Who Do You Lead?
The Importance of Employee Gender and Traits in a Leadership Context

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PhD Dissertation

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Chapter 1
Introduction

When you meet a human being, the first distinction you make is "male or female?" and you are accustomed to make the distinction with unhesitating certainty
Freud, 1965 in Northouse, 2016 p. 397

There are many stereotypical beliefs about men and women, but whether they differ in any significant way in relation to leadership is debated. Men are often described as agentic, decisive, and dominant, whereas women are described as communal, caring, and understanding (Bakan 1966; Eagly et al. 2020; Wood and Eagly 2009). Based on these differences in personality traits, many argue that male and female managers practice different leadership behaviors (Bass, Avolio, and Atwater 1996; Eagly and Johannesen-Schmidt 2001; Eagly, Johannesen-Schmidt, and van Engen 2003). However, given that leadership primarily works through employees, there is surprisingly little research that focuses on the role of employee gender and gender-related traits. Based on the literature that does exist, there is good reason to expect that employee gender and traits fit different leadership behaviors and managers, which could affect leadership outcomes. This dissertation begins to close these knowledge gaps through theory and empirical studies about employee gender and gender-related traits with regard to leadership. The dissertation contains studies of two different types of fit with employee gender and traits: first, fit between manager and employee gender and traits; and second, fit between leadership behaviors and employee gender and traits.

It is important to study gender differences between male and female employees. If we do not, managers might either assume that their employees are similar and treat them as such, even if this really does not fit them; or they might assume their employees are different in ways they are not, and reinforce inaccurate stereotypical beliefs and discriminate against one or the other gender. It is therefore important to increase our knowledge about gender and gender-related traits in a leadership context.

Effective leadership is essential for well-functioning organizations as it can help improve employees' well-being, motivation, and performance, while bad leadership can do the opposite. Leadership has therefore been studied extensively. The vast literature on leadership offers multiple definitions and perspectives, and there will probably never be agreement on a single definition

(Day and Antonakis 2012; Yukl 2013). However, in line with others, I under-stand leadership as the act of trying[1] to direct and energize people to achieve goals (Rainey 2014:337). This definition focuses on the dyad between, in this case,[2] the manager and the employee, and how the employee can be directed and energized. These two things are also the focus of this dissertation, as I study the importance of fit between manger and employee gender and traits and fit between leadership behaviors and employee gender and traits.

Focus on the dyadic relationship is one reason why it is relevant to study transformational and transactional leadership behaviors, as these are concep-tualized primarily at the dyadic level (Yukl 2013:32). Transformational lead-ership is about moving the employee beyond his or her self-interest to archive organizational goals, while transactional leadership is about giving the em-ployee incentive to work to archive organizational goals. Transformational and transactional leadership are the most studied leadership strategies and are important in both the generic and public management traditions (Jensen, Andersen, Bro, et al. 2019; Knippenberg and Sitkin 2013). Scholars have found them to have positive effects, and managers often use them in practice to improve their employees' motivation and performance. Transformational and transactional leadership are thus well studied and highly used leadership strategies, which makes it extremely relevant to study whether the effects of transformational[3] and transactional leadership are homogenous, or whether it depends on who the employee is. If the effect is heterogeneous, it is im-portant for managers to know that they are less likely to motivate their entire workforce with one specific leadership behavior. Part of this dissertation is therefore dedicated to studying how fit between different leadership behaviors and employee gender and traits matters for employees' motivation and man-ager preference.

Women and men tend to differ in traits that are believed to affect motiva-tion, performance and possibly the effectiveness of leadership elements (DeHart-Davis, Marlowe, and Pandey 2006; Gneezy, Niederle, and Rustichini 2003; Nielsen 2014; Ors, Palomino, and Peyrache 2013). However, we still do not know whether employee gender matters for the effects of transformational and transactional leadership. Only a few studies even come close to studying

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[1] The definition by Rainey uses the word *capacity*. However, in line with the critique of the traditional transformational leadership definition, as I will explain in Chapter 2, leadership is not always successful, which is why the word *capacity* is misleading.
[2] Leadership can be performed by anyone in any context, but this dissertation focuses on the formalized relationship between a manager and an employee.
[3] As will be explained in Chapter 2, I primarily use the term *visionary leadership*, but it builds on the traditional term "transformational leadership."

how employee gender matters with regard to transformational and transactional leadership. Thus even though multiple studies have examined how a manager's gender matters for their use of transformational and transactional leadership (Bass et al. 1996; Eagly and Johannesen-Schmidt 2001; Eagly et al. 2003), knowledge is still very sparse with regard to whether and how the gender of the employee might matter.

The arguments for why gender matters with regard to transformational and transactional leadership typically build on gender differences in communal and agentic traits, which is also the approach in this dissertation. The communal traits, e.g. being caring and understanding, are more strongly ascribed to women than men, while the agentic traits, e.g. being competitive and confident, are more strongly ascribed to men than women. However, even though these traits often lay the foundation for the arguments, they are generally not studied empirically. It is thus a great contribution of this dissertation that the traits are studied both as mediating variables as well as in their own right.

Going back to the definition of leadership, it is, as mentioned, a dyadic relation between the manager and the employee. The other part of the dissertation therefore focuses on fit between the manager and the employee. As mentioned, I focus on the individual employee and manager. Multiple theories have suggested that similarity matters (e.g. Similarity-Attraction Theory, Social Identity Theory, and Fit Theory). A small part of the literature building on these theories studies gender congruence (i.e. having the same gender) between manager and employee (Giuliano, Leonard, and Levine 2005; Grissom, Nicholson-Crotty, and Keiser 2012; Pedersen and Nielsen 2016). The findings are inconsistent and we still need knowledge on the potential effects of gender congruence in a leadership context. Even though there is some literature on the importance of gender congruence between manager and employee, I contribute to this literature in several ways. First, I study gender congruence in relation to different leadership outcomes. Second, a more significant contribution is the attention to communal and agentic traits. Among other things, this brings attention to the role of gender versus gender-related traits (communal and agentic traits). Although men and women tend to differ in communal and agentic traits, some men are also more communal and some women more agentic than others of the opposite gender. It is therefore interesting to study both gender and the gender-related traits in a leadership context. Third, an important contribution of this dissertation to the literature on gender and leadership is that it disentangles the manager's gender and traits in order to study the importance of each separately, especially the importance of fit between the manager and employee gender and traits.

Thus, by the focus on 1) fit between leadership and employee characteristics and 2) fit between manager and employee characteristics this dissertation

provides important theoretical contributions to the existing literature. Specifically, it does so by studying the following research question:

*How does fit between an employee's gender and traits
and their manager's gender, traits and leadership behavior
affect the employee's leadership perception, motivation, and
manager preference?*

By studying all three outcomes (leadership perception, motivation, and manager preference), the studies collectively contribute to our sparse knowledge about the two types of fit, i.e. fit between manager and employee gender and traits and fit between leadership behaviors and employee gender and traits. We are able to draw more robust conclusions by studying fit with employee gender and traits in relation to different outcomes as well as with different research designs, insofar as the studies provide similar results. In the following, I focus on how the studied outcomes are important. The two types of fit are studied in relation to three different outcomes: perceived leadership, motivation, and manager preference.

First, perceived leadership is a relevant outcome because leadership works through the employees, as pointed out by Rainey. Leadership can only increase employee job satisfaction, motivation, and performance if the employee perceives it (Jacobsen and Andersen 2015). It is therefore relevant what the employee actually perceives, and not just what the manager might do. If the manager succeeds in increasing the employee's leadership perception, the manager has the opportunity to realize the benefits of their leadership strategies. It is therefore useful for managers to know whether some of their employees perceive more leadership than others. We therefore study whether the gender combination between the manager and the employee matters for the effectiveness of leadership training on employee-perceived leadership. If the gender combination matters for leadership perceptions, managers should consider this, assuming they want their employees to perceive an equal amount of leadership regardless of their gender.

Second, I study motivation, as this is both a relevant outcome in itself, as well as an important source of increased performance, well-being, and commitment (Andersen, Heinesen, and Pedersen 2014; Andersen and Kjeldsen 2013; Bellé 2013; Bright 2008; Vandenabeele 2009). Perceived leadership is an (important) step on the way from a manager's leadership behavior to employee motivation, while employee motivation is a more important outcome for improving public service. In relation to motivation, I study the importance of both types of fit, i.e. fit between leadership and employee characteristics as well as fit between manager and employee characteristics. Both studies are important to gaining more knowledge about what might cause differences in

motivation in a workforce, and how a manager influences motivation. It is, for example, important for managers to know whether leadership strategies are more effective for some employees than for others if they wish to motivate all their employees.

Last, the dissertation includes a study of the effects of the two types of fit on employees' manager preferences. Employees' manager preference is not an ultimate goal, but as it could affect their job satisfaction, motivation, and the willingness to apply for and retain a job, it is an important outcome. Likewise, the results can shed light on some of the consequences of hiring managers with different characteristics.

The dissertation thus seeks to contribute to our knowledge about how fit between employee gender and traits and their manager's gender, traits, and leadership behavior affect the employee's leadership perception, motivation, and manager preference, as depicted in Figure 1.1.

Figure 1.1. The Relationships Studied in the Dissertation
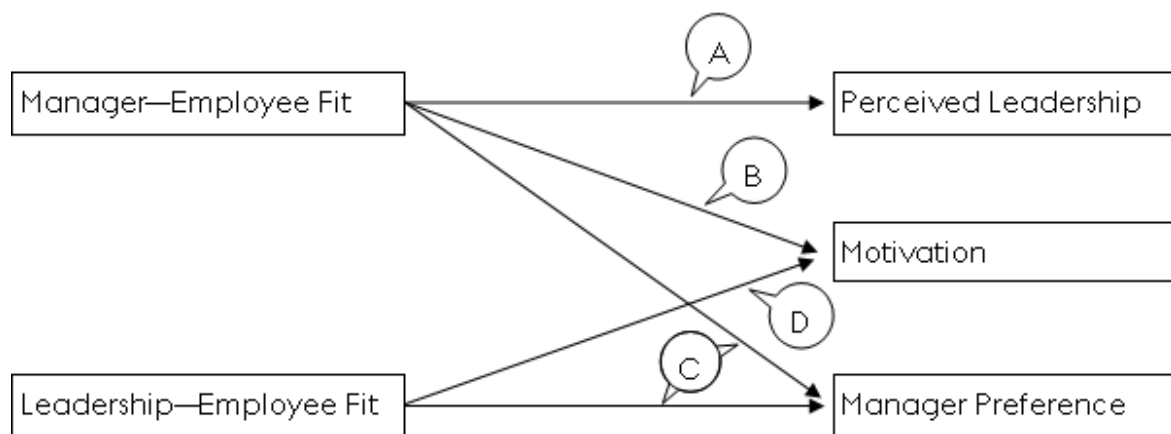
Note: A, B, C, and D refer to four different studies in the dissertation, as explained below.

The dissertation consists of the following studies:

A. The Importance of Similarity: How Gender Congruence Matters for the Impact of Leadership Training. Co-authored with Christian Bøtcher Jacobsen and Seung-Ho An. Submitted to *Administration & Society*.

B. Manager-Employee Fit: Does Fit in Gender and Traits Matter for Employee Motivation? Integrated in the summary.

C. Below the Surface: Experimental Evidence for how Traits but not Gender Matter for Manager Preference. Submitted to *Journal of Behavioral Public Administration*.

D. Leading Employees of Different Gender: The Importance of Gender for the Leadership-Motivation Relationship. Published in *Review of Public Personnel Administration* and in Appendix C.

The summary is structured as follows: Chapter 2 presents the theoretical framework of the dissertation, including a theoretical discussion of the transformational and transactional leadership concepts, leading to the use of the term *visionary leadership* instead of *transformational leadership*. Gender differences are discussed and argued to fit with each other and with different leadership behaviors, which leads to the studied manager-employee fit and leadership-employee fit. These sections end with the expectations for how they could affect leadership outcomes and in which studies this is elaborated on. Chapter 3 discusses how each of the research designs and the different data contribute to answering the research question; for example, how the organizational and national contexts of the studies affect the validity of the results. Having explained why we should expect fit between manager and employee characteristics and between leadership behaviors and employee characteristics to matter for leadership outcomes, and having outlined the methodological considerations, Chapter 4 presents and discuss the main results of the studies, structured after the two types of fit. Chapter 5 concludes with a discussion of the overall findings in relation to the research question: How does fit between an employee's gender and traits and their manager's gender, traits, and leadership behavior relate to the employee's leadership perception, motivation, and manager preference?

Chapter 2
Theoretical Framework

This dissertation examines how the characteristics of gender and communal and agentic traits matter in a leadership context. It distinguishes between 1) how the combination of manager and employee characteristics matters for leadership perception, motivation, and manager preferences and 2) how fit between leadership and employee characteristics matters for manager preferences and employee motivation. Both elements build on the theoretical argument from Person-Environment Fit Theory: that fit between an employee and their environment (e.g. manager and leadership) has positive effects on, for example, motivation. Before arguing how employee characteristics fit manager characteristics and leadership behavior and why it matters, the leadership strategies, gender, and gender-related traits are conceptualized. Even though transformational and transactional leadership have been abundantly studied for decades (Bass 1985; Burns 1978), the traditional definitions have been under severe criticism in recent years (Knippenberg and Sitkin 2013; Yukl 1999) and a new conceptualization has been developed (Jensen, Andersen, Bro, et al. 2019). It is therefore important to present how transformational and transactional leadership are conceptualized in this dissertation. Furthermore, the distinction between male and female has always existed, but it is still under debate whether, why, and how they differ in traits. The arguments for why men and women might differ will be put forward, but the focus is on whether or not they differ in communal and agentic traits and how the differences might matter in a leadership context.

2.1. Leadership

As mentioned in the introduction, leadership is about trying to direct and energize people to achieve goals. Transformational and transactional leadership are possible strategies in the attempt to do so. Transformational and transactional leadership are both goal-oriented leadership strategies that focus on vital leadership tasks related to motivating and directing employees to increase their goal attainment (Jacobsen and Andersen 2015). While transformational leaders[4] seek to *transcend* employees' self-interest, transactional leaders seek to *appeal* to it.

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[4] Leaders are understood as people who perform leadership, while managers are people with a management position. Transformational and transactional leadership can be performed by people without a management position, which is why the theoretical

Transformational leadership was developed in Burns' (1978) and Bass' (1985) seminal work and has since received a great deal of academic attention. However, it has also been criticized, especially by Knippenberg and Sitkin (2013), which has led to a new conceptualization and operationalization (Jensen, Andersen, Bro, et al. 2019). However, to be able to relate the theory and results of the dissertation to that of previous scholars, the traditional transformational concept is briefly explained in the following.

Traditionally, transformational leadership is understood as when a leader moves an employee beyond his/her self-interests though idealized influence, inspirational motivation, individual consideration, or intellectual stimulation (Bass 1985, 1999). There are two major criticisms of this definition: First, the behavior of the leader is intertwined with the effects thereof. The effect of transformational leadership is thus included in the definition, and the leader is per definition successful in moving the employee beyond his/her self-interests. The new definition only contains the leadership behavior and the intent to move the employee beyond his/her self-interest. The second criticism concerns the four dimensions: idealized influence, inspirational motivation, individual consideration, or intellectual stimulation. It is not clear from the conceptualization why some dimensions are included and others not, and furthermore how each dimension contributes individually or together (Knippenberg and Sitkin 2013). The new definition overcomes this by focusing on the visionary element, which is mainly present in the first two dimensions: idealized influence and inspirational motivation.

Following this criticism and in line with the recent trend in the literature (Jacobsen and Andersen 2015; Jensen, Andersen, Bro, et al. 2019), this dissertation focuses on the visionary element of transformational leadership and the leader's behavior instead of the effects thereof. At this point in time, the question of what to call this new conceptualization seems unresolved. In this dissertation it is called visionary leadership, as suggested by Knippenberg and Sitkin (2013), in order to highlight the difference between the visionary leadership concept and the old transformational leadership concept. In Study A, it is called transformational leadership as it builds on a larger project that uses that term.

Visionary leadership is defined as behavior seeking to develop, share, and sustain a vision in an attempt to move the employee beyond his or her self-interest and to achieve organizational goals, which corresponds to how Jacobsen and Andersen (2015:832) define transformational leadership. Visionary leadership thus includes three central aspects: developing a vision of the core

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definition concerns leaders, while the rest of the dissertation uses the term "manager."

goals of the organization, sharing the vision with employees, and sustaining the shared vision over time. As visionary leadership is meant to appeal to the importance of the organizational goals, it is expected to motivate the employees to work toward these goals (Andersen and Pedersen 2014:93; Jung and Avolio 2000) and hence result in increased performance.

Transactional leadership builds on an exchange between the leader and the employee to make it in the employee's self-interest to work towards organizational goals (Bass 1999). It is prudent that the transaction depends on the employee's behavior and that this link is clear to the employee, so that the employee's interest in obtaining the reward (or not receiving the sanction) will also get him/her to behave as wished. The transactional leadership strategy will thus give the employee an incentive that is expected to motivate him/her to work to achieve the organizational goals, and as a result work to increase performance. Transactional leadership encompasses three components: verbal rewards (e.g. praise), pecuniary rewards (e.g. bonuses), and sanctions (e.g. firing) (Jensen, Andersen, Bro, et al. 2019; Yukl 1999). The sanction component of transactional leadership is not included in this dissertation because the positive results are unclear (Nielsen et al. 2019), and employees are not expected to have a preference for this type of leadership. Instead, the focus is on verbal and pecuniary rewards and the differences therein.

When discussing leadership, it is important to differentiate between what the manager does and what the employee perceive that the manager does. Previous research has shown that there are large differences between what managers think they do and what their employees perceive—and that it is employee perception that is significant in relation to motivation and performance (Favero et al. 2016; Jacobsen and Andersen 2015; Wright and Nishii 2007). The employee has to perceive the leadership for it to affect them and hence for it to change their satisfaction, motivation, and behavior.

Employee characteristics and fit between employee and manager characteristics can be important in the transitions from actual leadership behavior to perceived leadership and onto employee reactions. The arguments for why this is are presented in the four studies as shown in Figure 2.1 and will briefly be presented later in the theoretical chapter. In Study A, gender congruence is expected to possibly affect both the manager's actual leadership behavior towards different employees as well as how much of the actual leadership the employees perceive. Perceived leadership is thus the dependent variable in Study A, while Studies B and C use perceived leadership as an independent variable to study how it matters for motivation and manager preferences. Figure 2.1 is a theoretical model, which is meant to clarify the theoretical claims of the studies in relation to perceived leadership.

Figure 2.1. Theoretical Model Concerning Perceived Leadership
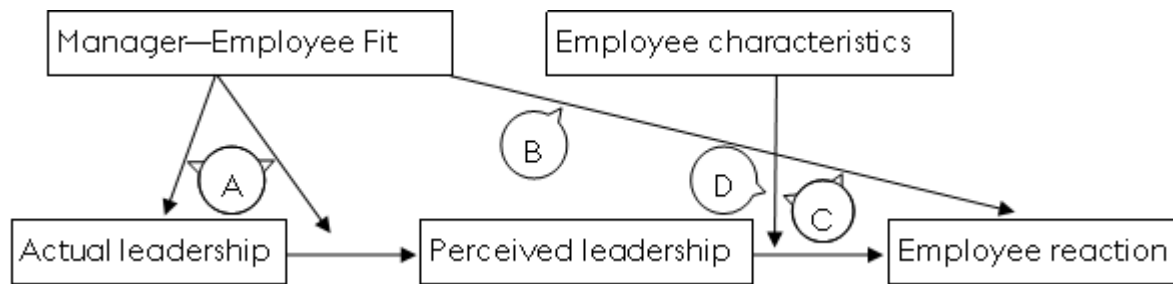
2.2. What is Motivation?

Motivation is an important employee reaction to leadership. Motivation is important for both managers' efforts to increase performance and researchers' attempts to develop theories on leadership and management (Steers, Mowday, and Shapiro 2004). Motivation is therefore the dependent variable in Studies B and D. Thus, even though it is not the main focus of this dissertation, it is an extremely relevant employee reaction, and it should be clarified how motivation is understood in this dissertation and how it might be affected.

So what is motivation? That is a complex question! There are a number of different kinds of motivation, different definitions of the same term, and endless questions it raises, even after one settles on a definition (Pinder 2008:1; Rainey 2014:9). Public service motivation, intrinsic motivation, and extrinsic motivation are examples of different types of motivation which are all interesting and relevant. However, work motivation is a very useful type of motivation when studying how gender and gender-related traits affect motivation. It helps ensure a more neutral baseline, as previous studies have found gender differences in other types of motivation. Women, for example, are found to have higher public service motivation, especially in the compassion dimension (Andersen and Kjeldsen 2013; Bright 2005; DeHart-Davis et al. 2006). The use of a broader type of motivation makes it possible to diminish gender differences, as it does not differentiate between motivation types that are more closely related to one gender or the other.

Work motivation is thus the motivation type studied in this dissertation; but work motivation has also been defined in numerous ways (Pinder 2008:10; Wright 2001). Motivation comes from the Latin word for movement, so work motivation refers to that which moves us to work (Pedersen 2015:50). Work motivation is thus an underlying element in all we do in relation to a given work task. In line with Jensen, Andersen, and Jacobsen, I therefore understand work motivation as "the energy a person is willing to invest in his or her job to achieve certain objectives" (Jensen, Andersen, and Jacobsen

2019:12). The question is then how to increase the energy the employee is willing invest.

Much of the existing literature points to transformational and transactional leadership having a positive influence on employee motivation (Avolio et al. 2009; Judge and Piccolo 2004; Nielsen et al. 2019; Wright, Moynihan, and Pandey 2012). The relationship between transformational and transactional leadership and motivation has been well studied, but there has not been enough focus on how individual-level factors interact with this relationship (Pinder 2008:48). The relationship between leadership and motivation is therefore assumed in this dissertation, while the theoretical arguments (Section 2.4.2) focus on how the relationship is expected to depend on employee gender and traits.

2.3. Gender and Gender-Related Traits

The theoretical arguments in this dissertation build on gender differences in communal and agentic traits (Bakan 1966), as these personality traits[5] have previously been associated with transformational and transactional leadership (Eagly et al. 2003), and thus are relevant for the subject of this dissertation. The communal traits are more strongly ascribed to women than men, while the agentic traits are more strongly ascribed to men. Women and men are thus argued to differ in communal and agentic traits on average, but not all women are expected to be more communal than all men, and vice versa for agentic traits. Furthermore, communal and agentic traits are not mutually exclusive; some people can be very communal and agentic while others are neither.

There is still a lot of discussion about whether or not men and women differ in any significant way, and whether the difference is caused by nature or nurture (Carli 1997; Eagly and Wood 2011; Lippa 2005:3). This dissertation tests empirically whether women and men differ and whether it matters in a leadership context, but it will not contribute to the discussion about nature and nurture. Both arguments are presented in the following. I assume that at least some of the gender differences might be caused by socialization, which makes it important to consider the empirical context in relation to how girls and boys are socialized. Much of the literature is from the United States, and there might be differences in gender-related socialization between the United

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[5] Communal and agentic traits are seen as personality traits, but will be named traits, while communal and agentic traits and gender are all seen as characteristics.

States and Denmark, which are necessary to take into account. This is elaborated in Section 2.3.3 and will be discussed further in the method and discussion chapters.

2.3.1. Which Gender Differences?

There are many different terms and distinctions in the literature on gender differences in traits; some use the distinctions masculine-feminine, instrumental-expressive, or systemizing-empathizing. However, they often cover similar sets of traits and are sometimes operationalized by the same questions (Feather 1984; Ward et al. 2006). The terms *communal* and *agentic* (Bakan 1966) are often used in relation to transformational and transactional leadership (Eagly et al. 2003) and will therefore also be used in this dissertation. Agentic traits are more strongly ascribed to men than women, whereas communal traits are more strongly ascribed to women than men.

Agentic traits cover a tendency to be confident, assertive, and controlling, for example by being competitive, ambitious, independent, self-confident, dominant, and forceful (Eagly and Johannesen-Schmidt 2001). Communal traits cover a tendency to be concerned with the welfare of other people, nurturing, gentle, kind, helpful, sympathetic, emotional, interpersonally sensitive, understanding, relational, and affectionate. Communal people might thus be more likely to accept others' direction, support others, and avoid drawing attention to themselves (Eagly and Johannesen-Schmidt 2001). How agentic and communal traits relate to leadership will be argued in Section 2.4.2.

2.3.2. Why are There Gender Differences?

Gender differences in communal and agentic traits can stem from nature and/or nurture. The nature arguments highlight biological differences in anatomy, brain processes, and hormones. Women produce more oxytocin (a pleasure hormone) than men when they interact with others, and oxytocin is enhanced by the female hormone estrogen, and neutralized by the male hormone testosterone (Legato 2008). Women can therefore be more motivated to create and foster social interactions. Furthermore, women have more dopamine in the part of the brain that relates to speech and memory, which possibly makes women better listeners and better at understanding and communicating. The testosterone in male brains might also slow down growth in the left hemisphere of the brain, which is normally responsible for language abilities (Lippa 2005:100–101). More fluent communication between the two brain parts, which is more present in women than men, might also cause women to be more verbally fluent than men on average. At an early age, girls are more fluid in both talking and writing, know more words, and use longer

sentences with fewer mistakes (Pinker 2009:37). Men, meanwhile, increase adrenaline production when participating in competition, while women decrease it (Pinker 2009). Moreover, testosterone can increase the appetite for risk, competition, and systematic thinking. Baron-Cohen (2004) argues for the tendency of male brains to be programmed to understand systems, while the female brain is programmed to empathy, communication, and interaction. However, even though they argue for biological differences, they are not postulating that these differences are deterministic. They only argue that men and women differ *on average*.

The nurture position argues that people are conditioned by societal norms for correct or acceptable behavior and thus socialized to act according to their gender role. Early socialization especially affects behavior, competencies, and learning (Carli 1997). Studies show that people talk differently to boys and girls. Girls are asked more questions, inviting them to communicate more, while boys are given more instructions (Carli 1997:48). Furthermore, girls are more socialized to play house, which focuses on feelings, caring, and communication, while boys are more socialized to play sports, which is focused on rules and competition. Children might even be name-called or teased if they participate in games traditionally connected to the other gender (Lippa 2005:105). This socialization in accordance with gender roles happens all through life. Men, as well as boys, are socialized to not show feelings—to "man up"—and women are socialized to not take charge—to not be "bitchy."

If gender differences are caused by nature (biology), the differences will be more or less constant over time and space. However, if they are caused by nurture (socialization), it is possible to create a society where gender differences are eliminated. The next section assumes that at least some of the gender differences are caused by socialization, and thus that they can vary though time and space.

2.3.3. Are the Differences Always There?

There are two reasons to expect that gender differences might not always be present, even though they sometimes are. The first has to do with the above-mentioned point, that if some of the gender differences are caused by socialization, they can vary accordingly. The second reason relates to the fact that women and men merely differ on average (if at all). Both points are elaborated in the following.

To the extent that at least some of the gender differences are caused by socialization, the differences can be expected to vary between societies. Social norms and gender roles are not the same across time and space. Some countries have stricter norms for correct behavior, e.g. in some countries it is assumed that women will stay home and take care of the house and family, while

the husband is the breadwinner—as it once was in Denmark. Boys and girls might thus be socialized differently, which might cause varying degrees of gender differences. The gender differences are therefore expected to be smaller now compared to earlier, and in cultures with less strict gender roles compared to cultures with more strict gender roles.

The second reason relates, as mentioned, to the argument that women and men differ on average—that it is not the case that *all* women are more communal than all men, nor that all men are more agentic than all women. Even if gender differences are present on average, they are not necessarily present within a given organization or profession. Based on Person-Environment (PE) Fit Theory, people are attracted to work environments that fit their own traits, and organizations will often select candidates that fit the organization and job task (Kristof-Brown, Zimmerman, and Johnson 2005). In female-dominated professions such as child care, where communal attributes like being helpful and sympathetic are beneficial, male employees are likely to be more communal than the average male, due to organizational selection and self-selection mechanisms. The Attraction-Selection-Attrition model hypothesizes that organizations attract and select employees that are similar to existing employees (Pinder 2008:52). Thus even if gender differences are present on average, this does not mean the differences are also present within a given profession or organization. Two mechanisms are thus at play, both of which cause the employees in a given profession and organization to be more alike than people in different professions. An organization's selection of employees and the individuals' self-selection into a profession mean that the individuals within a profession are probably more alike than individuals in general (Nielsen 2014:167). These effects are even more likely when women and men hold the same type of job in an organization, unlike organizations where most women, for example, are secretaries and most men are factory workers. Thus, the gender differences within high schools, the primary case of the dissertation, might be neutralized due to these selection and self-selection mechanisms. The same argument holds for leadership positions, where managers often have similar traits, probably because they are selected and self-selected into leadership positions (Wille et al. 2018).

2.4. How Does It Fit?

The previous sections defined transformational and transactional leadership and explained how to understand employee-perceived leadership and motivation. They then explained how and why women and men might differ, and when they might be less likely to do so. Building on this knowledge, I use the

Person-Environment (PE) Fit Theory in the central arguments of the dissertation. PE Fit Theory is a very broad theory that simply argues that when a person is well matched with their environment, it is beneficial and can increase motivation, satisfaction, and performance. PE fit is defined as "the compatibility between an individual and a work environment that occurs when their characteristics are well matched" (Kristof-Brown et al. 2005:281). I build on the previous sections and PE Fit Theory (and surrounding literature) to argue how an employee's communal and agentic traits and hence their gender fit manager characteristics and transformational and transactional leadership and how this matters for leadership outcomes, i.e. manager preferences, motivation, and perception.

2.4.1. How Do Employee and Manager Fit?

In this section I argue why similarity between an employee and their manager increases leadership perception, motivation, and manager preference. Similar-Attraction Theory (Byrne 1971), Social Identity Theory (Tajfel and Turner 1986), Relational Demography Theory (Tsui, Egan, and O'Reilly 1992), and the Theory of Representative Bureaucracy all suggest that similarity matters. In the fit literature, supplementary fit is when the employee and the manager supplement each other by being similar and hence fulfill each other's needs for belongingness and acceptance. Even though there is a broad theoretical claim that similarity is beneficial, not much focus has been given to its importance in a leadership context.

Similarity, for example having the same gender, has been argued to increase acceptance, interpersonal attraction, and understanding (Grissom et al. 2012; Tsui and O'Reilly 1989). People are attracted to people who are similar to themselves because they have a fundamental desire to be confirmed in their perspectives. People who are similar are thus more likely to share social networks, which can cause them to create social bonds with cooperation, similar expectations, and mutual trust (Grissom et al. 2012). Similarity is thus expected to increase compatibility and mutual understanding, which in turn can affect motives, attitudes, and behaviors, both consciously and subconsciously (Abrams and Hogg 1988; Hogg, Terry, and White 1995).

In a work context, similarity might increase cooperation, trust, acceptance, understanding, and interaction, which can cause employees to be more positive towards their manager. Previous research has found gender congruence to correlate with different work outcomes, such as job satisfaction and turnover (Giuliano et al. 2005; Grissom et al. 2012). Others have found that mangers like employees of the same gender better, and rate their performance (Tsui & O'Reilly, 1989) and extra-role behavior more highly (Tsui, Porter, & Egan, 2002), and that role ambiguity and conflict are lower.

However, the results in the existing literature about gender congruence are not consistent. Some have not found the expected effects of gender congruence and some have even found the opposite (Pedersen and Nielsen 2016). Some have found that female employees with male managers had lower levels of distress and fewer physical symptoms than those with a female manager (Schieman and Mcmullen 2008), and that female employees are rated more harshly by female managers than by male managers (Cooper 1997:148).

The empirical evidence for the effect of gender congruence is thus unclear. Harrison and colleagues (1998) argue that surface-level characteristics, such as gender, lose their importance over time, when people get to know one another's deep-level characteristics. This might explain why gender congruence is sometimes found to matter and sometimes not. They argue that surface-level characteristics are used as a clue when people do not have knowledge about the more important deep-level characteristics. Before you know a person, you might make assumptions based on their gender about their gender-related traits. However, as you get to know them, you learn what they are like as a person and stop using their gender as a clue. Therefore, gender might mostly matter when one does not have knowledge about traits. This dissertation therefore looks at both gender and gender-related traits to see how these affect leadership outcomes.

The dissertation concentrates on three different outcomes: perceived leadership, motivation, and manager preference. I will briefly argue how similarity (fit) between manager and employee can be expected to affect each of them, but the full argumentation with regard to perceived leadership and manager preference can be found in Studies A and C respectively.

Figure 2.2. Overview of Studies Regarding Manager-Employee Fit
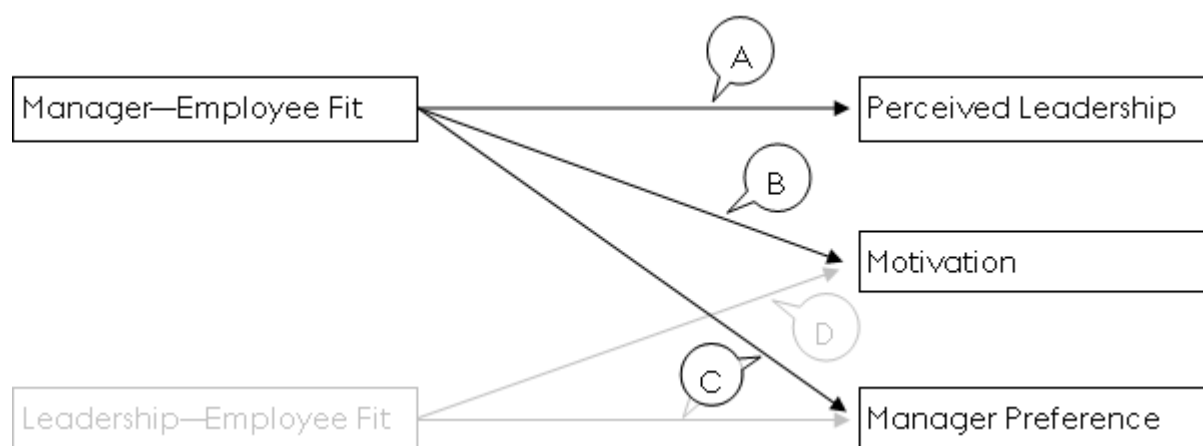
As already described (Section 2.1), not all of a manager's intended leadership behavior is perceived by the employee. The manager encounters challenges in exercising and communicating their leadership behavior and the employee encounters challenges in interpreting it. In Study A, we argue that gender congruence can decrease both these challenges, as depicted in Figure 2.1. Firstly, we argue that it tends to be easier for a manager to increase their leadership behavior towards employees who are gender congruent, because they tend to have a closer social bond and the employee is more likely to accept the behavior. Secondly, less leadership behavior will be lost in the transition from behavior to perception, because gender congruent employees tend to be better at understanding the manager and their leadership behavior. The employee will therefore perceive more of what the manager is doing.

Manager-employee fit is also expected to increase motivation (Study B in Figure 2.2). As this argument is not presented in any of the articles, the full argument is presented here, with references back to the effect of similarity from the beginning of this section. I argue that manager-employee fit increases motivation though fulfillment of the basic psychological needs for competence, autonomy, and relatedness, which in Self-Determination Theory (SDT) is assumed to increase motivation (Ryan and Deci 2000). People have a fundamental need to feel competence, autonomy, and relatedness, and when these needs are satisfied, it will lead to a feeling of self-determination, which will increase motivation.

The need for competence concerns one's need to feel effective when dealing with their environment. The need for autonomy concerns one's need to experience volition and feel like a causal agent. Lastly, the need for relatedness concerns one's need to interact with, be connected to, and experience caring for others (Hetland et al. 2011:508). People are thus more likely to be motivated to work if they feel it is their own choice, feel competent to do it, and feel related to others, such as their manager, coworkers, or clients.

First, I argue that employees are more likely to feel competent when they are similar to their manager. Similarity can, as mentioned, lead to increased trust and to managers rating their employee's performance more highly. The employee might feel more competent when their manager trusts them and rates their performance highly. I thus argue that similarity might increase the employee's belief that they have the competence to do their job.

Second, similarity can increase acceptance, understanding, and corroboration. When the manager and employee are similar, I therefore expect it to be easier for the manager to convince the employee of the importance of the organizational goals, as it would be easier to get the employee to accept and understand the importance of the goal and to get them to collaborate to achieve it. When the employee is convinced of the importance of the goal, I

expect them to feel more autonomy than those who have to work towards a goal whose importance they do not understand. I therefore expect similarity to increase the fulfillment of the employee's need for autonomy.

Finally, similarity can lead to more interaction and a better relationship. More interaction can fulfill the employee's need to interact with others while a better relationship can fulfill the employee's need to feel connected to and experience caring for others. I therefore argue that similarity can help fulfill the employee's need for relatedness.

Employees who are similar to their manager might thus experience a greater satisfaction of their basic needs and therefore be more motivated to work. However, this effect might not stand alone. As explained above, gender-congruent employees might perceive more of the manager's leadership and they might be more likely to accept it, which could also cause them to be more motivated. Part of the effect of manager-employee fit on motivation might thus go through leadership.

The last dependent variable is manager preference. I expect employees to prefer managers who are similar to themselves (Study C). As mentioned, people are attracted to similar people because they have a desire to be confirmed in their perspectives. People who are similar are thus more likely to foster a closer social bond and get along both socially and in the workplace. This is expected to cause the employee to prefer a manager who is similar to themselves, all else being equal. As mentioned, gender is a surface-level characteristic, so employees might disregard the manager's gender when they have knowledge about their traits. However, as multiple studies have found positive effects of gender congruence, it is worth testing.

2.4.2. How do Employee Gender and Traits Fit Different Leadership Behaviors?

While fit in gender and traits is a supplementary fit where the employee and manager are similar, I argue for a complementary fit between leadership and employee characteristics, as employees are expected to have different needs which are fulfilled by different leadership behaviors. Previous literature on leadership and gender studies whether female and male managers use different leadership strategies. This dissertation, however, focuses on the employee and how female and male employees might have different needs with regard to leadership. Like the manager-centered literature, I use the agentic and communal traits described in Section 2.3 to argue for fit between gender and different leadership behaviors. However, unlike much of the existing literature, I include the traits in my studies. In the following, I will briefly describe how

each of the leadership components—visionary leadership,[6] verbal rewards, and pecuniary rewards—fits communal and agentic traits and hence female and male employees, and why it is expected to affect manager preference and motivation. The arguments are unfolded in Studies C and D.

Figure 2.3. Overview of Studies Regarding Leadership-Employee Fit
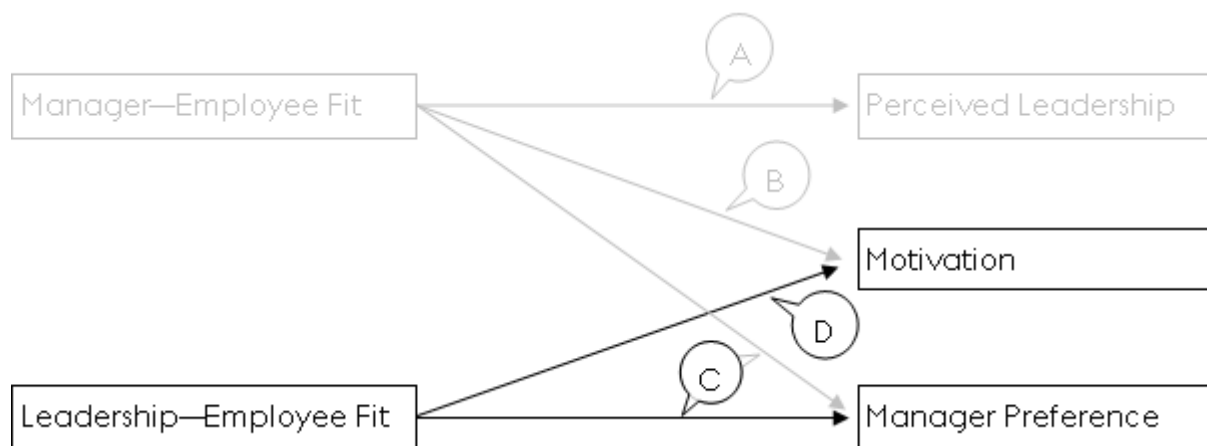
Visionary leadership is argued to fit communal traits. As mentioned, communal people might be more likely to accept the direction of others, which fits well with visionary leadership, which is all about the manager convincing the employee to work towards organizational goals. This is also related to communal people being more sympathetic and understanding, as they might be easier to convince regarding the vision. Furthermore, the tendency to be helpful, kind, and concerned with the welfare of other people also makes it more likely that they will help their manager but also help service users/citizens when the vision is about doing good for others, as it often is in public organizations.

The transactional leadership components are more systematic, and hence fit the agentic traits to some extent. However, I argue that there is a relevant difference between verbal and pecuniary rewards, so that verbal rewards primarily fit the communal traits while pecuniary rewards better fit the agentic traits. Communal employees tend to be more emotional, interpersonally sensitive, and gentle, which fits well with verbal rewards. The spoken word might carry more meaning and importance for the more emotional, interpersonally sensitive person, while the more tangible pecuniary rewards fit better with an agentic ambition and desire for competition. The agentic tendency to be more self-confident might also mean that agentic people have less need for verbal

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[6] Corresponds to transactional leadership as defined by Jensen et al. (2019).

acknowledgment. They already know their worth but need more tangible evidence to compare with others for competition.

I argue that this fit causes communal employees to be more motivated and prefer visionary leadership and verbal rewards more than less communal employees, while agentic employees prefer pecuniary rewards more than less agentic employees. As women tend to be more communal and men more agentic, this also leads to the expectation that women are more motivated by and have a greater preference for visionary leadership and verbal rewards than men, while men are more motivated by and have a greater preference for pecuniary rewards compared to women.

Even though surprisingly few have conducted studies related to these expectations, there are a few worth mentioning. Some have found gender to matter for work-related preferences (Bigoness 1988; Gooderham et al. 2004; Konrad et al. 2000). Gooderham et al. (2004) find that men tend to be a bit more materialistic than women, and Konrad et al. (2000) find they prefer earnings. Both findings are in line with agentic and male employees having a preference for pecuniary rewards compared to less agentic and female employees. In their meta-analysis, Konrad et al. also find that women tend to prefer opportunities to help others, feedback, and opportunities for self-fulfillment, which in some way relates to visionary leadership and verbal rewards. Lee and Park (2020) also find a more positive correlation with (the old conceptualization of) transformational leadership for female employees than male. These results thus support the expectations, but others do not. Konrad et al. also find that women prefer benefits and men prefer recognition, which would be more consistent with women preferring pecuniary rewards and men preferring verbal rewards. Lastly, in a Danish case, Pedersen (2018) did not find significant gender differences in the effect of monetary rewards on participation in a survey. However, the effect of this kind of leadership might also be different in different contexts, and this study was not conducted in a work environment with colleges and other relevant factors. However, to the extent that there are studies on how employees' gender matters for leadership, motivation, and preferences, their findings are mixed. This question is therefore extremely relevant to examine further, especially while distinguishing between gender and traits, as it is possible that gender matters less when the link to the gender-related traits is less profound.

Chapter 3
Research Designs and Data

This dissertation includes four studies that help answer its main question in different ways: How does fit between an employee's gender and traits and their manager's gender, traits, and leadership affect the employee's leadership perception, motivation, and manager preference? It is not an easy question to answer, which is why I use different research designs, focus on different variables, and study them in slightly different contexts. To the extent that the studies point to the same effect of fit, this increases the validity of the results. Table 3.1 presents the studies' primary variables, sample, and design.

I will briefly describe each of the studies, which are also presented in Table 3.1, before I discuss how they each contribute to the dissertation. Study A uses panel data from a field experiment to study the importance of gender congruence. This study includes employees from five different types of organizations: primary schools, high schools, day-care centers, tax departments, and banks. The field experiment is explained in more detail on LEAP-project.dk. Study B uses cross-sectional data from high school teachers and their managers to study the importance of fit in gender and traits between manager and employee for the employee's motivation. Study B is described further in the appendix A. Study C uses a conjoint experiment with within-person variation from Danish and Dutch high schools to study the importance of fit between employee gender and traits and the manager's gender, traits, and leadership behavior. Lastly, Study D uses cross-sectional data from high school teachers to study the importance of employee gender and traits for the leadership-motivation relationship.

Table 3.1. Overview of the Studies' Variables, Samples, and Research Designs

Full title	Independent variables	Moderators	Dependent variable	Sample	Design
The Importance of Similarity: How Gender Congruence Matters for the Impact of Leadership Training	Leadership training	Gender congruence	Perceived leadership	Employees from primary schools, high schools, daycare centers, tax departments, and banks	Field experiment, Panel data
Does Fit in Gender and Traits Matter for Employee Motivation (Chapter)	Gender congruence and manager's traits	Employee traits	Employee motivation	STX high school teachers and their managers	Cross-sectional
Below the Surface: Experimental Evidence for how Traits but not Gender Matters for Manager Preferences	Manager characteristics (gender, traits, and leadership behavior)	Employee traits and gender	Manager preference	HHX high school teachers & Dutch high school teachers	Conjoint experiments
Leading Employees of Different Gender: The Importance of Gender for the Leadership-Motivation Relationship	Employee-perceived leadership behavior	Employee gender and traits	Employee motivation	STX high school teachers	Cross-sectional

3.1. Research Context

The dissertation includes data from different countries and different organizational contexts. It is important to consider in which context the studies are conducted, both in relation to the validity of the results, but also to determine the usefulness of previous studies' theoretical arguments and results for the dissertation's claims. The primary case of the dissertation is Danish public high schools, but the inclusion of other national and organizational contexts increases the validity of the results. Most of the studies are conducted on Danish high school teachers, but Study C includes data on Dutch teachers and Study A includes, as mentioned, data from five different types of organizations: primary schools, high schools, daycare centers, tax departments, and banks. In the following, I describe the context of the studies and discuss how it relates to other organizational and national contexts.

3.1.1. Organizational Context

The primary case of the dissertation is high schools. In the following I argue why this is a useful case for the dissertation and how the inclusion of four other types of organizations—primary schools, daycare centers, tax departments, and banks—contributes to the validity of the dissertation's results.

Danish public high schools are an excellent case to study how fit between an employee's gender and traits and their manager's gender, traits, and leadership is related to the employee's leadership perception, motivation, and manager preference for at least four reasons. First, there is an approximately equal distribution between female and male teachers, but also a fairly high number of female managers. Secondly, teachers are expected to differ in terms of traits, as the job of teaching in high schools can be appealing to both agentic and communal teachers, especially in STX high schools (General Upper Secondary Education Programme), which is the more general high school. HHX high schools (Higher Commercial Examination Programme) have a bit more skewed gender distribution, as the focus on commercial issues might be more appealing to men and more agentic teachers. Lastly, principals have substantial autonomy as the Danish high schools are self-governed, which means the principals have good opportunity to use leadership strategies. Danish high school managers have been shown to use both visionary and transactional leadership (Jacobsen and Andersen 2015; Jensen, Andersen, Bro, et al. 2019). The case is thus a fruitful one to study the research question, as it provides variation on all the independent variables.

In Denmark, there are ten years of mandatory school, after which people can continue schooling in vocational school, which primarily prepares for a

specific trade or industry, or in high school, which primarily prepares for higher education (European Commission 2017). As mentioned, this project primarily studies high schools. The high schools can be divided into four different types: General Upper Secondary Education Programme (STX), Higher Commercial Examination Programme (HHX), Higher Technical Examination Programme (HTX), and Higher Preparatory Examination Programme (HF). I have surveyed teachers from HHX as well as teachers and managers from STX, where HF is often included. The STX and HF programmes are the general programmes, which consists of subjects in humanities, natural science, and social science. HHX programmes are more focused on business and socio-economic disciplines but they also include general subjects (Ministry of Children and Education 2020).

High schools in Denmark are publicly owned and funded, but are self-governed with their own supervisory boards. The Ministry of Children and Education thus issues rules and the school board is formally responsible (Ministry of Children and Education 2020). However, the principals have a relatively strong formal position with great autonomy and have the greatest influence on school decisions in practice (Jacobsen, Nielsen, and Hansen 2014). Hence, they are in a fairly strong position to exert leadership, e.g. over goal setting, hiring and firing of teachers, the school budget, and internal organization. However, they also face strong unions and political constraints, which to some extent limits their ability to use wage incentives and fire employees. The high schools typically have a rather flat structure with a short distance between principals and teachers. However, it is more and more common to have middle managers, who often primarily do administrative tasks, but sometimes also carry out personnel management tasks, such as employee development interviews. The principal might thus not always be the manager that performs the most leadership towards the employee, and the middle manager might therefore be more important for the employee. In this project, I therefore study the person who the employee considers to be their immediate (and hence most relevant) manager.

Danish high schools employ more than 14,000 teachers, and almost all of them are members of the Danish National Union of Upper Secondary School Teachers (Gymnasieskolernes Lærerforening 2019, 2020). Data from the union shows that 53% of its members are women and that the median age range is 40-44 years. There are 146 STX schools and 60 HHX schools in Denmark. I have useable data from 1,294 STX teachers and 426 HHX teachers. Both samples contained 52% female teachers and the mean age is approximately 47 years (See Studies C and D). It thus seems to be a representative sample of the population of Danish STX and HHX high school teachers. I therefore believe

that the results have high external validity with regard to Danish STX and HHX high school teachers in general.

In line with other scholars, I argue that (high) schools are one of the most common types of public organization (Jacobsen and Andersen 2015:833; O'Toole and Meier 2011:45). They are present in most countries and hence secure high external validity across countries. However, it is important to remember that there might be differences in leadership autonomy, culture, and gender socialization across countries, as I will discuss in the following section. Furthermore, even though high schools are quite similar to other types of public organizations in terms of being highly professionalized and decentralized with substantial discretion for individual managers (Jacobsen and Andersen 2015:833), which increases external validity, there might be gender- and trait-relevant differences, which makes it complicated to generalize the results across different types of organizations.

Study A about gender congruence and leadership perceptions includes different public and private organizations, which thus increases the external validity of the results and also indicates external validity of the results from the other studies when these are in line with the results from Study A. However, as the effects in Study A are not tested for each type of organization individually and as the mechanisms are slightly different in the five relationships that I study (e.g. inclusion of traits and different dependent variables), we should be cautious about generalizing the results to different types of organizations. Regarding the effect of gender (compared to traits), it might be less likely to matter in more gendered organizations, such as daycares, where male employees might have more communal traits, as communal traits are greatly aligned with taking care of children. This makes it more likely that fit between gender and leadership matters more in high schools than in Danish organizations that are more gendered. However, according to the broad literature behind the contact hypothesis, interaction often helps dissolve prejudice and stereotyping (Allport 1954; Brown and Hewstone 2005). Interaction between individuals who differ can help break down differences in values, preferences, and general outlook if the interaction happens in settings with equal status, collaboration, and common goals. The breakdown of differences is expected to be further enhanced if the interaction is institutionally supported. This means that there might be more acceptance and less gender stereotyping in Danish high schools, where there is an equal distribution of female and male employees, compared to more gender-skewed organizations. This indicates that high schools might be a least likely case to find an effect of manager-employee fit.

Lastly, it is important to remember that I study teachers and managers inside an organization. If I looked at effects across different organizations or different kinds of organizations, this would not be very useful for managers,

as the results might not apply inside organizations, where employees are already selected and self-selected. For managers leading employees in organizations, it is therefore not as useful to know whether gender and traits matter for leadership perceptions, motivation, and manager preference on average across organizations. It is much more interesting to know whether it matters for employees inside the same organization—i.e. the employee group of the organization. As explained in the theory chapter, selection and self-selection into the job and the organization might cause employees inside an organization to be more similar with regard to personality traits than across organizations. Gender differences and effects of gender are thus less likely to be present inside organizations, as employees and managers of different genders are more similar when they occupy the same job and work inside the same organization. There is thus reason to believe that the effect is not the same within organizations as it is on average across different organizations.

3.1.2. National Context

The previous section explains and discusses the organizational context, primarily that of Danish public high schools. In the following, I will present and discuss the public high schools in a national context with regard to leadership, and afterwards present and discuss the national context in a gender perspective.

In a leadership context, it is important to consider the extent to which Danish managers have autonomy to perform leadership compared to managers in other countries. As the primary case in the dissertation is high schools, and as much of the literature I contribute to is from the United States, I will discuss differences between Danish and American high school managers. Previous research has compared primary schools in Denmark and the United States (Texas). They find that the effect of leadership (internal management) on performance is stronger in the United States than in Denmark. One of the reasons they present is that the American principals have more autonomy, partly because the Danish unions are strong. As mentioned above, the union is also strong in Danish high schools, but while the primary schools are public, the high schools are self-governed and the principals therefore have much more autonomy over, for example, budgets and hiring. However, Danish high school principals still have less autonomy than American principals. Danish principals' lower degree of autonomy compared to American principals might cause the variation in leadership behavior and the effect thereof to be smaller. I do not study the effect of leadership on performance, but it is likely that the effect of leadership on motivation is weaker in Denmark, which makes it less likely that gender and traits moderate this relationship. Similarly, it might be less likely to find an effect of leadership-employee fit on manager preferences,

because the employee might not think the leadership matters much if the manager does not have enough autonomy. This thus indicates that Studies C and D are least likely cases to find leadership-employee fit to matter for motivation and manager preferences, because leadership might matter less than in other countries, for example the United States.

It is also important to consider how the national gender-related context might matter for the dissertation's arguments and results, mainly because part of the theoretical arguments for gender differences in traits build on the socialization of boys and girls, and this socialization can vary between countries. As the dissertation includes data from both Denmark and the Netherlands, it is important to know what characterizes Denmark and the Netherlands, compared to other countries, in order to consider the generalizability of the results as well as the transferability of theoretical arguments and empirical findings from other countries, mainly the United States.

Gender equality is seen as a defining value that has shaped Danish society (Danish Ministry of Culture 2016). Denmark and the Netherlands have a low degree of gender inequality with the second (0.04) and third (0.044) lowest scores on the UN Gender Inequality Index (GII), where the United States and OECD score 0.189 and 0.186 respectively (UNDP 2018). The GII covers inequality in reproductive health, empowerment, and the labor market. There is therefore reason to believe that Denmark and the Netherlands are very gender equal countries.

However, gender equality can cover many different elements of differing importance for the studies in the dissertation. Table 3.2 provides more detail on gender differences in employment in Denmark and the Netherlands, with the United States and OECD as comparisons. The share of female employees in service, industry, and agriculture is quite similar across the shown countries. All the shown countries have a significant gender segmentation, where around 90% of all employed women work in service, thereby constituting around 50% of the workforce in service. In Denmark, 40% of employed women work in education, human health, and social work activities, compared to only 13.2% of male workers. In the Netherlands these figures are 34.9% of female and 9.5% of male workers, while it is 30.3% of female and 8.3% of male workers on average in the EU (European Institute for Gender Equality 2019). Thus even though Denmark has a very low GII score, it has a somewhat gender-segregated labor market (Bloksgaard 2011).

Table 3.2. Measures of Gender and Employment

Measure	DK	NL	US	OECD
Employment rate (% of working age population):				
Men	77.00	81.50	76.50	76.00
Women	71.30	72.80	66.30	60.90
Part-time employment rate (% of employment):				
Men	15.20	19.20	8.40	9.40
Women	25.40	58.00	17.20	25.40
Female to male ratio of time devoted to unpaid care work	1.30	1.73	1.61	
Female share in service	53.57	52.18	53.43	
Female share in industry	23.48	17.20	20.81	
Female share in agriculture	19.31	28.07	25.24	
Employment in service, men (% of employed men)	68.96	71.74	69.86	62.46
Employment in service, women (% of employed women)	89.44	92.45	90.77	85.57
Employment in industry, men (% of employed men)	27.10	25.32	27.82	31.54
Employment in industry, women (% of employed women)	9.49	6.20	8.35	11.37
Employment in agriculture, men (% of employed men)	3.94	2.95	2.33	6.00
Employment in agriculture, women (% of employed women)	1.07	1.35	0.88	3.07
Share of female managers	26.50	25.10	39.80	32.40

The female employment rate is similar and above average in Denmark and the Netherlands. However, the Netherlands differs significantly in the rate of women working part-time. Thus even though women are just as likely to be employed in the Netherlands as in Denmark, more than half of Dutch working women work part-time. This is probably also related to the fact that women in the Netherlands devote 73% more of their time to unpaid care work compared to Dutch men. Unpaid care work covers work like services within the household, including care of persons and housework. Danish women devote 30% more time to unpaid care work than Danish men, which is low compared to, for example, the United States. This lesser female tendency to do unpaid care work in Denmark compared to the other countries might also indicate that the

social expectations towards women being caregivers and men being breadwinners might be less pronounced in Denmark compared to the other countries. The expectations of boys and girls might thus be more similar in Denmark compared to the other countries, even though a large share of employed women work in service.

These are just some of the indicators to consider when arguing for gender equality and socialization of boys and girls. There are some reasons to believe that Denmark has greater gender equality than the Netherlands, United States, and many other OECD countries, but it also becomes clear that there are multiple dimensions of gender equality, and it is difficult to know exactly how each might affect gender and gender-related traits and the importance thereof.

Following Social Role Theory, the social expectations towards girls and boys might be more similar in gender-equal countries than in countries with more gender inequality, and gender differences might therefore be smaller. The gender differences in Denmark might thus be smaller than gender differences in countries with more gender inequality. Denmark might therefore be a least likely case to study gender differences.

On the other hand, some studies have found that countries with more gender egalitarianism, socialization, and sociopolitical gender equity have larger gender differences in some aspects of personality, e.g. the Big Five (Lippa 2010; Schmitt et al. 2017)[7]. However, even if there are greater gender differences in countries such as Denmark, this does not necessarily mean that gender or traits matter more. As mentioned, the contact hypothesis states that interaction often helps dissolve prejudice and stereotyping if the interaction happens in settings with equal status, collaboration, and common goals, and especially if the interaction is institutionally supported (Allport 1954; Brown and Hewstone 2005). Danish organizations, such as public high schools, are characterized by equal status, collaboration, and common goals, and the interactions are institutionally supported (Nielsen and Madsen 2019). Potential differences might thus be decreased in organizations and, not least, individuals may be more accepting and more likely to become friends when they are in contact inside the organization. This might cause differences in gender and traits to be less important, because there is a better understanding of each other. Denmark might thus not be a least likely case to find gender differences in personality traits, but it can be argued to be a least likely case to find effects

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[7] This is consistent with Table A11 in the appendix, which indicate that there are slightly smaller gender differences among Dutch high school teachers than among Danish high school teachers.

of gender and traits, at least with regard to fit with a manager's gender and traits.

Even though the Netherlands is similar to Denmark on some parameters, the high share of part-time employed Dutch women and their tendency to use much more time on unpaid care work than Dutch men might be related to an unequal status between Dutch women and men. Dutch female and male teachers might therefore be less understanding of one another compared to Danish female and male teachers. If the findings are supported by the Dutch data it increases external validity, even though they are not "most different" cases. It would thus indicate that the results are valid outside the Danish context, but still primarily in somewhat gender-equal countries.

3.2. Research Designs and Estimation Strategies

I have used different research designs and methods in the studies, each of which have advantages and disadvantages. It is therefore beneficial to relate the studies to each other in this summary, so that they collectively can increase the validity of the results.

Studies A and C use an experimental setup, which ensures very high internal validity. In Study A, managers were randomly assigned to leadership training and their employees' leadership perceptions were measured before and after the training, which makes it possible to compare between and within subjects in first-difference models. This thus ensures the internal validity of the direct effect. However, introducing gender congruence as a moderating variable introduces risk of endogeneity bias. To deal with this, we included control variables that might affect the gender combination and the leadership-motivation relationship, e.g. the size of the organization and manager tenure. Study C, which also uses an experiment, also has high internal validity, as leadership behavior and manager characteristics are manipulated, while the employee's gender and traits aren't believed to be affected by any significant factors. The conjoint data is analyzed with ordinary least squares (OLS) regression models with cluster robust standard errors at the individual level, as each respondent answered five choice sets.

Internal validity is thus very high in both Studies A and C. However, the studies also have drawbacks. The field experiment in Study A does not include information about the employees' communal and agentic traits and it is therefore impossible to study how these traits matter with regard to leadership training and perceived leadership in this study. This is obviously a relevant drawback in a dissertation that focuses on gender *and* traits. It was therefore necessary to supplement this otherwise very useful study with data I collected myself. The conjoint experiment in Study C therefore included both gender

and the gender-related traits of both the manager and the employee. However, the drawback of the conjoint experiment is that it has less external validity. Ecological validity especially is lower than in the other studies. The employees were asked which manager they prefer out of two managers, who were described with a few words on seven attributes. This is very unlike the real situation that employees experience when interacting with their manager. However, it might be somewhat similar to a hiring situation. Furthermore, many of the existing conjoint experiments in public management and administration research are conducted with randomly selected citizens participating in online panels, while I sought to increase ecological validity by asking employees in their actual context, as recommended by James, Jilke and Van Ryzin (2017).

The remaining two studies (B and D) build on cross-sectional surveys which were analyzed with ordinary least squares (OLS) regression with cluster robust standard errors at the organizational level to account for multiple employees working in the same organization. These studies have higher external validity than the conjoint experiment, because they study the employees' and managers' actual contexts. The disadvantage of these studies is that they do not ensure as high a level of internal validity as the experiments. However, I have of course included relevant control variables to increase the trustworthiness of the results. One of the problems in these studies is the correlation between the variables. The high multicollinearity that especially occurs when introducing the moderations with traits makes it difficult to achieve significant results and increases the likelihood of Type II errors, i.e. not rejecting false null hypotheses. One of the major challenges in studying gender and gender-related traits as well as leadership is the correlation. In practice, many managers use multiple leadership components and they therefore often correlate, making it hard to study the effect of each individually, which is attempted in Studies C and D (studying the effect of leadership-employee fit on manager preference and motivation respectively). The employee's motivation and manager preference could be affected by any of the leadership components, and severe correlation between the leadership components can therefore be a challenge. One of the benefits of the conjoint experiment is that each of the leadership components is disentangled, making it possible to study each of them separately while being sure that the effect is not driven by any of the other leadership components. Similarly, gender and gender-related traits are expected to correlate, and often do. This makes it hard to study whether communal and agentic traits matter in themselves, or only because they are correlated with gender. Similarly, it makes it hard to see whether gender matters when it is disentangled from communal and agentic traits, which are often used in arguments for why gender matters with regard to leadership. Very few

studies have included measures of communal and agentic traits empirically even though they have used them theoretically, and none (that I know of) has disentangled the traits from gender in order to study each individually. This is thus a substantial contribution from the conjoint experiment in Study C.

3.3. Measurement of Central Variables

3.3.1. Visionary and Transactional Leadership

Visionary and transactional leadership are central variables in most of the studies, but they are examined in different ways. Studies C and D both focus on the leadership-employee fit, and the leadership components are therefore relevant independent variables. In Study C the leadership components are manipulated in the conjoint experiment so that the manager is described as either using or not using each of the leadership components. As mentioned, this operationalization has the advantage that it disentangles each component, as they were randomized individually. Studies A and D, which study how employee characteristics moderate the relationship between leadership training and perceived leadership and between leadership and motivation, measure the leadership components with employee answers to questions about their perception of the manager's leadership behavior. Asking real employees about their perception has the advantage of being better related to the respondents' actual work life and how they see their leadership. The questions used to measure the leadership components can be seen in Studies A and D. These measures of employee-perceived leadership are consistent with the LEAP project, as this is in accordance with the new definition of visionary leadership and transactional leadership. The researchers in the LEAP project conducted a thorough examination and discussion of the new conceptualizations (Jensen, Andersen, Bro, et al. 2019) and described the leadership training programs and the experimental setup at LEAP-project.dk.

3.3.2. Gender

The literature distinguishes between sex and gender. Sex is the biological distinction between men and women, based on their reproductive functions (Oxford English Dictionary 2020), while gender is a social distinction that contains the meaning that individuals and societies ascribe to these categories (Eagly and Wood 2011:759). This dissertation is about gender, and thus includes the meaning that others ascribe to men and women, as this is the most important concept in a leadership context. In the following, I will present and discuss how the operationalization of gender relates to these terms.

For the most part, I operationalize gender through a simple question about the respondent's gender. This means that it is operationalized by how the respondent sees him-/herself, and not necessarily their biological sex. In the field experiment, however, they primarily used the respondent's social security number to identify the respondent's gender. This is thus more closely related to the respondent's biological sex. However, their self-perceived gender and their biological sex are expected to correlate very closely, and it is thus not seen as a problem. Only a handful of the respondents answered that they did not know or did not wish to answer about their gender, which indicates that very few are unsure about their gender.[8]

The manager's gender is manipulated in the conjoint experiment in Study C, and thus not operationalized like in the other studies. The manager is described as either "male" or "female." However, it is important to be aware that this does not only indicate the manager's biological sex. It probably activates some of the employee's stereotypical expectations about the manager based on their sex, and thus indicates the manager's gender. However, part of these stereotypical beliefs are neutralized by the other information that the employees receive about the manager, such as their communal and agentic traits and their leadership behavior. Nevertheless, there might be other stereotypical beliefs attached to the clue about sex, which means that it can be understood as gender.

3.3.3. Communal and Agentic Traits

Communal and agentic traits are operationalized with the same eight questions in all the studies, except of course for the manager's traits in the conjoint experiments. Here communal managers are described as "very caring and understanding," while agentic managers are described as "very self-confident and ambitious." The traits are only described with a few words in order to limit the text that the respondents had to process to answer the survey.

3.4. Recap

This dissertation's research question is not easy to answer. However, the use of different research designs (field experiment, conjoint experiment, and cross-sectional) can increase the internal validity of the results. However, there is still reason to be cautious about generalizing the results to different contexts. It is difficult to assess the external validity of the dissertation's conclusions, because it is not completely clear how the importance of gender and

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[8] The employees who did not answer what their gender is were not included in the analyses.

gender-related traits are affected by different contexts, e.g. organizational and national. There are some arguments for the Danish public high schools being a least likely case to find effects of employee gender and traits and fit with their manager, as they might be more accepting and less stereotypical across the genders. Conversely, there are arguments for it to be a more likely case to find effects of fit between leadership and gender compared to more gendered occupations. However, despite differences between primary schools and high schools, the finding that leadership is less important for performance in Danish primary schools compared to American schools suggests that Danish public high schools are a least likely case to find significant effects of leadership-employee fit. Danish public high schools thus to some extent provide a least likely case in regards to finding effects of manager-employee fit and leadership-employee fit. Furthermore, the data used in the dissertation is assessed to be representative of their respective populations. Thus, studying fit with employee gender and traits in different contexts with a primary focus on Danish public high schools makes it possible to draw robust conclusions inside Danish public high schools while also qualifying assessments of the validity of the results in other contexts, e.g. other Danish organizations and other countries.

Chapter 4
Main Results

4.1. Gender Differences in Communal and Agentic Traits

Before examining the expected relationships with manager-employee fit and leadership-employee fit, it is interesting to see whether men and women differ in communal and agentic traits as expected or not, at least not in this context. The Danish high school case can, as mentioned, be seen as a least likely case, both due to Danish culture and socialization and due to selection and self-selection into organizations and jobs.

The results, as presented in Table 4.1, show that there are (some) gender differences, but they also indicate that the differences might be limited by selection and self-selection. Both HHX and STX female teachers are substantially more communal than male teachers on average, with a Cohen's *d* of 0.59 and 0.66 respectively (Table A10 in appendix B). The difference in agentic traits is less pronounced for STX teachers, with a cohen's *d* of 0.19 (Table A10 in appendix B), and insignificant for HHX teachers. The teachers from the general STX high schools differ most. Female STX teachers are 7 percentage points more communal than male STX teachers on average, while the male STX teachers are 2.5 percentage points more agentic on average (see Table 4.1). Female HHX teachers are similarly 6.8 percentage points more communal than their male colleagues on average, while the difference in agentic traits is insignificant. This might be because the Higher Commercial Examination Programme (HHX) is a business-oriented school, which might fit agentic people better than the more general STX schools do. It is thus likely that the similarity in agentic traits is caused by female agentic teachers' (self-)selection into HHX schools.

The results thus show that the expected gender differences between high school teachers in communal and agentic traits are often but not *always* present. When men and women do not differ in agentic traits, it makes the expected effects of fit with gender less likely, as these arguments build on gender differences in traits. Thus, if male HHX teachers are not more agentic than female HHX teachers, there is less reason to believe that the agentic-based arguments for why men should fit with pecuniary leadership and agentic managers hold in this context.

Lastly, the results show that managers at STX high schools don't differ significantly in communal and agentic traits. This is a very interesting finding. It thus seems that there has been a selection and/or self-selection into the job of manager in STX high schools. The managers tend to be more agentic than the teachers, and the female managers tend to be less communal than the female teachers. It is thus less likely that gender congruence between manager and employee will matter in the STX context, as STX managers do not (significantly) vary in communal and agentic traits dependent on gender. Both whether gender matters in HHX and whether gender congruence matters in STX will be examined and discussed in the appropriate sections of the dissertation.

Table 4.1. Gender Differences in Traits

Traits	HHX employees		STX employees		STX managers	
	Agentic	Communal	Agentic	Communal	Agentic	Communal
Female	-0.671	6.789***	-2.466***	7.093***	0.0392	1.692
	(1.245)	(1.156)	(0.738)	(0.627)	(1.877)	(1.749)
Leader age					0.119	-0.126
					(0.113)	(0.105)
Constant	68.39***	71.74***	69.25***	71.36***	73.41***	73.49***
	(0.883)	(0.820)	(0.523)	(0.444)	(1.181)	(1.101)
Observations	426	426	1,294	1,294	152	152
R^2	0.001	0.081	0.009	0.098	0.007	0.016
Adjusted R^2	-0.086	0.001	-0.088	0.009	-0.006	0.003

Note: $+p < 0.10$, $*p < 0.05$, $**p < 0.01$, $***p < 0.001$. Standard errors in parentheses. Employee differences are with fixed effects at high school level. Communal and agentic traits are scaled 0-100, 100 being most communal/agentic.

4.2. Manager-Employee Fit

This section presents the findings of the dissertation regarding how manager-employee fit matters in a leadership context. An important distinction is between the surface-level fit in gender and the deep-level fit in traits. To give a more nuanced understanding of the importance of these types of fit, they are examined in relation to three different leadership outcomes: leadership perception (Study A), motivation (Study B), and manager preferences (Study C).

4.2.1. Does Gender Congruence Matter for Leadership Perceptions?

To answer how manager-employee fit matters in a leadership context, the first article in the dissertation examines how the gender combination between manager and employee matters for the effect of leadership training on employee-perceived leadership. As mentioned, gender congruence is expected to increase the effect of leadership training on employee-perceived leadership. The results indicate that gender congruence between manager and employee, especially for female managers, is associated with stronger leadership training effects on employee-perceived leadership. I will briefly discuss the results to support and nuance this conclusion.

The effect of transactional leadership training on employees' perception of their manager's use of pecuniary rewards is significantly increased for gender-congruent employees. Gender congruence increases the training effect by more than 5 percentage points (Table 3, Study A). This is a substantial increase compared to the overall training effect of 4.28 percentage points. Almost the entire training effect is caused by an increase in the gender-congruent employees' perception of pecuniary rewards. When looking at the effect for female and male managers separately, the moderation is primarily driven by female managers. Female employees thus experience a larger increase in their perception of their manager's use of pecuniary rewards compared to their male colleagues after their manager has received transactional leadership training. This is also the case when the female manager has received combined leadership training, even though gender congruence (combined for female and male managers) does not significantly moderate the training effect. Figure 4.1 presents the results for the gender combinations, while the moderation with gender congruence can be seen in Table 3 in Study A.

Figure 4.1. Transactional (TAT) and Combined (CBT) Training Effects for Different Gender Combinations on Perceived Pecuniary Rewards
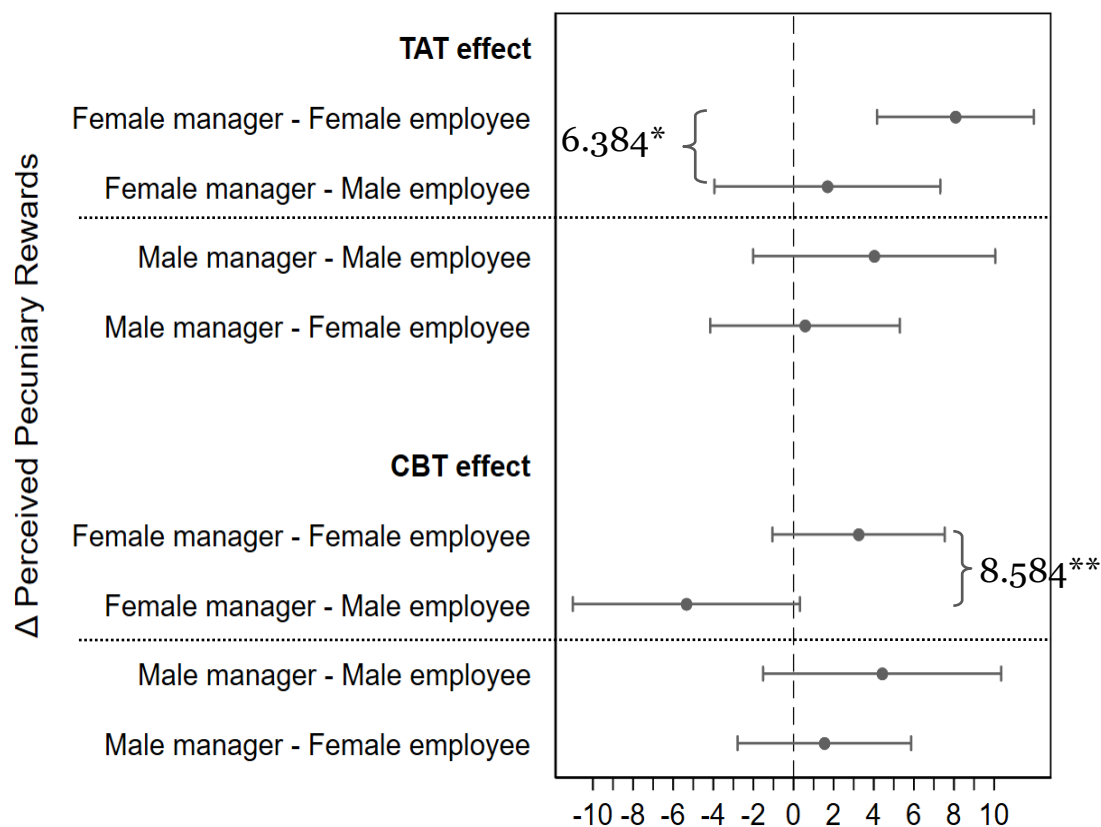
Note: + p < 0.10, * p < 0.05, ** p < 0.01, *** p < 0.001. Copy of Figure 2 in Study A. Interpretation: The values show the significant difference in treatment effect between two groups, i.e., the moderating effect of gender congruence. Perceived pecuniary rewards is scaled from 0-100.

For verbal rewards, gender congruence significantly moderates the training effect of combined training. Employees of the same gender as their manager thus experience a larger increase in their perception of their manager's use of verbal rewards than employees of the opposite gender after the manager has received combined leadership training (Table 2, Study A). Comparing the moderating effect of gender congruence (4.14 percentage points) with the direct effect of combined training (2.46 percentage points) shows that the moderating effect is rather substantial. When looking at the effect of gender congruence for female and male managers separately, the coefficients are similar, but insignificant. The insignificance is probably due to less power in the split sample, as there are only around 130 respondents in the groups including male employees. Looking at transactional leadership training, there are not

any significant differences between any of the gender combinations in the effect of transactional leadership training. This thus does not support the expectation that gender-congruent employees would perceive a larger increase in verbal rewards than gender-incongruent employees following their manager's transactional leadership training.

For transformational leadership (/visionary leadership), gender congruence only has a significant moderating effect for female managers. Female managers who have participated in transformational or combined leadership training increase their female employees' perception of transformational leadership significantly more than their male employees' perception. This difference in training effects between female and male employees under female management is rather substantial as it is similar to the overall training effect on perceived transformational leadership. The training effects on perceived transformational leadership are seen in Figure 4.2.

Figure 4.2 Transformational (TFT) and Combined (CBT) Training Effects for Different Gender Combinations on Perceived Transformational Leadership
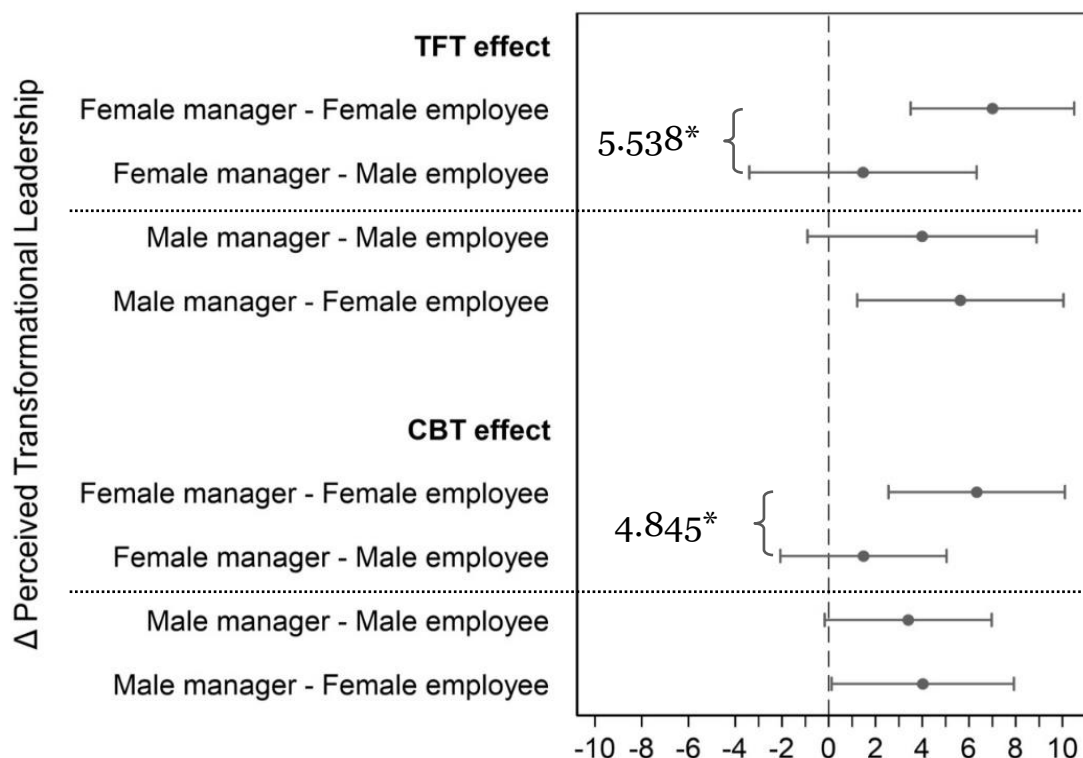

Note: + p < 0.10, * p < 0.05, ** p < 0.01, *** p < 0.001. Copy of Figure 4 in Study A. Interpretation: The values show the significant difference in treatment effect between two groups, i.e., the moderating effect of gender congruence. Perceived transformational leadership is scaled from 0-100.

The results indicate that gender congruence tends to increase the effect of leadership training on employee-perceived leadership, but that the effect is more pronounced for female managers than for male managers. When splitting the sample, the gender congruence moderation is only statistically significant for female and not male managers. The results thus indicate that there is more to it than first expected: It is not just gender congruence that matters—it is the gender combination. However, the results still show that fit between employee and manager gender does matter for leadership perceptions, as expected.

Even though STX managers do not differ in traits, gender congruence does matter for the effect of leadership training. However, we do not know whether the managers from the other types of organizations (daycare centers, primary schools, tax departments, and banks) differ in traits, as this was not measured in the LEAP project.

4.2.2. Does Fit in Gender and Traits Matter for Employee Motivation?

Even though gender congruence moderated the effect of leadership training on employee-perceived leadership, gender congruence and similarity in traits does not correlate positively with motivation for STX employees, which was otherwise expected.

Figure 4.3 shows the results regarding gender congruence. Gender congruence actually has a significant negative association with motivation, which is contrary to the expectation. Gender-congruent employees are thus less motivated than employees who have the opposite gender from their manager. When looking at the gender combinations, only the difference in motivation between employees under male managers is significant. Female employees with male managers are significantly more motivated than their male colleagues. This is not solely because female employees are more motivated than male employees, as Figure 4.3 shows male employees with female managers are just as motivated as their female colleagues.

Figure 4.3 Regression of Motivation on Gender Congruence and Gender Combinations

Note: Builds on Table A8 in appendix B. Interpretation: The dots represent the regression coefficient for motivation on each gender combination. The line represents the 95% confidence interval. Motivation is scaled from 0-100.

One reason why gender congruence does not correlate positively with motivation could be that gender and traits are not correlated as expected. We saw in Section 4.1 that there were no significant differences between male and female managers in communal and agentic traits, which could cause manager gender to be less important. However, if gender congruence does not matter for motivation because gender isn't a good indicator for communal and agentic traits, it is interesting to see whether similarity in traits matters. Table 4.2 shows that there is no significant moderation between employee and manager traits. Employees who are more communal are not more motivated than less communal employees the more communal their manager is. Similarly, employees who are more agentic are not more motivated when their manager is more agentic too.

There is thus no support for the expectation that manager-employee fit in gender and traits increases motivation. It is understandable that fit in gender does not significantly matter for employee motivation when managers do not

seem to differ in traits dependent on their gender, as seen in Section 4.1. Following the theoretical argumentation, however, it is surprising that fit in communal and agentic traits also does not correlate with motivation.

Table 4.2 Moderation Regression of Motivation on Traits

Motivation	Communal moderation	Agentic moderation	Moderations with controls
Communal	2.329* (0.884)		2.366* (0.896)
Communal manager	-0.258 (0.787)		-0.424 (0.735)
Communal # Communal manager	0.646 (0.764)		0.572 (0.834)
Agentic		3.487*** (0.757)	3.450*** (0.756)
Agentic manager		0.547 (0.693)	0.332 (0.711)
Agentic # Agentic manager		-0.508 (0.827)	-0.589 (0.802)
Transformational leadership (TFL)			0.0299 (0.0377)
Verbal rewards (VR)			-0.00753 (0.0363)
Pecuniary rewards (PR)			-0.00688 (0.0374)
Age			0.0855 (0.0666)
Years working under immediate manager			0.163 (0.166)
Manager position (1 = Principal)			0.931 (1.487)
Age (Manager)			-0.124 (0.104)
Constant	76.21*** (0.738)	75.88*** (0.699)	75.57*** (0.818)
Observations	531	531	531
R^2	0.019	0.056	0.086
Adjusted R^2	0.013	0.051	0.063

Note: + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors in parentheses. Motivation is scaled from 0-100. The communal and agentic traits are standardized, while the rest of the continuous variables (control variables) are centralized.

4.2.3. Does Fit in Gender and Traits Affect Manager Preferences?

Based on the fit theory, I expect employees to prefer managers who are similar to themselves with regard to gender and traits. In Study C, this is tested with

a conjoint experiment, where the manager's gender and traits are manipulated. The study shows that the more communal the employee is, the more they prefer a manager who is communal over one who is not. However, the study does not support the expectations regarding gender and agentic traits.

Gender is insignificant all around in Study C. Danish HHX teachers do not have a significant preference for female or male managers, not even when taking their own gender or traits into account. However, Dutch teachers have a slight preference for male managers over female managers, which will be discussed further in the concluding discussion.

Gender thus doesn't seem to matter, but what about traits? Do employees prefer managers who are similar to themselves with regard to communal and agentic traits? The answer is both yes and no. The more communal the employee is, the more they prefer a manager who is communal over one who is not, on average. The preference for communal managers compared to managers who are not communal is 18.2 percentage points on average. Employees who are one standard deviation (SD) more communal than the average have a 4.88 percentage point higher preference for a communal manager over one who is not communal. That means that the preference for a communal manager compared to a manager who is not communal is 13.32 for employees who are one SD less communal than the average, while it is 23.08 for employees who are one SD more communal than the average. This is thus a substantial difference.

The same effect is not found with regard to agentic traits. The employee's agentic traits do not significantly moderate their preference for agentic managers. Similarity in communal traits seems to matter, but there is no support for the importance of similarity in agentic traits (Figure 4.4).

Figure 4.4. Moderation Regression of Manager Preference on Gender and Traits
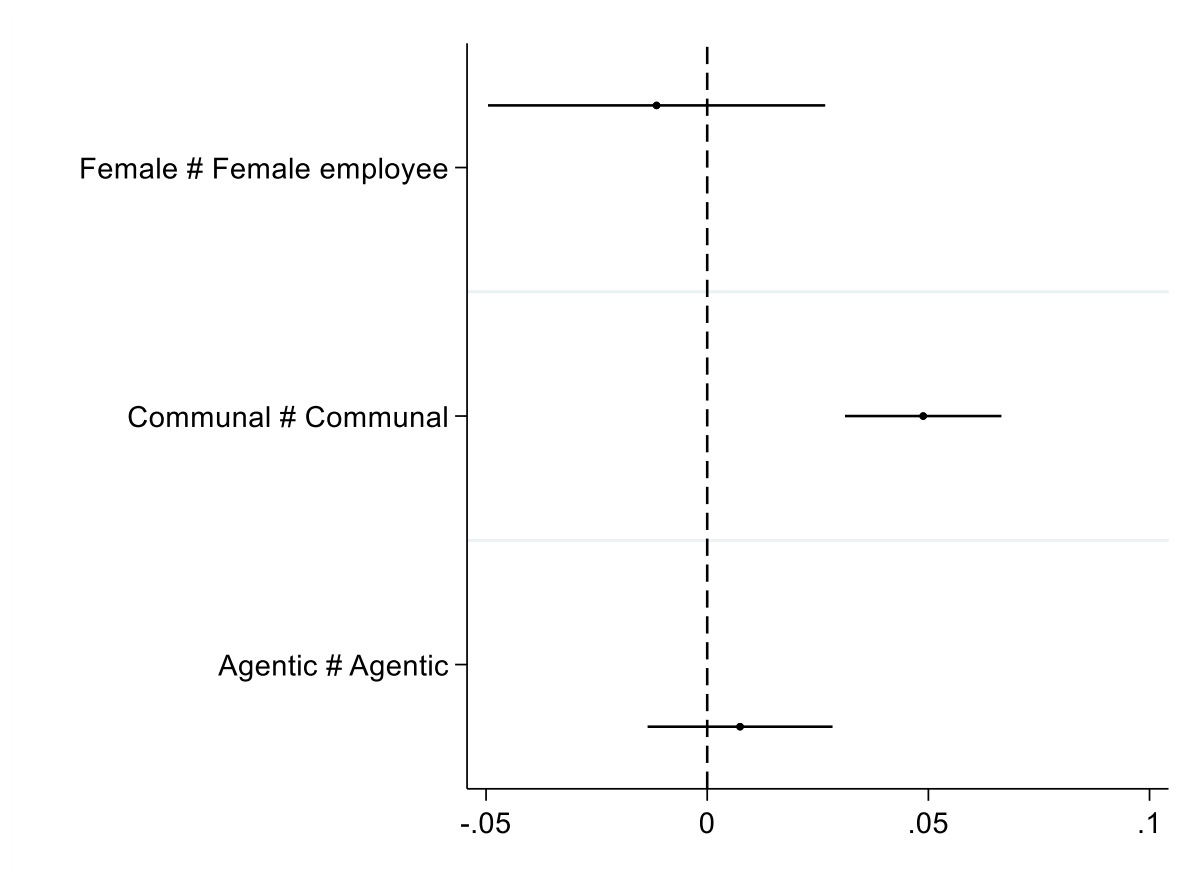
Note: Based on Tables A15 (Model 3), A16 (Model 2), and A17 (Model 6) in the supplement to Study C. Interpretation: The dots represent the moderated average marginal component effect (AMCE) of each manager characteristic. The dependent variable, preference, is scaled from 0-1. Employee traits are standardized. The line represents the 95% confidence interval.

Study C thus indicates that gender doesn't matter when it is disentangled from communal and agentic traits. This supports the argument that surface-level characteristics lose their importance when knowledge about deep-level characteristics is present. Study C provides limited support for the importance of fit between manager and employee gender and traits; however, it does provide some support for the argument that fit in traits can matter for manager preference.

4.2.4. So, does Manager-Employee Fit Matter?

The three studies provide mixed results regarding whether fit between manager and employee gender and traits matters in a leadership context. The female gender match seems to matter for the effect of leadership training on employee-perceived leadership, but it does not seem to matter for motivation or preferences. Similarity in communal traits does, however, seem to matter

for manager preference, but not for employee motivation, while similarity in agentic traits has not been found to matter for preferences or motivation. There is thus mixed support for the importance of manager-employee fit in gender and traits for perceived leadership, motivation, and manager preference, which I discuss in the following.

First, the results indicate that manager-employee fit is not equally important for all employees. The female and communal match seems more important than the male and agentic match. The results indicated that the female gender match is more important than the male gender match for leadership training effects. Likewise, it was only similarity in communal traits, and not in agentic traits, that mattered for manager preference. I will discuss why this might be in the concluding discussion.

Second, it is relevant to discuss the national context of the results. In the Danish sample, the manager's gender did not matter for the employee's manager preference, not even when considering the employee's own gender. However, the Dutch data show that Dutch high school teachers prefer male managers on average, and that this preference is not dependent on employee gender. This might be due to differences in gender-stereotypical beliefs in Denmark and the Netherlands, as women in the Netherlands are more likely to work part-time and do unpaid care work, as discussed in Chapter 3. The unimportance of the manager's gender in the Danish sample might thus not be generalizable to other contexts, but this is also not the focus of the dissertation.

The dissertation focuses on fit between manager and employee, and fit in gender did not matter in Denmark or the Netherlands. Even though the results were similar in Denmark and the Netherlands, they might not be generalizable to less gender-equal countries. Both the Netherlands and Denmark are quite gender-equal countries, and Denmark especially is considered a least likely case to find effects of gender congruence, as discussed in Chapter 3. The unimportance of gender congruence for manager preference is therefore not very generalizable outside the studied contexts. However, this also means that the findings that gender congruence matters for leadership perception and similarity in communal traits could be quite generalizable, but as mentioned even this generalizability is somewhat uncertain, as there are arguments both for and against Denmark as a least likely case.

Third, the differences between fit in gender and fit in traits are worth spending some time on. As just mentioned, gender congruence did not affect manager preference, while similarity in communal traits did. One reason might be that deep-level information about the manager's traits was apparent to the employee. The employee therefore did not need to use gender as an indicator of the manager's traits, because this knowledge was provided. Study

D, which disentangles gender and traits, thus suggests that communal traits are a relevant part of what makes gender matter in some contexts. Together with the results concerning leadership-employee fit, the differences between gender and traits are discussed further in the concluding discussion.

Finally, it is relevant to discuss the different outcomes. The results show that fit between manager and employee can matter for leadership perception and manager preference, but it does not seem to matter for employee motivation. Many different conditions affect motivation, which makes the importance of each smaller. It might therefore be that similarity matters for leadership perception and manager preference, but that the effect is not strong enough to change the employee's motivation to work. This would also mean that the substantial significance of the results is of less practical importance, if the goal is to improve motivation and performance. However, the study of employee motivation also has the disadvantage of a small sample size compared to its high degree of multicollinearity, which makes it difficult to achieve significant results. This might thus be an alternative explanation for why manager-employee fit does not significantly correlate with motivation even though it affects perception and motivation.

Overall, manager-employee fit in gender and traits does seem to matter. Female gender congruence and similarity in communal traits seem especially to matter for leadership perception and manager preference, respectively. However, there was no support for the importance of fit in gender and traits for employee motivation.

4.3. Leadership-Employee Fit

While the previous section concerned how fit between an employee and their manager matters, this section moves away from the manager's characteristics and onto their (leadership) behavior. The question is whether employees prefer and/or are motivated by different leadership behaviors dependent on their gender and traits. Visionary and transactional leadership are meant to motivate the employee to work towards organizational goals, and studies find that they do. Employees are thus found to respond to this kind of leadership behavior, but it is possible that the effect is not homogenous and instead depends on who the employee is. It is therefore relevant to study whether employees prefer and are motivated by different kinds of leadership.

4.3.1. Do Employee Gender and Traits Affect Manager Preferences?

In the theory chapter it was argued that female and communal employees would prefer a manager who uses visionary leadership and verbal rewards

more than male and less communal employees. Male and agentic employees were, on the other hand, expected to prefer pecuniary rewards more than female and less agentic employees. The moderation coefficients related to the six expectations are shown in Figure 4.5 (and Study C). The findings support the relevance of an employee's traits, but not their gender.

The more agentic an employee is, the more likely they are to prefer a manager who uses pecuniary rewards over one who does not. The preference for pecuniary rewards is 12.9 percentage points on average. Employees who are one standard deviation more agentic than the average have a 4.11 percentage point higher preference for managers who use pecuniary rewards over those who do not. This is somewhat similar to the effects concerning communal managers and employees as explained above, and there is thus also a substantial effect of being agentic for the preference for pecuniary rewards.

There is also a small, borderline statistically significant moderation effect of an employee's communal traits on verbal rewards. There is thus a tendency for an employee's communal traits to matter for their preferences for managers who use verbal rewards over those who do not. However, there is no statistically significant moderation effect of communal traits on the preference for visionary leadership, as otherwise expected. Similarly, there are no significant gender moderations on either leadership component.

The results indicate that an employee's gender does not matter for the relationship between leadership behavior and manager preferences, but that their traits sometimes do. At least part of the argumentation for how different leadership behaviors fit communal and agentic traits seems to be right. However, either the effect of this fit or the correlation between traits and gender is not strong enough for gender to matter for manager preferences.

Figure 4.5. Gender and Traits Moderation on the Effect of Leadership on Manager Preference
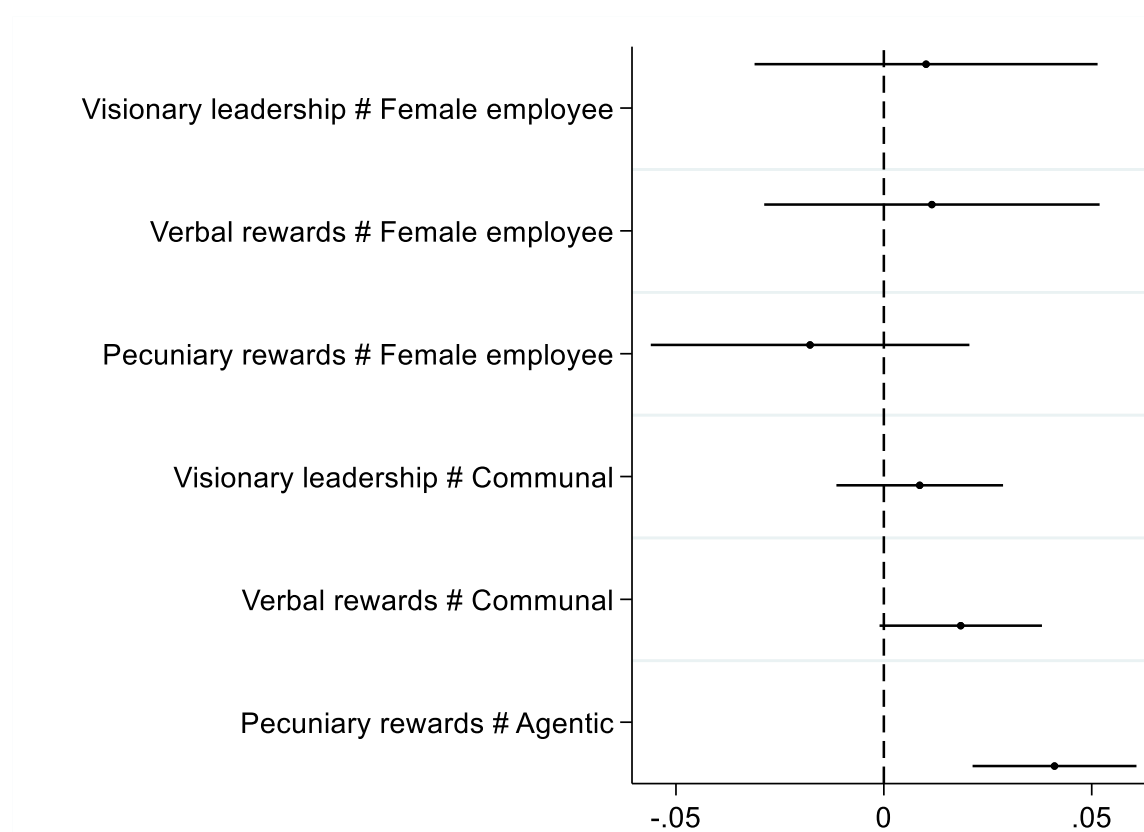
Note: Based on Tables A15 (Models 1 and 2), A16 (Model 1), and A17 (Models 1, 2, and 3) in the supplement to Study C. Interpretation: The dots represent the moderated average marginal component effect (AMCE) of each manager characteristic. The dependent variable, preference, is scaled from 0-1. The employee traits are standardized. The line represents the 95% confidence interval.

4.3.2. Do Employee Gender and Traits Matter for the Leadership-Motivation Relationship?

The previous section showed that employee traits to some degree seem to influence the relationship between leadership behavior and manager preference. However, this does not necessarily mean that they are more motivated by these leadership components. In the following I will therefore present my results concerning whether employee gender and traits moderate the leadership-motivation relationship. The relationships between motivation and visionary leadership and verbal rewards are expected to be more positive for female and communal employees compared to male and less communal employees, while the relationship between motivation and pecuniary rewards is expected to be more positive for male and agentic employees, compared to female and less agentic employees. The results from Study D provide limited support for these expectations.

Figure 4.6. Regression of Motivation on Leadership Components for Different Genders
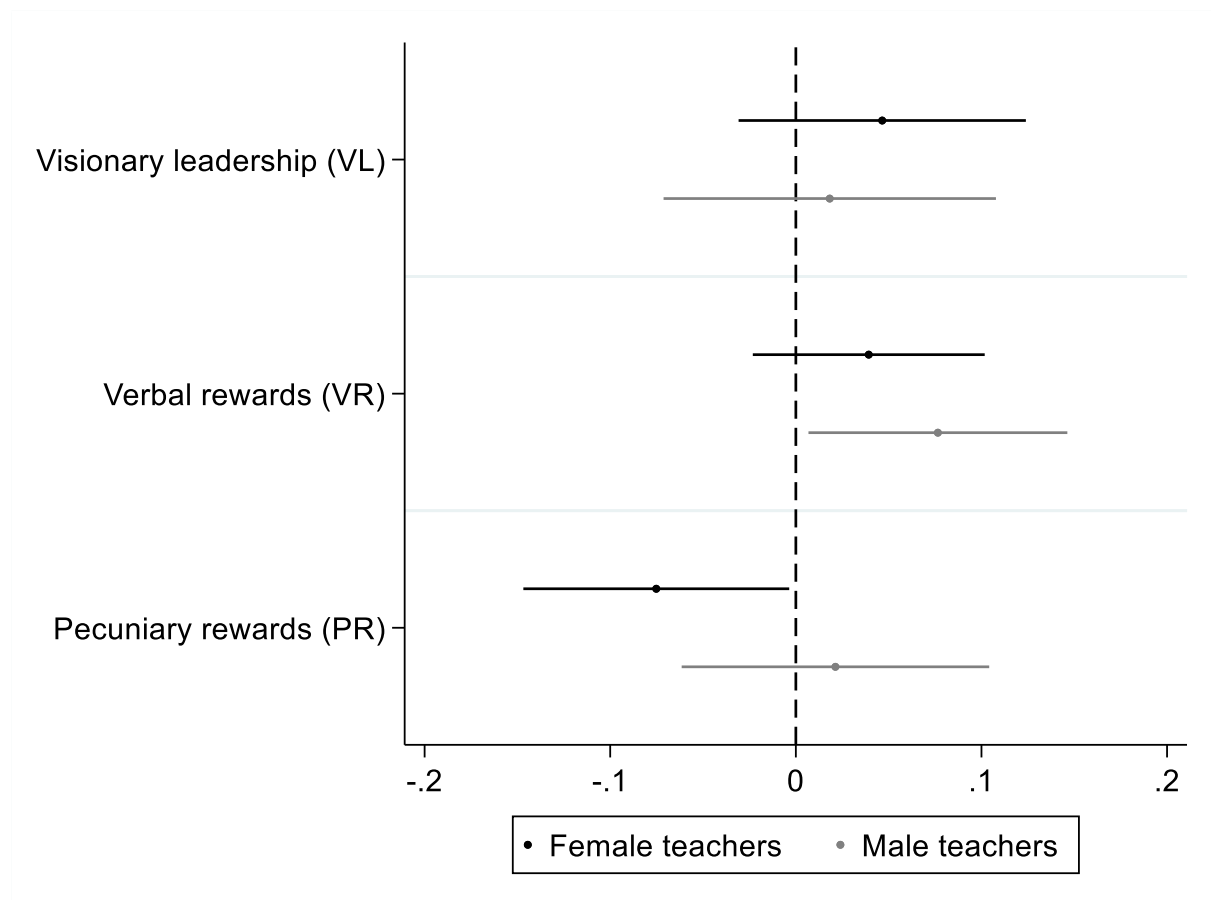
Note: Based on Table 2 in Study D. Interpretation: The dots represent the regression coefficient for motivation on each of the leadership components. Motivation is scaled 0-100; leadership components are scaled 0-100 and mean-centered. The line represents the 95% confidence interval.

The results show that female teachers, unlike male teachers, are less motivated the more pecuniary rewards they perceive. Yet the correlation between pecuniary rewards and motivation is only 0.07 for female employees, and the moderation coefficient is only 0.1, which it is quite small (see Model 3.2, Study D). On the other hand, the small moderation coefficient might be related to the fact that none of the overall correlations with the leadership components are substantially very large, and most are insignificant, which makes it harder to find significant and substantial moderations. Pecuniary rewards do not significantly correlate with motivation when looking at female and male employees collectively; it is therefore a substantial difference that pecuniary rewards are correlated with 1/10 less motivation for female employees compared to male employees (Model 3.2, Study D).

None of the other gender differences are significant, lending only partial support for gender differences in the leadership–motivation relationship. Nei-

ther communal nor agentic traits significantly moderate any of the tested leadership-motivation relationships. The lack of significant moderations might, however, be caused by a very high degree of multicollinearity in the moderations including traits. To limit this problem, and based on preliminary interviews, I asked the teachers directly whether they found pecuniary rewards motivating and whether pecuniary rewards could create a bad culture in the workplace. With these questions, it is possible to study the direct effect of communal and agentic traits instead of the moderating effect, and hence decrease the multicollinearity challenge. The analysis shows that teachers' agentic traits matter for their attitude towards pecuniary rewards. The more agentic the employee is, the less likely they are to think that the rewards will create a bad culture and the more likely they are to find them motivating. There is thus some indication that agentic traits do matter for the relationship between pecuniary rewards and motivation. In Table 4.3 the traits are not standardized and the correlation seems small; however, when the traits are standardized (Table A9 in appendix B), the effects seem quite substantial. Employees who are one SD more agentic are 5.267 percentage points more likely to think pecuniary rewards are motivating and 3.919 percentage points less likely to think they will create a bad culture.

Table 4.3. Fixed Effects Regression on Attitudes Towards Pecuniary Rewards

Attitude towards PR	PR motivate		PR create bad culture	
Female employee	-0.473	-0.107	2.955[+]	1.596
	(1.932)	(2.021)	(1.519)	(1.592)
Communal		0.0929		0.0841
		(0.0888)		(0.0700)
Agentic		0.416[***]		-0.309[***]
		(0.0755)		(0.0595)
Constant	41.15[***]	40.94[***]	72.40[***]	73.12[***]
	(1.369)	(1.396)	(1.076)	(1.100)
Observations	1,294	1,294	1,294	1,294
R^2	0.000	0.027	0.003	0.026
Adjusted R^2	-0.098	-0.071	-0.095	-0.072

Note: Copy of Table 4 in Study D. Fixed effects at high school level. Communal and agentic traits are scaled from 0-100 and mean-centered. PR = pecuniary rewards. The dependent variables are scaled from 0-100. Standard errors in parentheses. +p < 0.10, *p < 0.05, **p < 0.01, ***p < 0.001.

Overall, the results support that fit between pecuniary rewards and agentic and male employees does matter for motivation. However, they do not support

that fit between visionary leadership and verbal rewards and communal and female employees matter for motivation.

4.3.3. So, does Leadership-Employee Fit Matter?

The results indicate that fit between employee agentic traits and pecuniary rewards matter for manager preference and motivation. Agentic employees are more likely to prefer managers who use pecuniary rewards, more likely to say they find them motivating, and less likely to think that they will create a bad culture in the workplace, compared to employees who are less agentic. Furthermore, female employees, and not male employees, tend to be less motivated the more they perceive their manager using pecuniary rewards. The importance of fit between pecuniary rewards and employee gender, however, is not supported in relation to manager preference, where only the employee's agentic traits moderate the preference for pecuniary rewards. The results thus support the expectation that agentic traits fit pecuniary rewards in that they matter for employee motivation and manager preference, while the importance of employee gender is only found for the relationship between pecuniary rewards and motivation. This thus means that the results do not support that employees' gender matters for their preference for a manager who uses pecuniary rewards, or any other kind of leadership. There are several points to discuss concerning these results. Aside from the distinction between gender and traits, as was also discussed in relation to manager-employee fit, the points are primarily analytical and related to the generalizability of the results.

First, I will discuss the lack of support for importance of fit between verbal rewards and visionary leadership and employee gender and traits. The results do not generally support that fit between verbal rewards or visionary leadership and employee gender and traits matters for motivation or manager preference. There are some tendencies, but there is generally not statistical support for the expectations. This lack of importance is hard to generalize, partly because an insignificant result does not prove that there is no effect, as well as because Danish public high schools serve as a least likely case, as mentioned in Chapter 3. Leadership in Danish schools has been shown to matter less than in American schools, which is in line with the small direct correlations between leadership behaviors and motivation in Study D. There are therefore less likely to be significant moderations, which decreases the generalizability of the lack of importance of fit between employee gender and traits and visionary leadership and verbal rewards.

Second, I will discuss the generalizability of the finding that fit between pecuniary rewards and agentic traits matters for motivation and manager preferences. The finding seems rather robust, and I believe it to be generalizable outside the Danish public high school context, but it is necessary to study

further. It speaks to its generalizability that Danish public schools can be seen as a least likely case, as just mentioned. There are therefore less likely to be significant moderations, which increases the generalizability of the significance of agentic traits. However, agentic traits did not significantly moderate the effect of pecuniary rewards on manager preference in the Dutch sample. The coefficient was positive as expected, but it had a very large confidence interval, and was thus not statistically significant. This thus speaks to the need for further studies of the importance of fit between agentic traits and pecuniary rewards in different contexts.

Third, there are two methodological issues regarding the studies of motivation that are worth mentioning in relation to agentic traits not moderating the correlation between pecuniary rewards and motivation even though most of the results support the expectation that fit between pecuniary rewards and agentic traits matters for motivation and manager preference. The first methodological issue is the risk of common source bias in Study D. If the correlation between leadership and motivation is inflated, it can decrease the likelihood of finding moderating effects (Jakobsen and Jensen 2015). Secondly, Study D also has severe multicollinearity problems in the moderations including traits, which also decreases the possibility of finding significant moderations. These issues might thus explain why agentic traits are not found to moderate the relationship between pecuniary rewards and motivation, even though they are found to correlate with whether the employees themselves believe pecuniary rewards affect their motivation, workplace culture, and their preference for a manager who uses pecuniary rewards.

Fourth, I will discuss the generalizability of the finding that gender moderates the correlation between pecuniary rewards and motivation. The above-mentioned argument for Danish schools as a least likely case increases the generalizability of this result. However, Danish high schools are also a most likely case to find gender differences, compared to Danish public organizations where the men and women are more similar. If men and women differ more in agentic and communal traits, their gender is also expected to matter more for their fit with leadership behavior, and hence more likely to moderate the leadership-motivation relationship. It is thus unclear the extent to which this finding is generalizable to other Danish public organizations as well as to other countries.

Lastly, I will mention the difference in findings about gender and traits in relation to pecuniary rewards and manager preference. Employee gender does not significantly moderate the effect of the manager's use of pecuniary rewards for manager preference, even though agentic traits matter for this relationship. This might indicate that employee traits are more important than gender. This claim is further explored in the concluding discussion.

4.4. Overview of results

To provide an overview of all the different results, they are displayed in Table 4.4. The table shows how each of the four studies helps answer whether manager-employee fit, i.e. fit in gender and fit in traits, and leadership-employee fit, i.e. fit between leadership and gender and leadership and traits, matters for leadership perceptions, motivation, and manager preference. It is important to consider the number of tests that were conducted when looking at the results from this dissertation. Multiple tests have been conducted, and some will therefore be significant by chance (Stock and Watson 2015:269–70). It is therefore relevant to look at the tendencies that are present in multiple studies, as I have done in the previous sections.

Table 4.4 Overview of Results

Full title	Results	Outcome	Gender fit	Traits fit	Leadership-traits fit	Leadership-gender fit
The Importance of Similarity: How Gender Congruence Matters for the Impact of Leadership Training	Gender congruence is associated with stronger leadership training effects on employee-perceived leadership. Most pronounced for female gender congruence.	Leadership Perception	+			
Does Fit in Gender and Traits Matter for Employee Motivation?	Neither fit in gender nor traits has a significant correlation with motivation.	Motivation	o	o		
Below the Surface: Experimental Evidence for how Traits but not Gender Matter for Manager Preferences	Fit in communal traits matters for manager preference. Employee's agentic traits matter for preference for managers who use pecuniary rewards. Gender does not matter.	Manager Preference	o	+	+	o
Leading Employees of Different Gender: The Importance of Gender for the Leadership-Motivation Relationship	Female employees, unlike male, are less motivated the more pecuniary rewards they perceive. Traits do not moderate the leadership-motivation relationship, but more agentic employees are more likely to think pecuniary rewards motivate and less likely to think they create a bad culture.	Motivation			o/+	+

Chapter 5
Concluding Discussion

This dissertation has presented a number of findings that help answer the research question: How does fit between an employee's gender and traits and their manager's gender, traits, and leadership behavior affect the employee's leadership perception, motivation, and manager preference? The results indicate that fit with employee gender and traits increases perceived leadership, motivation, and manager preference, but it is also necessary to nuance this conclusion. To answer the question, I will briefly summarize the findings of the dissertation and discuss how they move our knowledge about gender, traits, and leadership forward and which questions they raise for future research.

First, employees in STX and partly in HHX high schools differ in agentic and communal traits on average. Female teachers tend to be more communal than male teachers, while male STX teachers tend to be more agentic than female STX teachers. However, female and male STX managers do not significantly differ in communal and agentic traits.

Second, there are mixed results regarding the importance of fit between employee and manager gender and traits. Gender congruence between manager and employee, especially the female gender match, tends to increase employee-perceived leadership, while it does not increase motivation or manager preference. Similarity in traits also does not significantly correlate with motivation, but similarity in communal traits does tend to increase manager preference.

Third, there is generally support for the importance of fit between agentic traits and pecuniary rewards, while there is not much support for the importance of fit with visionary leadership or verbal rewards. To summarize, I find that more agentic employees prefer pecuniary rewards to a larger extent than less agentic employees, while there is only an insignificant tendency for more communal employees to prefer verbal rewards compared to less communal employees. Female employees are less motivated the more pecuniary rewards they perceive while this is not the case for male employees. Agentic employees are more likely to think pecuniary rewards motivate and are less likely to think they will create a bad culture compared to less agentic employees.

Figure 5.1 gives an overview of the results for each of the examined types of fit and the three outcomes. There is at least some support for each of the

relationships except for the one between manager-employee fit and motivation. The motivation studies also have some disadvantages, however, as discussed in Chapter 4.

Figure 5.1. Overview of Results

Manager—Employee Fit → Perceived Leadership (+)

Manager—Employee Fit → Motivation (0)

Leadership—Employee Fit → Motivation (+)

Leadership—Employee Fit → Manager Preference (+)
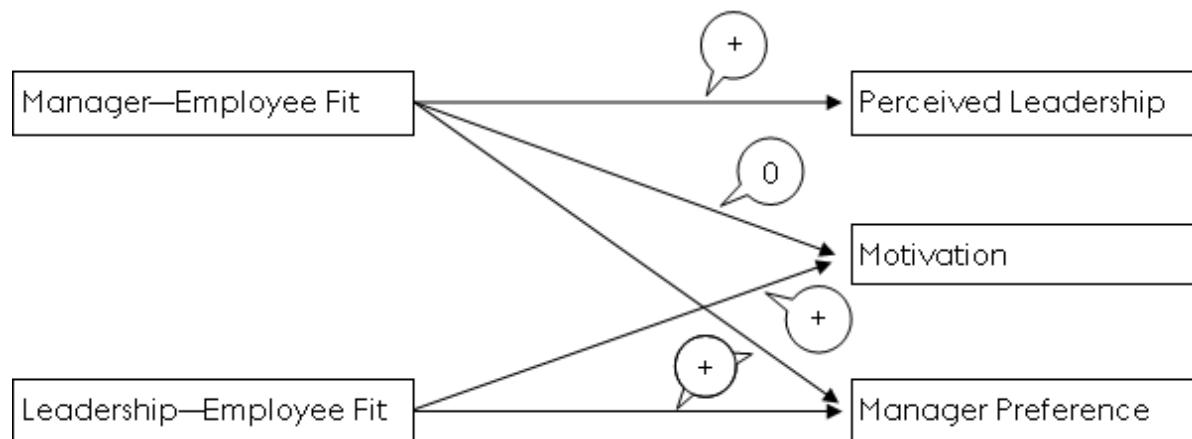
Note: + represents some support for a positive relationship, while 0 represents no support for the expectation.

Transformational/visionary and transactional leadership are well-studied leadership behaviors, so one might ask how I contribute to this extensive literature. The existing literature is generally very leader-centric, for example by studying how the manager's gender matters for leadership behavior, while I implement an employee-centered focus. A great theoretical contribution of the dissertation is thus the arguments for how visionary and transactional leadership, divided into verbal and pecuniary rewards, fit employees' gender and traits and why this could affect manger preference and motivation. Furthermore, most of the existing literature shows that visionary and transactional leadership have positive effects on outcomes such as job satisfaction, motivation, and performance (Avolio et al. 2009; Jacobsen and Andersen 2015; Wright et al. 2012). I push our knowledge forward on this point by showing that this effect is not always as homogenous as is often assumed.

Most of my findings indicate that pecuniary rewards are more effective when the employee is male and/or agentic, compared to female and/or less agentic. This is consistent with Konrad and colleagues' (2000) meta-analysis showing men value earnings more than women. However, Pedersen (2018) did not find any gender differences in a survey experiment where respondents could receive a monetary reward for participating. However, the survey situation differs substantially from a work situation, as there is no workplace culture to consider, no comparison or competition, and no joint effort with colleagues. Lee and Park (2020) also did not find any significant gender difference in the importance of transactional leadership for Korean civil servants.

However, there were around 50 women in the studied groups, which makes it hard to find significant results. Second, the study is from Korea, and it is hard to know how the results travel between such different societies. Even if there are larger gender differences in Korea, the differences in the organization might not be very large. The women who are in the workforce might be much more similar to men than the women who stay at home, when the portion of women working is smaller. In Denmark, most women work, which thus includes both communal and agentic women.

I did not find much support for heterogeneous effects of visionary leadership and verbal rewards. Previous studies on gender moderations of the relationships with transformational leadership provide mixed results. Lee and Park (2020), for example, find that female employees are more likely to rate transformational leadership as important than are male employees. Conversely, Kim and Shin (2017) find the relationship between transformational leadership and empowerment to be stronger for male employees. As Denmark can be seen as a least likely case and I find some tendencies but not any significant effects, it is still unclear to what extent female and communal employees fit visionary leadership and verbal rewards and whether it matters in a leadership context. This is thus worth studying further. In doing so, it might be relevant to distinguish between the vision's content, as the goals of an organization might affect which gender and traits the vision in visionary leadership fits. Previous studies find that value congruence matters for the relationship between public service motivation and visionary and transactional leadership (Jensen, Andersen, and Jacobsen 2019), and I find, in Study C, that communal employees prefer a manager with a communal goal.

I study three different outcomes: leadership perception, manager preference, and motivation. Employees' perceptions of leadership and their manager preference can affect motivation as well as other relevant outcomes such as job satisfaction. The finding that the gender combination between manager and employee matters for leadership perception and that the employee's traits matter for manager preferences are therefore important contributions to the leadership literature. However, motivation is one of the important roads to increasing performance in public organizations, so from an efficiency point of view, motivation is the most important outcome in the dissertation. Motivation is important for researchers and practitioners alike but it is also extremely complicated to study, as it is not directly observable. It is therefore hard to measure motivation and hence to make reliable studies thereof. Motivation is difficult to explain, as a number of factors affect it, of which leadership is just one. When gender and traits affect the leadership-motivation relationship, this thus only explains a small part of employee motivation. However, motivation is so essential that even a small increase is important. The finding that

employees' characteristics moderate the leadership-motivation relationship is therefore important for the leadership and motivation literatures.

The dissertation has also advanced the limits of our knowledge about *gender* in a leadership context. Much of the existing literature on gender does not consider the importance of organizational selection and self-selection. However, from a practical point of view, it is much more useful to know whether gender matters in organizations than to know whether the average female employee differs from the average male employee, who do not work in the same organization or under the same manager. This dissertation thus increases our knowledge about gender by studying it inside organizations, after selection and self-selection mechanisms have affected one's job and workplace.

Part of the gender literature that I speak to is the literature on gender congruence. As mentioned in Chapter 2, this literature provides mixed results about the effect of gender congruence in a leadership context. My results suggest that the importance of the gender combination is more nuanced than whether the manager and employee have the same gender. It suggests that especially the female gender match is important, and likewise that similarity in communal traits, and not agentic traits, matters for manager preference. This is consistent with Grissom and colleagues' (2012) finding that female employees under female management had a lower turnover and higher job satisfaction than male employees under female management. This suggests there is something about female and communal employees that make similarity more important. As argued in Study A, the communal tendency to be more relational might increase the positive effects of similarity. Gender congruence is argued to matter because it increases cooperation, acceptance, and mutual understanding through shared social bonds, social networks, and interpersonal attraction. As communal people are more relational, this might increase the social bonds and networks and hence the effects of similarity. Furthermore, as communal employees are more relational and interpersonally sensitive, it might be more important for communal employees to feel related to and have a social bond with their manager. Communal traits might thus cause the effect of similarity and the employee benefit thereof to be greater.

I also speak to the literature on gender differences. As mentioned in the introduction, the distinction between men and women is normally made instantly when one meets another human being. This dissertation contributes to the literature on gender differences by examining what it is about gender that might be important. The more knowledge we gain about what matters in relation to gender, the less unexplained significance is left in the two categories. The results from the dissertation indicate that communal and agentic traits are important. Study C, which disentangled manager gender from traits, showed that when the employee has knowledge about both gender and traits,

similarity in communal traits matters for manager preference, while gender congruence does not. Likewise, the employee's agentic traits matter for their preference for managers who use pecuniary rewards, while their gender does not. It thus seems that it is important to consider an employee's traits and not use gender as a cue. We have thus come one step closer to disentangling what matters with regard to gender in a leadership context.

However, the work is not yet done. As mentioned, most of the existing literature on gender and leadership focuses on the manager's gender. This literature generally does not test the communal and agentic traits which they argue cause differences in leadership behavior (Eagly and Johannesen-Schmidt 2001). Even though my studies primarily focus on the employee's gender, they indicate that this theoretical argument should be examined further. First, I find that STX managers do not differ in agentic and communal traits as otherwise expected. If this holds true in other organizational and national contexts as well, it indicates that a manager's communal and agentic traits do not cause gender differences in leadership behavior. Second, the results did not support that agentic and communal traits mediated the significance of gender for the leadership-motivation relationship. If this translates to managers, it might not be differences in communal and agentic traits that cause gender differences in leadership behavior. It is therefore relevant to examine the theoretical argument for gender differences in leadership behavior.

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Appendices

Appendix A: Study B

The data collection and descriptive statistics concerning Study B, about fit in gender and traits and employee motivation, are presented in the following, as they are not presented in any of the articles in the dissertation.

The data was collected in 2018 in two surveys, one for STX employees and one for STX managers. The employee survey was also used in Study D, about leadership-employee fit and motivation. The operationalization of variables are therefore described in Study D. Besides the variables from Study D, the manager's age is included in the regressions for Study B. The manager's age is operationalized as 2018 minus the year of birth.

Out of the 1,294 respondents in Study D, it was possible to connect 531 of them with their managers. The manager survey was distributed to principals and others in the leadership team at the participating high schools. A total of 538 managers received the survey, of which 281 started it and 211 finished it. 152 of the managers both answered the relevant questions and were successfully connected with the 531 employees. The analyses therefore consist of 531 responses.

Table A1 presents differences between the 531 employees who were successfully connected to their managers and used in Study B and the 763 employees who were used in Study D, but who could not be connected to their managers. It was not possible to connect employees with their managers if the manager did not answer the questionnaire, or if the employee did not answer the question about who their manager was, or if they did not answer it sufficiently. Danish high schools (normally) have only one principal, which makes it easy to connect employees to their immediate manager, if they answer that it is their principal. It is therefore not surprising that a larger share of the employees included in Study B have their principal as their immediate manager. Table A1 also shows that there are fewer female employees in Study B. One reason for this could be that female employees were more reluctant to name their immediate manager, out of personal consideration for the manager. As discussed in Study A, there are some reasons to believe the effect of gender congruence could be larger for the female gender match compared to the male. This would make it a less likely case to find effects of gender congruence on motivation.

Descriptive Statistics for Study B

Table A1. Descriptive Statistics for Employees

	Study B	Not connected to manager	Difference
Motivation	76.16	76.68	0.52
Gender (1 = female)	0.44	0.58	-0.13***
Agentic	68.96	67.27	1.69*
Communal	74.71	75.33	-0.62
Transformational leadership (TFL)	59.39	55.12	4.28***
Verbal rewards (VR)	57.59	54.45	3.13*
Pecuniary rewards (PR)	38.00	35.52	2.48*
Age	47.19	46.17	1.02+
Years under manager	5.08	5.16	-0.07
Manager position (1 = principal)	0.43	0.23	0.21***
n	531	763	

Note: + p < 0.10, * p < 0.05, ** p < 0.01, *** p < 0.001.

Table A2. Descriptive Statistics for Employees

	n	Mean	S.D.	Min	Max
Motivation	531	76.16	15.44	20	100
Gender (1 = female)	531	0.44	0.50	0	1
Agentic	531	68.96	12.84	20.83	97.92
Communal	531	74.71	10.55	37.5	100
Transformational leadership (TFL)	531	59.39	21.84	0	100
Verbal rewards (VR)	531	57.59	24.16	0	100
Pecuniary rewards (PR)	531	38.00	20.41	0	100
Age	531	47.19	10.96	25	73
Years under manager	531	5.08	4.93	0	35
Manager position (1 = principal)	531	0.43	0.50	0	1

Table A3. Descriptive Statistics for Female Employees

	n	Mean	S.D.	Min	Max
Motivation	236	77.73	15.36	20	100
Agentic	236	66.98	13.12	20.832	97.92
Communal	236	77.65	9.48	43.75	100
Transformational leadership (TFL)	236	60.36	22.48	0	100
Verbal rewards (VR)	236	57.58	24.47	0	100
Pecuniary rewards (PR)	236	38.98	21.12	0	100
Age	236	46.03	10.16	26	70
Years under manager	236	5.37	5.24	0	30
Manager position (1 = principal)	236	0.42	0.50	0	1

Table A4. Descriptive Statistics for Male Employees

	n	Mean	S.D.	Min	Max
Motivation	295	74.90	15.41	20	100
Agentic	295	70.54	12.41	33.33	97.92
Communal	295	72.36	10.80	37.5	100
Transformational leadership (TFL)	295	58.62	21.32	0	100
Verbal rewards (VR)	295	57.59	23.96	0	100
Pecuniary rewards (PR)	295	37.21	19.82	0	100
Age	295	48.11	11.49	25	73
Years under manager	295	4.85	4.67	0	35
Manager position (1 = principal)	295	0.44	0.50	0	1

Table A5 Descriptive Statistics for Managers

	n	Mean	S.D.	Min	Max
Gender (1 = female)	152	0.39	0.49	0	1
Agentic	152	73.49	11.28	47.92	100
Communal	152	74.10	10.55	43.75	97.92
Age	152	50.87	8.15	33	70
Tenure	152	22.85	8.31	7	46
Leadership education					
None	152	0.32	0.47	0	1
Other	152	0.20	0.40	0	1
Diploma	152	0.03	0.18	0	1
Master	152	0.45	0.50	0	1
Manager position (1 = principal)	152	0.31	0.46	0	1

Table A6. Descriptive Statistics for Female Managers

	n	Mean	S.D.	Min	Max
Agentic	60	73.49	10.99	47.92	91.67
Communal	60	75.14	11.29	54.17	97.92
Age	60	50.72	6.40	38	64
Tenure	60	22.85	6.67	8	38
Leadership education					
None	60	0.32	0.47	0	1
Other	60	0.15	0.36	0	1
Diploma	60	0.03	0.18	0	1
Master	60	0.5	0.50	0	1
Manager position (1 = principal)	60	0.25	0.43	0	1

Table A7. Descriptive Statistics for Male Managers

	n	Mean	S.D.	Min	Max
Agentic	92	73.48	11.52	47.92	100
Communal	92	73.42	10.05	43.75	95.83
Age	92	50.97	9.15	33	70
Tenure	92	22.85	9.26	7	46
Leadership education					
None	92	0.33	0.47	0	1
Other	92	0.23	0.42	0	1
Diploma	92	0.03	0.18	0	1
Master	92	0.41	0.50	0	1
Manager position (1 = principal)	92	0.34	0.47	0	1

Appendix B: Supplementary Analyses Referred to in the Dissertation

Analysis for Study B

Table A8. Regression of Motivation on Gender Congruence and Gender Combinations

Motivation	Gender congruence	Gender congruence w/control	Gender combinations	Gender combinations w/control
Gender congruence	-2.959*	-3.244*		
	(1.384)	(1.353)		
Male employee – Male manager			Reference category	Reference category
Female employee - Male manager			4.813**	5.281**
			(1.756)	(1.746)
Male employee - Female manager			2.512	2.877+
			(1.697)	(1.641)
Female employee - Female manager			2.353	2.713
			(1.965)	(2.080)
Transformational leadership (TFL)		0.0447		0.0411
		(0.0399)		(0.0393)
Verbal rewards (VR)		-0.00292		-0.0000293
		(0.0388)		(0.0385)
Pecuniary rewards (PR)		-0.0279		-0.0301
		(0.0393)		(0.0386)
Age (employee)		0.122+		0.135*
		(0.0635)		(0.0652)
Years working under IM		0.104		0.0829
		(0.165)		(0.164)
Manager position (1 = Principal)		1.134		1.219
		(1.657)		(1.681)
Age (Manager)		-0.0692		-0.0693
		(0.112)		(0.111)
Constant	77.68***	77.27***	73.91***	73.04***
	(0.998)	(1.137)	(1.235)	(1.287)
Observations	531	531	531	531
R^2	0.009	0.024	0.015	0.030
Adjusted R^2	0.007	0.009	0.009	0.012

Note: + $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Standard errors in parentheses. Motivation is scaled from 0-100. Continuous control variables are centralized.

Analysis for Study D

Table A9. Fixed Effects Regression on Attitudes Towards Pecuniary Rewards w/standardized traits

Attitude towards PR	PR motivates		PR creates bad culture	
Female employee	-0.473	-0.107	2.955[+]	1.596
	(1.932)	(2.021)	(1.519)	(1.592)
Communal		1.074		0.973
		(1.027)		(0.809)
Agentic		5.267[***]		-3.919[***]
		(0.957)		(0.754)
Constant	41.15[***]	40.94[***]	72.40[***]	73.12[***]
	(1.369)	(1.396)	(1.076)	(1.100)
Observations	1,294	1,294	1,294	1,294
R^2	0.000	0.027	0.003	0.026
Adjusted R^2	-0.098	-0.071	-0.095	-0.072

Note: +p < 0.10, *p < 0.05, **p < 0.01, ***p < 0.001. Standard errors in parentheses. Fixed effects at high school level. Communal and agentic traits are standardized. PR = pecuniary rewards. The dependent variables are scaled from 0-100.

Analyses on Gender Differences

Table A10. Cohen's *d* for Gender Differences in Traits

Traits	HHX employees		STX employees		STX managers	
	Agentic	Communal	Agentic	Communal	Agentic	Communal
Female	-0.05	0.59	-0.19	0.66	0.003	0.16
	(0.097)	(0.099)	(0.056)	(0.057)	(0.166)	(0.166)

Note: Standard errors in parentheses.

Table A11. Gender Differences in Traits for Dutch Teachers

Traits	Dutch employees	
	Agentic	Communal
Female	-1.335	4.237***
	(1.047)	(1.110)
Constant	67.49***	70.12***
	(0.713)	(0.756)
Observations	470	470
R^2	0.003	0.030
Adjusted R^2	0.001	0.028

Note: $+p < 0.10$, $*p < 0.05$, $**p < 0.01$, $***p < 0.001$. Standard errors in parentheses. Communal and agentic traits are scaled 0-100, 100 being most communal/agentic.

Appendix C: Leading Employees of Different Gender: The Importance of Gender for the Leadership-Motivation Relationship

Article

Leading Employees of Different Genders: The Importance of Gender for the Leadership–Motivation Relationship

Trine H. Fjendbo[1] 📧

Abstract
Employee motivation is important for public organizations. However, it might not be the same kind of leadership that motivates Susan and Steve. This article examines whether the association between transformational (visionary leadership) and transactional leadership (verbal and pecuniary rewards) and employee motivation depends on the employee's gender and gender-based traits. Based on gender differences in communal and agentic traits, pecuniary rewards are argued to motivate male/agentic employees more than female/communal employees. The opposite is argued regarding visionary leadership and verbal rewards. Analysis of 1,294 Danish high school teachers shows female teachers on average are more communal and less agentic than their male colleagues. Furthermore, female teachers, unlike male teachers, are less motivated the more pecuniary rewards they perceive. However, no other gender differences are significant, lending only partial support for gender-based differences in the leadership–motivation relationship.

Introduction

Like all organizations, public organizations depend on good and fitting leadership to help improve performance and motivation. Goal-oriented leadership (e.g., transformational

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and transactional leadership) has been found to have a positive influence on employee performance (Avolio et al., 2009; Jacobsen & Andersen, 2015; Wright et al., 2012). Both transformational and transactional leadership strategies seek to motivate the employee to work toward organizational goals but do so via different mechanisms. Transformational leadership tries to align employee's goals with those of the organization, whereas transactional leadership tries to make it in the employee's self-interest to work toward the goals. In that sense, both leadership strategies are meant to increase performance by influencing employees and their behavior. Nevertheless, we know very little about how employee characteristics matter for the effectiveness of leadership strategies. While gender has been shown to matter for employee motivation (Andersen & Kjeldsen, 2013; DeHart-Davis et al., 2006) as well as job trait preferences (Bigoness, 1988; Gooderham et al., 2004; Konrad et al., 2000), few studies have focused on whether gender matters for the degree to which leadership strategies motivate (Pedersen, 2018). Drawing on data from Danish public high school teachers, this article asks the question of whether employee gender, via differences in communal and agentic traits, moderates the correlation between goal-oriented leadership strategies and motivation.

This article seeks to contribute in at least three ways. Previous studies have used communal (e.g., being caring and interpersonal) and agentic (e.g., being ambitious and competitive) traits[1] to argue for gender differences in the use of transformational and transactional leadership (Bass et al., 1996; Carless, 1998; Eagly et al., 2003; Eagly & Johannesen-Schmidt, 2001) or argued for gender differences in emotional labor (Guy & Newman, 2004; Meier et al., 2006). However, many studies of the differences in job attribute preferences do not include sufficient theoretical arguments as to why gender matters and should lead to differences; they mostly just examine the differences (Konrad et al., 2000). The first contribution is, therefore, to further examine the traits at the base of the argument for why some leadership strategies fit one gender better than the other—thus, to measure and test the importance of communal and agentic traits in a leadership context.

The second contribution is to increase the sparse knowledge of whether the employee's gender matters to the relationship between transformational and transactional leadership and motivation. The previous studies connecting transformational and transactional leadership to different genders have focused on the manager and not the employee. Other studies have found differences between female and male employee traits (Nielsen, 2014) that are believed to affect motivation, performance, and possibly the effectiveness of leadership elements, such as wage systems (DeHart-Davis et al., 2006; Gneezy et al., 2003; Nielsen, 2014; Ors et al., 2013). It is, thus, a relevant next step to combine these insights and study whether the fit between goal-oriented leadership components and gender traits affects employee motivation. Motivation is both a goal in itself and an important step in increasing work outcomes such as performance, well-being, and commitment and decreasing turnover (e.g., Andersen et al., 2014; Bellé, 2013; Bright, 2008; Kjeldsen & Andersen, 2013; Vandenabeele, 2009).

Knowledge about how employee characteristics matter to the effectiveness of leadership is extremely relevant for managers interested in increasing motivation through leadership. The practical implication of gender differences in leadership effectiveness

does not necessarily mean that managers should behave differently toward different employees, but they might benefit from understanding why their leadership behavior only seems to motivate part of the workforce or from using multiple leadership components to reach more of the employees. The third contribution is, thus, to increase managers' knowledge about how (or whether) employee gender matters for the effectiveness of goal-oriented leadership, which can potentially improve the management of employees of different genders.

Leadership Strategies

Transformational and transactional leadership have been argued to appeal to female and male managers,[2] respectively. These goal-oriented leadership strategies seek to increase employees' goal attainment via motivation and direction (Jacobsen & Andersen, 2015; Oberfield, 2012). As both strategies have been used in research and practice, it is important to know if they motivate employees differently dependent on their gender and gender-based traits.

Transformational leadership tries to align the employee's goals with those of the organization to get the employees to work toward the organization's goals (Bass, 1999, p. 11; Jung & Avolio, 2000, p. 950). The traditional transformational leadership concept has been criticized for confounding the effects of the leadership with its definition as well as for lack of clarity about the conceptual definition and the multiple dimensions (Knippenberg & Van Sitkin, 2013; Yukl, 1999). Thus, in line with the recent trend in the literature (Jacobsen & Andersen, 2015, p. 832; Jensen, Andersen, Bro, et al., 2019), the focus is on the visionary element of transformational leadership and the manager's behavior instead of the effects of their behavior.

When using transformational leadership in this study, it is, therefore, labeled visionary leadership and conceptualized by three aspects consistent with how Jensen, Andersen, Bro, et al. (2019) and others conceptualize transformational leadership. First, visionary leadership involves developing a clear vision aligned with the main goals of the organization: Managers seek to translate the organization's general goals into clear, specific goals that are more tangible for the employee. Second, it involves communicating and sharing the vision among the employees: Managers seek to set the direction for the organization and clarify how the employees can contribute to achieving the goals through their work. Third, it involves sustaining the vision in the short and long run: Managers seek to create sustained acceptance of, cooperation with, and excitement about the vision and organizational goals. Visionary leadership contains all three aspects and is understood as "behaviors that seek to develop, share, and sustain a vision intended to encourage employees to transcend their own self-interest and achieve organizational goals" (Jacobsen & Andersen, 2015, p. 832).

Transactional leadership, in contrast, builds on a quid pro quo logic whereby the manager uses an exchange to appeal to the employee's self-interest to work toward organizational goals (Bass, 1999, pp. 9–10). Thus, instead of trying to move the employee's self-interest to align it with the organizational goals as the

transformational manager does, the transactional manager seeks to appeal to their employees' self-interest by rewarding or sanctioning them, contingent on their behavior and achievement of organizational goals. The exchange must be contingent on employee behavior, and the connection must be clear to the employees. Only then can the employees' aspirations to receive rewards or avoid sanctions get them to exhibit the desired behavior, thereby contributing to achieving the organizational goals. In line with Jacobsen and Andersen (2015, p. 832), transactional leadership is seen as "the use of contingent rewards and sanctions intended to create employee self-interest in achieving organization goals."

In line with recent literature (Jacobsen et al., 2016; Jensen, Andersen, Bro, et al., 2019), transactional leadership is divided into three components: verbal rewards, pecuniary rewards, and sanctions. Verbal rewards involve the use of nonpecuniary benefits to reward the employee contingent on their behavior and mostly consist of verbal acknowledgements and compliments, whereas pecuniary rewards are of monetary value, such as wage supplements, training, and perks. Employees who do as the manager wants receive rewards, whereas those who do not meet the agreed expectations receive sanctions; this gives the employee an incentive to achieve the organizational goals—or, at least, not be counterproductive. Sanctions can be in the form of informal and formal reprimands and ultimately dismissal. Verbal rewards, pecuniary rewards, and sanctions are three different ways to conduct transactional leadership, which do not necessarily covary (Jensen, Andersen, Bro, et al., 2019). In their pure form, pecuniary rewards do not contain any verbal acknowledgment but can be given in an automated system or be applied for in a form. Given together with verbal recognition, it would be both a pecuniary and a verbal reward. Preliminary interviews with managers and teachers at Danish high schools have shown that the managers generally do not use sanctions. Therefore, they are less relevant to study in this context and are excluded from the remainder of the article. Three different leadership components are, therefore, discussed: visionary leadership, verbal rewards, and pecuniary rewards.

Multiple studies have found all three components important in relation to employee motivation (Andersen & Pallesen, 2008; Nielsen et al., 2019; Wright et al., 2012), commitment (Oberfield, 2012), and performance (Bellé, 2014, 2015). However, the leadership–outcomes relationship is particularly true for employees' perceptions of leadership behavior compared with the manager's self-reported leadership behavior (Favero et al., 2018; Jacobsen & Andersen, 2015). The focus in this study is on the employee's perception of the manager's leadership, as the employee must perceive the leadership behavior to react to it and for the reaction to depend on the employee's characteristics. Even though research suggests that each of the leadership components has a positive effect on employee outcomes, the effects might be larger or smaller for different employee groups, with groups in this study being employees of different genders. Similar theoretical arguments can be made in relation to different work outcomes, but the focus here will be on motivation, as it is both an important part of managerial efforts to increase performance and researchers' attempts at developing useful theories on management (Steers et al., 2004). Motivation is "the energy a
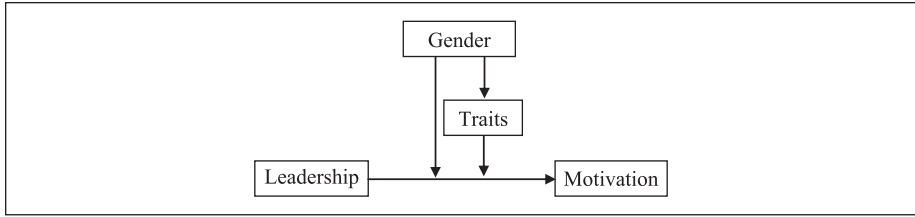
Figure 1. Theoretical model.

person is willing to invest in his or her job to achieve certain objectives" (Jensen, Andersen, & Jacobsen, 2019, p. 12).

The leadership components are expected to have a larger positive effect if they are compatible with employees' gender-based traits. Employee gender moderates the average effect of leadership, because each leadership component fits one gender better than the other, and this moderation is mediated by the employee's traits (as illustrated in Figure 1). Before arguing which leadership components fit which gender, existing research on gender differences in work-related values and needs is presented.

Gender Differences

Gender differences are often described with different distinctions (e.g., masculine–feminine, instrumental–expressive, agentic–communal). Many such distinctions cover similar sets of traits, and multiple studies using different distinctions have measured them with the same scales (Feather, 1984, p. 606; Ward et al., 2006, pp. 206–207). This article concentrates on the potential differences in agentic and communal traits (Bakan, 1966), as they consist of personality traits associated with transformational and transactional leadership (Eagly et al., 2003). *Agentic* traits cover a tendency to be assertive, controlling, and confident; for example, by being ambitious, independent, and competitive. *Communal* traits, in contrast, cover a tendency to be concerned with others, including being interpersonally sensitive, helpful, and sympathetic (Eagly & Johannesen-Schmidt, 2001). Communal people are, thus, more attentive and better at understanding the opinions and emotions of others. Agentic traits are more strongly ascribed to men, whereas communal traits are more strongly ascribed to women (Eagly & Johannesen-Schmidt, 2001).

However, the debate is still raging as to whether men and women differ in traits (Eagly & Wood, 2011; Nielsen, 2014) and whether this difference is due to biology or socialization (Carli, 1997; Eagly et al., 2000; Pinker, 2008). The cause of gender differences is neither discussed nor examined in this article. If just some of the gender differences are caused by socialization, however, they could be expected to differ between societies, as the differences between the socialization of boys and girls vary between societies. The social expectations toward boys and girls might be more similar in some societies than in others, which might cause women and men to be more similar.

Furthermore, the gender differences are differences on the average. Some women are more agentic, and some men are more communal than the average. Based on the Person–Environment Fit Theory, people will likely be attracted to jobs and organizations that fit their own traits, meaning that they self-select into organizations (Kristof-Brown et al., 2005). Likewise, organizations will often select the candidates that fit the given organization and job tasks. In organizations with emotional labor (Guy & Newman, 2004), such as child care, where communal traits such as being helpful and sympathetic are beneficial, male employees are likely to be more communal than the average male due to (self-)selection mechanisms. So, even if the gender differences are present on average, they are not necessarily present within a given organization or profession (Nielsen, 2014, p. 167), especially if women and men hold the same type of job in the same organization.

Thus, due to socialization, selection, and self-selection mechanisms, female and male employees might not differ in communal and agentic traits. Although this is tested later, it is assumed in the following section that, on average, women tend to be more communal and men more agentic.

Fit Between Leadership Strategies and Employees' Gender

Based on the fit literature (e.g., Kristof-Brown et al., 2005), it is argued that the leadership components fit different gender traits, which will cause the employee's gender to moderate the average effect of the leadership components. Person–environment fit defined as "the compatibility between an individual and a work environment that occurs when their characteristics are well matched" (Kristof-Brown et al., 2005, p. 281) has been argued to influence and shown to correlate with, for example, higher motivation, satisfaction, and performance (Kristof-Brown et al., 2005). If the manager meets the employee's psychological needs or if the employee's values are similar to those reflected in the leadership component, there is a fit (Cable & Edwards, 2004, p. 823). It is, therefore, argued that when the leadership component fits the employee's gender-based traits, it will have a larger positive effect on the employee's motivation.

Previous studies have found gender differences in job trait preferences (Bigoness, 1988; Gooderham et al., 2004; Konrad et al., 2000); women tend to prefer feedback, working with people, and the opportunity to help others, whereas men prefer earnings and solitude. Gender differences in traits, thus, also seem to express themselves in the employees' job-related preferences. In the following, each of the three leadership components is categorized according to how well it fits the communal or agentic trait; and, hence, the degree to which it fits female or male employees on average.

Transformational and transactional leadership have previously been related to, respectively, female and male *managers* (Eagly & Johannesen-Schmidt, 2001). However, the arguments in this article are still presented for three reasons: First, the previous studies have focused on managers, not employees. Second, they have not argued for the link for each distinct leadership component or even each strategy,

focusing instead on transformational leadership. Third, their arguments build on the original critiqued transformational leadership concept, which differs from the definition of visionary leadership used in this article.

Visionary leadership is argued to predominantly have communal aspects, which is in line with the existing literature (e.g., Eagly & Johannesen-Schmidt, 2001). Visionary leadership includes communicating and convincing employees of a shared vision, which demands interaction between the manager and employees and can help increase a sense of togetherness in the organization (Jensen & Bro, 2018). This fits well with the communal traits, such as being communicative and interpersonal. Furthermore, communal employees are helpful, sympathetic, accepting of others' direction, and supporting of others (Eagly & Johannesen-Schmidt, 2001, p. 783), which fits well with visionary leadership. The desire to convince employees to work toward the vision fits well with the communal tendency to accept the direction of others and support others. Conversely, it does not fit with the agentic tendency to be controlling and competitive. Visionary leadership, thus, fits the communal traits very well, but not the agentic.

Verbal and pecuniary rewards build on the same transactional logic but are still quite different regarding communal and agentic traits. Even though verbal rewards are a transactional leadership component, it is also closely related to transformational leadership, both theoretically (Yukl, 1999) and empirically (Jacobsen et al., 2016). Thus, even though pecuniary and verbal rewards are both transactional, it is important to argue how they each relate to communal and agentic traits.

Verbal rewards are more personal than pecuniary rewards (Yukl, 1999, p. 289) because the manager must communicate the rewards to the employees, unlike pecuniary rewards, which can be put in an automatic system without much managerial contact or effort. Verbal rewards are typically also gentler and kinder than pecuniary rewards, which are less personal and can be more competitive as they are more tangible, limited, and easy to compare. The agentic tendency to be ambitious, competitive, and self-confident, thus, fits with pecuniary rewards, as bonuses and other pecuniary rewards make it easy to argue how well you are doing, and, hence, compete with your coworkers. The communal tendency to be kind, sympathetic, and sensitive, thus, fits well with verbal rewards, whereas the agentic tendency to be competitive, ambitious, and self-confident fits better with pecuniary rewards. There is some overlap between the two leadership components, however, and they both have elements that fit the other gender-based trait as well. Verbal rewards can be somewhat competitive, whereas an interpersonal, sensitive person can appreciate pecuniary rewards.

To sum up, the communal employees are expected to prefer a manager who is communicative, social, and nurturing, will be more likely to follow the manager's vision, and value verbal appreciation; they are, therefore, expected to be more motivated by visionary leadership and verbal rewards. Conversely, the relatively agentic leadership component—pecuniary rewards—is expected to fit better with the agentic tendencies, such as being ambitious, competitive, and self-confident. The relation between leadership and motivation is, thus, expected to be moderated by communal and agentic traits. Women tending to have more communal traits and men more agentic lead to the following moderation hypotheses:
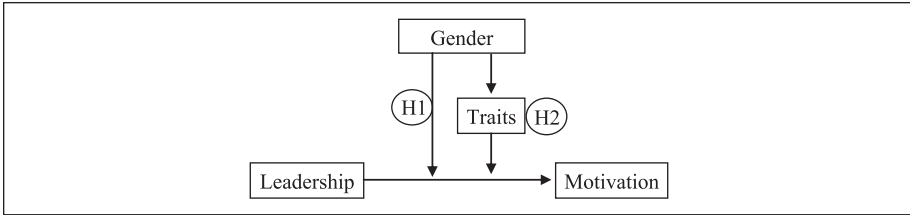
Figure 2. Tested model.

> **Hypothesis 1a (H1a):** The association between visionary leadership and employee motivation is more positive for female employees than for male employees.
> **Hypothesis 1b (H1b):** The association between verbal rewards and employee motivation is more positive for female employees than for male employees.
> **Hypothesis 1c (H1c):** The association between pecuniary rewards and employee motivation is more positive for male employees than for female employees.

As H1a to H1c follow from the expectation that female employees are more communal and less agentic than male employees, these moderations are expected to be mediated by the gender-based traits. This leads to the following mediated moderation hypotheses:

> **Hypothesis 2a (H2a):** The gender moderation on the association between visionary leadership and employee motivation is mediated by the employee's communal and agentic traits.
> **Hypothesis 2b (H2b):** The gender moderation on the association between verbal rewards and employee motivation is mediated by the employee's communal and agentic traits.
> **Hypothesis 2c (H2c):** The gender moderation on the association between pecuniary rewards and employee motivation is mediated by the employee's communal and agentic traits.

The following model as shown in Figure 2 will, thus, be tested:

Research Design and Data

This article is based on a cross-sectional survey of Danish high school teachers. Danish high schools are hierarchical organizations where the teachers identify with one principal, who has great autonomy (e.g., can hire, fire, and assign bonuses; Jacobsen & Andersen, 2015; Moderniseringsstyrelsen, 2012). While the board is formally responsible, the principal has the greatest influence on school decisions in practice (Jacobsen et al., 2014). Many high schools have expanded in recent years, and some principals

have delegated leadership responsibilities to leadership teams; even though the principal remains responsible for hiring and firing, teachers sometimes have another immediate manager. In such cases, this study examines the leadership style of the immediate manager. The high school managers have been shown to use different leadership strategies (Jacobsen & Andersen, 2015; Jensen, Andersen, Bro, et al., 2019), which is also the case in the present study (Table A4 in the Supplementary Material). Finally, Danish high schools have an almost equal distribution of female and male teachers, which makes for a good case to study the importance of leadership and employee gender.

Danish high schools offer a least likely case for two reasons; the respondents are Danish and all high school teachers. Denmark is one of the countries with the lowest degree of gender segmentation and inequality (Human Development Reports, 2018). As gender differences might depend on socialization and social expectations toward boys and girls, the gender differences in Denmark might be smaller than in countries with more gender segmentation. Second, the aforementioned selection and self-selection mechanisms might result in teachers, especially within the same organization, being quite similar. This renders Danish high school teachers a least likely case, as the gender differences might not be as profound as elsewhere. Support for the hypotheses would, therefore, make it likely that gender also matters across organizations, in organizations where men and women hold different kinds of jobs, and in more segregated countries. Conversely, lack of support would not necessarily mean that gender does not matter in other contexts.

Despite the low degree of Danish gender segmentation, Denmark has one of the highest proportions of female workers in the public sector and one of the lowest in the private sector (United Nations Economic Commission for Europe, 2017). The equal numbers of female and male employees might make the case of Danish high schools more generalizable to public sectors in other countries and less generalizable to other public organizations in Denmark, where the gender distribution is more skewed.

The survey was distributed in 2018 to approximately 9,000 teachers from 130 high schools with a response rate of approximately 18%. Some of the nonresponses were due to teachers no longer working in the organization or not feeling competent to answer questions about the manager due to limited experience with them. Others chose not to answer due to time constraints, as the survey took approximately 15 min to complete. The teachers have also become more reluctant to participate in voluntary surveys, as they are regularly asked or required to participate in surveys. Nevertheless, the participating teachers appear representative of the population. When compared with the members of the Danish National Union of Upper Secondary School Teachers, Gymnasieskolernes Lærerforening (GL), the differences are modest. GL (GL, 2019b) includes approximately 90% of the teachers in general subjects from different types of high schools; however, the sample only includes teachers in the general (STX) high schools. The share of female teachers was 52% in the sample compared with 53% in the union, and the median age was 45 years compared with 40 to 44 years in the union (GL, 2019a).

Measurement

The variables were all measured with employee-answered questionnaires, which could cause or increase a correlation between the dependent and independent variables and, thus, bias the first-order estimates. However, if this common source correlation is no different for each gender or gender-based trait, it would only increase the correlation between the first-order estimates, which would reduce the moderating effect, thereby making it a harder test of the moderation hypotheses (Jakobsen & Jensen, 2015). As the focus is on the moderations, the risk of common source bias causing Type I errors is, therefore, likely to be severely reduced; however, it could potentially cause Type II errors.

The dependent variable, motivation, was measured with four 7-point Likert-type scale questions that reflect work motivation. This general motivation measure was chosen in an attempt to limit the existing gender differences in motivation, which have been seen in, for example, public service motivation (Andersen & Kjeldsen, 2013; DeHart-Davis et al., 2006). The measure was rescaled so that 0 represents the lowest motivation and 100 the highest. The scale originally consisted of six questions, but as two of them can be argued to theoretically reflect something else and had mean lambdas below 0.4, they were not included (see Table A1 in the Supplementary Material). Confirmatory factor analysis (CFA) showed that the remaining four items loaded with mean lambdas between 0.44 and 0.73. The low-scoring item was originally reverse-worded. The fit indicators suggested that the fit was acceptable (Root Mean Square Error of Approximation [RMSEA] = 0.098, Comparative Fit Index [CFI] = 0.965, Standardized Root Mean Square Residual [SRMR] = 0.030) because SRMR, which is the most useful estimator when the sample is large, as in this case, was well below 0.05. A translated version of the questions and the CFA analyses are shown in the online appendix (Table A1 in the Supplementary Material).

The independent variables (i.e., the employee-perceived leadership components) were measured with 7-point Likert-type scale questions. The wording and factor loadings can be seen in Table A2 (Supplementary Material). The measures have been validated and further described by Jensen, Andersen, Bro, et al. (2019). In accordance with the definitions, visionary leadership was measured using questions regarding developing, sharing, and sustaining a vision in the organizations, verbal rewards with questions about the managers' use of nonpecuniary rewards contingent on employee behavior, and pecuniary rewards with questions on the managers' use of rewards with monetary worth contingent on employee behavior. The CFA showed that all items loaded well on their respective factors with mean lambdas between 0.65 and 0.89. The fit indicators also suggested a good fit (RMSEA = 0.079, CFI = 0.965, SRMR = 0.040). Each leadership component was based on at least three questions, rescaled (to 0–100), and mean-centered.

Based on interviews with three female and three male employees, there especially seemed to be a gender difference in their opinion on the use of pecuniary rewards. This led to the inclusion of questions about the respondents' thoughts on the use of individual wage supplements as a tangible example of pecuniary rewards. Respondents were asked how much they agree/disagree with two statements (on a 7-point scale).

The first was "Individual wage supplements could motivate me to put in an extra effort," and the second was "Individual wage supplements would create a bad culture in the workplace." Both scales were rescaled, 0 representing *completely disagree* and 100 *completely agree*. These variables were used to further examine the differences regarding pecuniary rewards.

Employee gender was measured using a survey question and coded 0 if man and 1 if woman. The few respondents answering "other" were not included.

The gender-based traits were measured with a short version (Helmreich et al., 1981) of the Personal Attributes Questionnaire (Spence et al., 1975) with eight 7-point Likert-type scale questions for each measure (Table A3 in the Supplementary Material). The respondents were asked how they are as a person (i.e., not only at work, but also privately). Each question contained conflicting traits, such as "not at all competitive" versus "very competitive." Asking respondents to choose between two opposing statements can reduce social desirability bias (Paulhus, 1991). The CFA showed that some items loaded poorly on the factor, with the lowest mean lambda at 0.293. This is acceptable, however, as it makes theoretical sense that there will be some differences in which of the items the respondents score high (i.e., you can make decisions very easily but also give up very easily). The fit indicators suggested an acceptable fit (RMSEA = 0.079, CFI = 0.828, SRMR = 0.078). Both measures were rescaled (to 0–100, with 100 being most agentic/communal). When used as independent variables, the measures were mean-centered.

Control variables that could cause bias if omitted (i.e., variables affecting both the interaction terms and motivation) were also included in the analyses. When testing the effect of each of the leadership components, the other leadership components were included as control variables. The manager's leadership position was included, where 1 represents a principal and 0 represents other leadership positions. The number of years the employee worked under the immediate manager, measured by a direct question and mean-centered, was also included. Finally, the respondent's age, measured as 2018 minus the year of birth, was mean-centered and included. As the respondent's age is highly correlated with tenure, tenure was not included in the analyses. Robustness checks show similar results when including tenure instead of age. Descriptive statistics and correlations of all variables (before centralization) are shown in Table A4 (in the Supplementary Material).

Estimation Strategy

The cross-sectional data were examined using ordinary least squares (OLS) regression. Cluster robust Standard Error (*SE*) at the organizational level was included to account for the clustered structure of multiple employees in the same organization. Fixed-effects models were only used when the leadership styles were not included, as this would otherwise control for variation in leadership behavior between organizations, which is essential for the analyses. The residual interclass correlation was only .013 (i.e., the organizational level did not explain much), which indicates that not using fixed or random effects was not too problematic. The analyses

Table 1. Gender Differences in Traits.

	Fixed effects		OLS with control variables[a]	
Traits	Agentic (Model 1.1)	Communal (Model 1.2)	Agentic (Model 1.3)	Communal (Model 1.4)
Female employees	−2.466*** (0.738)	7.093*** (0.627)	−2.596*** (0.702)	6.835*** (0.607)
Controls	No	No	Yes	Yes
Constant	69.25*** (0.523)	71.36*** (0.444)	68.75*** (0.564)	71.67*** (0.489)
Observations	1,294	1,294	1,294	1,294
R^2	.009	.098	.022	.094
Adjusted R^2	−.088	.009	.019	.091

Note. Fixed effects at high school level. Standard errors in parentheses. OLS = ordinary least squares.
[a]To see the gender differences as they would be in the following analyses, OLS regressions with the following control variables are included: age (mean-centered), years being the manager's employee (mean-centered), and the manager's leadership position.
†$p < .10$. *$p < .05$. **$p < .01$. ***$p < .001$.

including interaction terms suffered from multicollinearity, especially those involving gender-based traits as seen by the Value Inflated Factors (VIF) shown in Table A8 (in the Supplementary Material). The VIF values were calculated before centering the variables, as centering can decrease the VIF values without reducing the essential collinearity (Dalal & Zickar, 2012) and, therefore, without reducing the uncertainty of the estimates (the *SE*). The analyses, thus, suffer from an increased likelihood of Type II errors (i.e., not rejecting false null hypotheses). Mean centering was still beneficial, however, as it enabled us to see the correlation for the average employee.

Results

Gender is expected to matter for the association between leadership components and motivation because men are expected to be more agentic on average, whereas women are expected to be more communal. The analysis consists of three steps: (a) first, an analysis of whether female and male employees differ in agentic and communal traits (Table 1); (b) second, an analysis of whether gender moderates the correlation between motivation and each of the leadership strategies (Table 2 and Model 3.2); and (c) third, an analysis of whether agentic and communal traits mediate the gender moderation (Models 3.3 and 3.4). Finally, the analyses are supplemented by an additional analysis of the importance of gender and traits for the teachers' opinions about pecuniary rewards (Table 4).

Gender Differences in Traits

First, the results show that even within the same profession and within the same high school in Denmark, female teachers are on average 2.466 percentage points less

agentic (Model 1.1) and 7.093 percentage points more communal (Model 1.2) than male teachers. The communal gender difference is, thus, more pronounced than the agentic, and gender explains more of the difference in communal (9.8%) than agentic traits (0.9%). As gender only explains 0.9% of the variance in agentic traits, it is less likely to mediate a gender difference in leadership effectiveness. The results also show that male and female teachers both have agentic and communal traits on average, and Figure 3 illustrates the large overlap between male and female traits. Nevertheless, there is a substantial and statistically significant gender difference, particularly in the communal traits, even between teachers in the same high school. Furthermore, gender explains a substantial part of the individual differences in the communal traits.

Gender Moderation

The second step is to examine whether gender moderates the association between leadership and motivation as can be expected following the theoretical arguments and the empirical support for gender differences in agentic and communal traits. Table 2 shows the correlations for each gender, while Model 3.2 in Table 3 contains the moderation analysis. The high school teachers in general and female employees in particular are quite motivated, scoring between 70 and 80 on a 0 to 100 scale when they perceive the mean amount of the leadership components. Furthermore, male employees are statistically significantly more motivated the more they perceive their manager uses verbal rewards, whereas female employees are less motivated the more they perceive their manager uses pecuniary rewards. However, visionary leadership as well as verbal and pecuniary rewards for the other gender do not significantly correlate with motivation; that is, employees who perceive the mean amount of each of the other leadership components are not significantly more motivated when they perceive more of these leadership components. This is quite surprising taking previous results into account (Bellé, 2014, 2015; Nielsen et al., 2019; Oberfield, 2012; Wright et al., 2012) and makes it considerably less likely to find significant gender differences in the correlations. It does not indicate, however, that managers do not need to use any of these leadership components, as the correlations are for employees who perceive the mean
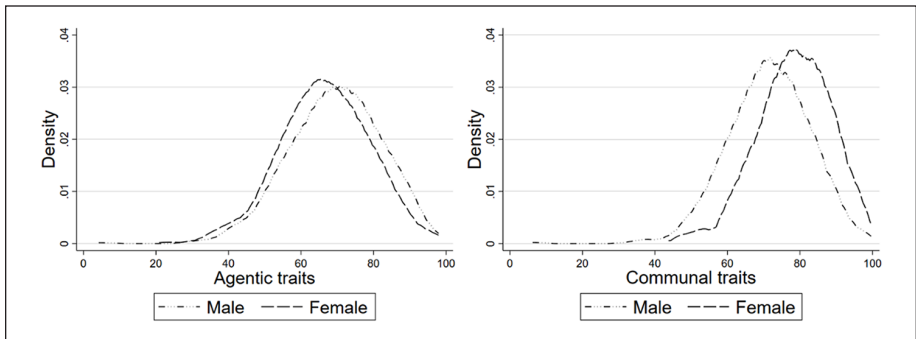
Figure 3. Gender distribution in agentic and communal traits.
Note. Kernel density of male and female employees in agentic (left) and communal traits (right).

amount of the other leadership strategies. The R^2 further shows that the models do not explain much of the variance in employee motivation, especially for female employees (Table 2). High school teacher motivation would appear to be explained by many other factors as well. To see whether the gender differences are statistically significant, a moderation analysis is necessary, as shown in Model 3.2 in Table 3.

Table 2. Regression of Motivation on Leadership With Split Sample on Employee Gender.

Motivation	Female employees (Model 2.1)	Male employees (Model 2.2)
Visionary leadership (VL)	0.0465	0.0183
	(0.0391)	(0.0451)
Verbal rewards (VR)	0.0393	0.0765*
	(0.0315)	(0.0352)
Pecuniary rewards (PR)	−0.0752*	0.0213
	(0.0361)	(0.0418)
Controls	Yes	Yes
Constant	79.12***	73.41***
	(0.658)	(0.825)
Observations	677	617
R^2	.022	.045
Adjusted R^2	.013	.036

Note. Standard errors in parentheses, cluster robust. Leadership components and continuous control variables are mean-centered. Control variables include age, years being the manager's employee, and the manager's leadership position.
$^†p < .10.$ $*p < .05.$ $**p < .01.$ $***p < .001.$

Gender statistically significantly moderates the correlation between pecuniary rewards and motivation (Model 3.2). In accordance with H1c, female employees are less motivated than male employees the more they perceive their manager to be using pecuniary rewards. Female employees who perceive more pecuniary rewards are actually less motivated than those who perceive less. Gender does not significantly moderate the associations between visionary leadership or verbal rewards and motivation (H1a and H1b).

Mediation by Gender-Based Traits

The third step is to see if the gender moderation is mediated by gender-based traits, and, thus, whether the gender differences described above weaken when the gender-based traits are introduced in the analysis. As just described, only pecuniary rewards are significantly moderated by gender (Model 3.2), and the mediated moderation analyses in Models 3.3 and 3.4 show that this moderation is more or less constant when including the gender-based traits. Thus, the gender-based traits do not seem to mediate the moderation, which does not support H2c.

Models 3.3 and 3.4 also show that none of the gender-based traits significantly moderates the association between motivation and pecuniary rewards or any of the

Table 3. Mediated Moderation Regression of Motivation on Leadership, Gender, and Traits.

Motivation	No moderation	Gender moderation	Agentic mediated moderation	Communal mediated moderation
	Model 3.1	Model 3.2	Model 3.3	Model 3.4
VL	0.0360	0.0286	0.0220	0.0257
	(0.0298)	(0.0436)	(0.0415)	(0.0424)
VR	0.0570*	0.0685*	0.0762*	0.0601†
	(0.0222)	(0.0341)	(0.0319)	(0.0329)
PR	−0.0308	0.0284	0.0198	0.0338
	(0.0299)	(0.0410)	(0.0405)	(0.0392)
Female employee	4.835***	4.854***	5.686***	3.130***
	(0.855)	(0.860)	(0.800)	(0.902)
Female employee × VL		0.0112	0.0114	−0.0088
		(0.0559)	(0.0540)	(0.0536)
Female employee × VR		−0.0236	−0.0305	−0.0204
		(0.0486)	(0.0446)	(0.0466)
Female employee × PR		−0.110*	−0.107*	−0.118*
		(0.0495)	(0.0485)	(0.0494)
Agentic			0.320***	
			(0.0390)	
Agentic × VL			−0.00172	
			(0.00245)	
Agentic × VR			−0.000371	
			(0.00234)	
Agentic × PR			0.00297	
			(0.00264)	
Communal				0.258***
				(0.0429)
Communal × VL				0.00412
				(0.00252)
Communal × VR				0.000219
				(0.00222)
Communal × PR				0.000720
				(0.00264)
Controls	Yes	Yes	Yes	Yes
Constant	73.89***	73.88***	73.56***	74.58***
	(0.772)	(0.774)	(0.719)	(0.754)
Observations	1,294	1,294	1,294	1,294
R^2	.044	.050	.117	.085
Adjusted R^2	.038	.043	.107	.075

Note. Leadership components, gender-based traits, and continuous control variables are mean-centered. Control variables include age, years being the manager's employee, and the manager's leadership position. Standard errors in parentheses, cluster robust. VL = visionary leadership; VR = verbal rewards; PR = pecuniary rewards.
†$p < .10$. *$p < .05$. **$p < .01$. ***$p < .001$.

other leadership components. However, regarding visionary leadership, communal traits have an *SE* of 0.00252; $p = .104$ (Model 3.4) and a VIF score of 111 (Table A8 in the Supplementary Material), which is more than 10 times higher than the recommendation. The high VIF score indicates a very high degree of multicollinearity, which increases the uncertainty of the estimates and, thus, increases the risk of Type II errors. The result is, therefore, explained even though it is not statistically significant. The association between visionary leadership and motivation tends to be stronger the more communal the employee is. The coefficient is 0.00412 while the direct correlation with visionary leadership is 0.0257 (Model 3.4). The average male employee who perceives 1 percentage point more visionary leadership is, thus, 0.0257 percentage points more motivated. However, if he were 10 percentage points more communal (female employees are on average approximately 7 percentage points more communal than male), he would be additionally 0.0412 percentage points more motivated for each percentage point more visionary leadership he perceives. Even though the gender moderation on visionary leadership is far from significant, it is worth mentioning that including communal traits decreases the coefficient from 0.0112 (Model 3.2) to −0.0088 (Model 3.4). Thus, even though the results are not significant, they are consistent with H2a; that is, that the employee's traits mediate the gender moderation.

Table 3 also shows that the employees who are more agentic as well as those who are more communal tend to be more motivated, meaning that there is a direct correlation between the two traits and motivation. This could be due to common source bias and social desirability, even though this study attempts to reduce social desirability in the construction of scales. Another possible explanation is that simply having a strong identity, whether agentic, communal, or something else, correlates with being more motivated.

To sum up, the gender-based traits do not seem to mediate the gender moderation on pecuniary rewards. However, looking at the insignificant results, there are indications that the communal trait might moderate the correlation with visionary leadership and mediate any potential significance of gender.

Different Genders' Attitudes Toward Pecuniary Rewards

The respondents were also asked more directly about their thoughts on the use of individual wage supplements as a tangible example of pecuniary rewards. Respondents were asked about the extent to which individual wage supplements could motivate them to put in an extra effort as well as whether such bonuses would create a bad culture in the workplace. The results are presented in Table 4.

The first interesting finding is that high school teachers on average do not think pecuniary rewards can motivate them to put in extra work, and they think that it will create a bad culture in the workplace. The R^2 shows that gender and the gender-based traits explain very little of the variation. However, there still seem to be differences in the respondents' attitudes, which are consistent with the expectations in H1c and H2c. As could be expected, female employees are more likely to think that pecuniary rewards will hurt the workplace culture (significant at 0.1), which might

Table 4. Fixed Effects Regression on Attitudes Toward Pecuniary Rewards.

Attitudes towards pecuniary rewards	PR motivates		PR creates bad culture	
	Model 4.1	Model 4.2	Model 4.3	Model 4.4
Female employee	−0.473 (1.932)	−0.107 (2.021)	2.955[†] (1.519)	1.596 (1.592)
Communal		0.0929 (0.0888)		0.0841 (0.0700)
Agentic		0.416*** (0.0755)		−0.309*** (0.0595)
Constant	41.15*** (1.369)	40.94*** (1.396)	72.40*** (1.076)	73.12*** (1.100)
Observations	1,294	1,294	1,294	1,294
R^2	.000	.027	.003	.026
Adjusted R^2	−.098	−.071	−.095	−.072

Note. Fixed effects at high school level. Communal and agentic traits are mean-centered. PR = pecuniary rewards. Standard errors in parentheses.
[†]$p < .10$. *$p < .05$. **$p < .01$. ***$p < .001$.

be mediated by their less agentic traits. Agentic employees are more likely to think they can be motivated by pecuniary rewards and less likely to think it will create a bad culture.

Conclusion and Discussion

This article has examined whether gender moderates the correlation between transformational and transactional leadership components and motivation, and whether this is mediated by gender-based traits. On this basis, there seems to be reason to investigate how employees of different genders respond to different leadership styles. The results suggest female employees are less motivated by their manager's use of pecuniary rewards than male employees. Beyond that, the empirical support for gender and gender-based traits moderating the association between leadership and motivation was not as pronounced as expected, although some differences and interesting tendencies did correspond with the expectations.

The most important finding was that gender moderates the correlation between pecuniary rewards and motivation. For female employees, the perception of the manager's use of pecuniary rewards is negatively correlated with motivation, whereas there is no correlation for male employees. However, the expected mediated moderation by gender-based traits could not be identified. Nevertheless, further analysis showed that female employees, more than male, think pecuniary rewards will create a bad culture in the workplace, and this difference seems to be mediated by their agentic attributes. This finding is consistent with Konrad and colleagues' (2000) meta-analysis of sex differences in job attribute preferences, where men valued earnings more than

women. Conversely, Pedersen (2018) did not find any gender differences in a survey experiment where some respondents could receive a monetary reward for participating. However, the survey situation differs substantially from a work situation, as there is no joint effort, and it will not influence the workplace culture.

Regarding pecuniary rewards, it is also worth noticing that it generally does not seem beneficial to increase the employees' perception thereof; at least not for Danish high school teachers. On average, neither female nor male teachers think it will motivate them but instead that it will hurt the workplace culture. This result might not be broadly generalizable, however, as some studies have found a positive effect of pecuniary rewards on employee motivation, and especially public employees might regard this type of leadership differently than private employees. Even though the theoretical argument for gender differences is generic and expected to hold in public as well as private organizations, there are selection and self-selection mechanisms that could influence both the gender moderation and the direct correlation between the leadership components and motivation. Especially the type of organization (e.g., daycare vs. tax offices) could be expected to influence the kind of employees hired and, thus, the employees' personal traits and differences therein. It is pertinent that this study examines Danish high school teachers, as it might not be generalizable to more gender-segregated organizations (e.g., daycare institutions). The least likely case of Denmark, however, makes it more likely to find significant gender differences in many other countries.

Even though all moderations regarding visionary leadership are statistically insignificant, the empirical tendencies are in line with the theoretical arguments. The results suggest that communal employees tend to be more motivated the more they perceive their manager to be using visionary leadership compared with less communal employees. This difference also seems to mediate any potential gender difference. Konrad and colleagues (2000) showed a large gender difference in the preference for the opportunity to help others. A next step for research on gender differences and visionary leadership is to investigate the content of the vision, as this might be important with respect to the gender or gender-based traits to which it speaks (Krogsgaard et al., 2014). A vision focused on helping others (e.g., on students' well-being) would fit better with the communal tendency to be sympathetic and concerned with others, whereas being the best organization would fit better with the agentic traits of being competitive and ambitious.

The results did not support the expectations about verbal rewards. As described, verbal rewards contain both communal and agentic elements, which can explain why gender and gender-based traits do not seem to matter. Similarly, Konrad and colleagues (2000) did not find a significant gender difference in the importance of recognition. The degree to which verbal rewards can be seen as communal or agentic might depend on how they are communicated to employees. For example, it might matter whether appreciation and acknowledgment are given to an individual or a group, and whether given in person or in public. Public and individual appreciation might relate more to the agentic traits of ambition, competition, and confidence, whereas personal or group acknowledgment might fit better with the communal tendency to be interpersonal and concerned with others. This would be an interesting distinction in future research on verbal rewards and gender differences.

This article only considered employee gender, but the gender combination between employee and manager might also matter for how leadership is received and employee motivation (Grissom et al., 2012). It is also relevant that this study did not examine managers' actual leadership, but the employees' perceptions of it. Especially when examining the employee's perception of the manager's leadership, the gender combination might matter. I, therefore, urge future research to look further into this always present but understudied phenomenon.

None of the correlations is substantially very large, not even the correlations between each of the leadership components and motivation, so this study does not provide any clear answer to the importance of gender and gender-based traits for the effectiveness of leadership. Bearing the existing literature in mind, this raises several questions. First, multiple studies have found gender differences in leadership behavior; so is gender merely important at the leadership level? And if so, why not for employees? This is especially puzzling, as employee gender has been found to matter greatly for their motivation. Second, many of these studies build their arguments on the communal and agentic traits, but this study questions whether these traits should be at the base of the theoretical arguments for gender differences in leadership or whether there is another explanation for the gender differences in leadership behavior. Further research is needed to obtain a better understanding of gender differences and the importance of gender-based traits. Based on these findings and the existing literature, gender and gender-based traits only appear to be important under certain circumstances—but what characterizes these circumstances? A first step would be to disentangle the leadership components as well as gender and gender-based traits to test the importance of each individually.

The results shown here give limited support for the expectations on gender differences in the relation between visionary leadership, verbal and pecuniary rewards, and motivation. Still, the findings support that gender and gender-based traits do play a role, as they indicate that employee gender and traits can matter for which leadership strategy motivates them. The results also imply that, at least for Danish high school managers, it is probably more beneficial to divert to increasing the employees' perception of visionary leadership and verbal rewards compared with pecuniary rewards, regardless of the teacher's gender. The practical implication of the study is, thus, not so much that managers should be aware of which gender they lead but that Danish high school teachers in general, and female teachers in particular, are not motivated by pecuniary rewards.

Declaration of Conflicting Interests

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Supplemental Material

Supplemental material for this article is available online.

Notes

1. Communal and agentic traits can be seen as personality traits, as they are "a relatively stable, consistent, and enduring internal characteristic that is inferred from a pattern of behaviors, attitudes, feelings, and habits in the individual" (American Psychiatric Association, 2020). In the literature, they are also called characteristics and behaviors, among other things.
2. Both leadership strategies can be used by official managers as well as unofficial leaders, but as the present study focuses on managers, this term will be used in the article.

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Author Biography

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English Summary

With this dissertation, I answer the research question *How does fit between an employee's gender and traits and their manager's gender, traits and leadership behavior affect the employee's leadership perception, motivation, and manager preference?* The dissertation contributes to our knowledge about employee gender and gender-related personality traits (communal and agentic) in relation to leadership behavior (transactional and visionary). It does so by focusing on two types of fit: fit between the employee and the manager and fit between the employee and leadership behaviors.

Theoretically, the dissertation builds on the fit literature, which argues that it is beneficial when a person is well matched with their environment, in this case their manager and his or her leadership behavior. First, I build on the literature on gender congruence and fit to argue how fit between a manager's and employee's gender and personality traits could affect leadership perception, motivation, and manager preference. Second, I combine the leadership and gender literatures and argue that leadership behaviors fit gender and gender-related traits differently and that this could affect the employee's motivation and manager preference.

I study this with different research designs and in different contexts to increase the results' validity. The primary case of the dissertation is Danish public high schools, but other Danish organizations and public high schools in the Netherlands are also included to increase external validity. I use survey data from a field experiment, a conjoint experiment, and two cross-sectional studies. Jointly the research designs contribute to increase validity, as each of them have different strengths. The conjoint experiment disentangles gender and personality traits, making a large contribution to the gender literature by furthering our knowledge on what it is about gender that matters in a leadership context.

The dissertation indicates that communal and agentic traits are important elements in a leadership context, and that the importance of gender is more elusive. This is not to say that gender does not matter in a leadership context, as it mattered for leadership perception and motivation on occasion. However, communal and agentic traits might be more important in relation to fit with managers and leadership behavior. The results show that neither manager gender nor employee gender matters for manager preference, but that traits do. The results generally suggest that the employee's gender and traits at least sometimes matter for fit with manager's gender, traits, and leadership behavior, particularly the use of pecuniary rewards. For managers this suggests that

it is worth considering employees' gender and gender-related traits if they wish to positively affect leadership perception, motivation, and preference.

Dansk Resumé

Med denne afhandling besvarer jeg forskningsspørgsmålet: Hvordan påvirker fit mellem medarbejderes køn og personlighedstræk og deres leders køn, personlighedstræk og ledelsesadfærd medarbejderens ledelsesopfattelse, motivation og lederpræference. Den bidrager til vores viden om medarbejderkøn og kønsrelaterede personlighedstræk (samhørig og egenrådig) i forhold til ledelsesadfærd (transaktionel og visionær) ved at fokusere på to typer af fit: fit mellem medarbejderen og lederen og fit mellem medarbejderen og ledelsesadfærden.

Teoretisk bygger afhandlingen på fitlitteraturen, som argumenterer for fordelene ved, at en person passer godt med sit miljø, i dette tilfælde med lederen og dennes ledelsesadfærd. For det første bygger jeg videre på litteraturen om kønskongruens og fit ved at argumentere for hvordan fit mellem lederens og medarbejderens køn og personlighedstræk kan påvirke ledelsesopfattelse, motivation og lederpræference. For det andet kombinerer jeg ledelses- og kønslitteraturerne og argumenterer for, at ledelsesadfærd passer til forskellige køn og kønsrelaterede personlighedstræk, samt for, hvorfor dette kan have betydning for motivation og lederpræference.

Jeg undersøger det med forskellige forskningsdesigns og i forskellige kontekster for at øge resultaternes validitet. Den primære case i afhandlingen er danske offentlige gymnasier, men andre danske organisationer og hollandske offentlige gymnasier er også inkluderet for at øge den eksterne validitet. Jeg bruger spørgeskemadata fra et felteksperiment, et conjoint-eksperiment og to tværsnitsundersøgelser. Tilsammen øger disse forskningsdesigns validiteten, da de har forskellige styrker. Conjoint-eksperimentet adskiller køn og personlighedstræk, hvilket er et stort bidrag til kønslitteraturen. Det øger vores viden om, hvad det er ved køn, der har betydning i en ledelseskontekst.

Afhandlingens resultater indikerer, at samhørige og egenrådige træk er vigtige elementer i en ledelseskontekst, og at vigtigheden af køn er mere flygtig. Dermed ikke sagt, at køn ikke har nogen betydning i en ledelseskontekst, da det i nogle tilfælde havde betydning for lederpræference og motivation. Samhørige og egenrådige træk er dog måske vigtigere i forhold til fit med ledere og ledelsesadfærd. Resultaterne viser, at hverken lederens køn eller medarbejderens køn havde betydning for lederpræferencer, men derimod at deres personlighedstræk havde betydning. Resultaterne viser generelt, at medarbejderens køn og personlighedstræk i det mindste nogle gange har betydning for fit med lederens køn, personlighedstræk og ledelsesadfærd, især brugen af pengemæssige belønninger. Det tyder på, at ledere med fordel kan overveje

medarbejderes køn og kønsrelaterede personlighedstræk, hvis de ønsker at øge deres ledelsesopfattelse, motivation og præference.