



Intra-organizational trust as a determinant of job satisfaction in the public sector

A case study of the Swedish Public Employment Service

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Abstract

From a managerial perspective, organizational effectiveness, whether internal or external, is of extreme importance. Therefore, management studies should investigate which phenomena need to be emphasized and safeguarded to utilize organizational effectiveness. Intra-organizational trust and job satisfaction are both defined as phenomena that are of influence on organizational effectiveness. This study will broaden and deepen existing literature and knowledge by investigating the relationship between intra-organizational trust as a determinant of job satisfaction. It will furthermore contribute to management studies in closing the research gap by applying the research to a public sector organization, a relatively understudied sector within this field of study with these particular concepts. Besides studying the relationship between intra-organizational trust and job satisfaction, this study will analyze the influence of five socio-demographic variables on job satisfaction. The Swedish Public Employment Service has functioned as the case study for this research. Data were obtained from 171 employees using a questionnaire. The data analysis, consisting of descriptive statistics and an ordinal linear regression model, showed that none of the five individual socio-demographic variables had a significant influence on job satisfaction experienced by the participants of this research. However, each of the three dimensions of intra-organizational trust appeared to positively influence the levels of job satisfaction based on the empirical data collected and analyzed for this research. The most important finding of this study is that intra-organizational trust among the Swedish Public Sector employees who participated in this research is a determinant of job satisfaction. These findings are of importance for management studies both in theory and practice.

Key words: intra-organizational trust, job satisfaction, socio-demographic variables, public sector, management, organization.

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1. Introduction

Steve Jobs once said *"Your work is going to fill a large part of your life, and the only way to be truly satisfied is to do what you believe is great work. And the only way to do great work is to love what you do. If you haven't found it yet, keep looking. Don't settle."* (Forbes, 2021).

For years, the topic of job satisfaction has occupied a prominent role in social science literature. Although a large amount of research has been completed, no single agreed-upon concept of job satisfaction exists (Mottaz, 1985). Mottaz himself defined job satisfaction as the employee's intuitive response to the overall work situation. In line with this, Spector (1997, p.2) expressed job satisfaction as the *"degree to which people like (satisfaction) or dislike (dissatisfaction) their job."*

Different factors influence an organization's effectiveness. Organizations and their management are constantly changing and adapting to keep up with rapid economic, political, scientific, legal, technological, and societal transformations, no matter in which sector they perform (Buitendach & Rothmann, 2009). To sustain and facilitate these changes and have strong and supportive teams and employees, it is essential to emphasize the organizational culture. By focusing on pursuing and maintaining high levels of job satisfaction amongst the organization's employees, the management could underscore the importance of a well-functioning organizational culture. Studies have found that different factors in an organization could be determinants and predictors of high (or low) levels of job satisfaction (Cho & Park, 2011; Ebeling et al., 1979; Locke, 1970; Lund, 2003; Mottaz, 1987; Shockley-Zalabak et al., 2000; Tietjen & Meyers, 1998). One factor found to be a plausible predictor or determinant of job satisfaction amongst employees in organizations is organizational trust (Cho & Poister 2013; Shockley-Zalabak et al., 2000). Organizational trust is one of the many qualities that an organization's management should try to adhere to and invest in to achieve. Many studies have shown that high levels of trust could lead to a range of positive consequences for both the individual (employee) and the organization (internal and external outcomes) (Bienkowska et al., 2008; Cho & Poister 2013; Cohen, 2015; Ozmen, 2017; Voelpel & Kearney, 2008).

High levels of job satisfaction have proven to lead to increased organizational effectiveness and should be considered important from a managerial perspective. Previous studies and research on job satisfaction have been able to identify some of the direct positive outcomes high levels of it will yield, both for the individual and the collective (organization). Some of these are higher levels of turnover, decreased absenteeism, increased commitment and morale of the employees, increased brand image, high-quality relationships amongst colleagues and their management, a competitive advantage in the market, and the employees' cooperative competencies (Ellickson & Logsdon, 2001; Kumari & Pandey, 2011; Munir & Rahman, 2016; Rao & Karumuri, 2019).

Considering both the organizational concepts of job satisfaction and organizational trust are found to be of significant influence on the success and effectiveness of an organization, this study has chosen to investigate the relationship amongst them. This research will explore the effect of organizational trust as a determinant of job satisfaction. Organizational trust inherently has a dual meaning and impact: it influences the intra-organizational culture (employees' trust in their colleagues, manager(s) and the organization) and the inter-organizational culture (external actors' and stakeholders' trust in

the organization as an entity) (Albrecht & Travaglione, 2003; Mayer et al., 1995; Mayer & Davies, 1999; Pate et al. 2007). This research will focus on the former, as we believe the influence of intra-organizational trust as a plausible determinant on job satisfaction is of higher relevance for management studies and practices.

Despite the fact that other studies have studied the relationship between intra-organizational trust and job satisfaction, much of the research has been conducted in other industries and environments, such as manufacturing (Cook & Wall, 1980); hotels and tourism (Gucer & Demirdag, 2014); private sector companies (Omarov, 2009); education (Sarikaya & Kaya, 2020; Aygün, 2021; Fard & Karimi, 2015); banking sector (Barimani & Khorshidi, 2018), health sector (Laschinger et al., 2002; Top et al., 2013), pharmaceutical company (Straiter, 2005). Moreover, the relationship between job satisfaction and intra-organizational trust in a Swedish public organization has not yet been examined.

1.1 Aims and objectives

Job satisfaction is essential from a managerial perspective due to its impact on organizational effectiveness. Although there is an increasing interest in exploring job satisfaction, we can observe fewer studies on job satisfaction undertaken in public organizations than private organizations.

This research aims to examine the relationship between intra-organizational trust and job satisfaction in the case of the Swedish Public Employment Service in Sweden and the relationship between job satisfaction and different socio-demographic variables. To do so, we will first examine how employees feel about the Swedish Public Employment Service and how satisfied they are with it. Secondly, we will look at the level of trust employees have in their colleagues, managers and organization. Based on a conceptual framework and with the help of the questionnaire findings, we aim to determine which factors lead to employees' satisfaction at the Swedish Public Employment Service and see whether there are significant differences in job satisfaction among socio-demographic variables. The questionnaire findings will offer us important and valuable information about employee attitudes toward functionality and organizational shortcomings. The importance of applying this research to a public organization will add value to academia and practical managerial purposes.

1.2 Research purpose

The purpose of this research is to examine the relationship between intra-organizational trust and job satisfaction in the case of the Swedish Public Employment Service in Sweden, as well as the relationship between job satisfaction and five different socio-demographic variables in the public sector.

1.3 Research questions and hypotheses

The research questions that will be answered through this research are the following:

"What is the influence of intra-organizational trust on job satisfaction in a Swedish public sector organization?"

"What is the influence of employees' socio-demographic variables on job satisfaction in a Swedish public sector organization "

To answer the two posed research questions empirically, a quantitative statistical analysis with the use of data derived from questionnaires will be used.

To support the research questions, and based on existing literature and research on the topic, the following hypotheses have been formulated. The eight hypotheses listed below will be tested through this research:

H1: The higher the level of employee's trust in managers, the higher the overall job satisfaction.

H2: The higher the level of an employee's trust in colleagues, the higher the overall job satisfaction.

H3: The higher the level of employee's trust in the organization, the higher the overall job satisfaction.

H4: Salary will be positively associated with overall job satisfaction.

H5: Tenure will be positively associated with overall job satisfaction.

H6: Gender will be positively associated with overall job satisfaction.

H7: Level of education will be positively associated with overall job satisfaction.

H8: Position will be positively associated with overall job satisfaction

1.4 Academic and practical relevance of the research

This research is of academic relevance due to its purpose of filling a research gap in existing scientific knowledge. Existing literature on job satisfaction reveals that limited studies in this area have been applied to the public sector. Most notable studies have used private sector companies or organizations as research cases. One of the reasons for this discrepancy in studied sectors is the, on average, differing organizational structures in place. Companies and organizations in the private sector are known for their strict and hierarchical organizational structures, with clearly defined roles, competitive culture, and differing wage and salary levels.

On the other hand, the public sector is more commonly known for having standardized organizational structures, controlled wages, salary levels, and operating on behalf of the public. At first glance, researchers might therefore find companies and organizations in the private sector more of an exciting research site. Therefore, this research is specifically applied to a Swedish governmental agency, the Swedish Public Employment Service, to assess job satisfaction (particularly concerning intra-organizational trust and the influence of socio-demographic variables) in the public sector.

Besides the general argument that few scholars have tried to explain the variation in job satisfaction amongst employees working for governmental institutions, even fewer scholars have used Sweden as the case for their research. Many different country-specific factors (such as culture, economy, language, religion, and so on) influence employees' working- and private life and conditions and how companies and organizations are run, structured, and managed. Therefore, applying this research to a

Swedish public organization will fill a research gap in the existing literature and is considered academically relevant.

This argument shows that this research, aside from being of academic relevance, also meets the requirements to be of practical relevance. The practical relevance of a research depicts the value of its findings for different organizations or industries. In this case, the purpose being served is to add value to the organizational context of institutions in the public sector in Sweden. The value could entail, for example, making recommendations or formulating suggestions for the particular industry or case to improve certain processes within their organization.

This research will contribute to management studies and literature because it provides empirical data on the influence of intra-organizational trust on job satisfaction, with additional information on the influence of socio-demographic variables on the latter. These topics are of interest to management as a discipline and practitioners of management due to their relevance and importance to internal and external organizational outcomes. The particular positive outcomes that high levels of intra-organizational trust and job satisfaction will contribute will be elaborated upon in the theoretical framework when assessing both concepts in-depth.

1.5 Research limitations

One of the limitations of this study is that, due to time constraints, the researchers could contact a limited number of managers working for the Swedish Public Employment Service. The researchers have reached out to several managers working for different departments and in other locations spread over Sweden, asking for their support in collaborating on this research. Eventually, three unit managers replied and willingly collaborated with this research by sending out the questionnaire to their teams. Each of the three unit managers' departments works in Sweden's Scania County ("Skåne län" in Swedish). The geographically uneven spread of data collection should be considered when reading the data analysis and conclusions.

Another inevitable research limitation is concerned with the global pandemic of Covid-19. The global pandemic has affected this research in some ways. The Swedish government implemented different measures during the academic year of 2020-2021 that led to various restrictions and limitations. First of all, students and employees have been deliberately recommended to work from home. Universities have been closed for class lectures. The researchers of this paper had to conduct this research from their homes. This has inevitably had some impact (although unable to measure the degree of this) on the collaboration, content and process of writing this research. Furthermore, individuals working in jobs that do not necessarily require physical attendance have been asked (by the government firsthand, but also by their direct employers) to work from home to limit the spread of the virus. The Swedish Public Employment Service has followed the restrictions set by the Swedish government and, therefore, seeking contact with their employees has been limited. The inability to walk into the offices of (employees of) the Swedish Public Employment Service or set up meetings and personally ask for collaboration might have affected the size of the sample unit and the response rate. Employees might have felt more distanced from this research and felt less empathy to collaborate by participating in the questionnaire. Although the global pandemic has inevitably been a limiting factor to this research, the researchers have tried to optimize the quality of this research. This will be further elaborated in the methodology section (see Chapter 3).

1.6 Outline of the research paper

This paper is outlined in six different chapters. The chapter following the introductory chapter consists of the theoretical framework. This part provides a detailed overview and analysis of the main concepts of this research: job satisfaction (dependent variable) and intra-organizational trust (independent variable). Each concept will be discussed separately (theories on their definition, measurements, importance, benefits, and how to achieve high levels of each respective concept) in two different subchapters and are tied together in the conceptual framework. The third chapter, "Methodology," provides the reader with extensive information on how the research was conducted, which research methods were used, the sample unit, ethical considerations and the reliability of the research, how the quantitative questionnaire was composed and how the data was analyzed. The fourth chapter presents the results from the empirical data that the researchers have collected through the methodological approach. The data analysis consists of descriptive statistics, different statistical tests and an ordinal logistic regression model, which serves as statistical input to answer the posed research questions. The fifth chapter comprises the discussion in which the empirical data is put in relation to the theoretical framework and where the hypotheses are being either rejected or accepted. The sixth and final chapter summarizes the research in the conclusion by answering the posed research questions and provides the reader with limitations and future research suggestions. References and appendices are included at the end of the research paper.

2. Theoretical framework

The theoretical framework serves as a basis on which the analysis will rely. The two main concepts of this research, job satisfaction and intra-organizational trust will be elaborated upon. This research will provide different theories and definitions of the main concepts. A stance will be taken on which definitions will be used in answering the posed research questions through quantitative data analysis. The theoretical background will provide important information from different scholars who argue that job satisfaction and intra-organizational trust are vital elements in an organization's internal and external success. Therefore, both of these concepts should be of critical interest to the management of an organization, institution or company. Job satisfaction and intra-organizational trust are both separate and interrelated concepts within the studies of management. Combined, this will form the theoretical background on which the analysis, discussion and conclusion of this research will rely. The final part of this chapter will provide a tangible overview of the predicted relationship between intra-organizational trust and job satisfaction by providing a conceptual framework of the independent- and dependent variable(s).

2.1 Job satisfaction

“Enhanced, sustained performance on the job results not so much from the fully furnished office or the temperature of the work environment, but the basic duty assigned in the job description and all those intrinsic feelings that produce positive attitudes about that duty. Although aspects of one's personal life as well as non-job factors at work influence the behavior and eventually the satisfaction of the worker, it is the work itself which brings fulfillment.” (Tietjen & Myers, 1998, p. 231).

Job satisfaction serves as the central concept of interest in this research, being the dependent variable. Therefore, it is a mere necessity to analyze what previous studies, theories and scholars have said about this. This part of the theoretical framework will provide information on and explore the concept by evaluating different definitions provided about the concept, how it is measured, and its influence on an organization (in terms of culture, external-and internal outcomes, and the like).

2.1.1 The importance of job satisfaction for an organization

Scholars have acknowledged the role and the importance of job satisfaction. According to Spector (1997), job satisfaction is a subject of considerable interest to both those who work in organizations and those who research them. Indeed, it is the variable that is most commonly studied in organizational behavior studies. He argued that job satisfaction is a critical variable in organizational theory and practice, spanning from job design to supervision. Spector (1997) stated that there are many important reasons why one should be concerned with job satisfaction. Firstly, from a humanitarian perspective, employees need to be treated equally and with respect. Job satisfaction reflects, to some degree, fair care. It may also be used to assess mental well-being or psychological wellbeing. Secondly, the utilitarian viewpoint holds that job satisfaction will contribute to employee behavior that has an impact on organizational functioning. Furthermore, job satisfaction may be a

measure of how well an organization is run. Spector (1997) concluded that differences in job satisfaction through organizational divisions might be used to identify possible problem areas.

According to Spector (1997), job satisfaction is one of the most commonly studied variables in organizational behavior. In research, it can function both as an independent and dependent variable (Wanous & Lawler III, 1972). Since this research aims to determine which factors contribute to employees' job satisfaction at the Swedish Public Employment Service, job satisfaction is treated as the dependent variable. As stated by Rothmann and Agathagelou (2000, cited in Buitendach & Rothmann, 2009), job satisfaction is a complex variable that is determined by situational aspects of the job context as well as an individual's dispositional characteristics.

The purpose of this study is to examine the impact of various intra-organizational trust determinants on job satisfaction. Considering job satisfaction is such a central concept in management studies, and for managers in practice, the concept has been studied in relation to numerous other factors. Previous studies have explored the relationship between job satisfaction with organizational trust and perceived organizational effectiveness (Shockley-Zalabak et al., 2000); trust and organizational commitment (Cho & Park, 2011); motivation (Tietjen & Myers, 1998); performance (Locke, 1970); working environment (Raziq & Maulabakhsh, 2015); personality (Judge et al, 2000); gender (Clark, 1997; Oshagbemi, 2000); intelligence (Ganzach, 2017); organizational culture (Lund, 2003); age and job tenure (Mottaz, 1987; Hunt & Saul, 1975; Bedeian et al, 1992; Lee & Wilbur, 1985); education, salary and job characteristics (Mottaz, 1984; Lee & Wilbur, 1985); and the hierarchical position in the organization (Ebeling et.al, 1979).

Wanous and Lawler III (1972) argue that more research is needed to figure out the intricate relationships between different ways of measuring satisfaction, different facets of satisfaction, and various independent and dependent variables. Moreover, there is a call for further research to examine the relationship between interpersonal and intra-organizational trust on job satisfaction in other sectors and industries to be able to possibly confirm that the relationship is generalizable (Straiter, 2005). And since the relationship between job satisfaction and intra-organizational trust can evolve with time, Aygün (2021) recommends that future research be conducted using different sample groups and demographic variables. This research therefore contributes to the broadening of the research field as two of the key arguments of the research are to apply the study to the less researched public sector (compared to the private sector) and by including five socio-demographic variables to the independent variables to analyze their possible influence on job satisfaction.

Early studies on employees' productivity, amongst others, provided evidence that people work for purposes other than solely their salary. This notion led to a new field of managerial studies in which researchers started to investigate different factors related to job satisfaction (Kumari & Pandey, 2011). Job satisfaction matters from a managerial perspective due to its influence on organizational effectiveness. It has been proven to directly impact turnover, absenteeism, and the employees' cooperative competencies (Ellickson & Logsdon, 2001; Kumari & Pandey, 2011; Munir & Rahman, 2016). Researching job satisfaction is therefore often grounded in utilitarian beliefs. Furthermore, it serves humanitarian interests due to the ethical responsibility of ensuring psychological safety, a sense of belonging, and being treated with respect at work (Ellickson & Logsdon, 2001).

Relatively fewer studies on job satisfaction have been performed on public organizations in comparison to private organizations. Scholars differ in their opinion on whether the nature of a sector plays a role in job satisfaction. Those scholars who advocate that there is a distinction (public management scholars) point to the differences in employees' organizational behavior and motivational profiles, both being possible dimensions influencing job satisfaction (Ellickson & Logsdon, 2001).

2.1.2 Two theories on job satisfaction: Content theories & process theories

According to the literature, there are two competing theories of job satisfaction. First, content theories that are concerned with the individual's (employee's in the case of this research) values, expectations and needs in relation to and their effect on their degree of job satisfaction (Gruneberg, 1979). The major content theories of job satisfaction are Maslow's Hierarchy of Needs (1943), Herzberg's motivation-hygiene theory (1959) and McGregor's X-Y theory (1960). Second, process theories, "[...] which in general terms, try to give an account of how the individual's needs, values and expectations interact with the job to provide job satisfaction and dissatisfaction" (Gruneberg, 1979, p.30). The main process theories of job satisfaction are Adam's equity theory (1963), Vroom's expectancy theory (1964), Locke's Range of Affect Theory (1976) and Oldham and Hackman's Job Characteristics Theory (1975).

Job satisfaction, according to process theories, is determined by not only the essence of the job and its meaning, but also by the expectations, values, and needs that people have with regard to their job (Gruneberg, 1979). Process theories describe the relationship and interaction between variables in relation to job satisfaction. Content theories, on the other hand, identify factors that are of influence on job (dis)satisfaction (Gruneberg, 1979). Gruneberg (1979) argued that, irrespective of the limitations and differences of employing one approach over another, it is evident that job satisfaction requires meeting the expectations, values and needs of individuals for what the job provides. In a field such as job behavior, it is therefore evident that there is no single best theory to explain all the phenomena. Much like the hardship in finding one definition for the concept of job satisfaction, scholar Gruneberg (1979) concludes that for different studies and different situations, the main focus of interest that influences job satisfaction might differ (ranging from e.g. expectations, values, needs, the individual's personality or the cultural background, etc.). Therefore, it is yet to be found impossible to agree on a generally accepted overall theory. This research will play its part in trying to contribute to the field of study on job satisfaction by collecting new data and analyzing the empirical data on the matter.

2.1.3 Research field and defining job satisfaction

As mentioned in the introduction of this research, finding a clear definition of the concept of job satisfaction has been hotly debated amongst scholars in the field. In order to measure job satisfaction, it is necessary to define what job satisfaction is and to delve into the keywords associated with it. Scholars mention the employee's feelings towards the different aspects of their jobs (Spector, 1997), the employee's affective response to the job (Mottaz, 1985) and the pleasurable emotional state deriving from being appraised for one's job performances (Locke, 1976) as definitions of job satisfaction. As a combination of the different definitions, this study will approach job satisfaction as a combination of an emotional state which results from the appraisal of one's experience and job performances and the individual's perception and evaluation of their job. The perception and feeling

of appraisal are in turn considered to be context-dependent and situational, being influenced by an individual's circumstances such as values, expectations and needs.

2.1.4 Measuring job satisfaction

Besides agreeing on an encompassing definition of the concept of job satisfaction, there is an excessive need to make the concept measurable. Job satisfaction in its nature is a qualitative concept. The methodology chapter will provide further information on what techniques have been applied in this research to make the qualitative concept measurable and quantitatively assessed in the questionnaire and data analysis. Steger et al. (2019) suggested that the Job Descriptive Index (JDI), the Job Satisfaction Survey (JSS), and the Minnesota Satisfaction Questionnaire (MSQ) are the most popular instruments for measuring job satisfaction. They pointed out that these instruments are well-designed and enjoy a high degree of reliability and validity. However, using an established job satisfaction scale can be expensive, mainly if many workers are to be surveyed.

Moreover, many scales are copyrighted, and authors can charge a fee to use them (Spector, 1997). The short version of the Minnesota Satisfaction Questionnaire is a very popular and commonly used facet measure in job satisfaction research. It is a typical example of a multifaceted measure of job satisfaction. The MSQ short version measures job satisfaction *"with specific aspects of a job such as job security, coworkers, working conditions, company policies, and opportunities for achievement, accomplishment, and advancement"* (Weis et al. 1967, cited in Steger et al, 2019, p.2). One advantage of the MSQ short form is that it can be used to assess two distinct components of job satisfaction: intrinsic and extrinsic levels of job satisfaction. Intrinsic job satisfaction refers to how individuals feel about the essence of their job tasks, while extrinsic job satisfaction refers to how individuals feel about aspects of their work situation that are unrelated to their job tasks or work itself (Spector 1997, cited in Hirschfeld, 2000). Both the intrinsic and extrinsic levels of job satisfaction are regarded in this research. Throughout the analysis, this distinction will not be of particular relevance as the combination of both is considered to provide enough information and insight on the matter. The reliability of the MSQ as an instrument has been tested in different sectors, resulting in a high coefficient alpha. In addition, the use of the Minnesota Satisfaction Questionnaire (MSQ) for research or clinical work is free of charge (University of Minnesota, 2021). Including and using the MSQ in this research's questionnaire is based on time-and cost-saving grounds (further elaboration on this can be found in chapter 3).

Wanous and Lawler III (1972) looked at nine different operational definitions of job satisfaction. When it comes to measuring job satisfaction, they argue that there is no single best method. They concluded that, according to them, the best measure might depend upon what independent or dependent variable the job satisfaction measure is related to. Likely, specific measures are better related to particular dependent and independent variables than others because of the aspect of satisfaction they tap. The data also suggest that it is possible to measure satisfaction validly with different job facets (Wanous & Lawler III, 1972). Facet and global measures are the most commonly used measures of job satisfaction (Hirschfeld, 2000; Steger et al., 2019). According to Spector (1997), job satisfaction is typically measured by an interview or questionnaire given to the employees in question. He argued that although there have been numerous efforts to measure job satisfaction using different methods, the simplest way to do so is to use one of the existing scales.

Additionally, Spector (1997) concluded that there are many benefits to using a pre-existing scale. To begin, a large number of available scales cover the major dimensions of satisfaction. Secondly, the majority of current scales have been used often enough to establish norms. Thirdly, several existing scales have been demonstrated to have a high degree of reliability. Fourthly, their use in analysis indicates validity. Finally, using an established scale eliminates the significant cost and time associated with developing a scale from the start. Due to the many listed and academically approved reasons to use existing scales for measuring job satisfaction, this research will also use the pre-existing scale. Further elaboration on the nature and exact purpose of this scale (MSQ) is provided in the methodology chapter (see 3.5 Design of the questionnaire).

2.1.5 Significance of high levels of job satisfaction

An individual's level of satisfaction with his or her job partly describes that person's job satisfaction. Appraisal, affective reaction, and attitude toward the job can all be used to determine how satisfied a person is with their job (Kumari & Pandey, 2011). Job satisfaction is reliant on cognitive and situational factors. Job satisfaction can be measured by evaluating individual employees' stance on dimensions such as salary, work responsibilities, growth opportunities, diversification of tasks, colleagues, and the work itself (Kumari & Pandey, 2011). A high level of job satisfaction will lead to different positive outcomes for both the individual and the organization. For the individual level, it will lead to increased commitment and morale, reduced absenteeism, a positive attitude towards the individual's tasks and the organization. Job satisfaction induces improved brand image and productivity levels at the organizational level, well-established and high-quality relationships amongst colleagues and between the superior and subordinate, increased job satisfaction, and a competitive advantage in the market, industry, and sector (Rao & Karumuri, 2019).

Rao and Karumuri (2019) have designed a conceptual framework to determine job satisfaction. In the framework, they distinguish 19 variables to predict job satisfaction. These variables are working conditions; salary and its structure; growth opportunities; relationship with one's superior; relationship with colleagues; the work and tasks in itself; welfare facilities; organizational policies; participation in decision making; achievement and recognition; a variety of work; managerial-and leadership style; interest in the job; appraisal of performance; job security; grievance handling procedure; organizational politics; social support at work; and, understanding and knowing the strengths and weaknesses of employees in assigning jobs or tasks. Some of these aspects of job satisfaction are treated in this research, particularly those referring to the internal qualities and characteristics of the organization.

2.1.6 Job satisfaction and socio-demographic variables

The purpose of including socio-demographic variables in the analysis is dual. First, the data would reveal details about the respondents' demographics. Simultaneously, the socio-demographic variables could be of influence on job satisfaction. The latter points to a diverging debate amongst management scholars in which one side argues that socio-demographic variables are the main determinants of job satisfaction. The other side argues that natural/environmental factors (employee-oriented leadership, patent, promotion, social interaction, teamwork, working conditions, etc.) are the leading determinants of job satisfaction (Ellickson & Logsdon, 2001; Hosseinzadeh, et al., 2013). Emphasizing both the socio-demographic variables and the natural/environmental factors in this study will therefore contribute to broader academic research on the, possibly differing, influence of both. From a

managerial perspective, that information would be valuable in choosing a management strategy in which one prioritizes either focusing on interpersonal support or technical support.

This subchapter on the concept of job satisfaction has provided background information, different theories and perspectives, and the proposed determinants and consequences of high levels of job satisfaction. The theoretical framework and literature review on this concept solidify the argument that some research gaps remain within this field of study. Therefore, this study was deliberately designed to be applied to a public sector organization and combines adding socio-demographic variables and the concept of intra-organizational trust to the evaluation of job satisfaction. Furthermore, this research will compare the empirical data to the knowledge that has been provided about the matter and will enable the possibility to answer the research questions and take stances on the eight posed hypotheses.

2.2 Intra-organizational trust

In this subchapter of the theoretical framework, the concept of intra-organizational trust, one of the independent variables of this research, will be elaborated. The subchapter will provide information on the general research field around the concept of intra-organizational trust, the acknowledged difficulty of agreeing on a comprehensive definition amongst international scholars, and an explanation of the four-factor typology of the concept that will be used in this research to get a greater understanding of the many aspects of intra-organizational trust. Furthermore, three different dimensions of intra-organizational trust will be presented, consisting of trust in one's colleagues, manager, and the organization at large. Lastly, the subchapter will demonstrate what scholars in this field of study have concluded about the positive internal-and external organizational consequences that high levels of intra-organizational trust generate and which tools and techniques managers could apply to utilize and achieve this success.

2.2.1 Research field on intra-organizational trust

Part of this research's academic and practical relevance is to contribute to a better understanding of the (importance of) the concepts of intra-organizational trust and job satisfaction. As previously mentioned, an acknowledged research gap for both concepts is the difficulty amongst scholars to agree on a single and comprehensive definition. Although many scholars agree that the subject of intra-organizational trust is attracting a growing number of academics' attention (Albrecht & Travaglione, 2003; Mayer et al., 1995; Mayer & Davies, 1999; Pate et al. 2007), there is a lack of relevant empirical evidence on the existence, determinants, and effect of trust in management, and it is especially true in a public sector setting (Albrecht & Travaglione 2003; van de Bunt et al., 2005). Some scholars argue that trust is regarded as a key element of organizational effectiveness (Albrecht & Travaglione 2003); some others say that it decreases opportunistic activity, increases cooperative compliance with corporate standards and laws, and enhances individual and organizational efficiency (Cho & Poister 2013), improves competitiveness (Ning et al. 2007), improves organizational performance (Mayer & Gavin, 2005), and it decreases ambiguity and distrust between the organization and employee (Campbell & Im 2015).

Considering this research is deliberately applied to a public organization, the concept of intra-organizational trust is therefore also specifically applied to this type of sector. Albrecht and Travaglione (2003) used data from two public sector organizations to determine levels of trust in

senior management and their correlates. Their findings indicate that trust in public sector senior management is affected by successful interpersonal contact, procedural fairness, organizational support, and job security. Their results also show that affective commitment, continued commitment, cynicism toward change, and turnover intention are all influenced by trust in senior management. Although the general perception is that intra-organizational trust will always generate positive phenomena (whether internal or external), it is essential to recognize that it could have other consequences. Pate et al. (2007) investigated the problem of public sector senior management trust. Their research aimed to see why there has been a downward trend of confidence in public sector senior management from the perspective of their employees over the years and whether this phenomenon was common across the public sector. The study's findings revealed a consistent lack of trust in senior management. The authors hypothesized three potential reasons for the constant lack of trust in senior management in the public organizations they used as their research cases (Pate et al., 2007).

Due to the relevance of their study and findings for this research, the three hypotheses are written out. First, the lack of trust arises from individual managers' actions, and behaviors, i.e., employees have no trust in their managers. Their second interpretation provides credence and weight to structural shifts in public sector management and speaks to organizational and job-related trust bases (Carnevale & Wechster, 1992, cited in Pate et al., 2007); the public sector's intensified bureaucratisation and managerialism has resulted in increasing dissatisfaction. Of course, this is an interesting interpretation. Still, it can explain job intensification and workplace tension rather than mistrust of senior management, as Bunting (2005, cited in Pate et al., 2007) points out. The last possible theory, which Pate et al. (2007) find most compelling, revolves around the supposed deterioration of the public sector's culture (Massey and Pyper, 2005 cited in Pate et al., 2007). They concluded that the study's findings have significant implications for staff management because a lack of trust directly impacts employee perceptions and behavior. By collecting empirical data from employees working for a Swedish public organization, the three hypotheses will implicitly be tested in this research.

2.2.2 Different definitions of trust and intra-organizational trust

In order to assess the effect of intra-organizational trust, the concept itself must be clearly defined. Different scholars have tried to formulate a comprehensive definition of the concept of trust, and the applied concept of intra-organizational trust specifically. According to Cook and Wall (2009), trust is described as the willingness to attribute good intentions to, and have faith in, the speech and acts of others. This ability would affect how one individual communicates with others. One attempt at the definition of trust that is commonly used and has been given broad consent to is by Rousseau et al. (1998). Their definition of trust is *"a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another"* (Rousseau et al., 1998, p. 395). Mayer et al. (1995, p. 712) define trust as *"the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party"*.

Ning et al. (2007) explored the relationship between intra-organizational trust and job performance in a state-owned enterprise (SOE) using a questionnaire method. This study is of specific relevance to this research considering its use of a public organization as their case. They found that *"an employee's trust in his/her immediate superior, co-workers, and the top manager exert positive influences upon*

work performance". They found also, *"that the influence of an employees' trust in top managers upon individuals' job performance is partially mediated by his/her trust in immediate superiors"* (p. 622). The emphasis of these scholars on both an employee's manager and colleagues is found to be important for this research. The definition of Ning et al. (2007) has partly influenced the choice of categorizing intra-organizational trust into three different types for the purpose of this research: trust in one's colleagues, trust in one's manager; and, trust in the organization.

In the different definitions, vulnerability is a key concept to trust. Being vulnerable implies that one is taking a risk and that there is something of importance at stake that could be lost (Mayer et al., 1995). Vulnerability equals risk-taking, while trust defines the willingness of an individual to undertake risk-taking behavior or actions (Mayer et al, 1995). This research aims to collect data providing insights on the willingness of risk-taking behavior of employees working for the Swedish Public Employment Service based on and indicating levels of trust.

Previously, a light has already been shed on the different perspectives of intra-organizational trust, by Pate et al. (2007) amongst others, to demonstrate that trust could lead to a variety of consequences (positive and negative). A cognitive function that individuals apply in their work is a phenomenon referred to as "presumptive bases of trust" (Cohen, 2015) or "propensity of trust" (Cohen, 2015; Voelpel & Kearney, 2008). Humans have an ability to put faith in others based on a reliance on other sources of evidence rather than personally knowing the other. The presumptive basis of trust on which an individual will base their faith can consist of information about the other's membership in a social or organizational category (mainly based on socio-demographic variables), information received through third parties, expectations of stereotypes and roles and, lastly, the institutional and regulatory environment in which the interaction will take place (Cohen, 2015). Trust propensity is similar to the presumptive basis of trust as it constitutes the tendency to rely on others based on willingness (Cohen, 2015; Voelpel & Kearney, 2008). The inherent willingness of a person to trust a trustee before knowing the particular individual can differ among people and is situational (Cohen, 2015). The cognitive application of the presumptive basis of trust and the level of propensity to trust will gradually dissolve as the truster becomes personally involved with the trustee. Therefore, Zand (1972, cited in Möllering et al., 2004) describes trust as a gradual and self-reinforcing phenomenon, calling it the "spiral reinforcement model of the dynamics of trust".

In this subchapter, an extensive overview of the different definitions of both trust and intra-organizational trust within the field of management studies, specifically applied to public sector organizations, has been provided to the reader. This research is based on the definition of intra-organizational trust specified by Mayer et al. (1995). The level of trust the truster has in the trustee depends partly on the latter's different characteristics and actions (Cohen, 2015). Mayer et al. (1995) defined ability, benevolence and integrity as the three main factors of trustworthiness and which help to clarify a significant portion of trustworthiness when taken together. Dietz and Den Hartog (2006) extend the three factors of Mayer et al. (1995) with a fourth factor; predictability. Each factor offers a specific viewpoint on the trustee, while, as a whole, provides a strong and sparse framework for the analytical study of trust for a third party, specifically applicable to an intra-organizational setting. Altogether, these four factors provide an interdisciplinary typology to identify and evaluate the level of intra-organizational trust (Dietz & den Hartog, 2006; Hasche et al., 2020; Ozmen, 2017; Pirson & Malhotra, 2011). This study will not do specific research on the influence of the four individual typologies that contribute to trust. Instead, the four-factor typology serves to create a deeper understanding of what organizational trust consists of. The four-factor typology therefore serves as part of the definition of organizational trust.

When high levels are achieved in each of the four-factor interdisciplinary typologies of intra-organizational trust, the (public) organization will benefit (Mayer et al., 1995). These benefits can establish themselves both internally and for external outcomes, such as the organization's relationship to its stakeholders and the general public. The specific benefits and how to achieve these will be elaborated upon further down in this subchapter on intra-organizational trust. Trustworthiness (defined through ability, benevolence, integrity and predictability) should therefore be a key concern to both management studies, individuals residing in managerial roles and organizations' management departments.

2.2.3 The concept of intra-organizational trust

Pirson and Malhotra (2011) identify six dimensions of trustworthiness in their intra-organizational trust framework. These are benevolence, integrity, managerial competence, technical competence, transparency and identification (Pirson & Malhotra, 2011). Using the dimensions of this framework, intra-organizational trust is measured by using the individual as the origin of evaluation, and the organization as the referent. Intra-organizational trust consists of three aspects in terms of who the truster is to trust. The truster ("the origin", or rather individual employee) can have both differing or similar feelings and levels of trust towards (1) the public organization, (2) their managers and, (3) their direct colleagues (Bienkowska et al., 2018). An elaboration on each of these subdimensions of intra-organizational trust will be provided below.

2.2.3.1 *Trust in colleagues*

Trust in and among colleagues is referred to as lateral trust by Bienkowska et al. (2008). This type of trust is defined by an individual's expectations of their colleagues' behavior in riskful, complex or uncertain situations (Bienkowska et al., 2008; Seppänen et al., 2014). Interpersonal relations are dependent on the level of lateral trust. This will have an immediate effect on factors such as the willingness to exchange ideas and knowledge, facilitate a caring and emphatic relationship, openness, reliability and honesty (Bienkowska et al., 2008). The interpersonal trust in colleagues is found to stimulate job satisfaction and the individual commitment of employees (Seppänen et al., 2014). Furthermore, the level of trust in one's colleagues will, like the level of trust in one's manager, increase and deepen the organizational citizenship behavior (Ozmen, 2017).

2.2.3.2 *Trust in managers*

Bienkowska et al. (2008) identify "specific trust" as the predictor of organizational outcomes. Specific trust is cognitive, situational and reliant on an individual's experiences. Two different types of trust are distinguished within specific trust: lateral (amongst employees) and vertical (superior-subordinate) trust. Vertical trust evaluates the employee's (subordinate) perception of the manager's (superior) intentions, competence and behavior (Bienkowska et al., 2008). It is important to assess and analyse the employee's trust in their manager separate from their trust in the organization, considering these might vary. Employees might trust their manager (superior) due to a cognitive and personal connection between the two individuals, resulting in a trustworthy work-relationship (Cohen, 2015). At the same time, the employee may have less trust in the organization for a variety of reasons, such as not being recognized or rewarded for the work and effort they put into their job. As previously

mentioned, trust is situational and context dependent. In other situations, an employee who is dissatisfied with the organization might see their direct manager as an extension, or rather personification, of the incompetencies and discontent of the organization (Cohen, 2015). These differing scenarios point towards the challenges of doing research on (intra-organizational) trust in general.

Hosseinzadeh et al. (2013) have identified the role of management-and leadership style to be of influence on the overall intra-organizational trust, as well as to trust in managers specifically. The management-and leadership style can be divided into two domains, their technical and interpersonal support. The trust gained from the technical support given by a superior's management-and leadership style is dependent on factors such as their reliance on the organization's regulations, rules and procedures (Bienkowska et al., 2008; Hosseinzadeh et al., 2013). Trust built from interpersonal support originates from e.g. forms of communication, psychological safety and reliability (Hosseinzadeh et al., 2013).

The enterprising behavior (defined by levels of risk-taking, creativity and assertiveness) of an employee ought to increase as the level of trust of this individual in their manager increases. Furthermore, it will deepen the degree of organizational citizenship behavior (Ozmen, 2017).

2.2.3.3 Trust in public organizations

Organizational trust can be seen as a key mediator between interactions with employees at various levels of the organizational structure and affiliation with the organization as a whole (Campbell & Im, 2015). Ozmen (2017) argues in his article on "How employees define intra-organizational trust: Analyzing employee trust in organizations" that up until now, relatively little research has been done on how employees perceive trust in their organizations at large.

2.2.4 Benefits of high levels of intra-organizational trust

Inside organizations, trust has been viewed as a vital managerial resource. Gaining trust within an organization is not only beneficial to the way organizations work, but also to individuals and the ways that they behave and their efficiency. Inside organizations, trust is found to increase organizational commitment, enhance cooperation amongst employees and be useful in managing conflict (Seppänen et al., 2014). From a managerial perspective, trust therefore serves as both an end and a means in itself, particularly in uncertain, complex and risky situations. It is therefore important to examine which factors lead to building trust within organizations (Cho & Poister 2013; Ozmen, 2017). Intra-organizational trust, if managed correctly, can form a source of competitive advantage for the organization. According to Voelpel and Kearney (2008), it is critical to foster high levels of intra-organizational trust because it serves as a prerequisite for external customers, stakeholders and the general public to perceive the organization as trustworthy. High levels of intra-organizational trust can furthermore have a direct impact on reducing transaction costs (Ozmen, 2017; Voelpel & Kearney, 2008). Therefore, safeguarding high levels of intra-organizational trust is considered essential both for the organization's internal and external outcomes (Bienkowska et al., 2008; Ozmen, 2017).

Ozmen (2017) describes the positive consequences of trust for internal relations as follows *"at this level, trust can be viewed as a social capital that reduces transaction costs, increases spontaneous sociability among members and facilitates the suitable forms of defense to organizational authorities"*

(p. 22). High levels of intra-organizational trust, particularly in one's colleagues and direct manager, will lead to an increased "unit performance" (Voelpel & Kearney, 2008). The unit performance reveals the level of adequate divisions of labour and responsibilities amongst the employees within the "unit" (team). Successful unit performances can lead to increased organizational citizenship behavior. Both of these factors are of influence on the level of retention within a "unit" (team) and organization at large (Ozmen, 2017; Voelpel & Kearney, 2008). Besides retainment within the "unit", or rather team, intra-organizational trust is also a critical factor of influence on recruitment (Ozmen, 2017).

Bienkowska et al. (2018) summarize the positive consequences of high levels of intra-organizational trust on organizational outcomes as follows *"trust has a positive effect on leader-follower relations, the process of knowledge transfer, employee commitment, higher levels of spontaneous cooperative behavior"* (p. 13). However, these authors emphasize, high levels of intra-organizational trust does not necessarily have a direct correlation to high levels of organizational performance. The relationship between trust and performance is situational and context-dependent, reliant on different independent variables (Bienkowska et al., 2018).

Considering the organizational benefits deriving from high levels of trust in senior management, Albrecht and Travaglione (2003) argued that improving levels of trust between public-sector workers (employees) and management may provide substantial opportunities to increase public-sector performance and effectiveness. High levels of intra-organizational trust yields a particular kind of capital, "collaborative capital", which becomes important in periods of uncertainty. In periods of stress, rapid change and other uncertainties faced by an organization, collaborative capital can be used as a reliant tool to (continue to) achieve success (Voelpel & Kearney, 2008). Similarly, Cohen (2015) argues that trust can increase the level of adaptation to new processes and tasks within the organization. Therefore, emphasizing and safeguarding intra-organizational trust will enhance an organization's long-term success and increase the competitive advantage and ability to deal with uncertainties.

2.2.5 Achieving high levels of intra-organizational trust

Adherence should be given to the reciprocation process within an organization as it increases the effort and positive work attitude of employees towards the organization (Cohen, 2015). Building trust between employees and the organization through positive and ongoing contact with organizational supervisors in the workplace can promote organizational identification, implying that the quality of communication is of great importance (Campbell & Im, 2015).

Scholars emphasize that continuous attention should be given to fostering intra-organizational trust within organizations, preferably initiated by the management of the organization. Oftentimes, the phenomenon of intra-organizational trust does not become important nor prioritized until it is problematic (Voelpel & Kearney, 2008). Considering intra-organizational trust is reliant on personal attributes, the work environment as well as the entire organizational context (van de Bunt et al., 2005), an organization's management should try to ensure that intra-organizational trust is provided and safeguarded throughout each of their actions and decision-making processes.

Bienkowska et al. (2018) performed research on the "Influence of intra-organizational trust on organizational outcomes". Their conclusion consists of different investments that an organization

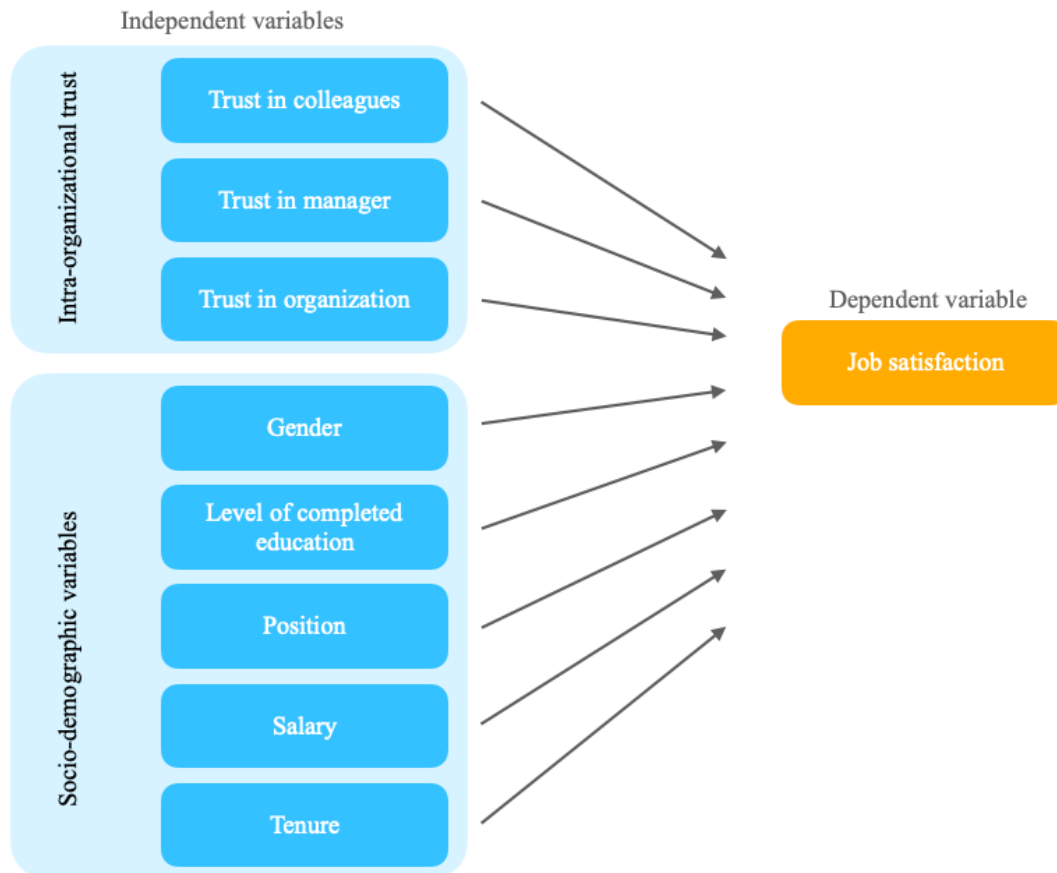
could (or rather, should) make for establishing and maintaining high levels of trust within the organization. These organizational investments consist of (Bienkowska et al., 2018, p. 26):

- Ensuring relatively stable conditions of employment and career/growth prospects;
- Clear organizational communication;
- Fairness and equal treatment in organizational procedures and regulations;
- Establishing and following standards for behavior according to rules and regulations;
- Transparency and accountability of the organization;
- Care and concern for the employees;
- Managing intangible assets for the organization.

2.3 Conceptual framework

The conceptual framework below shows the predicted relationships between the independent variables and the dependent variable. The predictions have been translated into the eight posed hypotheses, as presented in the introduction of this paper (1.3 Research questions and hypotheses). The dependent variable of this research is job satisfaction. The independent variables consist of two main categories: intra-organizational trust and socio-demographic variables. Intra-organizational trust is in turn divided into three specified levels of trust: trust in one's colleague, manager and the organization. The socio-demographic variables consist of five independent variables. The conceptual framework is shown in Figure 1 as a visualization of the predicted relationships between the independent variables and the dependent variable.

Figure 1: Conceptual framework showing the predicted relationship between the independent variables and the dependent variable.



As previously mentioned, this research mainly assesses the influence of intra-organizational trust as a plausible determinant of job satisfaction. It is applied specifically to an organization in the public sector in Sweden. The theoretical framework that has been described above will serve as the basis on which the analysis will rely. The collected empirical quantitative data will be analyzed, and the eight posed hypotheses will be tested.

3. Methodology

In this chapter, the methodological approach that has been applied in the thesis is presented and discussed. The chapter will begin by showing and explaining the quantitative research methods that have been applied. Afterward, the research site and respondents (sample unit) will be presented. In any research, independent of its research methods, it is important to acknowledge the different ethical considerations and limitations that might arise and recognize the position and role of the researcher(s). In the subchapter following the ethical considerations and reliability of this research, the use of indicators and measures is presented. These have been necessary to converge the initial qualitative concepts "job satisfaction" and "intra-organizational trust" to quantitatively measurable concepts. Afterwards, the data collection method, questionnaire, and data analysis are elaborated upon. Throughout the chapter the reader should get a clear indication of how the research was conducted.

3.1 Quantitative research methods

The research design chosen for this research is of a quantitative nature. Primary data will be collected and analyzed in order to be able to answer the research questions. The collection of the primary data was through a quantitative questionnaire. To be able to answer the posed research questions, a deductive approach has been taken to test the relationship between theory and research. A deductive approach to research entails composing hypotheses taken from existing theory which will get tested through collecting new data. Data analysis will eventually become a means to test the theory (Bryman, 2012).

The process of quantitative research consists of different steps, each applied to this research. In deductive quantitative research, one starts off with finding a theory that will get tested, draw hypotheses based on that, and formulate a research design. The choice of research design, in this case a quantitative case study, has a direct influence on factors such as the external validity and causality of the findings. The next step taken in this quantitative research was devising the measures of concepts that must be researched through the operationalization of the dependent (job satisfaction) and independent (intra-organizational trust and the socio-demographic variables) variables. The research was applied to the chosen research case, the Swedish Public Employment Service, and its inherent sample unit consisting of individuals who are of interest to this particular study. The following steps consisted of administering the research administration by collecting data through Internet-based questionnaires, processing data and analyzing the data. The data analysis led to a variety of findings from which conclusions were drawn. The findings and conclusions were lastly compared to the initially posed hypotheses and either support or reject theory (Bryman, 2012; 2015). Following these steps of conducting quantitative research allowed this research to find an answer to the posed research questions by relying on supported empirical data. The following subchapters will provide more comprehensive information and argumentation of the chosen methods for conducting this research.

3.2 Research site, target population and sampling method

Every research needs demarcations in order to establish a researchable scope. Such demarcations can consist of establishing an exact research site (the case) and defining the requirements of the respondents (the sample unit). The target population of this research consisted of employees working for the Swedish Public Employment service regardless of their role or job title. The Swedish Public Employment Service served as the case study for this research. The final sample unit was demarcated to consist of employees working in different departments in the Scania region. Further elaboration on the sample unit, sampling method and response rate will be provided below, but first a brief informative overview will be provided about the public sector organization that was chosen as the case of study for this research.

The research takes a single case study approach. Crowe et al. (2011) argue that a case study is a research approach used to generate an in-depth, multi-faceted understanding of a complex issue in its real-life context. It is an established research design used extensively in a wide variety of disciplines, particularly in the social sciences.

We chose to empirically test our hypothesis in the Swedish Public Employment Service case for our study. *"The decision on how to select the case to study is very important. The case is selected not because it is representative of other cases, but because of its uniqueness. The selected case study site should allow the research team access to the group of individuals, the organization, the processes or whatever else constitutes the chosen unit of analysis for the study. Access is therefore a central consideration; the researcher needs to come to know the case study site(s) well and to work cooperatively with them"* (Crowe et al., 2011, p. 5-6). In line with this, the Swedish Public Employment Service was selected as a case study for two reasons. First, there is little evidence of a similar analysis/approach conducted in a public organization, let alone in Sweden. Second, the researchers' access to and knowledge of the study site.

The Swedish Public Employment Service (“Arbetsförmedlingen” in Swedish)

The Swedish Public Employment Service is one of Sweden's six largest government agencies. Its mission is to serve as an official intermediary between individuals looking for jobs and organizations and businesses looking for employees to hire. Its goal is to positively contribute to the Swedish labor market by pairing employers and possible employees. The Swedish Public Employment Service is a governmental agency commissioned by the Swedish government. Its responsibility is also partly to ensure transparency and accountability amongst the Swedish employers whom they represent. The Swedish Public Employment Service offices are spread geographically throughout Sweden, with its headquarters in Solna, Stockholm. About 10.000 employees work for this organization. The organizational structure of the public organization is of a hierarchical nature. The top of the organization is organized by a board responsible for taking overarching decisions that influence the entire organization and its employees and are of specific strategic importance. Beneath the board (seen from a hierarchical perspective), the management team is positioned under the direction of a director-general. The management team consists of 11 employees. The management team works with the principal and strategic matters. Each of the 11 management team members is responsible for a specific area of operations with corresponding teams of employees (Arbetsförmedlingen, 2021).

In this research, the respondents have been selected through a process of purposive sampling. This respondent selection method is used both for qualitative and quantitative analysis (Bryman, 2012; Tongco, 2007). Purposive sampling was applied as the researchers of this paper had actively demarcated what characteristics and qualities the possible respondents needed to have. Composing clear respondent characteristics and qualities before conducting the research (which meant sending out the questionnaires) is crucial when applying purposive sampling as the sampling method (Tongco, 2007). As this research is a case study, the first and most important characteristic was that the possible respondents (sample unit) needed to be employees working for the Swedish Public Employment Service, which serves as the case study. The key informant technique, a technique depicting purposive sampling, was used and served as a particular contribution to the data collection. The key informant technique refers to using a few knowledgeable individuals who act as guides over a bigger population in a specific environment or culture (Tongco, 2007). In this research, those knowledgeable individuals were the three heads of units who helped the researchers send out the questionnaire to their respective departments (further elaboration on the key individuals that are referred to, their roles and contribution can be found in subchapter 3.2.1). In collaboration with the three heads of units working for the Swedish Public Employment Service, located and active in the Scania region, the researchers could (indirectly) reach out to the deliberately chosen sample unit consisting only of individuals who comply with the present conditions. The researchers ensured that the three heads of units were fully aware of the preset characteristics and qualities that the respondents needed to comply with. Although each of the respondents in the sample unit adheres to the preset characteristics and qualities, purposive sampling as a non-probability method is not entirely free from biases. In general, non-probability sampling methods contribute more to internal validity than external validity (Bryman, 2012; Tongco, 2007). Although the target population consisted of employees working for the Swedish Public Employment Service in all of Sweden, the final sample unit for this research contained only employees working in departments in the Scania region (further elaboration on the sample unit will be given in subchapter 3.2.1). Considering the public organization has offices and departments spread out over all of Sweden, awareness should be pointed towards the fact that the sample is not representative of the entire organization. Therefore, the interpretation of the results gathered from the data collection through questionnaires is limited to the sample unit yet leads to a high degree of internal validity of this research (Tongco, 2007). The fact that this sampling method does not enable the researchers to make generalizing conclusions does not interfere with the research's aims and objectives, as it is deliberately chosen to be a deductive case study.

Aside from determining the target population and employing the purposive sampling technique, the sample size requirements had to be carefully considered, particularly given the number of variables included in this study. The following rules of thumb in determining the sample size are presented in Roscoe (1975, cited in Sekaran & Bougie, 2016):

1. *For most studies, sample sizes of greater than 30 respondents but less than 500 are acceptable. This rule is accomplished as the final number of respondents consists of 171 respondents.*
2. *A minimum sample size of 30 for each demographic variable is needed as samples are split into subsamples. This rule is accomplished as the questionnaire entails five socio-demographic variables (which results in a sample size consisting of a minimum of 150 respondents).*
3. *The sample size for regression analyses should be several times (preferably ten times or more) the research variables. This rule is accomplished considering intra-organizational trust consists of three subdimensions (three variables). Five variables explain the respondents'*

socio-demographic data (eight variables in total, which according to this rule, should lead to a minimum of 80 respondents).

The research setting was non-contrived, which means that there was little to no interference from the researchers or the research itself in the Swedish Public Employment Service (Bryman, 2012). Daily activities continued as usual in the case studied and for the employees. These factors have most probably reduced the likelihood of respondents' biases in the research (Bryman, 2012; 2015).

3.2.1 Sample unit, response rate and data collection method

In this subchapter the contact with and approach to the sample unit will be presented. A chronological description will be given of the process of data collection. The initial step to data collection was by approaching one individual working for the Swedish Public Employment Service whom the researchers knew held a position that was valuable for this specific research. The first manager (official job title: Head of Unit) that was contacted to collaborate with this research is operative at the Malmö (Scania region) department of the Swedish Public Employment Service. In agreement to collaborate, the head of the unit demanded to get the ability to get a preview of the questionnaire (introductory text as well as the questionnaire itself) before it would be sent out to her corresponding team. The initial preview led to feedback given by three heads of units at the Malmö (Scania region) department to which the researchers responded in terms of clarification and modification. The feedback given by the three heads of units about the questionnaire consisted of a clarification of the term "job responsibilities" ("uppgiftsskyldigheter" in Swedish) and which specific policy was meant when referring to the "Swedish Public Employment Service policy". Furthermore, a modification of the reference to "one's manager" was agreed upon, modifying the reference to "one's closest manager" ("närmsta chef" in Swedish) to ensure each of the respondents would interpret the reference equally. Shortly after, the modified questionnaire was sent back to the first head of unit at the Malmö (Scania region) department, who in turn sent it to two other heads of units in the same department. The three heads of units sent out the introductory text with the link to the Internet-based questionnaire to their respective teams.

In total, 257 employees were reached through the initial two heads of units, including themselves. The second department that was contacted and complied with collaboration with this research had a total reach of 260 employees, also effective in the Scania region. The collaboration with both departments led to a total reach of 517 employees of the Swedish Public Employment Service. Out of 517 employees in total, 171 responses to the questionnaire were received. This equals a response rate of ca. 33%. In total, the data collection period lasted between March 9th and April 23rd, 2021.

The response rate for this research reached an acceptable level of 33%. To accomplish this, specifically in relation to the quantitative nature of this research, different techniques and tools were deliberately used. Enhancing response rates for Internet-based questionnaires differs from paper-based questionnaires. Internet-based questionnaires are a cost-effective method of gathering data from the sample unit. The digital nature of data collection through Internet-based questionnaires led to reduced time needed to be spent on the actual collection. Furthermore, the direct availability of data in one place, once collected, also led to both time-and cost savings and allowed for immediate structuring (Atif et al., 2012; Cook et al., 2016). Although Internet-based questionnaires generate many positive consequences for both the process and content of research in general, some drawbacks have been recognized by scholars. Although the reach of Internet-based questionnaires is generally higher than

paper-based questionnaires, one of the drawbacks is that different forms of liability and accountability of the sample unit to the researcher decline, partly due to the reduction or even absence of personal real life contact. This could result in lower response rates (Cook et al., 2016). Another acknowledged risk with Internet-based questionnaires in relation to the response rate is that the degree of break-offs (referring to a respondent starting to fill in the questionnaire but not completing it) is higher compared to paper-based questionnaires (Lynn, 2008). In an article on improving web questionnaire efficiency by Van Mol (2016), the scholar mentions that his meta-analysis of existing literature on the matter reveals that Internet-based questionnaires will generate a 6-15% lower response rate compared to traditional questionnaire methods. Awareness of approaching nonrespondents through follow-ups is therefore a necessity as it is a determinant of the final response rate. Therefore, this technique was applied to this research. The technique is specifically of interest as zero costs are related to sending reminding emails to the sample unit. Still, it was of importance to structure the follow-up approach well. Sending too many follow-up emails and/or with a demanding tone could have led to an increased resistance of the sample unit to participate (Cook et al., 2016).

Researcher P. Lynn acknowledges the existence of nonresponse in his article on "The problem of nonresponse" (2008). Lynn (2008) provides a framework consisting of 6 reasons for nonresponse. His framework consists of the researcher's inability to identify a specific sample unit, the inability to contact the sample unit, the sample unit's refusal (internal factor) or inability (external factor) to participate in the research, the inability of (clear) communication between the researcher and the sample unit, and data loss (Lynn, 2008). In research, a high number of nonresponses could lead to a phenomenon defined as "nonresponse bias" (Lynn, 2008). This bias refers to the potential difference in the individuals in the sample unit that do respond and those who do not (Atif et al., 2012). To minimize the risk of a nonresponse bias in this research, the framework produced by Atif et al. (2012) in their article "Estimating Non-Response Bias in a Web-Based Survey of Technology Acceptance: A Case Study of Unit Guide Information Systems" was applied. The authors prescribe a (representative) random sample, providing the Internet-based questionnaire with a clear and informative introduction and instruction on how to fill in the questionnaire, emphasizing the confidentiality of the data, minimizing the length and sending polite reminders (Atif et al., 2012). Each of these steps have been deliberately applied throughout this research. The strategy that was used to improve the response rate for the questionnaire, and by doing so, minimize the nonresponse bias, in this research was by sending follow-up reminder emails. As the responses to the Internet-based questionnaire were monitored closely, the researchers found that one week after the managers first sent out the emails to their teams (the sample unit of analysis), the responses stagnated. The stagnation in the amount of daily responses led to the decision to ask the managers to reach out to their teams once more in order to remind them of participating in the questionnaire. Due to the monitoring of the responses, the researchers found that the follow-up approach of sending reminder emails did help as the number of daily responses increased shortly after.

3.3 Ethics and reliability

Ensuring reliability is of importance in each academic research. As a result, different ethical issues and the researcher's position should be given careful consideration. The following paragraphs will explain which methods were used for this research specifically. First of all, it was ensured that each of the respondents in the sample unit was provided with identical information about the research, its purpose and goal and the researchers themselves. The questionnaire that was used and sent out for this

research begins with an introduction in which the research institution, the names of the researchers, the goal and purpose of the research and information about anonymity of the data and individual respondents are mentioned (see Appendix 1: "Questionnaire"). The raw data that was collected will remain with the researchers for the analysis' purpose only. The public organization, the Swedish Public Employment Service, will not be given access to the raw data, but merely to the final version of the analysis. Confidentiality of the collected data was promised to each individual included in the sample unit. Furthermore, the respondents remain anonymous in the data collection as no personal information such as name or address are collected. It was deemed critical to communicate that the questionnaire is confidential and that the results will only be shown through statistical summaries in the final report in order to increase response rate, accountability and transparency (Bryman, 2012; Lynn, 2008). All of the above described information was communicated to the employees at the Swedish Public Employment Service who participated also partly to ensure that possible biases or desired answers (as seen from the organization's perspective) would be minimized. Since it is of great importance to inform each respondent equally, these steps were carefully followed to safeguard the reliability of this research (Bryman, 2012).

In the introductory text that is included with the email sent out to the sample unit, as well as as the introduction to the Internet-based questionnaire, the respondent is informed about complying with the purpose of the research when choosing to participate (see Appendix 1). Participation in this particular case is equal to filling out the Internet-based questionnaire, and by doing so one gives consent to sharing their data with the researchers. The raw data will remain with the researchers only and be used exclusively for the purpose of this study's analysis. Another ethical concern often perceived in research in general is the invasion of privacy of the respondent (Bryman, 2012). This specific research is designed to have limited invasion of one's privacy as it is an overt research (meaning that the participants are aware of the researchers' focus on their setting although without interfering in the natural setting), the respondents are given equal information, informed consent is given through participation and anonymity and confidentiality are promised.

For the sake of informed consent and transparency towards the sample unit, the expected average length of filling in the questionnaire was mentioned in the introductory text to the questionnaire itself (approximately five minutes after having read the introductory text). The average length was based on trials that were executed before sending the questionnaire to the sample unit. Academic critique on questionnaires and respondents' willingness to participate is partly related to the amount of time a respondent will need to spend on the questionnaire (Atif et al., 2012; Lynn, 2008). Emphasis was therefore put on keeping the questionnaire as short as possible (47 questions in total, divided into three different subsections) and with closed questions (statements that are answered on a five-point Likert scale) when designing the questionnaire.

From an ethical perspective and to increase the transparency of the research and its design, it should be acknowledged that the questions asked in the questionnaire have been translated from English to Swedish. The original versions of the two questionnaires that were used (Minnesota Job Satisfaction scale developed by Weis et al., 1967, and on intra-organizational trust constructed by Omarov, 2009) are written in English. To increase the response rate, the final version of the questionnaire produced for this research was translated into Swedish by the researchers of this paper, who are both fluent in the Swedish language. Still, consideration should be given to the fact that any type of translation is affected by individual interpretations and biases. The component of personal interpretations and biases has actively been considered through several loops of feedback on the translations between the two researchers and with the first manager (one of the heads of units in the Scania region) working for the

Swedish Public Employment Service that was contacted. The English version of the questionnaire is included in Appendix 1.

3.4 Concepts: measures and indicators

The concepts of concern for this research are qualitative in their nature. Both intra-organizational trust and job satisfaction, the two overarching concepts of this research, are qualitative in the sense that they are not directly measurable with statistical data. Therefore, the concepts need to be operationalized into different measures. The new measures in turn allow the qualitative concepts to be quantitatively measured. The measures also allow for distinguishing fine differences which will lead to clear variations in outcomes. Furthermore, the use of measures ensures continuity of the research (Bryman, 2012). The well-chosen measures form a consistent device that can be used as an instrument to collect and analyze the data. The consistency and quality of the measures are influenced heavily by the reliability of the entire research, which will be described later. The third argument for using measures in quantitative research is that it provides the basis for more precise estimates of the level of relationships between the different concepts. As both the relation as well as the precise degree of the relationship between intra-organizational trust and job satisfaction are calculated, the effect of different variables becomes apparent (Bryman, 2012; 2015).

The two main concepts of intra-organizational trust and job satisfaction are made measurable through indicators. The variables on socio-demographic variables included in the questionnaire (see Appendix 1) can be unambiguously counted in quantities, therefore they are classified as direct measures (Bryman, 2012). The other variables included, concerning intra-organizational trust and job satisfaction, needed indicators to make the concepts directly quantifiable. Indicators allowed the researchers to analyse the quantitative data collected through the questionnaire as if it were a measure. How the concepts of intra-organizational trust and job satisfaction were made measurable through indicators is presented in "3.6 Design of the questionnaire". Consistency of the measures is important to achieve a high level of reliability (Bryman, 2012).

3.5 Design of the questionnaire

The quantitative empirical data collection of this research was through the use of questionnaires, as previously mentioned. To substantiate and argue for the exact choices made when designing the questionnaire, this subchapter will elaborate on how it was composed. In total, the questionnaire consists of three parts: socio-demographic variables, variables on intra-organizational trust, and variables on job satisfaction. The questionnaire consists of a total of 47 items. For the two latter parts of the questionnaire, a five-point Likert scale is applied. According to Bryman (2012), the Likert scale is a widely used format that Rensis Likert developed to ask questions about attitudes where respondents are asked to rate their level of agreement with a series of statements that form a multiple-indicator-or-item measure. The scale is then used to measure the intensity of attitudes on a subject. Thus, the Likert level allows to differentiate between employees in their attitudes, giving each respondent a number that indicates a more or less degree of dissatisfaction, neutral or satisfaction (Sekaran & Bougie, 2016). The employees of the Swedish Public Employment Service were asked to express their attitudes on different statements, on a five-point Likert scale, related to job satisfaction and intra-organizational trust.

The first part of the questionnaire consists of socio-demographic variables, such as gender, years of experience, their job title, salary and level of completed education. Even if the theoretical framework does not require or include certain variables, according to Sekaran & Bougie (2016), it is advisable to collect certain socio-demographic data. Such information aids in the description of sample characteristics in the data analysis report. Furthermore, an active choice to include these variables has been made, in order to answer the second posed research question (see introduction). The researchers are interested in seeing the plausible influence and significance of different socio-demographic variables on the level of job satisfaction.

To measure job satisfaction, the form of the Minnesota Job Satisfaction scale developed by Weis et al. (1967) was employed in this research (see Appendix 2 for further elaboration on the scale and dimensions). The scale consists of 20 items in its shortest form. The items are presented in a statement form and responses range from “1” (very dissatisfied) until “5” (very satisfied).

A scale of 22 items is used to measure intra-organizational trust levels (Omarov, 2009, cited in Gucer & Demirdag, 2014). The items are presented in a statement form and responses range from “1” (strongly disagree) until “5” (strongly agree) (see Appendix 3 for further elaboration on the scale and dimensions).

According to Sekeran and Bougie (2016), shorter items in the questionnaire are preferred over longer sentences. Therefore, the questionnaire was composed by intentionally using short and concise statements to which the respondents should reply. By doing this, a strategy to retain the focus of the respondent, the researchers hoped to increase the response rate and decrease missing values. As mentioned in subchapter “3.3 Ethics and reliability”, the introduction to the questionnaire was carefully composed to encourage a higher response rate.

3.6 Data analysis procedure

As previously mentioned, a quantitative approach was taken to answer the posed research questions. In order to conduct a quantitative analysis of the data collected from questionnaires, SPSS (a statistical software platform) was used. This subchapter will provide information on how the data analysis was employed and how it allowed us to test the hypotheses. In general, the beginning of a quantitative data analysis consists of several preliminary steps that must be completed before the actual analyzing can start (Sekaran & Bougie, 2016). The aim is to ensure that the data is correct, complete, and suitable for further analysis. The following paragraphs will guide the reader through the process of conducting the different steps in this research.

After finalizing the data collection period, the data that was conducted was coded in SPSS. According to Bryman (2015), the assignment of numbers to each item category in order to aggregate common answers is referred to as coding. As previously mentioned, the questionnaire consisted of closed-ended Likert-type items. The benefit of using closed-ended items was that it allowed respondents to respond on their own terms. Considering the assignment of numbers to answer categories is normally done prior to the administration of such questions to respondents, they are often referred to as "pre-coded" questions. The same went for this research. Respondents who answered "agree" or "satisfied" to a Likert-style statement received a code of "4" for that question, making

coding a relatively straightforward task (Bryman, 2015). After coding the responses, the next step involved importing the coded data into SPSS.

The computer program IBM SPSS Statistics version 26 is used to perform quantitative analysis of the data. The data included responses of 171 employees of the Swedish Public Employment Service. Responses to the job satisfaction scale were received on a 5-point Likert scale (1=very dissatisfied; 2=dissatisfied; 3=neutral; 4=satisfied; 5=very satisfied); responses to the intra-organizational trust scale were received on a 5-point Likert scale (1=strongly disagree; 2=disagree; 3=neutral; 4=agree; 5=strongly agree). After collecting data through questionnaires, the data was prepared for analysis. The first step involved exporting data from a Google Form to an Excel file. After that, each group was given a number (code) and the answers were coded. Data coding entails assigning a number to the answers of respondents so that they can be inserted into a database (Sekaran & Bougie, 2006). In this study, for example, gender is used as a three-category variable, with males being coded with 1, females being coded with 2, and others being coded with 999. Another example of a categorical variable is Tenure, which is regarded as a five-category variable where code 1 is assigned to employees with less than a year of working experience, 2=1-3 years, 3=4-7 years, 4=8-11 years, and 5=more than 12 years. Similarly, a coding approach has been applied to other categorical variables such as education, position, and salary. On the other hand, responses to the scale of job satisfaction and the scale of intra-organizational trust are coded in line with the respective scales (1= strongly disagree, to 5= strongly agree; and 1=very dissatisfied, to 5= very satisfied, respectively).

Whereas data on socio-demographic variables are of a nominal scale, the data on job satisfaction and intra-organizational trust are of an ordinal scale. Descriptive statistics including maximum, minimum, means, variance, and standard deviations were used and presented for both the dependent and independent variables.

Further analysis to test the validity of the measures was carried out. According to Sekaran and Bougie (2016), "[...] the reliability of a measure is established by testing for both consistency and stability. Consistency indicates how well the items measuring a concept hang together as a set". In line with this, Cronbach's alpha was used. Once all the descriptive statistics were gathered, the hypotheses could be tested by performing ordinal logistic regression in SPSS. Regression analysis allowed for an objective determination of the strength and nature of the relationship between the independent variables (intra-organizational trust and the socio-demographic variables) and the dependent variable (job satisfaction).

Finally, the methodological chapter of this paper outlined the choices that were made in the design and execution of this research. Careful consideration has been taken to a range of different aspects considered to be of importance when conducting quantitative research. The following chapter will provide a thorough analysis of the empirical data that was collected using the aforementioned methodological approaches.

4. Presentation, analysis and interpretation of data

In this chapter of the research paper, the empirical quantitative data collected from the questionnaires is presented and analyzed. The chapter provides the data analysis and shows the different tests and models that have been used in order to test the data. With the use of descriptive statistics information, a clear overview has been given about the respondents who participated in the research. The second subchapter of the analysis provides empirical data about the influence of the independent variables (intra-organizational trust and the socio-demographic variables) on job satisfaction (the dependent variable). The independent variables' influence on job satisfaction is measured by the significance of each respective dimension (three subdimensions of intra-organizational trust and five subdimensions of socio-demographic variables). This information consolidates the research and provides answers to the posed research questions.

4.1 Data analysis

In the following subchapters the results of different tests and models will be presented and analyzed. When analyzing empirical quantitative data it is important to perform different tests in order to get information on the raw data that has been collected. These tests allow for clarity of the data and demonstrate, amongst others, whether further analysis should rest on parametric or nonparametric tests, the descriptives of the data, detecting multicollinearity and the reliability of scales. After having performed the different tests and analyzed the raw data thoroughly, the exact influence of the independent variables on the dependent variable can be measured through ordinal logistic regression model.

4.1.1 Testing for normality of distributions

In order to perform data analysis, the first step is to determine the choice of statistical tests for hypothesis testing. The required statistical test is determined by whether the data obtained is parametric or nonparametric (Sekaran & Bougie, 2016). According to Burns and Burns (2012), there are four assumptions that must be met in order to perform a parametric test, i.e. (1) the assumption that data is interval or scale, (2) normality of distribution, (3) homogeneity of variance, and (4) that samples should be randomly drawn from the population. They further suggest that if assumptions 1, 2 or 4 are not fulfilled, a non-parametric test should be used. Moreover, nonparametric tests do not make any assumptions regarding distributions or population parameters (Burns & Burns, 2012).

Different tests of normality analysis can be used to see whether the data set satisfies the assumptions of the normality of distributions. Skewness and kurtosis are two objective measurements of normality that can be used together. The Kolmogorov-Smirnov and Shapiro-Wilk are generally accepted tests of normality of distribution (Burns & Burns, 2012; Sekaran & Bougie, 2016). Coefficients of skewness and kurtosis as well as Kolmogorov-Smirnov and Shapiro-Wilk are used to test for the normality of distributions in this sample (see Appendix 4: Normality of distributions). The results of these tests show that the normality assumptions have not been met. As a result, nonparametric tests should be used for the purpose of this research.

4.1.2 Descriptive statistics

In this study, descriptive statistics including maximum, minimum, means, variance and standard deviations are used and presented for both the dependent and independent variables. The results show that, in terms of gender representation, 69 percent of respondents (or 115 employees) were female, while 31 percent (or 52 employees) were male. One respondent was identified as the other, and the remaining two did not respond to the gender question. When it comes to years of experience, 11.7 percent (or 20 employees) have less than a year, 12.3 percent (or 21 employees) have 1-3 years, 24.6 percent (or 42 employees) have 4-7 years of experience, 20.5 percent (or 35 employees) have 8-11 years of experience, and 31 percent (or 53 employees) have more than 12 years of experience. In terms of educational background, 3.5 percent (or 6 employees) have a secondary education, 5.8 percent (or 10 employees) have a post-secondary education (other than college or university), 12.3 percent (or 21 employees) have studied at college or university, and the majority 78.4 percent (or 134 employees) have a college or university degree. When it comes to the position within an organization, 71.9 percent (or 123 employees) work as an employment officer, 5.8 percent (or 10 employees) work as specialist, 0.6 percent (or 1 employee) work as head of department, 4.1 percent (or 7 employees) work as section manager, 1.2 percent (or 2 employees) work as a customer host, 9.4 percent (or 16 employees) work as SIUS-consultant, and 7 percent (12 employees) defined themselves as other. In terms of income, 1.8 percent (or 3 employees) earn less than 25.000 SEK/month, 21.9 percent (or 37 employees) earn between 25.000-30.000 SEK/month, 42.6 percent (72 employees) earn between 30.001-35.000/month, 33.7 percent (or 57 employees) earn more than 35.000 SEK/month, and two respondents did not respond to this question.

Table I depicts the mean of all responses for dependent and independent (non-demographic) variables. The results indicate that the mean of all responses captured on a 5-point Likert scale for job satisfaction is 3.69, the mean of trust in a manager is 4.20, the mean of trust in colleagues is 4.31, and the mean of trust in the organization is 3.36.

Table I: Descriptive statistics for dependent and independent (non-demographic) variables

Descriptive statistics for dependent and independent (non-demographic) variables						
Variable	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Job satisfaction	171	1.80	4.90	3.6946	.64103	.411
Trust in manager	171	1.00	5.00	4.1989	.77005	.593
Trust in colleagues	171	1.80	5.00	4.3088	.67179	.451
Trust in organization	171	1.00	5.00	3.3645	.98791	.976

To compare the mean between groups for gender, for example, we split the data file into categories and run statistical analysis in SPSS. According to the findings, female employees have a mean job satisfaction of 3.73, a trust in manager of 4.17, a trust in colleagues of 4.36, and a trust in the organization of 3.38. For male employees, the mean of job satisfaction is 3.63, trust in manager 4.25, trust in colleagues 4.15, trust in the organization is 3.40. When it comes to others, the mean of job satisfaction is 3.13, trust in manager 4.36, trust in colleagues 4.60, trust in the organization is 2.00.

Similarly, we split the data to compare the means of responses captured based on the position that a respondent has within the organization. When it comes to the employment officer, the mean of job

satisfaction is 3.59, trust in manager 4.12, trust in colleagues 4.29 and trust in organization is 3.29. For specialists, the mean of job satisfaction is 4.09, trust in manager 4.40, trust in colleagues 4.52 and trust in organization is 3.62. For the head of department, the mean of job satisfaction is 4.60, trust in manager 5.00, trust in colleagues 5.00 and trust in the organization is 4.85. For section manager, the mean of job satisfaction is 4.29, trust in manager 4.42, trust in colleagues 4.42 and trust in organization is 3.85. For customer hosts, the mean of job satisfaction is 3.42, trust in manager 3.20, trust in colleagues 3.30 and trust in the organization is 3.36. For SIUS-consultant, the mean of job satisfaction is 3.82, trust in manager 4.43, trust in colleagues 4.32 and trust in the organization is 3.36. For employees who chose others as an option in terms of position, the mean of job satisfaction is 3.83, trust in manager 4.37, trust in colleagues 4.25 and trust in the organization is 3.48.

In terms of years of experience, the mean job satisfaction for an employee with less than a year is 3.81, trust in manager is 4.40, trust in colleagues is 4.44, and trust in organization is 4.04. For employees with 1-3 years of experience, the mean of job satisfaction is 3.46, trust in manager 4.03, trust in colleagues 4.08 and trust in the organization is 3.27. For employees with 4-7 years, the mean of job satisfaction is 3.62, trust in manager 4.05, trust in colleagues 4.32 and trust in the organization is 3.24. For employees with 8-11 years of experience, the mean of job satisfaction is 3.68, trust in manager 4.33, trust in colleagues 4.34 and trust in the organization is 3.25. For employees with more than 12 years of experience, the mean of job satisfaction is 3.80, trust in manager 4.20, trust in colleagues 4.30 and trust in the organization is 3.31.

Employees with a secondary school education have a mean job satisfaction of 3.69, trust in manager of 4.43, trust in colleagues of 4.13, and trust in organization of 3.64. For employees with post-secondary education (other than college or university), the mean of job satisfaction is 3.82, trust in manager 4.11, trust in colleagues 4.18 and trust in organization is 3.48. For employees, with studies at college or university (without a degree), the mean of job satisfaction is 3.72, trust in manager 4.28, trust in colleagues 4.49 and trust in organization is 3.45. For employees with a degree from university or college, the mean of job satisfaction is 3.68, trust in manager 4.18, trust in colleagues 4.29 and trust in organization is 3.32.

In terms of salary, for employees earning less than 25.000 SEK per month, the mean of job satisfaction is 3.30, trust in manager is 3.60, trust in colleagues is 3.13, and trust in organization is 3.33. For employees with a monthly salary between 25.000-30.000 SEK, the mean of job satisfaction is 3.63, trust in manager 4.30, trust in colleagues 4.35 and trust in organization is 3.53. For employees who earn between 30.001-35.000 SEK a month, the mean of job satisfaction is 3.55, trust in manager 4.08, trust in colleagues 4.33 and trust in the organization is 3.16. For employees with a monthly salary of more than 35.000 SEK, the mean of job satisfaction is 3.92, trust in manager 4.29, trust in colleagues 4.32 and trust in the organization is 3.49.

4.1.3 Kruskal-Wallis test and Mann-Whitney U-test

The Kruskal-Wallis test is a nonparametric test which is used to determine whether there are significant differences in the mean ranks between groups/categories in each of the socio-demographic variables in terms of the level of job satisfaction. According to Burns & Burns (2012, p. 322), *"the test determines whether these sums of ranks are distributed randomly, indicating that they are likely to have come from samples all drawn from the same population (null hypothesis) by comparing mean ranks of each group"*. If the Kruskal-Wallis test indicates a statistically significant difference between

groups of a variable, the Mann-Whitney U-test will be used as a post hoc test to identify which groups (if any) are significantly different by comparing pairs of groups. For this purpose, the Kruskal-Wallis test was performed on each of the socio-demographic variables. The null hypothesis of the Kruskal-Wallis test for this model is that the distribution of job satisfaction levels is the same across categories.

For the gender variable, Kruskal-Wallis test indicates that there is no significant difference in the level of job satisfaction between male and female, chi-square (χ^2) (1, N=168)= 1.80, p=.180.

For the experience variable, the test indicates that there is no significant difference in the level of job satisfaction between male and female, χ^2 (4, N=171)= 5.15, p=.272.

For the experience variable, the test indicates that there is no significant difference in the level of job satisfaction across categories χ^2 (4, N=171)= 5.15, p=.272.

For the level of education variable, the test indicates that there is no significant difference in the level of job satisfaction across categories, χ^2 (3, N=171)= .386, p=.943.

For the position variable, the test indicates that there is a significant difference in the level of job satisfaction across categories, χ^2 (6, N=171)= 17.16, p=.009.

For the salary variable, the test indicates that there is a significant difference in the level of job satisfaction across categories, χ^2 (3, N=169)= 10.16, p=.017.

As the p-value for position and salary is less than 0.05, the null hypothesis of Kruskal-Wallis test is therefore rejected. This suggests that there is a significant difference in the level of job satisfaction across categories in variables such as position and salary. The next step is to identify within which groups/pairs of the position and salary variables the differences are statistically significant.

For the position variable, the Mann-Whitney U-test pairwise comparisons indicate that there is a significant difference on the level of job satisfaction between employment officer and specialist (U=335.0, p = .017), as well as between employment officer and section manager (U=140.0, p=.003). However the results show there is no significant difference on the level of job satisfaction between other groups/pairs of the position variable.

For the salary variable, the Mann-Whitney pairwise comparisons indicate that there is a significant difference on the level of job satisfaction between employers with monthly earning of more than 35.000 SEK and those who earn between 30.001-35.000 SEK (U=1428.0, p = .003), as well as between employees who earn more than 35.000 SEK a month and those who earn 25.000-30.000 SEK (U=788.0, p=.039). However the results show there is no significant difference on the level of job satisfaction between other groups/pairs of the salary variable.

4.1.4 Testing for multicollinearity

"Multicollinearity is an often-encountered statistical phenomenon in which two or more independent variables in a multiple regression model are highly correlated. In its most severe case (if the correlation between two independent variables is equal to 1 or -1), multicollinearity makes the estimation of the regression coefficients impossible" (Sekaran and Bougie 2016, p.316). According to Sekaran and Bougie (2016), checking the correlation matrix for the independent variables is the most practical method to detect multicollinearity. The presence of high correlations between independent variables of 0.75 or above indicates multicollinearity. Pearson's correlation can not be used to determine the level of correlation between an ordinal and an interval/ratio variable because all variables must be measured at the interval/ratio level. In this study, Spearman's correlation was therefore employed to determine the relationship between independent variables (see Appendix 5). The correlation results show that the correlation values between the independent variables in this sample do not exceed 0.75. This means that there are no multicollinearity issues in this sample.

4.1.5 Reliability of scales

As mentioned in the previous chapters, the purpose of this research is to examine the relationship between intra-organizational trust and job satisfaction in the case of the Swedish Public Employment Service in Sweden, as well as the relationship between job satisfaction and different socio-demographic variables. Following the definition of concepts, variables of interest, and the selection of measures, the next step is to evaluate the reliability of a measure, or what Sekaran and Bougie (2016) define as the "goodness" of a measure. Reliability of a measure refers to both external and internal reliability. External reliability, on one hand, refers to the extent to which a measure is constant over time, whereas internal reliability, on the other hand, refers to the extent of internal consistency of a measure (Bryman, 2015). According to Sekaran and Bougie (2016, p.223), *"the reliability of a measure is an indication of the stability and consistency with which the instrument measures the concept"*. The external reliability of the measures employed in this research has been established in numerous other studies. The internal reliability of the scales used in this research is assessed using Cronbach Alpha analysis. Cronbach Alpha analysis is a commonly used measure to determine the internal consistency of a Likert scale. Cronbach Alpha values of 0.70 and above are considered appropriate for attitude scales (Burns & Burns, 2012). Cronbach Alpha analysis yielded Cronbach Alpha values of 0.94 and 0.92 for the scales of intra-organizational trust and job satisfaction, respectively (see Tables II and III). This indicates that both scales enjoy a high and acceptable level of internal consistency and, as such, are regarded as suitable measures for this research. After obtaining descriptive statistics for the variables of this study and having established the internal reliability of measures, the data set is now ready for a more in-depth analysis. The following step in this study is to test the hypotheses.

Table II: Results of Cronbach Alpha analysis for the scale of intra-organizational trust (IV).

Results of Cronbach Alpha analysis for the scale on intra-organizational trust		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.940	.941	22

Table III: Results of Cronbach Alpha analysis for the scale on job satisfaction (DV).

Results of Cronbach Alpha analysis for the scale on job satisfaction		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.920	.919	20

4.1.6 Ordinal logistic regression model

As our sample does not meet the assumptions of normality of distributions, we use a nonparametric counterpart model of the linear regression model, namely the ordinal logistic regression model, to examine the association between variables and determine the effect each of the independent variables have on the dependent variable.

The ordinal logistic regression, also known as proportional odds model, is an extension of the binary logistic regression model. Ordinal (ordered, ranked) variables, such as Likert-scales, are one of the most common applications of the proportional odds model (Osborne, 2015). Osborne (2015, p. 388-433) points out that *"the goal of ordinal logistic regression is to create a single estimate that predicts the probability of being in the next higher group as a function of a change in the independent variables (s) regardless of which group transition we are talking about"*.

The results from the ordinal logistic regression model indicate whether the model employed for the purpose of this research is statistically significant. The table below IV (Model Fitting Information) shows that the p-value for this model is smaller than 0.005, indicating that the model used for this research is statistically significant. This means that the model is a good fit for the data set. In other words, it suggests that these predictor (explanatory) variables which are included improve the model.

Table IV: Model fitting information.

Model Fitting Information				
Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	1278.902			
Final	1070.628	208.274	20	.000
Link function: Logit.				

4.1.7 Pseudo R-square

The Nagelkerke result (.715) indicates that the combined impact of independent variables explains 71.5 percent of changes or variations in job satisfaction (dependent variable). In other words, the 71.5 percent change in the dependent variable is a result of the combined effect of independent variables (see table V).

Table V: Pseudo R-square

Pseudo R-Square	
Cox and Snell	.715
Nagelkerke	.715
McFadden	.163
Link function: Logit.	

4.1.8 Test-of parallel lines

The null hypothesis for the test of parallel lines (see table VI) postulates that the location parameters are consistent across response groups. The probability value should be greater than $p > 0.05$ if the null hypothesis is to be rejected. As the p-value resulting from this model is $p .929$ (see Table VI), this means that the assumption of the test of proportional odds is not violated. As a result, the null hypothesis of the test of parallel lines is rejected.

Table VI: Test of parallel lines

Test of Parallel Lines (a)				
Model	-2 Log Likelihood	Chi-Square	df	Sig.
Null Hypothesis	1070.628			
General	.000b	1070.628	1140	.929
The null hypothesis states that the location parameters (slope coefficients) are the same across response categories.				
a. Link function: Logit.				
b. The log-likelihood value is practically zero. There may be a complete separation in the data. The maximum likelihood estimates do not exist.				

4.2 Influence of independent variables on job satisfaction

The table on parameter estimates (see table VII) depicts the regression coefficients and significance results for each of the independent variables employed in this model. The regression coefficients (estimates) are used for interpreting the predicted change in log odds.

Table VII: Parameter estimates of the independent variables.

Parameter Estimates						95 % CI	
Variable	Estimate	Std.error	Wald	df	Sig.	Lower Bound	Upper Bound
Trust in manager	1.500	.245	37.612	1	.000	1.021	1.979
Trust in colleagues	.772	.261	8.767	1	.003	.261	1.284
Trust in organization	1.684	.212	63.374	1	.000	1.269	2.098
[Salary: Less than 25.000 sek]	-.728	1.365	.285	1	.594	-3.403	1.947
[Salary: 25.000-30.000 sek]	-.687	.619	1.232	1	.267	-1.899	.526
[Salary: 30.001-35.000 sek]	-.106	.501	.045	1	.833	-1.087	.876
[Salary: more than 35.000 sek]	0a	.	.	0	.	.	.
[Gender: male]	-.279	.312	.801	1	.371	-.891	.332
[Gender: female]	0a	.	.	0	.	.	.
[Tenure: Less than a year]	-1.078	.655	2.704	1	.100	-2.362	.207
[Tenure: 1-3 years]	-.722	.591	1.491	1	.222	-1.881	.437
[Tenure: 4-7 years]	-.242	.501	.233	1	.629	-1.223	.739
[Tenure: 8 -11 years]	-.818	.452	3.282	1	.070	-1.704	.067
[Tenure: More than 12 years]	0a	.	.	0	.	.	.
[Education: Secondary school]	-.674	.787	.734	1	.392	-2.216	.868
[Education: Post-secondary education]	.423	.664	.406	1	.524	-.878	1.724
[Education: Studies at college or university]	-.677	.454	2.221	1	.136	-1.567	.213
[Education: Degree from college or university]	0a	.	.	0	.	.	.
[Position: Employment officer]	-1.091	.706	2.388	1	.122	-2.475	.293
[Position: Specialist]	.013	.824	.000	1	.987	-1.602	1.629
[Position: Head of department]	-1.300	1.871	.482	1	.487	-4.967	2.368
[Position: Section Manager]	.701	.903	.602	1	.438	-1.069	2.471
[Position: Customer host]	.942	1.595	.349	1	.555	-2.183	4.068
[Position: SIUS-consultant]	-.698	.824	.717	1	.397	-2.312	.917
[Position: Other]	0a	.	.	0	.	.	.
Link function: Logit.							
a. This parameter is set to zero because it is redundant.							

4.2.1 Three dimensions of intra-organizational trust

The results of the ordinal regression model show that trust in the manager, trust in colleagues and trust in the organization have a significant positive effect on job satisfaction.

The regression coefficients (estimates) from table VII can be interpreted as follows:

For every unit increase in the level of trust in the manager, there is a predicted increase of 1.500 (95% CI, 1.021-1.979) in the log odds of being at a higher level of job satisfaction. When the level of trust in the colleague increases, so does the probability of being at a higher level of job satisfaction. Trust in a manager is, therefore, a significant positive predictor of job satisfaction, Wald $\chi^2(1) = 37.612$, $p = .000$. This suggests that an employee who has a greater level of trust in his or her manager is more likely to be satisfied with his or her job (controlling the effect of other independent variables).

For every unit increase in the level of trust in colleagues, there is a predicted increase of .722 (95% CI, .261-1.284) in the log odds of being at a higher level of job satisfaction. As the level of trust in colleagues increases, so does the probability of being at a higher level of job satisfaction. Trust in colleagues is, therefore, a significant positive predictor of job satisfaction, Wald $\chi^2(1) = 8.767$, $p = .003$. This suggests that an employee who has a greater level of trust in his or her colleagues is more likely to be satisfied with his or her job (controlling the effect of other independent variables).

For every unit increase in the level of trust in an organization, there is a predicted increase of 1.684 (95% CI, 1.269-2.098) in the log odds of being at a higher level of job satisfaction. As the level of trust in an organization increases, so does the probability of being at a higher level of job satisfaction. Trust in an organization is, therefore, a significant positive predictor of job satisfaction, Wald $\chi^2(1) = 37.612$, $p = .000$. This suggests that an employee who has a greater level of trust in the organization is more likely to be satisfied with his or her job (controlling the effect of other independent variables).

4.2.2 Socio-demographic variables

The results of the ordinal logistic regression model show that demographic variables do not have a significant impact on job satisfaction. An elaboration on the analysis for each subdimension will be provided below.

Gender is a binary variable, and the results will be interpreted as a difference in log odds between male and female. Gender female is set as the baseline variable (category). The log odds of being at a higher level of job satisfaction was .279 points lower for male employees compared to females (95% CI, -.891 to .332), Wald $\chi^2(1) = 801$, $p = .371$. This suggests that female employees are more likely to be satisfied with their job (controlling the effect of other independent variables). However, gender is not found to be a significant predictor of job satisfaction.

Employees with more than 12 years of experience are set as a baseline category. The log odds of being at a higher level of job satisfaction was .818 points lower for employees with 8-11 years of experience compared to the baseline category (95% CI, -.1704 to .067), Wald $\chi^2(1) = 3282$, $p = .070$. The log odds of being at a higher level of job satisfaction was .242 points lower for employees with 4-7 years of experience compared to the baseline category (95% CI, -.1223 to .739), Wald $\chi^2(1)$

=233, $p=.629$. The log odds log of being at a higher level of job satisfaction was .722 points lower for employees with 1-3 years of experience compared to the baseline category (95% CI,-1881 to .437), Wald $\chi^2(1) = 1491$, $p=.222$. The log odds log of being at a higher level of job satisfaction was .1078 points lower for employees with less than a year of experience compared to the baseline category (95% CI,-2362 to .207), Wald $\chi^2(1) = 2704$, $p=.100$. This suggests that tenure was not a significant predictor of job satisfaction.

Employees who earn more than 35.000 SEK/month are set as a baseline category. The log odds log of being at a higher level of job satisfaction was .106 points lower for employees with a monthly salary of 30.001-35.000 SEK compared to the baseline category (95% CI,-1087 to .876), Wald $\chi^2(1) = .045$, $p=.833$. The log odds log of being at a higher level of job satisfaction was .687 points lower for employees with a monthly salary of 25.000-30.000 SEK compared to the baseline category (95% CI,-1899 to .526), Wald $\chi^2(1) = 1.232$, $p=.267$. The log odds log of being at a higher level of job satisfaction was .728 points lower for employees with a monthly salary of less than 25.000 SEK compared to the baseline category (95% CI,-3.403 to 1.947), Wald $\chi^2(1) = .285$, $p=.594$. This suggests that the higher the salary of an employee, he or she is more likely to indicate a higher level of job satisfaction (controlling the effect of other independent variables). However, the salary was not found to be a significant predictor of job satisfaction.

Education level "a degree from college or university" was set as a baseline category. Employees with college or university studies (without a degree) had a log odds of being at a higher level of job satisfaction that was .677 points lower than the baseline category (95% CI,-1.567 to .213), Wald $\chi^2(1) = 2.221$, $p=.136$. The log odds of being at a higher level of job satisfaction was .423 points higher for employees with post-secondary education compared to the baseline category (95% CI,-.878 to 1.724), Wald $\chi^2(1) = .406$, $p=.524$. The log odds log of being at a higher level of job satisfaction was .674 points lower for employees with secondary school compared to the baseline category (95% CI,-2.216 to .868), Wald $\chi^2(1) = .734$, $p=.392$. The results suggest that education was not found to be a significant predictor of job satisfaction.

Job position "other" was set as a baseline category. As only 12 employees have declared themselves as others in terms of job position, it is not considered a meaningful baseline category for interpreting differences in log odds between groups in this category. The results of the regression model suggest that position was not found to be a significant predictor of job satisfaction. However, the Kruskal-Wallis test revealed that there was a significant difference in the mean level of job satisfaction across categories, and Mann-Whitney pairwise comparisons revealed that there is significant difference in the level of job satisfaction between employment officer and specialist, as well as employment officer and section manager. This finding will be further discussed in the following chapter.

The data analysis and interpretation chapter yielded results that are useful in addressing the research questions and rejecting or accepting the posed hypotheses which will be discussed in the following chapter.

5. Discussion

In this chapter, the empirical data and findings that have been analyzed in the previous chapter will be assessed in relation to the theoretical framework that has been composed for this research. The hypotheses will be answered either through rejection or acceptance based on the collected data from employees working for the Swedish Public Employment Service. These findings are connected to what previous studies and research within this field of study have found and concluded.

The relationship between intra-organizational trust, socio-demographic variables and job satisfaction has been examined in other studies. However, as outlined as one of the research gaps, many studies have been carried out in other sectors (private sectors mainly). In this study, a model was developed to outline and analyze the variables influencing job satisfaction in a public sector organization in Sweden. A case study approach was used to validate the model. Ordinal logistic regression analysis was employed to examine the relationship between the three dimensions of intra-organizational trust, socio-demographic variables, and job satisfaction. An important finding of this study is that socio-demographic variables are not significant predictors of job satisfaction amongst employees in the Swedish Public Employment Service. In contrast, subdimensions of intra-organizational trust such as trust in the manager, trust in colleagues, and trust in the organization are found to be significant predictors and determinants of job satisfaction

The results of parameter estimates for the trust in manager (TM) variable provided strong evidence to support hypothesis H1 stating that, *the higher the level of employees' trust in managers, the higher the overall job satisfaction*. The variable on trust in colleagues (TC) yielded strong evidence to support hypothesis H2, stating that *the higher the level of an employee's trust in colleagues, the higher the overall job satisfaction*. The results of parameter estimates for the trust in organization (TO) variable provided strong evidence to support hypothesis H3 stating that, *the higher the level of employee's trust in the organization, the higher the overall job satisfaction*.

This study's findings are consistent with those of Güçer and Demirdag's (2014) hotel study, Sarikaya and Kara's (2020) and Aygün's (2021) studies in the education sector, Straiter's (2005) study in the pharmaceutical sector and Barimani and Khorshidi's (2018) study in the banking sector. In contrast to the ordinal logistic regression analysis performed in this study, the other studies have either employed multiple linear regression or correlation analysis to examine the relationship between job satisfaction and intra-organizational trust. Despite that, the findings that trust in the manager, trust in colleagues and trust in the organization have a significant positive effect on job satisfaction are consistent with the results of these studies.

The results of parameter estimates do not support hypotheses H4-H8, implying that gender, tenure, position, salary and level of education are not positively associated and, as a result, do not influence the level of job satisfaction of Swedish Public Employment Service employees. The findings suggest that socio-demographic variables are not significant determinants of job satisfaction in the Swedish Public Employment Service case. The results on the gender variable are consistent with those of Buitendach and Rothmann's (2009) study in the case of selected organizations in South Africa, and Oshagbemi's (2000) study in the case of university teachers in the UK. The results of this study with regard to education, tenure and salary are in line with the findings of Lee and Wilbur's (1985) study in

the case of public employees in the USA. With regard to position, the results are consistent with the Ebeling et al. (1979) study based on a national probability sample of working adults in the USA.

However, if a variable has no significant effect in explaining and determining the level of job satisfaction, that does not imply that there is no difference in job satisfaction levels between groups of the same variable. By comparing the mean of all responses captured on a 5-point Likert scale, one could observe the differences and similarities in the level of job satisfaction between groups in a specific variable. Spector (1997, p.2) pointed out that “*differences among organizational units in job satisfaction can be diagnostic of potential trouble spots. Each reason is sufficient to justify concern with job satisfaction. Combined they explain and justify the attention that is paid to this important variable*”.

When comparing the scores (mean) of male and female employees on job satisfaction, for example, the results show that the mean of female job satisfaction (3.73) is higher than the mean of male job satisfaction (3.63). This suggests that female employees are more satisfied with their jobs than their male colleagues. These results are consistent with the findings of Clark’s (1997) study on “*Why are women so happy at work?*” that females record slightly higher levels of job satisfaction than males in almost every category based on data from a large-scale British survey. However, the Mann-Whitney post hoc analysis results confirmed that there is no significant difference in the level of job satisfaction between male and female employees. This is consistent with the findings of Oshagbemi’s (2000) study of UK academics.

When it comes to the position an employee has in the organization, the mean of the head of department on job satisfaction is 4.60 (measured on a 5-point scale), followed by the mean of section manager (4.29), specialist (4.09), others (3.83), SIUS-consult (3.82), employment officer (3.59) and for the customer host (3.42). The results of Mann-Whitney post hoc analysis suggested that there is a significant difference in the level of job satisfaction between employment officer and specialist ($p = .017$), as well as between employment officer and section manager ($p = .003$). Job satisfaction levels rise in a positive linear fashion, from customer hosts expressing the lowest level of job satisfaction to the department head expressing the highest level of job satisfaction. This suggests that the higher the position of the employees within the organization, the higher the level of job satisfaction they express. However, the results of the ordinal regression models show that position is not a significant predictor of job satisfaction.

When it comes to how many years an employee has worked for the organization, the results show that the mean job satisfaction for an employee who has worked less than a year is 3.81, followed by employees with more than 12 years with a mean of 3.80, employees with 8-11 years with a mean of 3.68, for employees with 4-7 years 3.62, and employees with 1-3 years of experience with a mean of 3.46. The results indicate that job satisfaction levels do not increase in a positive linear fashion. This suggests that the level of job satisfaction among employees in the organization does not increase progressively with additional years of experience. The Mann-Whitney test confirmed that there is no significant difference in the level of job satisfaction between pairs/groups in this variable.

Employees with post-secondary education (other than college or university) have a mean job satisfaction of 3.82, followed by employees with studies at college or university (without a degree), who have a mean of 3.72, employees with a secondary school education who have a mean of 3.69, and employees with a degree or university who have a mean of 3.68, which is the lowest. This

suggests that job satisfaction levels do not follow a positive linear relationship pattern with regard to education level. In this study, employees with post-secondary education (other than college or university), for example, have expressed the highest level of job satisfaction, whereas employees with a degree or university have expressed the lowest level of job satisfaction. These findings are somewhat consistent with those of Clark (1997, p.349) that "*higher levels of education are associated with less-satisfied workers*". One explanation for this relationship is that while more education has benefits, it also increases expectations (Hagenaars, 1986, Ross and Reskin, 1992, cited in Clark, 1997), which leads to more job dissatisfaction and disappointment. Another is that employees with a higher education are more likely to experience educational mismatch (Sloane et al., 1995, cited in Clark, 1997).

Another finding of this study is that employees with a monthly salary above 35.000 SEK a month have the highest level of job satisfaction with a mean of 3.92, followed by employees with a monthly salary between 25.000-30.0000 SEK with a mean of 3.63, employees with a monthly salary between 30.001-35.000 SEK with a mean of 3.55, and employees with a monthly salary below 25.000-with a mean of 3.30. The results of Mann-Whitney post hoc analysis suggested that there is a significant difference in the level of job satisfaction between employers with monthly earning of more than 35.000 SEK and those who earn between 30.001-35.000 SEK ($p=.003$), as well as between employees who earn more than 35.000 SEK a month and those who earn 25.000-30.000 SEK ($p=.039$). This suggests that the higher the salary, the higher the level of job satisfaction. However, the results of the ordinal regression models show that salary is not a significant predictor of job satisfaction. These findings are consistent with those of Clark (1997) that income has no significant effect on job satisfaction.

Remember from the previous chapters that the scale of job satisfaction was presented in a statement form and responses ranged from "1" (very dissatisfied) until "5" (very satisfied) (see Appendix 1-part III-for the exact meaning of each Likert scale measurement from 1 until 5). From the results, the mean of job satisfaction, measured on a 5-point Likert scale, indicates that the level of job satisfaction among the employees of the Swedish Public Employees Service that participated in this research is 3.69. This value shows that the level of job satisfaction among employees is slightly below 4.0 ("satisfied"). Moreover, the mean of trust in the organization is 3.36 on the 5-point Likert scale, which is rather low. The mean of trust in the manager is 4.19, which is slightly above "satisfied". Trust in colleagues captured the highest mean of 4.30.

To measure the level of job satisfaction of the employees of the Swedish Public Employment Service, the Minnesota Satisfaction Questionnaire (MSQ) has been used. Researchers were able to assess job satisfaction based on three distinct factors: intrinsic (e.g., compensation, advancement, organizational policies, etc.); extrinsic (e.g., achievement, moral values, creativity, etc.); and general (coworkers and working conditions). The table in job satisfaction scale and dimensions (see Appendix 2) provides a more detailed overview of the aspects of job satisfaction that deserve more considerate attention from the management of the Swedish Public Employment Service. The arithmetic mean (\bar{x}) scores below 4.0 ("satisfied") regarding job satisfaction were captured in the statements such as "my pay and the amount of work I do" ($\bar{x}=2,42$); "the chances for advancement in this organization" ($\bar{x}=2,98$); "the praise I get for doing good job" ($\bar{x}=3,02$); "the chances to tell people what to do" ($\bar{x}=3,18$); "the way organisation's policy are put into practice" ($\bar{x}=3,23$); "the chance to be somebody in the community" ($\bar{x}=3,36$); "the chance to try my own methods of doing the jobs" ($\bar{x}=3,47$); "the working conditions" ($\bar{x}=3,70$); the chance to do something that makes use of my abilities" ($\bar{x}=3,72$); "the freedom to use my own judgement" ($\bar{x}=3,78$); "being able to do things that do not go against my conscience" (\bar{x}

=3,82); “the chance to do different things from time to time” (\bar{x} =3,83); and “the feeling of accomplishment I get from job” (\bar{x} =3,95). Each of these statements represents an important aspect of job satisfaction. The questionnaire findings offer important and valuable information about employee attitudes toward functionality as well as organizational shortcomings. The analysis of means allowed the researchers to identify which aspects of job satisfaction have lower arithmetic means and, as a result, require attention and evaluation from the Swedish Public Employment Service's management. In line with other studies on job satisfaction, these questionnaire findings show that employees of the Swedish Public Employment Service are not only looking for what Mottaz (1985) defines as traditional rewards such as a good salary, working conditions and steady employment, but also, among other things, opportunities for advancement within the organization, recognition for good work and a sense of belonging.

Our conceptual framework and design of hypotheses are based on a review of current theories and academic practice. Thus, this study enabled the identification of significant determinants of job satisfaction in a public organization setting. From an organizational perspective, this study suggests that intra-organizational trust matters, and the issue of job satisfaction could be further improved by addressing the issue of trust in managers, trust in colleagues and trust in organization. The findings of this study can be used to guide future studies and stakeholders in identifying areas for improvement, designing policies and strategies that might contribute to greater job satisfaction among employees of public organizations in Sweden.

6. Conclusion

The final chapter of this research paper provides the reader with the conclusions that have been drawn after conducting the quantitative empirical research. In conclusion, the two posed research questions are answered in a straightforward manner. The answers to the research questions are solidified through the data analysis and findings. Furthermore, this chapter will conclude with recommendations for future research and the Swedish government. The recommendations could be of interest to researchers and scholars within this field of study, management studies in general, and individuals and organizations with managerial and leadership functions and roles.

6.1 Conclusion

Two research questions were composed in this research to evaluate the influence of intra-organizational trust on job satisfaction in a Swedish public sector organization. The research questions that this research paper has answered with empirical data from a quantitative research method approach are the following:

"What is the influence of intra-organizational trust on job satisfaction in a Swedish public sector organization?"

"What is the influence of employees' socio-demographic variables on job satisfaction in a Swedish public sector organization?"

Prior to sending out the questionnaire, the eight hypotheses were developed, revealing what the researchers predicted would be the research's outcome, based on existing theory and literature. This study found the first three hypotheses (H1-H3) to be valid predictions. These hypotheses propose that the higher one's level of trust in one's manager, colleagues, and organization, the higher overall job satisfaction would be. These three hypotheses combined formed the answer to the first research question. The empirical data shows that, indeed, intra-organizational trust does have a positive influence on job satisfaction. This conclusion can be drawn for the respondents who participated in this research, consisting of public sector employees working for the Swedish Public Employment Service, confined to the Scania region department.

The second research question was composed to analyze the effect of socio-demographic variables on the levels of job satisfaction amongst the public sector employees working for the Swedish Public Employment Service. The socio-demographic variables consisted of five variables: salary, tenure, gender, level of education and position. The predefined hypotheses (H4-H8) were produced with the expectation that each of the five variables would be positively related to job satisfaction. After conducting the research, the empirical data showed no statistical significance for any of the five variables. As a result, hypotheses H4-H8 were rejected. The five socio-demographic variables, and therefore the answer to the latter five hypotheses, combined formulated the answer to the second posed research question. This research has found no significant difference in job satisfaction among the participants of this research consisting of employees working for the Swedish Public Employment Service (confided to the Scania region particularly) based on socio-demographic variables.

This research has added to and strengthened the notion that intra-organizational trust has an impact on job satisfaction. Intra-organizational trust is positively related to job satisfaction experienced by public sector employees amongst employees working for the Swedish Public Employment Service. Based on these findings, we can conclude that it is of importance for individuals in managerial- and leadership positions to invest in creating cultures, environments, and workplaces that strengthen high levels of intra-organizational trust specifically. This will lead to higher levels of job satisfaction amongst the employees working for the public sector organization. By focusing on establishing high levels of intra-organizational trust, levels of job satisfaction will increase indirectly. Besides this strategy, individuals in the management of public sector organizations should also aim to increase job satisfaction amongst their employees, particularly considering the many positive effects the high levels of job satisfaction have on both internal and external organizational outcomes. Increased commitment and morale, reduced absenteeism, a positive attitude towards one's tasks and the organization the employee works for, increased brand image, increased productivity levels, competitive advantage in the market and good relationships with colleagues and management are just a few of the positive consequences for the individual and the organization.

6.2 Recommendations

After having conducted this research, loads of knowledge and insights have become apparent to the researchers. Therefore, different recommendations can be made based on the knowledge that has been collected throughout this research. The recommendations that the researchers propose are of significance both for academics in terms of providing input for future research, and for practitioners in terms of recommending the implementation of a, for example, annual surveying tool to monitor the well-being of Sweden's public sector employees. The different recommendations will be elaborated upon in this subchapter of the conclusion.

6.2.1 Recommendations for future research

Our recommendation for future research would be, first of all, to apply a similar study to another Swedish public organization. This will allow for more substantial data on the influence of intra-organizational trust determinants on job satisfaction. More data and research could make it possible to make more generalizable statements on the influence of intra-organizational trust for public sector employees in Sweden. Another recommendation for future research that we suggest is to examine the influence of socio-demographic variables on job satisfaction amongst public sector employees more closely. In this study, the influence of the five different variables that were composed to assess the influence of the socio-demographic variables were found to not adhere to acceptable levels of significance. Due to this, no conclusions can be drawn on their effect and influence on job satisfaction. However, the results still pointed towards different kinds of influence of specific groups/categories within variables and should therefore still be taken into consideration in future research. In fact, it could be highly interesting to assess and analyze why the five variables were found not to be significant.

6.2.2 Recommendation to the Swedish government

Considering that public sector organizations are state-owned, one could argue that the state should set the right example to emphasize the monitoring of their employees' well-being. Around the world, different countries' governments have implemented annual (or other consistent time-frames) monitoring programs to evaluate qualities amongst public sector employees, such as their levels of job satisfaction. The United States, for example, surveys their public sector employees annually to establish a report on, amongst others, employee engagement and satisfaction. The U.S. Federal survey is employed by the Office of Personnel Management (state-owned department of the government) and is called the "Federal Employee Viewpoint Survey". The survey is sent to all permanent federal employees working for U.S. public sector organizations. The results of the government's survey results can be, and are, used to examine management practices and improve the work environment in the different public sector organizations and departments. The survey results are basically seen as a form of feedback that can be used to identify possible changes that need to be made in management and human capital strategies. Similar systems and tools are in place in the governments of other countries around the world. By doing these surveys, a government does not only get substantial information and input for improvements, but also radiates the importance of emphasizing the constant measurement and monitoring of one's employees' e.g. levels of job satisfaction towards other actors who lead institutions, organizations or companies.

The Swedish government does not yet have an annual (or quarterly or any other given time-frame) survey to measure the level of job satisfaction amongst their public sector employees. After conducting this research, we would like to suggest that the Swedish government implements a surveying strategy to consistently measure qualities such as job satisfaction amongst the Swedish public sector employees. As mentioned, this will radiate the government's stance on the importance of measuring and monitoring the well-being of their employees for feedback- and improvement purposes, both internally and externally.

References

- Albrecht, S. & Travaglione, A.. (2003). Trust in Public-Sector Senior Management. *International Journal of Human Resource Management*, vol. 14. DOI: 10.1080/09585190210158529.
- Arbetsförmedlingen (2021). Om oss: Vår organisation. Available online: <https://arbetsformedlingen.se/om-oss/var-verksamhet/organisation> [Accessed on 14 April 2021].
- Atif, A., Richards, D. & Bilgin, A. (2012). Estimating Non-Response Bias in a Web-based Survey of Technology Acceptance: A Case Study of Unit Guide Information Systems. *23rd Australasian Conference on Information Systems*, 3-5 December, 2012, Geelong.
- Aygün, M. (2021). Analysis of the relationship between job satisfaction and organizational trust of physical education and sports teachers. *Journal of pedagogical research*, vol. 5(1), pp. 203–215.
- Barimani, A., Salimi Khorshidi, A. (2018). The Relationship between Organizational Trust and Job Satisfaction in Employees of the Agricultural Bank Branches. *Journal of Industrial Strategic Management*, vol. 3, no. 2, pp. 25-36.
- Bedeian, A. G., Ferris, G. R. & Kacmar, K. M. (1992). Age, tenure, and job satisfaction: A tale of two perspectives. *Journal of vocational behavior*, vol. 40, no. 1, pp. 33–48.
- Bienkowska, A., Walecka-Jankowska, K., Zablocka-Kluczka, A. & Zimmer, A. (2008). Influence of intra-organizational trust on organizational outcomes. *Operations Research and Decisions*, vol. 8, pp. 9-30.
- Bryman, A. (2012). *Social Research Methods*. Oxford: Oxford University Press.
- Bryman, A. (2015). *Research methods and organization studies*. London, England: Routledge.
- Buitendach, J. H. & Rothmann, S. (2009). The Validation of the Minnesota Job Satisfaction Questionnaire in Selected Organisations in South Africa. *South African Journal of Human Resource Management*, vol. 7(1), pp. 1–8. DOI: 10.4102/sajhrm.v7i1.183.
- Burns, R. & Burns, R. P. (2012). *Business research methods and statistics using SPSS*. London, England: SAGE Publications.
- Campbell, J. W. & Im, T. (2015). Identification and Trust in Public Organizations: A communicative approach. *Public Management Review*, vol. 17, no. 8, pp. 1065-1084, DOI: 10.1080/14719037.2014.881531
- Cho, Y. J. & Park, H. (2011). Exploring the relationships among trust, employee satisfaction, and organizational commitment. *Public management review*, vol. 13, no. 4, pp. 551–573.

- Cho, Y. & Poister, T. (2013). Human Resource Management Practices and Trust in Public Organizations. *Public Management Review*, vol. 15, no. 6, pp. 816–838. DOI: 10.1080/14719037.2012.698854.
- Chowdhry, A., (2021). Lessons Learned From 4 Steve Jobs Quotes. Forbes. Available online: <https://www.forbes.com/sites/amitchowdhry/2013/10/05/lessons-learned-from-4-steve-jobs-quotes> [Accessed 11 April 2021].
- Clark, A. E. (1997). Job Satisfaction and Gender: Why Are Women So Happy at Work? *Labour Economics*, vol. 4, no. 4, pp. 341–372. DOI: <http://www.sciencedirect.com.ludwig.lub.lu.se/science/journal/09275371>.
- Cohen, A. (2015). Chapter 5: Organizational trust, in: Cohen, A. (2005). Fairness in the Workplace: A global perspective. *Palgrave Macmillan U.K.*
- Cook, D. A., Wittich, C. M., Daniels, W. L., West, C. P., Harris, A. M. & Beebe, T. J. (2016). Incentive and reminder strategies to improve response rate for Internet-based physician surveys: A randomized experiment. *Journal of Medical Internet Research*, vol. 18, no. 9, published online 16-09-2016, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5045523/>
- Cook, J. & Wall, T. (1980). New work attitude measures of trust, organizational commitment and personal need non-fulfilment. *Journal of Occupational Psychology*, vol. 53, no. 1, pp. 39–52. DOI: 10.1111/j.2044-8325.1980.tb00005.x.
- Crowe, S., Cresswell, K., Robertson, A., Huby, G., Avery, A. & Sheikh, A. (2011). The case study approach. *BMC Med Res Methodol*, vol. 11, no. 100. DOI: 10.1186/1471-2288-11-100
- Dietz, G. & Den Hartog, D. (2006). Measuring trust inside organizations. *Personnel Review*, vol. 35, pp. 557-588.
- Ebeling, J., King, M. & Rogers, M. (1979). Hierarchical Position in the Work Organization and Job Satisfaction: Findings in National Survey Data. *Human Relations*, vol. 32, no. 5, pp. 387–394. doi: 10.1177/001872677903200503.
- Ellickson, M. C. & Logsdon, K. (2001). Determinants of job satisfaction of municipal government employees. *State and Local Government Review*, vol. 33, no. 3, pp. 173–184.
- Fard, P. & Karimi, F. (2015). The Relationship between Organizational Trust and Organizational Silence with Job Satisfaction and Organizational Commitment of the Employees of University. *International Education Studies*, vol. 8, no. 11, pp. 219-227.

- Ganzach, Y. (1998). Intelligence and Job Satisfaction. *Academy of Management journal*, vol. 41, no. 5, pp. 526–539.
- Gerring, J. (2011). *The Case Study: What it is and What it Does*. Oxford University Press. DOI: 10.1093/oxfordhb/9780199604456.013.0051.
- Gruneberg, M. M. (2014). *Understanding Job Satisfaction 1979 (1979th ed.)*. Basingstoke, England: Palgrave Macmillan. DOI: 10.1007/978-1-349-03952-4.
- Güçer , E. & Demirdağ, Ş A. (2014). Organizational Trust and Job Satisfaction: A Study on Hotels. *Business Management Dynamics*, vol. 4, no. 1, pp. 12–28.
- Hasche, N., Höglund, L. & Mårtensson, M. (2020). Intra- organizational trust in public organizations – the study of interpersonal trust in both vertical and horizontal relationships from a bidirectional perspective. *Public Management Review*, DOI: 10.1080/14719037.2020.1764081
- Hirschfeld, R. R. (2000). Does revising the intrinsic and extrinsic subscales of the Minnesota Satisfaction Questionnaire short form make a difference?. *Educational and Psychological Measurement*, vol. 60, no. 2, pp. 255–270. DOI: 10.1177/00131640021970493.
- Hosseinzadeh, A., Samifanni, F. F., Rajabipour, P., Jonbeshi, A., Kaabbasi, R. & Amini, A. (2013). Investigating and identifying the factors and sources of employees' intra-organizational job satisfaction and dissatisfaction in Bakhtar regional electric company. *European Journal of Experimental Biology*, vol. 3, no. 6, pp. 22-32.
- Hunt, J. W. & Saul, P. N. (1975). The relationship of age, tenure, and job satisfaction in males and females. *Academy of Management journal*, vol. 18, no. 4, pp. 690–702.
- Laschinger, H. K. S., Finegan, J. & Shamian, J. (2002). The impact of workplace empowerment, organizational trust on staff nurses' work satisfaction and organizational commitment. *Emerald Group Publishing Limited*. DOI: 10.1016/S1474-8231(02)03006-9.
- Lee, R. & Wilbur, E. R. (1985). Age, education, job tenure, salary, job characteristics, and job satisfaction: A multivariate analysis. *Human relations; studies towards the integration of the social sciences*, vol. 38, no. 8, pp. 781–791.
- Li, N., Yan, J. & Jin, M. (2007). How does organizational trust benefit work performance?. *Front. Bus. Res. China*, vol. 1, pp. 622–637. <https://doi.org/10.1007/s11782-007-0035-7>
- Locke, E. A. (1970). Job satisfaction and job performance: A theoretical analysis. *Organizational behavior and human performance*, vol. 5, no. 5, pp. 484–500.

Locke, E. A. (1976). The Nature and Causes of Job Satisfaction. In Dunnette, M. D. & Hough, L. M. (eds.). *Chicago: Rand McNally*.

Lund, D. B. (2003). Organizational culture and job satisfaction. *Journal of business & industrial marketing*, vol. 18, no. 3, pp. 219–236.

Lynn, P. (2008). Chapter 3: The problem of nonresponse. In: de Leeuw, E. D., Hox, J. J. & Dillman, D. A. (2008). *International Handbook of Survey Methodology: Routledge*.

Mayer, R. C., Davis, J. H & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review*, vol. 20, no. 3, pp. 709-734.

Mayer, R. C., & Davis, J. H. (1999). The effect of the performance appraisal system on trust for management: A field quasi-experiment. *Journal of Applied Psychology*, vol. 84, no. 1, pp. 123–136. <https://doi.org/10.1037/0021-9010.84.1.123>

Mayer, R. C., & Gavin, M. B. (2005). Trust in management and performance: Who minds the shop while the employees watch the boss? *Academy of Management Journal*, vol. 48, no. 5, pp. 874–888. <https://doi.org/10.5465/AMJ.2005.18803928>

Mottaz, C. J. (1984). Education and work satisfaction. *Human relations; studies towards the integration of the social sciences*, vol. 37, no. 11, pp. 985–1004.

Mottaz, C. J. (1987). Age and work satisfaction. *Work and occupations*, vol. 14, no. 3, pp. 387–409.

Möllering, G., Bachmann, R. & Lee, S. H. (2004). Introduction: Understanding organizational trust - Foundations, constellations and issues of operationalization. *Journal of managerial psychology*, vol. 19, no. 6, pp. 556-570.

Omarov, A. (2009). Organizational Trust and Job Satisfaction: A Research in the Private Sector, master thesis, Department of Management and Organization, Dokuz Eylül University. Available online: <http://hdl.handle.net/20.500.12397/11088> [Accessed 28 January 2013]

Osborne, J. W. (2015) Best practices in logistic regression. *Thousand Oaks, CA: SAGE Publications*.

Oshagbemi, T. (2000). Gender differences in the job satisfaction of university teachers. *Women in Management Review*, vol. 15, no. 7, pp. 331-343. <https://doi.org/10.1108/09649420010378133>

Ozmen, S. Y. (2017). How employees define organizational trust: analyzing employee trust in organizations. *Journal of Global Responsibility*, vol. 9, no. 1, pp. 21-40.

- Pate, J., Beaumont, P. & Stewart, S. (2007). Trust in senior management in the public sector. *Employee Relations*, Vol. 29, no. 5, pp. 458-468. <https://doi.org/10.1108/01425450710776281>
- Pirson, M. & Malhotra, D. (2011). Foundations of organizational trust: What matters to different stakeholders? *Organization Science*, vol. 22, no. 4, pp. 1087-1104.
- Raziq, A. & Maulabakhsh, R. (2015). Impact of working environment on job satisfaction. *Procedia economics and finance*, vol. 23, pp. 717–725.
- Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. F. (1998). Introduction to special topic forum: Not so different after all: A cross-discipline view of trust. *Academy of Management Review*, vol. 23, no. 3, pp. 393-404.
- Sarikaya, S. & Keskinliç Kara, S. B. (2020). Organizational Trust and Organizational Support as a Predictor of Job Satisfaction. *International Journal of Curriculum and Instruction*, vol. 12, pp. 435–467.
- Sekaran, U. & Bougie, R. (2016). Research methods for business : a skill-building approach (Seventh edition). *John Wiley & Sons*.
- Seppänen, R., Kosonen, M., Vanhala, M. & Ellonen, H. K. (2014). Building intra-organizational trust with managerial communications. *International Journal of Management Practice*, vol. 7, no. 2, pp. 108-125.
- Shockley-Zalabak, P., Ellis, K. & Winograd, G. (2000). Organizational trust: what it means, why it matters. *Organization Development Journal*, vol. 18, no. 4, pp. 35-48.
- Spector, P. E. (1997). Job Satisfaction: Application, Assessment, Causes, and Consequences. *Thousand Oaks, CA: SAGE Publications*.
- Steger, M. F., Dik, B. J. & Shim, Y. (2019). Measuring satisfaction and meaning at work. in Gallagher, M. W. & Lopez, S. J. (eds) Positive psychological assessment: A handbook of models and measures., 2nd ed. *Washington, DC: American Psychological Association*, pp. 373–388. DOI: 10.1037/0000138-024.
- Straiter, K. L. (2005). The effects of supervisor's trust of subordinates and their organization on job satisfaction and organizational commitment. *International Journal of Leadership Studies*, vol. 1, pp. 86–101.
- Tietjen, M. A. & Myers, R. M. (1998). Motivation and job satisfaction. *Management decision*, 36, no. 4, pp. 226–231.

Tongco, D. C. (2007). Purposive sampling as a tool for informant selection. *Ethnobotany Research & Applications*, vol. 5, pp. 147-158.

Top, M., Tarcan, M., Tekingündüz, S. & Hikmet, N. (2012). An analysis of relationships among transformational leadership, job satisfaction, organizational commitment and organizational trust in two Turkish hospitals. *The International Journal of Health Planning and Management*, vol. 28, no. 3, pp. e217-e241.

University of Minnesota (2021). (MSQ) Minnesota Satisfaction Questionnaire. Available online: <https://vpr.psych.umn.edu/msq-minnesota-satisfaction-questionnaire> [Accessed 13 april 2021]

Van de Bunt, G. G., Wittek, R. P. M. & de Klepper, M. C. (2005). The evolution of intra-organizational trust networks. *International Psychology*, vol. 20, no. 3, pp. 339-369.

Van Mol, C. (2016). Improving web survey efficiency: the impact of an extra reminder and reminder content on web survey response. *International Journal of Social Research Methodology*, vol. 20, no. 4, pp. 317-327.

Voelpel, S. & Kearney, E. (2008). Trust within organizations: Benefiting from demographic changes by fostering intra-organizational trust. *Forum on Public Policy*, pp. 1-17.

Wanous, J. P. & Lawler III, E. E. (1972). Measurement and Meaning of Job Satisfaction. *Journal of Applied Psychology*, Vol. 56, no. 2, pp. 95–105. doi: 10.1037/h0032664.

Weiss, D. J., Dawis, R. V., & England, G. W. (1967). Manual for the Minnesota Satisfaction Questionnaire. *Minnesota Studies in Vocational Rehabilitation*, vol. 20.

Appendices

Appendix 1: Questionnaire

Introductory text

“Our names are Artan Rogova and Zoé Bander and we are currently writing our master’s thesis at Lund University, in order to graduate from the program “Master in Management”. For our thesis we are doing research about the effect of intra-organizational trust on job satisfaction. To conduct this research we have chosen the Swedish Employment Service as our case study. We would kindly like to ask you to participate in our research by filling in the questionnaire.

In the questionnaire you will be asked about your opinions and feelings towards your current job, the organization of your employment and your level of satisfaction or dissatisfaction towards different aspects. The answers will be completely anonymous and will only be available to the researchers (Artand and Zoé) performing this research. The raw data that will be conducted from the questionnaires will not be shared with the Swedish Public Employment Service. Anonymity and confidentiality are promised. The questionnaire consists of statements to which you take a stance and our estimation is that it will take a maximum of 5 minutes to fill in. Through participation you give consent to the use of your data in our research.

We would like to thank you in advance for your participation.”

Part I: Socio-demographic variables

1. Gender
 - a. Male
 - b. Female
 - c. Other
2. Years of employment for the Swedish Public Employment Service
 - a. Less than a year
 - b. 1-3 years
 - c. 4-7 years
 - d. 8-11 years
 - e. More than 12 years
3. What is the highest level of education that you have finished?
 - a. Elementary school
 - b. Secondary school
 - c. Post-secondary education (which doesn’t classify as college or university)
 - d. Studies at college or university
 - e. Degree from college or university
4. What is your function at the Swedish Public Employment Service?
 - a. Employment officer
 - b. Specialist
 - c. Unit manager

- d. Section manager
 - e. Customer host
 - f. SIUS-consultant
 - g. Other
5. What is your current monthly salary?
- a. Less than 25.000 SEK
 - b. 25.000-30.000 SEK
 - c. 30.001-35.000 SEK
 - d. More than 35.000 SEK

Part II: Intra-organizational trust

Answered through a 5-point Likert scale, ranging from strongly disagree (1) to strongly agree (5).

- (1) Strongly disagree
- (2) Disagree
- (3) Neutral
- (4) Agree
- (5) Strongly agree

1. I trust my supervisor that he/she has enough knowledge and skills about the job.
2. I trust my supervisor that he/she makes the right decisions about the job.
3. I trust my supervisor that he/she fully does his/her own duties.
4. I trust my supervisor that he/she keeps one's promise.
5. What my supervisor says is consistent with what he/she does.
6. When he/she is needed by employees, my supervisor is helpful and behaves supportively.
7. I trust my supervisor about any subject that he/she tells me.
8. I can easily talk to my supervisor about issues of my job.
9. I trust my supervisor that he/she can do the work easily and smoothly.
10. My supervisor gets our opinions when he/she makes decisions and applies procedures about the job.
11. When I encounter a problem related with my job, I believe that my colleagues will help me deal with it .
12. I trust my colleagues that they do their best on the job.
13. My colleagues do their duties, even if the supervisors do not show up at the workplace.
14. I trust my colleagues that they do not make my job difficult when carrying out a task that requires a lot of attention.
15. I trust my colleagues about specializing in their own field.
16. The company where I work always treats me fairly and justly.
17. The company where I work always keeps one's promise.
18. The company where I work always backs me up when I need help.
19. I trust the company where I work about being honest with its employees.
20. The company where I work awards and supports me as long as I do my work well enough.
21. The company where I work cares about my problems.
22. I trust this company's policies that are related with employees.

Part III: Job Satisfaction

Answered through a 5-point Likert scale, ranging from very dissatisfied (1) to very satisfied (5).

- (1) Very dissatisfied
- (2) Dissatisfied
- (3) Neutral
- (4) Satisfied
- (5) Very satisfied

- 1. Being able to keep busy all the time
- 2. The chance to work alone on the job
- 3. The chance to do different things from time to time .
- 4. The chance to be "somebody" in the community .
- 5. The way my boss handles his/her workers
- 6. The competence of my supervisor in making decisions
- 7. Being able to do things that do not go against my conscience
- 8. The way my job provides for steady employment
- 9. The chance to do things for other people .
- 10. The chance to tell people what to do
- 11. The chance to do something that makes use of my abilities
- 12. The way company policies are put into practice
- 13. My pay and the amount of work I do
- 14. The chances for advancement on this job
- 15. The freedom to use my own judgment
- 16. The chance to try my own methods of doing the job
- 17. The working conditions
- 18. The way my co-workers get along with each other
- 19. The praise I get for doing a good job
- 20. The feeling of accomplishment I get from the job

Appendix 2: Job satisfaction scale and dimensions

No.	JOB SATISFACTION	Dimension	Mean	Aspects of job satisfaction
1	Being able to keep busy all the time.	Intrinsic	4.27	Activity
2	The chance to work alone on the job.	Intrinsic	4.26	Independence
3	The chance to do different things from time to time.	Intrinsic	3.83	Variety
4	The chance to be "somebody" in the community.	Intrinsic	3.36	Social status
5	The way my immediate manager handles his/her employees.	Extrinsic	4.25	Supervision - human relations
6	The competence of my immediate manager in making decisions.	Extrinsic	4.09	Supervision - technical
7	Being able to do things that do not go against my conscience.	Intrinsic	3.82	Moral values
8	The way my job provides for steady employment	Intrinsic	4.02	Security
9	The chance to do things for other people.	Intrinsic	4.25	Social service
10	The chance to tell people what to do.	Intrinsic	3.18	Authority
11	The chance to do something that makes use of my abilities.	Intrinsic	3.72	Ability utilization
12	The way organization's policies are put into practice.	Extrinsic	3.23	Company policies and practices
13	My pay and the amount of work I do.	Extrinsic	2.42	Compensation
14	The chances for advancement in this organization.	Extrinsic	2.98	Advancement
15	The freedom to use my own judgment.	Intrinsic	3.78	Responsibility
16	The chance to try my own methods of doing the job.	Intrinsic	3.47	Creativity
17	The working conditions.	General	3.70	The working conditions
18	The way my co-workers get along with each other.	General	4.17	Co-workers
19	The praise I get for doing a good job.	Extrinsic	3.02	Recognition
20	The feeling of accomplishment I get from the job.	Intrinsic	3.95	Achievement

Appendix 3: Intra-organizational trust scale and dimensions

ORGANIZATIONAL TRUST		Code	Mean	Variables
No	Items			
1	I trust that my immediate manager has sufficient knowledge of the activity/operation (s).	TM1	4.12	Trust in manager
2	I trust that my immediate manager makes right decisions about the activity/operation (s).	TM2	4.02	
3	I trust that my immediate manager fulfills her/his duties.	TM3	4.32	
4	I trust that my immediate manager keeps her/his promises.	TM4	4.20	
5	What my immediate manager says is consistent with what he/she does.	TM5	4.19	
6	When my immediate manager is needed by his /her employees, he/she is helpful and supportive.	TM6	4.31	
7	I trust my immediate manager when he/she tells me something.	TM7	4.33	
8	I can easily talk to my immediate manager about issues related to my job.	TM8	4.38	
9	I trust that my immediate manager makes my job easier.	TM9	4.03	
10	My immediate manager listens to our opinions when he/she makes decisions and applies procedures that affect the work.	TM10	4.04	
11	When I encounter a problem related to my job, I trust that my colleagues will help me deal with it.	TC1	4.36	Trust in colleagues
12	I trust that my colleagues do/will do their best at work.	TC2	4.18	
13	My colleagues do their job even if the immediate manager is not at work.	TC3	4.52	
14	I trust that my colleagues do not make my job difficult when I perform a task that requires a lot of attention.	TC4	4.40	
15	I trust that my colleagues specialize in their own field.	TO1	4.08	Trust in organization
16	I feel fairly treated at my workplace at the Swedish Public Employment Service.	TO2	3.73	
17	The Swedish Public Employment Service always keeps its promise to me as an employee.	TO3	3.27	
18	The Swedish Public Employment Service always supports me when I need help.	TO4	3.36	
19	I trust that the Swedish Public Employment Service is honest with its employees.	TO5	3.25	
20	My employer rewards and supports me as long as I do my job well enough.	TO6	3.24	
21	My employer cares about my problems.	TO7	3.32	
22	I trust the Swedish Public Employment Service's policy regarding employees.	TO8	3.35	

Appendix 4: Normality of distributions

Descriptives		
	Statistic	Std. Error
Mean	3.8328	.04733
95% Confidence Interval for Mean	3.7394*	
	3.9262**	
5% Trimmed Mean	3.8530	
Median	3.9048	
Variance	.383	
Std. Deviation	.61889	
Minimum	1.83	
Maximum	4.95	
Range	3.12	
Interquartile Range	.83	
Skewness	-.504	.186
Kurtosis	.199	.369
*Lower Bound ** Upper Bound		

Tests of Normality						
Dataset mean	Kolmogorov-Smirnov (a)			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
	.067	171	.058	.978	171	.009
a. Lilliefors Significance Correction						

Appendix 5: Correlations between independent variables

Correlations between independent variables								
Variable	Trust in manager	Trust in colleagues	Trust in organization	Gender	Experience	Education	Position	Salary
Trust in manager	1.000	.463**	.481**	-.016	.000	-.025	.104	.025
Sig. (2-tailed)	.	.000	.000	.836	.997	.749	.175	.747
N	171	171	171	168	171	171	171	169
Trust in colleagues	.463**	1.000	.449**	.164*	-.039	-.052	.013	-.010
Sig. (2-tailed)	.000	.	.000	.034	.612	.499	.869	.900
N	171	171	171	168	171	171	171	169
Trust in organization	.481**	.449**	1.000	-.001	-.133	-.058	.090	.015
Sig. (2-tailed)	.000	.000	.	.990	.083	.454	.242	.844
N	171	171	171	168	171	171	171	169
Gender	-.016	.164*	-.001	1.000	.154*	-.088	-.029	.073
Sig. (2-tailed)	.836	.034	.990	.	.047	.257	.709	.351
N	168	168	168	168	168	168	168	166
Experience	.000	-.039	-.133	.154*	1.000	-.062	.194*	.705**
Sig. (2-tailed)	.997	.612	.083	.047	.	.423	.011	.000
N	171	171	171	168	171	171	171	169
Education	-.025	-.052	-.058	-.088	-.062	1.000	-.102	-.065
Sig. (2-tailed)	.749	.499	.454	.257	.423	.	.185	.400
N	171	171	171	168	171	171	171	169
Position	.104	.013	.090	-.029	.194*	-.102	1.000	.319**
Sig. (2-tailed)	.175	.869	.242	.709	.011	.185	.	.000
N	171	171	171	168	171	171	171	169
Salary	.025	-.010	.015	.073	.705**	-.065	.319**	1.000
Sig. (2-tailed)	.747	.900	.844	.351	.000	.400	.000	.
N	169	169	169	166	169	169	169	169
** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).								