People Talking Without Speaking

A study of the relationship between employees' perceived quality of an upward feedback tool and their level of needs satisfaction at work

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Abstract

Background: Human capital is valued more than ever in organisations and employee engagement is among the top priorities for managers to achieve. Employee engagement has been linked to many organisational benefits, but at the same time, managers face major challenges in creating conditions for engagement to arise since employees' expectations and needs are constantly changing. Thus, to let employees voice their opinions at frequent intervals and to involve them becomes essential in order for managers to be able to understand employees from their perspective and create a work environment that sparks engagement.

Purpose: The purpose of this study was to investigate the relationship between a *frequently used* upward feedback tool and employees' level of needs satisfaction at work. Investigating specific HRM-practices is desired within engagement research, and in order to meet this desire, we used the following research question as a guidance for our study:

What is the relationship between employees' perceived quality of a frequently used upward feedback tool and their level of needs satisfaction at work?

Method: In this study, a quantitative approach was taken, in which a cross-sectional design and survey method was used to investigate the aforementioned correlational relationship. Our case study was performed at Ellevio, a large electricity-grid company, where a questionnaire was distributed to gather data. In turn, regression analyses were conducted to investigate the relationship.

Conclusion: The findings in this thesis prove that there is a positive relationship between employees' perceived quality of a frequently used upward feedback tool and their level of needs satisfaction at work in the case study company. When employees perceive the quality of a frequently used upward feedback tool to be high, their level of needs satisfaction will also be high. Thus, we conclude that employees' perceived quality of a frequently used upward feedback tool is a positive predictor of their level of needs satisfaction at work.

Keywords: *Self-determination, needs satisfaction, employee voice, upward feedback.*

Foreword

"*Tell me and I forget, teach me and I may remember, involve me and I learn*"

-Benjamin Franklin

We would first of all like to thank everyone that have contributed with valuable inputs, help and support that have allowed us to perform this study.

Johan Ribrant, thank you for helping us conduct the study and get access to the employees at Ellevio. And thanks to all the employees who took the time to fill in the questionnaire.

To our supervisor, Tina Sendlhofer, thank you for all the support, valuable inputs and for helping us to get back on track at times when we felt (and most likely were) a bit lost. Amanda Åkesson, Ida Renfjord, Alva Grundberg, Mathilda Hammarström, Hannah Mellin and Filip Engholm, thank you for all the feedback during the supervision meetings that helped us progress with our work.

With this thesis we finalise our Bachelor Program in Business and Economics at the Stockholm School of Economics. The three-year journey has been exciting, fun and at times a bit bumpy. Writing our thesis in contrast to other courses have been a very iterative process as compared to other courses with more structured syllabuses and it has brought us new perspectives within the area of employee engagement. We have also experienced what Benjamin Franklin nicely pointed out, that learning first starts when you become truly involved.

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Table of contents

Definitions of Key Concepts

Employee voice	- The voluntary communication of employee suggestions, concerns, information about issues, ideas or opinions about work related issues to people who can act on the communication to bring about improvement or change (Detert and Burris, 2007; Morrison, 2011; Van Dyne and LePine, 1998).
Needs satisfaction	- The fulfilment of meeting the three basic psychological needs according to Self-determination theory, namely the need for autonomy, competence and relatedness, which in turn leads to enhanced self-motivation (intrinsic motivation) and mental health (Ryan and Deci, 2000).
Quality of the feedback tool	- The quality of the feedback tool is in this thesis defined according to what Bauer and Mulder (2006) state in their paper "*the satisfaction with the form of feedback, whether it is perceived as a possibility to share critical opinions, whether it leads to real changes in the perception of the subordinates, and whether it is acknowledged by the supervisors*" (Ibid, p. 514).
Upward feedback	- Employees providing feedback to their manager(s).
&Frankly	- A frequently used upward feedback tool in which employees can provide feedback on organisational issues, their motivation, engagement and similar aspects to their manager(s).
MEANAUTO	- Index used to measure the level of need satisfaction of autonomy.
MEANCOMP	- Index used to measure the level of need satisfaction of competence.
MEANRELA	- Index used to measure the level of need satisfaction of relatedness.
PERQUAL	- Index used to measure employees' perceived quality of &Frankly (the upward feedback tool).

1. Introduction

1.1 Background

1.1.1 Employee Engagement - A Complex Ideal to Manage and Achieve

Today, many leaders argue that taking care of employees has become an increasingly important factor for organisational success. Deloitte (2015) asked 3300 business and HR-leaders from 106 countries about what their major organisational issues were, with 87% saw culture and employee engagement as the most critical issues to address. Not only does engaged employees experience lower levels of stress (Limeade Institute, 2016), but organisations that manage to create a culture, which includes "*meaningful work, deep employee engagement… are outperforming their peers"* (Deloitte, 2015, pp. 35). The implications of having engaged employees are among many that organisations can reduce costs (O'Connell and Kung, 2007) associated with hiring and onboarding processes. Accordingly, there are financial incentives for organisations to keep employees engaged. More importantly however, lower levels of stress directly influence the well-being of the individual employee. Thus, managing to create an organisational environment that fosters engagement has profound value for both organisations and employees. At the same time, it has been shown that there are complexities associated with creating such a work climate. Deloitte (2018) highlights that employees' ever-changing expectations and needs consequently make managers struggle to meet their demands, which is putting a brake on the development of engagement. Thus, internal communication is vital for organisations to ensure an engaged workforce and as a matter of fact, internal communication has been linked to drive employee engagement (Mishra, Boynton and Mishra, 2014). Consequently, the question that arises from a manager perspective, is what specific practices that can be implemented to allow for better communication, spark engagement and in turn create organisational benefits.

1.1.2 Employee Voice - A Vital Ingredient for Employee Engagement

Kahn (1990) was the first to talk about engagement as a theoretical concept, which we define as "*a positive, fulfilling, work-related state of mind that is characterized by vigour, dedication, and absorption*" (Albrecht et al., 2015). Throughout the past two decades, the interest in conducting research within the area of engagement has surged (Bakker and Albrecht, 2018). Most of the studies have focused on the "between-person" view (Ibid), showcasing differences in work engagement among individuals as a function of personal strategies, working conditions and behavioural strategies (Bakker, Demerouti and Sanz-Vergel, 2014). As Bakker and Albrecht (2018) argues, this type of research – studying differences in engagement among employees – is one of the most significant contemporary trends within engagement research along with the trend of investigating the impact human resource management (HRM) practices have on employees.

The growing interest for HRM-practices stems more specifically from a desire to understand how HRM-practices and engagement are related. More generally, the field of engagement is in need of getting more integrated with reputable motivational and psychological theories such as Self-determination theory (SDT) (Shuck, Zigarmi and Owen, 2015). A meta-analysis conducted by Christian, Garza and Slaughter (2011) showed that autonomy is a predictor of engagement. However, Albrecht et al. (2015) mentions that additional research is needed to assess how autonomy is associated with engagement. In addition, as Constantin and Baias (2015) concludes, an inclusion of employee opinions is a must for organisations to create conditions for employee engagement. Thus, to include employees' opinions, known as employee voice, appears to be an essential ingredient in order to build and retain employee engagement. At the same time, the influence of needs satisfaction on motivation has been proven to be vital in various settings, including the workplace (Baard, Deci and Ryan, 2004). Bauer and Mulder (2006) found in their research that employees' perception of the quality of a feedback intervention, in terms of a yearly employee feedback survey, related positively to employees' level of needs satisfaction. However, no prior research has been conducted to evaluate the relationship between a *frequently used* upward feedback tool and employees' level of needs satisfaction at work. With this in mind, the

notion to investigate how a specific HRM-practice (i.e. a frequently used upward feedback tool) relates to employees' level of needs satisfaction becomes attractive since the relationship is uninvestigated and as it could have implications for how managers deal with employee engagement, a recurring issue in organisations.

1.2 Purpose and Research Question

The purpose of this study is to increase the understanding of the relationship between a specific HRM-practice and employees' feelings of needs satisfaction at work. In order to accomplish this, the study investigates how employees perceive the quality of a frequently used upward feedback tool (an internal communication practice) and how this relates to their level of needs satisfaction at work. More specifically, the study focuses on a specific upward feedback tool used by a large power grid company. The goal is to provide insights to this relationship, to guide future research into areas of interest and for managers to understand the implications of utilising an upward feedback tool. Through a quantitative cross-sectional study, the researchers aim to answer the following research question:

What is the relationship between employees' perceived quality of a frequently used upward feedback tool and their level of needs satisfaction at work?

1.3 Delimitation

The study is delimited to study the level of needs satisfaction of employees (and not that of leaders) and their perceived quality of the frequently used upward feedback tool &Frankly. Other feedback channels or tools that may exist have not been considered. The study is also delimited to investigate employees working with customer relations, a contributing factor being that the studied company has been using &Frankly for the longest period of time within this group.

1.4 &Frankly and Ellevio

&Frankly is a digital upward feedback tool that organisations can use in order to receive inputs from employees on organisational and personal issues. The employees use the tool through a smartphone application or via a link sent to their email, similar to a survey. &Frankly is intended to be used at frequent intervals and integrates questions related to engagement, motivation and other employee related matters. This can be contrasted with the most commonly used, once a year survey, which is associated with limitations to the follow up process as the results are prone to change between the long intervals of the surveys.

Ellevio is a Swedish company operating in the electricity sector. Alongside EON and Vattenfall, Ellevio offer distribution of electricity through their power grid to 900 000 customers and as of 2017 their revenue reached 7 Billion SEK (Ribrant, 2019, personal communication, 11 March). The company has 450 office employees of which about one third (170) uses &Frankly. Ellevio have been using &Frankly since 2017 and before that they had a similar paper questionnaire to collect feedback prior to the introduction of &Frankly. The initial purpose of having a tool to collect frequent feedback was to find out about issues and problems employees face in their work and to bring these onto the agenda for managers. The feedback from the tool, such as suggestions and areas that indicate that there could be problems are discussed in the working teams. Once a month the teams have a meeting in which the feedback from &Frankly is discussed and actions to improve in specific areas are considered. (Ibid)

1.5 Expected Contribution

Knowing the background to our thesis, our research will be performed as a means to contribute to one of the most significant trends within engagement research, namely how a specific HRM-practice is related to employee engagement, by measuring their level of needs satisfaction. By investigating this relationship through the lens of Self-determination theory and taking the feedback provider perspective, this study is expected to provide empirical data that could help

future research in the search for a causal relationship between more practical HRM-practices and employee engagement. Thus, the study is relevant in time and since no studies on how a frequently used upward feedback relate to employees' level of needs satisfaction have been performed, this thesis incorporates an aspect of novelty as it sheds light on an unexplored phenomenon in research.

2. Literature Review

2.1 A Shift in Perspective of What Drives Organisational Success

Most research in the past on the subject of upward feedback have focused on how leaders can provide employees with efficient and performance improving feedback as well as how leaders are affected by feedback from employees and other actors (e.g. Atwater, Roush and Fischtal, 1995; Reilly, Smither and Vasilopoulos, 1996; Tourish and Robson, 2004). Just a few decades ago, feedback in a top-down direction shifted to also include lateral and upward aspects of feedback from co-workers (peer assessment) and subordinates (upward assessment) among others through what is referred to as 360º feedback systems (Hurley, 1998). This links to the currently emerging organic paradigm within leadership research (Gill, 2011), in which distributed leadership based on the notion of collaboration and participation of other than the leader(s) is emphasised (Harris, 2008). Meanwhile, including and letting employees raise their opinions, influence and co-determine their work have been proven to foster more organisational success, in terms of higher customer satisfaction, better productivity, longer employment and better financial outcomes, as compared to other leadership paradigms (Jing, 2018). In the study by Jing (2018), the scope covered only small businesses and the means of communication in larger organisations would most likely differ since a general implication of larger companies is less interpersonal communication between employees and managers due to its mere size (Gray and Mabey, 2005). However, it can be argued that some transferability of their study to larger companies can be made since the organisational structure of larger companies is often similar to that of smaller companies working together as one (e.g. functional organisational structure or smaller teams working independently of other teams with own responsibilities, budgeting etc.) and hence similar effects could be expected in larger companies based on this assumption. Meanwhile, Morrison (2014) argues that employees' default option is not to raise their opinions, but to remain silent. Knowing this, to make employees share their ideas with their manager(s)

becomes interesting as their valuable inputs could be crucial for organisational success as well as avoiding potential scandals.

2.2 Involving and Engaging Employees - Barriers and Benefits

The link between how employees are treated at work and their level of engagement has proven to have implications for measurements of organisational success (Devi, 2009). As Markos and Sridevi (2010) describes, employee engagement is significantly intertwined with successful business outcomes such as, customer retention, profitability and customer loyalty. However, managing to make employees engaged is seldom as easy as it sounds since employees often hesitate to communicate problems upwards in organisations for a range of reasons. Milliken, Morrison and Hewlin (2003) found in their study that the most common reasons for not speaking up was fear of being labelled or viewed negatively, fear of damaging a relationship and fear of being punished. The common denominator for why employees default to remain silent seem to be a fear of being held accountable for speaking up, if he or she cannot remain anonymous. Thus, it is vital that psychological safety is established among organisational members, which is the underlying belief that the team is safe for interpersonal risk-taking (Edmondson, 1999), in order for employee voice to become a common practice in an organisation. As Milliken, Morrison and Hewlin (2003) concludes, when employees voice their opinions, they will more often than not be exposed to cognitive and emotional elements as well as social processes. Depending on the level of psychological safety, employees will choose to remain silent or voice accordingly. Consequently, valuable insights from lower levels of the organisation that could foster vital organisational learning may be impeded when no option is given for employees to raise their opinions (Milliken, Frances and Lam, 2009) and psychological safety is absent.

Remedies to the barriers of employees voicing their opinions, is argued to include the creation of a workplace where it is safe to voice one's opinions, promoting managerial interest in hearing about issues experienced by employees and recognising that employees have an inherent inclination to remain silent (Milliken, Morrison and Hewlin, 2003). However, these broad and general suggestions exemplify the approach research have had when it comes to addressing the

aforementioned problems associated with employees remaining silent, which in turn calls for a better specification of practical suggestions that managers could use. At the same time, considering the many differences among companies, it could be difficult, if not impossible, to find a reasonable "one size fits all" solution to these problems. However, as Truss et al. (2006, p.41) concludes, "*allowing people the opportunity to feed their views and opinions upwards is the single most important driver of engagement*", which highlights the benefits of voice opportunities on employee engagement and hence a motivational aspect for managers to seek practical solutions to promote this. Not only do voice-promoting practices facilitate employees to feel as important members of the organisation (Lind and Tyler, 1988; Vakola and Bouradas, 2005), but scholars have also argued that another consequence could be an overall increase in organisational effectiveness (Morrison, 2014). All in all, it can be argued that when psychological safety is present, upward feedback possibilities could have implications on organisational success through the mediating role of employee engagement.

2.3 Employee Need Satisfaction

A Self-determination theory model tested by Baard, Deci, and Ryan (2004) based on survey data from 528 employees in the investment banking industry provided evidence that managers being supportive of employees' autonomy at work, was positively related to employees' level of needs satisfaction. The study concludes that if managers take a subordinate's perspective, they could better understand the elements that are desired in specific situations to facilitate employee performance. However, they do not specify practical actions managers could take in order to support the autonomy of the employees, which is a limitation to their study. Further, their research highlights how important the work environment is for effective performance, similar to what other scholars have concluded in their research (e.g. Deci, Connell and Ryan (1989).

In a recent paper by Manganelli et al. (2018), they conclude that when individuals feel that they are motivated by themselves (autonomous regulation) and not by external means (controlled regulation), there is a range of positive outcomes for both employees and organisations. Despite the strong empirical support of the benefits, a majority of managers do not seem to be aware of

practices that could enhance needs satisfaction in employees, which would in turn promote autonomous regulation and better performance. Elaborating on the problem of why managers do not act according to the empirical evidence, research do not seem to present practical or feasible suggestions but rather vague and broad propositions. In line with this critique, Pfeffer and Sutton (2006) mention that only 15% of all decisions taken by physicians are based on evidence and that most rely on their past experience and knowledge. Although the transferability of this study on physicians could be limited, we believe that people in general to different degrees endorse behaviours and actions that produce expected outcomes as it provides them with a sense of control. As a matter of fact, a vast number of researchers have argued for individuals' necessity to feel a sensation of control over their situation at work as it has great impact on the level of experienced engagement (Milliken, et al., 2015).

2.4 Linking It All Together

Over the past decade, Self-determination theory, which in short highlights humans' desire to feel that they are in control, have mainly focused on investigating what factors facilitate volitional motivation (Deci, Olafsen and Ryan, 2017). A desire to integrate SDT with the field of engagement exists (Shuck, Zigarmi and Owen, 2015) and Bauer and Mulder (2006) found a positive relationship between employees' perceived quality of upward feedback and their level of needs satisfaction at work. Thus, it seems that upward feedback possibilities are related to positive effects on employees' sense of engagement, through needs satisfaction. However, a precondition for feedback to be given in the first place is a climate that is characterized by psychological safety. Only then will opinions be voiced that could facilitate the chain of events eventually leading to organisational success. With this in mind, Figure 1 showcase the theorised relationship between upward feedback and organisational success where the filled arrow is the potential relationship this thesis investigates.

Figure 1

3. Theoretical framework

3.1 Self-Determination Theory

Self-determination theory provides an empirically based framework of human motivation, optimal functioning and wellness (Gagné, 2013). The theory assumes that humans have an ever-existing growth tendency (Ryan and Deci, 2000), referred to as the Organismic integration process (OIP), stating that human development occur both by the internalisation of practices and values from the outside world, alongside the internal unfolding of intrinsic motivation (Gagné, 2013). The focus of research is given to the subjective experience in understanding what causes humans to become motivated in order to understand what actions can be taken to direct and maintain desired behaviours in different contexts (Niemiec and Ryan, 2009). More specifically, SDT revolves around three basic psychological needs (autonomy, competence, relatedness), defined as the "*psychological nutriments that are essential for ongoing psychological growth, integrity, and well-being*" (Deci and Ryan, 2000, p. 229), which enhances self-motivation and mental health when satisfied (Ibid). These needs are the central inputs in order for humans to feel a sense of development and their existence have through hundreds of studies been confirmed to be universal (Gagné, 2013). Consequently, SDT puts emphasis on the subjective experience and the level to which these needs are satisfied or not (Van den Broeck, et al., 2008).

3.1.1 The Three Basic Psychological Needs

According to Self-determination theory, the three basic psychological needs (autonomy, competence and relatedness) are separate and noncompensatory entities (Van den Broeck et al., 2016). This means that a high level of satisfaction for one need cannot compensate for a lower or no satisfaction of another need. The need for *autonomy* refers to individuals' desire to feel a sense of freedom, influence, being self-directed and in control over their behaviours (Legault, 2017). The need of autonomy is thereby satisfied when individuals volitionally endorses certain

behaviours (Deci and Ryan, 1985). The need for *competence* refers to an individual's inherent desire to feel competent and capable of mastering one's environment in terms of being able to manage different tasks and challenges (Harter, 1978; White, 1963). The need for *relatedness* refers to the perception of having meaningful social interactions and relationships, hence capturing the degree to which an individual feel connected to other people (Baumeister and Leary, 1995).

3.1.2 Needs Satisfaction and Its Implication on Motivation

The relative satisfaction of the three basic psychological needs will lead to different "types" of motivation, which SDT divides into two different groups; autonomous and controlled motivation. When an individual is autonomously motivated, the motivation is experienced to be "intrinsic" and comes from the individual herself. On the contrary, controlled motivation involves being motivated by instrumental means, e.g. directives from a manager, and is defined as "extrinsic". Autonomous motivation will be achieved when all three basic psychological needs are satisfied on a high level (Ryan and Deci, 2000) and controlled motivation occurs when the needs are satisfied to a lower level. However, the theory states that when controlled motivation resonates with the individual's values and beliefs to a high degree, autonomous motivation can be achieved (Deci, Olafsen and Ryan, 2017). This means that autonomous motivation (i.e. experienced to be intrinsic) can be generated from controlled motivation if the controlled motivation is perceived to originate from oneself. This aspect of the theory is referred to an individual's locus of causality, which is defined as "[*a*] *person's beliefs about the extent to which his/her actions are determined by external forces (control orientation) or by the self (autonomy orientation)*" (Sheldon et al., 2015, p. 365). Thus, when an individual's locus of causality is experienced to be highly autonomy orientated, then "extrinsic" motivation will be experienced to be "intrinsic". The theory further suggests that when individuals reach a state of autonomous motivation it has beneficial effects for organisational effectiveness, individual engagement and well-being (Gagné, 2013).

3.1.3 Supporting Needs Satisfaction

The implication of specifying the three basic psychological needs is that it becomes possible to predict what aspects of the environment that could support the satisfaction of them and those that could diminish or thwart them (Gagné, 2013). Accordingly, the ability to take action that enhances autonomous motivation increases. Self-determination theory suggest that an environment that supports employees in their autonomy, will lead to benefits on different organisational levels, e.g. higher employee satisfaction, organisational effectiveness and efficiency (Deci, Olafsen and Ryan, 2017). Autonomy-support refers to the representation of managers' understanding and acknowledgement of the employees' perspective (Baard, Deci and Ryan, 2004), where a provision of significant information, opportunities of choice and encouragement of self-initiation is given (Deci, et al., 1994). Supporting autonomy has been shown to highly correlate with satisfaction of the three basic psychological needs (Deci, Olafsen and Ryan, 2017). Thus, when managers are being autonomy-supportive, employees' sense of engagement and overall well-being will increase (Liu et al., 2011). At the same time, being autonomy-supportive allows for a better facilitation in reaching the organisation's financial goals (Deci, Olafsen and Ryan, 2017). However, even if environmental factors are believed to support the autonomy of the employees, it is still employees' perceived locus of causality towards these factors that will decide to what level the three basic psychological needs will be satisfied, thus highlighting the subjective focus of SDT once more.

3.2 The Link Between Motivation and Engagement

Although scholars are not in full agreement about whether or not a distinction between work motivation and engagement should be made, engagement has been argued to be embedded in motivation theory (Meyer and Gagné, 2008). At the same time, the main critique raised against seeing engagement and work motivation as interchangeable concepts has been that motivational theories mainly focus on intensity and not on the form of motivation (Macey and Schneider, 2008). However, as SDT provides a multidimensional conceptualisation of work motivation,

where it differentiates between various forms and intensity of motivation, we argue that viewing engagement and motivation as similar concepts is reasonable.

3.3 Hypotheses

Self-determination theory highlights that employees have an inherent desire to be in control and to influence one's work and work environment. An upward feedback tool could be seen as a way for employees to experience higher levels of needs satisfaction for autonomy and competence as employees are expressing their opinions concerning work-related issues, and thus exercising influence over their work environment to make it better resonate with their desires and abilities. At the same time, an upward feedback tool is a communication channel between employees and managers, which supports the notion of employees experiencing that they are being listened to. As suggested by Bauer and Mulder (2006), this reasoning would only be the case if the employees perceive the upward feedback tool to be a qualitative way to influence one's work environment and being listened to. At the same time, there is some complexity in deducing hypotheses on this specific area as previous research is limited when it comes to investigating upward feedback through an employee perspective. However, considering that Bauer and Mulder (2006) found a positive relationship between upward feedback possibility and needs satisfaction, we hypothesise the following:

H1: Perceived quality of a frequently used upward feedback tool has a positive relationship with the level of need satisfaction of autonomy.
H2: Perceived quality of a frequently used upward feedback tool has a positive relationship with the level of need satisfaction of competence.
H3: Perceived quality of a frequently used upward feedback tool has a positive relationship with the level of need satisfaction of relatedness.

4. Method

4.1 Research Approach and Strategy

In this study we have used Self-determination theory as our theoretical lens to look at employee voice. Few frameworks that theorize about human needs satisfaction have received as much attention as Self-determination theory (Van den Broeck et al., 2016). Consequently, the theory is considered mature (Edmondson and McManus, 2007), which make the theory appropriate to use as a foundation for hypothesis generation and testing and thus the reason for using it as our analytical lens. Considering this, the study has been performed by using a deductive approach, which means that the starting point for the study is to be found in existing theory, where hypotheses are deduced and tested through empirical data (Bryman and Bell, 2017).

4.1.1 Quantitative Method and Study Design

Considering that an integration of qualitative and quantitative data can be difficult to achieve (Greene, Caracelli and Graham, 1989) and that there is a risk of compromising the relative strength of either method on its own (Edmundson and McManus, 2007), a combined approach was rejected for this study. Knowing that our study would examine a relationship between two variables within a specific area of research, a quantitative method was decided to be the most suitable in order to achieve the goal of the thesis. A cross-sectional study using a survey method to collect data was performed. Even though this approach has associated limitations with internal validity as it cannot conclude any causality, the chosen approach has been argued to be the most appropriate given the research question of our study (Bryman and Bell, 2017). Additionally, the reason for not comparing one group using &Frankly and one group not using &Frankly and then compare the groups' level of needs satisfaction was partly based on an overall small population size available. Moreover, a comparison would assume that a relationship between the studied variables already existed, which has not yet been established. Further, a comparative study would

have required involvement of more than one department at the studied company, which would compromise the external validity of the study since differences in working conditions, culture, etc. among departments would have been hard to control for. Based on the aforementioned reasoning, it was concluded that the chosen method was the most suitable in order to empirically test the given hypotheses on the chosen company.

4.2 Selection of Case Study Company

After reaching out to four different organisations, all utilising the &Frankly tool, the chosen case study company became Ellevio. The reason behind this was first and foremost that Ellevio had been using the &Frankly feedback tool for the longest period of time among these companies. The accessibility in terms of getting as many respondents as possible to statistically test the hypotheses was also considered to be highest at Ellevio. Another reason was that the company had planned to do an evaluation of the &Frankly feedback tool in the near future which made our contact person interested and supportive to our study which turned out to be helpful for the conduction of it. Considering Johan Ribrant's responsibility of the overall usage of &Frankly, it was decided that Ribrant would be a great source of information in order to gather descriptive data about the company and the studied population. Consequently, a telephone interview with Ribrant was conducted.

4.3 Questionnaire Design

The decision to use a questionnaire was supported by the fact that employees frequently take questionnaires in a similar manner with the &Frankly tool, which was seen to decrease the negative impact a "new or unknown" situation (Bryman and Bell, 2017) could have on the respondents. The questionnaire was created with the digital tool Qualtrics and consisted of 38 questions and statements in total. It was divided into three sections with four demographic questions, 21 statements measuring the level of needs satisfaction and 13 statements to measure the perceived quality of the upward feedback tool (&Frankly).

4.3.1 Questionnaire Pre-Test

To ensure good quality of the questionnaire and to avoid confusion among respondents targeted with the final questionnaire, a pre-test was performed to collect feedback on the questionnaire. According to Bryman and Bell, (2017), a pilot study is of importance to ensure questions are perceived correctly and that the questions are relevant to answer the research question. Given that our population was rather small we decided not to conduct a pilot study on the case study population but instead to conduct a pre-test study, which we consider to be similar to a pilot study, as the questionnaire was designed to be used at any company that used &Frankly. The pre-testing was conducted at a company that was using &Frankly (not Ellevio), and feedback was collected through the contact person at the company who received inputs from employees who had taken the questionnaire. The feedback suggested that some statements were perceived as confusing as they were framed in a negative manner (e.g. "*The people I work with do not seem to like me much.*"). Such questions were then reframed to ask for the same thing but in a positive sense (e.g. "*The people I work with seem to like me.*"). Further, the 21 items used to measure the level of needs satisfaction has most often used a seven-point Likert scale with only three labels. However, as the respondents exclaimed confusion with regards to this scale, and especially the absence of labels to all numbers on the scale, we decided to change this into a five-point scale in the final questionnaire and to correspond each answer on the scale with a label instead of just a number.

4.3.2 Final Questionnaire

A five-point ordinal scale was used in which each point on the scale corresponded with the following statements: 1. Completely disagree, 2. Somewhat disagree, 3. Neither agree nor disagree, 4. Somewhat agree, 5. Completely agree, and 6. I don't know/No opinion. Using a five-point scale has been proven to both increase the response rate and be perceived as less confusing (Bouranta, Chitiris and Paravantis, 2009). Considering the small population available, the use of a five-point scale thus increased the likelihood of receiving a high response rate. In

total, nine of the statements was framed in such a manner that the scale had to be reversed when conducting the data analysis (see Appendix 2).

4.4 Data

The gathering of data was conducted over a ten-day period. Our contact person at Ellevio distributed the questionnaire via email to about 100 employees. In order to the ensure the highest possible response rate, we offered respondents the opportunity to participate in a lottery of two cinema tickets as well as having the contact person sending out a reminder to them after five days.

4.4.1 Sample Characteristics

Out of the 100 employees that received the email, 70 respondents took the questionnaire. Out of these, ten were sorted out due to incomplete answers. The remaining 60 respondents were used in the analyses and the internal loss of responses was considered to be at an acceptable level (Bryman and Bell, 2017). The sample was a convenient sample since the questionnaire was only distributed to the people who were currently using the &Frankly tool. Using a convenience sample is associated with some limitations to the generalisation of the results. However, such sample may be acceptable when there is a certain possibility to collect data from specific respondents and it is also a common method used for economic and management research (Bryman and Bell, 2017). Even though a random sampling would refine the chosen research method, considering that a utilisation of a frequently used upward feedback tool among employees was a prerequisite for the study, it would be impractical to gather data in a randomised manner for this study.

The descriptives in Table 1 (see Appendix 3) for the sample show that the gender distribution was even; 45% identified as women and 55% as men. The average age was 45, with a standard deviation of approximately 10 years. The level of education was the following: 41.7% had completed less than 3 years of tertiary education and 58.3% had completed 3 years or more of

tertiary education. The time of employment at Ellevio was distributed as follows: 23.3% less than 1 year, 15% 1-2 years, 8.3% 2-4 years and 53.3% more than 4 years.

4.4.2 Measurements

The perceived quality of the &Frankly feedback tool (PERQUAL), was measured using an index consisting of 13 items. The indices used to measure needs satisfaction consisted of seven items to measure the level of need satisfaction for autonomy (MEANAUTO), six items to measure the level of need satisfaction for competence (MEANCOMP) and eight items to measure the level of need satisfaction for relatedness (MEANRELA) (Deci et al., 2001; Ilardi et al., 1993; Kasser, Davey, and Ryan, 1992). The questionnaire was translated to Swedish since all respondents were native Swedish speakers and for a complete overview of the questionnaire and the items used in each index, see Appendix 2. Since these indices have previously been used successfully in research to test Self-determination theory in work settings (Harteis et al., 2005; Bauer and Mulder, 2006), and the perceived quality of the upward feedback tool (Bauer and Mulder, 2006), our questionnaire consisted of solely previously tested and validated measurements, which strengthened the internal consistency and the construct validity of our results.

4.4.3 Method of Data Analysis

The data analysis was accomplished using the statistics program Stata version 15.1. The first step was to transform the reversed statements in the questionnaire. The reversing process involved subtracting the respondents answer from 6, e.g. 2 became 4, 5 became 1, which allowed for the analysis to be performed. The indices (MEANAUTO, MEANCOMP, MEANRELA and PERQUAL) were controlled for internal consistency before they were created by testing the items with Cronbach's Alpha. They showed the following levels: 0.654 (MEANAUTO), 0.734 (MEANCOMP), 0.65 (MEANRELA) and 0.919 (PERQUAL). Questionable Cronbach's alpha levels was received for MEANAUTO and MEANRELA as they were below 0.7, which raises questions regarding their internal consistency (Bryman and Bell, 2017). Moreover, values above 0.9 have been argued to indicate unnecessary redundancy (Streiner, 2003). However, the reason behind having Cronbach's Alphas slightly below and slightly above the recommended levels was

not perceived to be due to the lack in construct validity or the number of items used and hence no items were removed from either index. An argument that supports this perception is that the items and the corresponding indices have been used in previous research. Instead, the limitation of the study is argued to lie with the relatively small sample size. At the same time, despite some research suggesting that the level of needs satisfaction can be used as a single index (Yu et al., 2016) there is a greater conviction among scholars not to combine the components into one overall index as the needs cannot compensate for each other in an overall assessment scale (Sheldon and Niemic, 2006) and that by doing so runs contrary to SDT's conceptualisation of the needs as being separate and noncompensatory entities (Van den Broeck et al., 2016).

For the three indices representing the different need satisfactions, an Ordinary Least Square (OLS) regression analysis was performed to test our hypotheses. Since our study aimed to find correlation rather than causation, we have not used the terms dependent and independent variables but predictor (PERQUAL) and criterion (MEANAUTO, MEANCOMP, MEANRELA) variables instead. First, a correlation check for the predictor and criterion variables was performed before a stepwise introduction of the control variables (gender, age, education and time employed) was made. The selected control variables was considered easy to isolate and interesting with regards to potential differences between gender, age groups, etc, which was the reasons for choosing them. During the procedure of stepwise introduction of the control variables, we analysed if the coefficient of the predictor variable (PERQUAL) changed in order to check for structural validity (Lu and White, 2014). Due to the relatively small sample size, it was decided to consider three important assumptions for the OLS regression analyses. First, to avoid any heteroskedasticity, robust standard errors was used in the regression analyses to relax the assumption of homoskedasticity (Williams, 2015). Second, in order to avoid the risk of having standard error inflation, the data was checked for multicollinearity. Lastly, the residuals were checked for normal distribution. By taking these actions, we went one step further than what is usually performed in quantitative research, where the underlying assumptions for OLS is seldom presented or discussed but rather assumed to hold (Hoekstra, Kiers and Johnson, 2012).

The hypotheses were then tested on the 5% significance level, which we considered to be an acceptable level.

4.5 Ethical Considerations

Bryman and Bell (2017) argue that there are different ethical aspects and rules that should be followed when conducting research. The authors highlight the fact that there is no common understanding among researchers of what the exact definition of what ethical research should involve. This study has considered the main ethical principles brought forward as important when doing research by Bryman and Bell (2017). Considering that the thesis focused on a single company, ethical considerations was given to both the organisation and the participants. Before submitting the thesis, an informed consent was given by the contact person at the company to include the company name in this thesis.

Since the study included active participant inputs from employees, information explaining the characteristics of the study was sent out before they participated via an information sheet (see Appendix 1) where it was highlighted that their participation was anonymous. A provision of contact details was given in order to give the participants an opportunity of contacting us with any questions regarding the questionnaire or the study in general. Moreover, as the study utilised a digital questionnaire to collect data, considerations were given to whether the participants could be identified or not. To prevent identification, the researchers used a generic access link to the questionnaire for all participants. Considering that the participants provided their email address in order to participate in the lottery, a decision was made to separate these answers from the rest of the data as soon as the questionnaire closed to avoid identification of specific respondents.

5. Empirical Data

As previously explained, we hypothesised a positive relationship between employees' perceived quality of the &Frankly feedback tool and their level of needs satisfaction at work.

5.1 Descriptives

The descriptives in Table 1 (see Appendix 3) highlights that the respondents in our sample answered on average on the upper end of the five-point scale, where 5 equalled "Completely agree", on the statements relating to the criterion variables: MEANAUTO (3.79), MEANCOMP (4.11) and MEANRELA (4.17) (see Appendix 3, Table 1, "Mean"). The variables also showed relatively small standard deviations indicating that the answers were consistent to a high degree for the respondents in the sample. The respondents answered relatively high on PERQUAL as well (3.75), although the standard deviation was higher than for the criterion variables (see Appendix 3, Table 1). As can be seen in the correlation table (see Appendix 3, Table 1) all three criterion variables were positively correlated ($p<0.05$) with PERQUAL, which was in accordance with the hypotheses.

5.2 Assumptions

As mentioned in section 4.4.3, we used robust standard errors to relax the assumption of homoskedasticity. Even if heteroskedasticity would not be present in our sample, robust standard error can still be used without any implications (Yamano, 2009).

The assumption of normally distributed residuals for the variables were verified visually (see Appendix 3, Figure 3) and were concluded to hold true as the residuals were within acceptable levels of being normally distributed for all criterion variables with slight skewness for MEANCOMP and MEANRELA.

The variance inflation factor (VIF) (see Appendix 3, Table 2) indicated that the sample data did not contain any multicollinearity as all values were less than four (4) which has been suggested to be the more conservative level to check for multicollinearity (O'Brien, 2007), thus verifying this assumption of OLS regression analysis.

5.3 OLS Regressions

The F-test in Model 5 for MEANCOMP (see Appendix 3, Table 4) and MEANRELA (see Appendix 3, Table 5) had p-values above 0.05, but we could still conclude that the model was usable and that the significant coefficient of the predictor variable (PERQUAL), was reliable as the F-test tests the predictive power of *all* independent variables (included in Model 5) simultaneously (Blackwell, 2008). The fact that some of the independent variables (i.e. the control variables in our model) had coefficients that could be equal to zero is most likely the underlying reason for the non-significant F-test as the test showed lower p-values values when the control variables were excluded.

H1: The perceived quality of a frequently used upward feedback tool (PERQUAL) has a positive relationship with the level of need satisfaction of autonomy (MEANAUTO).

The coefficient between PERQUAL and MEANAUTO was 0.315 ($p<0.01$) which was the highest among the three criterion variables. The R-squared value, indicating goodness of model fit, for the model that included all the control variables (Model 5), was 0.300, indicating that 30% of the variance between PERQUAL and MEANATUO is explained by the model. (For full regression analysis see Appendix 3, Table 3).

H2: The perceived quality of a frequently used upward feedback tool (PERQUAL) has a positive relationship with the level of need satisfaction of competence (MEANCOMP).

The coefficient between PERQUAL and MEANCOMP was 0.243 ($p<0.05$). The R-squared value in Model 5 was 0.126, indicating that 12.6% of the variance between PERQUAL and MEANCOMP is explained by the model. (For full regression analysis see Appendix 3, Table 4)

H3: The perceived quality of a frequently used upward feedback tool (PERQUAL) has a positive relationship with the level of need satisfaction of relatedness (MEANRELA).

The coefficient between PERQUAL and MEANRELA was 0.148 ($p<0.01$). The R-squared value, in Model 5, was 0.095, indicating that 9.5% of the variance between PERQUAL and MEANRELA is explained by the model. (For full regression analysis see Appendix 3, Table 5)

The results from the OLS regressions show that the predictor variable, PERQUAL, have a positive and significant coefficient on all criterion variables. Therefore, the regression analyses confirm our hypotheses (*H1, H2* and *H3*), which suggest that there is a positive relationship between employees' perceived quality of an upward feedback tool and their level of needs satisfaction at work on the population level. More specifically, the confirmation of our hypotheses implies that if an employee scores 1 point higher on perceived quality of the upward feedback tool index, he or she would also score higher with the respective coefficient on the criterion variable indices, all other things being equal. Although the R-squared value for MEANCOMP and MEANRELA indicates that the predictor variable PERQUAL only explains a relatively small part of the total variation in the criterion variables MEANCOMP and MEANRELA, the fact that the relationships are significant for all criterion variables at the 5% level (see Appendix 3, Table 3, 4 and 5) still implies meaningful results (Colton and Bower, 2002). Further, the regression analysis indicates that there are no significant relationships between the control variables (gender, age, education and time employed), and any of the criterion variables: MEANAUTO, MEANCOMP and MEANRELA at the 5% significance level (see Appendix 3, Table 3, 4 and 5). The coefficients for the control variables are also very small for the sample data, ranging from -0.079 to 0.059 (see Appendix 3, Table 3, 4 and 5). In addition, the stepwise introduction of the control variables showed minor effects on the coefficients for the criterion variables.

5.4 Summary of Hypothesis Testing

Hypotheses	**Outcome**
H1: Perceived quality of a frequently used upward feedback tool has a positive relationship with the level of need satisfaction of autonomy.	Accepted ($p<0.01$)
H2: Perceived quality of a frequently used upward feedback tool has a positive relationship with the level of need satisfaction of competence.	Accepted ($p<0.05$)
H3: Perceived quality of a frequently used upward feedback tool has a positive relationship with the level of need satisfaction of relatedness.	Accepted ($p<0.01$)

6. Analysis

As our regression analyses showed, the positive and significant relationships between employees' perceived quality of &Frankly, and their level of need satisfaction of autonomy, competence and relatedness confirmed our hypotheses and indicate that the relationship investigated is present on the population level (i.e. the 170 employees using the &Frankly tool). Considering that the stepwise introduction of the control variables (gender, age, education and time employed) showed minor effects on the coefficients for all the criterion variables, we can confirm structural validity of our models (Lu and White, 2014). At the same time, the control variables were not significant at the 5% level. These results are reasonable since SDT suggest that the three basic psychological needs are universal and should therefore be independent of the control variables used in this study (gender, age, education and time employed).

6.1 - Need for Autonomy

The first criterion variable used in the regression analysis was the level of need satisfaction for autonomy (MEANAUTO). When employees are provided with the possibility to leave upward feedback through a frequently used tool such as &Frankly, which they perceive to be of high quality, their sense of autonomy will be higher as well. SDT highlights that when managers are autonomy-supportive, the employees will embrace a feeling of control and freedom as they can partake in decision-making processes, which in turn contributes to a higher level of need satisfaction for autonomy. From an employee standpoint, as the organisation offers an opportunity to voice opinions through a frequently used upward feedback tool (&Frankly) employees are likely to experience that they can influence their workplace and partake in decisions which is associated with feelings of autonomy. However, this would only be the case if individuals see the opportunity to provide feedback to their manager(s) as a genuine way to improve their workplace (Bauer and Mulder, 2006).

6.2 - Need for Competence

The positive relationship between the second criterion variable, the level of need satisfaction for competence (MEANCOMP), and the perceived quality of &Frankly indicate that there could be mechanisms of the tool that supports competence. Although no causality has been established, there are some aspects that could be analysed based on Self-determination theory. If employees experience a possibility to cope with tasks and issues on their own terms, then their overall level of stress is likely to be at a more optimal level. Although the tool should not be seen as a way to address specific issues it could give managers a perception of how the overall stress level is among employees and make changes to the work environment for the longer term. This in turn would according to SDT increase the individual's level of need satisfaction for competence as the work and the tasks could be designed to better fit their abilities and their level of competence. At the same time, since the desire for change in the work environment was initially communicated by the employees, it seems reasonable that a greater sensation of competence would be experienced for the employees when their manager(s) change the work environment according to their desires. However, this would only be the case if the feedback tool is perceived to be of high quality, e.g. when employees feel that their opinions is actually being considered and when managers act on the feedback from the employees. Since the items used to measure the quality of &Frankly partly included these aspects and that the employees perceive the tool to be of great quality, this reasoning appears to hold.

6.3 - Need for Relatedness

The third criterion variable, the level of need satisfaction for relatedness (MEANRELA) also showed a positive relationship with the perceived quality of &Frankly. Seeing &Frankly as a communication channel in which employees can provide feedback to their manager(s) it is reasonable to believe that even though the feedback is anonymous, the mere opportunity to be able to provide feedback could be a way for employees in large organisations to connect with their manager(s). Our findings showed that the coefficient for MEANRELA had the lowest value

among the three criterion variables which indicate that the relationship is also the weakest for the given population. Considering that the need for relatedness captures the degree of connectedness to other people with regards to meaningful social interactions and relationships, the results seem reasonable as the employees are using a digital tool, without direct human interaction. However, &Frankly could be seen as a complement to the relations the employees have with their manager(s) and co-workers. When employees get the opportunity to leave feedback to their manager(s) and their manager(s) act in a manner consistent with received feedback, the employees will likely get a sense of their manager(s) listening to their inputs. Even though no direct interaction occurs, employees would regardless feel as a more valuable member of the organisation if the managers are acting in accordance with suggestions given by the employees. Consequently, when the perceived quality of &Frankly is high then employees are likely to experience more relatedness, as shown by the positive coefficient between PERQUAL and MEANRELA.

7. Discussion

Figure 2

In section 2 (Literature Review) we finalised our review with the figure above (Figure 2 [same as Figure 1]), as a way to present how the connection between the precondition for employees to leave upward feedback and organisational success is theorised to look like. The findings in our study should be interpreted with consideration to the limitations pointed out in section 4 (Method). If the positive relationship between the perceived quality of a frequently used upward feedback tool and employees' needs satisfaction represents causal relationships and if they could be proven to be valid for other companies and branches, our findings may have great practical implications for managers as an upward feedback tool then would be a practical way for managers to increase employee engagement by increasing their level of needs satisfaction.

7.1 Turning Employee Silence into Employee Voice

As previous research indicates, there is an ongoing change in the paradigm for leadership research in which more focus is directed towards collaboration and participation of all organisational members (Harris, 2008). &Frankly can be seen as a tool which both enables better internal two-way communication and act as a facilitator for managers to understand employee concerns and to include them in decision-making processes. The mere fact that companies have started to use upward feedback tools could be an indication that managers are trying to address the issue Morrison (2014) mention about employees defaulting to remain silent within organisations. If this is the case, managers have taken the first step to improve the relationship between them and the employees by trying to understand employee silence and promote employee voice. Consequently, issues that emerge at an employee level (which could spread and escalate into major problems) but remain unnoticed to managers, could with the help of an

upward feedback tool be avoided or addressed so as they do not escalate, as managers can easily receive inputs on such issues at an early stage. However, should the employees not perceive the tool to be a representation of managers' genuine interest in their opinions, the problems might still occur. Knowing this, it is vital that managers frequently act upon the feedback provided by the employees in order to create the conviction among the employees that the tool represents a great way for influencing one's work.

Psychological safety has been argued to be an antecedent to employee voice. To address the problem of employees who experience low psychological safety, for example when newly employed enters an organisation, an anonymous feedback tool is a way to create psychological safety for the employees to voice their opinions without having to worry about interpersonal risk-taking and being held accountable. As pointed out in section 2.2, we identified a common denominator for employees to remain silent as the fear of being held accountable and associated consequences, such as punishment or being labelled negatively (Milliken, Morrison and Hewlin, 2003). It is reasonable to believe that since &Frankly offers anonymity to the feedback provider, it can be regarded as a communication channel in which employee voice could (and probably would) occur, especially among organisational members that otherwise would have remained silent. Consequently, stronger feelings of being important members (relatedness) of the organisation would be expected as more people would likely voice their opinions (Vakola and Bouradas, 2005). All in all, overall engagement would most likely increase as allowing people to voice their opinions upwards has been argued to be an important factor for engagement (Truss et al., 2006).

7.2 Impact on Needs Satisfaction

According to our empirical data, the perceived quality of &Frankly was positively related with needs satisfaction which in turn leads to motivation, according to SDT. As the tool allows for more voices to be heard, it is reasonable to believe that more employees voice their opinions. With this reasoning in mind, more inputs would be provided from the employees, that symbolises the actions and behaviours the employees would have volitionally endorsed

themselves, if they could decide on their own. Consequently, when employees witness their manager(s) acting in accordance with their opinions and suggestions, their locus of causality is expected to move towards being more autonomously orientated as e.g. the manager(s) directives is perceived to partly stem from the employees themselves. Thus, it is reasonable to believe that the main mechanism of the tool associated with a higher level of needs satisfaction is the integration of employee opinions and suggestions (intrinsic motivation) with the managerial directives (extrinsic motivation), which help employees internalise the directives given by the managers to a higher degree. In turn, the controlled motivation is likely to become more autonomous (i.e. the experience of being intrinsically motivated) causing employees to become more engaged and end up in a better mental state for optimal functioning that fosters personal development and well-being in accordance with the Organismic integration process, which is assumed by SDT (Gagné, 2013).

By using an upward feedback tool, an organisation could create a working environment that fosters employee voice and engagement that would mitigate the negative implications employee silence has on organisational learning (Milliken Frances and Lam, 2009) and reduce rehiring and onboarding costs associated with a disengaged workforce (O'Connell and Kung, 2007). Ultimately, since previous research also has concluded that employee engagement is closely related to customer retention, customer loyalty and profitability (Markos and Sridevi, 2010) the consequence becomes an increased likelihood for organisational success.

7.3 Implications on Leadership

People like people who are alike is a commonly heard phrase in different contexts. This could also be applied to the 'manager - employee relation' as it can be argued that when there is a large discrepancy between employees' and managers' values and beliefs concerning the workplace and the organisation, it is unlikely that the employees will be easily convinced by manager directives. If managers instead reach out to the employees and include them in the decision-making process, it is likely that employees feel more valued, competent and connected with the organisation and its members. However, managers face the issue of having to prioritise

what decisions should be taken and in what order, which makes it harder for leaders to act in accordance with every input, all the time. With a frequently used upward feedback tool such as &Frankly, managers can gather quantitative data to get an overview of what areas employees are most interested in addressing and hence take action that will have the greatest positive impact on employees' sensation of being included and hence design the workplace to raise the level of needs satisfaction. As pointed out in section 2.2, a "one size fits all" solution is hard, if not impossible to find, but an advantage of using a digital tool is its adaptability to each organisation's requirements as the questions in the tool can be changed from time to time and that the intervals can be controlled according to what is desired by managers. On the other side, from a managerial perspective, it is a fine balance to ask the right questions within the tool to gather constructive feedback and to avoid having dissatisfied employees blurt out all their frustration. Although the tool could be argued to be a potential powerful tool to engage employees, the leadership aspect most likely plays a big role in how well the power of the tool is utilised, where leaders must adopt a prestigeless mentality and reduce the hierarchical gradient.

In summary, a frequently used upward feedback tool such as &Frankly can be considered a practical and structured way for managers to receive and include opinions from the employees in organisations. The feedback tool could also be seen as a practical way to create an autonomy-supportive environment for the employees, where the tool represents an artefact of the manager's genuine interest in the well-being of the employees. By utilising the feedback tool as a supportive aspect within the work environment, where managers and employees are more distant (e.g. larger organisations), it could impact the level of needs satisfaction for employees by having them co-determine their work via an upward feedback tool. This is supported by what Baard, Deci and Ryan (2004) concluded in their research, that managers, being autonomy-supportive is positively related with employees' level of needs satisfaction. In addition, our results are coherent with what was concluded in a study similar to ours by Bauer and Mulder (2006). They found a positive link between employees' perception of the quality of an upward feedback tool and employees' needs satisfaction. Although they looked at the use of a yearly survey used by employees whereas we looked at surveys used at more frequent intervals,

the patterns seem to be consistent, which acts as support for the existence of a causal relationship.

7.4 Contributions

With our study, we have contributed by providing empirical evidence on how the relationship between a specific HRM-practice and employees' level of needs satisfaction looks. As the relationship between employees' perceived quality of a frequently used upward feedback tool and employees' needs satisfaction has not been evaluated before, our study contributes to the discussion about engagement by shedding light on a previously unexplored phenomenon of employee voice. As we have shown, that a positive relationship was present, we hope that our study can be helpful for researchers looking for a potential causal relationship between a frequent upward feedback tool and employee engagement. Further, the study is of relevance since it utilised Self-determination theory, a reputable motivational and psychological theory, to analyse how a specific HRM-practice (a frequently used upward feedback tool) relates to employee engagement, instead of looking at more general leadership practices. With our study we hope that a first step towards a more practical orientation for how research could provide organisations with more practical suggestions in order to increase employee engagement, has been taken.

7.5 Limitations and Future Research

A limitation to our study and our research method is that we cannot conclude any causality between the investigated variables. This have been pointed out throughout the thesis and has mainly been motivated by the relatively new concept of frequently used upward feedback tools and that the relationship has not been established in research. Since the results are based on a single case study, contextual factors specific for the case company must be considered (Bryman and Bell, 2017). Although we have investigated one specific upward feedback tool, there is a range of similar alternatives. Consequently, looking at different tools could generate different results, but it appears that the majority of frequently used upward feedback tools are very similar in their design and seem to be used in a similar manner. At the same time, the intention of this

thesis has not been to contribute with any generalising conclusions but rather to add empirical data to an unexplored area of research. As our findings suggest, with a positive relationship being present, it would be interesting to evaluate the causal relationship between perceived quality of a frequently used upward feedback tool and employees' level of needs satisfaction as this could provide organisations with practical suggestions on how employee engagement can be increased. One way to accomplish this is to compare two different groups and evaluate potential differences in employee needs satisfaction when the tool is present or not. Another way is to measure needs satisfaction before the feedback tool is introduced and compare the results with a test later on where the usage of &Frankly, or similar tools, has been performed over a period of time. Finally, it would be interesting to dig deeper into employees' perception of a frequently used upward feedback tool by using a qualitative approach. This would also be interesting as Self-determination theory highlight the subjective experience of individuals with regards to needs satisfaction.

8. Conclusion

The purpose of this thesis was to build on the existing trend within engagement research and investigate the relationship between a specific HRM-practice (a frequently used feedback tool) and employees' level of needs satisfaction. The coefficients were positive for all criterion variables that represent the three basic psychological needs (autonomy, competence and relatedness). The reason for this is most likely due to the tool acting as an autonomy-supportive mechanism that makes people experience a sensation of influence over their work, experience higher levels of competence and feel related to the organisation. As the three needs all showed positive relationships, we can answer our research question without having to split it into the three different components. The research question that have been the lodestar for this thesis was:

"*What is the relationship between employees' perceived quality of a frequently used upward feedback tool and their level of needs satisfaction at work?*"

We came to the conclusion that when employees perceive the quality of a frequently used upward feedback tool to be higher, they also experience a higher level of needs satisfaction. Therefore, we can say that perceived quality of a frequently used upward feedback tool predicts a higher level of needs satisfaction in the investigated population at the case study company. Although no causality of the relationship has been established, when employee voice is present, which an upward feedback tool has been argued to facilitate, employees are more likely to experience higher levels of needs satisfaction. Consequently, a frequently used upward feedback tool is likely to be a practical way to increase employee engagement. In addition, as our results are congruent with what Bauer and Mulder (2006) concluded in their research, the positive relationship between employees' perceived quality of an upward feedback tool and their level of needs satisfaction appears to hold regardless if upward feedback is given frequently or once a year.

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10. Appendix

Appendix 1 - Information Sheet to Survey Participants

Study about work engagement - Information to participants

We are two students named Jacob Wellershaus and Oliver Gustafsson who are studying at the Stockholm School of Economics. As part of the 3-year bachelor program, we write an essay in an area of our choice. We both have a great interest in work engagement and will conduct a study in this area. To our help we need survey participants and therefore we reach out to you!

The purpose of the study is to investigate factors influence employee's engagement at work. All participants who choose to take the survey will be anonymous. If you wish to participate in the survey, it is available via the link provided below. The survey takes about 10 minutes to complete and for those participating and provide contact information, two cinema tickets will be awarded to one person. The survey consists of 34 statements where participants decide on how well these agree with one's opinion. As a participant you also have the right to take part of the result if you wish. Please let us know and a copy will be sent to you when the thesis is approved by the faculty. You are welcome to contact us if you want further information or have questions about the study.

Thanks in advance!

LINK TO SURVEY:
https://hhs.qualtrics.com/jfe/form/SV_a2Z3RL3R45YZpUp

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Oliver Gustafsson
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Appendix 2 - Digital Questionnaire

Survey about work engagement

Hi and thank you for participating in our survey about work engagement!

The purpose of the survey is to find out which factors influence engagement among employees. All participants will be anonymous.

The survey contains 34 statements related to your current job situation and it takes about 10 minutes to complete. Fill in the contact details on the last page to participate in the drawing of 2 cinema tickets!

If you have questions regarding the survey or wish to take part of the results, please feel free to contact us: 23756@student.hhs.se or 23905@student.hhs.se.

More information can be found in the information sheet where you found the link to the questionnaire.

Thanks again for your participation!
Jacob Wellershaus and Oliver Gustafsson
Students at the Stockholm School of Economics

Gender

- ○ Female
- ○ Male
- ○ Other

Age

- ○ 18-30
- ○ 31-40
- ○ 41-50
- ○ 51-60
- ○ 61-70

Education

- ○ Primary school
- ○ Upper secondary school
- ○ College 1-2 years
- ○ College/University 3 years
- ○ College/University more than 3 years
- ○ Other

How long have you been employed at your current workplace?

- ○ Less than 1 year
- ○ 1 to 2 years
- ○ 2 to 4 year
- ○ More than 4 years

Q1 I feel like I can make a lot of inputs to deciding how my job gets done.

- ○ Completely disagree
- ○ Somewhat disagree
- ○ Neither agree nor disagree
- ○ Somewhat agree
- ○ Completely agree
- ○ I don't know/No opinion

***The same Likert scale as for Q1 was used for all statements that follows (Q2-Q34) but have been deleted for the purpose of readability.**

Q2 I like the people I work with.

Q3 I feel competent when I am at work.

Q4 People at work tell me I am good at what I do

Q5 I feel pressured at work.

Q6 I get along with people at work.

Q7 I pretty much keep to myself when I am at work.

Q8 I am free to express my ideas and opinions on the job.

Q9 I consider the people I work with to be my friends.

Q10 I have been able to learn interesting new skills on my job.

Q11 When I am at work, I have to do what I am told.

Q12 Most days I feel a sense of accomplishment from working.

Q13 My feelings are taken into consideration at work.

Q14 On my job I do not get much of a chance to show how capable I am.

Q15 People at work care about me.

Q16 There are not many people at work that I am close to.

Q17 I feel like I can pretty much be myself at work

Q18 The people I work with seem to like me.

Q19 When I am working I often do not feel very capable

Q20 There is not much opportunity for me to decide for myself how to go about my work.

Q21 People at work are pretty friendly towards me.

Q22 I am pleased with the form of the feedback tool *&Frankly*.

Q23 I am pleased with the confidentiality of the feedback tool *&Frankly*.

Q24 I am satisfied with the frequency the feedback of *&Frankly* takes place.

Q25 Within the feedback I am able to express my concerns in *&Frankly*.

Q26 I have the feeling that my suggestions for improvement in *&Frankly* are taken seriously.

Q27 I have the impression that my supervisor tries hard to implement my suggestions in *&Frankly*.

Q28 I have the feeling that I can express my ideas freely within the feedback tool *&Frankly*.

Q29 I think that the feedback I provide in *&Frankly* is wasting valuable time for work.

Q30 I think I am able to disapprove freely in the feedback tool *&Frankly*.

Q31 I think my supervisor wants me to express my ideas in *&Frankly*.

Q32 I think the feedback I provide in *&Frankly* is useless.

Q33 My feedback in *&Frankly* contributes to a more realistic self-perception of my supervisor.

Q34 In my opinion, the feedback I provide in *&Frankly* contributes to a positive climate in the company.

Q35 Fill in your mail for the chance of winning 2 cinema tickets.

***The below information was not shown to participants. It demonstrates which questions were used in the respective index.**

Scoring Information. Form three subscale scores by averaging item responses for each subscale after reverse scoring the items that were worded in the negative direction. Specifically, any item that has (R) after it in the code below should be reverse scored by subtracting the person's response from 6. The subscales are:

(MEANAUTO) - Autonomy: Q1, Q5(R), Q8, Q11(R), Q13, Q17, Q20(R).

(MEANCOMP)- Competence: Q3, Q4, Q10, Q12, Q14(R), Q19(R).

(MEANRELA) - Relatedness: Q2, Q6, Q7(R), Q9, Q15, Q16(R), Q18, Q21.

(*Deci et al., 2001; Illardi et al., 1993; Kasser, Davey and Ryan, 1992*)

(PERQUAL) – Employees' perceived quality of &Frankly (the upward feedback tool): Q22, Q23, Q24, Q25, Q26, Q27, Q28, Q29(R), Q30, Q31, Q32(R), Q33, Q34.

(*Bauer and Mulder, 2006*)

Appendix 3 - Empirical Data

Table 1

Correlations and descriptives for variables used in multiple regression models

Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1) MEANAUTO	1.00							
(2)MEANCOMP	.52*	1.00						
(3)MEANRELA	.4*	.54*	1.00					
(4)PERQUAL	.50*	.34*	.28*	1.00				
(5)Gender	.04	0.00	-.06	.11	1.00			
(6)Age	.06	.1	.08	.05	-.01	1.00		
(7)Education	.11	-.03	.02	-.02	.02	-.42*	1.00	
(8)Time Employed	-.09	.11	.02	.05	-.31	.44*	-.2	1.00
N	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0
Mean	3.79	4.11	4.17	3.75	-	3.5	2.28	3.08
Std. Dev.	.55	.65	.46	.89	-	1.13	1.3	1.28
Min	1.43	2.17	2.86	1.00	-	1.00	1.00	2.00
Max	5.00	5.00	5.00	4.88	-	5.00	4.00	5.00

*** p<0.05**

Table 2

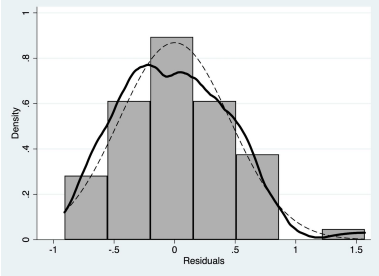
Multicollinearity diagnostics for variables used in all regression models

Variable	VIF	1/VIF
PERQUAL	1.02	0.98
Gender	1.15	0.87
Age	1.48	0.68
Education	1.22	0.82
Time Employed	1.41	0.71
Mean VIF	1.25	

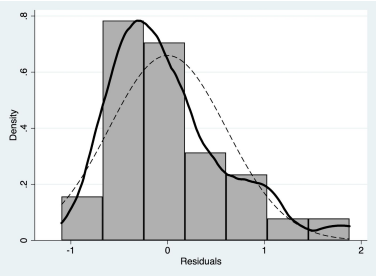
Figure 3

Distribution of residuals

MEANAUTO



MEANCOMP



MEANRELA

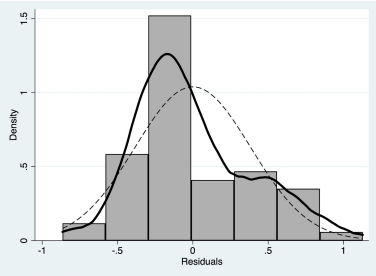


Table 3

Linear regression MEANAUTO

Number of obs = 60; F(5, 54) = 2.92; Prob > F = 0.0209; R-squared = 0.300; Root MSE = .480

	Model 1	Model 2	Model 3	Model 4	Model 5
MEANAUTO (Criterion Var.)					
PERQUAL	0.309**	0.310**	0.309**	0.309**	0.315**
	(0.104)	(0.107)	(0.109)	(0.110)	(0.110)
Gender		-0.00807	-0.00770	-0.00867	-0.0398
		(0.0682)	(0.0692)	(0.0693)	(0.0733)
Age			0.0158	0.0498	0.0882
			(0.0488)	(0.0565)	(0.0565)
Education				0.0699	0.0691
				(0.0477)	(0.0474)
Time employed					-0.0788
					(0.0535)
Constant	1.515***	1.529***	1.475***	1.198***	1.360***
	(0.225)	(0.236)	(0.283)	(0.344)	(0.360)
R-sq	0.252	0.252	0.253	0.276	0.300
adj. R-sq	0.239	0.226	0.213	0.223	0.235
rmse	0.479	0.483	0.487	0.484	0.480

Standard errors in parentheses, * p<0.05, ** p<0.01, *** p<0.001

Table 4

Linear regression MEANCOMP

Number of obs = 60; F(5, 54) = 2.14; Prob > F = 0.0743; R-squared = 0.126; Root MSE = .633

	Model 1	Model 2	Model 3	Model 4	Model 5
MEANCOMP (Criterion Var.)					
PERQUAL	0.246**	0.249**	0.246*	0.246*	0.243*
	(0.0893)	(0.0881)	(0.0931)	(0.0943)	(0.0954)
Gender		-0.0258	-0.0247	-0.0247	-0.0129
		(0.0774)	(0.0771)	(0.0778)	(0.0815)
Age			0.0488	0.0516	0.0371
			(0.0615)	(0.0719)	(0.0749)
Education				0.00580	0.00611
				(0.0685)	(0.0696)
Time employed					0.0299
					(0.0737)
Constant	1.341**	1.388***	1.222***	1.199**	1.138*
		(0.286)	(0.308)	(0.397)	(0.444)
N	60.0	60.0	60.0	60.0	60.0
R-sq	0.115	0.116	0.123	0.124	0.126
adj. R-sq	0.099	0.085	0.077	0.060	0.045
rmse	0.614	0.619	0.622	0.628	0.633

Standard errors in parentheses, * p<0.05, ** p<0.01, *** p<0.001

Table 5

Linear regression MEANRELA

Number of obs = 60; F(5, 54) = 2.11; Prob > F = 0.0785; R-squared = 0.095; Root MSE = .457

	Model 1	Model 2	Model 3	Model 4	Model 5
MEANRELA (Criterion Var.)					
PERQUAL	0.142**	0.148**	0.146**	0.146**	0.148**
	(0.0490)	(0.0473)	(0.0482)	(0.0489)	(0.0494)
Gender		-0.0424	-0.0419	-0.0422	-0.0506
		(0.0589)	(0.0594)	(0.0597)	(0.0615)
Age			0.0242	0.0358	0.0461
			(0.0499)	(0.0602)	(0.0581)
Education				0.0238	0.0236
				(0.0468)	(0.0466)
Time employed					-0.0212
					(0.0522)
Constant	1.514***	1.591***	1.509***	1.415***	1.458***
	(0.135)	(0.188)	(0.233)	(0.312)	(0.353)
N	60.0	60.0	60.0	60.0	60.0
R-sq	0.076	0.085	0.088	0.092	0.095
adj. R-sq	0.060	0.053	0.040	0.026	0.011
rmse	0.445	0.447	0.450	0.453	0.457

Standard errors in parentheses, * p<0.05, ** p<0.01, *** p<0.001