

A Conceptual Model: Linking Transformational Leadership to Innovative Work Behaviour via Basic Psychological Needs and Creative Self-Efficacy

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Abstract

Background: Transformational leadership (TL) is essential for enhancing employee innovative work behaviour (IWB) in today's volatile business environment. Unfortunately, studies reveal mixed results regarding the impact of leadership on IWB and highlight the need to explore serial mediating factors like basic psychological needs (BPN) and creative self-efficacy (CSE) to understand this relationship better.

Objective: This study aims to propose a research framework that addresses the need for satisfaction and frustration of Basic Psychological Needs (BPN) and CSE in explaining the association between TL and employee IWB.

Methodology: This paper reviewed the existing research articles to propose a new model that includes a serial mediation of BPN and CSE. The reviewed papers focused on the concepts of self-determination (SDT) and self-efficacy theory (SET) and their implementation in organisational innovation studies.

Result: The review highlighted the need to examine employees' BPN satisfaction and frustration and CSE to connect TL and IWB.

Conclusion: The proposed serial mediation model highlights how TL can enhance IWB by satisfying employees' BPN, developing CSE, and fostering a culture of IWB. The proposed model fills the gaps in the literature and offers practical insights for leaders.

Unique Contribution: The proposed model contributes to IWB studies by examining both need satisfaction and frustration and adding the role of CSE from SET to further explain the interconnection between TL and IWB.

Key Recommendation: Future research should empirically test the model's validity and examine how organisational culture and climate may affect the relationships proposed, providing insights into how TL drives IWB.

Keywords: Transformational leadership, Innovative work behaviour, Basic Psychological needs, creative self-efficacy

Introduction

In today's evolving and volatile business environment, organisations face uncontrollable levels of uncertainty and change, posing significant challenges to their survival and growth. In such a context, innovation becomes critical to organisational success. By implementing innovation, organisations can successfully navigate the evolving business landscape and develop new capabilities that lead to improved performance and sustainable competitive advantage.

Innovation takes place when employees create, advocate for, and put into action new ideas. An individual's contribution to innovation development is called innovative work behaviour (IWB). Engaging in IWB offers many benefits to employees, including improved work processes and outcomes. In addition, IWB also contributes to employees' professional development by increasing their knowledge of innovative solutions and innovation development processes and their ability to manage the associated uncertainty (Messmann et al., 2022). These explanations highlight the importance of employees' proactive contribution to organisational innovation, making IWB a significant topic in human resource management.

Considering its significant employee benefits, various studies have attempted to determine IWB determinants, such as leadership. Among the diverse leadership styles, transformational leadership (TL) was identified as the most studied style in its connection to IWB (AlEssa & Durugbo, 2022). TL enables organisations to thrive in a dynamic and innovative environment, empowering employees to think outside the box and contribute fresh and inventive ideas. Thus, TL fosters an environment encouraging innovative behaviour and enhancing employee creativity (Knezović & Drkić, 2020). This argument aligns with Self Determination Theory (SDT), which posits that the opportunity to be self-determining is the key to self-determination. Therefore, people will be more self-determined when their environment allows them to (Ryan & Deci, 2000). Hence, transformational leaders will support their employees' creativity by allowing them to be more creative.

Unfortunately, although studies have put forward evidence of TL's positive effect on IWB (Knezović & Drkić, 2020), many studies also found no effect (Messmann et al., 2022) and even a negative impact on innovative behaviour despite partial (Sethibe & Steyn, 2017). Additionally, previous studies have found that the effect of leadership on IWB is indirect rather than direct (Sethibe, 2018), highlighting the vital role of mediating and moderating factors in connecting this leadership style with its outcome.

In terms of mediating factors, previous studies have identified diverse results, such as basic psychological needs (BPN) (Messmann et al., 2022), perceived support for innovation, and innovation readiness (Tan et al., 2021). These results highlight countless means leadership style could provide a supportive environment for innovative behaviours. However, despite addressing the issue of mediating factors to connect leadership and IWB, previous studies have rarely examined serial mediation in the model. Hence, the knowledge regarding factors that might affect IWB serially and the cohesiveness and integrative view on the topic is limited. Based on this observation, the current study proposes serial mediation of BPN and creative self-efficacy (CSE) to bridge the relationship between TL and IWB and fill in the literature gap.

The conceptualisation of BPN is rooted in the concept of need in SDT (Van Den Broeck et al., 2016), which focuses on intrinsic motivation to achieve psychological growth, internalisation, and well-being (Ryan & Deci, 2000; Van Den Broeck et al., 2016). Therefore, SDT postulates the need for autonomy, competence, and relatedness (Van Den Broeck et al., 2016). BPN is conceptualised as the first mediating variable in this study. As a well-established concept within SDT, satisfying employees' BPN has been proven to improve numerous outcome variables, such as job satisfaction, affective commitment, positive affect, and engagement, while negatively associated with turnover intention, burnout, and strain (Van Den

Broeck et al., 2016). These studies asserted the importance of BPN in human resource research. However, despite its significance, BPN is still rarely employed in examining the connection between TL and IWB (Messmann et al., 2022). Most studies applied only BPN satisfaction as a mediating variable between the two constructs. Therefore, this paper aims to build a model that includes both need satisfaction and frustration in examining the relationship between TL and IWB.

Innovation takes a long time to be developed, promoted, and implemented. Because of this reason, it is fair to assume that innovative employees need certain characteristics to accomplish such a feat. Self-efficacy theory (SET) argues that for individuals to initiate, continue, and persevere through action, they need to have a certain level of efficacy or a belief in their capability and the possibility of success (Maddux, 1995). Thus, this paper introduces CSE as the second mediating variable in the proposed model because IWB is a complex behaviour where employees introduce new ideas and take a risk for its failure (Javed et al., 2019). CSE empowers employees to navigate such situations and creatively achieve their goals. Motivation is only sufficient to significantly impact IWB once employees believe in their ability to perform well (Javed et al., 2021). Hence, this study conceptualises the serial mediation of BPN and CSE to understand better how TL can influence IWB. Individuals who possess high levels of CSE can mobilise the necessary motivation, cognitive resources, and actions to effectively meet the demands associated with IWB. Empirical evidence from previous studies has consistently demonstrated the significant impact of leadership styles on employees' CSE (Akbari et al., 2020; Javed et al., 2021). When TL enhances employees' self-confidence to explore new possibilities, they delve deeper into understanding a problem and pursue innovative solutions.

Literature Review

Self-Determination Theory (SDT)

SDT examines how individuals interact and rely on their social environment. This theory posits that humans are inclined to be proactive, seeking out challenges and integrating new experiences. It also highlights the significance of fulfilling three fundamental psychological needs: competence, autonomy, and relatedness to enhance intrinsic motivation, self-regulation, and overall well-being (Ryan & Deci, 2000).

SDT encompasses various "mini-theories" that comprehensively explain human motivation and functioning. It is rooted in the humanistic perspective, assuming individuals possess an innate drive for growth and self-organisation. SDT also highlights the importance of a supportive social environment in sustaining this natural growth tendency. When individuals' need for autonomy, competence, and relatedness is disrupted, they can become controlled, fragmented, and alienated. Therefore, SDT emphasises the dynamic interaction between individuals and their social world, as individuals strive to fulfil their needs continuously. This interaction ultimately shapes individuals' level of engagement, curiosity, connectedness, and overall motivation in life (Ryan & Deci, 2000).

SDT arguments that the social environment at work shapes self-motivation explain how TL could build IWB by providing a supportive environment for IWB. SDT further explains the mechanism by which TL could affect IWB indirectly through the fulfilment of BPN (Messmann et al., 2022). However, Ryan and Deci (2000) also argued that BPN satisfaction and frustration affect individuals differently. Fulfilled BPN leads employees to experience a sense of autonomy in their actions (autonomy satisfaction), a feeling of social connection and belonging (relatedness satisfaction), and a sense of competence and accomplishment in their roles (competence satisfaction). On the other hand, when their psychological needs are blocked, individuals tend to feel controlled by internal or external pressures (autonomy frustration), experience social rejection and isolation (relatedness frustration), and feel a lack of effectiveness in their abilities and roles (competence frustration). According to SDT, satisfying these psychological needs is critical to an employee's well-being and development, while

frustration with these needs leads to adverse outcomes and decline (Ryan & Deci, 2000). To enhance our understanding of the intermediary role of BPN in the influence of TL on IWB, it is imperative to evaluate BPN satisfaction and frustration as separate constructs. This approach allows us to gain more insight into how BPN operates as a mediator in this relationship.

Self-Efficacy Theory (SET)

The adoption of SET in the proposed model mainly relies on the notion that IWB is a complex and challenging process for employees (Javed et al., 2019). SET believes self-efficacy has several common determinants: performance, vicarious and imaginal experiences, verbal persuasion, physiological and emotional states, and distal and proximal sources (Maddux, 1995). Performance experience refers to an individual's past performances, which develop the sense of mastery toward certain activities or skills. When performance experience requires individuals to experience the performance themselves, vicarious experiences are developed by observing others, what others did and what responses they received: the last experience, imaginal, results from an individual's imagination regarding effective and ineffective behaviours. Verbal persuasion, although it poses a probability of building efficacy, is generally less strong than experience. For verbal persuasion to build efficacy, it must be delivered by someone with expertise, trustworthiness, and attractiveness. Efficacy is also dependent on how an individual feels at the moment. Comfort generally increases one's efficacy about one's capability, while pain and fatigue might reduce it. This is also true for the comfort and discomfort in one's mental state. Anxiety, frustration, and depression decrease one's trust towards their ability, while positive mental states boost their efficacy. Lastly, distal and proximal sources explain the time frame of the factors. Past and future factors might affect an individual's self-efficacy (Maddux, 1995).

From this explanation, leadership style can significantly affect CSE through the opportunity to gain experiences, providing physical and psychological comfort, and verbal persuasion. The first mediating variables, BPN satisfaction and frustration, are also vital as positive and negative psychological conditions that might improve and hurt employees' CSE. Hence laying the foundation to include CSE as the second mediating variable in the model.

Propositions Development TL and IWB

TL comprises four unique components, namely idealised influence, inspiration, intellectual stimulation, and individualised consideration, which may affect employees' creativity differently. The empirical studies on the association between TL and IWB generally showed a positive influence (Knezović & Drkić, 2020), although deeper scrutiny will show that the evidence for the relationship is not as consistent.

For example, Sethibe and Steyn (2017) found a negative effect of idealised influence and a positive effect of other TL components on innovative behaviour. However, another study found no significant effect of idealised influence on innovative behaviour (Al-Shammari & Khalifa, 2019). In another light, too much TL in the organisation also harms innovativeness due to the curvilinear relationship between the two constructs (Chung & Li, 2018). In addition to the difference in the direction of the effect, the existing literature also shows no significant effect (Messmann et al., 2022), or no direct effect of TL on innovative behaviour (Sethibe, 2018).

Examining TL in its connection to IWB complies with SDT, which theorised that environmental support is needed for an individual to be more self-determining (Ryan & Deci, 2000). With its four components, TL can be argued to provide an appropriate environment that encourages innovation. TL encourages employees to reassess challenges and their work environment, thereby fostering the development of innovative ideas through intellectual

stimulation. TL also instils belief in employees' capabilities to achieve success through inspirational motivation. With individual consideration, TL recognises and highlights the individual qualities and talents. The emphasis on individual consideration further encourages IWB, empowering employees to contribute their unique perspectives and ideas. Therefore, leaders can create a conducive climate for innovative ideas by creating an environment that welcomes creative ideas and not blaming failure. Thus, the current study proposes the following relationship:

Proposition 1: TL has a significant and positive impact on IWB.

The Mediating Role of Need Satisfaction

As described by (Bass, 1990), TL emphasises the significance of addressing the emotional needs of followers. This type of leadership is positively associated with fulfilling three BPNs: autonomy, competence, and relatedness. Regarding autonomy, TL encourages employee development, thus fulfilling this need. To fulfil competence needs, TL use intellectual stimulation to motivate followers to question existing problem-solving methods and explore new approaches for improvement. Leaders also demonstrate individualised attention by meeting the unique needs of each employee and helping them reach their full potential. Additionally, the need for relatedness, which is related to the social aspect of the individual, is fulfilled by building social support at work. Building relationships with leaders, coworkers, and subordinates is vital (Hetland et al., 2011). When leaders create a conducive work environment that values employees' ideas and perspectives, recognises achievements, fosters trust, and provides autonomy, it increases employees' sense of freedom, effectiveness, and closeness to others. This environment, in turn, encourages employee engagement in innovative behaviour.

Empirical evidence supports the positive influence of TL on BPN satisfaction. (Hetland et al., 2011), as well as BPN satisfaction's positive impact on IWB (Evers et al., 2024). However, research specifically examining the mediating role of need satisfaction in the influence of TL on IWB is limited. Messmann et al. (2022) provide empirical evidence supporting the mediating role of competence satisfaction in the influence of TL on IWB. In summary, existing research supports the positive impact of TL on need satisfaction and the influence of need satisfaction on IWB. However, further research is needed to explore the mediating role of need satisfaction in the influence of TL on IWB. Thus, we proposed that:

Proposition 2: TL's impact on IWB is mediated by need satisfaction, specifically (a) autonomy, (c) competence, and (R) relatedness satisfaction.

The Mediating Role of Need Frustration

SDT posits that when individuals experience frustration in meeting their basic needs, they may respond by self-protective behaviours. These behaviours can manifest as withdrawal from others and a heightened focus on oneself. In extreme cases, individuals may even resort to antisocial, counterproductive, or self-injurious actions to regain a sense of fulfilment (Ryan & Deci, 2000). In their study, Van Den Broeck et al. (2014) discovered a noteworthy association between BPN frustration and counterproductive work behaviours that aimed to harm the organisation. This finding serves as an example of how unmet needs can lead to negative outcomes within the workplace.

Leadership within an organisation is essential in influencing the daily social environment of employees. This environment determines whether their needs are satisfied (need satisfaction) or hindered (need frustration). A leader's actions and behaviours can significantly impact the overall well-being and satisfaction of employees within the organisation. When a leader creates a supportive working condition, appreciates ideas, emphasises achievements, and trusts subordinates, it will reduce the feelings of pressure, isolation, and feelings of failure

in carrying out tasks felt by subordinates. Hence increasing subordinates' involvement in innovative behaviour. Thus, we proposed that:

Proposition 3: TL influences on IWB is mediated by need frustration, which includes (a) autonomy frustration, (b) competence frustration, and (c) relatedness frustration.

The Mediation of CSE

An extensive body of research recognises the pivotal role of leadership in nurturing employee innovation and creativity. Leaders play a crucial role in stimulating and guiding the cognitive processes of employees, specifically about innovative behaviour. They achieve this by exposing employees to diverse sources of knowledge and information, fostering a culture of knowledge sharing, and creating an environment that supports engagement in the creative process. Leaders' ability to stimulate individual innovative behaviour significantly influences, generates, and enhances novel ideas, particularly among employees with high levels of CSE. Employees with high levels of CSE demonstrate a greater inclination to pursue and engage in creative endeavours and innovation actively (Akbari et al., 2020).

Previous studies have provided empirical support for the mediating role of CSE in the relationship between leadership styles and IWB. For instance, Javed et al. (2021) found that CSE mediates the impact of inclusive leadership on IWB. Based on this rationale, we proposed that:

Proposition 4: TL influences IWB through CSE.

Need Satisfaction and CSE in The Serial Mediating Role

The perception of need satisfaction, which pertains to how well an individual's environment fulfils their BPN, is thought to impact self-efficacy. When individuals feel that their needs are met, it can enhance their belief in their abilities and increase their self-efficacy. This connection highlights the importance of addressing and supporting individuals' BPN to foster self-efficacy (Klaeijnsen et al., 2018). It was empirically proven that higher levels of need satisfaction are associated with increased self-efficacy (Klaeijnsen et al., 2018). Considering the dear connection between self-efficacy and CSE, need satisfaction may also positively affect CSE.

Furthermore, leadership is essential in predicting BPN, CSE, and IWB (Hetland et al., 2011). Therefore, it is hypothesised that the influence of TL on IWB can occur through a sequential mediation process involving need satisfaction and, subsequently, CSE. Influential leaders who create conducive work conditions, express appreciation for ideas and perspectives, emphasise employee achievements and foster trust can enhance the sense of autonomy, effectiveness, and connectedness among employees. This condition will enhance the confidence in employees' creativity and motivate them to generate and implement innovative ideas. Thus, the proposed proposition is:

Proposition 5: The influence of TL on IWB is sequentially mediated by the need satisfaction and CSE.

The Serial Mediation of Need Frustration and CSE

The study conducted by Wang & Tsai (2020) revealed that BPN frustration hurts self-efficacy. Based on the findings on leadership's ability to predict BPN, CSE, and IWB (Hetland et al., 2011), this study proposes a sequential mediation process involving needs frustration and CSE to explain TL's effects on IWB. This suggests that transformational leaders have the potential to affect IWB by addressing BPN frustration, which subsequently fosters CSE growth. This sequential mediation process suggests that TL indirectly affects IWB by reducing the need for frustration and enhancing employees' CSE. TL can stimulate a positive work

environment that encourages and facilitates innovation by meeting employees’ psychological needs and empowering them to believe in their creative abilities. Therefore, we propose:

Proposition 6: TL indirectly influences IWB through sequential mediation involving reducing need frustration and enhancing CSE

The proposed conceptual model based on this study propositions is presented as follows:

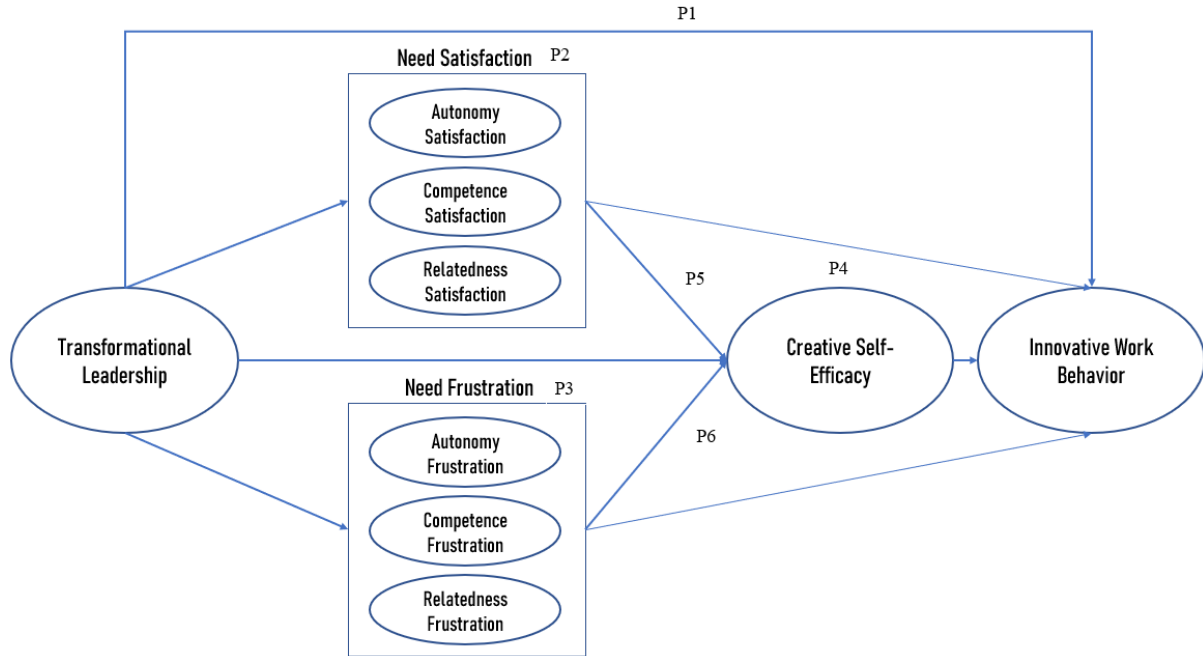


Figure 1. The proposed conceptual model

Discussion

This conceptual article innovatively combines the principles of SDT and SET in investigating the relationship between TL and IWB through a serial mediation process of BPN and CSE at the individual level. The basic principles of SDT propose that BPN of autonomy, competence, and relatedness are critical for optimal functioning and personal development in the workplace environment. In the context of TL, leaders have the qualities to achieve SDT and considerably increase followers’ potential to innovate.

The insights obtained from this conceptual analysis suggest that transformational leaders satisfy their followers’ BPN, which in turn facilitates the development of CSE. As a result, such improved CSE incubates greater IWB since individuals experience greater competence, autonomy, and relatedness in their roles at work. This serial mediation model highlights that having a value-oriented leadership style is important as it fits to employees’ intrinsic motivations to develop a feeling of volition and initiative.

Conclusion

Based on the SDT tenets, the serial mediation model proposed represents a comprehensive perspective on TL’s role as a catalyst of workplace innovative behaviour. When leaders satisfy their employees BPN, employees’ CSE will flourish and contribute to the organization in form of IWB. This model fills an important gap present in the existing body of literature. The proposed model also offers practical recommendations for organizational leaders when it comes to fostering and developing employee’s innovation.

Theoretically, this paper shows a linkage between TL, SDT, SET, and IWB which adds to the body of knowledge. It highlights the transformational power of a leadership style beyond

the nature of transaction-based exchanges to focus on employees' BPN that creates a supportive atmosphere for innovation.

The study primarily presents a conceptual model without empirical testing, indicating that the practical applicability and validation of the model remain unconfirmed. Additionally, considering complex human behaviours, the proposed model also could benefit from the addition of other variables that may serve as moderating variables. Therefore, future research could verify the proposed model and include organizational culture and climate as moderating variables on the model(s).

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