Leadership and Psychological Contracts:

A Meta-Analysis

Fredrik Ruben Lamøy

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Abstract

Leadership and psychological contracts have gained popularity in research these past decades, with a constant increase in leadership theories. Many leadership styles have been extensively researched in organizational psychology, but many important aspects of leadership have remained unexplored. Psychological contracts have become an important description of the underlying expectations that exist between an employee and a leader. An outcome of these expectations being breached by leaders may lead to many negative outcomes. Although an increasing number of individual studies investigated leadership and psychological contracts together, no meta-analysis has to date synthesized these findings. This study aims to quantitatively compile and retrieve findings on the relationship between leadership and psychological contract research using meta-analytic methods to better understand their association. Furthermore, this paper also serves as an overview of both specific leadership styles and psychological contract measures individually, which may prove beneficial for future researchers.

Support was found for all hypotheses regarding the relationship of leadership and psychological contracts. Furthermore, all positive leadership styles were negatively related to psychological contract breach (social exchange-based leadership, neo-charismatic leadership, and ethical leadership), while negative leadership styles within the destructive/abusive leadership category were positively related to psychological contract breach. Additionally, neo-charismatic and transactional leadership were positively related to transactional psychological contracts (TPC; transactional leadership more so than other neo-charismatic styles) and relational psychological contracts (RPC). Social exchange-based leadership was negatively related to transactional psychological contracts, but there were too few studies to infer a link to relational psychological contracts. Apparently, leader-member exchange theory is currently overemphasized in psychological contract research, providing 50% of the entire data. There was a lack of studies on neo-charismatic leadership styles in relation to psychological contract breach, and conversely articles on ethical/moral leadership in relation to psychological contract contents were also particularly lacking. Understanding how leaders’ behavior affect the psychological contracts of employees appears to be beneficial and could prevent negative work outcomes through reducing perceived contract breach. Future studies should focus on the research of non-LMX styles and psychological contracts.
Introduction

Leadership theory has gained importance with new research and leadership styles surfacing more rapidly than ever. This may be a result of society being more affected by novel developments concerning organizational structures and changes in the traditional employer-employee relationship. Psychological contracts suggest one avenue for understanding this relationship. Psychological contracts are defined as the implicit or explicit promises made in the employment relationship (Argyris, 1960). They refer to social exchange theory which assumes that social behavior is the result of exchanges based on costs and benefits. Research on psychological contracts has grown considerably since its reconceptualization by Rousseau (1989). In recent years, researchers have investigated its relationship to leadership, but an empirical review is left to be desired.

Many leadership styles with positive aspects lead to beneficial organizational outcomes in job performance, leadership satisfaction, commitment, competence, role clarity, role conflict and turnover intentions, according to a meta-analysis by Gerstner and Day (1997). Many theories have been developed and extensive research has been conducted in the realm of leadership, and investigators are left to maneuver between many definitions and interpretations. The same is true for psychological contract research. For example, Restubog et al. (2011) found that leader-member exchange (LMX) decreased the perception of psychological contract breach, which in turn positively affected work outcomes. Many individual studies showed similar relationships of breach, violation or fulfillment to this type of leadership theory, but a more systematic approach is currently needed to properly organize their many measures (Collins, 2010; Dulac et al., 2008; Henderson, Wayne, Shore, Bommer, et al., 2008). Additionally, other leadership styles such as transformational leadership, ethical leadership, and destructive leadership have been linked to different psychological contract measures (Ahmad et al., 2019; Cassar, Bezzina, & Buttigieg Sandra, 2017; Epitropaki, 2013; Syrek & Antoni, 2017). Understanding the relationship between leadership and psychological contracts may be an important factor for understanding leaders’ influence on organizational outcomes and push this scope of leadership research further (Dinh et al, 2013). Consequently, “… scholars can also develop integrative perspectives that unify diverse theories and stimulate novel leadership research in the new millennium” (Dinh et al, 2013, p.55). Therefore, I conducted a study using meta-analytic procedures to compare leadership styles and
their relation to psychological contract constructs such as contents, relational and transactional contract types and breach (see Figure 1 for an illustration below).

This study aims to review and synthesize the current research on leadership in relation to psychological contracts, in order to gain a better understanding of this relationship. The present study also intends to investigate specific leadership styles in combination with different psychological contract measures to gain a more detailed picture of differences and similarities in accordance to theoretical backgrounds and definitions. This paper also aims to provide suggestions for future research, and particularly areas requiring more emphasis in the current landscape. Two reviews performed extensive elaborations of the current landscape of leadership theories and demonstrated their frequency in research. These leadership reviews by Zhu et al. (2019) and Dinh et al. (2013) serve as frameworks for this paper. Dinh et al. (2013) performed an extensive review identifying thematic categories of leadership while Zhu et al. (2019) provides further insight into the theoretical backgrounds of these various thematic categories. This in turn makes it possible for the author to gain a better overview over differently worded leadership styles that are theoretically dissimilar which may be of use for future research. These overviews will thus serve as labels for the theoretical background and similarities between leadership styles throughout this paper. All available leadership styles will be tested for all possible relationships with measures of psychological contracts. Hypotheses in this paper are thus also based on all previously studied relationships between all aspects of leadership and psychological contracts.

This study makes two major contributions to the current research literature on psychological contracts and leadership. First, it compiles and synthesizes the primary research on leadership and psychological contracts in a quantitative empirical review. There are very few meta-analyses or reviews on the subject, and none regarding leadership as of currently. This is supported by Rousseau and Tijoriwala (1998) who argue that even if the amount of research on psychological contract theory has significantly increased, the points of focus and their measurements are quite diverse. With the help of a meta-analysis, it is possible to study a larger sample size and attain stronger statistical accuracy that improves representativeness or generalizability of the findings. Second, this research may help researchers better understand how various leadership behaviors may affect the psychological contracts between employers and employees. There is a vast amount of leadership styles and this study makes use of leadership reviews to provide important
information and correlations through meta-analytic procedures. Findings may provide researchers with better insight as to how leadership behavior affects psychological contracts within organizations and hold important practical implication to the workplace.

**Leadership and Psychological Contracts**

Important associations have been found between leadership and organizational outcomes such as employee productivity, performance in the workplace (Barling et al., 1996; Crant, 2000; Keller, 2006), and employee behavior (Bass, 1998; Northouse, 2010). The seminal leadership handbook by Leonard et al. (2016) presents some quintessential elements of leadership definitions. For example, leadership is an ongoing process that can only be understood when discussed in its specific context (e.g., time). Leonard et al. (2016) also stress improving and understanding people’s behavior as essential in leadership. Furthermore, leaders hold the power of influence and responsibility for members in their organization that allows them to resolve challenges that arise. Thus, good leadership paves the way of successful organizations and is an essential part of organizational psychology research.

Leadership has become a booming area of study, and researchers are constantly promoting new developments (Avolio et al., 2009). The challenge of sorting and finding the most empirically relevant leadership styles arises along with the growing number of styles. This challenge also occurs in leadership and psychological contract research where some styles are frequent, while others are absent in the current literature. Thus, the inclusion of leadership styles in this paper is based on their frequency and relevance in research in line with recent leadership reviews (Dinh et al., 2013; Zhu et al., 2019). I elaborate upon and categorize each of these forms of leadership based on their theoretical origins and similarities. However, before going into further detail on each style, I examine leadership as a whole in relation to psychological contracts. This also includes leadership styles that are considered negative.

Shore and Tetrick (1994) argued: “The employee is more likely to view the manager as the chief agent for establishing and maintaining the psychological contract” (p. 101). To further understand this role of the leader, a short elaboration on psychological contract theory is helpful. Psychological contract is a term earliest traceable to Argyris (1960), who described an implicit understanding of norms between employers and employees (Argyris, 1960). Although the essence of this definition was retained, the modern understanding could be defined as an individual’s
perception of the premises and terms that occur in a reciprocal exchange agreement (Rosseau, 1989). Several studies have shown positive correlations between leadership and psychological contracts (Cassar, Bezzina, & Buttigieg Sandra, 2017; Goodwin et al., 2001; Kasekende, 2017; Kasekende et al., 2016; Megheirkouni, 2020). These studies examine different leadership styles but point to a similar pattern. Leader behavior that promotes positive relationships between employees and their leaders also promotes positive and strong psychological contracts.

Establishing a relationship between employees and their leaders seems to be an important factor in the maintenance of psychological contracts (Tosunoglu & Ekmekci, 2016). Perhaps a natural assumption, but Cassar, Bezzina and Buttigieg (2017) found that the workers’ ratings of their leaders affect how satisfied they are, their feeling of identity, fairness, and commitment to their workplace. McDermott, Conway, Rousseau, and Flood (2013) similarly argued in their paper a lack of attention from researchers in the necessity of adapting leadership styles to develop appropriate contracts. The authors also argue that effective psychological contracts and effective organizational HR strategies depend on how well leaders “walk and talk”. In other words, a great deal of responsibility is placed upon both an organization and its leaders to actively promote beneficial environments in the workplace. The current research points to leadership being related to psychological contracts and examining this relationship further may hold practical and theoretical contributions. Thus, I suggest the following hypothesis (see Figure 1 for illustration):

**Hypothesis 1:** Leadership is positively related to psychological contracts.
**Figure 1**

*Model of variables in leadership and psychological contracts based on the leadership frameworks by Dinh et al. (2013) and Zhu et al. (2019)*

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**Social Exchange-Based Leadership and Psychological Contract Breach**

Leader-Member Exchange theory (LMX) is the most popular and widely researched social exchange-based leadership style (Lord et al., 2017). Social exchange theory (SET) serves as a theoretical foundation of both LMX and psychological contracts, and links both concepts in its emphasis on reciprocity and exchange. SET originates from Homans (1958) who argued that new relationships are founded upon the value people estimate based on costs and benefits of this relationship. The theory assumes that humans always desire to gain more from relationships than they have to give. Blau (1968) further proposed more emphasis on the social context rather than the economic and regarded social rewards as a highly important motivator. Dansereau et al. (1975) applied these understandings of human relationships to propose Vertical Dyad Linkage (VDL), the antecedent of modern leader-member exchange theory. LMX is the most frequently researched in the social exchange-based leadership category and also the most frequently researched leadership style in relation to psychological contracts. Other styles like VDL do exist within this category, but I only emphasize and define LMX as there are currently no studies of other social exchange-based styles in relation to psychological contracts. Future researchers may however use the same categorization to their benefit.
LMX is distinctive from other relationship-based theories in its emphasis on unique leader-employee relationships. According to LMX theory, leaders form different relationships with their employees, and the quality of this relationship explains various work-related outcomes. Indeed, there has been consistent research showing the benefits from high-quality LMX on work outcomes (Hill et al., 2016; Lord et al., 2017). However, some criticism of the style has been proposed. A main concern is an effect of favoritism or discrimination that may occur by the in-group and out-group theory of LMX. The idea is that employees may experience different levels of privileges based on their group status. Members in the in-group will have a more positive relationship with their leader resulting in a potential experience of discrimination for members of the out-group (Leonard et al., 2016).

However, researchers have found moderate to large negative correlations between LMX and psychological contract breach (PCB; U. A. Agarwal & S. Bhargava, 2014; Dulac et al., 2008; Hill et al., 2016). Psychological contract breach describes an employee’s perception of their contract expectations being breached (Griep & Cooper, 2019). Several negative work outcomes are associated with perceived psychological contract breach. In the meta-analysis by Zhao et al. (2007), psychological contract breach was associated with several negative work outcomes such as increased turnover intention, lower job satisfaction and lower performance. Findings show however that high-quality employee-employer relationships make potential unmet expectations more acceptable if explained, and the feeling of breach is reduced (Hill et al., 2016). Considering these detrimental consequences of breach and the potential preventive power a leader holds, further research is warranted.

A recently published meta-analysis (Liao & Hui, 2021) showed a moderate to large correlation between LMX and psychological contract fulfillment (PCF). Psychological contract fulfillment is the perceived fulfillment of an employee’s psychological contract. According to Zhao et al. (2007), psychological contract breach and psychological contract fulfillment may be used interchangeably as contrasting opposites. Studies exclusively examining fulfillment can thus be used to examine breach as well through recoding of effect sizes. Based on the body of findings showing a negative association between LMX and contract breach, I propose a negative relationship for all social exchange-based leadership styles (Figure 2).
**Hypothesis 2a** Social exchange-based leadership styles are negatively related to psychological contract breach.

The relational contract “entails broad, open-ended and long-term obligations, and it is based on the exchange of not only monetizable elements (e.g., payment for service), but also socio-emotional elements such as loyalty and support” (Morrison & Robinson, 1997, p. 229). A relational contract emphasizes the interests of multiple parties and socio-emotional terms, with a general disinterest in material terms (Griep & Cooper, 2019). Because of the important role of these socioemotional elements for the relational contract, a positive relationship between social exchange-based leadership styles and relational psychological contracts may exist. Relational contracts have previously been found strongly related to LMX (Chen, 2010). Additionally, researchers generally see a pattern in types of social exchange like perceived organizational support, trust in the organization and job satisfaction being related and predicting the same outcomes or behaviors (Tekleab & Chiaburu, 2011). A relationship between psychological contracts and social exchange-based leadership could hence be a result of their similar theoretical origin. LMX that is the primarily researched leadership style is more generally representing social exchange-based-leadership. Based on these emphasized relational aspects of social exchange-based leadership styles I suggest the following hypothesis (Figure 2):

**Hypothesis 2b.** Social exchange-based leadership is positively related to relational psychological contracts.

In contrast, we will most likely see the opposite with transactional psychological contracts (TPSC). Transactional contracts, being the opposite end of the continuum of relational psychological contracts, focus on explicit contract expectations such as monetary compensation, promotions, and are often short-term (e.g., performing contracted work for specific periods of time; Morrison & Robinson, 1997). There is a major emphasis of terms that contribute to the employee’s self-interest which naturally contrasts relational terms. The transactional contract has not previously been identified as related to social exchange but rather to economic exchange (Millward & Hopkins, 1998). An important component of LMX is building personal relationships, and this is possibly a characteristic that lacks in transactional psychological contracts. Additionally, studies have found moderate to small negative correlations between LMX and transactional psychological
contracts (Liao & Chen, 2018). This furthers the notion that we will see negative correlations when asserting the relationship of social exchange-based leadership to transactional psychological contracts (Figure 2). Thus, I suggest the following hypothesis:

**Hypothesis 2c** Social exchange-based leadership is negatively related to transactional psychological contracts.

**Ethical/Moral Leadership Theories and Psychological Contract Breach**

Ethical or moral leadership styles are value-based styles and we have seen a resurgence of research since the 1990s (Hernandez, Eberly, Avolio, & Johnson, 2011). All emphasize the importance and consequences of altruistic behavior of leaders. In this study, I include ethical, authentic, servant and spiritual leadership that pertain to the thematic categorization suggested by Dinh et al. (2013). These are the only ethical or moral leadership styles that have been researched in relation to psychological contracts (see Figure 2).

Authentic leadership is a leader’s pattern of acting with transparency and promoting a positive, ethical work environment. A key concept of this leadership style is also to promote positive psychological capabilities, and to contribute to employees’ self-development (Avolio et al., 2008). Spitzmuller and Ilies (2010) found a convergence of relational authentic leaders and transformational leadership behavior. However, as argued in the review of authentic leadership by Gardner et al. (2011), the styles are dissimilar in their emphasis of acting based on principles and values. Authentic leaders make decisions according to their beliefs even if those values do not necessarily benefit others. Based on these arguments authentic leadership is most appropriately placed among other value-based styles like ethical/moral leadership.

Leaders adopting an ethical leadership style are, according to a review by Brown and Trevino (2006), “...honest, caring and principled individuals who make fair decisions” (p. 597). They maintain a standard of ethical conduct in their organization and aim to promote and communicate this standard regularly. Ethical leadership is also frequently studied in abusive supervision literature reviews as the positive form of leadership that is opposite to abusive supervision (Aryee et al., 2007; Oh & Farh, 2017). Considering the transparent and fair behavior an ethical leader may display, I expect to see little relation to any form of perceived contract breach. In fact, some studies have found moderate to large correlations between ethical leadership
and psychological contract fulfillment (Ahmad et al., 2019; Erkuțlu & Chafra, 2014; Tseng & Wu, 2017a). Followers may see an ethical leader as a person who consistently follows up on their expected obligations. Should these expectations ever fall short, this belief of their leader’s fairness and trustworthiness could attenuate the perceived feeling of breach. Psychological contract fulfillment has indeed been positively identified as related to ethical leadership (Tseng & Wu, 2017). As styles within this thematic category of ethical/moral based leadership (Tseng & Wu, 2017) promote leader transparency, openness and fairness, I expect the following:

**Hypothesis 3** Ethical/moral based leadership styles are negatively related to psychological contract breach.

**Neo-Charismatic Leadership Styles and Psychological Contract Breach**

Transformational and transactional leadership are currently the most relevant styles in modern research. The neo-charismatic leadership styles make up 39% of the total leadership articles reported by Dinh (2014). In the bibliometric leadership review by Zhu et al (2019) transformational leadership articles appear up to four times more frequently than the second most frequent leadership style. The term neo-charismatic leadership was first used by House and Aditya (1997) who argued the similarity of the thematic category’s leadership theories by several factors. First, these theories attempt to assert how leaders may lead their business to success in entrepreneurial efforts or difficult challenges for the organization. Second, they all describe how leaders can, for example, motivate employees, increase productivity, and gain respect and loyalty from employees. Third, neo-charismatic leadership styles share their emphasis of leader behavior inspiring ambition, empowerment, and role modeling and creating an intellectually stimulating, positive environment. Lastly, all leader behaviors result in higher productivity, and general well-being with collectively shared visions (House & Aditya, 1997).

Only transformational and transactional leadership are defined and investigated in this paper as they are the only ones currently researched in relation to psychological contracts (see Figure 2). Even though Dinh et al. (2013) categorizes transactional leadership with these other styles, I propose some additional separate hypotheses for transactional leadership. Transactional leadership is a behavioral-based style where reward or punishment for performance serves as the main instigator for employees. It emphasizes exchange of economic values between the employee
and the employer and is less focused on relational qualities like other neo-charismatic leadership styles. Similar to psychological contracts, it is an agreement, but more specifically on the compensation for an employee’s specific level of performance (Jabeen, Behery, & Abu Elanain, 2015). This is the main difference between transactional and transformational leadership. For temporary workers, these economic transactions between a leader and an employee sets a boundary of what is demanded from each party without extra relational options. Transactional leadership may be positively related to the transactional contract as it disregards the social and relational aspects of leadership but appeals to explicit monetary agreements. It therefore makes sense to further investigate transactional leadership separately from the other neo-charismatic leadership styles. Indeed, studies have shown a positive relationship between transactional leadership and transactional psychological contracts (Jabeen, Behery, & Abu Elanain, 2015; Syrek & Antoni, 2017).

Even though transactional leadership does not prioritize the relational aspects of the leader-follower relationship, it does not negatively affect the relational contract itself. Jabeen, Behery and Abu Elanain (2015) and Syrek and Antoni (2017) both find transactional leadership to be positively related to relational psychological contracts as well. This could perhaps be because the transactional leader still takes care of employee goal fulfillment by means of rewards or reprimanding unlike a laissez-faire type of leadership. While transactional leaders perhaps do not think of nurturing long-term relationships, they do constantly watch over their employees while making sure rules are properly administered. Therefore, I suggest the following:

**Hypothesis 4a.** Transactional leadership is positively related to the transactional contract.

**Hypothesis 4b.** Transactional leadership is positively related to the relational contract.

Transformational leadership is defined as a leadership style that inspires followers to go beyond what is expected of them and steer them in a way that benefits the organization even if such benefits are not extended to themselves (Bass & Riggio, 2006). It was originally coined in the seminal work by Burns (1978) as distinct from transactional leadership. It was further developed by Bass (1985) with more focus on the internal processes and the presumption that leaders can exhibit transformational as well as transactional qualities. Both authors are generally regarded as the pioneers of transformational and transactional leadership, and we see a particular rise in research popularity throughout the past decades. In fact, transformational leadership is
currently the most popular leadership style in terms of research frequency (Dinh et al., 2013; Zhu et al., 2019).

Transformational leadership has been found to influence intangible work outcomes like job commitment, but also more tangible type outcomes such as pay satisfaction. Potentially, the transformational leader promotes both their social well-being and their monetary compensation (Jabeen, Behery, & Abu Elanain, 2015; Syrek & Antoni, 2017). That could mean their psychological contracts are less likely to be breached and employees are prone to experience healthy exchanges with employers. Epitropaki (2013) did find a negative relationship between transformational leadership and psychological contract breach. Considering these findings, I therefore expect a negative relationship between these neo-charismatic leadership styles and psychological contract breach. Thus, I suggest the following hypothesis:

**Hypothesis 4c.** Neo-charismatic leadership styles are negatively related to psychological contract breach.

Neo-charismatic leadership styles should generally be positively related with relational and transactional psychological contracts. Transformational leadership has been found positively related to both relational and transactional contract types (Jabeen, Behery, & Abu Elanain, 2015; Syrek and Antoni, 2017). Furthermore, it makes sense that transformational leadership shows a relationship to both contract types. Bass (1985) argued that the transformational leader exhibits both transactional and transformational qualities. Several authors have supported this view (Odumeru & Ogbonna, 2013). However, this suggests that transactional and relational expectations are most likely met by the transformational leader. I thus expect the following:

**Hypothesis 4d.** Neo-charismatic leadership styles are positively related to relational psychological contracts.

**Hypothesis 4e.** Neo-charismatic leadership styles are positively related to transactional psychological contracts.
Destructive/Abusive/Toxic Based Leadership and Psychological Contract Breach

Destructive, abusive, or toxic leadership is strictly negative and detrimental leadership behavior. Several other terms are used for these clusters of behaviors (e.g., followers’ susceptibility, destructive fellowship or abusive supervision, Dinh et al., 2013). All produce comparable outcomes, but abusive supervision/leadership is the most frequently researched. Only abusive supervision is defined in this paper as it is currently the only specific term found in relation to psychological contract research (see Figure 2). Abusive supervision is defined by Tepper (2000) as employees’ perceptions of hostile behavior from leaders. Naturally, most employees do not expect to receive any sustained harassment in their workplace, and generally desire a positive environment. Abusive supervision became a popular research topic after Tepper (2000) conceptualized and proposed its many negative consequences such as: lower job and life satisfaction and other emotionally damaging outcomes. Some studies do indeed find abusive leadership to be positively related to contract breach (Pradhan et al., 2020; Wei & Si, 2013). Abusive supervision has according to Pradhan et al. (2020) been positively associated with employees’ intention to quit, mediated through psychological contract breach.

If employees lose trust in their leaders due to their abusive behavior, they should naturally perceive psychological contract breach. Strong to moderate correlations have been found between abusive supervision and trust, further supporting this idea (Xiaqi et al., 2012). Based on previous findings and a negative association of trust and breach, I expect all leadership styles in this cluster to be positively related to contract breach (Robinson, 1996).

**Hypothesis 5** Destructive/abusive/toxic based leadership is positively related to psychological contract breach.
Figure 2

Hypotheses based on existing research in leadership and types of psychological contracts.
Method

Literature Search and Criteria for Inclusion

To extract and identify relevant articles for this meta-analysis, I used several different methods and resources. It should first be prefaced that Raeder et al. (2019) had already conducted a thorough and comprehensive literature search on the string “psychological contract”. Articles retrieved by Raeder et al. (2019) include studies up to 2018. As this search is not completely up to date it was first necessary to perform a new search to add more recent studies. The reference bank was downloaded and imported into reference software (EndNote X9.3.3). I then conducted a thorough electronic search in the Web of Science Core Collection, PsycINFO, PubPsych and Scopus. The keyword “psychological contract” was used in all databases, and only studies in the years 2018-2020 were included. Additionally, “psychological contract” had to be mentioned in the title, keywords, abstract or topic. The search resulted in initially 1440 studies, but these were then cross-checked for duplicates, resulting in a total of 837 studies. Combining this updated list of studies (n=837) with the library provided by Raeder et al. (2019) (n=1595), 2432 studies were accumulated. However, some studies overlapped with studies from the preexisting reference bank, so further duplication removal was necessary resulting in a total of 2257 studies.

Studies were included if: (a) they studied leadership and psychological contracts (contents, breach, fulfillment or violation) and (b) reported Pearson-type correlations (or similar recodable coefficients) of leadership in relation to measures of psychological contracts. As previously mentioned, I followed the exact same practice as Zhao et al. (2007) of including fulfillment correlations in this meta-analysis recoded as breach data. Effect sizes of fulfillment were reversed to gain effect sizes of breach and were thus included even if not specifically hypothesized. Studies were screened in an online reference management application (Rayyan; Ouzzani et al., 2016). Studies were only retained if they were published in English or Norwegian. The initial screening resulted in a total of 435 studies fitting the first criteria. Additional studies were excluded if they were qualitative, theoretical or failed to provide usable correlations. After this process 67 studies fit both criteria for inclusion and were retained.
Coding of Studies and Meta-Analytic Procedures

Screening on articles retained with the first criteria was performed by two independent researchers to ensure higher accuracy: the author and a fellow master student writing their thesis on psychological contracts. It was not necessary to do this screening for the first stage of the literature search, as this coding was already performed by Raeder et al. (2019). If studies included several measures for the same sample, all effect sizes were averaged and entered as one sample. This was necessary to prevent bias from a false and inflated sample size (Moeyaert et al., 2016; Schmidt & Hunter, 2015; Wood, 2007). Some studies also used the terms psychological contract violation and breach interchangeably. To solve this problem, I used a common definition of breach for the coding process (Bal et al., 2008; Zhao et al., 2007). Thus, if psychological contract violation was defined as perceiving a breach of psychological contracts instead of the emotional effect it caused, it was coded as breach. All leadership styles were coded based on their category of leadership (e.g., LMX was coded as social exchange-based leadership, or transformational leadership as neo-charismatic leadership; Dinh et al., 2013). Studies were double checked for any further sample duplication for authors with more than one retrieved article. The full list of retrieved articles with their respective variables and sample sizes is provided in Appendix 1.

The meta-analytic methods are based on procedures suggested by Schmidt and Hunter (2015). This is the most common random effects method used to perform meta-analyses in the field of industrial and organizational psychology. One of its primary strengths is the ability to identify and correct sources of error to find a true population effect. These sources could for example be sampling error and reliability of measurements (Field & Gillett, 2010). Using the Excel sheet developed by Bosco and Aguinis (2013), meta-analytic calculations were conducted. First, the weighted uncorrected mean effect sizes ($\bar{r}$) were found for each leadership-psychological contracts measure. I also report the 95% confidence interval for this uncorrected $\bar{r}$. This shows an approximation for the range and variability in mean effect sizes. All studies were then corrected for attenuation following formulas provided by Schmidt and Hunter (2015).

As a prerequisite for these corrections reported reliabilities of the studies’ methods of measurement are needed. However, some studies did not report any reliabilities for their measurements of leadership or psychological contracts variable. As suggested by Zhao et al. (2007), the average reliabilities for each study’s measure were used as replacements. For example,
if a study on LMX and psychological contract breach did not provide the reliability of LMX, an average of other studies’ LMX reliabilities was used. Vice versa, the same was done for any psychological contracts measure as well. The final true weighted effect sizes after correcting for this attenuation in measurement error is denoted by ($\tilde{r}_c$). A credibility interval of 90% is provided; showing the approximate variability of effect sizes in each study, based on the corrected standard deviation (Zhao et al., 2007). Additionally, the number of studies ($k$) and sample size (N) is reported.

**Results**

All correlations between leadership and types of psychological contracts are provided in Table 1. Hypothesis 1 predicted that all leadership styles are related to psychological contracts. As expected, meta-analytic calculations point to a moderately strong correlation between all types of positive leadership styles and positive psychological contracts, $\tilde{r}_c = .417$, CI [.320, 406]. Thus, due to the confidence interval (CI) not being zero, Hypothesis 1 is supported.

Hypothesis 2a predicted that social exchange-based leadership is negatively related to psychological contract breach. LMX was the only social exchange-based leadership style investigated in relation to psychological contracts. A moderately strong negative relationship between social exchange-based leadership and psychological contract breach was found, $\tilde{r}_c = -.449$, CI [-.471, -.323]. Because of the confidence interval not being zero, Hypothesis 2a is supported. Hypothesis 2b predicted a positive relationship between social exchange-based leadership and relational psychological contracts. However, not enough studies were available to perform meta-analytic calculations. Due to explicit, short-term monetary compensation being a primary emphasis of transactional psychological contracts, a negative relationship between social exchange-based leadership and transactional psychological contracts was expected in Hypothesis 2c. A negative correlation between social exchange-based leadership and transactional psychological contracts was found, $\tilde{r}_c = -.196$, CI [-.262, -.045]. With zero not being included in the CI there is support for Hypothesis 2c.

Hypothesis 3 predicted that ethical/moral leadership styles were negatively related to psychological contracts. As predicted, there was a moderately strong negative correlation between ethical/moral leadership styles and psychological contract breach, $\tilde{r}_c = -.417$, CI [-.453, -.289]. The CI is not zero in either lower or upper bounds. Thus, support was also found for Hypothesis 3.
Leadership that emphasizes monetary value for compensation rather than relational value should usually be ideal for employees seeking short-term contractual employment with only economical gain as motivation. Especially due to transactional leaders being highly enforcing of predetermined rules and agreements. Thus, Hypothesis 4a predicted that transactional leadership was also positively related to transactional psychological contracts. As expected, a moderately strong and positive correlation was found between transactional leadership and transactional psychological contracts, $\tilde{r}_c = .534$, CI [-298, .555]. The confidence interval is not zero in either lower or upper bounds, supporting Hypothesis 4a. Because transactional leadership is a positive leadership style contrary to a laissez-faire or toxic approach, Hypothesis 4b predicted it to be related to relational psychological contracts. A positive relation between transactional leadership and relational psychological contracts was found, $\tilde{r}_c = .499$, CI [.404, 428] with zero not being present in either upper or lower bounds of the confidence interval. Therefore, support for Hypothesis 4b was found.

Because of the neo-charismatic leaders’ openness with their employees and their commitment to the employees’ emotional and social well-being, it was expected in Hypothesis 4c that neo-charismatic leadership does not promote any breach. A moderately strong, and negative relationship between neo-charismatic leadership and psychological contract breach was found, $\tilde{r}_c = -.538$, CI [-.494, -.450], with a non-zero confidence interval. This shows support for Hypothesis 4c. Transformational leaders may display qualities from both leadership styles, so a positive relationship with both relational and transactional psychological contracts was expected in Hypothesis 4d and 4e. As expected, a positive and moderately strong relationship was found with both relational psychological contracts, $\tilde{r}_c = .495$, CI [.267, 544] and transactional psychological contracts, $\tilde{r}_c = .385$, CI [.222, 404]. The CI excluded zero in upper and lower bounds for both relationships. Thus, support was found for both Hypothesis 4d and Hypothesis 4e.

Abusive, toxic, or destructive leadership should be detrimental to several work outcomes. It was expected in Hypothesis 5 that because none of the leadership styles within this category display any positive qualities it should be positively related to psychological contract breach. A positive moderately strong relationship was found between destructive leadership and psychological contract breach, $\tilde{r}_c = .362$, CI [.222, .404], with zero excluded from the confidence interval. Therefore, support for Hypothesis 5 was found.
Table 1
*Meta-Analysis Results of the Main Effect of Leadership*

<table>
<thead>
<tr>
<th>Leadership</th>
<th>k</th>
<th>N</th>
<th>(\bar{\bar{r}})</th>
<th>(\bar{r}_c)</th>
<th>(\sigma_\rho)</th>
<th>(Q)</th>
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<th>90% CRI</th>
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<td></td>
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<td></td>
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<td>-.196</td>
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<td>.404</td>
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</table>

*Note.* \(\bar{\bar{r}}\) = sample-sized weighted mean; \(\bar{r}_c\) = actual estimated population effect size after correcting measurement error in predictor and criterion; \(\sigma_\rho\) = standard deviation of population effect size; \(k\) = number of studies; \(N\) = total sample size; CI = confidence interval; CRI = credibility interval; PCB = psychological contract breach; TPC = transactional psychological contract; RPC = relational psychological contract; ***\(p < .001\)
Table 2

*Overview and frequency over leadership studies in relation to psychological contracts*

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<th>Thematic Categories of Leadership + Transactional Leadership</th>
<th>$k$</th>
<th>Frequency</th>
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</table>

Note. $k$= number of studies; Frequency= percentage of articles retrieved per thematic category of leadership + transactional leadership

**Discussion**

The aim of this study was to investigate the relationship between leadership and psychological contracts. The current study is to the author’s knowledge the first meta-analysis synthesizing findings from leadership in relation to psychological contracts research. By empirically comparing all available leadership styles to measures of psychological contracts, a relationship between leadership and psychological contracts was supported which attests to the importance of positive leadership in the workplace. More specifically, all positive leadership categories were negatively related to psychological contract breach (social exchange-based leadership, neo-charismatic leadership, and ethical leadership), while negative leadership styles within the destructive/abusive leadership category were, as predicted, positively related to psychological contract breach.

Additionally, LMX was negatively associated with transactional psychological contracts, while leadership styles within the neo-charismatic category were generally found positively related
to both transactional and relational psychological contracts. It should be noted that only two studies were found for the LMX-TPC relationship. However, these findings were expected considering the distinct lack of emphasis placed on the quality of relationships in transactional psychological contracts in direct contrast to LMX. This suggests that the higher quality of a transactional psychological contract an employee experiences, the worse their employee-employer LMX relationships are. On the contrary, employees with high relational and transactional psychological contracts have better employee-employer relationships with neo-charismatic leaders. While destructive/abusive leadership was positively correlated with psychological contract breach, the correlation was only low to moderate in comparison to positive leadership styles which generally had (if reversed) a stronger relationship with psychological contract breach. This could perhaps suggest that there is a more noticeable preventative effect on breach through positive leadership styles than expected. Such a notion was initially predicted considering its often-reversed relationship in research to styles such as ethical leadership (Aryee et al., 2007; Oh & Farh, 2017).

**Theoretical Contributions**

The first major theoretical contribution made by this paper is compiling and synthesizing current primary research on leadership and psychological contracts. With growing amounts of individual studies in psychological contracts research, Rousseau and Tjioriwala (1998) argued the need for a more systematic approach. This present study responded to this need of a systematic approach by performing a thorough meta-analysis. Very few meta-analyses currently exist on psychological contracts, and none of them study its relation to all forms of leadership. Performing a meta-analysis has benefits in terms of representativeness and strong statistical accuracy. This is because primary studies are prone to have some form of measurement error possibly resulting in slightly skewed correlational outcomes. Based on the methods of Schmidt and Hunter (2015), the present study synthesized research and corrected for such measurement errors and bias which provided true population effect sizes of all relationships. Furthermore, as argued in current literature reviews, leadership is a largely diverse field of study with many styles of leadership behavior (Dinh et al., 2013; Zhu et al., 2019). By empirically defining each type of major leadership style, this study reviewed all types of leadership in relation to psychological contracts research. This clearly defined analysis gives researchers a better understanding of similarities and dissimilarities of leadership regarding psychological contracts. With solid, clear cut terms of
leadership styles future researchers may easily determine areas warranting further investigation. For example, social exchange-based leadership was found heavily prioritized in research compared to other thematic categories. Table 2 shows this rather large discrepancy in the number of articles on social exchange-based leadership compared to other highly relevant leadership styles like neo-charismatic and ethical/moral ones. Similarly, findings present an overview of which parts of current psychological contracts research that are emphasized in relation to leadership. It was for example confirmed that breach was more popular than contents, and this was confirmed for every leadership style but neo-charismatic ones.

The second major theoretical contribution made by the present study is helping researchers better understand how leadership behavior affects employer-employee psychological contracts. A vast amount of leadership styles exists, and by using current leadership reviews, this study made calculations based on previous empirical definitions of thematic categories of leadership. Before this meta-analysis, there existed little comparison of negative and positive leadership styles in regard to psychological contract breach. As shown by Zhao et al. (2007) many detrimental work outcomes stem from psychological contract breach. Understanding which and how these leadership styles affect breach may thus be very beneficial for both leadership and psychological contract research. Most major positive leadership styles identified in this paper were negatively related to breach. In contrast, negative leadership styles were found positively related to breach. This falls in line with the ideas proposed by Hill et al. (2016) that leaders holding positive relationships with their employees should reduce perceived breach. An important outcome of these findings is detailed insight into how relationships between specific leadership styles and measures of psychological contracts differ.

Findings from this meta-analysis demonstrated how emphasis of social and relational aspects in LMX affect transactional psychological contracts differently than transformational leadership. Additionally, findings indicate that transactional leadership’s inclusion into the neo-charismatic thematic category of leadership could perhaps be too crude. There was indeed an association between transactional leadership and transactional psychological contracts, but this relationship was much stronger in comparison to other neo-charismatic styles. However, as was expected, little difference was found between transactional and other neo-charismatic leadership styles in their correlations to relational psychological contracts. This shows that there may be a
difference in how specific properties of transactional leadership function in relation to transactional psychological contracts as opposed to neo-charismatic leadership styles like transformational leadership.

Limitations and Future Research

Although the present study took measures to prevent errors and bias through standard meta-analytic procedures, it was not without limitations. Because only one study examined the relationship between LMX and relational psychological contracts, it was impossible to perform a meta-analysis on Hypothesis 2b. It could have proven quite beneficial to attain further studies on this to be able to further explore the differences between social exchange-based and neo-charismatic leadership in regard to the contents of psychological contracts. Whereas social exchange-based leadership was negatively associated with transactional psychological contracts, neo-charismatic leadership was positively associated with both types of psychological contracts. Future studies should therefore focus less on psychological contract breach and study the relationship between LMX and psychological contract contents. Not unexpectedly, 50% of the total amount of leadership articles in this meta-analysis studied LMX in relation to psychological contracts in some way. Although meta-analytic methods by Hunter and Schmidt were applied to prevent bias as much as possible, the existence of such a divergence should be noted by future researchers.

While the study initially prepared several categories of leadership based on current reviews, only LMX was found for social exchange-based leadership. It could benefit the generalizability of results on the social exchange-based leadership category if more of its leadership styles were available in research. However, it does seem that according to the categorization by Dinh et al. (2013), there really are not many other relevant leadership styles available. LMX is the improved and currently relevant leadership theory in the social exchange-based leadership category. Researchers may hold more interest in LMX due to its similarity in theoretical background (social exchange theory) with psychological contract research. However, this does not reduce from the importance of other forms of leadership behavior. Among the retrieved studies, only three of them study the relationship between neo-charismatic leadership styles and psychological contract breach. This limited the value of meta-analytic tests between these variables. The popularity of transformational leadership is well established in both Dinh et al. (2013) and Zhu et al. (2019).
Thus, the lack of psychological contract breach studies on this thematic category may warrant further investigation in order to remove such meta-analytic limitations. A contrast however is seen in the thematic category of ethical/moral leadership where research on contents was nonexistent. This could limit the overall comparability of thematic categories. These are also highly relevant leadership styles where more emphasis should be placed on investigating a relationship with psychological contract contents. How ethical or authentic leaders compare with other leaders in maintaining social and transactional expectations could give a more detailed image of the leader-pc relationship beyond this meta-analysis.

Some studies provided several measures on either leadership or psychological contracts, which posed a methodological challenge to the study. The same sample had to be listed for all the measures causing inflated sample sizes. It would be more beneficial to have multiple samples for each type of measure. As this was not possible, samples were entered once with averaged correlations as suggested by several authors (Moeyaert et al., 2016; Schmidt & Hunter, 2015, pp. 435-452; Wood, 2007). This is however a methodological limitation that made it difficult to synthesize some of the separate findings in some larger studies. A suggested remedy to this would obviously be for studies in the future to have several samples for each measure of leadership style or psychological contract criterion. Lastly, a somewhat debated limitation in meta-analytic methodology in the scientific community is the file-drawer issue. As a master’s degree student, it was impossible for me to solve the file-drawer issue as I cannot gain access to these papers. However, previous meta-analyses in organizational psychology have often applied formulas such as Rosenthal’s Fail-safe N to address possible publication bias, but this tradition has in recent years been found unnecessary. Studies from the recent decade have shown the file-drawer issue to be less of an issue than previously believed by researchers (Dalton et al., 2011; Keim et al., 2014).

Practical Implications

This study poses several positive practical implications. First of all, positive leadership styles appear to be quite beneficial in preventing psychological contract breach. Based on the present study’s results, social exchange-based leadership, neo-charismatic leadership and ethical leadership are all negatively related to breach. Psychological contract breach has many detrimental work outcomes which can be prevented by leaders and organizations being aware of their leadership behavior. For example, according to these results there is a higher relationship between
negative leadership and contract breach. Noticing and being aware of characteristics of these negative leadership styles, organizations can prevent employees perceived psychological breach. This in turn could result in lower turnover intention, higher job satisfaction and better performance among many other work outcomes negatively associated with contract breach (Zhao et al., 2007).

A second practical implication is that positive leadership may preserve relational psychological contracts during organizational change. A study on organizational change and ethical leadership by Sharif and Scandura (2014) argued that ethical leaders were immensely beneficial to affected employees. Similarly, Furst-Holloway and Cable (2008) demonstrated the importance of positive relationships between employees and leaders in face of organizational changes. According to the findings of this study, ethical/moral and neo-charismatic leadership styles are related relational to psychological contracts. In other words, leaders will maintain their relational psychological contracts with employees even when facing organizational changes.

**Conclusion**

The present study adds to current leadership and psychological contract research by synthesizing and providing a previously nonexistent meta-analytic overview of the relationship between the two increasingly popular areas. First, leadership was found significantly related to psychological contracts. More specifically, all positive leadership styles: social exchange-based leadership, neo-charismatic leadership and ethical/moral leadership were significantly negatively related to psychological contract breach, while destructive/abusive leadership was significantly positively related to breach. Transactional leadership and ethical/moral leadership were also positively related to transactional psychological contracts and relational psychological contracts, but there were not enough studies to perform a review for social exchange-based leadership. The present study also mentioned several suggestions as to where future research should be heading in regard to leadership and psychological contracts. A lack of studies on neo-charismatic leadership styles and psychological contract breach was found, and conversely articles on ethical/moral leadership in relation to psychological contract contents were particularly lacking. Studies in the future should pay less attention to the overrepresented social exchange-based leadership (LMX), and more to other highly popular leadership styles in relation to both breach and contents. Understanding how leaders’ behavior affect the psychological contracts of employees may provide
several important workplace benefits, and could prevent negative work outcomes through reducing perceived contract breach.
References


Maier, C. (2010). *The impact of leadership on employees' attitudes towards their pay.* [Doctoral dissertation, Universität Trier] https://doi.org/10.25353/ubtr-xxxx-7a03-9c82


Philipp, B. L. U., & Lopez, P. D. J. (2013). The moderating role of ethical leadership: Investigating relationships among employee psychological contracts, commitment, and citizenship


Yin, J. L., & Wu, X. (2009). *The empirical research on the relationships between perceptions of organizational practices and psychological contracts - Using knowledge employees as research participants*. https://doi.org/10.1109/ICMSS.2009.5305156


(Appendix below)
APPENDIX 1

List of all studies retrieved and their measured variables

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<td>Tziner et al. (2017)</td>
<td>LMX</td>
<td>PCB</td>
<td>716</td>
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<td>Wang et al. (2010)</td>
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<td>PCV</td>
<td>675</td>
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<td>Wu and Chen, (2015)</td>
<td>EPL</td>
<td>PCF</td>
<td>258</td>
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<tr>
<td>Yin and Wu, (2009)</td>
<td>LMX</td>
<td>RPC, TPC</td>
<td>432</td>
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<tr>
<td>Zageneczyk et al. (2013)</td>
<td>MCV</td>
<td>PCB</td>
<td>262</td>
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<tr>
<td>Zageneczyk et al. (2014)</td>
<td>MCV</td>
<td>RPC, TPC</td>
<td>199, 156, 152</td>
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</table>

Note. PC = "Psychological Contract"; PCF = "Psychological contract fulfillment"; PCB = "Psychological contract breach"; PCV = "Psychological contract violation"; RPC = "Relational Psychological Contract"; TPC = "Transactional Psychological Contract"; ELS = "Ethical leadership style", TL = "Transformational Leadership";
BOL = "Brand-Oriented Leadership"; SL = "Servant Leadership"; LMX = "Leader-Member Exchange"; ABS = "Abusive supervision"; BL = "Benevolent Leadership"; TRL = "Transactional Leadership"; ALS = "Authoritarian Leadership"; BNV = "Benevolent Leadership"; MOL = "Moral Leadership"; ACL = "Authentic leadership"; EPL = "Empowering Leadership"