The Impact of Transformational Leadership Effects on Innovative Work Behavior by the Moderating Role of Psychological Empowerment

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Abstract: The study is an endeavor to analyze the relationship between transformational leadership (TFL) and innovative work behavior (IWB) of bank employees in commercial banks of Bangladesh. This paper examines whether psychological empowerment influences the above causal relationship. Data from 372 bank employees were analyzed using Structural Equation Modeling and Partial Least Squares (SMART PLS). Our key findings suggest that there is a significant positive relationship between TFL and IWB. The results also indicate the employees who are highly psychologically empowered, like to work under TFL and this shows that when the level of psychological empowerment of employees is high, TFL impact IWB positively. From the leadership perspective, our findings suggest that the role of psychological empowerment in the relationship between TFL and IWB should not be underestimated by the leaders or the managers of the commercial banks.

Keywords: Transformational leadership, Psychological Empowerment, Innovative Work Behavior, Commercial Banks of Bangladesh.

INTRODUCTION

The business environment is rapidly changing and it is really critical for an organization to survive without a degree of innovation (Slater, 1994; Epstein, 2018). Edmondson, (2018) postulates that innovation is an important priority for an organization as it helps to achieve a competitive advantage. In line with the study carried out by Damanpour & Schneider, (2008), an individual employee innovative work behavior plays an important role in contributing to the overall organizations' innovation.

The innovative behavior of employees refers to the development of useful ideas and implementation of those ideas into improved or new products or services (Shanker, 2017). Petrou, (2018) points out that innovative work behavior of employees does not happen automatically. Bushra, (2011) discovers that one of the most affecting factors which may enhance employee innovative work behavior is leadership. Leaders may create a willingness in the minds of individuals to perform in order to achieve organizations goal and objectives (Cashman, 2017). Moreover, leadership also creates a bond where employees can comfortably work together with their leader (Jung *et al*., 2003; Shibru and Darshan, 2011). Transformational leadership theories expose that its core leadership function is stimulating innovation (Aga, 2016).

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It has been noted from the previous study, leaders who have a transformational mind is more effective to enhance subordinates innovative behavior compared to transactional leadership (Chen, 2016; Lee *et al*. 2016; Afsar *et al*. 2017). For this reason, most of the organizations have shifted the paradigm of their leadership from a transactional to transformational style (Rosenbach, 2018). The definition of transformational leadership indicates that the leaders who tend to follow transformational leadership are knowledgeable, able to lead themselves and their followers in an effort to bring changes in the organization (Northhouse, 2018). Moreover, transformational leaders are exerting extra efforts to meet the increasing demands of global competition (Asrar ul-Haq *et al*. 2016). Leaders with a transformational mindset tend to change individuals, teams or organizations by communicating and modeling a vision and motivate their followers to achieve the vision (Sosik, 2018). Han *et al*., (2016) expose that transformational leadership is known as the main driver of innovative work behavior of employee individual innovation which enhance overall organizations innovation (Wallace *et al*. 2016).

There is also a need to understand the mechanism through which transformational leaders enhance subordinates innovative work behavior, since there is no previous study to understand how transformational leaders enhance innovative work behavior of subordinates relating to banks. One particularly promising psychological mechanism which may moderate the relationship between transformational

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leadership and innovative work behavior is psychological empowerment (Deci *et al*, 1989; Pieterse *et al*, 2010). Psychological empowerment can be defined as the cognitive state of employees characterized by increased intrinsic task motivation. According to Joo *et al*., (2017) an individual's perception of autonomy and power which he/she instigate novel and innovative positive changes is known as psychological empowerment. Pieterse (2010) stresses that leaders are bound by some factors within an organization, for example, HRM policies, organizational settings and the rules and regulations of the organization. These can lead to a great extent influence a follower sense of psychological empowerment independent of leadership. In this present study, we, therefore, argue that psychological empowerment is an important moderator of the influence of transformational leadership. Transformational leadership and the followers' innovative work behavior have attracted most of the scholars from past years (Yahaya, 2016, Sosik 2018). The research idea actually comes up from the previous literature which tells us that the transformational leadership affects the innovative behavior of employees in both ways directly and indirectly (Choi, 2016; Afsar *et al*. 2017; Sosik 2018). Based on this background and the research gap, the present study endeavors to explore the relationship between TFL and IWB as well as the role of psychological empowerment from the employees of commercial banks in Bangladesh. The paper is organized into several sections. Section 2 presents a review of related studies. Section 3 highlights the empirical strategy and data used in the analysis. Section 4 presents the empirical results. Finally, Section 5 discusses the findings and policy implications.

THEORETICAL FOUNDATION AND HYPOTHESIS DEVELOPMENT BASED ON LITERATURE

Innovative Work Behavior (IWB)

For the last two decades, the field of innovative work behavior has been attracting scholars attention as it helps to develop overall organization innovation (Tahsildari, Hashim & Normeza Wan, 2014). Based on the findings in previous studies, without some degree of innovation in the company's operation, it may not able to survive in the competitive market (Scarbiriugh, 2016). In line with Cainelli, (2004) in comparing to zero innovative companies, the innovative company proved to have higher levels of productivity and economic growth. However, new ideas may be born in the minds of an individual (Den Hartog & De Jong, 2010), most of the organizations mention that the main source of innovation is nothing rather than the innovative behavior of the employees in the company (Bason, 2018).

De Spiegelaere, Van Gyees, and Van Hootegem, (2014) postulate that the most widely accepted definition of innovative work behavior concept has been developed by West & Farr, (1989) who mentioned that innovative work behavior represents actions of an individual that involve

> *"intentional introduction and application (within the individual, group or organization) of ideas, processes, products or procedures which are relevant to the new unit of adoption, designed to significantly benefit the individual, the group, organization or wider society (p.9)"*

Most of the researchers agreed upon the fact that innovative work behavior is a multi-stage process. However, due respect to the different authors, the dimensions of innovative work behavior could also vary.

Table 1: Dimensions of Innovative Work Behavior by Different Authors

Authors	Dimensions of Innovative work behavior
Kanter (1988)	1) Idea generation 2) Coalition building 3) Idea realization 4) Transfer/Diffusion
Scott & Bruce (1994)	1) Problem recognition/Idea generation 2) Coalition building 3) Implementation of innovation
Jannsen (2000)	1) Idea generation 2) Idea promotion 3) Idea realization
De Jong & Den Hartog (2010)	1) Opportunity exploration 2) Idea generation 3) Idea championing 4) Idea implementation

Innovative work behavior is a multistage process (Feng, 2016; Sethibe, 2017). Moreover, creativity is also known as an important part of employees innovative work behavior (Wallace, 2018). Innovative work behavior is argued to be largely a motivational issue (Bammens, 2016) besides being influenced by

knowledge, skills, and abilities, which make it of considerable interest to leadership researchers (Wu, 2017).

Transformational Leadership

In the field of management, transformational leadership has attracted most of the researchers' attention because of its motivational spirit to the followers (Bottomley, 2016; Caillier *et al*. 2016). Transformational leadership concept has been developed by Burns (1978), who distinguishes between transformational and transactional leadership characteristics. The leaders who tend to have a transformational mind, motivate their followers by creating a friendly environment whereby employees may comfortably express their idea which is really important to enhance innovative work behavior (Choi *et al*. 2016; Bai *et al*. 2016). Transformational leaders motivate their followers to work for a long time and take out from them more than expected (Rosenbach, 2018). Moreover, transformational leaders treat their followers equally, help them in all kinds of situation and make the employees feel they are the most important assets to them (Descahmp, 2016). Such treatment makes employees feel proud and unite them to work together even in a dramatically changing environment (Shamir *et al*. 2018). The work of Burns has been advanced by Bass and Avolio, (1995) and they divide transformational leadership into four components. The brief discussion about these components is presented in Table **2**.

Psychological Empowerment

Psychological empowerment is known as an increased intrinsic task motivation towards individual orientation to his or her role in the workplace (Chiniara, 2016). Moreover, psychological empowerment manifested in a set of four cognitions namely; meaning, competence, self-determination, and impact (Srivastava, 2016). Meaning is experienced by an individual when he/she put greater responsibilities towards the work and think of the work is meaningful to him (Khany, 2016). Competence indicates the level of confidence which an individual feels as he/she accomplishes the work successfully (Shogren, 2016). Self-determination refers to individual flexibility to perform his/her tasks with comfort and impact refers to the extent to which an individual believes that his or her work contribute significantly (Schermuly, 2016). In addition, the impact also makes the individual employee believes that organizational outcomes are influenced by him/her (Islam, 2016).

Transformational Leadership and Innovative Work Behavior

Leadership research proposes transformational leadership as a driver for facilitating innovative work behavior among employees (Sosik, 2018). Moreover, leaders may help their followers by creating a friendly environment where they can exhibit higher levels of innovation (Bai, 2016). In line with Masa'deh, (2016) finding, the impact of transformational leadership is emulated motivation and empowerment which in turn influence positively employee innovative work behavior. Mumford *et al*., (2002) argue that leaders with a transformational style have a vision that increases their employee willingness to perform beyond expectations (Asrar ul-Haq, 2018). The increased level of inspiration is likely to upgrade organizational development.

Transformational leaders use higher order constructs dimension which results in positively innovative work behavior. Empirical finding exposes a positive association between innovative work behavior of employees and transformational leadership (Li, 2016). For example, the manager's gender moderated the latter relationship, indicating that under the female managers, employees show less innovative work behavior compared to the male managers.

Table 2: Components of Transformational Leadership and Their Definition

Components of Transformational leadership	Definition
Idealized influence	The leader acts as a role model and self-gain sacrificed for collective gain (Masa'deh, 2016).
Inspirational motivation	The component inspirational motivation indicates the ways leaders take to motivate and inspire their followers to achieve both personal and organizational goals with a compelling and energizing vision (Bottomley, 2016).
Intellectual stimulation	Intellectual stimulation encourages followers to question the status quo (Susan, 2016).
Individual consideration	Individual consideration exposes that the leaders take care and support each employee individually to bring out their best for the organizations (Ginter, 2018).

Furthermore, in 164 Taiwanese pharmaceutical firms, Victor *et al*., (2008) found a positive correlation between transformational leadership and innovative work behavior. It has been discovered from the study of Shin and Zhou, (2003) who investigated 46 Korean companies and successfully draw out with the positive findings of the relationship between transformational leadership and organizational innovation. In Taiwanese electronics and telecommunication companies, scholars also found a positive association between CEOs' transformational leadership and individual innovation.

In Bangladesh, only a few numbers of studies have been conducted to examine transformational leadership. For example, Soleman *et al*., (2016) found positive impacts of bank managers on employee engagement. In a similar study, Perry has reported that transformational leadership is an essential factor to improve the followers level of confidence and work outcomes compared to transactional leadership.

The findings of previous literature clearly exposed that the relationship between transformational leadership and innovative work behavior is positively associated. Therefore, the first hypothesis for this study is:

H1: Transformational leadership is positively associated with innovative work behavior

Psychological Empowerment as a Moderator Between Transformational Leadership and Innovative Work Behavior

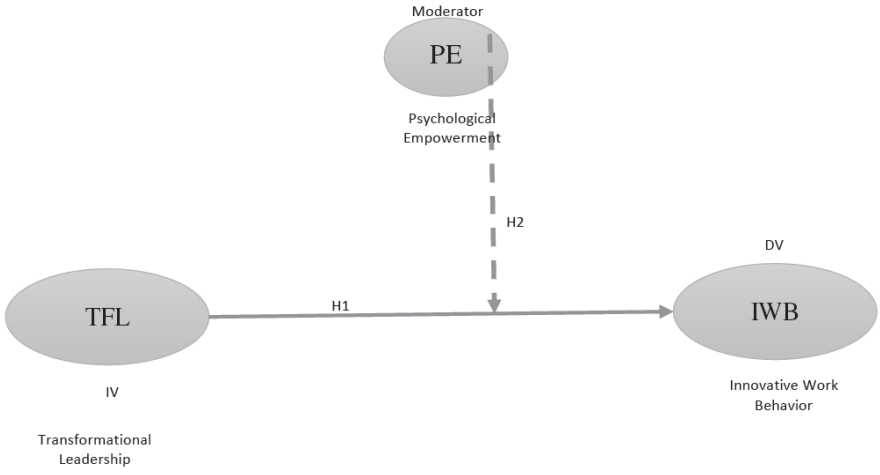
Psychological empowerment can be defined as a psychological state dwelling inside people, reflecting a dynamic introduction towards work role. It is in this particular way, the concept of empowerment as a set of administrative hones enter in the designation of duties (Shorgen, 2016). Moreover, psychological empowerment supports motivational development. Starting and directing activities, having the capacity to perform the work well, being able to have an effect on the environment, and the seriousness of the work are examples of motivational development among the employees (Morin, 2016). Psychological empowerment has been given a significant sum of consideration for a long time (e.g, Carless, 2004; Ergenli *et al*. 2007).

According to Spreitzer, (1995) psychological empowerment includes different predecessors namely, organization, peers and various sources within the environment or individuals. In spite of the fact that leaders can have a significant effect on the work environments of their subordinates, numerous factors are bounded by them within the organizations. The rules and regulations of the organization, HRM policies, and social settings can be an example of this. These contribute an extraordinary impact as the subordinates sense psychological empowerment is strengthening the leadership (Shalley, 2004).

Therefore, in this study, we focus on empowerment as a psychological state which will be generally autonomous of transformational leadership. Moreover, we believe that psychological empowerment is an important moderator which influences transformational leadership.

In short, we propose that transformational leadership is more effective in increasing innovative work behavior of the followers who are highly

The Research Framework



psychologically empowered than those with lower psychologically empowered followers.

H2: Psychological empowerment moderate the relationship between transformational leadership and innovative work behavior of employees among commercial banks of Bangladesh.

METHODOLOGY

The quantitative research design is applied as a framework for this study, as it is typically used in science for theory verification and hypotheses testing (Cresswell, 2017). The survey instrument for the study is a questionnaire. It is used because it is the most suitable process for collecting information from the enormous numbers of employees (Brace, 2018).

Respondents in this study are the employees from the selected commercial banks in Bangladesh. There are 48 commercial banks in Bangladesh, and more than 250,000 employees work in different departments (Bangladesh Central bank, 2017). Cohen *et al*, (2000) in their study, suggest that if the population is more than 100,000, the sample size will be 370. In tandem to ensure the sample size and the achieved sample size is sufficient to be a representative of the population, a sample size calculator from https://www.surveysystem.com/sscalc.htm are used and the results indicate that for the population of 250,000 of employees working in the banks in Bangladesh, the study needs 372 responses for the confidence level of 95%. Based on the 372 responses, 600 respondents have been selected after taking consideration of some returned questionnaire might be invalid, unfulfilled, and could not be used for analysis purposes or some respondents may not return the questionnaire. An employee becomes permanent after 6 months of working in the organizations in Bangladesh, therefore, only permanent employees are selected for the study. We have chosen five private banks for this study since they are identified as the innovative banking organizations in Bangladesh based on their innovative offers and improving services (Bangladesh Bank, 2018). The permanent employees are selected because they naturally have a vast knowledge regarding their leaders, hence, they can provide more reliable information to evaluate their leaders rather than the new employees. In the questionnaire, the followers/employees are asked to evaluate their individual psychological empowerment. In addition, they are also asked to measure the level of transformational leadership of their leaders. Cluster and purposive sampling method are adopted as the data are collected from two cities namely Dhaka and Chittagong commercial banks.

Using SPSS software, descriptive data analysis is carried out. SMART-PLS 3.2.7 is adopted to assess the measurement of the study. In this present study, every construct in the questionnaire has three or more items where responses would be elicited using the Five-Point Likert Scale. The main reason for using the five-point scale format instead of the seven-point scale is to follow the originality of the scales in which the questionnaire items are adapted from. The original questionnaire uses the PANAS scale (Watson *et al*, 1988), a five-point scale. The questionnaire includes the five sections where Section A collects the information regarding the demographic profile of the respondents. Section B includes items regarding innovative work behavior, while section C includes items on transformational leadership. Finally, section D includes items on psychological empowerment. Respondents are required to rate the effectiveness of the transformational leadership with innovative work behavior as well as moderating psychological empowerment on the relationship between TFL and innovative work behavior.

RESULTS

As the data is collected through the questionnaire, the researcher faces challenges when gathering the raw data. In this study, the data is not above the set mark of 5%. Whereas the additional characteristics of SMART-PLS 3.2.7 suggest it would fit automatically and fill in the missing data with the appropriate mean (Hair *et al*. 2016). The sample profile of respondents is indicated in Table **3**.

As shown in Table **3**, the largest single age group (45.43%) is "below 25". Moreover, the group also indicates that the majority of the respondents are male. The second largest group (18.54) is also in the same category of "Below 25" which comprised of females as the majority respondents. Besides, it has been observed that only four respondents fall under the age group of "35-44", which is evenly divided by gender.

Furthermore, half of the respondents have more than 1 year to 5 years' working experience and this group of respondents comprised mainly of those who aged below 25 years (40%) which means that the majority of the employees are youngsters and fresh graduates. This indicates that a high interest of new graduates in the banking sector. 23.38% of the

Table 3: Profile of Respondents (N=372)

Variable	Description	Age Group				Percentage (%)
		Below 25	25-34	35-44	45-60	
Gender	Male	169	63	2	25	70
	Female	69	31	2	11	30
	Total	238	94	4	36	100.00
Status	Single	137	0	0	0	36.82
	Married	101	94	4	36	63.17
	Total	238	94	4	36	100.00
Tenure of Service	Less than 1 Year	75	12	0	0	23.38
	1-5 Years	163	28	0	0	51.34
	More than 5 Years	0	54	4	36	25.26
	Total	238	94	4	36	100.00

respondents have the working experience of less than 1 year.

The authors have calculated the mean and standard deviation of the first 30 and the last 30 respondents based on the nonresponse bias method of Wallace and Cooke's (1990). In addition, it has been observed that there is no significant difference in the data.

The author uses the SPSS version 23.0 to examine the mean, standard deviation, minimum and maximum value for each item in the major constructs. Table **5** illustrates the descriptive studies for all major indicators.

In Table **5**, the summary of descriptive statistics has been calculated and the mean value of all three latent variables ranges from 4.25 to 4.89 with the standard deviation ranging from 0.499 to 0.565 on a five-point Likert scale.

To apply inferential statistics, PLS-SEM version 3.2.7 has been used which allows for the simultaneous analysis of both the measurement model (relationships between latent constructs and measurement items) and the structural model (the relationship between latent constructs PLS-SEM analysis is conducted to examine the item reliability.

The following table displays the convergent validity of this study.

As described in Table **6**, CA values of all constructs ranged from 0.89 to 0.91, above 0.7 recommended by

Table 4: Nonresponse Bias

Variable	First 30 Responses		Last 30 Responses	
	Mean	Standard Deviation	Mean	Standard Deviation
Innovative Work Behavior	1.875	0.540	1.620	0.604
Transformational Leadership	1.550	0.510	1.566	0.549
Psychological Empowerment	1.822	0.650	1.711	0.599

Table 5: Descriptive Statistics

Constructs	N	Minimum	Maximum	Mean	Std. Deviation
Innovative Work Behavior	372	1.00	4.88	1.681	.5659
Transformational Leadership	372	1.00	4.25	1.561	.4992
Psychological Empowerment	372	1.00	4.89	1.747	.5745
Valid N (listwise)	372				

Table 6: Achievement Criteria of Convergent Validity

Constructs	Items	Loadings	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Innovative Work Behavior	IWB1	0.753	0.906	0.907	0.924	0.605
	IWB2	0.781				
	IWB3	0.750				
	IWB4	0.764				
	IWB5	0.797				
	IWB6	0.723				
	IWB7	0.800				
	IWB8	0.845				
Psychological Empowerment	PE1	0.780	0.916	0.918	0.930	0.598
	PE10	0.770				
	PE2	0.850				
	PE3	0.764				
	PE5	0.742				
	PE6	0.760				
	PE7	0.777				
	PE8	0.768				
	PE9	0.740				
Transformational Leadership	TFL1	0.798	0.898	0.900	0.918	0.584
	TFL2	0.751				
	TFL3	0.793				
	TFL5	0.725				
	TFL6	0.750				
	TFL7	0.745				
	TFL8	0.763				
	TFL9	0.787				

the study of Hair, Ringle, and Sarstedt (2013). Meanwhile, CR values range from 0.918 to 0.985, which is higher than 0.7 and this indicates adequate convergence or internal consistency (Hair *et al*., 2016).

Next, the Average Variance Extracted (AVE) of the variables are assessed. The AVE criterion is defined as the grand mean value of the squared loadings of the indicators associated with the construct. An AVE value of at least 0.5 and higher indicates a latent which the variable can explain more than half of the variance of its indicators on average is considered as sufficient (Hair *et al*., 2013; Henseler, Ringle, & Sinkovics, 2009). In the current study, the AVE score for each construct is found to be above the minimum threshold (more than 0.5) and this is parallel to Hair *et al*., (2013) description and the range between 0.584 and 0.605 is shown in Table **6**. Based on the results it can conclude that convergent validity has been achieved.

Discriminant validity explains the phenomenon of distinction on one construct from the other constructs; it explains the correlation between the constructs, as well as how many indicators represent only a single construct (Hair *et al*., 2013). It is assessed using the cross loading (Chin, 1998), second Fornell- Lacker‟s criterion (Fornell & Larcker, 1981). The loadings of an indicator on its assigned latent variables should be higher than its loadings on all other latent variables.

Table 7: Fornell and Lacker Criterion for Discriminant Validity

S. No	Constructs	1	2	3	4
1	Innovative Work Behavior	0.778			
2	Psychological Empowerment	0.874	0.773		
3	Transformational Leadership	0.844	0.822	0.765	

Table 8: Cross Loadings Criterion for Discriminant Validity

Items	Innovative Work Behavior	Psychological Empowerment	Transformational Leadership	Transactional Leadership
IWB1	0.753	0.653	0.652	-0.035
IWB2	0.781	0.699	0.681	-0.122
IWB3	0.750	0.642	0.631	-0.299
IWB4	0.764	0.653	0.622	-0.157
IWB5	0.797	0.678	0.645	-0.170
IWB6	0.723	0.657	0.683	-0.126
IWB7	0.800	0.742	0.645	-0.223
IWB8	0.845	0.704	0.687	-0.159
PE1	0.674	0.780	0.672	-0.102
PE10	0.651	0.770	0.666	-0.126
PE2	0.722	0.850	0.650	-0.104
PE3	0.645	0.764	0.626	-0.052
PE5	0.800	0.742	0.645	-0.223
PE6	0.663	0.760	0.601	-0.033
PE7	0.673	0.777	0.596	-0.065
PE8	0.607	0.768	0.624	-0.032
PE9	0.602	0.740	0.634	-0.079
TFL1	0.627	0.612	0.798	-0.195
TFL2	0.613	0.647	0.751	-0.154
TFL3	0.738	0.658	0.793	-0.318
TFL5	0.610	0.603	0.725	-0.030
TFL6	0.639	0.606	0.750	-0.031
TFL7	0.609	0.598	0.745	0.002
TFL8	0.666	0.649	0.763	-0.299
TFL9	0.642	0.650	0.787	0.087

As shown in Table **7**, the calculated square root of the AVE ranges from 0.765 to 0.778. The values exceeded the inter-correlations of the construct with the other constructs in the model, indicating adequate discriminant validity.

The theorized concept of constructs can be solved by assessing through convergent and discriminant validity. This can be achieved using the cross-loading approach, by looking at the respective loadings and cross-loadings, the evaluation can be made and whether there are problems with any items. Hair *et al*., (2016) suggests the cut-off value for loading at a minimum of 0.5 as significant. The cross loading is a significant problem if any item which has a loading of higher than 0.5 on two or more factors. Table **8** shows the assessment of discriminant validity through cross-loadings.

The alternative approach which is based on the multitrait-multimethod matrix is applied to assess discriminant validity known as the Heterotrait-Monotrait (HTMT) ratio of correlations which is shown in Table **9**.

The discriminant validity is established when the construct is within the range of -1 to 1, and when the results are otherwise, discriminant validity is not achieved. The results reveal that as per the HTMT criterion mentioned in the study of Henseler *et al*., (2015) are achieved and it is presented in Table **9**. The results reveal that the discriminant validity has been established among the construct as the relationship falls within the standard range.

With 5000 subsamples, a bootstrapping procedure is performed after assessing the measurement model as suggested by Hair, Tatham, (1998) in order to

Table 9: Heterotrait Monotrait (HTMT) Criterion for Discriminant Validity

S. No	Constructs	1	2	3	4
1	Innovative Work Behavior				
2	Psychological Empowerment	0.953			
3	Transformational Leadership	0.933	0.906		

Table 10: Direct Relationship Results

Hypotheses	Relationships	Std Beta	Std Error	T-Value	P Values	Decision
H1	Transformational Leadership -> Innovative Work Behavior	0.820	0.811	17.070	0.000***	Accepted

*p< 0.05, **p<0.01***p<0.001.

Table 11: Moderating Effect

Hypothesis	Relationship	Standard Beta	Standard Error	T Values	P Values	Outcomes
H2	TFL X PE -> IWB	0.270	0.021	12.974	0.000	Accepted

examine the statistical significance using a t-test of each hypothesis relationship. Based on the direct effect on the one-tail test, a 95% level significance is achieved as mentioned in the hypothesis, and all the relationships are in the right direction.

Table **10** shows that H1 hypotheses of this study are accepted and the relations between the constructs are positive and significant.

In the case of moderating effect the study the following hypotheses are postulated:

H2: Psychological empowerment moderate the relationship between transformational leadership and innovative work behavior of employees among commercial banks of Bangladesh.

To test the above hypotheses, PLS-SEM 3.2.7 is used to analyze the conditional effect in the two-level analysis. First, the interactive effect is created between the independent variable and the moderating variable (Hair *et al*., 2014), then the bootstrapping procedure is conducted to determine the moderating effect and its significance. The result is presented below in Table **11** and Figure **1**.

The analysis shows the psychological empowerment moderates the relationship between transformational leadership and innovative behavior with a beta value (0.270), t-value (12.974) and p-value (0.000) respectively.

Figure **1** shows that the high psychological empowerment strengthens the positive relationship between transformational leadership and innovative work behavior.

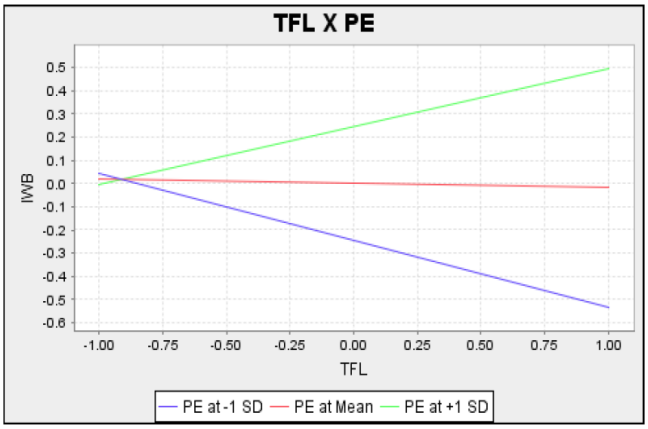


Figure 1: The Interaction Between Transformational Leadership and Employee Psychological Empowerment on Innovative Work Behavior.

DISCUSSION

The following section presents the discussion of empirical research findings with respect to the current body of knowledge. This section focuses on theoretical as well as managerial implications of discovered results with respect to the hypotheses raised in the study. The chapter is finalized by a discussion of limitations of the current study as well as suggestions for further research.

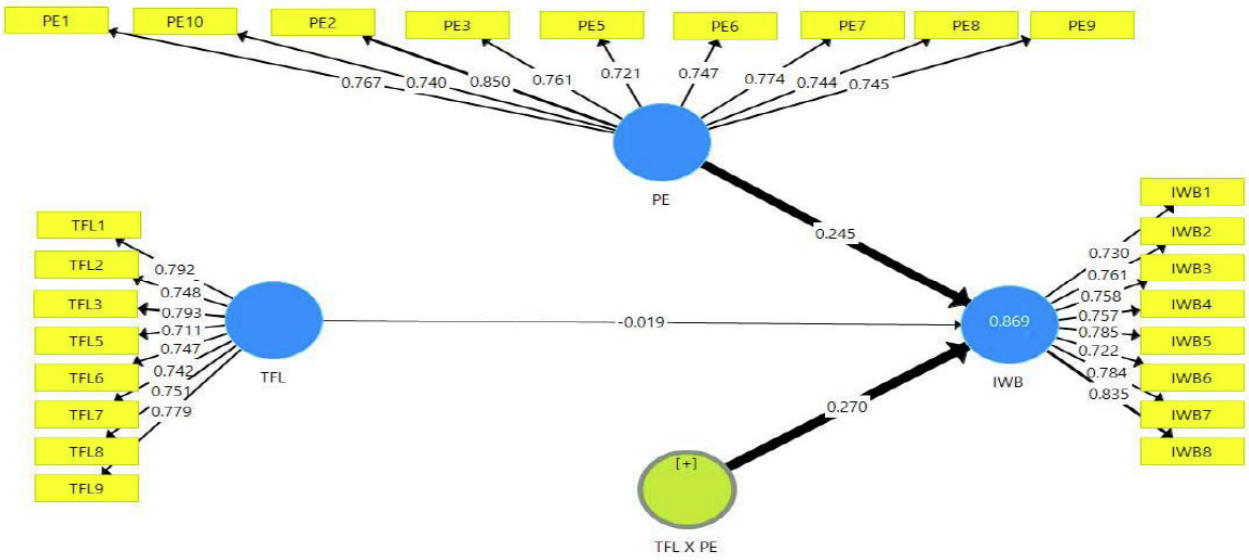


Figure 2: Moderating effect of psychological empowerment between TFL and IWB.

THEORETICAL IMPLICATIONS

The first two hypotheses (H1 and H2) addressed the direct relationship between leadership styles on innovative work behavior. The results indicate that transformational leadership has a positive relationship with IWB. These findings are in line with the findings in the literature review which provide evidence of both direct (Crawford, 2001; Khan, Aslam & Riaz, 2012) and indirect (Sharifirad, 2013; Kroes, 2015) positive impact on IWB, and on the overall organizational innovation (Jung, Chow, and Wu, 2003). However, the result of this study deviates from findings of Crawford, (2001) who identifies in the analysis of five organizational sources (educational, medical, manufacturing, sales and service), that all four elements of transformational leadership positively correlate with innovative behavior. The difference in results can be attributed to specifics of analyzed industry or cultural context.

The goal of the present study is to shed more light on these relationships by examining the follower psychological empowerment as a moderator. Psychological empowerment is found to be moderate in the relationship with the innovative behavior of transformational leadership.

The findings of the present study establish a boundary condition (i.e., psychological empowerment) to the effectiveness of transformational leadership in engendering innovative behavior. The results support the argument that followers need to feel empowered to act on the inspirational appeal of transformational leadership. Thus, the present study confirms the proposition that transformational leadership may engender innovative behavior - a proposition that is a cornerstone in transformational leadership theory. It also shows that psychological empowerment plays an important role in determining whether this positive relationship materializes.

The results of the present study show that Transformational leadership seem to be influential only with high psychological empowerment. Indeed, psychological empowerment seems to be a precondition for innovative behavior. With low psychological empowerment, innovative behavior is low irrespective of leadership behavior. With high psychological empowerment, leadership influences the extent to which the action is translated into innovative behavior. These results are in line with previous research which highlighted the importance of psychological empowerment for innovative behavior (e.g., Jung *et al*., 2003; Spreitzer, 1995; Thomas & Velthouse, 1990). The results also qualify these findings by demonstrating the influence of leadership on the innovative behavior of psychologically empowered individuals.

An additional implication of the present study shows that a higher psychological empowerment transformational leadership is more beneficial to innovative behavior. As theoretical and empirical research frequently contrast the (positive) effects of transformational with the (less beneficial) effects of transactional leadership, the present study suggests that this is only warranted with elevated levels of psychological empowerment - at least where innovative

behavior is concerned. As indicated in the preceding paragraph, however, this may also hold for other outcomes (e.g., personal initiative; Frese *et al*., 1996).

MANAGERIAL IMPLICATION

The results of the present study imply that transformational leadership can be instrumental in increasing employee innovative behavior. However, organizations should not simply promote transformational leadership but should take follower psychological empowerment into account. Through management development programs leaders could be made aware of the level of psychological empowerment of followers, indicating when more attention should be paid to stimulating psychological empowerment versus stimulating transformational leadership. In general, it seems most beneficial to stimulate both followers' psychological empowerment and transformational leadership. Through empowerment programs, organizations may set the stage for the more effective use of transformational leadership in engendering innovative behavior. Furthermore, research has shown that transformational and transactional leadership can be learned and training programs should be developed. Barling, Weber, & Kelloway, (1996); Dvir, Eden, Avolio, & Shamir, (2002), suggest that efforts should be made to increase follower psychological empowerment as complemented by leadership development efforts to increase transformational leadership.

LIMITATION AND SUGGESTION FOR FUTURE RESEARCH

Some limitations of the present study must be considered. One limitation is using the cross-sectional survey which does not allow conclusions regarding causality nor does it fully capture the dynamic nature of the relationship between leader and follower behavior. Replication of our findings in studies using different methods, for instance, laboratory or field experiments, as well as longitudinal designs would be highly valuable.

The sample of the study might be another limitation. The organization is a governmental agency, which might have restricted psychological empowerment by limiting the amount of autonomy for followers and the impact they could have on their surroundings. However, this would more likely have attenuated the relationships under investigation, rendering the current tests relatively conservative. Nevertheless, it would be interesting to replicate the present results in a different environment.

Another point that needs to be mentioned is the aim of the study is not to provide a comprehensive model of all antecedents of innovative behavior of employees. The aim of the study is to clarify the relationship between transformational leadership with the follower innovative behavior in particular. In addition, we need to stress that other moderators may affect the relationship between transformational leadership and innovative behavior. Our specific focus should by no means be interpreted as arguing against or downplaying the influence of other moderators or antecedents of innovative behavior, such as a climate supportive of innovation (West & Anderson, 1996). Finally, the present study does not focus on the underlying influence processes. Therefore, based on the present data we cannot conclude that the current findings are obtained through the underlying processes as assumed.

CONCLUSION

As innovation is becoming more important for organizations, the study which focuses on the effect of innovative behavior of employees is increasingly important. The study of antecedents that are under managerial control is of substantial value for the organizations. The rise in research on transformational leadership over the past decades holds the promise of uncovering transformational leadership as an important determinant of follower innovative behavior. However, evidence to this effect has been scarce and inconsistent. The present study is aspired to uncover a possible reason for the inconsistent findings of research into this relationship and identifying psychological empowerment as a prerequisite to strengthening the transformational leadership. The relationship is only associated with the increased of the follower innovative behavior when psychological empowerment of followers is high.

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