Antecedents of Voice: How is Employee Voice Affected by Leader Age and Self-Efficacy?
Abstract

In order to continuously develop and prosper, organizations should promote and welcome change. Innovation can come from work-related ideas, suggestions or concerns formulated by employees who are at the centre of operations. Before speaking up, employees weigh the costs and benefits of performing voice behaviour. They assess the supervisor’s receptiveness to voice based on several characteristics that will be examined in this research. This study investigated whether and how leader self-efficacy mediated the relationship between supervisor age and employee voice behaviour. Empirical assessment of 124 supervisor-employee dyads finds no support for the hypotheses. However, the study and its findings still provide some valuable implications for managers and organizations. Additionally, theoretical contributions for future research are discussed.

Keywords: upward voice behaviour, leader self-efficacy, supervisor age
Acknowledgements

At the end of the process of writing my Master Thesis, I would like to thank several people for their help and support in making this research possible.

First of all, I would like to express my gratitude to Dr. Hannes Guenter, my supervisor at Maastricht University, for his valuable guidance and critical assessment during the course of my thesis. I thank him for his continuous feedback and for the unlimited knowledge he shared with me. Second, I would like to thank Pedro Neves, my supervisor at Universidade Nova, for his advice and feedback offered to me during the past few months. Third, I thank all the participants of the various organizations that constitute our research sample who were kind enough to take the time to complete the questionnaires.

Lastly, I am grateful for the unconditional support of my family, who have made my academic education possible.

Marie Didrich

Maastricht, January 4th, 2019
Table of Content

Introduction 5

Theoretical Background 9
  Upward Voice Behaviour 9
  Leader Self-Efficacy 10
  Age and Leader Self-Efficacy 12
  The Mediating Role of Self-Efficacy 17

Methods 19
  Context 19
  Sample and Procedure 20
  Measures 22
  Analytical Strategy 24

Results 25
  Descriptive Statistics 25
  Hypotheses Testing 26
  Exploratory Analyses 30

Discussion 31
  Main Findings 32
  Theoretical Contributions 34
  Limitations and Suggestions for Future Research 36
  Practical Implications 37

Conclusion 38

References 40

Appendix A: Introduction to the Survey 45

Appendix B: Definitions of Industries and Industry Distribution of the Sample 46

Appendix C: Variables and Items 47

Appendix D: Results of Regression Analyses 48

Appendix E: Results of Exploratory Analyses 48
Introduction

“Be a voice, not an echo.” - Albert Einstein

The continuous strive for progress of organizations starts with an effective internal functioning. Innovative ideas and suggestions to enhance processes represent valuable opportunities for growth and improved performance. Employees can benefit their organisations by expressing constructive opinions or ideas related to their work environment, an act referred to as employee voice behaviour in academic literature (Liang, Farh & Farh, 2012). Such voice behaviour has the power to improve decision-making, detect errors more efficiently and promote continuous learning (Morrison, 2011).

Voice is not only beneficial to the receiver, it is also valuable to the sender. As described by Morrison (2014), employees who speak up have a greater sense of control and tend to feel more valued than those who remain silent. Research shows that organizations in which voice is not welcomed cause employees to feel unvalued, experience cognitive dissonance and suffer from a lack of control that can ultimately lead to dissatisfaction, stress and sabotage (Morrison & Milliken, 2000; Morrison, 2014). Therefore, it is in the best interest of organizations to ensure that the right mechanisms are put in place for employees to speak up with either promotive voice behaviour, defined by Liang, Farh & Farh (2012) as the “as employees' expression of new ideas or suggestions for improving the overall functioning of their work unit or organization” (p. 74), or prohibitive voice behaviour, namely the “employees' expressions of concern about work practices, incidents, or employee behavior that are harmful to their organization” (p. 75).

Faced with the decision of whether or not to share potentially advantageous information with their supervisors, also referred to as leaders in this study, employees will outweigh the costs and benefits of speaking up (Detert & Burris, 2007; Detert & Treviño, 2010). Even
though this planned and intentional behaviour (Liang, Farh & Farh, 2012) has the potential to improve organizational processes and profit the sender of voice, some factors discourage employees from speaking up. They can originate from three different sources: Firstly, personal traits such as extraversion, conscientiousness and agreeableness (LePine & Van Dyne, 2001) or low self-esteem (LePine & Van Dyne, 1998) have an impact on the employee’s likelihood to speak up. Secondly, the environment they are a part of also plays a role in the emergence of voice behaviour. Indeed, the organizational structure (Detert & Treviño, 2010), the level of psychological safety (Detert & Burris, 2007) and satisfaction within the workgroup (LePine & Van Dyne, 1998) may discourage employees to speak up. Finally, supervisors’ personal characteristics and implicit beliefs are also taken into account by employees when deciding whether or not to speak up (Morrison & Milliken, 2000). In order to assess the supervisors’ receptiveness to voice, employees will rely on external signals coming from direct interactions or from overall personality traits displayed by their leaders (Detert & Treviño, 2010).

Personality traits of leaders play an important role in the assessment that subordinates make about the desirability of voice behaviour (Burris, 2012). The extent to which leaders believe they can achieve work-related tasks, also known as leader self-efficacy, can be used by employees as an indicator in order to evaluate the receptiveness of their supervisors to voice behaviour. Several factors can influence leader self-efficacy. In this study, due to the scarce and conflicting results of previous academic research, the age of the supervisor will be analyzed as an antecedent to their fluctuating self-efficacy, which will in turn impact employee voice behaviour.

Even though age has already been researched as a predecessor for self-efficacy (Hill & Elias, 1990; Schwoerer & May, 1996; Maurer, 2001; Reed, Doty & May, 2005; Bausch,
Michel & Sonntag, 2014), it has been subject to contradicting results and was primarily focused on older rather than younger supervisors. On the one hand, Maurer (2001) identified internal and external factors, for instance decreased cognitive abilities or fewer development opportunities, that favour a decline in self-efficacy as employees age. On the other hand, Schwoerer and May (1996) believe that the experience accumulated by older workers enhances their self-efficacy. Moreover, the authors state that the lack of know-how of younger employees negatively impacts the confidence they have in their abilities to successfully carry out work-related tasks.

In addition, few studies tackled the relationship between leader self-efficacy and voice behaviour. Fast, Burris and Bartel (2014) have argued that future research should identify the types of leaders that are prone to lower leader self-efficacy. Furthermore, the mediation effect of self-efficacy in the relationship between supervisor age and employee voice behaviour has never been researched in a comprehensive study. Therefore, since these variables can have great consequences on voice behaviour and consequently, proper organizational functioning, it is important to fill the research gaps they represent. By conducting analyses on a diverse sample of employee-supervisor dyads, this thesis will attempt to add to the understanding of leader influences on voice by delving into the demographic and self-efficacy variables of the supervisor that can affect employee voice behaviour.

In conclusion, this study will fill the previously mentioned research gaps and contribute to the theory on the antecedents of voice behaviour. Specifically, I will present an understanding of leadership complexions that have an influence on employee voice behaviour by examining the following research question:

_How does ageing relate to the self-efficacy of leaders, and how will it in turn affect the voice behaviour of employees?_
This Master Thesis will be structured as follows: Firstly, an extensive review of the existing academic literature will be analyzed in order to build hypotheses. Secondly, I will describe the methodology of the research as well as the subsequent results. Thirdly, a discussion of these results will be presented, along with the contributions and limitations of this study. Finally, directions for future research will be suggested.
Theoretical Background

In order to be successful, companies must profit from all sources of knowledge that exist, starting with their own employees. Being at the centre of operations, they experience with work processes and activities on a daily basis, which also makes them best positioned to notice inefficiencies or suggest improvements (Morrison, 2014). Leaders, also referred to as supervisors in this thesis, should thus recognize the importance of their subordinates by encouraging knowledge sharing (Fast, Burris & Bartel, 2014). Upward voice behaviour, defined by Liu, Song, Li and Liao (2017) as the “employees’ expression of constructive work-related ideas to organizational leaders” (p. 238), represents a valuable source of knowledge that companies can use to flourish (Detert & Treviño, 2010; Argyris & Schon, 1996). Moreover, this extra-role behaviour is not obligatory but facilitates the effective functioning of the work environment (Walumbwa & Schaubroeck, 2009).

Upward Voice Behaviour

Many academic articles have studied the antecedents to upward voice behaviour. Employee-centered antecedents such as self-esteem and job satisfaction (LePine & Van Dyne, 1998), psychological safety (Detert & Burris, 2007) and felt obligation for constructive change (Liang, Farh & Farh, 2012) as well as situational antecedents such as group size, self-managed work groups and satisfaction within the group (LePine & Van Dyne, 1998) have an effect on the likelihood that employees will speak up in their workplace.

However, a scarce amount of literature research considered leader-centered and demographics antecedents as influences to voice behaviour. Therefore, the following sections will dive deeper into these factors. Firstly, when employees consider whether or not to perform voice behaviour, they will evaluate the complexions of their supervisors by observing...
the external signals they send (Burris, 2012). Indeed, as employees who undertake voice behavior face the risk of being negatively perceived by their leaders and may even be confronted with sanctions due to the sharing of their ideas or concerns (Krefting & Powers, 1998), the decision to speak up will be appraised based on the signals they can observe. Leaders that are considered as being open, understanding and flexible will send positive signals and will thus encourage employees to speak up (Detert & Treviño, 2010; Liu, Song, Li & Liao, 2017). Secondly, a psychologically safe environment where employees do not fear punishment for voicing concerns or suggestions encourages them to feel confident to share ideas (Liang, Farh & Farh, 2012). Thirdly, the perceived probability that the leader will consider the suggestions and implement them is an antecedent of voice behaviour. Lack of action and power to put into effect ideas coming from subordinates will deter them from sharing their opinions (Detert & Treviño, 2010).

**Leader Self-Efficacy**

The self-perception of leaders about their ability to successfully perform work-related tasks, otherwise known as occupational leader self-efficacy (LSE) (Chiesa, Toderi, Dordoni, Fiabane, & Setti, 2016; Ng, Ang & Chan, 2008), influences the actions that will be taken and has a critical impact on their responsiveness to voice. Self-efficacious leaders tend to be more committed, focused on achieving goals and are more likely to actively seek solutions to their problems (McCormick, Tanguma & López-Forment, 2002). Indeed, the self-efficacy beliefs of supervisors will have a significant impact on their motivation level, willingness to succeed and perseverance when faced with obstacles as well as their stress level (Opoku Mensah & Lebbaeus, 2013). Furthermore, self-efficacious leaders show signs of receptiveness as well as openness to change to their subordinates, which will be positively interpreted as welcoming of voice (Bobbio & Manganelli, 2009; Fast, Burris & Bartel, 2014).
According to Maurer (2001), there are four main situations in which leader self-efficacy can be influenced. Firstly, mastery experiences are acquired through prior performance achievements when a task is successfully carried out. In the future, supervisors will thus be more confident in their abilities to perform the same task. Secondly, as leaders notice others similar to themselves being successful in performing a task, their self-efficacy will be boosted, which represents a vicarious experience. Thirdly, LSE can be reinforced by external influences. Sources of persuasion such as encouragement and positive feedback coming from co-workers, friends, family and other parties are highly efficient to increase confidence in one’s abilities to perform a task. Finally, physiological variables such as health, stress and energy can have an effect on LSE. As presented by Bandura (1977), emotional arousal influences responses to situations in a way that when people feel anxious or vulnerable, they will expect their performance to be negative, whereas when faced with an energizing state of mind, they will believe in their chances of success. All in all, these experiences and mindsets influence the perception that leaders have about their ability to be prosperous in their job tasks. Therefore, as LSE increases in certain situations, employees will then feel more confident to speak up about workplace-related matters.

Nevertheless, employees do not always feel welcomed to share their thoughts with their supervisors. Formal environments with centralized decision-making, hostile working climate or high power distance cultures may be associated with employees remaining silent, believing that speaking up is undesired and risky (Detert & Treviño, 2010; Morrison, 2014). Leaders may also perceive employees willing to challenge the status quo as threats to their credibility and relevance (Fast, Burris & Bartel, 2014). Indeed, some supervisors may feel pressured to continuously prove themselves and be efficient. In the event that they do not achieve their self-set objective, their LSE would be negatively affected (Fast, Burris & Bartel, 2014). Being
less confident in their capabilities, supervisors are less receptive to voice behaviour and react defensively to it since questioning their mode of operation or decisions directly threatens their ego.

As previously demonstrated, the personality of leaders impacts the environment in which communication between subordinates and supervisors takes place. In light of these considerations, I argue that self-efficacious leaders will make their employees comfortable enough to suggest new ideas and notify potential issues.

_Hypothesis 1_: There is a positive relationship between leader self-efficacy and employee voice behaviour.

**Age and Leader Self-Efficacy**

The self-efficacy of leaders is a characteristic that varies according to different reasons. In the course of their careers, they will experience several situations and tendencies which will determine the self-confidence in their abilities to carry out work-related tasks. When starting in their positions, young supervisors have a lower LSE due to several factors such as low level of skills or low motivation (Bandura & Cervone, 1983; Avolio, Waldman, & McDaniel, 1990). Arriving at an intermediate age, they will be more confident in their abilities due to superior performance, optimal learning capabilities and trust from their superiors (Maurer, 2001). However, older supervisors suffer from lower confidence to develop and are faced with age stereotypes, which undermine their confidence to carry out tasks (Michel and Sonntag, 2014). Therefore, I expect that there will be a relationship between the age the leader and their self-efficacy. When they enter their supervision position, their self-efficacy will initially be low due to lower motivational and confidence levels, and will increase over the years as they acquire maturity in their role. Thereafter, when reaching
an older age, supervisors will experience a decrease in their LSE as a result of several internal and external factors. In the subsequent section, I will elaborate on the rationale behind these assumptions by examining the three main age points reached by leaders.

Young supervisors are defined by researchers as being 30 years old or below (Ostroff & Atwater, 2003) or 35 years old or below (Hyvönen, Feldt, Salmela-Aro, Kinnunen, & Mäkikangas, 2009). When starting in their leadership positions, young individuals have not yet acquired the necessary skills in order to perform work-related tasks in a fully confident manner. Thus, they may suffer from low self-efficacy. Indeed, employees who do not feel competent enough to successfully carry out a task will be less interested in producing efficient realizations (Bandura & Cervone, 1983; Giniger, Dispenzieri, & Eisenberg, 1983). In addition to lower pay levels compared to senior workers, this factor may then lead to lower commitment and motivational levels (Avolio, Waldman, & McDaniel, 1990). Due to their reduced commitment, they are more likely to conduct job searches and switch jobs than middle-aged and older individuals (Ostroff & Atwater, 2003).

Age and work experience are related variables, which means that young workers are associated with a lower experience in their career. For that reason, it can be assumed that young leaders cannot rely on mastery experiences to predict their performance due to the fact that they occupy a supervising position since a shorter amount of time. Indeed, they do not have acquired the know-how and training necessary to be fully confident in their abilities to successfully carry out a task (Schwoerer & May, 1996). They will therefore be faced with a lower self-efficacy. Additionally, younger employees have reported a higher level of burnout than older ones (Maslach, Schaufeli, & Leiter, 2001). Nevertheless, they believe that their lack of know-how can easily be addressed by educational opportunities (Wilson, Kickul & Marlino, 2007). Therefore, young supervisors tend to participate more in training and
development programs than their older counterparts and are considered more adaptable and open to feedback coming from superiors (Maurer, 2001).

After working for several years, employees reaching an intermediate age are more likely to be promoted to the position of supervisors (Lawrence, 1988). Some reasons behind this effect might be that they are trusted enough by their superiors to be assigned to complex tasks since they are capable of adapting to new situations, learn new technologies and competencies and do not suffer from additional peer pressure to be permanently successful (Maurer, 2001; West, Welch & Knabb, 2002). Middle-aged supervisors enjoy several advantages such as longer work experience, more skills and do not yet suffer from a decline in performance due to diminished hearing, dexterity and agility that impact older individuals (Ostroff & Atwater, 2003). Indeed, according to the authors, workers experience a peak in performance at the age of 40. Moreover, as previously mentioned, age is found to be negatively related to feedback (Runhaar, Sanders and Yang, 2010). Thus, middle-aged supervisors are more likely to seek external evaluations from their same-aged peers rather than from older ones. The feedback received will be taken into account in order to assess the current performance and improve it. According to the authors, high occupational self-efficacy was linked to a higher likelihood of feedback asking and reflection. Therefore, it can be assumed that middle-aged supervisors will have a greater LSE.

Older supervisors, defined as being 50 years old or above (West, Welch & Knabb, 2002; Reed, Doty & May, 2005; Chiesa et al., 2016), may experience a decline in self-efficacy due to several reasons. On the one hand, the decrease may come from the leaders themselves. In a study conducted by Runhaar, Sanders and Yang (2010), they found out that age and asking for feedback were negatively related, which means that older leaders are less likely to rely on external evaluation to assess their performance and progress in their line of work. Indeed, low
LSE individuals believe that asking for feedback will expose them more to their weak functioning aspects rather than to their strong points. Additionally, according to Bausch, Michel and Sonntag (2014), they have less confidence in their abilities to learn and improve their competences compared to younger individuals. As a consequence, they tend to be less motivated and less effective in their work-related tasks. Similarly to younger workers, the lack of motivation causes supervisors to experience a decline in their willingness to successfully perform a task (Giniger, Dispenzieri, & Eisenberg, 1983). This lack of desire to progress comes from a fear of failure that older employees have (Colquitt, LePine & Noe, 2000) and may be accentuated as they experience memory impairments (West, Welch & Knabb, 2002). Indeed, the ability to remember decreases as people age, which impedes their ability to retrieve, learn and memorize information. Therefore, they are less likely to seek training opportunities (Colquitt, LePine & Noe, 2000).

On the other hand, lower leader self-efficacy of older workers may be caused by external influences. As supervisors age, their superiors tend to give them more routine than complex assignments, since it is considered risky to assign them to changes in job content, technologies or perform in out-of-the-ordinary situations. Indeed, individuals are perceived to be less motivated and less capable of performing tasks successfully as they age (Colquitt, LePine & Noe, 2000). Older workers are also perceived as being less adaptable than younger ones (Posthuma & Campion, 2009) and are thus evaluated in a more severe manner than their younger counterparts (Sturman, 2003). Furthermore, they are seen as being more costly since they are closer to retirement and have a higher salary due to their seniority (Posthuma & Campion, 2009). Consequently, they are given less growth and development opportunities, which undermines their mastery experiences (Maurer, 2001). However, some companies place emphasis on retraining midcareer supervisors. This opportunity might be very useful if it did
not cause leaders to feel obsolete and displaceable (Hill & Elias, 1990). Indeed, they are taught to forget about how they used to do things and instead learn modern techniques, which places them in a vulnerable position since they are believed to be less capable to learn. These age stereotypes affect the self-efficacy of older employees. As Posthuma & Campion (2009) pointed out, older individuals also hold negative stereotypes towards their peers. Indeed, older supervisors were found to give reduced performance ratings to older workers, which means that they sustain the stereotype that they are a victim of themselves (Shore, Cleveland & Goldberg, 2003). Additionally, due to the fact that older people have a higher group identification than younger ones (Chiesa et al., 2016), when detecting unfavourable depictions of similar others, it will form a negative vicarious experience that will adversely influence their self-efficacy (Maurer, 2001). Moreover, older employees have less contact with younger workers and experience a deterioration of their social network over time, which causes them to lose some emotional support and become isolated in their workplace over time.

However, not all studies support the idea that older supervisors experience a decline in their self-efficacy. As explained by Schwoerer & May (1996), since they possess more mastery experience, they should be more confident in their abilities to successfully accomplish tasks, which would increase their self-efficacy. Additionally, there is a positive relationship between the number of previous leadership role experiences and LSE (McCormick, Tanguma & López-Forment, 2002). Nevertheless, the authors found a curvilinear relationship between age and performance, meaning that youngest and oldest employees performed more poorly than other age groups. Poor performance is found to be an antecedent of low LSE since mastery experiences shape the vision that individuals have about their abilities to successfully perform a task (Maurer, 2001).
The scarcity of research regarding the self-efficacy of young workers as well as the contradicting and ambiguous results of research studying older supervisors’ self-efficacy calls for studies that help reconcile the contradicting findings on the age of supervisors and self-efficacy. Based on the literature previously analyzed, I hypothesize that young supervisors do not yet have the motivation and experience necessary to be fully dedicated and confident in their abilities to achieve work-related tasks (Schwoerer & May, 1996; Giniger, Dispenzieri, & Eisenberg, 1983; Bandura & Cervone, 1983). Over time, as they age, they will multiply mastery experiences and will acquire the skills needed to be successful in their endeavours (Maurer, 2001). However, after reaching a certain age, they will be faced with a decline in their confidence to learn (Bausch, Michel and Sonntag, 2014). This will in turn cause a downturn in their motivation. Coupled with the ageing stereotypes formulated by others (Colquitt, LePine & Noe, 2000; Sturman, 2003), these antecedents will ultimately decrease the self-efficacy of leaders. In conclusion, a curvilinear relationship between the supervisors age and their self-efficacy will be assumed. Therefore, the following hypothesis will be tested:

*Hypothesis 2*: There is an inverted U-shaped relationship between the supervisor age and leader self-efficacy, with the highest level of self-efficacy occurring at an intermediate age level.

**The Mediating Role of Self-Efficacy**

Previously, I investigated the separate relationships between leader self-efficacy and upward voice behaviour as well as age and leader self-efficacy. In the subsequent section, I will shed a light on how leader self-efficacy mediates the relationship between supervisor age and voice behaviour.
As explained before, age can have a significant effect on the self-efficacy of supervisors. At a young age, several factors such as lower motivational and commitment levels can jeopardize the confidence that supervisors have in their abilities to successfully carry out tasks. After multiplying mastery experiences over the years and maturing, they will experience a peak in their performance, which will urge them to develop their skills even further by reflecting on their work and welcome peer reviews. However, after reaching a certain age, their development capabilities may decrease, which in turn causes a decrease in their self-confidence. Moreover, negative age stereotypes are proven to negatively affect the perceptions that older supervisors have about themselves.

These self-perceptions that leaders have can also impact the behaviour of their subordinates. Indeed, before performing voice behaviour, employees will assess the receptiveness of their supervisors (Detert & Treviño, 2010). On the one hand, if they are seen as being receptive and flexible, employees will be more likely to perform upward voice behaviour. On the other hand, if supervisors are perceived as being reluctant to external opinions, employees will be less likely to share their thoughts. It can thus be concluded that self-efficacy positively impacts employee voice behaviour.

These findings allow me to hypothesize that leader self-efficacy mediates the relationship between the age of the leader and voice behaviour coming from employees.

Hypothesis 3: Self-efficacy mediates the relationship between supervisor age and employee voice behaviour, with the highest level of employee voice behaviour occurring at an intermediate supervisor age level.
In brief, this thesis proposes that the relationship between the age of the supervisor and employee voice behaviour depends on the self-efficacy of the supervisor. With the former research question, variables and hypotheses, the theoretical framework of this study is represented in Figure 1 below.

![Figure 1: Theoretical framework](image)

Methods

Context

This study was conducted in collaboration with three other Master students of Maastricht University, School of Business and Economics. The data was collected through an online survey created on Qualtrics and was gathered for an approximate period of one month. In order to study the relationship between supervisors and their employees, potential respondents were given a unique code that would only be used by their dyad. After completing their questionnaire, they were asked to share the code as well as the link to the survey with their counterpart. The personal codes were formed by using the initials of the name of the student who sent the survey as well as four digits. The use of a code allowed us to match the responses of the dyads and analyze them jointly.

In order to reach the participants, an email was sent to either the supervisor or the employee targeted (Appendix A). They were presented with an introduction to the request and an explanation on how to proceed with the code to be used in the dyad. Moreover, for some
respondents, two other codes were included in the email. This consists of a way to ensure complete anonymity if the codes were to be shared with other dyads. The online survey started with an introduction and explanations on the research and the codes were asked to the respondents. In order to ensure honest answers and since some questions comprised sensitive and personal opinions, it was explicitly articulated to the respondents that the responses would be treated in a confidential manner and that neither the supervisor nor the employee would have access to the answers of their counterpart. Moreover, they were informed that their participation was voluntary. During the survey, participants were not obliged to answer all of the questions, but were asked to confirm that the answers will remain blanks. At the end of the questionnaire, demographic questions were asked. Finally, a conclusion was presented to the respondents, thanking them for their participation, and they were given the possibility to fill in their email address in order to receive an executive summary of the team’s findings.

To reduce concerns regarding common method bias, the topic studied presented in the introduction of the survey is not representative of the actual study carried out. This “cover story” was created in order to prevent participants from forming associations between the independent and dependent variables. Moreover, the questionnaire included several definitions and clarifications of terms in order to ensure the full comprehension of respondents.

**Sample and Procedure**

The respondents approached worked in diverse jobs across various industries (e.g. insurances, pharmaceutical, financial, etc.) as shown in Appendix B, and were asked to participate in a study investigating performance and workplace relationships between supervisors and their employees. In order to reach the respondents, convenience sampling was used through emails sent to the potential participants. In the email, we introduced an evasive
topic, namely the study of work performance of a supervisor and their subordinate in a company, in order to prevent the respondents from knowing the true purpose of the study, which would influence the answers they would provide. The goal being to reach a large number of respondents, which increases the reliability of the study, snowball sampling was used in addition to convenience sampling, by requesting the respondents to share the questionnaire with their networks and by giving them additional codes.

401 potential dyads were approached to participate in the study. In total, 344 individuals filled in the survey. Among them, 168 answered the survey as supervisors and 176 as employees, indicating a potential of 168 dyads. The approximate response rate therefore amounts to 41.9%. After controlling for careless responding checks errors as well as incomplete dyads, the final sample consisted of 124 dyads, which equals to a response rate of 32.3% and a total usable data of 73.8%.

The average age of the supervisors is 43 years old (SD = 12.09) and the average age of the employees who filled in the survey is 36 years old (SD = 11.39). Regarding the supervisors, 34% of them are female and 66% are male. The three most frequent nationalities are Dutch (25%), Belgian (24%) and German (22%). Finally, they have on average 11 years of experience in a leadership position (SD = 10.27). Regarding the employees, 46% of them are female and 54% are male. The average tenure in the company equates 12 years (SD = 10.31) for supervisors and 7 years (SD = 7.29) for employees. Regarding the countries in which the dyads work, 25% of them operate in the Netherlands, 22% in Germany and 22% in the United States of America. The three most common industries in which they work for are

1 Due to the difficulty of tracking an accurate response rate, an approximation of the percentage was calculated.

2 In order to increase the accuracy and representativeness of the study, it was decided that respondents who failed both careless responding checks would be excluded from the sample.
Commerce (32%), Public Services (13%) and Health (13%) (Appendix B). The mean company size is of 284 employees (SD = 1060.49). Finally, the average time that supervisors and employees spend working together is of 5 years (SD = 5.39).

Measures

All measures were first developed in English. Then, a two-step procedure of back translation, namely the “translation of a translated text back into its original language” (Son, 2018) (p. 89), was used in order to convert the survey in Dutch and German. For the French version, a professional translator translated the measures. The questionnaire comprised several measures that have been used in previous studies, to be utilized in collaboration with the three other students. Therefore, the following section will exclusively review the ones used in my conceptual framework as well as the control variables selected.

Supervisor measures. Supervisors had to answer a set of closed-ended questions relating to themselves as well as to their employee. In the end, several demographic questions were asked.

Self-Efficacy. Self-efficacy was measured using the New General Self-Efficacy Scale from Chen, Gully and Eden (2001) (Appendix C). The scale consists of eight items, each of which requires supervisors to evaluate their self-confidence to achieve work-related tasks. Items include: “When facing difficult tasks, I am certain that I will accomplish them.” and “I am confident that I can perform effectively on many different tasks.” Responses were given on a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). Supervisors were asked to rate themselves. The Cronbach’s $\alpha$ for this measure is 0.84, which confirms the homogeneity of the scale.
Age. The age of the respondents was asked in the demographic questions at the end of the survey. It was formulated as a continuous measure in the form of a drop-down menu where the participants were able to select their exact age.

Subordinate measures. Subordinates had to answer a set of closed-ended questions relating to themselves as well as to their supervisor. In the end, several demographic questions were asked.

Promotive and Prohibitive Voice Behaviour. Promotive and prohibitive voice behaviour was measured using the ten-item scale from Liang, Farh and Farh (2012) (Appendix C). Responses were given on a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). Subordinates were asked to rate their own behaviour. In order to ensure the comprehension of participants, the term ‘work unit’ was defined as being the group of people with whom the respondent works and interacts under the guidance of their supervisor. The five items belonging to promotive voice behaviour were separated from the five items of prohibitive voice behaviour. Cronbach’s α for promotive voice behaviour is 0.87 and is of 0.77 for prohibitive voice behaviour. When pooling the variables into one common variable, employee voice behaviour, the Cronbach’s α equates 0.83.

Control variables. Previous studies have indicated that organizational tenure (Schwoerer & May, 1996; Stamper & Van Dyne, 2001; Detert & Burris, 2007) as well as dyadic tenure of the supervisors and their employees (Cheng, Lu, Chang & Johnstone, 2013) are related to voice behaviour. Moreover, researches have found that gender and voice behaviour are connected (LePine & Van Dyne, 1998). Stamper and Van Dyne (2001) provide evidence to indicate that the age of employees has an effect on their likeliness to perform voice behaviour. Indeed, older employees feel more comfortable speaking up.
Previous research is inconsistent on the relationship between organizational size and voice behaviour. Some studies state that the larger the firm, the more it will welcome management innovations and transformational leadership (Vaccaro, Jansen, Van Den Bosch & Volberda, 2012). Others affirm that as the size of the company increases, knowledge sharing and internal communication decreases (Serenko, Bontis & Hardie, 2007). In contrast, LePine & Van Dyne (1998) found no relationship between firm size and voice behaviour.

Consequently, in order to minimize confounding effects’ influence, I controlled for organizational tenure (in years), dyadic tenure (in years), employee age (in years), gender and organizational size (in number of employees) as in prior research.

**Careless Responding Checks.** Both questionnaires included two careless responding checks questions. Placed at the end of a scale, they measure the attention level of respondents when filling in the survey. Careless responding checks included items such as “Please mark this item as ‘Never’” and “Please mark this item as ‘Strongly Agree’” depending on the scales used.

**Analytical Strategy**

After collecting the data on Qualtrics, it was processed using SPSS Statistics version 25. Firstly, the data sets were both edited separately before being merged using the codes. Secondly, dyads where at least one of the respondents failed both responding checks as well as incomplete dyads were excluded from the sample. This resulted in a sample size of 126 dyads. Subsequently, the reliability of the scales was assessed using the Cronbach’s alpha. I then computed new variable names for employee promotive and prohibitive behaviour, employee voice behaviour and supervisor self-efficacy. This was done using the mean values of the items forming the scale.
Before using the data in the statistical analyses, some assumptions must be met in order to prevent the formulation of wrong conclusions. In order to screen the data for missing values, the Missing Completely at Random (MCAR) test by Little (1988) was performed. For employee promotive and prohibitive voice behaviour as well as for supervisor self-efficacy, no data was missing. Afterwards, the normality assumption was tested. It requires the sample distribution to fall under a bell-shaped normal curve which is distributed symmetrically around the sample mean (Burns & Burns, 2008). An outlier analysis was conducted in order to check skewness and kurtosis levels. For supervisor self-efficacy, two outliers were detected, which caused a negative skew and a peak in the data. Consequently, when filtered out of the sample, the data (N = 124) was normally distributed. Regarding employee voice, two outliers were detected as well. They caused a slight negative skew and a small peak. However, when filtered out, the skew was even more negative. Therefore, even though employee voice does not meet the assumption of normality, the data can still be used to conduct the analyses. Due to the large sample size (N = 124), the central limit theorem states that above a sample of 30, the distribution approaches a normal distribution (Burns & Burns, 2008).

Results

In the following section, the results of the statistical analyses performed to test the hypotheses are presented. Firstly, the descriptive statistics will be addressed. Secondly, the hypotheses will be tested and discussed. Finally, exploratory analyses will be presented.

Descriptive Statistics

Table 1 summarizes the means, standard deviations, correlations and Cronbach’s alphas of the main variables and control variables in this study. Even though negative correlations
between supervisor self-efficacy and the three voice behaviour variables (i.e. employee voice behaviour, employee promotive voice behaviour and employee prohibitive voice behaviour) exist, the results are not significant. It thus serves as an indicator that Hypothesis 1 might not be supported. Similarly, the negative correlation between supervisor self-efficacy and supervisor age is not significant, which might indicate that Hypothesis 2 is not supported.

Regarding the control variables, some of them are found to be significantly correlated to the main model variables. Indeed, employee organizational tenure is significantly correlated to prohibitive voice behaviour. This seems to suggest that as employees spend more time in the same organization, they feel more comfortable to express their concerns about harmful work processes or behaviours. As with dyad tenure and employee age, employee tenure is also significantly correlated to supervisor age and employee voice behaviour. Finally, employee age is significantly correlated to employee promotive voice behaviour, indicating that as employees get older, they are more likely to present suggestions to their supervisors. Due to the fact that organizational size and the gender variables have no correlation with any of the variables of the main model, they were removed in order to increase the power of the tests (Montazemi, Cameron & Gupta, 1996).

All independent variables present a Cronbach’s alpha that is above the minimum level of .70 (Burns & Burns, 2008). Therefore, there is a very small item-specific variance, which means that the items constituting the scales have a low uniqueness (Cortina, 1993).

**Hypotheses Testing**

The following section will outline the results of the statistical analyses. The most interesting findings will be reported in this chapter. Other findings will be presented in Appendix D. In order to test the hypotheses, I performed hierarchical multiple regressions.
### Table 1: Descriptive Statistics and Correlations

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Supervisor Aged</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Employee Voice Behavior</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Supervisor Promote Voice Behavior</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Employee Promote Supervisor Voice Behavior</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Supervisor Set-Effect</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Supervisor Organizational Tenure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Employee Organizational Tenure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Department</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Employee Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Employee Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Supporter Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Organizational Size</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: N = 119.124. Reliability estimates are presented in brackets.
**Hypothesis 1** proposes that leader self-efficacy has an influence on employee voice behaviour. Table 2 illustrates the findings of the regression analysis of self-efficacy on voice behaviour, including all the control variables. The analysis shows an insignificant relationship between supervisor self-efficacy and employee voice behaviour (p=.99). When removing the control variables, supervisor self-efficacy is not significant either (p=0.50) (Table 1 of Appendix D). This means that, against what I expected, self-efficacy is not a predictor of voice behaviour and that **Hypothesis 1** is thus not supported.

### Table 2
*Regression Results for the linear effect of Supervisor Self-Efficacy on Employee Voice Behaviour*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Employee Voice Behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b</td>
</tr>
<tr>
<td>Constant</td>
<td>3.72</td>
</tr>
<tr>
<td>Tenure Supervisor</td>
<td>-.00</td>
</tr>
<tr>
<td>Tenure Employee</td>
<td>.02</td>
</tr>
<tr>
<td>Tenure Dyad</td>
<td>.01</td>
</tr>
<tr>
<td>Age Employee</td>
<td>-.00</td>
</tr>
<tr>
<td>Self-Efficacy Supervisor</td>
<td>-.01</td>
</tr>
</tbody>
</table>

**Hypothesis 2** examined the curvilinear relationship between supervisor age and their self-efficacy. It was tested by performing a curvilinear regression analysis using a quadratic term for supervisor age. As shown in Table 3, the regression analysis does not hold significant results. Therefore, it can be concluded that **Hypothesis 2** is not supported and age does not

### Table 3
*Regression Results for the curvilinear effect of Supervisor Age on Supervisor Self-Efficacy*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Supervisor Self-Efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b</td>
</tr>
<tr>
<td>Constant</td>
<td>4.61</td>
</tr>
<tr>
<td>Tenure Supervisor</td>
<td>0.00</td>
</tr>
<tr>
<td>Tenure Employee</td>
<td>-.00</td>
</tr>
<tr>
<td>Tenure Dyad</td>
<td>-.02</td>
</tr>
<tr>
<td>Age Employee</td>
<td>-.00</td>
</tr>
<tr>
<td>Age Employee</td>
<td>-.03</td>
</tr>
<tr>
<td>Age Squared</td>
<td>0.00</td>
</tr>
</tbody>
</table>
have a curvilinear effect on self-efficacy. When removing the control variables, the analysis
does not comprise any significant results either (Table 2 of Appendix D).

_Hypothesis 3_ proposed that supervisor self-efficacy mediates the relationship between
supervisor age and employee voice behaviour. In order to test it, I followed the three steps
outlined by Baron and Kenny (1986). Firstly, the relationship between the independent
variable, supervisor age, and the mediator, supervisor self-efficacy has to be tested. This step
corresponds to _Hypothesis 2_, which was not supported. This means that the first condition for
the mediation to hold is violated. Secondly, the independent and dependent variables must be
significantly related. As displayed in Table 4, this is not the case. The third step consists in
testing the effect of both the independent variable and the mediator on the dependent variable.
The regression results in Table 5 indicate that none of the variables are significant. Since the
three conditions of Baron & Kenny (1986) are not met, supervisor self-efficacy does not act
as a mediator in the relationship between supervisor age and employee voice behaviour. Thus,_
_Hypothesis 3_ is not supported.

<table>
<thead>
<tr>
<th>Table 4</th>
<th>Regression Results for the Second Step of the Mediation Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variables</td>
<td>Employee Voice Behaviour</td>
</tr>
<tr>
<td></td>
<td>b</td>
</tr>
<tr>
<td>Constant</td>
<td>3.13</td>
</tr>
<tr>
<td>Age Employee</td>
<td>-.01</td>
</tr>
<tr>
<td>Age Squared</td>
<td>.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 5</th>
<th>Regression Results for the Last Step of the Mediation Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variables</td>
<td>Employee Voice Behaviour</td>
</tr>
<tr>
<td></td>
<td>b</td>
</tr>
<tr>
<td>Constant</td>
<td>3.42</td>
</tr>
<tr>
<td>Age Employee</td>
<td>.02</td>
</tr>
<tr>
<td>Age Squared</td>
<td>.00</td>
</tr>
<tr>
<td>Self-Efficacy Supervisor</td>
<td>-.07</td>
</tr>
</tbody>
</table>
Exploratory Analyses

Promotive and Prohibitive Voice Behaviour (*Hypothesis 1*)

In the main analyses of my model, I used employee voice behaviour as my dependent variable. However, as explained by Liang, Farh & Farh (2012), promotive and prohibitive voice behaviours have different behavioural contents, functions and implications. Therefore, the two variables could yield different results.

When using promotive voice behaviour as the dependent variable of *Hypothesis 1*, the tests did not reveal any significant results (Table 1 of Appendix E). However, as displayed in Table 2 of Appendix E, when selecting prohibitive voice behaviour, employee tenure is positively significant (Beta = 0.32, p < 0.05). This indicates that as employees gain experience in an organization, they become more comfortable to speak up about the concerns they have regarding harmful work practices or behaviours. Since employee tenure was the only significant control variable, I ran the test again by isolating it. The variable was even more significant (Beta = .21, p < 0.05) (Table 3 of Appendix E) whereas the model was significant at the 0.1 level (F (2,116) = 2.95, p = 0.06).

Linear Effect of Age on Self-Efficacy (*Hypothesis 2*)

*Hypothesis 2* posits that supervisor age has a curvilinear effect on their self-efficacy. However, since the results to the analyses were not significant, a linear effect is tested. As displayed in Table 4 of Appendix E, none of the variables are significant. It can thus be concluded that supervisor age does not have a linear effect on self-efficacy.

Moderation Analysis (*Hypothesis 3*)

Since supervisor self-efficacy did not prove to be a mediator in the relationship between supervisor age and employee voice behaviour, it was repositioned as a potential moderator in
the linear relationship between the independent and dependent variables. In order to test this new relationship, I used the SPSS add-in PROCESS by Andrew F. Hayes (2012). Table 5 of Appendix E summarizes the results, which were insignificant. Similar results can be observed for promotive voice behaviour (Table 6). Nevertheless, when tested with prohibitive voice behaviour (Table 7), the relationship holds a significant result. Indeed, employee tenure is positively significant at the 0.05 level. Therefore, a longer employee tenure increases the moderating effect of supervisor self-efficacy on the negative linear relationship between supervisor age and employee voice behaviour.

In conclusion, I conducted three additional exploratory analyses in order to examine the data collected in more depth. In the first exploratory analysis, employee voice behaviour was replaced by employee promotive and prohibitive voice behaviour. Whereas promotive voice did not yield any significant outcome, prohibitive voice showed significant results related to employee tenure, which sheds a light on the differences between the two types of voice behaviours. The second exploratory analysis examined a possible linear effect between supervisor age and self-efficacy, which did not prove to be significant. Finally, a moderation analysis was tested, which did not generate significant findings when using voice behaviour as the dependent variable. However, as it was replaced by prohibitive voice behaviour, the control variable employee tenure was significant. Consequently, these exploratory analyses highlight the importance of distinguishing the different types of voice behaviour.

**Discussion**

This purpose of this study was to investigate the effect of supervisor age on employee voice behaviour and additionally, how supervisor age influences self-efficacy as the mediator for the previously mentioned relationship. Since previous research was inconclusive regarding
the relationship between these supervisor’s internal characteristics and voice behaviour, this study was conducted in order to address these incongruent findings and shed light on new ways to improve organizational performance. In the following section, I will summarize the main findings, discuss the derived implications of the results, the limitations of the study and finally, directions for future research.

**Main Findings**

In summary, the main findings of this study are the following: Firstly, leader self-efficacy is not significantly related to employee voice behaviour. Secondly, the relationship between supervisor age and self-efficacy was insignificant. Finally, the mediating role of leader self-efficacy in the curvilinear relationship between supervisor age and employee voice behaviour was not supported.

In *Hypothesis 1*, I suggested that leader self-efficacy would positively relate to employee voice behaviour. In their research, Fast, Burris and Bartel (2014) identified a positive correlation between the variables. Indeed, they discovered that supervisors with low self-efficacy levels feel threatened by voice and react defensively to it, which in turn influences employees to remain silent. Despite their findings, self-efficacy was not found to be a significant predictor of voice. A possible explanation for the insignificant result might be that a high level of leader self-efficacy may be interpreted by employees in contrasting ways. Some may perceive it as an invitation and encouragement to speak up while others may find it intimidating and may believe that supervisors are so convinced of the rightness of their own ideas that they will not welcome voice (Detert & Burris, 2007). Another possible explanation might be that employees may hold implicit beliefs about the riskiness of performing voice behaviour. This process may prevent them from speaking up, regardless of the environmental context or the voice solicitation of their supervisors (Morrison, 2014). Therefore, even if
leaders are considered to be self-efficacious and open to voice, subordinates would remain silent due to a fear of punishment.

Against my expectations, I found no evidence for Hypothesis 2, which tested a curvilinear relationship between supervisor age and self-efficacy. One probable explanation for the unsupported hypothesis may be that the two variables were unrelated in this study. The reasoning behind this hypothesis was derived from academic literature. Since no significant results were found for the curvilinear relationship between supervisor age and self-efficacy, a linear relationship was tested as part of exploratory analyses. However, this did not yield any significant results. Thus, I cannot conclude that supervisor age has an effect on self-efficacy. A potential reason for the insignificant findings might be that this study was cross-sectional, hence only analyzed data from the sample at one specific point in time. However, a longitudinal research could improve the reliability of the findings as well as an understanding of the changes that workers experience regarding their self-efficacy levels over their working life (Schwoerer & May, 1996). Another possible explanation might be that since supervisor self-efficacy is a self-reported measure, it can be subject to social desirability response bias (Arnold & Feldman, 1981). Participants may have provided biased answers in order to present the best version of themselves, which would undermine the reliability of the data and the conclusions that can be drawn from it.

Hypothesis 3 proposed that supervisor self-efficacy mediates the relationship between supervisor age and employee voice behaviour. I found no significant results that would support this mediation hypothesis. A probable explanation for this lack of significance might be the presence of a second mediator that was not measured in this study, which would develop in the opposite direction of leader self-efficacy and would thus produce a null relationship. Since the mediation analysis did not prove to be significant, supervisor self-
efficacy was repositioned as a potential moderator in the linear relationship between supervisor age and employee voice behaviour. This did not yield any significant findings. However, when using prohibitive voice behaviour as the dependent variable, the covariate employee tenure was found to be positively significant. Consequently, it means that as employees accumulate years in an organization, they will be more confident to speak up to their supervisors about issues in their workplace. This contradicts the findings of Liang, Farh and Farh (2012) since they found no significant results between organizational tenure and prohibitive voice behaviour. This could be explained by the cross-cultural comparison of the Chinese sample used by the authors to this thesis’ sample. The higher power distance in the Chinese culture may have negatively influenced the formulation of prohibitive voice.

**Theoretical Contributions**

Despite the fact that the three hypotheses investigated in this study were not supported, the research offers some valuable contributions to the theory. As Geletkanycz and Tepper (2012) stated, the failure to find support for hypotheses is a finding in itself and represents an informative way to introduce new theoretical developments. This study can be considered an addition to previous research that has investigated the antecedents of employee upward voice behaviour. Leader self-efficacy was not found to be positively related to voice. This result indicates that a high self-efficacy level may be interpreted by employees in contradicting ways, encouraging them to stay silent (Detert & Burris, 2007). Self-efficacious supervisors are confident in their abilities to be successful in their work (Bandura, 1977) and may thus give the impression that they have superior knowledge about work practices, which would then discourage employees to speak up (Morrison & Milliken, 2000; Morrison, 2014). Such implicit beliefs about the riskiness of voicing out their ideas or concerns cause them to
formulate deduced inferences about possible punishments they might suffer from (Detert & Edmondson, 2011; Morrison, 2014).

In this study, I introduced supervisor age as an antecedent to self-efficacy and consequently voice behaviour. Over their working life, supervisors will interact with various individuals and experience new situations that will shape their work-related confidence levels. Therefore, I expected age to be a predictor of leader self-efficacy. Previous research is still inconclusive about the relationship between these two variables. The results of this study indicate that age does not have a curvilinear effect on leader self-efficacy.

A yet unexplored research area of voice theories was investigated in this study through the assumption that leader self-efficacy may have a mediating role between supervisor age and employee voice behaviour. Indeed, supervisor age was investigated by several researchers as being an antecedent to self-efficacy. Additionally, academic literature delved into the effect of self-efficacy on employee voice and concluded that self-efficacious leaders encourage employees to speak up through their attitudes and responses. This study found no significant results for the mediation testing. Therefore, in this research, leader self-efficacy does not mediate the relationship between supervisor age and employee voice.

In addition to the proposed hypotheses, I have tested whether differences in the number of years spent in an organization are related to voice behaviour outcomes by controlling for employee tenure. Prior research has examined the effect of employee tenure on voice behaviour (Detert & Burris, 2007), but few studies have acknowledged differences for promotive and prohibitive voice. In this study, contradicting the findings of Liang, Farh & Farh (2012), it was recognized that employee tenure has a significant effect on prohibitive voice behaviour, meaning that as employees accumulate experiences in an organization, they will be more confident to speak up about issues that may harm the company. On the contrary,
employee tenure did not have a significant effect on promotive voice behaviour, which supports the findings of the authors. This may suggest that regardless of the time they have spent in a company, employees are likely to speak up about suggestions and ideas in order to improve the overall functioning of the work processes.

Limitations and Suggestions for Future Research

This study contributes to the research by providing theoretical and practical contributions. The diverse data collection conducted in various industries as well as the fairly large sample size represent advantages of the research. Moreover, the dyadic configuration of the data collection allows for a more representative sample. However, the study also contains limitations and opportunities for future research on this subject.

Firstly, the use of a cross-sectional design in this study prevents the formulation of accurate parameters estimates. Since the variables evolve and change over time, analyzing the data from a sample at one specific point in time restrains the capture of dynamics. Therefore, future research could examine the variables and relationships with the use of longitudinal study design.

Secondly, in order to collect the data, non-random sampling methods such as convenience and snowball sampling were used. This could result in a biased sample that is unrepresentative of the population. As previously specified, the final sample consisted of a majority of Dutch, Belgians and Germans. Although this limits the representativeness of the findings, the results of the research apply specifically to the groups described above. Nevertheless, future research could enhance the generalizability of the findings to a larger population by making use of diverse samples and random sampling methods.

Thirdly, the use of online self-administered questionnaires represents a convenient way of collecting data in a timely and cost-efficient manner. However, this method does not come
without consequences. Several scales were self-reported only, and may thus have suffered from social desirability response bias since respondents may have tried to present themselves in a favourable way (Arnold & Feldman, 1981). Additionally, observer ratings can also suffer from bias. Respondents may rate their counterpart differently based on factors such as contrasting interpretations of behaviours, varying opportunities to observe the counterpart or unique beliefs about behaviours and personalities (Hoyt, 2000). Consequently, future research should consider using multiple raters for targets in order to improve the reliability of the target scores.

Furthermore, future research could examine the antecedents of voice behaviour by including more variables (e.g. organizational tenure, organizational size, environmental factors, etc.) in order to investigate the levels of prediction of these antecedents. Voice behaviour could also be compared with silence as outcome variable. This would contribute to the research about the differences between the two variables as well as their antecedents.

**Practical Implications**

This study has several implications for managers and organizations. The importance of voice behaviour for companies highlights the need for a safe environment in which employees feel comfortable to speak up to their supervisors. It is vital that the benefits of voice are promoted and shared throughout the organization in order to counteract the fear of negative consequences and thus, silence. Therefore, companies should actively reinforce a climate of psychological safety where employees feel safe to voice their ideas and concerns (Fast, Burris & Bartel, 2013). Nevertheless, supervisors are also a crucial part of the voice behaviour process and should therefore not be overlooked. This study calls for organizations to recognize the internal factors that influence supervisors to embrace voice or rather reject it. By creating a culture where employee voice is welcomed and continuous improvements are a
necessity, leaders may be more likely to embrace and solicit voice (Burris, 2012). Moreover, supervisors should be made aware of their own characteristics that impact the likelihood of employee voice (Detert & Treviño, 2010).

The findings related to employee tenure and prohibitive voice behaviour provide some guidance that may be helpful to organizations. The research suggests that individuals with more working years in a company are more comfortable to speak up to their supervisors about issues they identified in their workplace. This highlights the need for organizations to integrate new employees and make them feel comfortable at work so that they can give back to their work community by sharing ideas and drawing attention to ineffective work practices or behaviours (Liang, Farh & Farh, 2012). As Cable, Gina and Staats (2013) proposed, organizations should encourage newcomers to express their authentic best selves since it positively affects employment relationships and organizational commitment.

Conclusion

During a regular workday, employees make countless decisions, most of which they are not even aware of, regarding work practices and behaviours (Detert & Edmondson, 2011). Their judgements are influenced by unconscious assessments of external situations. When evaluating the decision to perform voice behaviour, based on external and internal factors, employees will consider the benefits as well as the risks of speaking up. This study sought to gain a greater understanding of the antecedents of employee voice behaviour. In particular, I investigated the effect of supervisor age on self-efficacy, which in turn would influence voice behaviour. Based on academic literature, I formulated three hypotheses and tested them by performing regression analyses on the 124 dyads that formed the sample. In this study, supervisor age and self-efficacy were not significantly correlated. Additionally, leader self-
efficacy was not significantly correlated with employee voice behaviour. Finally, leader self-efficacy does not function as a mediator between supervisor age and employee voice behaviour. Employee tenure was positively related to prohibitive voice behaviour. Despite the fact that none of the hypotheses were significant, this research contributes to the existing literature by highlighting the importance of creating an environment conducive to voice. More specifically, being the receivers of voice, supervisors should be regarded as an important factor when deciding whether or not to speak up. Organizations need to create an environment in which continuous improvements are required and voice is therefore welcomed. Finally, leaders should be aware of the characteristics that are likely to influence employees in their decisions to speak up. All in all, future research can make use of the insights gained from this study by investigating the supervisory antecedents to voice behaviour and eventually provide a conclusive answer to the following research question: How does ageing relate to the self-efficacy of leaders, and how will it in turn affect the voice behaviour of employees?
References


Appendix A: Introduction to the Survey

Dear participant,

We greatly appreciate your participation in this study, which should take about 10 minutes to complete. Please complete this survey in one go. Thank you.

With this questionnaire, we examine workplace relationships (between supervisors and employees) and performance. Therefore, the survey has to be answered by a supervisor and one of their employees. In order to match your responses, you have been given a unique code that will have to be filled in on the first page of this questionnaire.

Your responses will be treated confidentially and will be processed anonymously so that nobody from your organization will be able to determine that these were your individual responses. We ask you to respond to the questions as frankly and directly as possible.

Please make sure that you have your matching code at hand before you start completing the survey. You will be asked to fill in this code on the first survey page. Without this code, your responses cannot be used.

Completing this questionnaire is entirely voluntary and you are free to choose to quit at any time. By participating, you also consent to the publication of study results as long as the information is anonymous so that no identification of participants can be made.

If you have any questions, feedback, or additional comments, feel free to contact us via our group email: workrelation@gmx.com

Phone number: +31 6 11 77 22 42

Lead Researcher: Dr. Hannes Guenter

Associate Professor of Organizational Behavior

Maastricht University School of Business and Economics
Once again thank you for participating!

Best regards,

Marie Didrich, Luuke Schmidt, Lee Walker & Hannah Kremer

Appendix B: Definitions of Industries and Industry Distribution of the Sample

Categories:

1. Craft (Automotive, Construction, Electrician, Paper, Metal)
2. Consulting and IT Services
3. Education
4. Commerce (Finance, Advertising, Insurance, Accounting)
5. Public Services (Government, Environment Engineering, Agriculture)
6. Health
7. Hospitality (Building Management)
8. Research
9. Sales (Retail, Media)
10. Others

Distribution of Industries:
Appendix C: Variables and Items

New General Self-Efficacy Scale (8 items) by Chen, Gully, and Eden (2001)

Items:

1. I will be able to achieve most of the goals that I have set for myself.
2. When facing difficult tasks, I am certain that I will accomplish them.
3. In general, I think that I can obtain outcomes that are important to me.
4. I believe I can succeed at most any endeavor to which I set my mind.
5. I will be able to successfully overcome many challenges.
6. I am confident that I can perform effectively on many different tasks.
7. Compared to other people, I can do most tasks very well.
8. Even when things are tough, I can perform quite well

Promotive and Prohibitive Voice Behaviour scale (10 items) by Liang, Farh & Farh (2012)

Items on promotive voice:

1. I proactively develop and make suggestions for issues that may influence the unit.
2. I proactively suggest new projects which are beneficial to the work unit.
3. I raise suggestions to improve the unit’s working procedure.
4. I proactively voice out constructive suggestions that help the unit reach its goals.
5. I make constructive suggestions to improve the unit’s operation.

Items on prohibitive voice:

1. I advise other colleagues against undesirable behaviors that would hamper job performance.
2. I speak up honestly with problems that might cause serious loss to the work unit, even when/though dissenting opinions exist.

3. I dare to voice out opinions on things that might affect efficiency in the work unit, even if that would embarrass others.

4. I dare to point out problems when they appear in the unit, even if that would hamper relationships with other colleagues.

5. I proactively report coordination problems in the workplace to the management.

Appendix D: Results of Regression Analyses

Table 1
Regression Results for the linear effect of Supervisor Self-Efficacy on Employee Voice Behaviour

<table>
<thead>
<tr>
<th>Variables</th>
<th>Employee Voice Behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b</td>
</tr>
<tr>
<td>Constant</td>
<td>3.99</td>
</tr>
<tr>
<td>Self-Efficacy Supervisor</td>
<td>-.07</td>
</tr>
</tbody>
</table>

Table 2
Regression Results for the curvilinear effect of Supervisor Age on Supervisor Self-Efficacy

<table>
<thead>
<tr>
<th>Variables</th>
<th>Supervisor Self-Efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b</td>
</tr>
<tr>
<td>Constant</td>
<td>4.23</td>
</tr>
<tr>
<td>Age Employee</td>
<td>-.01</td>
</tr>
<tr>
<td>Age Squared</td>
<td>.00</td>
</tr>
</tbody>
</table>

Appendix E: Results of Exploratory Analyses
### Table 1
Regression Results for the linear effect of Supervisor Self-Efficacy on Employee Promotive Voice Behaviour

<table>
<thead>
<tr>
<th>Variables</th>
<th>b</th>
<th>SE</th>
<th>β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.50</td>
<td>.57</td>
<td>6.18</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>Tenure Supervisor</td>
<td>-.00</td>
<td>.01</td>
<td>-.05</td>
<td>-.39</td>
<td>.70</td>
</tr>
<tr>
<td>Tenure Employee</td>
<td>.01</td>
<td>.01</td>
<td>.07</td>
<td>.50</td>
<td>.62</td>
</tr>
<tr>
<td>Tenure Dyad</td>
<td>.01</td>
<td>.01</td>
<td>.09</td>
<td>.77</td>
<td>.45</td>
</tr>
<tr>
<td>Age Employee</td>
<td>.01</td>
<td>.01</td>
<td>.08</td>
<td>.59</td>
<td>.56</td>
</tr>
<tr>
<td>Self-Efficacy Supervisor</td>
<td>.05</td>
<td>.13</td>
<td>.04</td>
<td>.38</td>
<td>.71</td>
</tr>
</tbody>
</table>

### Table 2
Regression Results for the linear effect of Supervisor Self-Efficacy on Employee Prohibitive Voice Behaviour

<table>
<thead>
<tr>
<th>Variables</th>
<th>b</th>
<th>SE</th>
<th>β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.93</td>
<td>.63</td>
<td>6.20</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>Tenure Supervisor</td>
<td>-.01</td>
<td>.01</td>
<td>-.08</td>
<td>-.69</td>
<td>.49</td>
</tr>
<tr>
<td>Tenure Employee</td>
<td>.03</td>
<td>.02</td>
<td>.32</td>
<td>2.18</td>
<td>.03</td>
</tr>
<tr>
<td>Tenure Dyad</td>
<td>.01</td>
<td>.02</td>
<td>.07</td>
<td>.55</td>
<td>.58</td>
</tr>
<tr>
<td>Age Employee</td>
<td>-.01</td>
<td>.01</td>
<td>-.16</td>
<td>-1.11</td>
<td>.27</td>
</tr>
<tr>
<td>Self-Efficacy Supervisor</td>
<td>-.08</td>
<td>.14</td>
<td>-.05</td>
<td>-.54</td>
<td>.59</td>
</tr>
</tbody>
</table>

### Table 3
Regression Results for the linear effect of Supervisor Self-Efficacy on Employee Prohibitive Voice Behaviour

<table>
<thead>
<tr>
<th>Variables</th>
<th>b</th>
<th>SE</th>
<th>β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.67</td>
<td>.58</td>
<td>6.37</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>Tenure Employee</td>
<td>.02</td>
<td>.01</td>
<td>.21</td>
<td>2.26</td>
<td>.03</td>
</tr>
<tr>
<td>Self-Efficacy Supervisor</td>
<td>-.08</td>
<td>.14</td>
<td>-.05</td>
<td>-.57</td>
<td>.57</td>
</tr>
</tbody>
</table>

### Table 4
Regression Results for the linear effect of Supervisor Age on Supervisor Self-Efficacy

<table>
<thead>
<tr>
<th>Variables</th>
<th>b</th>
<th>SE</th>
<th>β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>4.12</td>
<td>.19</td>
<td>22.15</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>Tenure Supervisor</td>
<td>.00</td>
<td>.01</td>
<td>.06</td>
<td>.40</td>
<td>.69</td>
</tr>
<tr>
<td>Tenure Employee</td>
<td>-.00</td>
<td>.01</td>
<td>-.06</td>
<td>-.40</td>
<td>.69</td>
</tr>
<tr>
<td>Tenure Dyad</td>
<td>-.01</td>
<td>.01</td>
<td>-.17</td>
<td>-1.36</td>
<td>.18</td>
</tr>
<tr>
<td>Age Employee</td>
<td>-.00</td>
<td>.01</td>
<td>-.08</td>
<td>-.53</td>
<td>.60</td>
</tr>
<tr>
<td>Age Supervisor</td>
<td>.00</td>
<td>.01</td>
<td>.06</td>
<td>.43</td>
<td>.67</td>
</tr>
</tbody>
</table>
### Table 5
Results for the Moderation Analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>SE</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>2.87</td>
<td>1.99</td>
<td>1.49</td>
<td>.14</td>
</tr>
<tr>
<td>Age Supervisor</td>
<td>.01</td>
<td>.04</td>
<td>.25</td>
<td>.81</td>
</tr>
<tr>
<td>Self-Efficacy Supervisor</td>
<td>.17</td>
<td>.48</td>
<td>.35</td>
<td>.73</td>
</tr>
<tr>
<td>Age Supervisor x Self-Efficacy Supervisor</td>
<td>-.00</td>
<td>.01</td>
<td>-.27</td>
<td>.79</td>
</tr>
<tr>
<td>Tenure Supervisor</td>
<td>-.00</td>
<td>.01</td>
<td>-.57</td>
<td>.57</td>
</tr>
<tr>
<td>Tenure Employee</td>
<td>.02</td>
<td>.01</td>
<td>1.60</td>
<td>.11</td>
</tr>
<tr>
<td>Tenure Dyad</td>
<td>.01</td>
<td>.01</td>
<td>.77</td>
<td>.44</td>
</tr>
<tr>
<td>Age Employee</td>
<td>-.00</td>
<td>.01</td>
<td>-.27</td>
<td>.78</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.05</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 6
Results for the Moderation Analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>SE</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.87</td>
<td>2.25</td>
<td>1.72</td>
<td>.09</td>
</tr>
<tr>
<td>Age Supervisor</td>
<td>-.02</td>
<td>.05</td>
<td>-.32</td>
<td>.75</td>
</tr>
<tr>
<td>Self-Efficacy Supervisor</td>
<td>-.04</td>
<td>.54</td>
<td>-.08</td>
<td>.94</td>
</tr>
<tr>
<td>Age Supervisor x Self-Efficacy Supervisor</td>
<td>0.00</td>
<td>.01</td>
<td>.30</td>
<td>.76</td>
</tr>
<tr>
<td>Tenure Supervisor</td>
<td>-.00</td>
<td>.01</td>
<td>-.29</td>
<td>.78</td>
</tr>
<tr>
<td>Tenure Employee</td>
<td>.01</td>
<td>.01</td>
<td>.43</td>
<td>.67</td>
</tr>
<tr>
<td>Tenure Dyad</td>
<td>.01</td>
<td>.02</td>
<td>.84</td>
<td>.40</td>
</tr>
<tr>
<td>Age Employee</td>
<td>-.00</td>
<td>.01</td>
<td>.66</td>
<td>.51</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.04</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 7
Results for the Moderation Analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>SE</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>2.07</td>
<td>2.52</td>
<td>.82</td>
<td>.41</td>
</tr>
<tr>
<td>Age Supervisor</td>
<td>.03</td>
<td>.05</td>
<td>.67</td>
<td>.50</td>
</tr>
<tr>
<td>Self-Efficacy Supervisor</td>
<td>.38</td>
<td>.61</td>
<td>.62</td>
<td>.54</td>
</tr>
<tr>
<td>Age Supervisor x Self-Efficacy Supervisor</td>
<td>-.01</td>
<td>.01</td>
<td>-.69</td>
<td>.49</td>
</tr>
<tr>
<td>Tenure Supervisor</td>
<td>-.01</td>
<td>.01</td>
<td>-.65</td>
<td>.52</td>
</tr>
<tr>
<td>Tenure Employee</td>
<td>.03</td>
<td>.02</td>
<td>2.14</td>
<td>.03</td>
</tr>
<tr>
<td>Tenure Dyad</td>
<td>.01</td>
<td>.02</td>
<td>.47</td>
<td>.64</td>
</tr>
<tr>
<td>Age Employee</td>
<td>-.01</td>
<td>.01</td>
<td>1.02</td>
<td>.31</td>
</tr>
<tr>
<td>$R^2$</td>
<td>.06</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Official Statement of Originality

By signing this statement, I hereby acknowledge the submitted master thesis titled "Antecedents of Voice: How is Employee Voice Affected by Leader Age and Self-Efficacy?" to be produced independently by me, without external help.

Wherever I paraphrase or cite literally, a reference to the original source (journal, book, report, internet, etc.) is given.

By signing this statement, I explicitly declare that I am aware of the fraud sanctions as stated in the Education and Examination Regulations (EBR) of the SBE.

Place: Maastricht

Date: January 4th 2019

First and Last Name: Marie Didrich

Study Program: International Business – Organisations: Management, Change and Consultancy

Course/Skill: Master Thesis

I-Number: i6091180

Signature: [Signature]

[Signature]