

Effect of Perception of Transformational Leadership on Job Satisfaction, Innovative Behavior, and Work Performance of University Staff in Phnom Penh, Cambodia: A Conceptual Framework

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Abstract

The governance of higher education has suggested improving research at universities that focus on developing human resources for higher education and digital transformation. Meanwhile, the higher education system and resources must receive enough financial support to improve weaknesses, which is essential for higher education. They must have considered a rule of development that will crucially enhance intellectual capability for creating leadership to all the degrees in their job. Transformational leadership absorbs the pressure at the workplace and encourages them to challenge hard work. At the same time, leadership behavior is the most observed, help to changing the employees behavior to get a more interested in a job, diagnostic, and reduce turnover and stress. This study reviews and discusses the effect of the perception of transformational leadership on job satisfaction, innovative behavior, and work performance of the university's staff in Phnom Penh, Cambodia. Participate, transformational leadership, job satisfaction, and innovative behavior are independent of influencing work performance, in which work performance is a dependent variable; thus, the development hypothesis will be shown in the literature review.

Keywords: transformational leadership, job satisfaction, innovative behavior, work performance

1. Introduction

Cambodia is a developing country that needs to improve its quality of education in the 21st century as the country can develop if there is a focus on education quality. Employees require support and training to achieve their goals; thus, they must have developed student and staff abilities at each university. According to the Ministry of Education, Youth and Sports (2006), strategy planning 2006–2010 explains comprehensive quality assurance, increased quality, and improvement of leadership at all education levels and higher education institutions, which was proposed “to realize the guarantee and improvement of quality in both the standards of educational institutions and standards of the system,” not only in higher education but also at all stages of education as well as “to strengthen the management and development of educational institutions” (p.372). Additionally, higher education in Cambodia appeared in the middle of the 20th century, but the higher education system has gone up and down in this situation (Ngoy et al., 2019).

The total number of public universities increased from 8 to 39 between 1997 and 2004, while the total population of students increased from 10,000 to more than 200,000. The World Bank is developing implementation to support higher education for improved quality and capacity and has given a project aimed at providing academic support for the low skills of students and offered scholarships for the staff to jointly train in a program that prefers the improved quality of resources at the university (MoEYS, 2014; World Bank, 2016).

James McGregor Burns, the first author who proposed the transformational leadership theory and transactional leadership in 1978, asserted the idea of leadership related to helping followers and motivating them to achieve a goal together (Burn, 1978). For instance, the meta-analysis of Judge and Piccolo (2004) examined 626 relationships from 87 origins that focus on the transformational, transactional, and laissez-faire characteristics of leadership and the results of leading to achieving a goal. The quality of education in Cambodia must be improved (World Bank, 2018; MoEYS, 2019). The education system of Cambodia confronts some problems that have been appearing since the civil war in 1970, during which the infrastructure was destroyed by war.

Therefore, low quality and unsuccessful execution are problems in higher education in Cambodia. Thus, they must increase the quality of the university because it will help the university challenge competitors and develop the country (Altbach, 2004). Cambodia is a developing country, so the problem of low-quality education is aggravated. It will impact the university's staff as they have never joined the training program at the university (Chealy, 2009). According to the report of the Accreditation Committee of Cambodia (2011), it was suggested that the government of Cambodia must improve the quality of higher education. These three factors significantly inhibit the development of higher education and more capable human capital in the country." The quality of higher education has been limited in Cambodia (Vicheth, 2012), and cannot measure between higher education and labor, thus producing an oversupply of low-skilled and graduated students who have received less training (Heng, 2011; D'Amico, 2011; Ford, 2006). Thus, it must enhance the ability of employees to respond to labor changes (Sen & Ros, 2013). For education development in Cambodia, the school director should work with the deputy director to increase education system management (Long, 2014). Kitamura (2016) found that the labor market in Cambodia was insufficient and should be supported by the university students who graduated. They cannot transform to help economic development and need a labor market to support the university.

As mentioned above, the lack of an education system, training programs, and limited higher education have impacted Cambodia's education quality. Consequently, there is low enrollment at universities. Moreover, graduated students cannot find jobs to follow up on their skills, so many will find jobs that do not relate to their skills. Therefore, universities have confronted problems that have damaged performance for several years. The problem of universities is related to several factors that have been lowering the quality of staff performance.

Several factors are related to work performance, such as transformational leadership, job satisfaction, and innovation behavior. Transformational leadership can encourage followers and impact job attitudes, role perceptions, or employee performance (Podsakoff et al., 1996). Additionally, transformational leadership has a direct impact on turnover intention in relation to employee performance (Wang & Sun, 2017). Alternatively, transformational leadership is positioned to encourage employees to achieve a goal that increases work performance with high expectations and focuses on the employee to change attitudes, and the evaluation differs from employee complaining (Bass, 1985; Yokl, 1999). Moreover, transformational leadership has frequent power with two functions, namely, intrinsic worth and perfection that is encouraging an employee, referred to as the act of the follower in choosing the best way to provide an effective work for them and supporting all their activities than use their own ideas (Kuhnert, 1994). Additionally, the keyword of charisma accepts expanded inspection and censure as the power of irreconcilable with the concept of transformation, and the idiom of charisma focuses on the full range of leadership models in due course changing to an influence of idealized (Barbutto, 1997; Hunt, 1999).

Transformational leadership can impact performance by focusing on work outcomes (Zhu et al., 2005). According to Ling, Simsek, Lubatkin, and Veiga (2008), the transformational leadership of the CEO impacts work performance. Job satisfaction has a relationship with work performance (Judge et al., 2001), and it positively impacts organizational commitment, turnover intention, and absenteeism (Yang, 2010). Job satisfaction positively impacts commitment and performance (Awang et al., 2010). Innovative behavior serves as a mediator that impacts master orientation in the relationship between role work performance and job satisfaction (Janssen & Van Yperen, 2004). The low level of innovation impacts work performance and competitiveness advantage for international markets (Hameed et al., 2018). According to Thornhill (2006), innovative behavior has a positive impact on the relationship between employee behavior and work performance, and work innovation influences work performance (Calantone et al., 2002).

In this study, transformational leadership is the key concept to clarify leaders' behavior to lead followers to achieve goals. They must have a good leadership style and how to conduct their university or organization. Transformational leadership is vital in increasing employee creativity and satisfaction with their job. Leaders could have used the leadership transformation in their organization, which would have resulted in high performance, focusing on productivity and motivation to achieve a goal. As a result, this study considers transformational leadership as the main factor in explaining the direct and indirect impact of job satisfaction and innovative behavior on work performance; thus, transformational leadership is the most important variable in improving the job quality related to employee creativity that was focused on employee satisfaction to increase work growth and work environment, in which university will be improving the quality of the system and increasing the human resources.

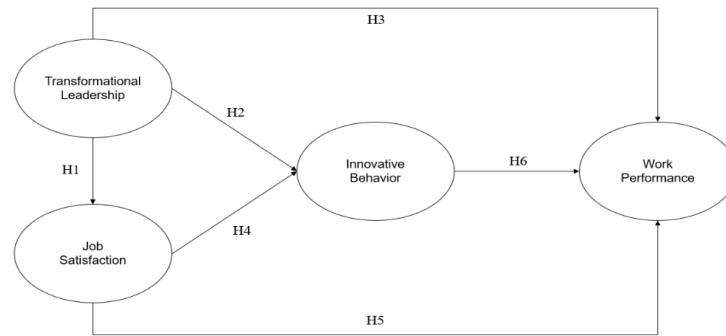


Figure 1. Conceptual framework

2. Literature Review

2.1 Transformational Leadership

Transformational leadership, through the familiar leader and follower's motor move forward, achieves its goal during intention exchanging (Burns, 1978). Transformational leadership always encourages followers to progress in their jobs and realize that they have used their job level for alternative work performance during the interchange between the leader and the follower (Bass et al., 1987). Transformational leadership is when a leader has stress in self-forfeiture for the long run of a vast group or corporation (Bass, 1985, 1997, 1998; Howell & Avolio, 1992). However, transformational leadership is urgent, involving the exchange, new creation, and marshaling priority to the visual sense, as well as the quality of transformation in an organization (Tichy & Devanna, 1986, p.4). Transformational leadership is another person's skill who will need to exchange, improve, and lead (Northouse, 2001). Therefore, transformational leadership is related to the skill of reality of another person: "He or she spends time listening, summarizing, integrating, and guiding what is being said, making key interventions and summoning images, ideas, and values that help those involved to make sense of the situation with which they are dealing" (Morgan, 1997, p.184). Furthermore, the four factors of transformational leadership theory are (1) Idealized Influence, (2) Inspirational Motivation, (3) Intellectual Stimulation, and (4) Individual consideration; they are components of transformational leadership in terms of exchanged behavior of an employee to achieve a goal with new conception (Bass, 1985a). As a result, the definition of transformational leadership is the ability of a leader to change the strategic plan to complete the mission, which is accurate of followers was used to evaluate the action of a leader that is highly committed degree to the institution and organized to achieve a goal.

2.2 Job Satisfaction

The contemplation of job satisfaction is like a result of another person's attitude, taking from stability and conclusion to focus on the similarities and similarities experienced in a job (Bullock, 1952). Furthermore, job satisfaction returns to the views; another ahead clasps their working (Srivastava, 1974). work-life balance, in which the organization's efficiency was provided to the employee to increase satisfaction. In addition, Job satisfaction is like an enjoyable or favorable spiritual condition that focuses on evaluating their first job experience (Locke, 1976). However, job satisfaction seems to be the favorable frontage of a person who is ahead of all of the facets of the work environment (Vroom, 1978). Job satisfaction is like the sentiment of followers to process their job; work experience is connected with famous skills, new speculation, and transition to change in the future (Kidd, 2006). In addition, job satisfaction was referred to as the follower's happiness with their job (Eracleous & Chamorro-Premuzic, 2009). The investigation was used to clarify the components of job satisfaction, namely salary competition, work autonomy, supervision, interpersonal relationships, development training and opportunity, job conditions, and job security (Maertz & Griffeth, 2004). In the previous study, the component of job satisfaction was used to increase satisfaction for the nurses, namely job autonomy, job development, expertise recognition, and self-sufficiency (Foley et al., 2004). In this study, the proposed components of job satisfaction are the opportunity for promotion or advancement, recognition, responsibility, achievement, and work itself. Consequently, the definition of job satisfaction is the follower's emotional reception and introduction of an individual toward all the situations that were reflected in a person's attitude toward their job, which is the positive feeling state resulting from the evaluation of the work experience.

2.3 Innovative Behavior

Many scholars define innovation differently. Innovation is the emergence of new thinking or breathing know-how, capital, materials, and other variables (Schumpeter, 1934). Additionally, innovation is some conception, operation, or equipment to collect recognized that is a new idea to relate with unit processing for assumption (Zaltman et al., 1973, p. 10). Innovation refers to creating new ideas for a developed product to succeed and give a good outcome (Anderson et al., 2014, p. 1298). Meanwhile, innovation combines ideas with coeval for processing in execution (Rosing et al., 2018). Innovative behavior is behavior to generate new conception in the job to progress and to strive to bring them into training, including the extension to seek and discover novel opportunities and solutions, promoting the generation of conception, retaining support from sponsors, idea generation, and carry out the feasibility of the test in advance (Kanter, 1988). Innovative behavior is the intentional generation, realization, and promotion of novel ideals within a job role, job group, or organization, giving advantage role of performance, group, or organization (Scott & Bruce, 1994; Woodman et al., 1993). Innovative behavior defined novel concept generation from the group and could have been put into the activity and processing (Scott & Bruce, 1994a). Innovative behavior was specified on the traits of the organization, namely the kind of product, the quality of administration, the effectiveness of employment energy, company relationship, and traits of competition that will require attentiveness and management for the organization (Mulkay, 2019). Idea generation and implementation are single factors used to measure innovative behavior (Ex. Van de Ven, 1986; Scott & Bruce, 1994; Krause, 2004; Dorenbosch et al., 2005). The outline relates to the stages of innovative behavior: idea generation, idea promotion, and idea implementation (Kanter, 1988). Innovation behavior has three functions: idea generation, promotion, and implementation (Janssen, 2000). For this study, the components of innovative behavior are idea promotion, idea generation, and new implementation. As a result, the definition of innovative behavior is the deliberate exploration of all the personal behaviors to generate, promote, and implement the new at any organizational level.

2.4 Work Performance

Work performance is the job related to output or pursuit to clarify all the personal skills to achieve a goal (Williams & Anderson, 1991). Moreover, employee performance was referred to as the collection of benefits or non-benefits by followers; thus, they could have provided self-realization to focus on the direction or indirectly show the organization's success (Motowildo & Borman, 1993). Furthermore, work performance is like the result of data processing, which mentions the work justification or venture of time duration (Bernardin & Russel, 1993, p. 378). Work performance was explained by the number of personnel needed to determine the line that will follow the quality of the organization's founder (Nayyar, 1994). Moreover, the employees' ability as the organization's resources were developed to achieve a goal that proposed new ideas to challenge another organization, which is strategy planning, which refers to implementation and evaluation for the organization. Additionally, the whole skill of employees was used to clarify the processing of their job as well as possible, which could have reduced time and cost to increase more benefits for an organization; thus, the employee will be standing on the middle point between the organization and customers to increase productivity that will have explained the high performance. Work performance has investigated the organization's output, namely efficiency and effectiveness, to focus on the productivity of the work in progress (Gomes, 1995). Work performance is necessary to show the quality, quantity, attendance, accommodation, encouragement, and schedule of work results (Rizwan et al., 2014). The successful comprehensive measuring depended on productivity, efficiency, effectiveness, quality, and work attendance (Arinanye, 2015). For this study, work performance was used to measure the non-financial atmosphere, which included productivity, efficiency, job quality, and job knowledge. As a result, the definition of work performance is the person's ability to carry out an activity and record the produced outcome to focus on the work function, which was contributed individually for an efficient and perceptive term that was contributed by employees both directly and indirectly to achieve a goal at the workplace.

3. Hypothesis Development

3.1 Transformational Leadership and Job Satisfaction

Transformational leadership is related to the skill of reality of another person: "He or she spends time listening, summarizing, integrating, and guiding what is being said, making key interventions and summoning images, ideas, and values that help those involved to make sense of the situation with which they are dealing" (Morgan, 1997, p.184). Moreover, transformational leadership is the term of art that is highly committed to the organization level and controlled to achieve a goal (Leithwood & Jantzi, 2006). Job satisfaction is the most important aspect of the clarity of follower behavior, and one part of the organization must attend to it (While and

Barriball, 2005). Some researchers have given evidence to explain the positive relationship between transformational leadership and job satisfaction (Walumbwa & Lawler, 2003; Rafferty & Griffin, 2004; Walumbwa et al., 2004; Walumbwa et al., 2005; Nguni et al., 2006; Walumbwa et al., 2007; Givens, 2008). Transformational leadership will reduce stress in their job and encourage followers to be happy at the workplace, as it will show promising results for the employees, who will be satisfied with their jobs (Castro et al., 2008). Transformational leadership was powered to jointly push the individual followers to achieve job satisfaction (Braun et al., 2013; Judge & Piccolo, 2004a; Podsakoff et al., 1996). According to imperial research, transformational leadership impacts job satisfaction (Braun et al., 2013). Transformational leadership has influenced employee job satisfaction (Ali et al., 2013). In the career research study, it was explained that transformational leadership and transactional leadership are the leadership styles that will have a potential influence on employee satisfaction between managers and followers in the workplace (Iqbal et al., 2020; Prochazka et al., 2017; Fernandes & Awamleh, 2013). Mesut and Toby (2020) provided evidence of the relationship between transformational leadership and follower attitudes, follower engagement, follower commitment, emotional intelligence, and job satisfaction. Transformational leadership is one part of the leadership style that will help employees increase their performance and reduce the weak points of a leader to achieve an objective.

H1: Transformational leadership has a positive effect on job satisfaction.

3.2 Transformational Leadership and Innovative Behavior

Transformational leadership will be related to innovative or creative groups (Eisenbeiss et al., 2008). The advantage of transformational leadership is that it could help employees increase their performance so that employees will have an increase in basic tasks and innovative activities (Ng, 2017). According to Mumford and Licuanan (2004), transformational leadership is related to innovation (McMurray et al., 2013). Generally, however, there is little research on the effects of transformational leadership on employee innovation behavior (Afsar et al., 2018). For example, transformational leadership has been used in hotels to provide suitable evidence to clarify the role of leaders who change techniques and motivate their followers with innovations focused on service delivery (Mehmetoglu, 2015; Wang et al., 2014); with transformational leadership, participants reported successful work performance and happiness (Brown & Arendt, 2010; Kara et al., 2013). As a leader's behavior, transformational leadership pushes an employee toward innovation. In an empirical study of a non-profit organization in Australia, transformational leadership was found to be a significant factor in increasing innovation in the workplace (McMurray et al., 2013). On several occasions, the skills of a leader have been found to encourage followers to create new ideas and innovate to increase productivity (Denti & Hamlin, 2012; Rosing et al., 2011).

H2: Transformational leadership has a positive effect on innovative behavior.

3.3 Transformational Leadership and Work Performance

Transformational leadership is the one part of the leadership style that has used to function for motivation and supporting employees, which had to spread processing in their job to achieve a goal (Bass & Riggio, 2006); another scholar was explained transformational leadership to encourage followers, job commitment, and fundamental that could have built stronger performance (Podsakoff et al., 1996). According to Wang et al. (2011), the transition of meta-analyze was explained as transformational leadership to relate with work performance that could have the potential for an increase in work growth (Wang et al., 2017; Judge & Piccolo, 2004b; Lowe et al., 1996). The increase or decrease in the processing of their job depended on the employees to change behavioral supporting on the new conception that will join with the organization to transit new technology who follow the situation. The previous study by Ling, Simsek, Lubatkin, and Veiga (2008) explained that the transformational leadership of the CEO impacts the work performance that follows the collection of the primary and secondary data at the organization (Zhu et al., 2005). According to Yukl (2006), transformational leadership was shown as the one part that increased performance, spreading the power to relate with the cognition of followers. Thus, transformational leadership of mental leaders impacts employee performance and will follow the ability to increase the high level of gathering value (Yang et al., 2010). Any support on the research by Mittal and Dhar (2016) explains that transformational leadership impacts behavioral outcomes, including work performance, organizational citizenship behavior, voice behavior, and service behavior (Judge & Piccolo, 2004c). Transformational leadership, as the role model, is the path for the follower to move forward and support them to reach a goal.

H3: Transformational leadership has a positive effect on work performance.

3.4 Job Satisfaction and Innovative Behavior

Job satisfaction could have a central point to clarify the optional behavior that was referred on the innovation behavior, which was used to the recommendation by theory, in which job satisfaction was impacted on the organization to relate with job feeling and work environment (Nerkar et al., 1996; Scott & Bruce, 1994b). Some researchers suggested that job satisfaction does not directly impact creativity but supports the relationship between supervision and climate follower creativity. Shalley et al. (2004) and Podsakoff et al. (1996) explained job satisfaction related to climate follower creativity. According to prior research, organizational learning is related to organizational innovation, with job satisfaction as the mediator (Hussein et al., 2014; Park et al., 2013). Furthermore, some researchers were given evidence that job satisfaction impacts innovation (Hussian et al., 2014; Tien & Choa, 2012). Transitive adaptation of the environment was used to investigate the effect of the relationship between job satisfaction and innovation performance (Spanjol et al., 2014). Based on the research study in management, it was explained that job satisfaction has a relationship with innovation (Woisetschläger et al., 2016; Rai & Hornyak, 2013; Cheng et al., 2010).

H4: Job satisfaction has a positive effect on innovative behavior.

3.5 Job Satisfaction and Work Performance

The research study on marketing in an organization described how job satisfaction (role of the salesperson) impacts work performance (Yang & Jen-Te, 2010; Brown, Steven P, Peterson and Robert A, 1994). Job satisfaction was related to work performance (Judge et al., 2001; Awang et al., 2010), but some researchers have explained plenty of job satisfaction impacts on work performance that will relate to the contacted customer (Chen et al., 2012; Chen et al.; Y. L., 2012). The investigation of job satisfaction impacted the workplace's four functions: widespread satisfaction with labor, the relationship between employees and payment, organizational culture and well-being, and employee faithfulness (Antoncic & Antoncic, 2011). More evidence explains that job satisfaction impacts work performance (Ziegler et al., 2012), and another research suggested that job satisfaction has a relationship with work performance (Rast et al., 2012). According to a research study in Sri Lanka, the result of testing with "Structural Equation Modelling" could have suggested that job satisfaction is related to work performance (Perera et al., 2014). Furthermore, job satisfaction refers to employee attitude that impacts employee behavior specified on the benefit in an organization (Pawirosumarto et al., 2017), in which job satisfaction is influenced by work performance (Zaraket et al., 2017). The research study has proposed the advantage of motivation to increase the morality of employee satisfaction that will help the organization to increase productivity and work efficiency (NORMI & Siti, 2020; Hardiyanto et al., 2019; Anwar & Budi, 2018).

H5: Job satisfaction has a positive effect on work performance.

3.6 Innovative Behavior and Work Performance

A research study suggested that the innovation role should count the performance related to the eventual result focused on employee innovation behavior (Rank et al., 2004). Janssen and Van Yperen's (2004) research study explained how innovation behavior impacts work performance. Employee behavior was changed attitude to process support on their job, in which it was liked factor that is characteristic of employee (Bharadwaj & Menon, 2000), and related to employee motivation that will explain both two variables to combine into the innovation (Mostafa, 2005). Yilmaz et al. (2005) and Hagedoorn and Cloudt (2003) explained innovation behavior to express any result that clarified the dimension of innovation behavior to give good results for an organization (von Wettberg et al., 2018; Zou et al., 2011; Hornsby et al., 2002; Antoncic & Hisrich, 2001; Barringer & Bluedorn, 1999; Narver & Slater, 1990). Innovation behavior could have shown successful ways to the organization focused on competition and profitability (Roberts & Amit, 2003; Roberts, 1999). Innovation behavior is the basic enterprising that was related to work performance (Covin et al., 2000; Zahra & Covin, 1995; Naman & Slevin, 1993; Miller, 1983), in which innovation behavior was referred to the new product that will spend less time and cost to increase work performance (Tidd et al., 2005). According to Fuentes et al. (2004), innovative behavior will make the design of a new product reduce cost to expense and customer needs and increase product quality (Prajogo & Sohal, 2003).

H6: Innovative behavior has a positive effect on work performance.

3.7 Mediating Effect of Job Satisfaction Relationship Between Transformational Leadership and Work Performance

Transit factors may impact employee performance. The factors include transformational leadership and job satisfaction. Transformational leadership is the leader's ability to encourage the employees to achieve a goal more than strategy outcomes and intrinsic benefit, so there is a close relationship between leader behavior and

employee satisfaction.

Table 1. Mediating role of job satisfaction

No	Name	Topic	Description	Page	Paragraph
1	Curado and Santos, 2021	Transformational leadership and work performance in health care: the mediating role of job satisfaction.	The results show that job satisfaction fully mediates the relationship between transformational leadership and adaptive performance.	1	1
2	Amalia et al., 2022	The Effect of Transformational Leadership and Work Motivation Against Employee Performance with Job Satisfaction as Mediation Variable: The Case of The Takalar District Court.	The study results mean that the influence of transformational leadership on employee performance at the Takalar District Court is mediated by job satisfaction.	114	4
3	Angriani, et al., 2020	The effect of transactional and transformational leadership on lecturer performance with job satisfaction as the mediation.	Job satisfaction mediates the effect of transformational leadership on the lecturers' performance.	1271	4
4	Kawiana et al., 2020	How transformational leadership intensifies employee performance mediating by job satisfaction.	This research found that job satisfaction was essential in mediating between transformational leadership and employee performance.	454	1
5	Lasiny et al., 2021	The Effect of Transformational Leadership and Work Motivation on Employee Performance with Job Satisfaction as a Mediation Variable.	Transformational leadership has a significant effect on employee performance through job satisfaction.	840	6
6	Paracha et al., 2012	Impact of leadership style (transformational & transactional leadership) on employee performance & mediating role of job satisfaction. Study of private school (educator) in Pakistan.	Job satisfaction is mediating between transformational leadership and employees' performance.	61	3
7	Pratama, 2016	Effect of Transformational Leadership Towards Employee's Performance Through Satisfaction and Moderated by Culture.	The overall results support that transformational leadership style has a significant positive impact on employees' job performance as well as mediating work satisfaction	92	1
8	Rafia and Achmad Sudiro, 2020	The Effect of Transformational Leadership on Employee Performance Mediated by Job Satisfaction and Engagement.	Job satisfaction mediates the effect between transformational leadership and employee performance.	124	2

9	Rawashdeh et al., 2020	Job satisfaction as a mediator between transformational leadership and employee performance: Evidence from a developing country.	The mediating effect of job satisfaction in the relationship between transformational leadership and employee performance.	3861	4
10	Roz, 2019	Job satisfaction as a mediation of transformational leadership style on employee performance in the food industry in Malang City.	Another thing found in this study is job satisfaction, which can mediate the transformational leadership style on employee performance.	57	2

Table 1. explains that job satisfaction is related to employee satisfaction through emotional feeling. According to literature reviews, Job satisfaction will impact work performance and employee outcomes.

3.8 Mediating Effect of Innovative Behavior Relationship Between Transformational Leadership and Work Performance

Implementation and generating ideas are necessary to relate work performance to increase productivity. Innovative behavior could positively impact work performance through employee behavior and attitudes.

Table 2. Mediating role of innovative behavior

No	Name	Topic	Description	Page	Paragraph
1	Adre and Dizon, 2021	The mediating effect of innovative work behavior on the impact of transformational leadership on work performance: The case of Meken Food Corporation	The mediation analysis results revealed that Innovative Work Behavior fully mediates the impact of Transformational Leadership on Work Performance.	1	1
2	Supriyanto et al., 2018	Transformational leadership's role in mediating emotional intelligence's effect on manager performance moderated by innovative work behavior.	Innovative work behavior moderated the effect of transformational leadership on manager performance.	100	1
3	Purwanto, 2020	The Impacts of Leadership and Culture on Work Performance in Service Company and Innovative Work Behavior as Mediating Effects	Based on the study's results, it can be concluded that transformational leadership positively and significantly influences work performance directly and through innovative work behavior such as mediation.	288	2

Table 2:3 explains that innovative behavior will improve employee behavior and generate ideas. Innovative behavior could have a positive impact on employee outcomes and attitudes. Transformational leadership may have motivated employees to achieve goals by creating new ideas. Thus, transformational leadership will positively impact work performance through innovative behavior such as mediation.

4. Discussion

A leader's traditional style must have changed, and transformational leadership is the new strategy to improve creative and motivational followers to achieve a goal; thus, transformational leadership could enhance follower performance and job satisfaction related to innovative behavior for increased productivity and service. The benefit of the research study will help educator leaders understand the training programs to achieve new skills

and develop human resources to increase their knowledge and ability for private and public universities.

Employee behavior clarifies whether work performance was low or high, referring to productivity and leader behavior. The transformational leadership style could have been assigned to enhance staff performance at the universities or other domestic organizations in advance. Moreover, the advantage of transformational leadership is that it demonstrates the improvement of university performance successfully and explains the processing of the stages to achieve a goal in each university, in which leader behavior is the key point in changing the university to get more benefits both staff behavior and technique skills applied for developing a new concept with motivated employee are improve job progress and work performance. Employees will get more benefits from a new experience to enhance performance, in which employees receive training programs to increase productivity and innovation services or digital transformation. Therefore, employee outcome is measured by the progress made to achieve a goal on time, and leaders could have evaluated low and high performance by their activity. The employee will receive motivation to increase their job. They are enjoying a new experience with the training program in which the leader is one part of encouraging employees to join in some activities for increased productivity. Thus, work performance always follows the management style of rotating positions so that the employee can gain more knowledge of the different skills.

Additionally, the employee will be changing their behavior to support the work environment and encouraged to increase creative thinking of new ideas to evolve the old strategic plan of the university that will be specified on innovative work behavior, in which employees will change their characteristics of them to increase a new idea jointly with teamwork to spread the reputation of the university, and developing weakness point of the employee to achieve a goal. Employee satisfaction will help the university to improve its performance and productivity.

As a result, this study reveals the degree of transformational leadership that supports and motivates staff to enjoy their work. Employee satisfaction could involve critical thinking to increase new implementation and relate to the innovation of the individual behavior of employees who work jointly with teams for improved work performance. The relationship between leaders and staff will increasingly relate to communication and exchanging experiences to benefit work efficiency and effectiveness. For this research study, the findings will provide the advantage of improving the job quality of employees as well as increasing productivity at universities in Phnom Penh, Cambodia.

5. Conclusion

Investigation of an effect of perception of transformational leadership on job satisfaction, innovative behavior, and work performance of the university's staff in Phnom Penh, Cambodia, that will help universities to improve their staff performance. The employee will be changing their behavior to support the work environment and encouraged to increase creative thinking of new ideas to evolve the old strategic plan of the university that will be specified on innovative work behavior, in which employees will change their characteristics to increase a new idea jointly with teamwork to spread the reputation of the university, and developing weakness point of the employee to achieve a goal.

Therefore, this study will show the degree of transformational leadership that supports and motivates staff to enjoy their work. Employee satisfaction could involve critical thinking to increase new implementation and relate to the innovation of the individual behavior of employees who work jointly with teams for improved work performance. The relationship between leaders and staff will increasingly relate to communication and exchanging experiences to benefit work efficiency and effectiveness. For this research study, the findings will provide the advantage of improving the job quality of employees as well as increasing productivity at universities in Phnom Penh, Cambodia. Time is not waiting for someone; therefore, intelligent leaders must have chosen a leadership style focused on their situation. The employee will be satisfied to receive a strategic plan that a good leader prepared. Employee satisfaction was related to leading a leader, in which employee behavior will increase their ability to show the work performance specified on productivity and reputation.

As a result, this study relates transformational leadership as the main factor to explain directly and indirectly impacted job satisfaction and innovative behavior that was specified on work performance; thus, transformational leadership is the most important variable in improving the job quality related to employee creativity that was focused on employee satisfaction to increase work growth and work environment, in which university will be improving the quality of the system and increasing the human resources.

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The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Data sharing statement

No additional data are available.

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References

- Accreditation Committee of Cambodia. (2011). Guideline on institutional accreditation process.
- Adre, K. M., & Dizon, R. T. M. D. (2021). The mediating effect of innovative work behavior on the impact of transformational leadership on work performance: The case of Mekeni Food Corporation.
- Afsar, B., & Masood, M. (2018). Transformational leadership, creative self-efficacy, trust in supervisor, uncertainty avoidance, and innovative work behavior of nurses. *The Journal of Applied Behavioral Science*, 54(1), 36-61. <https://doi.org/10.1177/0021886317711891>
- Akdere, M., & Egan, T. (2020). Transformational leadership and human resource development: Linking employee learning, job satisfaction, and organizational performance. *Human Resource Development Quarterly*, 31, 393-421. <https://doi.org/10.1002/hrdq.21404>
- Ali, A. Y. S., Sidow, M. A., & Salad, H. S. (2013). Leadership styles and job satisfaction: empirical evidence from Mogadishu universities. *European Journal of Management Sciences and Economics*.
- Altbach, P. G., & Umakoshi, T. (2004). *Asian universities: Historical perspectives and contemporary challenges*. JHU Press.
- Amalia, P. T., Munizu, M., & Umar, F. (2022). The effect of transformational leadership and work motivation against employee performance with job satisfaction as mediation variable: The case of the takalar district court. *Hasanuddin Journal of Applied Business and Entrepreneurship*, 5(1), 104-119.

- Angriani, M. R., Eliyana, A., Fitriah, H., & Sembodo, P. (2020). The effect of transactional and transformational leadership on lecturer performance with job satisfaction as the mediation. *Systematic Reviews in Pharmacy*, 11(11).
- Antonicic, B., & Hisrich, R. D. (2001). An integrative conceptual model. *Journal of Euromarketing*, 9(2), 17-35. https://doi.org/10.1300/J037v09n02_02
- Anwar, P. M., & Budi, I. (2018, November). The influence of job satisfaction and motivation on the employee performance at PT. Era Media Informasi. In *IOP Conference Series: Materials Science and Engineering* (Vol. 453, No. 1, p. 012064). IOP Publishing. <https://doi.org/10.1088/1757-899X/453/1/012064>
- Arinanye, R. T. (2015). Organizational Factors Affecting Employee Performance at The College of Computing and Information Sciences (Cocis), Makerere University, Kampala-Uganda. *Unpublished master dissertation. Uganda Technology and Management University.*
- Asbari, M., Bernarto, I., Purwanto, A., Wijayanti, L. M., & Hyun, C. C. (2020). The impacts of leadership and culture on work performance in service company and innovative work behavior as mediating effects. *Journal of Research in Business, Economics, and Education.*
- Auer Antoncic, J., & Antoncic, B. (2011). Employee satisfaction, intrapreneurship and firm growth: a model. *Industrial Management & Data Systems*, 111(4), 589-607. <https://doi.org/10.1108/02635571111133560>
- Awang, Z., Ahmad, J. H., & Zin, N. M. (2010). Modelling job satisfaction and work commitment among lecturers: A case of UiTM Kelantan. *Journal of Statistical Modeling and Analytics*, 1(2), 45-59.
- Barbuto, J. E. (1997). Taking the charisma out of transformational leadership. *Journal of Social Behavior and Personality*, 12(3), 689.
- Barringer, B. R., & Bluedorn, A. C. (1999). The relationship between corporate entrepreneurship and strategic management. *Strategic management journal*, 20(5), 421-444. [https://doi.org/10.1002/\(SICI\)1097-0266\(199905\)20:5<421::AID-SMJ30>3.0.CO;2-O](https://doi.org/10.1002/(SICI)1097-0266(199905)20:5<421::AID-SMJ30>3.0.CO;2-O)
- Barroso Castro, C., Villegas Perinan, M. M., & Casillas Bueno, J. C. (2008). Transformational leadership and followers' attitudes: The mediating role of psychological empowerment. *The International Journal of Human Resource Management*, 19, 1842-1863. <https://doi.org/10.1080/09585190802324601>
- Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership*. Psychology press. <https://doi.org/10.4324/9781410617095>
- Bass, B. M., Avolio, B. J., & Goodheim, L. (1987). Biography and the assessment of transformational leadership at the world-class level. *Journal of management*, 13(1), 7-19. <https://doi.org/10.1177/014920638701300102>
- Bernadin, J. H., & Russell, J. E. (1993). *Human Resource Management: An Approach*. New York: McGraw Hill Companies.
- Bharadwaj, S., & Menon, A. (2000). Making innovation happen in organizations: individual creativity mechanisms, organizational creativity mechanisms or both? *Journal of Product Innovation Management: An International Publication of the Product Development & Management Association*, 17(6), 424-434. <https://doi.org/10.1111/1540-5885.1760424>
- Borman, W. C., & Motowidlo, S. J. (1993). Expanding the criterion domain to include elements of contextual performance. In N. Schmitt & W. C. Borman (Eds.), *Personnel selection in organizations* (pp. 71-98). San Francisco: Jossey-Bass.
- Braun, S., Peus, C., Weisweiler, S., & Frey, D. (2013). Transformational leadership, job satisfaction, and team performance: A multilevel mediation model of trust. *The leadership quarterly*, 24, 270-283. <https://doi.org/10.1016/j.leaqua.2012.11.006>
- Brown, E. A., & Arendt, S. W. (2010). Perceptions of transformational leadership behaviors and subordinates' performance in hotels. *Journal of Human Resources in Hospitality & Tourism*, 10(1), 45-59. <https://doi.org/10.1080/15332845.2010.500205>
- Brown, S. P., & Peterson, R. A. (1994). The effect of effort on sales performance and job satisfaction. *Journal of marketing*, 58(2), 70-80. <https://doi.org/10.1177/002224299405800206>
- Bullock, T. H. (1952, January). The invertebrate neuron junction. In *Cold Spring Harbor Symposia on Quantitative Biology* (Vol. 17, pp. 267-273). Cold Spring Harbor Laboratory Press. <https://doi.org/10.1101/SQB.1952.017.01.024>

- Burns, J., Looney, A., Casey, N., & O'Donnell, M. L. (1978). *Leader*. New York, NY: Harper & Row.
- Calantone, R. J., Cavusgil, S. T., & Zhao, Y. (2002). Learning orientation, firm innovation capability, and firm performance. *Industrial marketing management*, 31(6), 515-524. [https://doi.org/10.1016/S0019-8501\(01\)00203-6](https://doi.org/10.1016/S0019-8501(01)00203-6)
- Chealy, C. (2009). Higher education in Cambodia. In *The political economy of educational reforms and capacity development in Southeast Asia* (pp. 153-165): Springer. https://doi.org/10.1007/978-1-4020-9377-7_10
- Chen, C. F., & Kao, Y. L. (2012). Investigating the antecedents and consequences of burnout and isolation among flight attendants. *Tourism Management*, 33(4), 868-874. <https://doi.org/10.1016/j.tourman.2011.09.008>
- Cheng, C. F., Lai, M. K., & Wu, W. Y. (2010). Exploring the impact of innovation strategy on R&D employees' job satisfaction: A mathematical model and empirical research. *Technovation*, 30(7-8), 459-470. <https://doi.org/10.1016/j.technovation.2010.03.006>
- Covin, J. G., Slevin, D. P., & Heeley, M. B. (2000). Pioneers and followers: Competitive tactics, environment, and firm growth. *Journal of business venturing*, 15(2), 175-210. [https://doi.org/10.1016/S0883-9026\(98\)00015-9](https://doi.org/10.1016/S0883-9026(98)00015-9)
- Curado, C., & Santos, R. (2022). Transformational leadership and work performance in health care: the mediating role of job satisfaction. *Leadership in Health Services*, 35(2), 160-173. <https://doi.org/10.1108/LHS-06-2021-0051>
- D'Amico, R., Vermigli, P., & Canetto, S. S. (2011). Publication productivity and career advancement by female and male psychology faculty: The case of Italy. *Journal of Diversity in Higher Education*, 4(3), 175. <https://doi.org/10.1037/a0022570>
- Denti, L., & Hemlin, S. (2012). Leadership and innovation in organizations: A systematic review of factors that mediate or moderate the relationship. *International Journal of Innovation Management*, 16(3), 1240007. <https://doi.org/10.1142/S1363919612400075>
- Dorenbosch, L., Engen, M. L. V., & Verhagen, M. (2005). On-the-job innovation: The impact of job design and human resource management through production ownership. *Creativity and innovation management*, 14(2), 129-141. <https://doi.org/10.1111/j.1476-8691.2005.00333.x>
- Eisenbeiss, S. A., Van Knippenberg, D., & Boerner, S. (2008). Transformational leadership and team innovation: integrating team climate principles. *Journal of applied psychology*, 93(6), 1438. <https://doi.org/10.1037/a0012716>
- Fernandes, C., & Awamleh, R. (2004). The impact of transformational and transactional leadership styles on employee's satisfaction and performance: An empirical test in a multicultural environment.
- Foley, M., Lee, J., Wilson, L., Cureton, V. Y., & Canham, D. (2004). A multi-factor analysis of job satisfaction among school nurses. *The Journal of School Nursing*, 20(2), 94-100. <https://doi.org/10.1177/10598405040200020701>
- Ford, S. (2006). Crimes against Humanity at the Extraordinary Chambers in the Courts of Cambodia: Is a Connection with Armed Conflict Required. *UCLA Pac. Basin LJ*, 24, 125. <https://doi.org/10.5070/P8242022190>
- Fuente, A., García-Burillo, S., Gerin, M., Teyssier, D., Usero, A., Rizzo, J. R., & De Vicente, P. (2005). Photon-dominated chemistry in the nucleus of M82: Widespread HOC+ emission in the inner 650 parsec disk. *The Astrophysical Journal*, 619(2), L155. <https://doi.org/10.1086/427990>
- Furnham, A., Eracleous, A., & Chamorro-Premuzic, T. (2009). Personality, motivation and job satisfaction: Hertzberg meets the Big Five. *Journal of managerial psychology*, 24(8), 765-779. <https://doi.org/10.1108/02683940910996789>
- Givens, R. J. (2008). Transformational leadership: The impact on organizational and personal outcomes. *Emerging leadership journeys*, 1, 4-24.
- Gomes, E. F., Rema, P., & Kaushik, S. J. (1995). Replacement of fish meal by plant proteins in the diet of rainbow trout (*Oncorhynchus mykiss*): digestibility and growth performance. *Aquaculture*, 130, 177-186. [https://doi.org/10.1016/0044-8486\(94\)00211-6](https://doi.org/10.1016/0044-8486(94)00211-6)

- Hagedoorn, J., & Cloudt, M. (2003). Measuring innovative performance: is there an advantage in using multiple indicators? *Research policy*, 32(8), 1365-1379. [https://doi.org/10.1016/S0048-7333\(02\)00137-3](https://doi.org/10.1016/S0048-7333(02)00137-3)
- Heng Seiha, K. S. a. S. S. (2011). Decentralised Governance.
- Hornsby, J. S., Kuratko, D. F., & Zahra, S. A. (2002). Middle managers' perception of the internal environment for corporate entrepreneurship: assessing a measurement scale. *Journal of business Venturing*, 17(3), 253-273. [https://doi.org/10.1016/S0883-9026\(00\)00059-8](https://doi.org/10.1016/S0883-9026(00)00059-8)
- Howell, J. M., & Avolio, B. J. (1992). The ethics of charismatic leadership: submission or liberation?. *Academy of Management Perspectives*, 6(2), 43-54. <https://doi.org/10.5465/ame.1992.4274395>
- Hunt, J. G. (1999). Transformational/charismatic leadership's transformation of the field: An historical essay. *The leadership quarterly*, 10(2), 129-144. [https://doi.org/10.1016/S1048-9843\(99\)00015-6](https://doi.org/10.1016/S1048-9843(99)00015-6)
- Hussain, H. K., Talib, N. A., & Shah, I. M. (2014). Exploring the impact of transformational leadership on process innovation and product innovation: A case of Iraqi public universities. *Asian Social Science*, 10(21), 168. <https://doi.org/10.5539/ass.v10n21p168>
- Hussein, N., Mohamad, A., Noordin, F., & Ishak, N. A. (2014). Learning organization and its effect on organizational performance and organizational innovativeness: A proposed framework for Malaysian Public Institutions of Higher Education. *Procedia-Social and Behavioral Sciences*, 130, 299-304. <https://doi.org/10.1016/j.sbspro.2014.04.035>
- Imran, M., Hameed, W. U., & Haque, A. U. (2018). Influence of industry 4.0 on the production and service sectors in Pakistan: Evidence from textile and logistics industries. *Social Sciences*, 7(12), 246. <https://doi.org/10.3390/socsci7120246>
- Inail, M. A., Hardiyanto, E. B., & Mendham, D. S. (2019). Growth Responses of Eucalyptus pellita F. Muell Plantations in South Sumatra to Macronutrient Fertilisers Following Several Rotations of Acacia mangium Willd. *Forests*, 10(12), 1054. <https://doi.org/10.3390/f10121054>
- Iqbal, S., Atique, U., Mahboob, S., Haider, M. S., Iqbal, H. S., Al-Ghanim, K. A., ... & Mughal, M. S. (2020). Effect of supplemental selenium in fish feed boosts growth and gut enzyme activity in juvenile tilapia (*Oreochromis niloticus*). *Journal of King Saud University-Science*, 32(5), 2610-2616. <https://doi.org/10.1016/j.jksus.2020.05.001>
- Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behaviour. *Journal of Occupational and organizational psychology*, 73(3), 287-302. <https://doi.org/10.1348/096317900167038>
- Janssen, O., & Van Yperen, N. W. (2004). Employees' goal orientations, the quality of leader-member exchange, and the outcomes of job performance and job satisfaction. *Academy of management journal*, 47(3), 368-384. <https://doi.org/10.2307/20159587>
- Judge, T. A., & Piccolo, R. F. (2004). Transformational and transactional leadership: a meta-analytic test of their relative validity. *Journal of Applied Psychology*, 89(5), 755. <https://doi.org/10.1037/0021-9010.89.5.755>
- Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction–job performance relationship: A qualitative and quantitative review. *Psychological bulletin*, 127(3), 376. <https://doi.org/10.1037/0033-2909.127.3.376>
- Kanter, R. M. (1988). Three tiers for innovation research. *Communication research*, 15(5), 509-523. <https://doi.org/10.1177/009365088015005001>
- Kara, D., Uysal, M., Sirgy, M. J., & Lee, G. (2013). The effects of leadership style on employee well-being in hospitality. *International Journal of Hospitality Management*, 34, 9-18. <https://doi.org/10.1016/j.ijhm.2013.02.001>
- Kawiana, I. G. P., Riana, I. G., Rihayana, I. G., & Adi, I. N. R. (2020). How transformational leadership intensify employee performance mediating by job satisfaction. *MIX: Jurnal Ilmiah Manajemen*, 10(3), 327361. <https://doi.org/10.22441/mix.2020.v10i3.010>
- Kidd, C. (2006). *The forging of races: race and scripture in the Protestant Atlantic world, 1600–2000*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511817854>
- Kitamura, Y., Edwards Jr, D. B., Williams, J. H., & Sitha, C. (2016). *The political economy of schooling in Cambodia: Issues of quality and equity*: Springer. <https://doi.org/10.1057/9781137456007>

- Kraay, A. (2018). Methodology for a World Bank human capital index. *World Bank Policy Research Working Paper*, (8593). <https://doi.org/10.1596/1813-9450-8593>
- Krause, D. E. (2004). Influence-based leadership as a determinant of the inclination to innovate and of innovation-related behaviors: An empirical investigation. *The leadership quarterly*, 15(1), 79-102. <https://doi.org/10.1016/j.leaqua.2003.12.006>
- Kuhnert, K. W. (1994). Transforming leadership: Developing people through delegation.
- Lasiny, D. A., Astuti, E. S., & Utami, H. N. (2021). The effect of transformational leadership and work motivation on employee performance with job satisfaction as a mediation variable. *Journal of Southwest Jiaotong University*, 56(6). <https://doi.org/10.35741/issn.0258-2724.56.6.73>
- Lee, J. H., Yang, D. H., Jang, S. Y., Choi, W. S., Kim, K. H., Lee, W. K., ... & Chae, S. C. (2013). Incremental predictive value of red cell distribution width for 12-month clinical outcome after acute myocardial infarction. *Clinical cardiology*, 36(6), 336-341. <https://doi.org/10.1002/clc.22114>
- Leithwood, K., & Jantzi, D. (2006). Transformational school leadership for large-scale reform: Effects on students, teachers, and their classroom practices. *School effectiveness and school improvement*, 17, 201-227. <https://doi.org/10.1080/09243450600565829>
- Ling, Y., Simsek, Z., Lubatkin, M. H., & Veiga, J. F. (2008). The impact of transformational CEOs on the performance of small-to medium-sized firms: Does organizational context matter? *Journal of Applied Psychology*, 93(4), 923. <https://doi.org/10.1037/0021-9010.93.4.923>
- Locke, E. A., Sirota, D., & Wolfson, A. D. (1976). An experimental case study of the successes and failures of job enrichment in a government agency. *Journal of Applied Psychology*, 61(6), 701. <https://doi.org/10.1037/0021-9010.61.6.701>
- Long, N. (2015). *Leadership development needs of Cambodian primary school principals and deputy principals*.
- Lowe, K. B., Kroeck, K. G., & Sivasubramaniam, N. (1996). Effectiveness correlates of transformational and transactional leadership: A meta-analytic review of the MLQ literature. *The leadership quarterly*, 7(3), 385-425. [https://doi.org/10.1016/S1048-9843\(96\)90027-2](https://doi.org/10.1016/S1048-9843(96)90027-2)
- Lu, H., While, A. E., & Barriball, K. L. (2005). Job satisfaction among nurses: a literature review. *International journal of nursing studies*, 42, 211-227. <https://doi.org/10.1016/j.ijnurstu.2004.09.003>
- Maertz Jr, C. P., & Griffeth, R. W. (2004). Eight motivational forces and voluntary turnover: A theoretical synthesis with implications for research. *Journal of management*, 30(5), 667-683. <https://doi.org/10.1016/j.jm.2004.04.001>
- McMurray, A. J., Islam, M. M., Sarros, J. C., & Pirola-Merlo, A. (2013). Workplace innovation in a nonprofit organization. *Nonprofit Management and Leadership*, 23(3), 367-388. <https://doi.org/10.1002/nml.21066>
- McMurray, B., Kovack-Lesh, K. A., Goodwin, D., & McEchron, W. (2013). Infant directed speech and the development of speech perception: Enhancing development or an unintended consequence? *Cognition*, 129(2), 362-378. <https://doi.org/10.1016/j.cognition.2013.07.015>
- Miller, W. R. (1983). Motivational interviewing with problem drinkers. *Behavioural and Cognitive Psychotherapy*, 11(2), 147-172. <https://doi.org/10.1017/S0141347300006583>
- Ministry of Education, Y., and Sport (MoEYS). (2006). Education strategic plan 2006–2010. (Phnom Penh: Ministry of Education, Youth, and Sport). Retrieved from https://planipolis.iiep.unesco.org/sites/default/files/ressources/cambodia_education_strategic_plan_2006-2010.pdf
- Mittal, S., & Dhar, R. L. (2016). Effect of green transformational leadership on green creativity: A study of tourist hotels. *Tourism management*, 57, 118-127. <https://doi.org/10.1016/j.tourman.2016.05.007>
- MoEYS (Ministry of Education, Y. A. S. (2014). Education strategic plan 2014-2018. 122. Retrieved from <http://www.moeys.gov.kh/images/moeys/policies-and-strategies/559-en.pdf>
- MoEYS (Ministry of Education, Y. a. S. (2019). Education strategic plan. 128. Retrieved from https://drive.google.com/file/d/1kdtxQD1F4Pym1_h056hzoJqQH7C7CqZ/view
- Morgan, G. (1999). *Images de l'organisation*. Presses Université Laval.

- Mostafa, M. M. (2005). An empirical study of patients' expectations and satisfactions in Egyptian hospitals. *International journal of health care quality assurance*, 18(7), 516-532. <https://doi.org/10.1108/09526860510627201>
- Mulkay, C. D. (2019). *Investigating the utilization of surfactant in liquid unloading experiments of a propped fracture* (Doctoral dissertation).
- Mumford, M. D., & Licuanan, B. (2004). Leading for innovation: Conclusions, issues, and directions. *The Leadership Quarterly*, 15(1), 163-171. <https://doi.org/10.1016/j.leaqua.2003.12.010>
- N. Anderson et al. Innovation and creativity in organizations: A state-of-the-science review, prospective commentary, and guiding framework. *Journal of Management*. <https://doi.org/10.1177/0149206314527128>
- Naman, J. L., & Slevin, D. P. (1993). Entrepreneurship and the concept of fit: A model and empirical tests. *Strategic management journal*, 14(2), 137-153. <https://doi.org/10.1002/smj.4250140205>
- Narver, J. C., & Slater, S. F. (1990). The effect of a market orientation on business profitability. *Journal of marketing*, 54(4), 20-35. <https://doi.org/10.1177/002224299005400403>
- Nayyar, D. (1994). International Labor Movements, Trade Flows and Migration Transitions: A Theoretical Perspective. *Asian and Pacific Migration Journal*, 3, 31-47. <https://doi.org/10.1177/011719689400300103>
- Nerkar, A. A., McGrath, R. G., & MacMillan, I. C. (1996). Three facets of satisfaction and their influence on the performance of innovation teams. *Journal of Business Venturing*, 11(3), 167-188. [https://doi.org/10.1016/0883-9026\(96\)00002-X](https://doi.org/10.1016/0883-9026(96)00002-X)
- Ng, T. W. (2017). Transformational leadership and performance outcomes: Analyses of multiple mediation pathways. *The leadership quarterly*, 28(3), 385-417. <https://doi.org/10.1016/j.leaqua.2016.11.008>
- Ngoy, M., Say, S., & Leang, U. (2019). *Governance in public higher education in Cambodia*: CDRI, Cambodia Development Resource Institute.
- Nguni, S., Slegers, P., & Denessen, E. (2006). Transformational and transactional leadership effects on teachers' job satisfaction, organizational commitment, and organizational citizenship behavior in primary schools: The Tanzanian case. *School effectiveness and school improvement*, 17, 145-177. <https://doi.org/10.1080/09243450600565746>
- NORMI, S. (2020). The Supply Chain Resources in Job Performance on Hospitality and Tourism Sector. *Journal of Environmental Management and Tourism (JEMT)*, 11(02 (42)), 422-428. [https://doi.org/10.14505/jemt.v11.2\(42\).21](https://doi.org/10.14505/jemt.v11.2(42).21)
- Northouse, L., Templin, T., & Mood, D. (2001). Couples' adjustment to breast disease during the first year following diagnosis. *Journal of behavioral medicine*, 24, 115-136. <https://doi.org/10.1023/A:1010772913717>
- Paracha, M. U., Qamar, A., Mirza, A., Hassan, I. U., & Waqas, H. (2012). Impact of leadership style (transformational & transactional leadership) on employee performance & mediating role of job satisfaction. Study of private school (educator) in Pakistan. *Global Journal of Management and Business Research*, 12(4), 55-64.
- Park, C. H., Song, J. H., Yoon, S. W., & Kim, J. (2013). A missing link: psychological ownership as a mediator between transformational leadership and organizational citizenship behaviour. *Human Resource Development International*, 16(5), 558-574. <https://doi.org/10.1080/13678868.2013.839510>
- Pawirosumarto, S., Sarjana, P. K., & Gunawan, R. (2017). The effect of work environment, leadership style, and organizational culture towards job satisfaction and its implication towards employee performance in Parador Hotels and Resorts, Indonesia. *International journal of law and management*, 59(6), 1337-1358. <https://doi.org/10.1108/IJLMA-10-2016-0085>
- Perera, C., Liu, C. H., Jayawardena, S., & Chen, M. (2014). A survey on internet of things from industrial market perspective. *IEEE Access*, 2, 1660-1679. <https://doi.org/10.1109/ACCESS.2015.2389854>
- Podsakoff, P. M., MacKenzie, S. B., & Bommer, W. H. (1996). Transformational leader behaviors and substitutes for leadership as determinants of employee satisfaction, commitment, trust, and organizational citizenship behaviors. *Journal of management*, 22(2), 259-298. [https://doi.org/10.1016/S0149-2063\(96\)90049-5](https://doi.org/10.1016/S0149-2063(96)90049-5)

- Prajogo, D. I., & Sohal, A. S. (2003). The relationship between TQM practices, quality performance, and innovation performance: An empirical examination. *International journal of quality & reliability management*, 20(8), 901-918. <https://doi.org/10.1108/02656710310493625>
- Pratama, G. (2016). Effect of Transformational Leadership Towards Employee's Performance Through Satisfaction and Moderated by Culture. *Jurnal Ekonomi Universitas Esa Unggul*, 7(2), 778-786.
- Prochazka, J., Gilova, H., & Vaculik, M. (2017). The relationship between transformational leadership and engagement: Self-efficacy as a mediator. *Journal of Leadership Studies*, 11, 22-33. <https://doi.org/10.1002/jls.21518>
- Rafferty, A. E., & Griffin, M. A. (2004). Dimensions of transformational leadership: Conceptual and empirical extensions. *The leadership quarterly*, 15, 329-354. <https://doi.org/10.1016/j.leaqua.2004.02.009>
- Rafia, R., & Achmad Sudiro, S. (2020). The effect of transformational leadership on employee performance mediated by job satisfaction and employee engagement. *International Journal of Business, Economics and Law*, 21(5), 119-125.
- Rai, A., & Hornyak, R. (2013). The impact of sourcing enterprise system use and work process interdependence on sourcing professionals' job outcomes. *Journal of Operations Management*, 31(6), 474-488. <https://doi.org/10.1016/j.jom.2013.07.005>
- Rank, J., Pace, V. L., & Frese, M. (2004). Three avenues for future research on creativity, innovation, and initiative. *Applied Psychology*, 53(4), 518-528. <https://doi.org/10.1111/j.1464-0597.2004.00185.x>
- Rast, S., & Tourani, A. (2012). Evaluation of employees' job satisfaction and role of gender difference: An empirical study at airline industry in Iran. *International journal of business and social science*, 3(7), 91-100.
- Rawashdeh, A., Elayan, M., Shamout, M., & Saleh, M. (2020). Job satisfaction as a mediator between transformational leadership and employee performance: Evidence from a developing country. *Management Science Letters*, 10(16), 3855-3864. <https://doi.org/10.5267/j.msl.2020.7.026>
- Rizwan, M., Tariq, M., Hassan, R., & Sultan, A. (2014). A comparative analysis of the factors effecting the employee motivation and employee performance in Pakistan. *International Journal of Human Resource Studies*, 4, 35. <https://doi.org/10.5296/ijhrs.v4i3.5873>
- Roberts, P. W. (1999). Product innovation, product-market competition and persistent profitability in the US pharmaceutical industry. *Strategic management journal*, 20(7), 655-670. [https://doi.org/10.1002/\(SICI\)1097-0266\(199907\)20:7<655::AID-SMJ44>3.0.CO;2-P](https://doi.org/10.1002/(SICI)1097-0266(199907)20:7<655::AID-SMJ44>3.0.CO;2-P)
- Roberts, P. W., & Amit, R. (2003). The dynamics of innovative activity and competitive advantage: The case of Australian retail banking, 1981 to 1995. *Organization science*, 14(2), 107-122. <https://doi.org/10.1287/orsc.14.2.107.14990>
- Rosing, K., Bledow, R., Frese, M., Baytalskaya, N., Johnson Lascano, J., & Farr, J. L. (2018). The temporal pattern of creativity and implementation in teams. *Journal of Occupational and Organizational Psychology*, 91(4), 798-822. <https://doi.org/10.1111/joop.12226>
- Rosing, K., Frese, M., & Bausch, A. (2011). Explaining the heterogeneity of the leadership-innovation relationship: Ambidextrous leadership. *The leadership quarterly*, 22(5), 956-974. <https://doi.org/10.1111/joop.12226>
- Roz, K. (2019). Job satisfaction as a mediation of transformational leadership style on employee performance in the food industry in Malang City. *International Journal of Economics, Business and Accounting Research (IJEBAAR)*, 3(02). <https://doi.org/10.29040/ijebar.v3i02.532>
- Schumpeter, J. A. (1934). *The theory of Economic Development*, Harvard University Press, Cambridge, Massachusetts.
- Scott, S. G., & Bruce, R. A. (1994). Determinants of innovative behavior: A path model of individual innovation in the workplace. *Academy of Management Journal*, 37(3), 580-607. <https://doi.org/10.2307/256701>
- Sen, V., & Ros, S. (2013). Anatomy of higher education governance in Cambodia.
- Shalley, C. E., Zhou, J., & Oldham, G. R. (2004). The effects of personal and contextual characteristics on creativity: Where should we go from here?. *Journal of management*, 30(6), 933-958. <https://doi.org/10.1016/j.jm.2004.06.007>

- Slåtten, T., & Mehmetoglu, M. (2015). The effects of transformational leadership and perceived creativity on innovation behavior in the hospitality industry. *Journal of Human Resources in Hospitality & Tourism, 14*(2), 195-219. <https://doi.org/10.1080/15332845.2014.955557>
- Spanjol, J., Tam, L., & Tam, V. (2015). Employer–employee congruence in environmental values: An exploration of effects on job satisfaction and creativity. *Journal of business ethics, 130*, 117-130. <https://doi.org/10.1007/s10551-014-2208-6>
- Srivastava, S. (2013). Job satisfaction and organizational commitment relationship: Effect of personality variables. *Vision, 17*(2), 159-167. <https://doi.org/10.1177/0972262912483529>
- Supriyanto, A. S., Ekowati, V. M., Alim, S. Y. A. H. I. R. U. L., & Waluyo, A. P. (2018). Transformational leadership role in mediating the effect of emotional intelligence on manager performance moderated by inovative work behavior. *Kaav International Journal of Economics, Commerce & Business Management, 5*(4), 100-106.
- Thornhill, S. (2006). Knowledge, innovation and firm performance in high-and low-technology regimes. *Journal of business venturing, 21*(5), 687-703. <https://doi.org/10.1016/j.jbusvent.2005.06.001>
- Tichy, Noel M. and Devanna, Mary Anne (1986). *The Transformational Leader*. New York: John Wiley & Sons.
- Tidd, J. (2006). *Innovation models*. Imperial College London, 17.
- Tien, L. C., & Chao, H. S. (2012). Effects of information culture and job satisfaction on the organizational innovation-a study of different leadership styles as a moderator. *Advances in Management and Applied Economics, 2*(3), 83.
- Van de Ven, A. H. (1986). Central problems in the management of innovation. *Management science, 32*(5), 590-607. <https://doi.org/10.1287/mnsc.32.5.590>
- Vicheth, S. (2012). Cambodia's higher education structure and the implications of the 2015 ASEAN economic community. *CDRI's Cambodia Annual Development Review, 2013*, 24-32.
- Von Wettberg, E. J., Chang, P. L., Başdemir, F., Carrasquila-Garcia, N., Korbu, L. B., Moenga, S. M., ... & Cook, D. R. (2018). Ecology and genomics of an important crop wild relative as a prelude to agricultural innovation. *Nature communications, 9*(1), 649. <https://doi.org/10.1038/s41467-018-02867-z>
- Vroom, V. H., & Jago, A. G. (1978). On the validity of the Vroom-Yetton model. *Journal of Applied Psychology, 63*(2), 151. <https://doi.org/10.1037/0021-9010.63.2.151>
- Walumbwa, F. O., & Lawler, J. J. (2003). Building effective organizations: Transformational leadership, collectivist orientation, work-related attitudes and withdrawal behaviours in three emerging economies. *The International Journal of Human Resource Management, 14*, 1083-1101. <https://doi.org/10.1080/0958519032000114219>
- Walumbwa, F. O., Lawler, J. J., & Avolio, B. J. (2007). Leadership, individual differences, and work-related attitudes: A cross-culture investigation. *Applied psychology, 56*, 212-230. <https://doi.org/10.1111/j.1464-0597.2006.00241.x>
- Walumbwa, F. O., Orwa, B., Wang, P., & Lawler, J. J. (2005). Transformational leadership, organizational commitment, and job satisfaction: A comparative study of Kenyan and US financial firms. *Human resource development quarterly, 16*, 235-256. <https://doi.org/10.1002/hrdq.1135>
- Walumbwa, F. O., Wang, P., Lawler, J. J., & Shi, K. (2004). The role of collective efficacy in the relations between transformational leadership and work outcomes. *Journal of occupational and organizational psychology, 77*, 515-530. <https://doi.org/10.1348/0963179042596441>
- Wang, H. J., Demerouti, E., & Le Blanc, P. (2017). Transformational leadership, adaptability, and job crafting: The moderating role of organizational identification. *Journal of Vocational Behavior, 100*, 185-195. <https://doi.org/10.1016/j.jvb.2017.03.009>
- Wang, X., Chontawan, R., & Nantsupawat, R. (2012). Transformational leadership: effect on the job satisfaction of Registered Nurses in a hospital in China. *Journal of advanced nursing, 68*(2), 444-451. <https://doi.org/10.1111/j.1365-2648.2011.05762.x>
- Wang, X. H. F., Kim, T. Y., & Lee, D. R. (2016). Cognitive diversity and team creativity: Effects of team intrinsic motivation and transformational leadership. *Journal of business research, 69*(9), 3231-3239. <https://doi.org/10.1016/j.jbusres.2016.02.026>

- Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of management*, 17(3), 601-617. <https://doi.org/10.1177/014920639101700305>
- Woisetschläger, D. M., Backhaus, C., & Cornwell, T. B. (2017). Inferring corporate motives: How deal characteristics shape sponsorship perceptions. *Journal of Marketing*, 81(5), 121-141. <https://doi.org/10.1509/jm.16.0082>
- Woisetschläger, D. M., Hanning, D., & Backhaus, C. (2016). Why frontline employees engage as idea collectors: An assessment of underlying motives and critical success factors. *Industrial Marketing Management*, 52, 109-116. <https://doi.org/10.1016/j.indmarman.2015.05.015>
- Woodman, R. W., Sawyer, J. E., & Griffin, R. W. (1993). Toward a theory of organizational creativity. *Academy of management review*, 18(2), 293-321. <https://doi.org/10.2307/258761>
- World Bank Group. (2016). World development report 2016: Digital dividends. World Bank Publications.
- Yang, J. T. (2010). Antecedents and consequences of job satisfaction in the hotel industry. *International Journal of Hospitality Management*, 29(4), 609-619. <https://doi.org/10.1016/j.ijhm.2009.11.002>
- Yang, J., Zhang, Z. X., & Tsui, A. S. (2010). Middle manager leadership and frontline employee performance: Bypass, cascading, and moderating effects. *Journal of Management Studies*, 47(4), 654-678. <https://doi.org/10.1111/j.1467-6486.2009.00902.x>
- Yilmaz, C., Alpan, L., & Ergun, E. (2005). Cultural determinants of customer-and learning-oriented value systems and their joint effects on firm performance. *Journal of business research*, 58(10), 1340-1352. <https://doi.org/10.1016/j.jbusres.2004.06.002>
- Yukl, G. (1999). An evaluation of conceptual weaknesses in transformational and charismatic leadership theories. *The leadership quarterly*, 10(2), 285-305. [https://doi.org/10.1016/S1048-9843\(99\)00013-2](https://doi.org/10.1016/S1048-9843(99)00013-2)
- Zahra, S. A., & Covin, J. G. (1995). Contextual influences on the corporate entrepreneurship-performance relationship: A longitudinal analysis. *Journal of business venturing*, 10(1), 43-58. [https://doi.org/10.1016/0883-9026\(94\)00004-E](https://doi.org/10.1016/0883-9026(94)00004-E)
- Zaltman, G., Duncan, R. & Holbek, J. (1973). *Innmations and Organizations*. New York: Wiley.
- Zaraket, W. S., & Saber, F. (2017). The impact of financial reward on Job satisfaction and performance: Implications for Blue Collar Employees. *China-USA Business Review*, 16(8), 369-378. <https://doi.org/10.17265/1537-1514/2017.08.003>
- Zhu, W., Chew, I. K., & Spangler, W. D. (2005). CEO transformational leadership and organizational outcomes: The mediating role of human-capital-enhancing human resource management. *The leadership quarterly*, 16(1), 39-52. <https://doi.org/10.1016/j.leaqua.2004.06.001>
- Ziegler, R., Schlett, C., Casel, K., & Diehl, M. (2012). The role of job satisfaction, job ambivalence, and emotions at work in predicting organizational citizenship behavior. *Journal of Personnel Psychology*. <https://doi.org/10.1027/1866-5888/a000071>
- Zou, G., & Yilmaz, L. (2012, March). Exploring the impact of social communication on the innovation potential of epistemic communities. In *Proceedings of the 50th Annual Southeast Regional Conference* (pp. 315-320). <https://doi.org/10.1145/2184512.2184585>

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