

The effect of transformational leadership and empowerment on organizational commitment and employee effectiveness in Germany

Mark Nikolai Billstein¹

¹*Faculty of Business and Economics, Mendel University, Brno, CZ*

mark.billstein@gmail.com

Abstract— German small and medium-sized organizations (SMEs) will face problems in retaining qualified employees and remaining competitive in the future. The change to a more transformational and empowered leadership culture seems to provide an opportunity to increase employee retention and effectiveness in the long term. However, there are not enough studies in the literature that allow a generally valid statement for any type of organization and geographic region about the effect of transformational leadership and empowerment on the employee behavior. The results of this study should lead the way for future research and enable German SMEs to better prepare themselves for the future challenges of long-term employee retention and the resulting shortage of skilled workers. Using a systematic literature analysis and the statistical evaluation of 434 data sets, from German SMEs, both the theoretical and practical perspectives were merged. The consolidation of both perspectives should increase the awareness of German SMEs about the impact of the leadership culture on the organizational commitment and employee effectiveness. Transformational leadership and employee empowerment were examined as essential impact factors for the employee behavior in this context. The results show that transformational leadership and employee empowerment, each as an independent variable, have a positive effect on organizational commitment and employee effectiveness. These findings, for the German region, are consistent with the literature. Ultimately, this study succeeds in providing German SMEs the knowledge of controllable influencing factors, transformational leadership and employee empowerment, to react to the imminent shortage of skilled labour and to remain competitive in the long term.

Keywords— Transformational leadership, empowerment, organizational commitment, employee effectiveness

1. Introduction

In Germany in 2018, 99.5% of all companies were small and medium sized enterprises (SMEs). This makes SMEs to the engine of the German economy and with 57.6% of all employees obliged to pay social insurance, they employ the largest share of employees in Germany (ifm Bonn, 2020). However, these organizations are forced to increasingly challenge their existing leadership culture because their employees and their expectations of leadership have changed (Brodbeck et al., 2002). Due to the size of their workforce, SMEs often suffer from a lack of skills in organizational and personnel development. In most cases, personnel development is limited to the organization's management. Thus, organizations are increasingly rethinking their approach (Busse & Doganer, 2018). Many organizations have become highly specialized in their field, which also leads to new employee profiles within the organization (Matzler et al., 2008). Over the past 20 years, the academic level of employees has increased enormously, leading to a more heterogeneous employee structure. Consequently, the expectations of employees towards their leaders have also changed significantly in recent years. In addition, in most cases the regional location of the organization does not have a sufficient density of qualified employees and so it is difficult for SMEs to find and retain the right employees (Busse & Doganer, 2018). This makes it essential for German SMEs to rethink their existing leadership concepts and adapt them to the new requirements of their employees in order to remain competitive in the long term. High employee dissatisfaction with the leadership culture within the organization often leads to low performance and low organizational commitment. Employees want to take more personal responsibility and be actively involved in decision-making processes (Matzler et al., 2008). In this context, the literature has been increasingly talking about transformational leadership and empowerment of employees in order to increase employee performance and organizational commitment. Transformational leadership can be seen as an extension of transactional leadership. Transformational leadership is an attempt by leaders to inspire their employees to identify with the leader and the organization in order to achieve collective goals (Bass & Avolio, 1993; Wilkinson, 1998; Conger, 1998). The predominant presence of leadership integrity is reflected in transformational leadership because it encourages both loyalty and esteem for leaders (Ensley et al., 2006). As a result, followers transform their own interests for the benefit of the organizational goals. Empowerment is a psychological condition or set of perceptions in which employees are supposed to have control over their work and be able to make decisions on their own (Maynard et al., 2012; Zhang & Bartol, 2010). Leaders enable their employees to contribute their thoughts and be involved in the decision-making process, which in turn promotes the organizational commitment. Nevertheless, the enhancement of organizational commitment and employee performance can only be achieved through the empowerment of employees, assuming a certain

consistency in the actions of the leader and the compliance with an organization's code of conduct (Baird et al., 2018). Transformational leadership and empowerment have become part of new theories that investigate the ways in which human resource management methods can enhance the capability of employees to achieve the strategic goals of the organization. Accordingly, this study seeks to explore the relationships between transformational leadership and empowerment and employee's organizational commitment and performance in German SMEs.

2. Literature review

Leadership is one of the most studied areas in modern economics. A systematic literature review (SLR) was performed in order to examine the existing literature in a structured way with regard to the research topic of this study. The goal was to identify a research gap that serves as the basis for this study. The advantages of an SLR for a comprehensive review of a research topic in the literature are versatile. According to Klassen et al. (1998), the SLR is particularly distinguished by its structured approach. All studies relevant to a topic are identified, evaluated and synthesized in generalized statements. This type of literature analysis has its origins in medicine and politics, where it facilitates clinical or political decision-making in a transparent and objective manner (Tranfield et al., 2003). The SLR approach has been adapted and applied in other areas, such as management. It can help managers attain a more comprehensive view of topics and remain more impartial in their decisions (Thorpe et al., 2006). Due to the replicable and methodologically accurate approach of an SLR, this type of literature analysis is widely used for empirical research (Weed, 2005). The present review focuses only on empirical and conceptual studies that have explored transformational leadership and empowerment, and their impact on organizational commitment or employee effectiveness. For this reason, all articles which examine these variables should be analyzed to obtain a comprehensive overview of the existing literature in this area of research. All electronic databases, which were available through the author's university network, were searched for relevant articles. By using the vendor EBSCO, the following Databases were included in the SLR: Academic Search Complete, Academic Search Ultimate, Business Source Ultimate, EconLit with Full Text, ERIC, Library, Information Science & Technology Abstracts and Central & Eastern European Academic Source. Based on the keywords combination "transformational leadership," "empowerment," and "organizational commitment" or "transformational leadership," "empowerment," "effectiveness," "performance" and "efficiency" the existing literature for both focus topics, the impact of the independent variables on organizational commitment and on employee effectiveness, should be reviewed. Furthermore, the articles had to be written in English and be published in a peer-reviewed journal to be included in this SLR. The research region and year of publication were not considered when selecting the journals. In a first step, all eligible articles from the databases were incorporated into a table. In the second step the table was checked for duplicate articles (e.g., if an article occurred in more than one database), and the duplicates were excluded from the review. After all relevant articles were identified, a second, detailed screening of the articles was performed. The focus was on a full textual analysis of the articles using quality criteria, which should ensure that only articles that provide added value in answering the research question of this dissertation were selected. To be suitable for the literature analysis, a peer-reviewed article had to meet the following quality criteria: (1) it must discuss transformational leadership and empowerment and their impact on organizational engagement or employee effectiveness, (2) it must be an empirical or conceptual study (i.e., no books, book summaries or journalistic articles) and (3) it must be written entirely in English (e.g., not only the abstract should be in English). In the final step, all articles that did not meet all of the second screening criteria were excluded from the literature analysis. Ultimately, 46 articles were identified, which met the inclusion requirements for the SLR. In a second step, these articles were analyzed in more detail. Eleven articles were removed, because of duplicates, not written in English or no availability. At least, 35 articles were considered for this SLR. In the next step, these articles were clustered into groups. The first group investigated the keywords transformational leadership, empowerment and organizational commitment ($n = 12$). The second group of articles focused on the keywords transformational leadership, empowerment and employee effectiveness ($n = 15$). The third group researched organizational commitment, as well as employee performance ($n = 8$). The articles included in the final sample were published between 1999 and 2019.

To analyze and synthesize the results of the articles, the relevant information needed to be extracted. The matrix method of Garrard (1999) was used for the structured abstraction of all-important results from the articles. For a complete consideration of the previous research and its approaches, the following information was extracted: (1) What was the focus of the study? (2) What assumptions were made to investigate the research question? (3) Which methodological approaches were used to conduct the research? (4) What were the results of the research? The results were first recorded and summarized in a table. Altogether, this overview emphasizes that the relationship between transformational leadership and empowerment and the effects of these variables on organizational engagement or employee effectiveness have been researched and tested in a multitude of contexts, cultures and areas. However, it is not possible to generalize the relevance of the research on this topic to a specific industry or organization size by referring to the relevant articles. The sample consists of four conceptual studies and 31 empirical studies. The composition demonstrates that this topic has been investigated both conceptually and empirically and that the topic has an international scope, with studies from eight geo-graphic regions worldwide. Surprisingly, few studies had a European focus, and

none of the articles investigated the variables' relationship in Germany. Then, the SLR results from all 35 empirical and conceptual studies were synthesized, which can be seen in the results matrix below (see Table 1).

	Relationships of variables			
	Transformational leadership enhances employee effectiveness	Empowerment enhances employee effectiveness	Transformational leadership enhances organizational commitment	Empowerment enhances organizational commitment
Number of articles, which proved a positive relationship	15 (65%)	13 (50%)	14 (70%)	10 (50%)

Table 1: Results of systematic literature review

A total of four variable links were examined, which serve as a basis for answering the research question and reflect the state of the research on the effects of transformational leadership and empowerment on organizational commitment and employee effectiveness. One examined question was whether, according to existing research, transformational leadership has a positive effect on employee performance. This relationship was confirmed, with 65% of all relevant articles proving this relationship; this connection was positively investigated by a total of 15 articles. Saleem et al. (2019), among others, demonstrated that there is a significant positive correlation between these two variables (see also Wang & Howell, 2012; Kollmann et al., 2013). It can be concluded that the literature, with a confirmation rate of only 50%, is divided on whether empowerment increases employee effectiveness. According to Lee et al. (2017), more empowered employees work more effectively than others. In contrast, Dierckx de Casterle et al. (2008) identified no direct link between empowerment and employee performance. Furthermore, there is a high level of agreement among the researchers regarding the effects of transformational leadership on organizational commitment. Seventy percent of the relevant articles confirmed that organizational commitment is higher than normal when applying transformational leadership (Saleem et al., 2019; Şahin et al., 2014; Asiri et al., 2016). As mentioned above in the case of employee effectiveness, there is no clear indication as to whether empowering employees alone leads to an increase in organizational commitment. The agreement rate among the articles of only 50%, that found a direct connection, is not sufficient to support this statement.

Important to notice is, that the percentages of Table 1 are based on different databases. Due the different research topics, the findings regarding the impact of transformational leadership and empowerment on organizational commitment is only considering the 20 relevant articles (12 articles focusing only organizational commitment and eight articles considering both output variables). The same approach was used for the results of employee effectiveness. For example, 65% of the 23 relevant articles on employee effectiveness supported a positive link between transformational leadership and employee effectiveness. Furthermore, even if this SLR was carried out in a structured and methodologically accurate manner, there are still some limitations to be considered in its execution. Only articles that were available in the author's university databases were included in the review. Additionally, the articles had to be peer-reviewed and written in English. All non-peer-reviewed articles and non-English language articles were consequently excluded. For this reason, there may be research in other languages or databases that would support, complement or refute the above-mentioned conclusions on the relationship among transformational leadership, empowerment, organizational commitment and employee effectiveness. Even considering these limitations, this literature analysis was successful in giving a general overview of the existing literature that investigates the relationship among transformational leadership, empowerment, organizational commitment and employee effectiveness. However, with only 35 relevant articles, this relationship was investigated within a very manageable framework. As mentioned above, no specific industry or organization size could be identified as a research focus for the relationship among the variables. Furthermore, no study focuses these relationships in German SME or even in Germany, which lead to a huge research gap. To close this research gap and to build the basis for future research the following hypotheses were derived.

3. Methodology

The right research design is of great importance when conducting a study. To answer the research question of this study, only primary research could be taken into consideration since employee effectiveness and organizational commitment are very difficult to understand and measure using existing data (Lowry, 2015). Furthermore, quantitative research was very appropriate for testing the previously established hypotheses of the present study (Brinkmann & Kvale, 2014). A standardized online survey was used to collect the necessary primary data. The online survey was highly suitable for the examination of the present research question since a large number of participants distributed all over Germany could be surveyed in a short time and at a manageable cost (Sue & Ritter, 2012). To guarantee a target-oriented survey, the structure of the questionnaire should be based

on the underlying research model and the hypotheses to be tested. This design was crucial for the observance of the quality criteria and for the results of the survey.

Research model and hypothesis

After a detailed analysis of the literature, it can be concluded that the relationships between transformational leadership and empowerment as input variables and organizational commitment and employee effectiveness have not yet been sufficiently investigated in Germany. Although there is a general consensus in the literature on the positive impact of transformational leadership on the organizational commitment and employee effectiveness, there is a lack of studies that support these effects in Germany. Furthermore, there is disagreement regarding the effect of empowerment on the dependent variables. As mentioned in the introduction, the right leadership culture is of crucial importance, especially for small and medium-sized organizations in Germany. Due to the smaller number of employees in the organization, the wrong leadership approaches can have a significant impact on the employee satisfaction and motivation. Employee absences or even layoffs have a significant impact on small and medium-sized organizations. For this reason, the following research framework will be used in this study to examine the respective relationships between input and output variables.

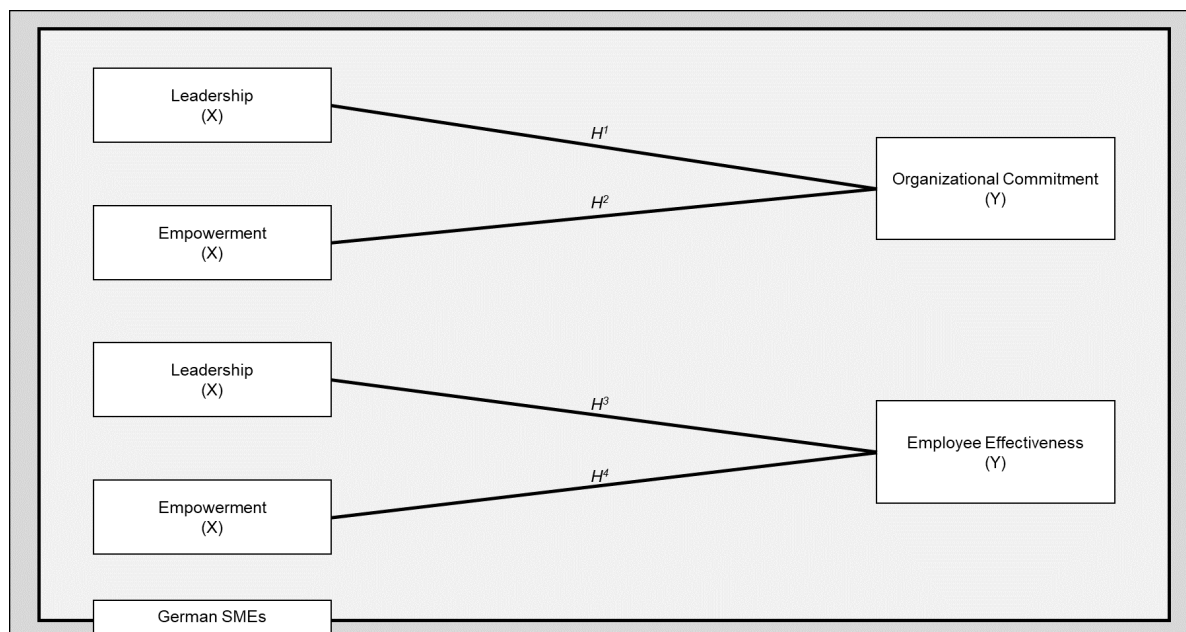


Figure 1: Visualization of research framework and hypotheses

By using the following hypotheses, the statistical evidence for the direct relationship between transformational leadership, empowerment, organizational commitment and employee effectiveness, in German SMEs, should be provided to prove the existing literature in other countries and to close the research gap in Germany.

H1: Transformational leadership (TL) will enhance the organizational commitment (OC).

H2: Empowerment (EM) will enhance the organizational commitment (OC).

H3: Transformational leadership (TL) will enhance the employee effectiveness (EE).

H4: Empowerment (EM) will enhance the employee effectiveness (EE).

Data collection

Data for the current study was collected by using an online questionnaire. The structure of the questionnaire was based on the research framework. Transformational leadership was measured with Mahar's (2004) 18-items transformational leadership questionnaire. To measure empowerment, the pretested 11-item scale of Kirkman et al. (2004) was used. Further, the present study used the 5-item scale of Kehoe and Wright (2013) to measure the organizational commitment. The employee effectiveness was quantified by using the scale of Koopmans et al. (2012), which consists of 18 items. For all items, a 5-point Likert scale was used. The questionnaire was distributed via numerous social media platforms (e.g., Facebook, Instagram), via

professional networks (e.g., Xing, LinkedIn) and in German SMEs. It was not necessary to make a special selection with regard to respondents' age or professional status, as the only requirement to participate was to be employed at a German SME. The subsequent exclusion of unsuitable datasets was done by means of the corresponding demographic questions. In total data of 631 employees was collected via the online survey. Considering the research focus of this study, the data sets of leaders and employees in organizations with more than 1000 employees were not part of the evaluation. Ultimately, the data of 434 employees was analyzed in this study.

Data analysis

The evaluation of the data should then be performed with the statistics software IBM SPSS Statistics Version 25. To ensure that the datasets were appropriate for evaluation, the reliability of the scales was examined by using Cronbach's Alpha. A subsequent factor analysis to merge the items into one factor was not necessary, as only already tested scales were used to test each variable. The demographic characteristics of the sample were then evaluated using descriptive statistical methods to more accurately interpret the hypothesis testing results. In the next step, the hypotheses were tested using inferential statistical procedures. For this research, a linear regression analysis was used. The aim was to model the relationship between two interval-scaled variables (Schneider et al., 2010). To additionally analyze the effect of one or more independent variables with respect to one or more dependent variables, a two-factor ANOVA is conducted (Green & Salkind, 2010; Hopkins, 2000).

4. Results

Demographic data

In general, the research was conducted by 434 people from small (47%) and medium (53%)-sized organizations in Germany. Participants were 55.5% female, 44.2% male, and the remaining 0.3% diverse. The majority of the respondents were between 26 and 30 years old. The second-largest group of respondents included people in the age group 20-25 years. In terms of the participants' academic qualifications, most participants had a bachelor's or master's degree. Eighty-seven percent of all respondents were employed at the time of the data collection. In addition, 119 participants had 1–2 years or 2–5 years of professional experience and even nineteen percent had more than 10 years of professional experience.

Reliability test

The reliability of the data was measured by Cronbach's Alpha. To assure reliable data, α must be greater than 0.7 (Schmitt, 1996). Further testing to verify the validity of the data is not necessary, since only previously tested scales were used for the survey. The results of the reliability test are shown in the table below.

Scale	Number of Items	Cronbachs Alpha α
Transformational Leadership	18	0,939
Empowerment	11	0,756
Organizational Commitment	5	0,917
Employee Effectiveness	18	0,848

Table 2: Cronbach's Alpha of used scales

All scales used in this study provide a high level of reliability. This is not surprising since only scales already used in other studies have been applied. For the same reason, no additional factor analysis is necessary for further evaluation of the data in this study in order to consolidate the individual items, per focus topic, into a factor. The individual items have already been checked sufficiently whether they load to the intended factor.

Regression analysis

Since the significance of the relationships between the interval-scaled variables has not yet been fully explored, this section describes how the hypotheses derived from the research model were tested using a regression analysis. A regression analysis is appropriate for data that fulfill the conditions of the Gauss–Markov theorem (Hallin, 2014). (1) Whether there is a linear relationship between the dependent variable and the independent variable, (2) if 0 as the error value of each value of the independent variable is valid as the expected value, (3) if there is random variation in the independent variable and if the independent variable has a variance and (4) if the necessary homoscedasticity is given. To verify the first prerequisite, all correlations of the variables were visually displayed and analyzed using a scatter diagram. The necessary linearity of the coefficients and the requirement for randomness in the sample were fulfilled by the underlying research model and the survey method. Therefore, the first requirement of the Gauss–Markov Theorem could be considered fulfilled. The second assumption of the theorem was verified by creating a scatter plot of the normalized estimated values of y (on the x -axis) and the normalized error values (residuals; on the y -axis). The scatter plot was used to visually verify that the average error throughout the range of estimated values was 0. Inferential statistical methods can also be performed for violations of the normal distribution

assumption with a sample size of $N > 30$, since the statistical methods are robust for violations of the normal distribution assumption with a sufficiently large sample (Schneider et al., 2010). Nevertheless, the model was carefully evaluated before using the corresponding parametric tests. The distributions of the relevant variables were, according to the initial estimation, approximately normally distributed according to single peak histograms and other distribution characteristics (i.e., position of the median close to the arithmetic mean, skewness and kurtosis, Q-Q plots). However, the results of the Kolmogorov–Smirnov test regarding the most extreme deviation could not confirm a normal distribution of the available data in the sample presented here. Significant deviations from the normal distribution could be determined. Furthermore, a first outlier analysis was conducted. Four mild outliers were found in the empowerment variable. After excluding the outliers, the relevant distribution characteristics were unchanged. Since the outliers were mild outliers (data points less than three standard deviations from the mean) and input errors could not be assumed (true outliers), they were initially left in the dataset. As a result, this requirement was met for all independent variables. The random variation and variance of the independent variables were checked using the existing scatter plot. After the distribution of the scatter plot was visually analyzed, the third requirement was also confirmed. Furthermore, the scatter plot was used to prove the fourth prerequisite, homoscedasticity. This was done with a visual comparison of the data points in the diagram. If the scattering of the data points does not show a clear pattern, it can be assumed that the error term causes the same variance over the entire range of the estimated values. In the final step, the normal distribution of the disturbance variables was analyzed with the help of a histogram of the standardized residuals and the analysis of statistical outliers to prove the independence of the residuals (Matson & Huguenard, 2007). The linear regression analysis continued by confirming the prerequisites of the Gauss–Markov theorem. The one-sided significance level upon which all methods were based was $\alpha = 0.05$. Values of $p < 0.05$ were interpreted as significant, values of $p < 0.01$ were regarded as highly significant, and values of $p < 0.001$ were treated as extremely significant. In addition to the significance, the effective strengths were calculated for the respective characteristic values. Values of $B > 0.1$ have a low effect strength, values of $B > 0.3$ have medium effect strength, and values of $B > 0.5$ have high effect strength (Hopkins, 2000). All the relationships studied, except for the effect of transformational leadership on employee effectiveness, show a significance level of less than 0.001 and are therefore extremely significant. Only the relationship between transformational leadership and employee effectiveness has a significance level of 0.05 and is therefore highly significant. Following this, each hypothesis was examined.

At the beginning of the regression analysis, H1 and H2 were evaluated. Based on these hypotheses, the effects of the independent variables transformational leadership and empowerment on the dependent variable organizational commitment were examined. The aim was to support or reject the hypothesis that there is a significant positive correlation between these variables, as identified in the literature review. Even if, as mentioned in the literature analysis, researchers agree on the connection, this finding needed to be examined in the context of the present research work in Germany. As of today, no reliable study in this geographic region has examined the underlying research model. With regard to the relationship between empowerment and organizational commitment in particular, researchers have been in disagreement. It was therefore necessary to examine this point again in the presented framework.

H1: Transformational leadership (TL) will enhance the organizational commitment (OC).

H2: Empowerment (EM) will enhance the organizational commitment (OC).

Variable	Unstandardized regression coefficient B (SE)	Standardized coefficient β	t-value	Sig. p
TL	.397	.317	8.171	.000
EM	.806	.498	12.843	.000
R^2	.492			
Corrected R^2	.489			
F (df = 2; 424)	205.23			

Table 3: Regression analysis results for the influence of transformational leadership (TL) and empowerment (EM) on organizational commitment (OC)

As Table 3 indicates, both relationships are extremely significant. Therefore, H1 and H2 were supported. With a corrected R^2 of 48.9%, the independent variables are well suited to explain the variance in the dependent variable. Furthermore, the unstandardized coefficient shows that transformational leadership (0.397) and empowerment (0.806) have a medium and high effect on organizational commitment, respectively.

In the following, the effects of the independent variables transformational leadership and empowerment on the dependent variable employee effectiveness are presented. In view of the disagreement in the literature (see Chapter 2) about the effect of empowerment on employee effectiveness, re-examining this relationship was necessary. For this reason, H3 and H4 were formulated and assessed.

H3: Transformational leadership (TL) will enhance the employee effectiveness (EE).

H4: Empowerment (EM) will enhance the employee effectiveness (EE).

Variable	Unstandardized regression coefficient B (SE)	Standardized coefficient β	t-value	Sig. p
TL	.073	.120	8.171	.005
EM	.430	.547	12.843	.000
R^2	.371			
Corrected R^2	.369			
F (df = 4; 431)	127.367			

Table 4: Regression analysis results for the influence of TL and EM on employee effectiveness (EE)

The results of the regression analysis H3 and H4 in Table 4 reveal, that these hypotheses were supported. The significance level of each variable in relation to employee effectiveness is well below 5%, even though the relationship between transformational leadership and employee effectiveness is only highly significant. However, transformational leadership has only a weak effect on employee effectiveness. In contrast, empowerment of employees has a strong positive influence on employee effectiveness.

5. Discussion

In the context of this study, the following research question should be answered: does the transformational leadership and empowerment of employees have a positive impact on the output factors organizational commitment and employee effectiveness in German SMEs? To answer this question, the existing literature was accessed with the help of a SLR, and, an online-based questionnaire with 434 respondents. The consolidation of the theoretical knowledge and the practical findings is discussed in the following, which is intended to provide the reader with a comprehensible answer to the research question. As shown in the literature, a positive relationship between transformational leadership and the output factors organizational commitment and employee effectiveness could be assumed for the German region. The present study supported this influence in German SMEs and even proved its extreme significance. However, these findings are surprising, since Germany in general is a country with a low power distance regarding Hofstede's (2010) cultural dimensions and all respondents come from SMEs. Experience have shown that the transformational leadership style is not yet widely established and that the familiar transactional style is still maintained in German SMEs. German organizations have developed through centralization, hierarchical leadership and the quest for efficiency. Today, they must learn to stay competitive through decentralized leadership, flexibility and innovation. To achieve this aim, organizations need to develop the right leadership approach. The development of leadership theories has shown that until only a few years ago, the transactional leadership style was still predominant, but in the current age, employees are placing more and more emphasis on motivation and leadership through transformational attitudes and measures. An initial insight is thus that German SMEs must eschew the idea of motivating their employees with monetary value and rather strive to achieve a common vision. Particularly for organizations that adhere to their old strongly hierarchical leadership styles and struggle to establish a more transformational leadership culture, the literature recommends empowerment as a first step toward transformational leadership. As a guided intervention to mobilize employees, it is intended to create new scope in the established system. Furthermore, the influence of empowerment on the output factors was supported for the German region. The study proved that employees in German SMEs in particular consider themselves to be more efficient and more connected to their organizations if they have greater freedom to solve tasks autonomously. Usually, especially in small

organizations, what is more common is a more directive style of leadership in which the leader defines clear guidelines on how tasks are to be performed. The focus of this study, on the employee's view, reveals that employees strive for more freedom and consider it to be performance enhancing. Therefore, the recommendation for German SMEs is to create a business environment in which employees have more independent decision-making power and thus carry out tasks more effectively and feel more committed to the organization. German SMEs could consequently succeed in retaining their employees in the long term, which would reduce costs and make them more competitive.

6. Conclusion

SMEs have a crucial impact on the German economy. They make up the majority of all organizations within the country and make a major contribution to Germany's international economic strength. In this context, the employees of these SMEs also represent a decisive factor in keeping Germany competitive in the long term. Employee satisfaction is therefore particularly important for organizations in order to ensure the long-term retention of employees and their performance. As the literature has sufficiently proven, the leadership culture within the organization is an important factor influencing employee satisfaction. Unfortunately, the predominant leadership culture in German SMEs is still a very transactional and hierarchical-oriented culture. However, in recent years the needs of employees have changed significantly, and organizations need to rethink. In the literature, the transformational leadership style and the empowerment of employees are the most common examples, which can positively influence employee satisfaction. As this study has shown, this positive correlation between transformational leadership, empowerment, organizational commitment and employee effectiveness can also be supported for the field of German SMEs. Regarding the individual relationships between the variables, a positive relationship between transformational leadership and organizational commitment and employee effectiveness could be demonstrated both in the literature and in the present study. In addition, the positive effect of empowerment on both output variables was demonstrated both theoretically and in practice. German SMEs are thus provided with initial starting points addressing which levers they can use to improve their performance in the long term. With more decision-making power, employees experience more trust in their work and feel more comfortable in the work they do. At the same time, the performance of work increases because the greater personal responsibility means that employees are more aware of the results of their work and try to deliver better results. This study should provide the first thoughts for German SMEs to adapt their leadership culture to the new requirements. Especially considering the current state of literature, this study closes the research gap on the impact of transformational leadership and empowerment on organizational commitment and employee effectiveness in German SMEs. However, some limitations for the interpretation of the presented research results have to be considered. Hence, the statements of this study, only refer to the assessments of employees from German SMEs, which have no leadership responsibility. The results can differ significantly if another research group, such as leaders or employees from larger organizations are included in the survey. This study only provides initial implications for German SMEs. However, for a generally valid statement about Germany, the research field should be expanded, and further studies should be conducted. Ultimately, this study was successful in identifying possible influencing factors for long-term employee commitment and performance to increase the awareness of German SMEs to rethink their current leadership culture in order to stay competitive in the long-term.

REFERENCES

- Asiri, S. A., Rohrer, W. W., Al-Surimi, K., Da'ar, O. O. & Ahmed, A. (2016). The association of leadership styles and empowerment with nurses' organizational commitment in an acute health care setting: a cross-sectional study. *BMC Nursing*, 15(1), 1-10.
- Baird, K., Su, S. & Munir, R. (2018). The relationship between the enabling use of controls, employee empowerment, and performance. *Personnel Review*, 47(1), 257-274.
- Bass, B. M. & Avolio, B. J. (1993). *Transformational leadership: A response to critiques*. In M. M. Chemers & R. Ayman (Eds.), *Leadership theory and research: Perspectives and directions* (pp. 49–80). San Diego: Academic Press.
- Brinkmann, S. & Kvale, S. (2014). *Interviews: Learning the craft of qualitative research interviewing*. London, England: Sage.
- Brodbeck, F. C., Frese, M. & Javidan, M. (2002). Leadership made in Germany: Low on compassion, high on performance. *Academy of Management Perspectives*, 16(1), 16–29.
- Busse, R. & Doganer, U. (2018). The role of compliance for organisational change. *Journal of Organizational Change Management*, 31(2), 334–351.
- Conger, J. A., & Kanungo, R. N. (1998). *Charismatic leadership in organizations*. Thousand Oaks, CA: Sage.
- Dierckx de Casterlé, B., Willemsse, A., Verschuere, M. & Milisen, K. (2008). Impact of clinical leadership development on the clinical leader, nursing team and care-giving process: a case study. *Journal of Nursing Management*, 16(6), 753–763.
- Ensley, M.D., Pearce, C.L. & Hmieleski, K.M. (2006). The moderating effect of environmental dynamism on the relationship between entrepreneur leadership behavior and new venture performance. *Journal of Business Venturing*, 21(2), 234–263.
- Garrard, J. (1999). *Health sciences literature review made easy: The matrix method*. Sudbury, MA: Jones and Barlett Publishers.
- Green, S. B. & Salkind, N. J. (2010). *Using SPSS for Windows and Macintosh: Analyzing and Understanding Data* (5th ed.). Upper Saddle River, NJ: Pearson Education, Inc.
- Hallin, M. (2014). *Gauss-Markov Theorem in Statistics*. Wiley StatsRef: Statistics Reference Online.
- Hofstede, G., Hofstede G. J. & Minkov, M. (2010). *Cultures and organizations: Software of the mind*. Revised and Expanded 3rd Edition. New York: McGraw-Hill.
- Hopkins, W. G. (2000). Measures of Reliability in Sports Medicine and Science. *Sports Medicine*, 30(1), 1-15.
- ifm Bonn (2020, 01.06). *Mittelstand im Überblick*. <https://www.ifm-bonn.org/statistiken/mittelstand-im-ueberblick/#accordion=0&tab=0>.
- Kehoe, R. R. & Wright, P. M. (2013). The Impact of High Performance Human Resource Practices on Employees' Attitudes and Behaviors. *Journal of Management*, 39(2), 366–391.

- Kirkman, B. L., Rosen, B., Tesluk, P. E. & Gibson, C. B. (2004). The impact of team empowerment on virtual team performance: The moderating role of face-to-face interaction. *Academy of Management Journal*, 47(2), 175–192.
- Klassen, T. P., Jahad, A. R. & Moher, D. (1998). Guides for reading and interpreting systematic reviews. *Archives of Pediatric & Adolescent Medicine*, 157(7), 700–704.
- Kollmann, T., Stöckmann, C., Krell, P., Peschl, A. & Buchwald, S. (2013). Integrating dependency on the leader and empowerment into transformational leadership - creative performance relationship. *Central European Business Review*, 2(1), 7-14.
- Koopmans, L., Bernaards, C., Hildebrandt, V., van Buuren, S., van der Beek, A. J. & de Vet, H. C. W. (2012). Development of an individual work performance questionnaire. *International Journal of Productivity and Performance Management*, 62(1), 6–28.
- Lee, A., Willis, S. & Tian, A. W. (2017). Empowering leadership: A meta-analytic examination of incremental contribution, mediation, and moderation. *Journal of Organizational Behavior*, 39(3), 306–325.
- Lowry, L. D. (2015). Bridging the Business Data Divide: Insights into Primary and Secondary Data Use by Business Researchers. *IASSIST Quarterly*, 39(2), 14–25.
- Mahar, T. A. (2004). *An Examination of the MLQ and Development of the Transformational Leadership Questionnaire*. Master thesis. Saint Mary's University, Halifax.
- Matson, J. E. & Huguenard, B. R. (2007). Evaluating Aptness of a Regression Model. *Journal of Statistics Education*, 15(2), 1-15.
- Matzler, K., Schwarz, E., Deutinger, N. & Harms, R. (2008). The Relationship between Transformational Leadership, Product Innovation and Performance in SMEs. *Journal of Small Business & Entrepreneurship*, 21(2), 139–151.
- Maynard, M. T., Gilson, L. L. & Mathieu, J. E. (2012). Empowerment—Fad or Fab? A Multilevel Review of the Past Two Decades of Research. *Journal of Management*, 38(4), 1231–1281.
- Şahin, D. R., Çubuk, D. & Uslu, T. (2014). The Effect of Organizational Support, Transformational Leadership, Personnel Empowerment, Work Engagement, Performance and Demographical Variables on the Factors of Psychological Capital. *EMAJ: Emerging Markets Journal*, 3(3), 1-17.
- Saleem, M. A., Bhutta, Z. M., Nauman, M. & Zahra, S. (2019). Enhancing performance and commitment through leadership and empowerment. *International Journal of Bank Marketing*, 37(1), 303–322.
- Schmitt, N. (1996). Uses and abuses of coefficient alpha. *Psychological Assessment*, 8(4), 350–353.
- Schneider, A., Hommel, G. & Blettner, M. (2010). Linear Regression Analysis. *Deutsches Ärzteblatt Online*, 107(44), 776-782.
- Sue, V. M. & Ritter, L. A. (2012). *Conducting online surveys* (2nd ed.). Los Angeles: Sage Publications.
- Thorpe, R., Holt, R., Pittaway, L. & Macpherson, A. (2006). Knowledge within small and medium sized firms: A systematic review of the evidence. *International Journal of Management Reviews*, 7(4), 257–281.
- Tranfield, D., Denyer, D. & Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management*, 14, 207–222.
- Wang, X.-H. & Howell, J. M. (2012). A multilevel study of transformational leadership, identification, and follower outcomes. *The Leadership Quarterly*, 23(5), 775–790.
- Weed, M. (2005). “Meta interpretation”: A method for interpretive synthesis of qualitative research. *Forum: Qualitative Social Research (FQS)*, 6(1), 1–21.
- Wilkinson, A. (1998). Empowerment: theory and practice. *Personnel Review*, 27(1), 40–56.
- Zhang, X. & Bartol, K. M. (2010). Linking Empowering Leadership and Employee Creativity: The Influence of Psychological Empowerment, Intrinsic Motivation, and Creative Process Engagement. *The Academy of Management Journal*, 53(1), 107–128.