



Universitat Autònoma de Barcelona

ADVERTIMENT. L'accés als continguts d'aquesta tesi queda condicionat a l'acceptació de les condicions d'ús establertes per la següent llicència Creative Commons:  http://cat.creativecommons.org/?page_id=184

ADVERTENCIA. El acceso a los contenidos de esta tesis queda condicionado a la aceptación de las condiciones de uso establecidas por la siguiente licencia Creative Commons:  <http://es.creativecommons.org/blog/licencias/>

WARNING. The access to the contents of this doctoral thesis it is limited to the acceptance of the use conditions set by the following Creative Commons license:  <https://creativecommons.org/licenses/?lang=en>



**Leadership Styles, Work Engagement and Perceived Organizational
Support among Nurses**

Aida Mehrad

PhD Programme in Health and Sports Psychology

Department of Basic, Developmental, and Educational Psychology

Faculty of Psychology

Universitat Autònoma de Barcelona

Thesis Supervisors:

Jordi Fernández Castro

Maria Pau González Gómez de Olmedo

2021

Leadership Styles, Work Engagement and Perceived Organizational Support
among Nurses

by

Aida Mehrad

Program of Doctor in Health and Sports Psychology

Department of Basic, Developmental, and Educational Psychology

Faculty of Psychology

Universitat Autònoma de Barcelona

Thesis Supervisors:

Jordi Fernández Castro

Maria Pau González Gómez de Olmedo

2021

Dedicated to all honorable doctors, nurses, and healthcare personnel

Dedicado a todos los honorables médicos, enfermeras y personal sanitario

تقدیم به تمامی پزشکان ، پرستاران و کادربهداشت محترم

Acknowledgment

First, I would like to reveal my sincere acknowledgment to Dr. Jordi Fernández Castro and Dr. Maria Pau González Gómez de Olmedo, my kind and supportive supervisors, patient supervision, enthusiastic encouragement, and valuable commentaries of this project. This research would not have been achievable without their support and accurate guides in formulating the research topic and methodology.

I would also wish to thank Galatea Foundation for endorsing this project and its support. Besides, I am thankful to all members and staff of the basic, developmental, and educational psychology department for their gentle attention and assistance around these academic years. Likewise, I am sincerely thankful to my kind parents that during this academic journey, support me; in the end, I am special thanks to my husband for his gentle patience and reinforcement.

Thanks for all your support! Without you, this project could not have been done.

Table of Contents

Acknowledgement.....	V
Table of Content.....	VI
Abstract.....	X
Resumen.....	XII
List of Tables.....	XIV
List of Figures.....	XV
List of Abbreviations.....	XVI
Chapter 1 Theoretical Background.....	1
1.1 Introduction.....	2
1.2 Leadership.....	5
1.2.1 Leadership Styles.....	6
1.2.2 The Conceptual and Operational Definitions of Leadership Styles.....	11
1.2.3 Avolio and Bass (1991) Full Range of Leadership Theory.....	13
1.3 Work Engagement.....	14
1.3.1 Employees' Work Engagement at Workplace.....	15
1.3.2 Nurses Work Engagement at Healthcare Organizations.....	17
1.3.3 The Conceptual and Operational Definition of Work Engagement.....	18
1.4 Perceived Organizational Support (POS).....	19
1.4.1 The Conceptual and Operational Definition of POS.....	21
1.4.2 Theory Perceived Organizational Support (POS) (1986)	21
1.5 Relationships Between Leadership Styles, Work Engagement, and POS.....	21
1.5.1 Leadership Styles and Work Engagement.....	22
1.5.2 POS and Work Engagement.....	27
1.5.3 POS and Leadership Styles.....	28
1.6 The Present Study.....	30
1.7 Research Objective.....	31
1.8 Hypothesis.....	31
1.9 Scope of Study.....	32
1.10 Organization of Study.....	32

Chapter 2 Methodology.....	33
2.1 Introduction.....	34
2.2 Research Design.....	34
2.3 Population of the Study.....	34
2.3.1 Sample and Sampling Method.....	35
2.4 Location of the Study.....	36
2.5 Data Collection.....	36
2.6 Instrumentation and Measurement.....	36
2.6.1 Antecedent Variable: Background Factors.....	37
2.6.2 Dependent Variable: Work Engagement.....	37
2.6.3 Independent Variable: Leadership Styles.....	37
2.6.4 Mediator Variable: POS.....	38
2.7 Instrument Scores Validity and Reliability.....	38
2.8 Data Analysis.....	39
2.9 The Level of Significance.....	42
2.10 Ethical Considerations.....	43
2.11 Chapter Summary.....	43
Chapter 3 Results.....	44
3.1 Introduction.....	45
3.2 Descriptive Analysis.....	45
3.2.1 Respondents' Background.....	45
3.2.2 Distribution of Measures.....	46
3.3 Inferential Statistical Analysis.....	47
3.3.1 Differences in Work Engagement between Socio-Demographic Factors based on <i>t</i> -test Results.....	48
3.3.2 Differences in Work Engagement between Socio-Demographic Factors based on ANOVA Results.....	49
3.3.3 Relationships between Leadership Styles, Three Outcome Scales, POS, and Work Engagement.....	50
3.3.4 Predictors of Work Engagement.....	52

3.3.5	Significance of Individual Regression Coefficients.....	54
3.3.6	Mediation Effect of POS on Relationships between Leadership Styles, Three Outcome Scales, and Work Engagement.....	54
3.3.6.1	Mediating Test of Laissez-Faire on Work Engagement through POS.....	55
3.3.6.2	Mediating Test of Transactional Leadership on Work Engagement through POS.....	56
3.3.6.3	Mediating Test of Transformational Leadership on Work Engagement through POS.....	57
3.3.6.4	Mediating Test of Three Outcome Scales on Work Engagement through POS.....	59
3.4	Summary of Results.....	60
3.5	Chapter Summary.....	61
	Chapter 4 Discussion.....	62
4.1	Introduction.....	63
4.2	Nurses Work Engagement and Socio-Demographic Factors.....	63
4.3	Leadership Styles, Three Outcome Scales, POS, and Nurses' Work Engagement	65
4.3.1	Transformational Leadership, Transactional Leadership, Laissez-Faire, and Leadership Behavior Outcomes with POS.....	65
4.3.2	Nurses' Work Engagement and POS.....	67
4.3.3	Transformational Leadership, Transactional Leadership, Laissez-Faire, and Leadership Behavior Outcomes with Work Engagement.....	68
4.4	Predictors of Nurses' Work Engagement at Healthcare Organizations.....	70
4.5	Mediation Effect of POS on Relationships between Transformational Leadership, Transactional Leadership, Laissez-Faire, and Leadership Behavior Outcomes, with Work Engagement.....	71
4.6	Chapter Summary.....	72
	Chapter 5 Conclusion.....	73
5.1	Introduction.....	74
5.2	Results Outline.....	74

5.3	Contribution of the Study.....	75
5.4	Implications of the Study.....	78
5.4.1	Theoretical Implications.....	79
5.4.2	Practical Implication.....	80
5.5	Limitations of the Study and Recommendation of future Lines.....	82
5.6	Chapter Summary.....	83
	References.....	84
	Appendixes.....	106

Abstract

Work engagement is an essential factor in nursing work, both for the quality of the service provided and for nurses' occupational health.

The present study proposes investigating the association between leadership styles of nursing supervisors and work commitment and elucidating the role that Perceived Organizational Support (POS) has in this relationship. The study included 85 nurses from health organizations in Catalonia, Spain, recruited using the snowball procedure.

This study applied a cross-sectional design with quantitative methodology using multiple linear regression analysis and mediation analysis (Sobel's test). Leadership styles (transformational, transactional, and laissez-faire) were evaluated, along with the scale of leadership effects through the Multifactorial Leadership Questionnaire (MLQ) as independent variables. The POS as a mediating variable was assessed by the Organizational Support Test Perceived (POS), and the dependent variable, work engagement, was evaluated by the Utrecht Job Involvement Scale (UWES).

The results indicated that there are differences in work engagement depending on the job position. Nurses who worked in Socio-Health centers are more involved than nurses dedicated to Teaching and Research, Primary and Community Care, and Hospital Care. The results showed a positive correlation between transformational leadership, transactional leadership, and leadership behavior outcomes with job involvement. On the other hand, laissez-faire was negatively related to work commitment.

Also, the POS had a positive connection with job involvement. Transformational leadership, transactional leadership, and leadership behavior outcomes positively affect POS, while laissez-faire showed a negative association. Likewise, it was analyzed whether leadership styles, leadership behavior outcomes, and POS improved the prediction of job involvement; data indicated leadership behavior significantly predicted job involvement; this factor accounted for 27% of the variance of job involvement.

Furthermore, this study confirmed that POS is a significant mediator between leadership styles (transformational leadership, transactional leadership, laissez-faire) and the outcome of leadership with job involvement. According to the present study's findings, it can be concluded that leadership styles and their outcomes together with POS influence work engagement. Transformational leadership and transactional leadership are the two main leadership styles that significantly impact nurses' attitudes and engagement with their work. At the same time, laissez-faire can decrease the work engagement in the workplace that managers, supervisors, and leaders of healthcare organizations should consider. Other than that, nurses who have a high POS at work showed high work engagement levels in healthcare organizations. This study proposes different suggestions for health administrations, hospitals, managers, supervisors, leaders, and nurses to improve the level of work engagement considering basic human needs. The organization must commit to favoring effective leadership styles and ensuring a high POS. Besides, this study recommends that healthcare organizations improve leadership styles specifically for those managers, supervisors, and leaders who use the laissez-faire style in healthcare organizations. In summary, this study sheds new light on health psychology, especially in job involvement among nurses in health organizations in Catalonia, Spain.

Keywords: Leadership Styles, Leadership Behavior Outcomes, Laissez-Faire, Nurses, POS, Transformational Leadership, Transactional Leadership, Work Engagement

Resumen

El engagement es un factor esencial en el trabajo de enfermería, tanto para la calidad asistencial, como para la salud laboral de las enfermeras.

El presente estudio propone estudiar la asociación entre estilos de liderazgo de las supervisoras en enfermería y el engagement y dilucidar el papel que tiene el Apoyo Organizacional Percibido (POS) en esta relación. El estudio incluyó a 85 enfermeras de organizaciones sanitarias de Cataluña, España, reclutadas mediante el procedimiento de bola de nieve.

Este estudio aplicó un diseño transversal con metodología cuantitativa mediante análisis de regresión lineal múltiple y análisis de mediación (prueba de Sobel). Se evaluaron los estilos de liderazgo (transformacional, transaccional y laissez-faire), junto con la escala de efectos del liderazgo mediante el Cuestionario de Liderazgo Multifactorial (MLQ) como variables independientes. Además de eso, el POS como variable mediadora fue evaluado por el Test de Apoyo Organizacional Percibido (POS) y la variable dependiente, el engagement, fue evaluada por la Escala Implicación Laboral de Utrecht (UWES).

Los resultados indicaron que hay diferencias en la implicación laboral en función del puesto de trabajo. Las enfermeras que trabajaron en centros Sociosanitarios están más implicadas que las enfermeras dedicadas a la Docencia e Investigación, la Atención Primaria y Comunitaria y Atención Hospitalaria. Los resultados también mostraron una correlación positiva entre el liderazgo transformacional, el liderazgo transaccional y los resultados del liderazgo con el engagement. Por otro lado, el laissez-faire se relacionó negativamente con el engagement.

Además, el POS tuvo una conexión positiva con la implicación laboral. El liderazgo transformacional, el liderazgo transaccional y los resultados del liderazgo tienen relaciones positivas con el POS, mientras que el laissez-faire mostró una asociación negativa. Asimismo, se analizó si los estilos de liderazgo, los resultados del liderazgo y el POS mejoraron la predicción de la implicación laboral. Los datos indicaron que los resultados del liderazgo

predijeron significativamente la implicación laboral, este factor representó el 27% de la varianza de la implicación laboral.

Además, este estudio confirmó que el que POS es un mediador significativo entre los estilos de liderazgo (liderazgo transformacional, liderazgo transaccional, laissez-faire) y los resultados del liderazgo con implicación laboral. De acuerdo con los hallazgos del presente estudio, se puede concluir que los estilos de liderazgo y sus resultados junto con el POS influyen en el engagement. El liderazgo transformacional y el liderazgo transaccional son los dos estilos principales de liderazgo que tienen un impacto considerable y positivo en las actitudes y el engagement de las enfermeras con su trabajo. Al mismo tiempo, el laissez-faire puede disminuir el engagement en el lugar de trabajo, aspecto que deben considerar los gerentes, supervisores y líderes de las organizaciones de atención médica. Aparte de eso, las enfermeras que tenían un POS alto en el trabajo mostraron altos niveles de engagement en las organizaciones de salud. El presente estudio propone diferentes sugerencias para las administraciones de salud, hospitales, gerentes, supervisores, líderes y enfermeras para mejorar el nivel de implicación laboral considerando las necesidades humanas básicas, partiendo de la base de que la organización debe comprometerse en favorecer los estilos efectivos de liderazgo y asegurar una alta POS. Asimismo, este estudio recomienda que las organizaciones de salud mejoren los estilos de liderazgo específicamente por parte de aquellos gerentes, supervisores y líderes que usan el estilo laissez-faire en las organizaciones de atención sanitaria. En resumen, este estudio arroja nueva luz sobre la psicología de la salud, especialmente en el contexto del engagement entre las enfermeras de las organizaciones sanitarias en Cataluña, España.

Palabras clave: Estilos de liderazgo, Resultados del comportamiento de liderazgo, Laissez-Faire, Enfermeras, POS, Liderazgo transformacional, Liderazgo transaccional, Work engagement

List of Tables

Table 1 <i>Variables Reliability</i>	38
Table 2 <i>Personal Profile of Respondents (N=85)</i>	46
Table 3 <i>Descriptive Statistic of Main Variables</i>	47
Table 4 <i>Differences in Work Engagement between Socio-Demographic Factors based on t-test Results (N=85)</i>	48
Table 5 <i>Differences in Work Engagement between Socio-Demographic Factors based on ANOVA Results (N=85)</i>	49
Table 6 <i>Pearson Correlations</i>	51
Table 7 <i>Results of Multicollinearity with Tolerance and VIF Measures</i>	52
Table 8 <i>Results of Multiple Linear Regression Analysis for Work Engagement</i>	53
Table 9 <i>Mediating Test of Laissez-Faire on Work Engagement through POS</i>	55
Table 10 <i>Mediating Test of Transactional Leadership on Work Engagement through POS</i>	56
Table 11 <i>Mediating Test of Transformational Leadership on Work Engagement through POS</i>	58
Table 12 <i>Mediating Test of Three Outcome Scales on Work Engagement through POS</i>	59

List of Figures

Figure 1 <i>Conceptual Framework of the Study</i>	31
Figure 2 <i>Mediation Model</i>	55
Figure 3 <i>The Mediating Role of POS on the Relationship between Laissez-Faire and Work Engagement</i>	56
Figure 4 <i>The Mediating Role of POS on the Relationship between Transactional Leadership and Work Engagement</i>	57
Figure 5 <i>The Mediating Role of POS on the Relationship between Transformational Leadership and Work Engagement</i>	58
Figure 6 <i>The Mediating Role of POS on the Relationship between Three Outcome Scales and Work Engagement</i>	59

List of Abbreviations

ANOVA	Analysis of Variance
CFA	Confirmatory Factor Analysis
EDA	Exploratory Data Analysis
EEF	Extra Effort
EFF	Effectiveness of a Leader's Behavior
LF	Laissez Faire
MLQ	Multifactor Leadership Questionnaire
POS	Perceived Organizational Support
SAT	Followers' Satisfaction
TAL	Transactional Leadership
TFL	Transformational Leadership
TOS	Three Outcome Scales
UWES	The Utrecht Work Engagement Scale
VIF	Variance Inflation Factor
WE	Work Engagement

Chapter 1 Theoretical Background

1.1 Introduction

Most organizations and workplaces try to change their structure and improve themselves based on new trends in the current global business world. According to this strategy, they need to recognize human factors of improvement and efficiently apply them. There are various factors such as employees job satisfaction, kind of work, coworkers, supervisors or subordinates, payment and incentives, organization communication, etc. have a brilliant role on organization outcomes and increase its level, remarkably (De Nobile & McCormick, 2008; Aziri, 2011; Eslami & Gharakhani, 2012). Accordingly, identifying important influences is imperative and necessary in the work environment (Allen, 2001). In the study of Martinez Jaime et al. (2012) hospital as a healthcare system has a principal role in securing the job and providing appropriate employee conditions. Likewise, workplaces such as companies have a prominent contribution to employees' welfare and the work environment's protection. Moreover, each type of united system's reality is dissimilar from one organization to another, and numerous internal and external factors will bind it up (Moumen & El Aoufir, 2017).

Human resources in every organization are assumed as one of the crucial parts that are impacted by different internal and external factors; consequently, they should be supported by the organization and managers, especially. Human resources play a critical role in developing and growing, understanding, and facilitating the workplace; therefore, considering them and satisfying their requirements can be valuable and efficient for the organization and human resources (Noordin & Jusoff, 2009).

According to the organization's vital role and managers, supervisors, and leaders, conducting and supporting employees in the work environment is critical and should be considered. Generally, they can provide an accurate field for organizational behaviors and increase productivity and well-being at work. In this regard, recognizing employees' requirements and managing them in the correct methods can help the managerial situation. Otherwise, it can be threatening for employees and the work environment; besides, it creates some uncontrollable organizational behaviors, abnormal reactions, low-performance levels, and outcomes. In the healthcare system that frequently is an organized response of a society to the population's health

problems and needs; the presence of some organizational behaviors can be of raise employees' motivation, and they are engaged in their job (Donev et al., 2013).

While the interest in leadership is quite intense in business companies, it has not developed in other kind of organizations. In this case, organizations are dedicated to services such as those for health care. Therefore, studying the impact of leadership styles on work involvement requires considering the mission of the organization. This study will focus on nursing essential in healthcare organizations with unique characteristics that advise studying their peculiar leadership roles. Indeed, these organizational characteristics can be included organizational behavior and performance derived from managers, supervisors, or leaders, and the workplace influences nursing and can guarantee care facilities. In other words, the organization and its environment impact nurses' performance and behavior; it also supports care equipment at the workplace (Banaszak-Holl et al., 1996). Hospitals as a part of healthcare organizations likewise have structural characteristics such as size and teaching status that are essential characteristics for patients and personnel in a particular work setting, for instance, high numbers of healthcare workers in the training section. Additionally, there are modifiable determinants affecting practice that are subject to some monitoring of hospital leaders because they have an essential role in the work environment. In general, hospital characteristics and personal nurse characteristics can be assumed as a combination of healthcare organizations' factors or features (Clarke, 2007). To sum up, healthcare organizations have specific features. Therefore, it is better to focus on them briefly; then go through the details. For instance, institutional factors are assumed as essential determinants in the health system because it provides basic public service, as well (Robone et al., 2011) that in the Clarke (2007) study has been referred them (e.g., hospital characteristics and personal nurse characteristics). The demographic characteristics of an employee, work-related factors during employees' work, and the organization's attributes in which the employee is working there can be essential and regarded as organizational features. Each of them can count on the organization's outcomes, correspondingly. According to Sue et al. (2013), Personal Health Record (PHR) can also be useful for healthcare organizations recorded that appeared in the healthcare system as online laboratory test results, patient-physician secure email, online prescription refills, and online appointment scheduling. Collecting all these mentioned data can modify the healthcare organization's characteristics or

main features. From organizational perspectives, POS, and the degree of autonomy within an organization are predictive characteristics of an employee who is more committed to his or her organization (Miedaner et al., 2018); and their factors are also linked to organization features (Sue et al., 2013). Healthcare organizations build friendship communication with employees of the same role, creating a platform for the imperative spread of knowledge when clinical leaders are absent. Employees' relationships and feelings in different positions are assumed as an essential factor in healthcare organizations. They can somehow guarantee employees' engagement and level of their job performance. The effect of various factors as internal and external factors influences employees' job performance at healthcare organizations. These mentioned results come from the study of Marqués-Sánchez et al. (2018) that focused on physicians' and nurses' healthcare institutions in Spain. Consequently, the level of healthcare quality has remarkably influenced patient safety. These two are assumed as the main factors that need to be considered because they move in parallel and do not work separately (Carayon et al., 2013).

The current study will focus on leadership styles and the role of POS that have essential effects on nurses' work engagement at healthcare organizations in Catalonia, Spain. Based on this location of the study, we can explain that in 1977, public health services in Catalonia, Spain, were transferred to the Catalan government when the Spanish and the Catalan governments agreed to assign the health plan the public health competencies to Catalonia. Structures improved after decentralization, and teams strengthened with trained and full-time staff. Since then, Catalonia is responsible for the surveillance, protection, and improvement of its communities' health through health protection activities, health education, promotion of healthy lifestyles, and research for disease and injury prevention. Additionally, the Spanish Health Ministry coordinates the different regions' public health activities to guarantee equity among domains (Mateu I Serra, 2013).

1.2 Leadership

Saleem (2015) proposes: Northouse (2007) stated, "Leadership is a process through which an individual influences a group of people to attain common goals." Leadership can be an interpersonal strategy that a leader tries to find followers' potential requirements and satisfies them. So, the purpose of the organization is achieved by influencing followers. Leadership likewise is a set of relevant perspectives that advance others' tendencies and behaviors to meet shared group purposes and needs that include some styles (Eagly et al., 2003). In truth, leadership styles determine the purpose, direction, and employee program at the organization. Overall, the leadership styles assumed a series of managerial tendencies, behaviors, and abilities based on personal and organizational standards. The continued exploration of good managers has resulted in the development of several leadership theories. Additionally, every organization's role is precious; it can provide an appropriate condition for employees' performance. In general, based on the behavioral approach, all leadership styles have a direct relationship with employees and organizational behavior styles at the workplace (Bandura & Schunk, 1981).

According to the imperative role of employees' performance and organizational behavior in various segments of work, leaders play noteworthy roles at the workplace; in this regard, they should improve the level of presentation and activities of their team or employees (Carasco-Saul et al., 2014). Moreover, leaders must be considered toward employees learning and training as crucial factors in the work environment. The training involves:

1. Supporting the use of procedures that develop creative opinions.
2. Training a promising idea.
3. Obtained resources.
4. Encourage members.
5. Using after acting review.
6. Monitoring external events that are related to innovation activity.

The obstacles in learning or training included conflict, restriction of information, differentiation among major subunits of an organization by function, product, and customer, common belief that top management should have responsibility. The study leader influence methods comprised

an interview, questionnaire, and observation (Yukl, 2009). Other studies that were proposed by Yukl (2012) and Yukl et al. (2019) clarified that leaders are divided into different groups: task-oriented, change-oriented, and relationship-oriented. Relation-oriented included supporting, developing, recognizing, and empowering; besides, task-oriented referred to improve efficiency and reliability of activities carried out by the leaders of a team or work unit. Additionally, it comprised three component behaviors: planning work unit activities, clarifying roles and objectives, and monitoring operations and performance. Recently, problem-solving also was added as a fourth component of the task-oriented. Likewise, the change-oriented behaviors involved advocating change, encouraging innovation, and envisioning change.

Regarding Hsieh and Wang (2015), leadership plays a critical factor in ensuring organizational sustainability in today's work environment; furthermore, it is increasingly evident that leadership needs to come from a new and updated twenty-first-century leadership type of leader. An accurate leadership style is assumed as a natural and extended discussion in positive workplace relationships. In this regard, leaders or managers can promote influential employee associations via the unique method. Moreover, leadership is determined as one of the single most prominent elements that contribute to employee work engagement. Positive psychology and positive organizational behavior studies distinguish that leadership is defined as extremely important for generating positive well-being at the workplace; besides, the administration has a noticeable effect on employees' reactions and increases their intrinsic motivation (Wang et al., 2016). According to the critical role of leadership shown in various research in recent decades, Hernández-Castilla et al. (2017) also focused on successful leaders and their role in the workplace that was assumed as a relevant factor in four case studies placed that have been in Madrid, Spain.

1.2.1 Leadership Styles

Study on leadership has become an outstanding scholarly and professional continuation in an ever changing, highly assembled, and multi-dimensional globalized world (Gandolfi & Stone, 2018). Likewise, leadership style is assumed as one of the most significant human-resource-related outcomes and perhaps one of the most studied management and industrial psychology topics (Fiaz et al., 2017).

Leadership has various styles; these styles included: authoritarian, paternalistic, democratic, laissez-faire, transactional, and transformational. The authoritarian style is assumed to be epitomized when a leader dictates policies, rules, and procedures to determine what purposes are to be completed, direct, and monitor all activities without subordinates' meaningful participation. This type of leader has full control of the team, leaving low autonomy within the group (Kendra, 2012). Most scholars have recognized autocratic leaders with authoritarian leaders simply because research has demonstrated a strong positive correlation between autocratic leadership style and authoritarianism (Fiaz et al., 2017).

Jackson (2016) proposes: Farh and Cheng (2000) stated, Paternalistic leadership as "a style that combines strong discipline and authority with fatherly benevolence". The paternalistic style also discussed to the powerful leader that everyone needs to respect him; additionally, it is a managerial approach that entails a dominant authoritative personality which acts as a matriarch or patriarch and treats partners and employees just like they are members of large extended families (Paternalistic Leadership Style, n.d). Generally, the paternalistic leaders expect trust, obedience, and loyalty from the employees (Sales, 2016).

The democratic style referred to leaders who endeavor to accomplish their goals with others' direct participation (Mansor et al., 2012). This style is appropriate when innovative problem-solving solutions are demanded by the organization or conducting meetings for departments working on improvement and achieving tasks and goals (Mohiuddin, 2017).

Interest in transformational and transactional styles compared to laissez-faire has grown in recent years. Transactional leadership style refers to the exchange association between leader and employee, in which each party is involved to meet their respective self-interests. Each party's interests are met by clarifying employee responsibilities, leader's expectations, and compliance benefits. Transactional leadership is the second style identified in the literature (Strom et al., 2014). In truth, transactional leadership refers to a dynamic exchange between leaders and their subordinates. The leader sets purposes, monitors progress, and recognizes rewards that can be expected upon purpose achievement. It includes an exchange process between the leader and the followers, intended to increase followers' compliance with the leader

and the organizational rules. The transactional leader operates within the existing system or culture, prefers risk avoidance, pays attention to time constraints and productivity, and frequently prefers process over substance as a means for maintaining control (Keskes, 2014).

Transformational leadership style concentrates on a leader's ability to interact, understand, and support employees beyond the standard employment exchange. Transformational leaders may take on roles such as facilitator, mentor, and innovator, depending on situational conditions, and may arise in part due to personal disposition. Transformational leadership style attempts to align employee values, beliefs, and attitudes with that of the organization's collective interest, creating a workforce committed to and working toward a singular vision (Strom et al., 2014). In the study of Henker et al. (2015), transformational leadership style includes behaviors that encourage employees to take various views on how they do their work and challenge them to endeavor new approaches. Transformational leadership style involved six keys' actions:

- Providing intellectual stimulation.
- Articulating a vision.
- Providing an appropriate model.
- Fostering the acceptance of group goals.
- Expecting a high performance.
- Providing individualized support that improves employees' ways of working.

Previous studies mostly explained the transformational leadership style, which encourages the advancement of employees in the workplace. This style is also determined as a charismatic and influential fact for burns employees to do more than expected of them at work (Hayati et al., 2014). Transformational leadership style plays a vital role in employees' attitudes towards their jobs compared to transactional leadership style. These two styles are presented by Burns (1978), and it seems that these two styles are commonly used and tested for studies. Transformational leadership is supposed when leaders encourage their employees to raise their opinions, morals, perceptions, and partnerships with organizations' purposes. Besides, the transactional leadership style deals with exchanging between the leaders and their employees (Saleem, 2015).

Strom et al. (2014) identified low transformational leadership amongst employees leads to high transactional leadership at the workplace, threatening the work environment. According to a definition provided by Blomme et al. (2015), transactional leadership style is assumed as on the stimulation of the requirements, competencies, and purposes of the followers, on challenging followers intelligently, and on charismatic and encouraging leadership, within which followers can be excited energetically. Transformational leadership style also provides followers with challenge stressors by which employees are stimulated to achieve purposes, perfect their personal talents, and reach mastery, even under circumstances of high time pressure, high workloads, and high levels of job responsibility. In this regard, leaders who treat employees with respect, display concern, communicate in a friendly manner, and who set uniform standards for the act are likely to stimulate high levels of employee work engagement (Mitonga-Monga & Hlongwane, 2017).

Unlike transformational and transactional leadership styles, the laissez-faire style has been focused on those leaders who helped all individuals who work together for their common good (Mansor et al., 2012). This leadership style is displayed when a leader chooses not to guide performance. Employees are given the freedom to operate without a leader's influence when the situation would usually demand that they do so. The leader is, in most cases, left with only the communication role for facilitation. This leadership behavior is the most ineffective and inactive and is strongly associated with employee dissatisfaction, conflict, and ineffectiveness (Al-Sayah, 2011). Laissez-faire leadership behavior or 'hands-off' leadership is where leaders avoid accepting their responsibilities or are unavailable when needed, resist expressing their views on important issues, give no feedback, and make little effort to help employees satisfy their needs. There is no exchange with employees or attempt to help them grow (Bass & Avolio, 1997). Generally, most researchers have assessed this leadership behavior as the most passive and unsuccessful one, strongly related to employee dissatisfaction (Avolio, 1999; Bass, 2008). Based on earlier studies, laissez-faire leadership behavior relates negatively to subordinates' job satisfaction, leader effectiveness, satisfaction with the leader, and affective commitment toward the organization. This style has negative correlations with effectiveness outcomes across different situations, various leaders, and hard and soft data results. The mechanisms through which laissez-faire leadership negatively influences constructive employee outcomes have

received less attention. The most empirical investigation has concentrated on the direct relations between laissez-faire leadership and employee outcomes (Buch et al., 2014).

In earlier investigations in the leadership area, in 1996, Lowe et al. examined transformational leadership and transactional leadership. Similarly, Avolio et al. (1999) evaluated the relationship between transformational leadership and transactional leadership. In their study, the researchers explained factor analysis. Antonakis et al. (2003) focused on MLQ and examined its validity in the same vein. Alonso et al. (2010) likewise reviewed transformational leadership, transactional leadership, and laissez-faire leadership based on Multifactor Leadership Questionnaire (MLQ) in Spain. In their study, the researchers focused on 954 participants and used the Spanish version of MLQ; they considered the factors of MLQ depend on Confirmatory Factor Analysis (CFA). Similarly, Al-Sayah (2011) used 45 items MLQ that evaluated transformational leadership, transactional leadership, and laissez-faire leadership. Additionally, Berger et al. (2012) examined the short scale of transformational leadership among 1,718 workers in five sectors. Leadership style states traits, characteristics, skills, and behaviors that leaders use when interacting with their employees. Also, Kanste et al. (2007) focused on the psychometric properties of MLQ among 601 nurses in Finland. The researchers considered transformational leadership and transactional leadership and examined the validity of CFA's questionnaire factors.

The importance of leadership styles, leaders, managers, supervisors, etc., need to distinguish the authentic and right leadership style based on the situation and apply it to the organization correctly. Many leaders do not have adequate awareness and skill for generating a suitable atmosphere among employees to use precise style at the workplace. Hence, all organizations need to have educated and conscious leaders to improve and manage their affairs.

Based on previous investigations, different leadership styles are used in various workplaces; and the main point is that a leader should recognize an appropriate technique based on the organization's situation. In the main, leaders should be focused on convenient styles and conduct them accurately. In other words, talent management leads to competition, advantage, and high productivity (Batista-Taran et al., 2009). Because applying inaccurate style leads to

inconvenient conditions for employees. Indeed, this issue required educated leaders via various methods at the workplace. In general terms, leaders should apply the right styles based on conditions. Using these styles likewise needs to have an educational policy supported through government and organization to gain a high level of information and performance between employees. This operative policy achieves through training and the right planning.

1.2.2 The Conceptual and Operational Definitions of Leadership Styles

The MLQ (Uçar et al. 2012) is a questionnaire that evaluates transformational leadership, transactional leadership, and laissez-faire leadership; before describing the conceptual and operational definition, a summary is introduced to provide greater understanding and justification of using them in the study.

MLQ, including nine leadership scales and three outcome scales that are applicable in leadership contexts. In more detail, MLQ included five transformational, three transactional, one laissez-faire, and three outcome scales that these three scales assumed as leadership behavior outcome. The first of the transformational scales is inspirational motivation. Interior to this subscale of transformational leadership is the articulation and representation of a vision by the leader. Consequently, by inspecting the future with a positive attitude, followers are motivated. Idealized influence introduces the attribution of charisma to the leader. Based on the leader's positive attributes, followers built close emotional ties to the leader. Trust and confidence are likely to be built-in followers. Idealized influence emphasizes a collective knowledge of mission and values and acts in these values. Intellectual stimulation combines challenging the assumptions of followers' expectations, analyzing the difficulties they face, and generating solutions. Individualized consideration is determined by considering the individual needs of followers and developing their strengths. On the side of the transactional leadership scales, the contingent reward is a leadership behavior. The leader focuses on clearly outlined tasks while providing followers with tips to fulfill these tasks. In active management-by-exception, the leader views, and searches actively for deviations from rules and standards to withdraw these deviations; if required, corrective actions are taken. In opposition, in management-by-exception, passive intervening only occurs, subsequent errors have been detected, or standards have not been met. An even more passive approach is laissez-faire, which is essentially defined as the

absence of leadership. Laissez-faire is used as a non-leadership contrast to the more active forms of transformational and transactional leadership plans. The three outcome criteria which are included in the MLQ are:

- Followers' extra effort (EEF)
- The effectiveness of a leader's behavior (EFF)
- Followers' satisfaction (SAT) with their respective leader

In combination, these scales form the full range of leadership, a comprehensive model developed by Avolio and Bass (2002). This model supports MLQ. Their effectiveness has been documented in several meta-analyses. The meta-analytic results provide the complete text of the full range of leadership. The results provide essential support for the validity of transformational and contingent rewards and, to some extent, laissez-faire leadership. The validity of transformational leadership seems to generalize across many situations, including when it is studied in rigorous settings. On the other hand, this study's results revealed that transformational and transactional leadership are so positively related that it is challenging to separate their unique consequences (Judge & Piccolo, 2004).

In short, **Leadership** is a set of relevant perspectives that advance the tendency and behaviors of others to meet shared group purposes and needs that included some styles (Eagly et al., 2003). More in detail, **Conceptually Definition, Transformational Leadership** directed employees' attitudes towards their jobs; also, **Transactional Leadership** referred to deals with the exchange between the leaders and their employees (Saleem, 2015). **Laissez-Faire Leadership** provides little or no direction and gives employees as much freedom as possible; it looks easy-going and straightforward between leaders and subordinates (Tarsik et al., 2014). Additionally, the **Three Outcome Scales** assume a combination of organizational behavior in leadership; this factor is not counted as leadership styles and adopted as leadership behavior outcomes (EEF, EFF, and SAT) (Al-Sayah, 2011; Judge & Piccolo, 2004).

Besides, the **Operational Definition** of leadership styles refers to the score of employees on the MLQ proposed by Bass and Avolio (1995). This questionnaire included 45 items (Appendix A

shows the Spanish version) and used a 5-point 0-4 Likert scale (0 = *not at all*, 1 = *once in a while*, 2 = *sometimes*, 3 = *fairly often*, and 4 = *frequently*, if not always) (Al-Sayah, 2011). Thirty-six items represent nine leadership factors, and nine items assess three leadership outcome scales; in the present study, all these 45 items were evaluated. In the previous studies, Lowe et al. (1996); Avolio et al. (1999); Antonakis et al. (2003); Kanste et al. (2007); Alonso et al. (2010); Al-Sayah (2011); Berger et al. (2012); Manning (2014); and García-Sierra and Fernández-Castro (2017) likewise have applied MLQ for their investigations.

1.2.3 Avolio and Bass (1991) Full Range of Leadership Theory

Transformational leadership, transactional leadership, and laissez-faire leadership styles are three main parts of leadership that have provided the foundation for studying leadership amongst disciplines during the last two decades (Mullins, 2007; Northouse, 2007). Avolio and Bass (1991) focused on these three broad categories of leadership behavior that are distinct but not mutually exclusive and highly transformational to avoidant or (laissez-faire) at the other end. According to these researchers and Antonakis et al. (2003), the full range of leadership theory describes the extent to which each of these three leadership behaviors (transformational, transactional, and laissez-faire) are active, passive, effective, and ineffective. In this theory, transformational factors are characterized by four dimensions, which comprised:

- a) Idealized influence: where the leader is being trusted and respected, as he or she manages high moral standards, and the followers endeavor to emulate them.
- b) Individualized consideration: the leader treats employees as individuals are treated equitably.
- c) Intellectual stimulation: the leader stimulates the followers' understanding of the problems and identifies their own beliefs and standards.
- d) Inspirational motivation: the leader expressly and characteristically emphasizes to followers the need to perform well and accomplish organizational goals.

Transactional factors likewise emerging from this theory, on the other hand, include contingent reward and management-by-exception. Contingent reward comprises an interaction between the leader and the staff. The leader uses tips and promises to inspire employees to reach optimum performance levels contracted by both. management-by-exception, on the other hand, is defined

as being active or passive. This transactional leadership behavior perspective happens when the leader monitors employees' performance for any significant deviations from standards and takes corrective action when needed.

In contrast, passive management occurs when a leader waits passively for mistakes to happen and intervenes if standards are not fully met. Also, laissez-faire leadership behavior is a passive leadership style with no relationship between the leaders and the followers. It represents a non-transactional leadership style in which necessary decisions are not made, actions are delayed, leadership responsibilities are neglected, and authority is unused. Leaders displaying this form of non-leadership avoid decision-making, providing rewards, and providing positive or negative feedback to their employees, with the leaders leaving the responsibility to others (Mester et al., 2003).

1.3 Work Engagement

Understanding the human groups that work in organizations requires both the study of leadership and, contrarily, how employees are involved in their tasks; this is work engagement. The work engagement is a state, including vigor, dedication, and absorption. Vigor is categorized by high levels of energy, mental resilience while working, determination when faced with problems, and a willingness to invest effort in one's work. Dedication likewise states to a sense of stimulus, pride, significance, enthusiasm, and challenge at the workplace. And absorption is being pleased, fully concentrated, and deeply engrossed in one's work, with trouble detaching from work (Schaufeli et al., 2006). The workers engaged in their work have a high level of more creativity, productivity, and willingness to go the further mile (Bakker & Demerouti, 2008). In truth, work engagement has been well-defined as a positive, satisfying, and motivational work-related state of mind characterized by vigor, dedication, and absorption (Eldor, 2017). Generally, work engagement has been clarified as a positive state of mind characterized by vigor, dedication, and absorption. Likewise, work engagement has established standing in engendering a wide array of imperative organizational and personal outcomes (Enwereuzor et al., 2016).

1.3.1 Employees' Work Engagement at Workplace

In recent years, work engagement has increasingly expanded status as a legitimate construct among academic scholars (Strom et al., 2014). From the point of view of Wang et al. (2016), work includes a significant portion of an individual's life; therefore, engagement at work plays an imperative role when employees appraise their life. In other words, the researchers clarified that work engagement has a meaningful effect on employees' lifestyles. Overall, work engagement is probable as the oldest and most common concept of workplace well-being. Therefore, work engagement is one of the organizational factors that is impacted by various items. Cobzaru (2010) study established amongst employees who worked in private universities in Spain, work engagement and subordinates (vigor, dedication, absorption) play a vital role in their workplace position. In line with these investigations, Engelbrecht et al. (2017) revealed that engaged employees are more creative, enjoy their work, and are more well-organized and complicated in their work. Based on Manning (2016), the employees who are not engaged and empowered in their work are more likely to become dissatisfied with their job; and show a high level of turnover and adverse patient outcomes. Overall, the employees who are vigorous, dedicated, and absorbed, are better able to cope with work difficulties and demands (Wang et al., 2017). Work engagement is related to desired consequences such as commitment, health, job performance, lower absenteeism, and job satisfaction (Strom et al., 2014). Employees' work engagement can represent a source of sustainable competitive advantage, and it can make a real difference for an organization's survival. In general, work engagement predicts various performance indices, such as better organizational units, customer loyalty, profit, and efficiency (Sarti, 2014). In the view of Lu et al. (2018), work engagement is a stable work condition that can move between employees at the workplace.

Kahn (1990) formulated the concept of engagement, who postulated that engaged employees put substantial effort into their work because they identify with it and are physically involved, cognitively vigilant, and emotionally connected (Garcia-Sierra et al., 2016). Truly, Kahn (1990) explained that engagement is an important organizational factor derived from employees' attitudes. It has been realized as an imperative effect on organization products, remarkably (Harter et al., 2002; Bakker et al., 2014). The engagement is likewise determined as a positive factor that can cope with work difficulties at the organization. This positive motivational feeling

is determined as the field of organizational psychology and, likewise, organizational behavior. An employee describes his/her physically, cognitively, and emotionally during the engagement field's performance. The engagement related to well-being or fulfillment; and, characterized as a high level of energy (Kahn, 1990). Besides, with the presence of engagement among employees, some undesirable results such as burnout will decrease it to the lowest level; overall, engagement and burnout determined as two separate factors that can be related to each other (Maslach & Leiter, 1997; Garcia-Sierra et al., 2016). A likely explanation is that engaged employees are more creative, profitable, safer, healthier, and less likely to leave their leaders (Wagner & Harter, 2006). Regarding the importance and effect of engagement amongst employees; it can be clarified that work likewise as a meaningful factor has a positive relation with individual task performance, appropriate presentation, practical behavior, individual work-family facilitation, job satisfaction, and subjective well-being (as engagement) (Lu et al., 2018).

The main point that must be explained is that a low level of work engagement as one of the uninterested organizational behaviors that emerged among employees, which should be regarded carefully because it represents several negative organizational factors such as job dissatisfaction, turnover, intention to leave the organization, burnout, canceling the job, etc. Besides, the employees who are not engaged have insufficient impacts on organization outcomes, customer satisfaction, retention, productivity, and profitability. These employees waste their talent on tasks that may not matter much (Kompaso & Sridevi, 2010). Therefore, lack of attention to effective factors that lead to multiple abnormal organizational behaviors such as low level of work engagement among employees engenders widespread obstacles in the work environment (Ahmad et al., 2010).

Organizational features have a remarkable role in employees' work engagement; they must focus on educating a work environment supportive of employees, keeping them motivated and positive, not just about their occupations but also about the organization (Strom et al., 2014). Regarding Lee et al. (2017) research, employees' work engagement is influenced by different organizational factors that should be considered carefully. These factors are derived from the work environment and leaders. The researchers explained that leadership styles, corporate culture, and empowering leaders positively affect work engagement via work meaningfulness.

In that survey, the general emphasized its vital role and its strategies for supporting and conducting employees.

1.3.2 Nurses Work Engagement at Healthcare Organizations

This section will focus on the work engagement of nurses. But before defining work engagement in nurses, it is necessary to emphasize that nurses are a key and essential element that must be considered in any health system (Martínez-Zaragoza et al., 2017). The study of Dong et al. (2020) showed that nursing care quality is one of the main factors in managing the healthcare system. In truth, the quality of nursing care is directly related to patient safety and patient satisfaction. The health care organization needs to provide adequate support for nurses that can lead to work engagement and a high-performance level (Havens et al., 2018).

According to a definition provided by Ghazawy et al. (2019), work engagement is assumed as the main tool for assuring patient safety and care quality and hospital significantly predicted high levels of nurses' work engagement. Work engagement is dissimilar across professions, and nursing is not excluded (Fiabane et al., 2013). In essence, work-engaged nurses can be regarded as valuable assets to their organizations. According to Antoinette Bargagliotti (2012), work engagement adds to nurses' unique body of knowledge. It supposedly underlies their actions while creating a practice environment that can promote safe and effective care. Based on the importance of work engagement amongst nurses, Simpson (2009) advocated that it is necessary to understand its antecedents for developing and testing interventions that influence nurses' work engagement (Enwereuzor et al., 2016). In a previous investigation, nurses with high work engagement provided more people-centered care in retirement homes (Abdelhadi & Drach-Zahavy, 2012). In other words, engagement has a positive relationship with work performance, workers' health, and client loyalty in various professions. Engagement impacts nurses' performance: therefore, it also influences health-care outcomes. Concentration is not related to a personality trait, but it is assumed to result from the interaction between dispositional factors, personal learning throughout their professional health-care providers' careers and their work environments; likewise, engagement is susceptible to modification. Positive work climate, social support from the organization, and supervisors' influence through leadership styles are factors that stand out as fostering engagement (Garcia-Sierra et al., 2016).

In sum, the recent literature reviews showed that the levels of work engagement among nurses varied in different hospital wards, and low levels of work engagement were linked to poor workers as an example increasing burnout, and reducing intention to remain and career satisfaction, also patient outcomes such as low patient satisfaction and increased adverse events. Furthermore, the predictors of work engagement among nurses were mainly comprised of:

1. Demographic data, such as sex, age, and occupational tenure.
2. Job-related variables, such as job stress, role ambiguity, and organizational support.
3. Personal factors, such as personality, self-efficacy, and coping style (Cao & Chen, 2019).

1.3.3 The Conceptual and Operational Definition of Work Engagement

Summarizing what has been said above, from a **Conceptual Point of View**, work engagement is assumed as a positive factor that can cope with work problems at the workplace. This positive motivational feeling is determined as the field of organizational psychology and, likewise, organizational behavior. Engaged employees describe him or her physically, cognitively, and emotionally during the performance. The work engagement is related to well-being or fulfillment; and is also characterized as high energy (Kahn, 1990). Work engagement included three dimensions. These dimensions are vigor, dedication, and absorption. The vigor assumed a high level of energy and mental resilience while working. Dedication is defined as loyalty and being healthy. And the absorption assumed as fully concentrated and happily engrossed in one's work (Bakker & Demerouti, 2008).

The **Operational Definition** of Work Engagement refers to employees' score on The Utrecht Work Engagement Scale (UWES), which has been performed by Schaufeli & Bakker (2003). Truly, UWES is a self-reporting scale with 17 items and has a seven-point scale ranging from *never* = 0 to *always* = 6 (Appendix A shows the Spanish version). The UWES evaluated three dimensions of work engagement that include: vigor, dedication, and absorption. In this questionnaire, the dimensions have different items, such as vigor (VI, six items), dedication (DE, five items), and absorption (AB, six items) (Schaufeli et al., 2006). This instrument has demonstrated appropriate reliability and validity with good Cronbach's alpha. For instance, in

the study of Pérez-Fuentes et al. (2018), in Spain, the researchers reported a high Cronbach's alpha of 0.84 in the vigor dimension, 0.89 in dedication, and 0.81 in absorption. This questionnaire also is superior to the one-factor model (Schaufeli et al., 2006). This instrument has been validated in various countries such as Spain, Portugal, and Netherlands (Schaufeli et al., 2002), South Africa (Storm and Rothmann, 2003), China (Yi-Wen and Yi-Qun, 2005), Greece (Xanthopoulou et al., 2012), and Spain (Garcia-Sierra et al., 2016).

According to work engagement and UWES as its measurement, the **Model of Schaufeli & Bakker (2003)** likewise supported this questionnaire and focused on work engagement and its subordinates (vigor, dedication, and absorption). The work engagement model considered developing a level of engagement and advanced career development in today's workplace (Bakker & Demerouti, 2008).

1.4 Perceived Organizational Support (POS)

It has been stated that leadership is a critical factor for organizations' functioning from the point of view of management. That engagement is a crucial factor among employees, as well. Now is the time to look for an element as the title of POS that relates to these two factors.

The concept of organizational support is derived from social theory. This theory proposes that when someone holds respectful feelings with someone else, the other will respond positively. POS is defined as general beliefs regarding how employees perceive that their organization pays attention to their wellbeing and values their contributions. POS is likewise viewed as the degree to which employees believe that they value and care about their contribution. Other investigators regard POS as the magnitude of employees' belief about the organization's recognition of their job and how much they care about their needs. POS did not build in a short period of time. It is developing through the course of long interaction between employees and organizations. When employees have confidence that the organization helps and supports them, they will develop high POS. On the contrary, the organization that certain employees give their best can provide more support; it is reciprocal. The organizational support can be informed of a competitive salary, more benefits, modern tools, flexible work hours, capacities, and a great career. Employees with higher POS are believed to have a positive work attitude and behavior. And in

the end, it will benefit the organization (Ayuningtias et al., 2019). POS helps to deal with their recurrent stressors. In fact, POS is known as employees' perceptions that an organization values their works, efforts, and contributions. POS likewise can help nurses to exhibit a positive attitude, make ethical decisions, increase their commitments, influence turnover intention, and ultimately decrease job stress. POS meaningfully predicted task performance, optional performance, and certain future career aspirations of employees in the work environment (Duyar & Aydin, 2012). Regarding Korzynski (2015) survey, supporting leaders and organizations have a meaningful role in a high level of development and workplace outcomes. POS likewise positively influenced career success (Liu et al., 2015). In other words, one of the main managerial assignments is organizational support that should be considered carefully (Corin & Bjork, 2016). Based on POS examination, the result revealed that there are positive significant correlations between nurses' perception of overall ethical work climate and each of POS, commitment, and job satisfaction. The researcher also explained negative correlations between nurses' turnover intention and each of these variables (Abou Hashish, 2017). In fact, nurses who perceived less organizational support experience more stress, and POS predicts job stressors (Khrais et al., 2018). In an investigation released by Labrague et al. (2018) among nurses, the researchers explained that the POS is low among nurses in governmental hospitals than in private hospitals. Also, there are significant correlations between POS, hospital bed capacity, and nurses' work status. POS is determined as a condition based on how much the organization considers employees' values and needs. Generally, organizational support is one of the important indices of the nursing work environment and can be considered an influential moral factor. This perception of POS's level, especially about ethical practice, is a vital element of the constraints upon nurses' actions. Likewise, POS reduces workplace stressors and is potentially involved in dealing with work-related fatigue, excitement, and depression (Robaee et al., 2018). POS as well can be the cause of employee wellbeing (Cugueró-Escofet et al., 2019). It is regarded as being central to understanding job-related attitudes. POS refers to employees' global beliefs concerning the extent to which the organization values their contributions and cares about their wellbeing, which is regarded as a psychological agreement that the employee makes with the enterprise (Cheng et al., 2020).

1.4.1 The Conceptual and Operational Definition of POS

Conceptually, POS is the extent to which employees consider that their organization values their participation, cares about their well-being, and fulfills socioemotional requirements (Eisenberger et al., 1986).

In the **Operational Definition** part, POS refers to the score of employees' perceptions concerning the degree to which the organization values their participation and cares about their well-being, introduced by Eisenberger et al. (1986). This questionnaire included 36 items and measured with a 7-point Likert scale (1 = *strongly disagree*, 7 = *strongly agree*), but based on this origin questionnaire in Spain, has been used the short version of this questionnaire that appeared in the Spanish version and proposed by Virgilio Ortega (2003). This Spanish version included 17 items and comprised a 7-point Likert scale (1 = *strongly disagree*, 7 = *strongly agree*) (Appendix A shows the Spanish version) (Ortega, 2003).

1.4.2 Theory Perceived Organizational Support (POS) (1986)

Theory of perceived organizational support proposed by Eisenberger et al. (1986). This theory has explained that employees progress POS to meet endorsement requirements, esteem, and affiliation and evaluate the benefits of increased work effort. In truth, POS increases employees' feelings of responsibility to support the organization reach its objectives, their affective commitment to the organization, and their expectation that enhanced performance will be rewarded. In general, POS behavioral outcomes include increases in in-role and extra-role presentation and reductions in withdrawal behaviors such as absenteeism and turnover. This theory clarified that to meet socioemotional needs and to assess the welfare of increased work effort. Employees from a general perception concerning how the organization standards their contributions and care about their comfort.

1.5 Relationships between Leadership Styles, Work Engagement, and POS

In this section, the relationship between leadership styles, Nurses' work engagement, and POS will be considered jointly. The relationship between these variables taken two in two will be explained first, and then a model of the relationship together will be proposed.

1.5.1 Leadership Styles and Work Engagement

According to the earlier studies, efficiency and innovation adaptation mediate the relation between leadership and human capital. In the view of Yukl (2008), task-oriented leaders are useful for efficiency; the relation-oriented ones improve human resources and relationships to job satisfaction and lower turnover, and change-oriented ones improve adaptation and are top executives. By this report, Dimitrov (2015) stated leadership has a considerable contribution to organizations and human behavior. Employees hope to do exciting work and obtain good rewards; in effect, engagement among employees can grow this desire, but it needs some practical organizational factors that lead to engagement. Leadership can lead to employment and a high level of outcomes if offered correctly (Meng & Xiao, 2015). A good relation between leaders and employees leads to obtaining organizational goals; it also prepares a suitable condition for employees' apparent engagement (Carter & Baghurst, 2014). In general, leaders' daily behavior impacts employees' daily work engagement and conducts their workplace (Breevaart et al., 2013). In the same vein, Solberg et al. (2014) emphasized the role of leadership at work and its contribution to high levels of work engagement. Similarly, Hansen et al. (2014) explained that leaders are responsible for creating engagement among employees in work environments. In truth, leaders' consideration and management methods can expand employees' motivation and tend toward their work; it also raises their work engagement (Banaszak-Holl et al., 2013).

Likewise, improvisation in leadership has a prominent role in engagement (Milner & Hendler, 2012; Shuck & Herd, 2012; Schultz & Bezuidenhout, 2013). In this regard, Malik et al. (2014), following the path-goal theory, examined leadership behavior and its effect on subordinates. They explained that leadership was assumed as an art that motivated people to work and their goals, which will be actualized at the workplace. Four styles of leadership behavior were considered: directive, supportive, participative, and achievements oriented.

In the same vein, Ali et al. (2013) focused on leadership behavior and employees' performance. The researchers explained that there is a significant positive relationship between leadership behavior and employees' engagement. Regarding Sellgren et al. (2008) that focused on leadership behavior and nurse managers, leadership is assumed to be a leader's primary task for

innovation, development, flexibility, and commitment changes. Additionally, this organizational behavior is determined as a core element of management. Fernández-Muñoz et al. (2017) studied safety leadership and working conditions on employees' safety performances. In this study, the researchers focused on 103 process industry organizations that are in Spain. These researchers explained that safety leadership decreases work pressure; additionally, it positively impacts environmental conditions, occupational hazards, safety incentives, and employees' safety.

In the research based on engagement and leadership, Hanson and Ward (2010) focused on teachers' engagement and leadership in Singapore schools. They explained that leaders need more knowledge about leadership strategy to satisfy teachers and increase their engagement. In this regard, Azka et al. (2011) demonstrated a meaningful relationship between transformational leadership and work engagement. Furthermore, applying an authentic leadership style is determined as an imperative factor in appearing at work engagement (Zhang & Bartol, 2011; Wang & Hsieh, 2013). Regarding Yasin Ghadi et al. (2013), transformational leadership has a noticeable contribution to employees' attitudes and motivation. This factor is assumed as the primary organizational factor that increases engagement and satisfaction amongst employees. Hayati et al. (2014) explained that transformational leadership positively influences employees' behaviors. Transformational leaders transfer their interest and high level of power to their assistants. In the survey of Strom et al. (2014), the researchers focused on 348 participants and explained that transformational leadership and transactional leadership moderated the association between work engagement and organizational justice. A low transactional leadership style causes indecision about one's social self in the context of the work, and this state of uncertainty incites an employee's deepened desire to seek justice-related information. In general, leadership influences employees' satisfaction and work engagement (Dimitrov, 2015).

Employees are strongly influenced by their leaders in their perceptions and behaviors. The quality of leadership in advance between leaders and employees is considerable (Carasco-Saul et al., 2014). Leadership styles directly influence the attitude and behavior of employees at the organization. Leadership assumed a well-recognized critical component in the effective management of employees. In this case, transformational leadership creates and fosters an environment that builds trust and confidence, encouraging employees' development and a shared

vision for the organization. On the other hand, transactional leadership lays the foundations of a transformational leadership style (Popli & Rizvi, 2015). Leaders should be recognizing the condition and illustrate an appropriate reaction (Blomme et al., 2015). In parallel with previous studies, Gözükarar and Simsek (2015) described that transformational leadership has a considerable contribution to improving work engagement. Jeong et al. (2016) in Korea studied transformational leadership and work engagement amongst teachers. The researchers explained that transformational leadership does not directly associate with engagement, but it positively moderated the relation between work engagement and openness. Additionally, transformational leadership plays a negative moderation role in the relationship between work engagement and professionalism. Schmitt et al. (2016) reported that transformational leadership has a positive relationship with work engagement; in reality, this factor increases performance and positive attitudes amongst employees.

Besides, Manning (2016) focused on leadership styles and engagement amongst 441 nurses in the hospital. In this study, the researcher has used Utrecht (UWES) and (MLQ) 5X short form. The findings showed that transactional and transformational leadership styles have a positive impact on the engagement of nurses. Besides, the passive avoidant leadership style has a negative influence on the engaged. Similarly, Ni (2016) has emphasized improving leadership style to increase the staff's presence and engagement by leaders. In Goswami et al. (2016), which examined the role of emotions as mediators and transformational leadership as moderators on the leader's humor and employees' engagement, the researchers explained that transformational leadership creates a positive relation between leader humor and employees' engagement. In parallel to previous studies, Bass et al. (2016) clarified that transformational leadership positively correlates with employees' work engagement. It can control employees' behavior when confronted with environmental violence. Zhu et al. (2009) focused on follower characteristics as a moderator on the association between transformational leadership and follower work engagement; the investigators explained that transformational leadership positively impacts work engagement when followers illustrate positive characteristics. They believed that transformational leadership has positively associated higher levels of followers' psychological meaningfulness, psychological safety, and psychological availability, causing higher engagement levels among employees. A seminal study in this area is Breevaart et al.

(2015), which classified employees as more engaged in their work when their leaders used more transformational leadership behaviors. This study considered transformational leadership behaviors as effective factors for employees when they need leadership. Also, in a study conducted by Lewis and Cunningham (2016), there is a positive relationship between transformational leadership and work engagement. The literature on the relationship between leadership styles and work engagement has highlighted the contrast between transactional and transformational leadership.

Manning (2016) emphasized the positive association between transformational leadership and work engagement in the work environment. In the study of Buil et al. (2016), which was established in Spain amongst 323 frontline employees, the findings confirmed that transformational leadership influences organizational identification and work engagement at the workplace. Hawkes et al. (2017) focused on the relationship between transformational leadership and work engagement mediated by job resources among employees; their research showed a direct connection between transformational leadership and employees' work engagement; and between transformational leadership and job resources. Additionally, in the mediating model, transformational leadership indirectly relates to work engagement via job resources. In this regard, Gan and Chen (2017) considered the relationship between transformational leadership and work engagement mediated via leader identification and organizational identification. In their study illustrated likewise, there is a positive relationship between transformational leadership and engagement; also, identifying leaders mediated the association of these two factors. In 2016, Enwereuzor et al. explained that transformational leadership as one of the main characteristics of leadership style has a positive relationship with work engagement; additionally, this positive relation is so brilliant among nurses who have high person-job fit as compared with those who have poor person-job fit.

Employees who are not engaged will cause significant changes in their performance and behavior (Kompaso & Sridevi, 2010). Organizations may not play their role correctly in such states and do not know about employees' requirements. Furthermore, the lack of proper information to identify and manage these practical factors possibly generates devastation and irreparable phenomenon among employees. Finding an appropriate solution and applying it

precisely can be beneficial to human resources development. Based on this negative organizational feeling, it is crucially necessary to realize behavioral characteristics, distinguishing strengths, weaknesses, and levels of basic human needs by leaders and organizations, particularly in nurses' healthcare systems. Moreover, finding these practical factors can increase work engagement at the workplace (Batista-Taran et al., 2009). Employee motivation is determined as an essential factor for the achievement of organizational purposes. In this case, manager-employee relations enhance necessary for achieving employee motivation by utilizing practical styles of leadership. Managers differ in their values, attitudes, and behaviors and the way they lead their followers. Therefore, Zareen et al. (2014) examined the impact of transactional, transformational, and laissez-faire leadership styles on 100 employees. The researchers reported all three leadership styles to have a significant positive effect on employee motivation. Furthermore, ineffective leadership and disengaged nurses reduce the quality of care and patient satisfaction in healthcare organizations. Leaders in these sections play critical roles (Washburn, 2017).

Regarding the previous studies that focused on the association between work engagement and leadership or leadership styles, specifically transformational and transactional leadership, which mediated or moderated by different factors such as self-efficiency, optimism, burnout, person-job fit, work meaning fullness, positive affect, job resource, recovery experience, identification, leadership member, sense of coherence, trust, perception of safety, perception leadership, follower characteristics, need for leadership, psychological capital, organizational culture, job anatomy, meaning in work, follower characteristics; positive emotions, and also in some cases transformational leadership used as a mediator (Azka et al., 2011; Yasin Ghadi et al., 2013; Gözükarar & Simsek, 2015; Saleem, 2015; Goswami et al., 2016; Schmitt et al., 2016; Gan & Chen, 2017; Wang et al., 2016, etc.). In this sense, leadership styles, particularly transformational leadership, transactional leadership, and laissez-faire, can be considered independent variables that influence nurses' work engagement as dependent variables mediated by POS. The previous investigations also did not survey three outcome scales (EEF, EFF, and SAT) as a combination of organizational behavior outcomes that influence work engagement. At the same time, this study attempted to fill this gap and focus on it.

1.5.2 POS and Work Engagement

Earlier studies in work engagement concentrated on different reasons influencing work engagement and decreasing this organizational factor level amongst employees. Based on recent reviews, POS is assumed as one of the primary managerial assignments in working conditions (Corin & Bjork, 2016). Support usually drives the leader and work environment that has a meaningful role in employees' attitudes about their work. In the previously published studies examined the relationship between POS with work engagement at the workplace (Yang et al., 2017); likewise, some studies determined the role of POS as a mediator between supervisor support and work engagement amongst employees (Jin & McDonald, 2017).

In an investigation proposed by Wang et al. (2017) that has been held amongst nurses in China, the researchers reported POS could enhance the level of work engagement amongst hospital nurses. In this regard, Yongxing et al. (2017) found that POS moderated the association between work engagement and job performance. Besides, the researchers reported the organizational support reproduces the type of support that progresses through employees' interactions with administrative agents such as leaders and reflects employees' beliefs concerning the extent to which the organization, they work for values their participation and cares about their well-being. This factor can also produce a feeling of responsibility to care about the organization's welfare and help the organization reach aims based on the reciprocity norm. In parallel to this study, Shantz et al. (2014) focused on 175 employees who worked in manufacturing organizations in the United Kingdom; the researchers reported that corporate support moderates the relationship between work engagement and turnover intentions deviant behaviors. Also, Wang (2015) explained that POS moderated the relationship between individual proactive personality and work engagement. Based on Gillet et al. (2017), POS and work engagement are determined as two main factors that should be improved and considered via leaders and the workplace. Similarly, Hempfling (2017) explained that organizational support directly relates to work involved, and the individuals who gained support show a high level of engagement.

Caesens and Stinglhamber (2014) investigated 265 employees and 112 supervisors and clarified a significant relationship between work engagement and organizational support. Additionally, Zone (2013) stated POS has a considerable contribution to the high level of job involvement.

Jin and McDonald (2017) have been focused on the mediator role of organizational support that linked the relationship of supervisor support with work engagement amongst 1251 employees who worked on local government. The investigators explained that administrative support motivates employees' engagement toward work and its environment. In this line, Tungisa Kapela and Pohl (2017) demonstrated that organizational support has a substantial role in employees' satisfaction and organizational commitment.

1.5.3 POS and Leadership Styles

According to the important role of POS and leadership styles at the workplace, Giray and Şahin (2014) focused on 341 employees, and they reported there is a significant relationship between POS and leadership styles (paternalistic, participative, and authoritarian leadership). Additionally, POS fully mediated the association between paternalistic leadership and intention to leave, and it partially mediated the relationship between authoritarian leadership, participative leadership, and intention to leave. Likewise, POS and transformational leadership influence employees' work-life that needs more consideration at the workplace (Muthia Roza & Yuki, 2016). In this regard, Kim (2017) examined the transformational leadership style and POS. The investigator clarified that strong transformational leadership and strong POS are assumed as two crucial factors at the workplace, influencing different attitudes toward diversity. Based on Gaudet and Tremblay (2017), leadership style is determined as one of the main factors that can influence POS. Yildirim and Naktiyok (2017) examined the impact of managers' and POS's transformational leadership on employee empowerment and concluded that transformational leadership and POS have a positive influence on employee empowerment. Additionally, POS plays a mediator role in the relationship between transformational leadership and employee empowerment, that this role is not at a meaningful level. Qi et al. (2019) examined POS as a mediator between relationship-inclusive leadership and employee innovative behavior, the researchers reported a direct relationship between POS and leadership; POS mediated the association between leadership and employee innovation. Inclusive leadership represents an important organizational aspect that can assist in creating a more innovation-supportive work environment. Besides, supervisors in leadership play a critical role in providing organizational resources and rewards for subordinates; therefore, it should be considered an imperative organizational support source. According to the investigation of Imran and Aldaas (2020), POS

and entrepreneurial leadership positively and significantly affect organizational performance. In other words, POS and leadership have a strong impact on outcomes of the organization; and both are assumed as organizational motivators for employees to perform better. Consequently, the presence of different factors can improve engagement amongst employees or vice versa. But the role of organization and leader in different aspects is crucial and should be considered remarkably. Type of leadership styles and POS assumed as two main organizational factors related to work engagement and increasing its level at the workplace (Hudie et al., 2017).

Regarding Manning (2016), POS is derived from transformational and transactional leadership styles and positively impacts work engagement. In truth, this organizational factor is determined as a positive motivator for increasing employees' constructive attitudes and engagement (Al Mehrzi & Singh, 2016). Additionally, POS can help organizational leaders deal effectively with dysfunctional behaviors and enhance nurses' dedication, commitment, satisfaction, and loyalty to their organization. García-Sierra and Fernández-Castro (2018) reported transformational leadership of managers has a positive impact on nurse engagement who worked in health centers through the mediating effect of structural empowerment. Similarly, in the relationship between leadership and nurses' work engagement, humble leadership was significantly related to nurses' innovative behavior and work engagement.

Unfortunately, most organizations forget that work engagement lies with leaders within an organization, and those leaders require guidance on how to get employees inspired to gain common targets. The employees' work engagement is different for individuals, but it is referred to as the relationship between individual and workplace. Furthermore, the organization is responsible for its employees and leaders. It should know their leaders what skills are required to have their employees engaged and offer them appropriate knowledge to make it occur. Thus, leaders need to get specific skills in any part of the action to satisfy employees' requirements (Employee engagement through the lens of leadership, 2014). The leaders should ensure employees have everything they need to do their job (physically, financially, and information resources) (Kompaso & Sridevi, 2010). In general, support usually drives by the leader and work environment (Yang et al., 2017).

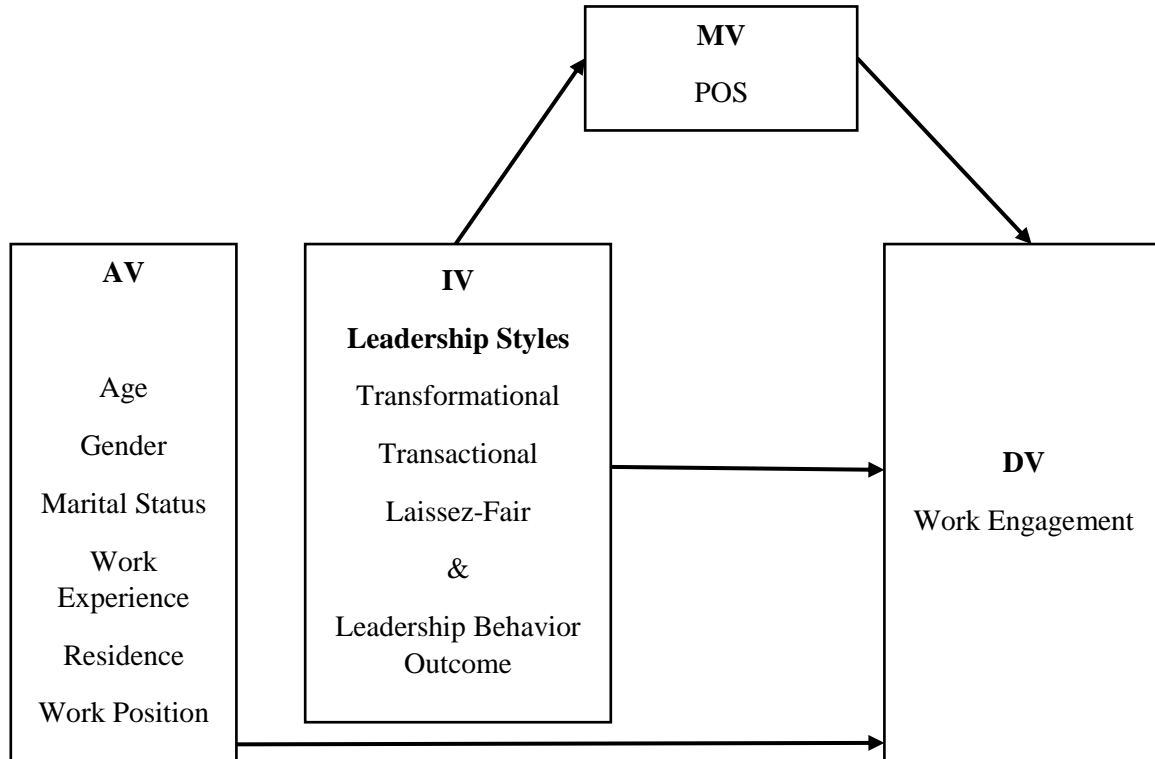
According to earlier investigations towards leadership styles, work engagement, and POS; also, their relationship together, findings showed that still there is a lack of adequate information about nurses' work engagement at healthcare organizations that mediated via POS and impacted by transformational leadership, transactional leadership, and laissez-faire leadership styles; also, three outcome scales as a combination of organizational behavior outcomes. Therefore, the researcher focused on this area to fill this gap in the context of Health Psychology. The main aim and structure of this study will explain clearly in the next sections.

1.6 The Present Study

The current study focused on transformational leadership, transactional leadership, and laissez-faire. The leadership behavior outcome (follower satisfaction, extra effort, and effectiveness) will deeply examine and discuss in chapters 3 and 4. Specifically, the present study focuses on the association between nurses' work engagement with the leadership styles mentioned above and leadership behavior outcome mediated by POS at healthcare organizations. In other words, it is emphasized the critical role of leadership styles on nurses' opinions and behavior and their engagement toward their job that has a relationship with work performance and their mental health. Quality of care toward nurses' engagement improves via leadership styles and organizational support. The level of nurses' engagement impacted via POS and leadership styles at the workplace has been measured. Following, Figure 1 illustrated the conceptual framework of the present study.

Figure 1

Conceptual Framework of the Study



1.7 Research Objective

The purpose of this study is to determine the relationships between leadership styles (transformational leadership, transactional leadership, and laissez-faire), leadership behavior outcome, nurses' work engagement, and POS.

1.8 Hypothesis

H₁: There would be significant relationships between leadership styles, leadership behavior outcomes, and POS.

H₂: There would be a significant relationship between work engagement and POS.

H₃: There would be a significant relationship between work engagement, leadership styles, and leadership behavior outcome.

H₄: Leadership styles, leadership behavior outcome, and POS would account as the predictors of work engagement.

H₅: POS would mediate the relationships between leadership styles, leadership behavior outcomes, and work engagement.

It is assumed that the transformational and transactional styles, as well as the outcome of leadership behavior, will have a positive effect on both work engagement and POS. In contrast, the laissez-faire style will have the opposite effect.

1.9 Scope of Study

The present study focuses on nurses' work engagement dependent on leadership styles, the outcome of leadership behavior, and POS. The nurses who work in any position in all types of health care services at healthcare organizations in Catalonia, Spain, will be considered. Additionally, this study examined POS's mediation role in the relationships between leadership styles, the outcome of leadership behavior, and work engagement.

1.10 Organization of Study

The present study is structured into Five Chapters. Chapter 1 focuses on introducing the survey that included the study's background and literature review, research objective, hypotheses, conceptual framework, the definition of terminology, the scope of the study, and the study's organization. In the following, Chapter 2 presents the methodology, the instruments that are used for data collection, sample and sampling, location, etc. In addition, Chapter 3 focuses on data analysis and results. Then, Chapter 4 concentrates on the interpretation of the outcome of the current study and discussion. Finally, Chapter 5 summarized this study and mentioned the conclusion based on the results; it also refers to the implications and recommendations for future research; as well, it notes the study's limitations.

Chapter 2 Methodology

2.1 Introduction

The present chapter exposes the methods used to gather the data and is organized as follow:

1. The research design.
2. Population, data collection procedure and its technique, sampling method, and location of the study.
3. Instrumentation and measurement.
4. Instrument scores validity and reliability.
5. Data analysis.
6. Ethical consideration.
7. Level of significance.
8. Summary.

2.2 Research Design

The present study's research design is based on a cross-sectional design and quantitative approach to answer the research questions and determine the relationship between research variables. This study also applied regression analyses; therefore, the contingent variable's value is calculated as the independent variable's value in this analysis. In fact, the regression analysis determines predictor variables, as well. According to the study's hypotheses, regression analysis has been carried out to complete the relationships between main variables; likewise, predictor variables. It is served to determine the extent to which POS mediates the relationships between leadership styles, leadership behavior outcome, and work engagement.

2.3 Population of the Study

Population debates the whole group of individuals, actions, or objects of interest that the investigator must study and obtain proper conclusions (Babbie, 2013). Based on this explanation, this research focused on nurses working between 2019-2020 years at healthcare organizations in Catalonia, Spain. A sample of 85 nurses from Catalonia, Spain, participated in the current study. The Spanish sample included (89.3% female, 8.3% male, and 2.3% preferred not to say), with a mean age of 49.22 years ($SD = 9.89$, range 24-64).

2.3.1 Sample and Sampling Method

A sample is determined as a subdivision of a population that is adapted to study. In truth, it is impossible to examine all members of a particular population. Furthermore, it is wise to select a sample based on a specific population. Knowing the total population is imperative, and the exact sample for the study can determine based on the total population (Rouzegari, 2013).

The present study's sample size originated from population nurses working at healthcare organizations in Catalonia, Spain. The Spanish version of the questionnaires was sent to the participants as an online questionnaire; then, the nurses fill the questionnaires optionally. A snowball sampling method that drives the convenience sample technique is employed for the current study. This method is assumed to be a recruitment technique in which study participants can help researchers identify other potential subjects. In other words, snowball sampling is designated as a non-probability sampling method in which the samples have features that are rare to discover. This is a sampling method in which existing subjects present referrals to recruit models required for a research study (Snowball Sampling, n. d). According to Goodman (1961), the snowball sampling procedure has been characterized as a random sample of individuals is formed from a given measurable population. Snowball is a valuable method when it is difficult to find sample participation and ensure sincerity. In the current study, this Snowball has worked from nurse to nurse, providing confidence in the source of invitation to participate. Since the invitation to participate did not come from the organization where they worked, the bias of seeking approval from supervisors has been removed. Finally, total anonymity facilitates sincerity. So, in the current circumstances, the Snowball has been the technique of choice.

Additionally, the convenience sampling method links snowball sampling as a non-probability sampling technique that has been used in this study. Convenience sampling is a nonprobability or nonrandom sampling where members of the target population that meet specific practical criteria, such as easy accessibility, geographical proximity, availability at a given time, or the willingness to participate is included in the study (Narcy-Combes, 2008; Etikan et al., 2016). This sampling is defined as a method adopted by researchers to accumulate market research data from a conveniently available pool of participants. It is the most generally adopted sampling

technique as it is incredibly prompt, uncomplicated, and economical. In many cases, members are readily approachable to be a part of the sample (Convenience Sampling, n. d).

2.4 Location of the Study

The location of the current study for evaluating the primary objective was healthcare organizations in Catalonia, Spain. Catalonia is an autonomous community in Spain's northeastern corner that has been designated as a nationality by its Statute of Autonomy. Catalonia consists of four provinces: Barcelona, the capital and largest city in this area, then order Girona, Lleida, and Tarragona (Refer to Appendix B); in this study majority of the participants were from Barcelona (57 participants- 67.9%). The main point is that the health system is managed and legally regulated by Catalonia's autonomous government (Puente Martorell, 2010).

2.5 Data Collection

The data collection was assumed as the fundamental part of this study, designed based on quantitative methods. In this study, the objectives required preliminary information on respondents' backgrounds, leadership styles, three outcome scales, work engagement, and POS via standardized questionnaires. Dillman et al. (2008) pointed out that a questionnaire is a well-established method for collecting essential and necessary data to answer the research questions. Based on this explanation, the researcher can help answer the research questions by applying appropriate and accurate questionnaires. Therefore, the Spanish version of the questionnaires is offered as an online questionnaire to participants. The data were collected from 17 May 2019 to 15 March 2020 among the nurses working in healthcare organizations in Catalonia, Spain.

2.6 Instrumentation and Measurement

The present study comprised antecedent, independent, dependent, and mediator variables measured by instruments explained in detail in the following sections. The first section of the instruments is socio-demographic information of respondents' background. The second section is designed to investigate leadership styles and three outcome scales by MLQ; the third section considered examining the work engagement by UWES. Finally, the fourth section measured

POS by the POS questionnaire. All study's questionnaires were in Spanish and adapted for the Spanish population.

2.6.1 Antecedent Variable: Background Factors

This study's antecedent variables included the nurse's personal backgrounds: age, gender, marital status, work experience in years, place of residence (province), and work position (hospital care, primary and community care, socio-healthcare, and teaching & research).

2.6.2 Dependent Variable: Work Engagement

This study measured work engagement as a dependent variable and used the Utrecht Work Engagement Scale (UWES), developed by Schaufeli & Bakker (2003). This tool has 17 items and has a seven-point scale ranging (*Never* = 0, *Almost Never* = 1 (A few times a year or less), *Rarely* = 2 (Once a month or less), *Sometimes* = 3 (A few times a month), *Often* = 4 (Once a week), *Very often* = 5 (A few times a week), *Always* = 6 (Every day)) (Schaufeli & Bakker, 2004; Garcia-Sierra et al. 2016). This questionnaire asks about employee feelings at work. Schaufeli et al. (2006) reported vigor has 6 items (items 1, 4, 8, 12, 15, and 16), dedication has 5 items (items: 2, 5, 7, 10, and 13), and absorption has 6 items (items: 3, 6, 9, 11, 14, and 16).

2.6.3 Independent Variable: Leadership Styles

For measuring leadership styles as independent variables in the present study, the MLQ was proposed by Bass and Avolio (1995). This questionnaire included 45 items that scored between 0-4 (0 = *never* to 4 = *usually*) and measured transformational, transactional, laissez-faire, and three outcome scales. Transformational has 20 items (items: 10, 18, 21, 25, 6, 14, 23, 34, 9, 13, 26, 36, 2, 8, 30, 32, 15, 19, 29, and 31); transactional has 8 items (items 1, 11, 16, 35, 4, 22, 24, and 27); laissez-faire has 8 items (5, 7, 28, 33, 3, 12, 17, and 20); and three outcome scales has 9 items (37, 40, 43, 45, 38, 41, 39, 42, and 44). In fact, one scale measures the three outcomes and all scales of the three-outcome used in the sum.

2.6.4 Mediator Variable: POS

In addition, measuring the POS as the mediator of this study was clarified by the Spanish version of POS proposed by Ortega (2003). This Spanish version included 17 items and comprised a 7-point Likert scale (1 = *strongly disagree*, 7 = *strongly agree*).

2.7 Instrument Scores Validity and Reliability

In studies that involve multiple items and a Likert-type scale, the same as the current study, Cronbach's alpha measurement of reliability was applied to measure the research tool's internal consistency. Truly, Cronbach's alpha is one of the most critical statistics in a study involving test construction and use. Applying coefficient Cronbach's alpha (α) has a significant role in the social science areas (Cortina, 1993). Based on the instruments that have been utilized in the current study and analyzing the reliability of the variable, the results are exposed in Table 1.

Table 1

Variables Reliability

Variable	Cronbach's Alpha	No. Items
WE	.759	17
POS	.753	17
TAL	.868	8
TFL	.967	20
LF	.895	8
TOS	.949	9

Note. WE = Work Engagement, POS = Perceived Organizational Support, TAL = Transactional Leadership, TFL = Transformational Leadership, LF = Laissez Faire, TOS = Three Outcome Scales

The Cronbach's alpha coefficient ranges from 0 to 1; when a rate is close to 1, it means that the internal consistency determined is at a high level. In general, the reliability of 0.70 or greater is considered well. In the quantitative studies, the Cronbach's alpha 0.60 is acceptable, but an alpha

lower than 0.60 designates insufficient internal consistency (Zinbarg, 2006). As shown in Table 1, all measures followed this rule in the current study, and they are not less than 0.753 and showed high internal consistency reliability. transformational leadership illustrated the highest Cronbach's alpha 0.967, and POS showed the lowest Cronbach's alpha .753. The findings generally showed high reliability.

2.8 Data Analysis

In this study, the data obtained from participants will be coded, computed, and analyzed by SPSS version 25 (2017). Descriptive analysis and inferential statistical analysis are the two statistical procedures utilized for data analysis.

In this study, before starting the main data analysis, **Exploratory Data Analysis (EDA)** was carried out and showed descriptive statistics such as mean, standard deviation, maximum, minimum score, Skewness, and Kurtosis. EDA is determined as a set of methods to present the data meaningfully in visual ways (Howell, 2007). EDA was applied before starting a particular statistical process. It helps to determine or recognize any mistakes that emerged during the data coding procedure. These errors would happen in two cases; first, when data entered twice in one field repeatedly, second, the field left blank (Zhu & Wu, 2004). This process protects and checks whether the set of data has the necessary normality and linearity before showing a parametric test (Dillman et al., 2008).

Additionally, the present study has used the test of normality for data distribution and consists of univariate and multivariate normality (Hair et al., 2003). Indeed, normal distribution explains a particular way about observations that tend to impact a specific value more than spread across a range of values (Safaria et al., 2010). Based on an evaluation of skewness and kurtosis values, this study illustrates the data of variables usually distributed. Additionally, studies in social science mentioned that the amount of skewness should be between -2 and +2. The studies likewise reported that the amount of kurtosis should be between -3 to +3 (Brown, 1997).

Furthermore, this part describes the normality of the distribution variable of the study and follows this rule. These variables include work engagement, leadership styles, three outcome

scales, and POS. In Chapter 3, Table 3 shows the Test of Normality and Distribution of Measures.

Independent t-test and ANOVA (Analysis of Variance) in the current study were performed to investigate the differences in work engagement between socio-demographic factors. This analysis was also used to evaluate hypothesis testing for **correlation analysis** conducted to examine relationships between POS, work engagement, leadership styles, and three outcome scales. Additionally, **multiple linear regression analysis** was likewise performed to define the key determinants of work engagement among nurses. In the end, a **series of mediation analysis (Sobel test)** was carried out to clarify whether POS mediated the relationships between work engagement, leadership styles, and three outcome scales.

This study's independent **t-test analysis** analyzed differences in nurses' work engagement to socio-demographic factors (marital status, work experience, and residence). The t-test analysis was assumed as a commonly used technique to compare the means of different groups. This method of analysis compares two groups that are statistically different from each other. In other words, it is utilized to examine whether two groups have different average values (Sharifi & Sharifi, 2001). **ANOVA tests** in this study were applied for analyzing differences in age, gender, and work position with nurses' work engagement. Homogeneity of variances is one of the critical assumptions in t-test and ANOVA analysis; therefore, for testing this assumption, Levene's test is utilized in SPSS statistics. Levene's test explanation deals with a primary question; are there any differences in variance between various groups or not? In a case where Levene's test was $p > 0.05$, the researcher reported the amount of equal variance assumed for the test. In contrast, if Levene's test shows $p < 0.05$ researcher said the amount of equal variance was not assumed for the t-test (Field, 2009).

Correlational analysis is used in the present study to explore the significant statistical relationships between leadership styles, three outcome scales, POS, and work engagement. The correlation analysis supports describing the association between variables based on their strength and magnitude. Pearson correlation analysis value should have fluctuated between +1 and -1. These two signs illustrate a positive or negative linear correlation. If the r illustrates +1,

there is a perfectly positive correlation, but if it shows -1, there is a totally negative relationship between variables. If r close to zero, it means that there is a nonlinear relationship between variables (Taylor, 1990). Besides, Cohen (1988) clarified the rule of thumb where correlation is contributed by r ; and explained that the strength of the relation of effect size expressed in terms of r when it is between 0.10-0.29 demonstrates a small effect size (small relationship). Also, when r is between 0.30-0.49 shows a medium effect size (medium relationship); additionally, when r is between 0.50-1.00, it illustrates a large effect size (large relationship).

Multiple linear regression analysis is applied in this study to examine how well a set of variables can predict findings. This method is used to provide information on the independent variable's influences on the dependent variable. These analyses determined the amount of prediction and significance independent variable, and its contribution towards the dependent variable. Also, multiple regression analysis is calculated to discover whether a critical predictor variable will predict; thus, when the results of another variable are controlled (Ma'rof, 2013). For the current, this study used the enter method to control variables and determine the best subset of variables for explaining a dependent variable; therefore, all variables are analyzed in one step (Chan, 2004). This method, likewise, is used in the current study to investigate whether leadership styles, three outcome scales, and POS will predict work engagement or not.

In social science, it is important to assess the presence of **multicollinearity**. To avoid the presence of multicollinearity, several tolerance statistics should not be less than 0.10, and likewise, Variance Inflation Factor (VIF) values greater than 10 may merit additional examination (O'Brien, 2007; Strydom, 2011). Analysis of multicollinearity is imperative because the influence of multicollinearity reduces the interpretation of a particular coefficient, although the model's overall predictive power might be useful. A high level of multicollinearity means that other independent variables highly predict an independent variable. Multicollinearity is a statistical phenomenon that refers to two or more variables with high correlation levels (Hair et al., 2006). In the present study, the range of tolerance statistics was from 0.123 to 0.559, and for the VIF statistics ranged from 1.789 to 8.110.

A series of regression analysis and Sobel test for mediation analysis has been used to examine the possible mediator effects on other variables' relationships. Indeed, a mediator variable is produced by the independent variable and, in turn, causes the dependent variable. In mediation relationships, a third variable (mediator variable) plays an imperative role in leading relationships between the dependent variables and the independent variables (Ma'rof, 2013). In the study of Baron and Kenny (1986), it has been mentioned that there are some conditions for mediation, such as the independent variable should be related to the mediator variable and dependent variable. When the mediator variable is involved in the regression model, an independent variable's effect on the dependent variable should be reduced. If the impact of an independent variable on the dependent variable completely disappears after entering the mediator variable, it is entitled to full mediation. However, if the influence of independent variables on the dependent variable was still significant, it can be determined that the mediator partially mediated the relationship between independent and dependent variables. The Sobel test was then calculated to test whether a mediator variable significantly carries an independent variable's effect on the dependent variable. The Sobel test examines whether an independent variable's indirect influence on the dependent variable via the mediator variable is significant or not (Sobel et al., 1986). In a small sample such as this sample of the current study, the Sobel test (1982) assumes that this distribution is normal. When this assumption is dissatisfied, it needs to use a bootstrapping test (Koopman et al., 2015). Therefore, in summary, according to this study's normal distribution, the series of regression analysis and Sobel test was used to evaluate POS's mediation role in the relationships between leadership styles, three outcome scales, and work engagement.

2.9 The Level of Significance

To test the hypothesis, reject them based on the 0.05 significant levels. When the significant p -value obtained from SPSS was less than α , H_0 is rejected. Also, when the amount of p -values is more than α , the H_0 is accepted. Selecting a smaller level of α , such as 0.01 or 0.001, may increase confidence insignificance but run an increased risk of Type II error, which is false adverse determination, and so have less statistical power. The selection of α -level involves a choice between significance and power, and consequently, between the Type I error and the

Type II error. In some areas, such as medicine, it is common to express statistical significance in units of 0.01 or 0.001, but social science studies usually get the 0.05 level (Thompson, 2004).

2.10 Ethical Considerations

The study asked for informed consent, that it was voluntary, that the participants could abandon it at any time, and that it was anonymous since at no time did it generate customized databases (with no personal data). Additionally, this research followed the code of good practices of the Ethics Committee in Animal and Human Research (CEEAH) of UAB. The study likewise exactly persuaded part of Research involving people from CEEAH.

2.11 Chapter Summary

This chapter explained the research methodology that entailed the quantitative approach. To evaluate leadership styles, leadership behavior outcomes, POS, and work engagement among nurses, the questionnaires developed by other investigators and designated thoroughly in this chapter were used. The current study's sample size consisted of 85 nurses working in healthcare organizations during 2019- 2020 in Catalonia, Spain. Also, this chapter clarified the sampling method and statistical techniques.

Chapter 3 Results

3.1 Introduction

The findings of the study are represented in two main sections. The first part is the descriptive statistic that addresses all critical variables of the study—the second part concentrations on the inferential statistics.

3.2 Descriptive Analysis

Descriptive findings concentrate on respondents' characteristics and the study's critical variables. In this study, data distribution characterizes nurses' background and the variables studied in central tendency. In fact, in the current study, **Descriptive Analysis** was used to explain respondents' background (nurses), leadership styles, three outcome scales, work engagement, and POS. The respondents' background results have been reported as a personal profile, and the study's main variables have been reported as a distribution of measures. These results are shown via the minimum, maximum, mean, standard deviation, percentage. And for main variables Skewness, and Kurtosis are also illustrated for showing their normal distribution that has been discussed in the **Distribution of Measures** section 3.2.2.

3.2.1 Respondents' Background

This section concentrates on the description of the personal characteristics of the study's respondents. The present study's personal characteristics involve age, gender, marital status, work experience, work position, and residence (province). A total of 85 nurses from healthcare organizations in Catalonia, Spain, were included in this research. Table 2 shows the findings obtained from the respondents' background.

The respondents of the present study are 85 nurses in Catalonia, Spain. That Majority of them was 51 and older years old ($n = 41, 48.24\%$), Female ($n = 75, 89.3\%$), Married ($n = 51, 61.4\%$), with Work Experience less than 15 years old ($n = 66, 78.6\%$), worked in Hospital Care Position ($n = 46, 54.1\%$), which located in Barcelona Province ($n = 57, 69.9\%$). Additionally, the study's findings showed that the nurses' minimum age was 24 years old, while the maximum age was 64 years old. As well, the average age of respondents was 49.22 ($SD = 9.89$).

Table 2*Personal Profile of Respondents (N = 85)*

Variable		n	%	<i>M</i>	<i>SD</i>	Min	Max
Age				49.20	9.89	24	64
	Under 35	8	9.41	164.25	38.85		
	36-50	36	42.35	169.22	36.92		
	51 and older	41	48.24	158.60	31.36		
Gender	Female	75		164.22	34.72		
	Male	7		154.71	34.35		
	Other	2		161.50	48.79		
Marital Status	Married	51		165.66	36.30		
	Unmarried	32		159.96	32.47		
	Not respondent	2					
Work Experience	>15	66		162.15	34.83		
	<15	18		167.83	34.25		
	Not respondent	1					
Work Position	Hospital Care	46		156.13	34.98		
	Primary & Community Care	22		164.50	34.36		
	Socio-Healthcare	7		190.71	13.48		
	Teaching & Research	10		177.30	32.00		
Province	Barcelona	56		166.87	35.86		
	Other	29		157.37	31.25		

3.2.2 Distribution of Measures

Table 3 shows the descriptive properties of leadership styles, three outcome scales, work engagement, and POS based on minimum, maximum, mean value, standard deviation, Skewness, and Kurtosis.

Table 3*Descriptive Statistic of Main Variables*

Variables	Min	Max	<i>M</i>	<i>SD</i>	Skewness	Kurtosis
POS	33.00	222.00	118.726	48.486	.274	-.722
WE	68.00	224.00	163,635	34,469	-.403	-.381
TAL	8.00	40,00	24,329	7,226	-.194	-.274
TFL	20.00	100,00	60.623	19,768	.120	-.764
LF	8.00	9.00	21.976	7.747	.297	-.731
TOS	9.00	45.00	27.023	9.743	.226	-.834

Note. POS = Perceived Organizational Support, WE = Work Engagement, TAL = Transactional Leadership, TFL = Transformational Leadership, LF = Laissez-Faire, TOS = Three Outcome Scales

The findings in Table 3 show that transformational leadership with a mean value of 60.62 (*SD* = 19.77) has the highest mean among leadership styles. In contrast, laissez-faire, with an average value of 21.976 (*SD* = 7.75), has the lowest mean among leadership styles. Besides, POS showed a mean value of 118.726 (*SD* = 48.49), and work engagement illustrated a mean value of 163.636 (*SD* = 34.47). According to Skewness and Kurtosis analysis, results displayed that the study variables have a normal distribution.

3.3 Inferential Statistical Analysis

In this section, *t*-test and ANOVA were performed to investigate the differences in work engagement between socio-demographic factors. Furthermore, correlation analysis was conducted to examine relationships between leadership styles, three outcome scales, POS, and work engagement. Multiple linear regression analysis was also performed to define the critical determinants of work engagement among nurses. Finally, a series of mediation analyses was carried out to determine whether POS mediates the relationships between leadership styles, three outcome scales, and work engagement.

3.3.1 Differences in Work Engagement between Socio-Demographic Factors based on *t*-test Results

The results of the *t*-test analysis based on socio-demographic factors with work engagement are shown in Table 4.

Table 4

Differences in Work Engagement between Socio-Demographic Factors based on t-test Results (N = 85)

Variable	n	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Marital Status					
Married	51	165.66	36.30	.724	.471
Unmarried/Other	32	159.96	32.47		
	2 Not responded				
Work Experience					
> 15 years	66	162.15	34.83	.615	.540
< 15years	18	167.83	34.25		
	1 Not responded				
Residence (Province)					
Barcelona	56	166.87	35.86	1.20	.231
Other	29	157.37	31.25		

Note. *t* = *t*-test

The *t*-test results presented in Table 4 and shows that there was no significant difference in work engagement amongst Married ($M = 165.66$, $SD = 36.30$) and Unmarried/Other nurses ($M = 159.96$, $SD = 32.47$), $t(81) = .724$, $p = .471$; additionally, there was no significant difference in work engagement between years of work experience > 15 ($M = 162.15$, $SD = 34.83$) and years of work experience <15 ($M = 167.83$, $SD = 34.25$), $t(82) = .615$, $p = .540$; likewise, there was no meaningful disparity in work engagement between Residence (Barcelona Province) ($M = 166.87$, $SD = 35.86$) and Other Provinces ($M = 157.37$, $SD = 31.25$), $t(83) = 1.20$, $p = .231$. Marital status, work experience, and residence do not have significant differences with work

engagement; furthermore, calculating Cohen effect size is not needed for this part of *t*-test analysis.

3.3.2 Differences in Work Engagement between Socio-Demographic Factors based on ANOVA Results

The results of ANOVA analysis based on socio-demographic factors with work engagement are demonstrated in Table 5.

Table 5

Differences in Work Engagement between Socio-Demographic Factors based on ANOVA Results (N=85)

Variable	n	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
Age					
Under35	8	164.25	38.85	.908	.407
36-50	36	169.22	36.92		
51 and older	41	158.60	31.36		
Gender					
Female	75	164.22	34.72	.299	.826
Male	7	154.71	34.35		
Other	2	161.50	48.79		
Work Position					
Hospital Care	46	156.13	34.98	2.87	.04
Primary & Community Care	22	164.50	34.36		
Socio-Healthcare	7	190.71	13.48		
Teaching & Research	10	177.30	32.00		

Note. *F* = *F*-test (variation between sample means / variation within the samples)

As illustrated in Table 5, the results of one-way ANOVA revealed a significant difference between work position groups and work engagement ($F(3, 82) = 2.87, p < .05$). Additionally, Cohen effect size ($\eta^2 = 0.32$) suggested Medium effect size; then, the difference between work engagement and work position is accepted. Tukey Post-hoc shows that work engagement varies among different work position groups: the work position group socio-healthcare ($M = 190.71, SD = 13.48$), the work position group teaching and research ($M = 177.30, SD = 32.00$), the work position group primary and community care ($M = 164.50, SD = 34.36$), and the work position group hospital care ($M = 156.13, SD = 34.98$). The results in the Tukey Post-hoc test (LSD) likewise illustrated that there are significant differences in nurses' work positions who were working in the socio-healthcare position and hospital care position at 0.05 level; additionally, it appears that nurses who worked in socio-healthcare positions experience a significantly higher level of work engagement with ($M = 190.71, SD = 13.48$) than those in the hospital care group ($M = 156.13, SD = 34.98$). In contrast, both groups' primary & community care and Teaching & research were not statistically significantly different from the rest of the groups.

On the other hand, the findings of the ANOVA test showed that there are no significant differences between age groups and work engagement ($F(2, 82) = .908, p = .407$); additionally, the results illustrated there are no meaningful differences between gender groups and work engagement ($F(3, 81) = .299, p = .826$).

3.3.3 Relationships between Leadership Styles, Three Outcome Scales, POS, and Work Engagement

This study hypothesized significant relationships between leadership styles, three outcome scales, work engagement- work engagement and POS- and leadership styles, three outcome scales, and POS (H_1-H_3). These hypotheses were tested by correlating all variables with each other and are shown in Table 6.

Table 6*Pearson Correlations*

Variables	1	2	3	4	5	6
1. WE						
2. POS	.447**					
3. TAL	.257*	.431**				
4. TFL	.329**	.530**	.880**			
5. LF	-.356**	-.522**	-.667**	-.691**		
6. TOS	.425**	.616**	.844**	.912**	-.681*	

Note. * $p < .05$, ** $p < .01$

According to the relationships between leadership styles, three outcome scales, and POS, the findings showed a significant association between POS and leadership Styles (transformational leadership, transactional leadership, laissez-faire, and three outcome scales). The results based on Table 6 revealed that there is a positive association between three outcome scales ($r = .616$, $p < .01$), transactional leadership ($r = .431$, $p < .01$), and transformational leadership ($r = .530$, $p < .01$), with POS; on the other hand, there is a negative association between laissez-faire ($r = -.522$, $p < .01$) with POS; then, H₁ is accepted (See section 1.8, page 31).

The results revealed a significant association between work engagement and POS ($r = .447$, $p < .01$); then, H₂ is accepted (See section 1.8., page 31).

In addition, the findings released that there is positive association between three outcome scales ($r = .425$, $p < .01$), transactional leadership ($r = .257$, $p < .05$), and transformational leadership ($r = .329$, $p < .01$), with work engagement; on the other hand, there is negative association between laissez-faire ($r = -.356$, $p < .01$) with work engagement; then, H₃ is accepted (see section 1.8., page 31).

3.3.4 Predictors of Work Engagement

Multiple linear regression analysis is applied to investigate and determine leadership styles, three outcome scales, and POS as predictors of nurses' work engagement. Proceeding to analysis, the variables of the study were tested for the assumptions of the multivariate analysis. The assumptions of multicollinearity, normality, linearity, and homoscedasticity of residuals were tested via SPSS. In Table 7 illustrates the result of multicollinearity.

Table 7

Results of Multicollinearity with Tolerance and VIF Measures

Variable	Collinearity Statistic		Evidence of Multicollinearity
	Tolerance	VIF	
TOS	.134	7.474	No evidence
TFL	.123	8.110	No evidence
TAL	.198	5.058	No evidence
LF	.469	2.133	No evidence
POS	.559	1.789	No evidence

Checking multicollinearity is assumed as an important factor; also, bivariate correlations amongst all independent variables of the study should not exceed 0.8. In this case, the variable with a value higher than 0.8 should be dropped. All independent variables of the current study follow this rule. Table 7 illustrates the amount of tolerance and VIF. From this table, it could be understood that there is no evidence of multicollinearity. In addition, multicollinearity demonstrates the tolerance and VIF values relating to each independent variable. Based on Table 7, all VIF values were meaningfully and smaller than 10. The multicollinearity diagnostics findings revealed no evidence found in multicollinearity or perfect multicollinearity among the independent variables. According to the rule of thumb, if the VIF value does not exceed 10, there is no purpose for apprehension. Therefore, if the VIF value exceeds 10, the variable is said to be extremely collinear (Strydom, 2011). In addition, the amount of tolerance should not be less than 0.10 (O'Brien, 2007).

Table 7 illustrates that the tolerance of variables was between 0.123 to 0.559, and the amount of VIF ranged from 1.789 to 8.110. Based on these results, there is no multicollinearity among variables. The current study hypothesized that leadership styles, three outcome scales, and POS would consider unique variance in predicting work engagement (H₄) (see section 1.8., page 31).

Table 8

Results of Multiple Linear Regression Analysis for Work Engagement

Variable	B	SE	β	<i>t</i>	<i>p</i>
(Constant)	153.969	28.836		5.339	.000
TOS	2.051	.934	.581	2.196	.031*
TAL	-.372	.480	-.214	-.776	.440
TFL	-1.148	1.037	-.241	-1.106	.272
LF	-.671	.628	-.151	-1.070	.288
POS	.163	.092	.228	1.760	.082

Note. $F(5, 78) = 5.76$, $*p < .05$, $R = .52$, $R^2 = .27$, Adjusted $R^2 = .22$

Table 8 shows the results of multiple regression analysis to work engagement performed to test H₄. Three outcome scales, transactional leadership, transformational leadership, laissez-faire, and POS were used in a standard regression analysis to predict work engagement. The study results indicated that all the independent variables in the equation explained (27%) of the variance. This study used the enter method for analyzing multiple linear regression. The findings illustrated among factors of leadership styles, three outcome scales, and POS; only three outcome scales has a significant proportion of variance in work engagement scores ($R^2 = 0.27$, $F(5, 78) = 5.76$, $p < .05$). As a result, it can show that the independent variables meaningfully described the dependent variable variance as a group. The coefficient determination amount should be between 0-1; in this study, the results showed that the model's coefficient determination was 0.27. Then, all the independent variables described 27 percent of work engagement. As displayed in Table 8, it was found that three outcome scales ($\beta = .581$, $t(78) = 2.196$, $p < .05$) significantly predicted work engagement. The present study results illustrated

that transactional leadership, transformational leadership, laissez-faire, and POS do not significantly contribute to nurses' work engagement. As a combination of leadership behavior outcomes, only three outcome scales have a meaningful contribution to work engagement. Thus, based on multiple linear regression analysis results, the data partially supported H₄ (See section 1.8., page 31).

3.3.5 Significance of Individual Regression Coefficients

In this section, the aim was to study the effects of independent variables on the dependent variable. The regression coefficients offer the strength of the association between the independent variables and the dependent variable in the regression equation and the relationship's direction (Hair et al., 2006). This section refers to a constant that is assumed as a simple regression. The value of the constant in almost all factors is meaningless. Based on the amount of B (positive or negative) among independent variables, when one unit adds to the amount of constant, the amount of work engagement varies (Hoffmann, 2010). In this study, relying on Table 8, work engagement = 153.969 + (2.051) (three outcome scales) + (-0.372) (transformational leadership) + (-1.148) (transactional leadership) + (-0.671) (laissez-faire) + (0.163) (POS). Work engagement increased by about 2.051 units when three outcome scales as a significant factor in work engagement increased one unit. Additionally, the other values of the independent variables remained constant.

3.3.6 Mediation Effect of POS on Relationships between Leadership Styles, Three Outcome Scales, and Work Engagement

This study performed a series of regression analyses to examine POS's mediating effect on the relationships between leadership styles, three outcome scales, and work engagement. Before analysis, the assumptions of mediation should be established. According to Baron and Kenny (1986), there are three assumptions related to mediation relationships:

- The independent variable should be related to the dependent variable.
- The independent variable should be linked with the mediator variable.
- The mediator variable should be related to the dependent variable.

In continuation, Figure 2 shows the mediation model.

Figure 2
Mediation Model

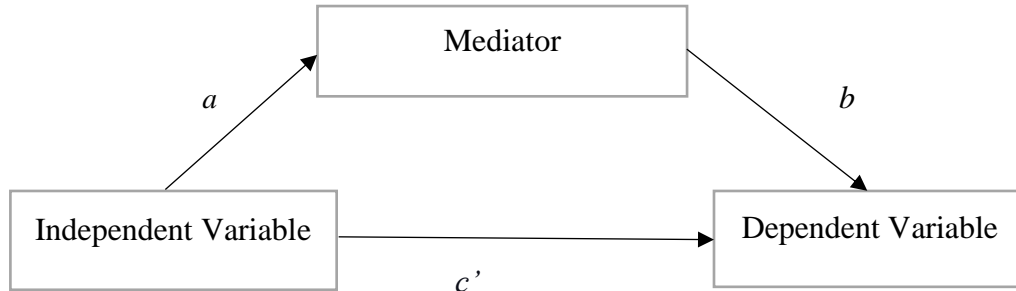


Figure 2 shows the mediation model of relationships between independent and dependent variables. The path *a* illustrates the relationship between the independent variable and mediator. Path *b* denotes the relationship between the mediator and the dependent variable, and path *c'* represents the link between the independent and dependent variables. As shown in Table 6, all the variables were related to work engagement and had a significant association with it; therefore, these results followed Baron and Kenny's assumptions (1986).

3.3.6.1 Mediating Test of Laissez-Faire on Work Engagement through POS

The study is examined to determine the relationship between laissez-fair with work engagement is mediated by POS. Table 9 shows this relationship.

Table 9
Mediating Test of Laissez-Faire on Work Engagement through POS

IV	DV	B	SE	β	t	<i>p</i>
LF	POS	-3.249	.586	.522	-5.54	.000**
POS	WE	.319	.071	.447	4.525	.000**
LF	WE	-.671	.628	-.151	-1.070	.288

Note. B = Unstandardized beta; β = Standardized beta; ** $p < .01$, * $p < .05$

Figure 3

The Mediating Role of POS on the Relationship between Laissez-Faire and Work Engagement

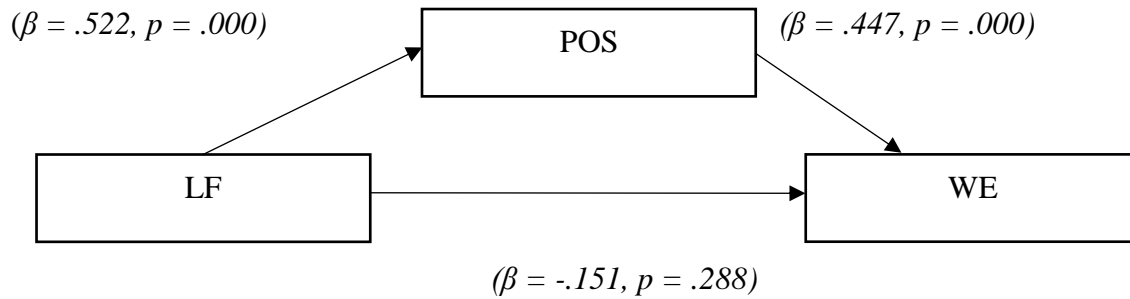


Table 9 shows the direct effect of laissez-faire on work engagement (*c* path) is not significant ($b = -.671, p = .288$). Conversely, the direct effect of laissez-faire on POS (*a* path) is significant ($b = -3.249, p < 0.01$). In addition, the relationship between POS and work engagement (*b* path) is also significant ($b = 0.319, p < 0.01$). Thus, POS fully mediates the relationship between laissez-faire and work engagement. The Sobel test calculation likewise displayed that the indirect effect of laissez-faire on work engagement is statistically significant ($z = -3.490, p = .000$). Therefore, H_5 is accepted, and POS mediates the relationship between LF and WE fully.

3.3.6.2 Mediating Test of Transactional Leadership on Work Engagement through POS

The study is examined to determine the relationship between transactional leadership with work engagement is mediated by POS. Table 10 shows this relationship.

Table 10

Mediating Test of Transactional Leadership on Work Engagement through POS

IV	DV	B	SE	β	t	p
TAL	POS	2.879	.665	.431	4.326	.000**
POS	WE	.319	.071	.447	4.525	.000**
TAL	WE	-1.148	1.037	-.241	-1.106	.272

Note. B = Unstandardized beta; β = Standardized beta; ** $p < .01$, * $p < .05$

Figure 4

The Mediating Role of POS on the Relationship between Transactional Leadership and work engagement

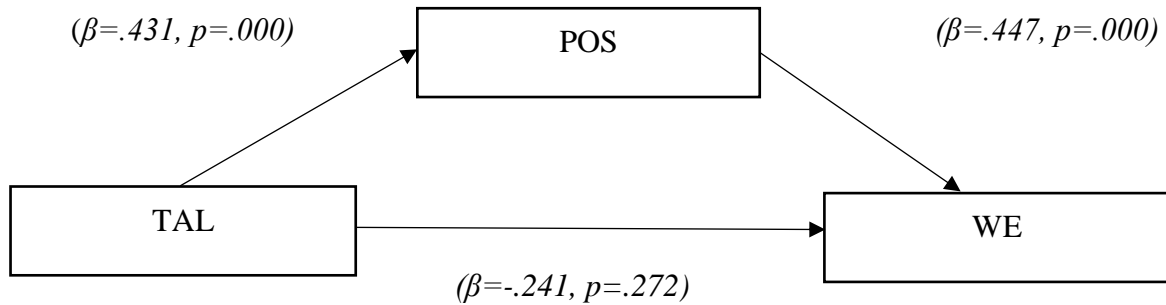


Table 10 shows the direct effect of transactional leadership on work engagement (c' path) is not significant ($b = -1.148, p = .272$). Conversely, the direct effect of transactional leadership on POS (a path) is significant ($b = 2.879, p < 0.01$). In addition, the relationship between POS and work engagement (b path) is also significant ($b = 0.319, p < 0.01$). Thus, POS fully mediates the relationship between transactional leadership and work engagement. The Sobel test calculation similarly showed that transactional leadership on work engagement's indirect effect is statistically significant ($z = 3.117, p = .008$). So, H_5 is accepted.

3.3.6.3 Mediating Test of Transformational Leadership on Work Engagement through POS

The study is examined to determine the relationship between transformational leadership with work engagement is mediated by POS. Table 11 shows this relationship.

Table 11*Mediating Test of Transformational Leadership on Work Engagement through POS*

IV	DV	B	SE	β	t	p
TFL	POS	1.293	.228	.530	5.663	.000**
POS	WE	.319	.071	.447	4.525	.000**
TFL	WE	-.372	.480	-.214	-.776	.440

Note. B = Unstandardized beta; β = Standardized beta; ** $p < .01$, * $p < .05$

Figure 5

The Mediating Role of POS on the Relationship between Transformational Leadership and work engagement

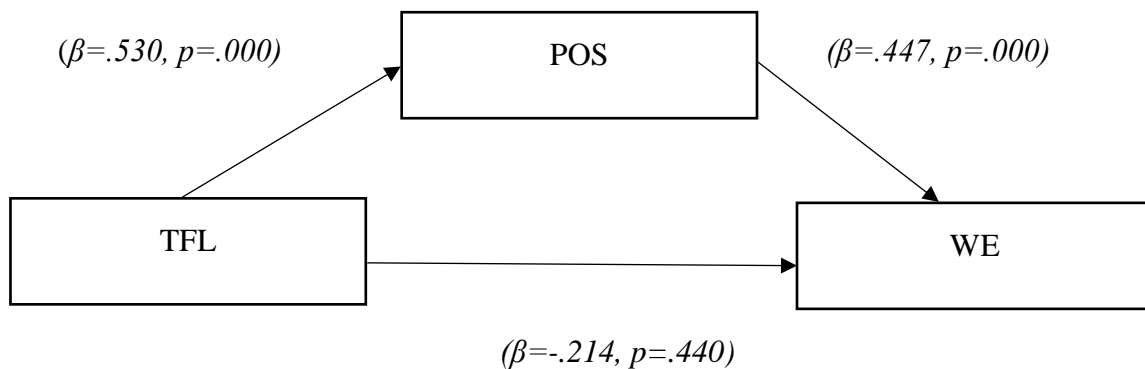


Table 11 shows the direct effect of transformational leadership on work engagement (c' path) is not significant ($b = -0.372, p = .440$). Conversely, the direct effect of transformational leadership on POS (a path) is significant ($b = 1.293, p < 0.01$). In addition, the relationship between POS and work engagement (b path) is also significant ($b = 0.319, p < 0.01$). Thus, POS fully mediates the relationship between transformational leadership and work engagement. The Sobel test calculation similarly showed that the indirect effect of transformational leadership on work engagement is statistically significant ($z = 3.521, p = .000$). Therefore, H_5 is accepted.

3.3.6.4 Mediating Test of Three Outcome Scales on Work Engagement through POS

The study is examined to determine the relationship between three outcome scales with work engagement is mediated by POS. Table 12 shows this relationship.

Table 12

Mediating Test of Three Outcome Scales on Work Engagement through POS

IV	DV	B	SE	β	t	p
TOS	POS	3.045	.431	.616	7.072	.000**
POS	WE	.319	.071	.447	4.525	.000**
TOS	WE	2.051	.934	-.581	2.196	.031*

Note. B = Unstandardized beta; β = Standardized beta; ** $p < .01$, * $p < .05$

Figure 6

The Mediating Role of POS on the Relationship between Three Outcome Scales and Work Engagement

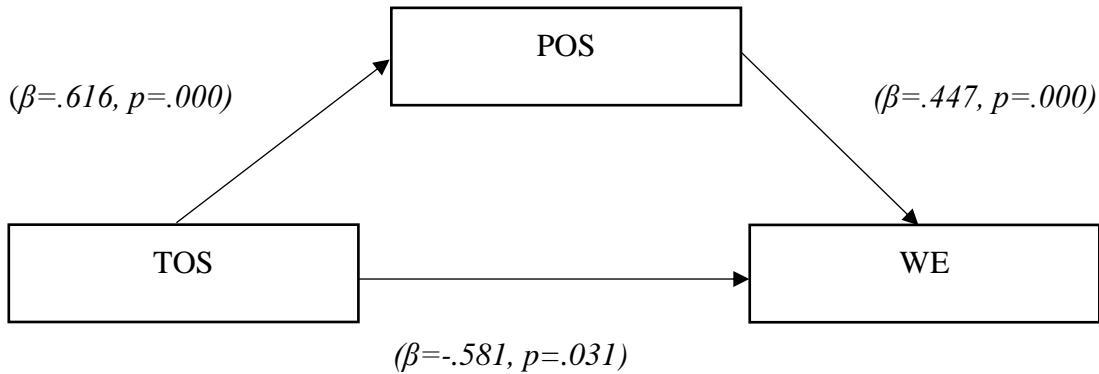


Table 12 shows the direct effect of the three outcome scales on work engagement (c' path) is significant ($b = 2.051, p < 0.05$). Additionally, the direct effect of three outcome scales on POS (a path) is significant ($b = 3.045, p < 0.01$). The relationship between POS and work engagement (b path) is also significant ($b = 0.319, p < 0.01$). Thus, POS partially mediates the relationship between three outcome scales and work engagement. The Sobel test calculation similarly

showed that the direct effect of three outcome scales on work engagement is statistically significant ($z = 3.791, p = .000$). Therefore, H_5 is accepted.

3.4 Summary of Results

In this study, 85 nurses working in healthcare organizations in Catalonia, Spain, completed the online self-report questionnaire that evaluated personal background, leadership styles, three outcome scales, POS, and work engagement.

In the current study assessed any significant differences in work engagement among nurses according to age, gender, marital status, work experience, residence (province), and work position. Among these characteristics, age, gender, marital status, work experience, and residence were not significant work engagement differences. On the contrary, the findings revealed a significant difference between work position groups and work engagement. In fact, the work positions showed meaningful differences with work engagement; and nurses with different roles at healthcare organizations illustrated an extra level of work engagement. Between socio-healthcare and hospital care positions found significant differences while the rest of the positions (teaching & research - primary & community care) did not show significant differences. Additionally, those nurses who worked in the socio-healthcare position showed a high level of work engagement than other positions.

Additionally, this study revealed that transformational leadership, transactional leadership, and three outcome scales were positively related to work engagement. On the contrary, laissez-faire was negatively associated with nurses' work engagement. Also, POS was positive with work engagement. Besides, transformational leadership, transactional leadership, and the three outcome scales showed positive relations with POS. On the other hand, laissez-faire showed a negative association with POS.

This study likewise evaluated whether leadership styles, three outcome scales, and POS enhanced work engagement prediction. The findings revealed that the three outcome scales were a significant predictor of nurses' work engagement.

Additionally, this study demonstrated the mediation model of the relationship between leadership styles, three outcome scales, and work engagement. To sum up, the study's findings showed that POS was a significant mediator for the associations between leadership styles (transformational leadership, transactional leadership, and laissez-faire), three outcome scales, with nurses' work engagement at healthcare organizations. And, among them, the only variable that has a direct effect on work engagement was leadership behavior outcomes.

3.5 Chapter Summary

This chapter shows the results of the current study. Likewise, the chapter focused on the analysis of the data that was obtained from nurses in healthcare organizations. At first, this chapter evaluated the differences of socio-demographic factors based on nurses' work engagement; in the following, this chapter referred to the correlation of critical variables with work engagement and H₁ to H₃ confirmed. Additionally, multiple linear regression was used for illustrating predictor variables, and H₄ is partially approved. Also, it applied a series of regression analyses (path model) for showing the role of POS as a mediator on the associations between leadership styles, three outcome scales, and work engagement, then H₅ is confirmed. The next chapter will discuss and interpret the findings based on the literature.

Chapter 4 Discussion

4.1 Introduction

The current chapter presents the discussion of results of this study derived from quantitative analysis of the relationships between leadership styles, three outcome scales, POS, and nurses' work engagement at healthcare organizations in Catalonia, Spain.

4.2 Nurses Work Engagement and Socio-Demographic Factors

Work engagement does not significantly differ in age, gender, marital status, work experience, and province of residence. In contrast, work position groups that included hospital care, primary and community care, teaching and research, and socio-healthcare showed significant work engagement differences. More specifically, amongst these four work positions that have been evaluated in this study, those nurses who worked in socio-healthcare positions illustrated more engagement than the rest of healthcare organizations' positions. Also, there were not any meaningful differences between the work engagement of nurses who worked in primary and community position, and teaching and research position. In sum, the level of nurses' engagement toward their work at healthcare organizations was displayed in order of these positions: socio-healthcare position was the highest level, then teaching and research position, in following primary and community position, and hospital care.

In general terms, these results are consistent with previous studies. For example, Tshilongamulenzhe and Takawira (2015) explained no significant differences between gender and work engagement. Additionally, Ntsoane (2017) reported gender and age do not have any significant relation and difference with work engagement. In the same way of current research, Sharma et al. (2017) reported no difference in work engagement regarding gender and marital status, while they explained that there is a significant difference between work engagement and age in three different groups (less than 28, between 28-32, and more than 32) that those employees who were between 28-32 years old showed a high level of work engagement; besides, there were meaningful differences between work engagement of those employees who were less than 28 years old and those who were between 28-32 years old. The researchers also explained differences between years of work experience (less than three years, 3-9 years, more than nine years) and work engagement. In that study, the researchers examined the socio-

demographic factors with work engagement items (vigor, dedication, and absorption), while in the current study, work engagement was examined as general.

There is explicit evidence that the level of engagement varies depending on the type of job. Jaworek (2018) found a significant difference between work position groups and work engagement; those employees who worked as sales representatives, welfare services/rehabilitation, and teachers were more engaged toward their work with tele sales operators and blue-collar workers. Similarly, Hakanen et al. (2019) explained that work position has a meaningful relationship with work engagement. Those employees in human service occupations reported higher work engagement levels than employees in other industries in 30 European countries context.

In the present study, all the participants are involved in people's healthcare, so work has a significant meaning for all of them. Therefore, the differences between nurses who work in socio-healthcare or hospital care cannot be explained by the importance of the job or providing essential services to people. The difference could explain that the hospital nurses have a higher demand and temporary pressure. This temporary stress can derive the amount of perceived support from the organization and patients hospitalized for a short period. So, the closer relationships that socio-healthcare nurses develop cannot establish in the hospital setting. This fact can assume how much the socio-healthcare in the health sector is valuable and must be more considerate. Based on nurses' positions, workplace, and the time and situation of working, passing with patients can evaluate nurses' attitudes and engagement regarding their job. With considering the differences between hospital care and socio-healthcare, we can report that hospital care can be classified into two types: acute care that usually offered by hospitals, which covers a complete range of medical specialties; and long-stay care that these days are less prevalent, implemented during psychiatric care and prolonged nursing care. The main differences between these two are how their services are delivered (St Patrick's, 2019). With deeply searching among previous studies in the Catalonia, Spain context, no research has been found focused on different jobs in health organizations; therefore, the present study's results and discussion can be valuable. Only, few investigations concentrate on primary and community care position; for instance, Xyrichis and Lowton (2008) clarified team working amongst nurses

who work in primary and community care position is essential, could best be delivered, and it can progress an integrated approach to encouraging and maintaining the health of the population whilst improving service efficiency; therefore, nurses team working can be helpful in patients with a long-term condition, but it cannot guarantee it. According to the importance of nurses in health systems development, success, and the accomplishment of good population health outcomes, Munyewende et al. (2014) reported working of nurses in primary health care positions is valuable locally and internationally that need support from doctors and other categories of health professionals. In parallel, Almalki et al. (2012) emphasized nurses' imperative role in primary health care positions. They explained that this position is determined as the primary health unit or the first contact between the community and the health care system.

Additionally, it is claimed to establish a proper career rank system for those occupied in primary health care positions. Similarly, Smolowitz et al. (2015) described that role of direct health care services is associated with improved patient health outcomes, reduced health disparities, and more efficient spending of health care money; additionally, it assumed as the provision of critical health care services, comprising the most comprehensive scope of health services offered, in the community for persons from all socioeconomic groups and geographic regions. Successful integration in the primary care sector requires expert leadership of change that needs to provide by managers, which was proposed by Chreim and Williams (2010).

4.3 Leadership Styles, Three Outcome Scales, POS, and Nurses' Work Engagement

This section will focus on the results of the study's main variables and compare them with the earliest investigations that have been done in this field. In this case, the discussion of each variable analyzed with the appropriate method explains comprehensively in the below sections.

4.3.1 Transformational Leadership, Transactional Leadership, Laissez-Faire, and Leadership Behavior Outcomes with POS

The present study's findings showed that leadership styles (transformational leadership, transactional leadership, and laissez-faire) and their outcomes relate to POS in healthcare organizations. Transformational leadership, transactional leadership, and outcomes illustrated a positive association with POS, while laissez-faire showed a negative relation with POS. These

results displayed to what extent leadership styles and their outcomes as a combination of organizational behavior in leadership can be essential strategies of the organization and its support.

Giray and Şahin (2014) focused on the relationship between paternalistic, participative, and authoritarian leadership styles, while the current research focused on transformational leadership, transactional leadership, and laissez-faire as three main leadership styles and evaluated their association with POS. This research's findings parallel the study of Muthia Roza and Yuki (2016), who reported transformational leadership and POS have a significant and positive association. Similarly, Kim (2017) explained that transformational leadership style and POS are assumed as two critical factors which impact differential attitudes toward diversity; the above researchers in their investigations only focused on transformational leadership while in this study considered three main styles of leadership also focused on the combination of organizational behavior in leadership that it can show the differences of this study with another research. Same as the current study, Gaudet and Tremblay (2017) determined that leadership style is one of the main factors that can influence POS. In parallel, Yildirim and Naktiyok (2017) examined the relationship between transformational leadership with POS among employees. They reported transformational leadership and POS have a positive influence on employee empowerment while the current study focused on the impact of three styles of leadership (transformational, transactional, and laissez-faire) on POS; likely as this study, the POS is considered as a mediator variable between the relationship of transformational leadership and empowerment. Qi et al. (2019) likewise evaluated POS in their study as a mediator between inclusive leadership and employee innovative behavior. Based on Imran and Aldaas (2020), POS and leadership have a substantial impact on the organization's outcomes. Both are determined as two primary organizational motivators for employees at the workplace.

Regarding the findings of this study and earlier investigations, it can conclude that leadership styles have a considerable role in the perceived organizational support among employees at the workplace; and in this research amongst nurses who were working in healthcare organizations. Leadership styles can determine in appearing organizational behavior and assumed as internal factors. Leaders, managers, or supervisors play an essential role in selecting and performing

each of these styles based on the work situation, directly and indirectly affecting the feeling, attitude, performance, etc., of employees. Besides, this study's findings can explain which leadership and organizational behavior types can improve and increase the health organizations' strategies and knowledge in the Catalonia context. In Chapter 5, we will return to analyze this point considering the psychological context.

4.3.2 Nurses' Work Engagement and POS

The findings of this research released that nurses' work engagement has a positive association with POS at healthcare organizations in Catalonia, Spain. This study's findings support previous investigations done by Corin and Bjork (2016) that explained organizational support generally assumed as the managerial assignment that needs to be analyzed to improve administrative work and sustainability. In the same way as the current study, Wang et al. (2016) focused on nurses' work engagement and explained the POS influence on hospitals' work engagement levels. Like the present study, Yongxing et al. (2017) evaluated POS's role in the association between job performance and work engagement as a moderator and reported POS and work engagement have a positive association, while in the current study, POS played as a mediator between leadership styles and work engagement. Similarly, there is a positive relationship between POS and work engagement. Wang (2015) and Shantz et al. (2014) explained POS's role as moderator on employees' work engagement. Gillet et al. (2017) clarified that POS and work engagement have positive relations that contributed to the high level of employees' motivation who worked in the French Air Force. Based on the studies of Zacher and Winter (2011), Zone (2013), and Caesens & Stinglhamber (2014), POS plays a considerable role in the level of work engagement, and it is beneficial for employees' engagement. In parallel, Hempfling (2017) clarified a positive relationship between POS and work engagement; likewise, Jin and McDonald (2017) applied POS as a mediator variable in their study between work engagement, and supervisor support reported POS positively related to work engagement.

Additionally, Ghazawy et al. (2019) emphasized the role of work support and environment on the level of nurses' work engagement; this attitude also related to Dong et al. (2020) found that the care quality of nurses that nourish them from the healthcare system related to their engagement; also, it ensures patients satisfaction. This finding can help hospital managers

implement effective strategies to improve nursing care quality and recognize the influential role of the healthcare system on nurses' performance and attitude. Regarding Manning (2016), POS is derived from transformational and transactional leadership styles and positively impacts work engagement. In truth, this organizational factor is determined as a "positive motivator" and "increase constructive attitudes" for employee engagement (Al Mehrzi & Singh, 2016).

Earlier studies examined the relationships between work engagement with POS in different workplaces or locations and populations. In this case, there are not many studies on POS, specifically in nurses. Therefore, this study focused on nurses' context in the healthcare organizations in Catalonia, Spain.

4.3.3 Transformational Leadership, Transactional Leadership, Laissez-Faire, and Leadership Behavior Outcomes with Work Engagement

This study showed that leadership styles (transformational leadership, transactional leadership, and laissez-faire) and three outcome scales directly correlate with work engagement. Transformational leadership, transactional leadership, and their outcomes positively associate work engagement and increase its level. In contrast, laissez-faire negatively relates to nurses' work engagement and decreases its level in healthcare organizations. Considering the findings of this research, Azka et al. (2011) explained an association between transformational leadership and work engagement. Additionally, Yasin Ghadi et al. (2013) reported that transformational leadership has a noticeable contribution to employees' attitudes, motivation, and increasing employee engagement. In parallel, Hayati et al. (2014) clarified this result and emphasized the important role of transformational leadership on employees' behaviors. Strom et al. (2014) likewise explained that transformational leadership and transactional leadership affect the relationship between work engagement and organizational justice. Similarly, Dimitrov (2015) emphasized that leadership influences employees' work engagement in the workplace. In parallel, Gözükar and Simsek (2015) also described that transformational leadership has a considerable contribution to improving work engagement. Schmitt et al. (2016) reported that transformational leadership has a positive relationship with work engagement; in reality, this factor increases the amount of performance and positive attitudes amongst employees. In other words, the presence of work engagement that appeared by transformational leadership translates into higher proactivity, and it is related to job performance. The investigators released that

leaders who want employees to show high levels of proactivity need to avoid high levels of job stress that lead to strain and negative reactions in employees over time; also, they explained that for increasing employee engagement and proactivity, transformational leadership skills must develop and improve amongst supervisors. Zareen et al. (2014) reported a positive relationship between three styles (transformational, transactional, and laissez-faire) of leadership with work engagement and explained that transactional leadership style is positively and significantly related to employee motivation compared to transformational and laissez-faire leadership styles. In contrast, the laissez-faire leadership style has an intermediate impact, and the transformational leadership style has the lowest impact. They clarified that the main factors that managers and leaders should adopt are the appropriate leadership style according to the situation and values and attributes of the followers to make them motivated and committed to organizational goals for optimum performance. In comparing this finding with the current study, the relation between laissez-faire and work engagement is negative. Still, they are similar for a positive relationship between transformational and transactional leadership with work engagement. According to these findings and the importance of situation for applying leadership styles, the **Situational Leadership Theory** proposed by Hersey and Blanchard during the mid-1970s referred to the management of organizational behavior. It explained that there is no single "best" style of Leadership. The investigators believed that effective leadership is task relevant. Most successful leaders adapt their leadership style to the individual or group's performance will or group they are endeavoring to lead or impact (Hersey & Blanchard, 1977). Manning (2016) examined the relationship between leadership styles and engagement amongst nurses and reported transactional and transformational leadership styles positively impacting nurses' engagement. In parallel to the previous studies, Zhu et al. (2009), Breevaart et al. (2015), Bass et al. (2016), and Goswami et al. (2016) clarified that transformational leadership has a positive association with employees' work engagement and increases its level. In this regard, Lewis and Cunningham (2016); and Manning (2016) reported a positive association between transformational leadership and work engagement. Additionally, Buil et al. (2016) confirmed that transformational leadership influences organizational identification and work engagement in the Spanish workplace context. In parallel, Hawkes et al. (2017); and Gan and Chen (2017) also considered the connection between transformational leadership and employees' work engagement and reported these two factors to have a direct relationship. As the present study

results, Enwereuzor et al. (2016) likewise reported transformational leaderships to assume to be one of the principal factors of leadership style that positively correlate with nurses' work engagement. In the context of health centers, Washburn (2017); and García-Sierra and Fernández-Castro (2018) also clarified that transformational leadership has a positive impact on nurses' engagement. In contrast to the current research, Jeong et al. (2016) reported that transformational leadership does not associate with engagement in the workplace; in fact, this style does not contribute to low or high teachers' work engagement in the South Korean context.

According to previous studies, most of them focused on transformational leadership and, in some cases, in the context of healthcare organizations in Spain. At the same time, this research specifically considered three leadership styles and combination actions of organizational behavior (three outcome scales) that impact nurses' work engagement and deeply evaluated their role at healthcare organizations in Catalonia.

4.4 Predictors of Nurses' Work Engagement at Healthcare Organizations

Considering the results, the three outcome scales was determined as leadership behavior outcomes that predicted nurses' work engagement at healthcare organizations in Catalonia, Spain. Based on previous studies that they just evaluated the role of transactional leadership and transformational leadership or examined leadership styles as general (Fant, 2019), leadership behavior outcomes also are the best predictors of engagement. So, beyond the leadership style, what influences engagement are the outcomes of leadership style: Follower's satisfaction, extra effort, and effectiveness. Some of the researchers, such as Dabke and Patole (2014); and Peng (2018), likewise focused on the role of POS as a predictor of work engagement in different populations and workplaces while in this study deeply considered nurses work engagement context in Catalonia, Spain; and evaluated the role of POS, leadership styles, and leadership behavior outcomes as its predictors.

4.5 Mediation Effect of POS on Relationships between Transformational Leadership, Transactional Leadership, Laissez-Faire, Leadership Behavior Outcomes, and Work Engagement

This study's findings showed that POS mediated the relationship between leadership styles (transformational leadership, transactional leadership, and laissez-faire) and their outcomes with nurses' work engagement at healthcare organizations in Catalonia, Spain.

These results are consistent with the study of Giray and Şahin (2014) that reported POS mediated the association between leadership styles (paternalistic, participative, and authoritarian leadership) and organizational variables; additionally, this factor partially mediated the relationship between leadership styles to leave. The researchers, same as the current study, used POS as a mediator and determined its mediation role between paternalistic, participative, and authoritarian as three leadership styles and organizational variables. In contrast, the present study focused intensely on the mediation role of POS on the relationship between transformational, transactional, laissez-faire, and leadership behavior outcomes with work engagement for filling the gap of this type of relationship between variables and showing the importance of organizational behaviors at healthcare organizations. The evaluation of these groups of variables and the value of their influence on the consequence of organizations and nurses' performance is not performed before. Therefore, applying POS as a necessary mediation on the association of leadership styles and their outcomes on nurses' work engagement can be valuable. In sum, this study showed that POS or organizational support mediation affects how much can be effective and beneficial among nurses who work at healthcare organizations. It can convey organizational factors such as leadership styles and their outcomes that drive managers, leaders, and supervisors on nurses' work engagement. By recognizing leadership styles and applying them in an exact situation by those in charge, this cycle of the relation between manager-employee can be stable and efficient. Based on the findings of the current study, POS plays a considerable role in increasing nurses' level of engagement and performance at healthcare organizations. It can be assumed as a positive factor at work that should be considered and utilize by managers or any person in charge of the healthcare organizations. By knowing nurses' demands and categorizing their activity and work positions, offering organizational support by managers or any person in charge can be workable and has a considerable impact on

health organizations' outcomes and nurse's engagement. Overall, how to provide support and which type of support at the health organizations is the main factor in any segment depends on recognizing nurses' characteristics and requirements.

4.6 Chapter Summary

The current chapter shows previous studies' results like the present study's findings, and those are also dissimilar with these results. This chapter focused on the discussion of socio-demographic factors of nurses. In the following, this chapter referred to the correlation of critical variables with work engagement. Likewise, the results of multiple linear regression are discussed based on predictor variables. Also, according to the finding of POS's path model and role as the mediator between leadership styles, leadership behavior outcomes, and work engagement, the results were discussed and compared with earlier studies. The results were displayed along with the discussion, interpretation of the findings based on literature. The next chapter explains the study's results outline, the study's contribution, and implications; also, it will explain limitations and future recommendation lines.

Chapter 5 Conclusion

5.1 Introduction

This chapter provides an outline of the results obtained and reflects on their theoretical and practical implications. Finally, their limitations are revealed, and new lines of research are proposed.

5.2 Results Outline

According to the Hypotheses of this research, specifically examined the relationships between leadership styles (transformational leadership, transactional leadership, and laissez-faire), three outcome scales, and POS with work engagement; also planned to determine the predictors of nurses' work engagement among the main variables of the study; additionally, identify the role of POS as a mediator between relationships of leadership styles, three outcome scales, and work engagement. This study likewise applied different theories and models that completely matched the objective and the questionnaires of this study. In addition, the data and analysis them followed based on the aim and hypotheses of the study as well.

Based on the personal background of nurses at healthcare organizations in Catalonia, Spain: the results illustrate that most respondents in this study were female, age 51 years old and older, married, had work experience less than 15 years in that specific field, worked in hospital care position, and their workplace located in Barcelona province. Among the socio-demographic factors, only work position groups showed differences in work engagement; therefore, those nurses who worked in socio-healthcare positions are more engaged than teaching and research, primary and community care, and hospital care positions.

The study's main variables showed significant and positive relationships between transformational leadership, transactional leadership, and their outcomes with work engagement. At the same time, there was a negative association between laissez-faire and work engagement. It can be concluded that transformational leadership and transactional leadership styles have a considerable role in the high levels of work engagement. At the same time, laissez-faire cannot be assumed as a convenient style for nurses to increase their engagement toward work, and it has the opposite result. The leadership behavior outcomes, i.e., follower

satisfaction, extra effort, and effectiveness, play a positive and influential role in appearing nurses' work engagement. The results also displayed that there were significant relationships between leadership styles and their outcomes with POS. As a result, it is determined that transformational leadership and transactional leadership styles increase POS's level and are effective at work. At the same time, while laissez-faire is conducted to a low level of POS. Based on positive relationship results of POS and work engagement, it can conclude that POS as one of the main organizational factors needs to be considered comprehensively by managers or any persons in charge and the health organizations for providing a dynamic and productive environment for nurses according to their demands, position level, characteristics, etc. As well, letting nurses succeed because these successful nurses assumed a competitive benefit contributes to the organizational achievement and high level of outcomes. Further, by knowing and applying accurate leadership styles such as transformational and transactional in the right situation, this creation and outcomes will be progress. Truthfully, the successful nurses perform better, stay healthier, proactive, self-learners, career-oriented, and distribute greater attention toward organizational purposes; and in the end, it leads to nurses' precious engagement. Leadership behavior outcomes are predictors of work involved in this study, and their role can be more brilliant in an organization's environment. According to the mediation findings, POS contributes to mediating the relationships between transformational leadership, transactional leadership, laissez-faire, and their outcomes with work engagement. Truly, POS is necessary to actively carry out a job when liking with work engagement that assumed as positive, fulfilling, and work-related state of mind shows reinforces nurses emotional that lead to more involvement in their work. In effect, when nurses think that their healthcare organization valued their contributions and perceived that their well-being was more of concern about them due to it, they are probably likely to repay their organization by trying to meet their related organizational obligations by becoming more satisfied, high level of performance and team working, and engaged.

5.3 Contribution of the Study

This section derives from the findings of the current study. This study's outcomes indicate that participants' work engagement is impacted by socio-demographic factors, leadership styles, leadership behavior outcomes, and POS. This study applied different methods to discover

differences, relationships between variables, determining predictor variables, and the mediator variable's relationships between dependent variables and independent variables. The study specified the importance of job involvement amongst nurses influenced by various healthcare organizations in Catalonia, Spain. In truth, the study's findings clarified that different factors impact nurses' job engagement and change their views and beliefs toward their work and performance at the healthcare organizations.

The more essential findings from the current study were that work positions have a considerable contribution to work engagement. It should distinguish that different work positions have a fundamental role in improving and increasing nurses' work engagement at healthcare organizations in Catalonia, Spain. Additionally, work positions can change nurses' attitudes toward their work and their environment. In this regard, those in charge as a head at healthcare organizations must be considered nurses based on their work position and endeavor to facilitate a work environment based on human resources. In general, the human resources demand can be comprised or classify based on basic and critical human needs and some factors such as well training, offering reward according to the performance, work environment facilitation etc. This study's findings are in parallel with Jaworek (2018) and Hakanen et al. (2019). They focused on the effects of socio-demographic factors on work engagement and mentioned that work position significantly impacts work engagement at the workplace. Additionally, this factor changes employees' approaches toward their work and work environment.

Leadership styles, leadership behavior outcomes, and POS as primary and applicable factors on work engagement in psychological areas, specifically in industrial, organizational, and health, were considered in the present study. Each leadership style has a unique impact on nurses' job involvement and changes this involvement into different levels. Regarding the study findings, each type of leadership has positively or negatively influenced nurses' work engagement. Such that some of them improve nurses job involvement; i.e., applying transformational and transactional styles by recognizing proper condition in the direction of increasing outcomes of the health organizations and offering organizational support from the organizations can be positively related to employment; and those nurses who receive these styles from their managers, supervisors, and leaders show better reaction towards work difficulties and are more

engaged about their job; while those nurses who faced with laissez-faire leadership style at work that has a negative impact on work engagement; they usually illustrate low level of engagement and enthusiastic at work. Moreover, by this knowledge, the healthcare organizations need to support nurses by getting early information about leadership and organizational behavior by training and organizing national and international seminars and workshops for nurses, managers, supervisors, leaders, and any other person who is in charge to make them familiar with different leadership and organizational behavior. By clarifying and categorizing the results of leadership styles and organizational behavior on the performance, feeling, and engagement of nurses at the workplace, the leaders will be expert and professional in offering styles and organizational behavior. Healthcare organizations can encourage managers or any person in charge to support their nurses, i.e., by attempting to solve any struggle in job tasks, having meetings with their assistants regularly, or providing emotional and materials resources to their employees when needed. Likewise, POS positively influences nurses' job involvement; in reality, nurses who get POS or support from their managers, supervisors, and leaders illustrate better feelings toward their work and are more engaged. The presence of POS and applying an authentic leadership style according to work situations- as stated in the Situational Leadership Theory which proposed by Hersey and Blanchard, 1970s- have remarkable contributions in high levels of performance, presentation, communication, outcome, and engagement of nurses that can be helpful for the organization.

The presence of transformational and transactional styles can provide a high level of POS as compared to laissez-faire. By the study results, leadership behavior outcome has a meaningful role in predicting nurses' work engagement; this means that a combination of organizational behaviors in leadership plays a considerable role in achieving a high work engagement level. Likewise, POS contributes to mediating the relationships between transformational, transactional, laissez-faire styles, and leadership behavior outcomes with work engagement. Therefore, it must explain that POS is an essential factor in increasing nurses' engagement or job involvement. In this case, the healthcare organizations and those in charge of the organizations must consider POS a vital unit for nurses to get better work engagement. In other words, health organizations have some responsibilities to provide POS through work design and work conditions that can be more helpful for work outcomes. These responsibilities included

evaluation based on the job description and nurses' reports, work or system design that determine the work charts, recruitment, and regular training and updating nurses.

These findings of the study are in concordance with Zhu et al. (2009); Azka et al. (2011); Zacher and Winter (2011); Yasin Ghadi et al. (2013); Zone (2013); Caesens and Stinglhamber (2014); Giray and Şahin (2014); Hayati et al. (2014); Shantz et al. (2014); Strom et al. (2014); Zareen et al. (2014); Breevaart et al. (2015); Dimitrov (2015); Gözükarar and Simsek (2015); Wang (2015); Al Mehrzi and Singh (2016); Bass et al. (2016); Buil et al. (2016); Corin and Bjork (2016); Enwereuzor et al. (2016); Goswami et al. (2016); Manning (2016); Muthia Roza and Yuki (2016); Schmitt et al. (2016); Wang et al. (2016); Gan and Chen (2017); Gaudet and Tremblay (2017); Gillet et al. (2017); Hawkes et al. (2017); Hempfling (2017); Jin and McDonald (2017); Kim (2017); Washburn (2017); Yildirim and Naktiyok (2017) ; Yongxing et al. (2017); García-Sierra and Fernández-Castro (2018) ; Ghazawy et al. (2019) ; Qi et al. (2019); Dong et al. (2020); Imran et al. (2020); and Imran & Aldaas (2020) who focused on leadership styles, POS, and work engagement; also, the researchers concentrated on work engagement predictors at the workplace. The earlier studies considered several factors such as POS and leadership styles on work engagement among various groups of employees and workplaces. While the present study was deemed to determine the position of transformational, transactional, laissez-fair styles, leadership behavior outcomes, and POS specifically on work engagement amongst nurses who worked at healthcare organizations in Catalonia, Spain. This study likewise contributes to the body of knowledge because it highlighted practical factors that impact Spain's healthcare system's work engagement.

5.4 Implications of the Study

Studying work engagement by linking it to leadership styles, leadership behavior outcomes, and POS is relevant to the context of healthcare organizations such as Hospitals, Doctors' Clinics, Specialists' Offices & Clinics, Nursing Homes & Assisted Living Facilities, Laboratories & Diagnostics Clinics, Dental Offices, Orthodontics Offices, Outpatient Clinics, etc.

Nurses' engagement depends on their supervisors' behavior, and besides, the supervisors' behavior changes the view that nurses have of how the organization or provides support.

Therefore, these results indicate that to improve each nurse's performance, it is necessary to act in organizational variables such as the supervisors' guidelines, organization strategies, and policies. This interdependence between individual behavior and the organization has important theoretical and practical implications that we will see in this section.

5.4.1 Theoretical Implications

The findings of this research support the Avolio and Bass (1991) Full Range of Leadership Theory, which suggested that leadership styles have various positive and negative outcomes based on the performance and organizational behavior of leaders and employees. Likewise, POS plays a vital role in forming work engagement and has a close and positive association with work engagement. So, the leader's behavior can influence the perception nurses to have of the organization as a whole. This finding indicates that POS is assumed as a motivator factor that leads to work engagement. Therefore, the results support the Theory Perceived Organizational Support (POS) (1986), which explained that POS increases employees' feelings of responsibility to help the organization reach its goals, also it raises the positive attitude and performance of employees regarding their work and engaging about their job, as well.

Moreover, the findings illustrated that POS needs to be considered to indicate work engagement among the nurses of healthcare organizations. This study was conducted in the Spanish context, and the previous local studies less focused on nurses' work engagement at healthcare organizations. Consequently, this study contributes to the literature related to organizational behavior and performance in the Health Psychology field. To sum up, the current study's findings have expanded the Model of Schaufeli & Bakker (2003). This theory was assumed as the theory of work engagement, which explained the effect of different work engagement factors at the workplace. It is likewise determined as an excellent approach to the study of psychological areas such as Health Psychology. This theory indicates that the engagement decreases with the severity of the lawsuits and increases with the employee's resources to face the demands. These resources can be more brilliant for the individual or organizational part. The present study results explain how the nurse's supervisor's behavior can contribute to being one more organizational resource to face work requirements.

5.4.2 Practical Implications

This research results have practical implications for nursing supervisors, human resources managers of hospitals and health centers, and for the public health system (ICS) management of Catalonia, Spain. Considering the role of nurses' work engagement, recognizing factors contributing to work engagement is critical. Therefore, the first and significant implication is paying attention to nurses' human needs:

- Recognizing basic human requirements by nurses is essential at the workplace. For instance, realizing the basic human needs such as receiving the reward, adequate salary, feeling job security, having an excellent organizational relationship, continuous training, close supervision, etc., and the influence of different supporter factors on them may ultimately profit from the low level of work engagement and endeavor to satisfy requirements and increase nurses' work engagement at the workplace. By recognizing basic needs, nurses know exactly what they want from their workplace. Additionally, managers and any person in charge understand well how to satisfy these nurses' requirements in the work environments to improve their work engagement.

The present study results clarified that work engagement is assumed as one of the primary and effective factors amongst nurses in the workplace related to leaders' behavior and organization support. Therefore, this implies that:

- Healthcare organizations and any person in charge can obtain initial and necessary training about styles of leadership and organizational behavior. Nurses' supervisors must receive adequate formation and apprehend that there are not any single best styles; therefore, they based on that exact situation have to show specifically organizational behavior and applying precise leadership style with considering nurses' background.

Regarding the study results, healthcare organizations need to encourage managers to support their nurses:

- For instance, supervisors try to resolve any conflict in job responsibilities according accurate work charts and descriptions, have meetings with their assistants regularly, and provide emotional and materials resources to their nurses when needed.

According to the study results, preparing update and practical seminars and workshops for managers, supervisors, leaders, and nurses to become more familiar with organizational behavior, conflicts and how to manage it, human resource requirements, leadership styles, and any other factors related to the organization is essential:

- For example, healthcare organizations can concentrate on nurses' education and training and identify and improve their strengths.

By offering these types of workshops, they are aware of organizational behavior and factors; then they can control and restrict uncommon organizational performance and behavior; likewise, via these seminars and workshops, managers can modify conflicts and apply leadership styles in the exact situation (e.g., based on this study's results, using types of transformational leadership and transactional leadership with consideration of condition-theory of situational leadership- can be more beneficial for the healthcare organizations while limiting and reducing laissez-faire style by managers can be supportive for the high level of organizational outcome and nurses engagement). Additionally, healthcare organizations need to consider POS as the imperative alignment for intervention and prevention to increase nurses' work engagement. This support and organizational design are typically provided by the prominent and high-ranking officials at organizations according to nurses' requirements. Also, the study implies that nurses, by knowing their necessities as human resources need to mention them to their managers, leaders, or supervisors; additionally, these officials with this knowledge attempt to monitor and reduce negative factors that have an unsatisfactory role on attitude, believe, performance, engagement, etc. of nurses at the workplace.

Therefore, it suggests that managers, leaders, or supervisors educate and improve their information to realize accurate leadership styles and organizational support to obtain remarkable outcomes based on nurses' performance and engagement at work; also update their knowledge based on their proficiency. This study's findings showed that nurses convey feelings toward work through organizational support that they receive, also based on leadership styles that they lead by their managers, supervisors, or leaders. So, the findings are valuable for nurses to be conscious of organizational supports and leadership styles that their headers conduct, influencing their personal and social life. According to each positive and negative factor, and

applying accurate leadership styles and offering organizational support, appropriate working conditions can provide nurses. In general, the study's findings could support all nurses who work in any healthcare organizations. It could be like a guide in planning for nurses in healthcare systems.

5.5 Limitations of the Study and Recommendation of future Lines

The present study used primary data collected by the researcher from nurses who worked at healthcare organizations in Catalonia, Spain. Indeed, the study has numerous considerable assets that can be effective for nurses and healthcare organizations for improving the level of their performance and engagement.

- This study used the cross-sectional design and data collected at one time. Furthermore, it is recommended that investigations in this area perform longitudinal design if time and finance are sufficient for the researcher. The longitudinal design provides a convenient situation for recognizing the amount of work engagement based on organizational factors such as leadership styles and POS on nurses' feelings and attitudes in the duration of services.
- Secondly, this study only focused on healthcare organizations in Catalonia, while work engagement is a critical factor among nurses in any healthcare organization and systems; therefore, it is recommended that future studies consider all healthcare organizations throughout Spain.
- Subsequently, the study evaluated private and public healthcare organizations together simultaneously, so it is suggested that future studies compare nurses in two different groups of public and private sectors and assessing factors that more influence work engagement based on their workplace. Undoubtedly, the situations and types of their attitudes in each of these groups are different and show various reactions toward work engagement.
- This study is focused on nurses and their perception of their supervisors (leaders); it would be convenient to do the same research with the participation of the supervisors themselves.

5.6 Chapter Summary

This section, as the last part of Chapter 5, summarized the chapters of the study:

Chapter 1 focused on the introduction, background of the study and literature review, research objective, hypotheses, conceptual framework, the definition of terminology, the scope of the study, and the study's organization.

Chapter 2 considered the methodology and the instruments that are applied for collecting data.

Chapter 3 focused on data analysis.

Chapter 4 concentrated on data result discussion and interpreted them regarding the literature.

And **Chapter 5** explained the results outline and contribution of the study with some degree of generalization; this chapter also mentioned implications that were offered in two parts of theoretical and practical. As a final point, the chapter ended with limitations and recommendations for future lines that seem to have many benefits on Spanish Healthcare Organizations' outcomes, specifically in the Catalonia area.

References

- Abdelhadi, N., & Drach-Zahavy, A. (2012). Promoting patient care: work engagement as a mediator between ward service climate and patient-centred care. *Journal of Advanced Nursing*, 68(6), 1276–1287. doi:10.1111/j.1365-2648.2011.05834.x
- About Hashish, E. A. (2017). Relationship between ethical work climate and nurses' perception of organizational support, commitment, job satisfaction and turnover intent. *Nursing Ethics*, 24(2), 151–166. doi:10.1177/0969733015594667
- Ahmad, H., Ahmad, K. & Ali Shah, I. (2010). Relationship between job satisfaction, job performance attitude towards work and organizational commitment. *European Journal of Social Science*, 18(2), 257–267.
- Ali, A. S. A., Elmi, H. O., & Mohamed, A. I. (2013). The effect of leadership behaviors on staff performance in Somalia. *Educational Research International*, 2(2), 197–210. <http://www.erint.savap.org.pk/>
- Allen, T. D. (2001). Family-Supportive Work Environments: The Role of Organizational Perceptions. *Journal of Vocational Behavior*, 58(3), 414–435. doi:10.1006/jvbe.2000.1774
- Almalki, M. J., FitzGerald, G., & Clark, M. (2012). Quality of work life among primary health care nurses in the Jazan region, Saudi Arabia: a cross-sectional study. *Human Resources for Health*, 10(1), 1–12. doi:10.1186/1478-4491-10-30
- Al Mehrzi, N., & Singh, S. K. (2016). Competing through employee engagement: a proposed framework. *International Journal of Productivity and Performance Management*, 65(6), 831–843. doi:10.1108/ijppm-02-2016-0037
- Alonso, F. M., Saboya, P. R., & Guirado, I. C. (2010). Transformational and transactional leadership: An analysis of the factor structure of the Multifactor Leadership Questionnaire (MLQ) in a Spanish sample. *PSICOTHEMA*, 22 (3), 495–501.
- Al-Sayah, F. A (2011). *Exploring The Relationship Between the Perceived Leadership Behaviours and Job Satisfaction at The Libyan Petrochemical Companies* [Doctoral dissertation, University of Durham]. <http://etheses.dur.ac.uk/3318/>
- Antoinette Bargagliotti, L. (2012). Work engagement in nursing: a concept analysis. *Journal of Advanced Nursing*, 68(6), 1414–1428. doi:10.1111/j.1365-2648.2011.05859.x

- Antonakis, J., Avolio, B. J., & Sivasubramaniam, N. (2003). Context and leadership: an examination of the nine-factor full-range leadership theory using the Multifactor Leadership Questionnaire. *The Leadership Quarterly*, *14*(3), 261–295.
doi:10.1016/s1048-9843(03)00030-4
- Avolio, B. J. (1999). *Full Leadership Development: Building the Vital Forces in Organisations*. Thousand Oaks, CA: Sega Publications.
- Avolio, B. J. & Bass, B. M. (1991). *Full-Range of Leadership Development*. Binghamton, NY: Bass, Avolio and Associates.
- Avolio, B. J., & Bass, B. M. (2002). *Developing potential across a full range of leadership*. Mahwah, N.J.: Lawrence Erlbaum Associates.
- Avolio, B. J., Bass, B. M., & Jung, D. I. (1999). Re-examining the components of transformational and transactional leadership using the Multifactor Leadership. *Journal of Occupational and Organizational Psychology*, *72*(4), 441–462.
doi:10.1348/096317999166789
- Ayuningtias, H. G., Shabrina, D. N., Prasetio, A. P., & Rahayu, S. (2019). *The Effect of Perceived Organizational Support and Job Satisfaction*. Proceedings of the 1st International Conference on Economics, Business, Entrepreneurship, and Finance (ICEBEF 2018). doi:10.2991/icebef-18.2019.148
- Aziri, B. (2011). Job satisfaction: A literature review. *Journal of Management Research and Practice*, *3*(4), 77–86.
- Azka, G., Tahir, M. Q., M, A. K., & Syed, T. H. (2011). Transformational leadership, employee engagement and performance: Mediating effect of psychological ownership. *African Journal of Business Management*, *5*(17), 7391–7403. doi:10.5897/ajbm11.126
- Babbie, E. (2013). *The practice of social research* (13th ed.). Belmont, CA: Wadsworth Publishing Company.
- Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *Career Development International*, *13*(3), 209–223. doi:10.1108/13620430810870476
- Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. I. (2014). Burnout and Work Engagement: The JD–R Approach. *Annual Review of Organizational Psychology and Organizational Behavior*, *1*(1), 389–411. doi:10.1146/annurev-orgpsych-031413-091235

- Banaszak-Holl, J., Zinn, J. S., & Mor, V. (1996). The impact of market and organizational characteristics on nursing care facility service innovation: a resource dependency perspective. *Health services research, 31*(1), 97–117.
- Banaszak-Holl, J., Castle, N. G., Lin, M., & Spreitzer, G. (2013). An assessment of cultural values and resident-centered culture change in U.S. nursing facilities. *Health Care Management Review, 38*(4), 295–305. doi: 10.1097/hmr.0b013e3182678fb0
- Bandura, A., & Schunk, D. H. (1981). Cultivating competence, self-efficacy, and intrinsic interest through proximal self-motivation. *Journal of Personality and Social Psychology, 41*(3), 586–598. doi:10.1037/0022-3514.41.3.586
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*(6), 1173–1182. doi:10.1037/0022-3514.51.6.1173
- Bass, B. M. (2008). *Handbook of Leadership, Theory, Research, and Managerial Applications*. (4th ed.). NY: Free Press.
- Bass, B. M., & Avolio, B. J. (1997). *Full range leadership development: Manual for the multifactor leadership questionnaire*. Palo Alto, CA: Mindgarden.
- Bass, B. I., Cigularov, K. P., Chen, P. Y., Henry, K. L., Tomazic, R. G., & Li, Y. (2016). The effects of student violence against school employees on employee burnout and work engagement: The roles of perceived school unsafety and transformational leadership. *International Journal of Stress Management, 23*(3), 318–336. doi:10.1037/str0000011
- Batista-Taran, L. C., Shuck, M. B., Gutierrez, C. C., & Baralt, S. (2009). The role of leadership style in employee engagement. In M. S. Plakhotnik, S. M. Nielsen, & D. M. Pane (Eds.), *Proceedings of the Eighth Annual College of Education & GSN Research Conference* (pp. 15-20). Miami: Florida International University.
http://coeweb.fiu.edu/research_conference/
- Berger, R., Romeo, M., Guardia, J., Yepes, M., & Soria, M. A. (2012). Psychometric Properties of the Spanish Human System Audit Short-Scale of Transformational Leadership. *The Spanish Journal of Psychology, 15*(1), 367–376.
doi:10.5209/rev_sjop.2012.v15.n1.37343

- Blomme, R. J., Kodden, B., & Beasley-Suffolk, A. (2015). Leadership theories and the concept of work engagement: Creating a conceptual framework for management implications and research. *Journal of Management & Organization*, 21(2), 125–144. doi:10.1017/jmo.2014.71
- Breevaart, K., Bakker, A., Hetland, J., Demerouti, E., Olsen, O. K., & Espevik, R. (2013). Daily transactional and transformational leadership and daily employee engagement. *Journal of Occupational and Organizational Psychology*, 87(1), 138–157. doi:10.1111/joop.12041
- Breevaart, K., Bakker, A. B., Demerouti, E., & Derks, D. (2015). Who takes the lead? A multi-source diary study on leadership, work engagement, and job performance. *Journal of Organizational Behavior*, 37(3), 309–325. doi:10.1002/job.2041
- Brown, J. D. (1997). Skewness and kurtosis. *JALT Testing and Evaluation SIG Newsletter*, 1(1), 20–23.
- Buch, R., Martinsen, Ø. L., & Kuvaas, B. (2014). The Destructiveness of Laissez-Faire Leadership Behavior. *Journal of Leadership & Organizational Studies*, 22(1), 115–124. doi:10.1177/1548051813515302
- Buil, I., Martínez, E., & Matute, J. (2016). From internal brand management to organizational citizenship behaviours: Evidence from frontline employees in the hotel industry. *Tourism Management*, 57, 256–271. doi: 10.1016/j.tourman.2016.06.009
- Burns, J. M. (1978). *Leadership*. New York: Harper & Row.
- Caesens, G., & Stinglhamber, F. (2014). The relationship between perceived organizational support and work engagement: The role of self-efficacy and its outcomes. *European Review of Applied Psychology*, 64(5), 259–267. doi: 10.1016/j.erap.2014.08.002
- Cao, X., & Chen, L. (2019). The impact of empathy on work engagement in hemodialysis nurses: The mediating role of resilience. *Japan Journal of Nursing Science*, 17(1). doi:10.1111/jjns.12284
- Carasco-Saul, M., Kim, W., & Kim, T. (2014). Leadership and Employee Engagement. *Human Resource Development Review*, 14(1), 38–63. doi:10.1177/1534484314560406
- Carayon, P., Karsh, B.-T., Gurses, A. P., Holden, R. J., Hoonakker, P., Schoofs Hundt, A., Montague, E., Rodriguez, A. J., & Wetterneck, T. B. (2013). Macroergonomics in

- Health Care Quality and Patient Safety. *Reviews of Human Factors and Ergonomics*, 8(1), 4–54. doi:10.1177/1557234x13492976
- Carter, D., & Baghurst, T. (2014). The Influence of Servant Leadership on Restaurant Employee Engagement. *Journal of Business Ethics*, 124(3), 453–464. doi:10.1007/s10551-013-1882-0
- Chan, Y. H. (2004). Biostatistics 201: Linear regression analysis. *Singapore Med J*, 45(2), 55–61. PMID: 14985842.
- Cheng, L., Cui, Y., Chen, Q., Ye, Y., Liu, Y., Zhang, F., Zeng, W., & Hu, X. (2020). Paediatric nurses' general self-efficacy, perceived organizational support and perceived professional benefits from Class A tertiary hospitals in Jilin province of China: the mediating effect of nursing practice environment. *BMC Health Services Research*, 20(1). doi:10.1186/s12913-019-4878-3
- Chreim, S., Williams, B. E. (Bernie), Janz, L., & Dastmalchian, A. (2010). Change agency in a primary health care context. *Health Care Management Review*, 35(2), 187–199. doi:10.1097/hmr.0b013e3181c8b1f8
- Clarke, S. P. (2007). Hospital work environments, nurse characteristics, and sharps injuries. *American Journal of Infection Control*, 35(5), 302–309. doi:10.1016/j.ajic.2006.07.014
- Cobzaru, A. (2010). Work engagement among employees in private universities. Vigor. Dedication. Absorption. *Quality Management in Higher Education*, 2, 35–38.
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Science* (2nd ed.). New Jersey: Lawrence Erlbaum.
- Convenience Sampling: Definition, Applications, Advantages, Method, and Examples. (n.d). Questionpro. <https://www.questionpro.com/blog/convenience-sampling/#:~:text=Definition%3A%20Convenience%20sampling%20is%20defined,pr ompt%2C%20uncomplicated%2C%20and%20economical>.
- Corin, L., & Björk, L. (2016). Job Demands and Job Resources in Human Service Managerial Work an External Assessment Through Work Content Analysis. *Nordic Journal of Working Life Studies*, 6(4), 3. doi:10.19154/njwls.v6i4.5610
- Cortina, J. M. (1993). What is coefficient alpha? An examination of theory and applications. *Journal of Applied Psychology*, 78(1), 98–104. doi:10.1037/0021-9010.78.1.98

- Cugueró-Escofet, N., Ficapal-Cusí, P., & Torrent-Sellens, J. (2019). Sustainable Human Resource Management: How to Create a Knowledge Sharing Behavior through Organizational Justice, Organizational Support, Satisfaction and Commitment. *Sustainability, 11*(19), 5419. doi:10.3390/su11195419
- Dabke, D., & Patole, S. (2014). Predicting employee engagement: Role of perceived organizational support and supervisor support. *Tactful Management Research Journal, 3*, 1–8.
- De Nobile, J. J., & McCormick, J. (2008). Organizational Communication and Job Satisfaction in Australian Catholic Primary Schools. *Educational Management Administration & Leadership, 36*(1), 101–122. doi:10.1177/174114320708406
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2008). *Internet, mail, and mixedmode surveys: The tailored design method* (3rd ed.). UK: Wiley Publisher.
- Dimitrov, D. (2015). Leadership in a humane organization. *European Journal of Training and Development, 39*(2), 122–142. doi:10.1108/ejtd-07-2014-0051
- Donev, D., Kovacic, L., & Laaser, U. (2013). *The Role and Organization of Health Systems*. J. Verlag, G. Burazeri, & L. Zaletel Kragelj (Dü). içinde Lage, Germany: Jacobs Publishing Company.
- Dong, X., Lu, H., Wang, L., Zhang, Y., Chen, J., Li, B., Li, B., Huang, X., Wan, Q., Dong, S., & Shang, S. (2020). The effects of job characteristics, organizational justice and work engagement on nursing care quality in China: A mediated effects analysis. *Journal of Nursing Management, 28*(3), 559–566. doi:10.1111/jonm.12957
- Duyar, I., & Aydin, I. (2012). Chapter 12 What do we know about Assistant Principals? A Cross-National Examination of the Factors Affecting Task Performance, Discretionary Performance, and the Future Career Aspirations of Assistant Principals. *Discretionary Behavior and Performance in Educational Organizations: The Missing Link in Educational Leadership and Management, 299–330*. doi:10.1108/s1479-3660(2012)0000013017
- Eagly, A. H., Johannesen-Schmidt, M. C., & Van Engen, M. L. (2003). Transformational, transactional, and laissez-faire leadership styles: A meta-analysis comparing women and men. *Psychological Bulletin, 129*(4), 569–591. doi:10.1037/0033-2909.129.4.569

- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology, 71*(3), 500–507. doi:10.1037/0021-9010.71.3.500
- Eldor, L. (2017). Looking on the Bright Side: The Positive Role of Organisational Politics in the Relationship between Employee Engagement and Performance at Work. *Applied Psychology, 66*(2), 233–259. doi:10.1111/apps.12090
- Employee Engagement through the lens of leadership.* (2014). Insight. <https://www.insights.com/resources/employee-engagement-through-the-lens-of-leadership/>
- Engelbrecht, A. S., Heine, G., & Mahembe, B. (2017). Integrity, ethical leadership, trust and work engagement. *Leadership & Organization Development Journal, 38*(3), 368–379. doi:10.1108/lodj-11-2015-0237
- Enwereuzor, I. K., Ugwu, L. I., & Eze, O. A. (2016). How Transformational Leadership Influences Work Engagement Among Nurses: Does Person–Job Fit Matter? *Western Journal of Nursing Research, 40*(3), 346–366. doi:10.1177/0193945916682449
- Eslami, J., & Gharakhani, D. (2012). Organizational Commitment and Job Satisfaction. *ARPJN Journal of Science and Technology, 2*(2), 85–91.
- Etikan, I., Abubakar Musa, S., & Alkassim, R. S. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics, 5*(1), 1–4. doi: 10.11648/j.ajtas.20160501.11
- Fant, L. M. (2019). *Transformational Leadership and Organizational Performance as Predictors of Employee Engagement.* [Doctoral Dissertation, Northcentral University]. (Order No. 27546726). Available from ProQuest Dissertations & Theses Global. (2322201173). <https://search.proquest.com/dissertations-theses/transformational-leadership-organizational/docview/2322201173/se-2?accountid=15292>
- Farh, J.-L., & Cheng, B.-S. (2000). A Cultural Analysis of Paternalistic Leadership in Chinese Organizations. *Management and Organizations in the Chinese Context, 84*–127. doi:10.1057/9780230511590_5
- Fernández-Muñiz, B., Montes-Peón, J. M., & Vázquez-Ordás, C. J. (2017). The role of safety leadership and working conditions in safety performance in process industries. *Journal*

- of Loss Prevention in the Process Industries*, 50, 403–415. doi: 10.1016/j.jlp.2017.11.001
- Fiabane, E., Giorgi, I., Sguazzin, C., & Argentero, P. (2013). Work engagement and occupational stress in nurses and other healthcare workers: the role of organizational and personal factors. *Journal of Clinical Nursing*, 22(17-18), 2614–2624. doi:10.1111/jocn.12084
- Fiaz, M., Su, Q., Amir, I., & Saqib, A. (2017). Leadership styles and employees' motivation: Perspective from an emerging economy. *The Journal of Developing Areas*, 51(4), 143–156. doi:10.1353/jda.2017.0093
- Field, A. (2009). *Discovering statistics using SPSS* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Gan, Y., & Chen, C. (2017). The Relation between Transformational leadership and Subordinates Work Engagement: The Mediating Effect of Identification with Leader and Organizational Identification. *Advances in Social and Behavioral Sciences*, 19, 77–81.
- Gandolfi, F., & Stone, S. (2018). Leadership, leadership styles, and servant leadership. *Journal of Management Research*, 18(4), 261–269.
- Garcia-Sierra, R., Fernandez-Castro, J., & Martinez-Zaragoza, F. (2016). Work engagement in nursing: An integrative review of the literature. *Journal of Nursing Management*, 24(2), E101-E111. doi:10.1111/jonm.12312
- García-Sierra, R., Fernández-Castro, J., & Martínez-Zaragoza, F. (2017). Implicación de las enfermeras en su profesión. Un estudio cualitativo sobre el engagement. *Enfermería Clínica*, 27(3), 153–162. doi: 10.1016/j.enfcli.2017.03.006
- García-Sierra, R., & Fernández-Castro, J. (2018). Relationships between leadership, structural empowerment, and engagement in nurses. *Journal of Advanced Nursing*, 74(12), 2809–2819. doi:10.1111/jan.13805
- Gaudet, M. C., & Tremblay, M. (2017). Initiating structure leadership and employee behaviors: The role of perceived organizational support, affective commitment and leader–member exchange. *European Management Journal*, 35(5), 663–675. doi: 10.1016/j.emj.2017.04.001

- Ghazawy, E. R., Mahfouz, E. M., Mohammed, E. S., & Refaei, S. A. (2019). Nurses' work engagement and its impact on the job outcomes. *International Journal of Healthcare Management*, 1–8. doi:10.1080/20479700.2019.1644725
- Gillet, N., Becker, C., Lafrenière, M.-A., Huart, I., & Fouquereau, E. (2017). Organizational Support, Job Resources, Soldiers' Motivational Profiles, Work Engagement, and Affect. *Military Psychology*, 29(5), 418–433. doi:10.1037/mil0000179
- Giray, M. D., & Şahin, D. N. (2014). Perceived organizational support as a mediator of the relationship between leadership styles and organizational outcomes. *Türk Psikoloji Dergisi*, 29(73), 1–17.
- Goodman, L. A. (1961). Snowball Sampling. *The Annals of Mathematical Statistics*, 32(1), 148–170. doi:10.1214/aoms/1177705148
- Goswami, A., Nair, P., Beehr, T., & Grossenbacher, M. (2016). The relationship of leaders' humor and employees' work engagement mediated by positive emotions. *Leadership & Organization Development Journal*, 37(8), 1083–1099. doi:10.1108/lodj-01-2015-0001
- Gözükara, İ., & Şimşek, O. F. (2015). Linking Transformational Leadership to Work Engagement and the Mediator Effect of Job Autonomy: A Study in a Turkish Private Non-Profit University. *Procedia - Social and Behavioral Sciences*, 195, 963–971. doi:10.1016/j.sbspro.2015.06.274
- Hair, J., Black, B., Babin, B., Anderson, R., & Tatham, R. (2006). *Multivariate data analysis* (6th ed.). Upper Saddle River, NJ: Prentice-Hall.
- Hair, F. J., Bush, P. R., & Ortinau, J. D. (2003). *Marketing research: Within a changing information environment* (2nd ed.). Toronto: McGraw Hill-Irwin Canada.
- Hakanen, J. J., Ropponen, A., Schaufeli, W. B., & De Witte, H. (2019). Who is Engaged at Work? *Journal of Occupational and Environmental Medicine*, 61(5), 373–381. doi:10.1097/jom.0000000000001528
- Hansen, A., Byrne, Z., & Kiersch, C. (2014). How interpersonal leadership relates to employee engagement. *Journal of Managerial Psychology*, 29(8), 953–972. doi:10.1108/jmp-11-2012-0343
- Hanson, D., & Ward, C. (2010). *Staff engagement in the Singaporean school system: leadership training strategies for the development of Singapore school principals*.

- International conference on education and new learning technologies, JUL 2010.
Barcelona, SPAIN.
- Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. *Journal of Applied Psychology, 87*(2), 268–279. doi:10.1037/0021-9010.87.2.268
- Havens, D. S., Gittell, J. H., & Vasey, J. (2018). Impact of Relational Coordination on Nurse Job Satisfaction, Work Engagement and Burnout. *JONA: The Journal of Nursing Administration, 48*(3), 132–140. doi:10.1097/nna.0000000000000587
- Hawkes, A. J., Biggs, A., & Hegerty, E. (2017). Work Engagement: Investigating the Role of Transformational Leadership, Job Resources, and Recovery. *The Journal of Psychology, 151*(6), 509–531. doi:10.1080/00223980.2017.1372339
- Hayati, D., Charkhabi, M., & Naami, A. (2014). The relationship between transformational leadership and work engagement in governmental hospitals nurses: a survey study. *SpringerPlus, 3*(1), 1–7. doi:10.1186/2193-1801-3-25
- Hempfling, M. S. (2017). *Happiness, work engagement, and perception of organizational support of student affairs professionals*. Dissertation Abstracts International Section A: Humanities and Social Sciences, 77(7-A(E)).
- Henker, N., Sonnentag, S., & Unger, D. (2015). Transformational Leadership and Employee Creativity: The Mediating Role of Promotion Focus and Creative Process Engagement. *Journal of Business and Psychology, 30*(2), 235–247. doi:10.1007/s10869-014-9348-7
- Hernández-Castilla, R., Murillo, F. J., & Hidalgo Farran, N. (2017). Lecciones aprendidas del estudio del liderazgo escolar exitoso. Los casos de España en el Proyecto Internacional ISSPP. *Revista de Investigación Educativa, 35*(2), 499–518.
doi:10.6018/rie.35.2.279241
- Hersey, P., & Blanchard, K. H. (1977). *Management of organizational behavior: utilizing human resources* (3rd ed.). Englewood Cliffs, N.J.: Prentice-Hall.
- Hoffmann, J. P. (2010). *Linear regression analysis: Application and assumptions* (2nd ed.). America: Brigham Young University.
- Howell, D. C. (2007). *The analysis of missing data*. In Outhwaite, W. & Turner, S. Handbook of Social Science Methodology. London: Sage.

- Hsieh, C. C., & Wang, D. S. (2015). Does supervisor-perceived authentic leadership influence employee work engagement through employee-perceived authentic leadership and employee trust? *The International Journal of Human Resource Management*, 26(18), 2329–2348. doi:10.1080/09585192.2015.1025234
- Hudie, X., Yun, C., & Fuqiang, Z. (2017). Inclusive Leadership, Perceived Organizational Support, and Work Engagement: The Moderating Role of Leadership-Member Exchange Relationship. *Proceedings of the 2017 7th International Conference on Social Network, Communication and Education (SNCE 2017)*. doi:10.2991/snec-17.2017.48
- IBM Corp (2017). *IBM SPSS Statistics for Windows, Version 25.0*. Armonk, NY: IBM Corp.
- Imran, R., & Aldaas, R. E. (2020). Entrepreneurial leadership: a missing link between perceived organizational support and organizational performance. *World Journal of Entrepreneurship, Management and Sustainable Development*, 16 (4), 377–388. <https://doi.org/10.1108/WJEMSD-10-2019-0077>
- Imran, M. Y., Elahi, N. S., Abid, G., Ashfaq, F., & Ilyas, S. (2020). Impact of Perceived Organizational Support on Work Engagement: Mediating Mechanism of Thriving and Flourishing. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(3), 1–18. doi:10.3390/joitmc6030082
- Jackson, T. (2016). Paternalistic leadership. *International Journal of Cross Cultural Management*, 16(1), 3–7. doi:10.1177/1470595816637701
- Jaworek, M. (2018). The role of occupational and demographic factors in relation to work engagement in polish sample of employees – initial study. *Journal of Positive Management*, 8(4), 44. doi:10.12775/jpm.2017.130
- Jeong, S., Hsiao, Y. Y., Song, J. H., Kim, J., & Bae, S. H. (2016). The Moderating Role of Transformational Leadership on Work Engagement: The Influences of Professionalism and Openness to Change. *Human Resource Development Quarterly*, 27(4), 489–516. doi:10.1002/hrdq.21265
- Jin, M. H., & McDonald, B. (2017). Understanding Employee Engagement in the Public Sector: The Role of Immediate Supervisor, Perceived Organizational Support, and Learning Opportunities. *The American Review of Public Administration*, 47(8), 881–897. doi:10.1177/0275074016643817

- 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), 755–768. doi:10.1037/0021-9010.89.5.755
- Kahn, W. A. (1990). Psychological Conditions of Personal Engagement and Disengagement at Work. *Academy of Management Journal, 33*(4), 692–724. doi:10.5465/256287
- Kanste, O., Miettunen, J., & Kyngäs, H. (2007). Psychometric properties of the Multifactor Leadership Questionnaire among nurses. *Journal of Advanced Nursing, 57*(2), 201–212. doi:10.1111/j.1365-2648.2006.04100.x
- Kendra, C. (2012, March 14). *Lewin's Leadership Styles*. About.com Psychology. <http://psychology.about.com/od/leadership/a/leadstyles.htm>.
- Keskes, I. (2014). Relationship between leadership styles and dimensions of employee organizational commitment: A critical review and discussion of future directions. *Intangible Capital, 10*(1), 26–51.
- Khrais, H., Ahmed Higazee, M. Z., Khalil, M., & Abdel Wahab, S. D. (2018). Impact of Organizational Support on Nursing Job Stressors: A Comparative Study. *Health Science Journal, 12*(04). doi:10.21767/1791-809x.1000582
- Kim, M. (2017). Effects of team diversity, transformational leadership, and perceived organizational support on team-learning behavior. *Social Behavior and Personality: An International Journal, 45*(8), 1255–1269. doi:10.2224/sbp.6325
- Kompaso, S. M., & Sridevi, M. S. (2010). Employee Engagement: The Key to Improving Performance. *International Journal of Business and Management, 5*(12). doi:10.5539/ijbm.v5n12p89
- Koopman, J., Howe, M., Hollenbeck, J. R., & Sin, H. P. (2015). Small sample mediation testing: Misplaced confidence in bootstrapped confidence intervals. *Journal of Applied Psychology, 100*(1), 194. doi: 10.1037/a0036635
- Korzynski, P. (2015). Online networking and employee engagement: what current leaders do? *Journal of Managerial Psychology, 30*(5), 582–596. doi:10.1108/jmp-10-2013-0344
- Labrague, L. J., McEnroe Petite, D. M., Leocadio, M. C., Van Bogaert, P., & Tsaras, K. (2018). Perceptions of organizational support and its impact on nurses' job outcomes. *Nursing Forum, 53*(3), 339–347. doi:10.1111/nuf.12260

- Lee, M. C. C., Idris, M. A., & Delfabbro, P. H. (2017). The linkages between hierarchical culture and empowering leadership and their effects on employees' work engagement: Work meaningfulness as a mediator. *International Journal of Stress Management*, 24(4), 392–415. doi:10.1037/str0000043
- Lewis, H. S., & Cunningham, C. J. L. (2016). Linking Nurse Leadership and Work Characteristics to Nurse Burnout and Engagement. *Nursing Research*, 65(1), 13–23. doi:10.1097/nnr.0000000000000130
- Liu, J., Yang, J., Yang, Y., & Liu, Y. (2015). The relationships among perceived organizational support, intention to remain, career success and self-esteem in Chinese male nurses. *International Journal of Nursing Sciences*, 2(4), 389–393. doi: 10.1016/j.ijnss.2015.01.004
- 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. doi:10.1016/s1048-9843(96)90027-2
- Lu, X., Xie, B., & Guo, Y. (2018). The trickle-down of work engagement from leader to follower: The roles of optimism and self-efficacy. *Journal of Business Research*, 84, 186–195. doi: 10.1016/j.jbusres.2017.11.014
- Malik, S. H., Aziz, S., & Hassan, H. (2014). Leadership Behavior and Acceptance of Leaders by Subordinates: Application of Path Goal Theory in Telecom Sector. *International Journal of Trade, Economics and Finance*, 5(2), 170–175. doi:10.7763/ijtef.2014.v5.364
- Manning, J. M. (2014). *The influence of nurse manager leadership style factors on the perception of staff nurse structural empowerment, work engagement, and intent to stay* [Doctoral dissertation, Louisiana State University Health Sciences Center School of Nursing]. ProQuest Central; ProQuest Dissertations & Theses Global. (1711860384). <https://search.proquest.com/dissertations-theses/influence-nurse-manager-leadership-style-factors/docview/1711860384/se-2?accountid=15292>
- Manning, J. (2016). The Influence of Nurse Manager Leadership Style on Staff Nurse Work Engagement. *JONA: The Journal of Nursing Administration*, 46(9), 438–443. doi:10.1097/nna.0000000000000372

- Mansor, N. N. A., Wai, C. M., Mohamed, A., & Shah, I. M. (2012). The Relationship between Management Style and Employees' Well-Being: A Case of Non-Managerial Staffs. *Procedia - Social and Behavioral Sciences*, 40, 521–529. doi: 10.1016/j.sbspro.2012.03.225
- Ma'rof, A. A. (2013). *Relationships between group attachment and prosocial value with prosocial behavior tendencies among Orang Asli adolescents in Perak and Pahang, Malaysia*. [Master's thesis, Universiti Putra Malaysia]. <http://psasir.upm.edu.my/id/eprint/38538/>
- Marqués-Sánchez, P., Muñoz-Doyague, M., Martínez, Y., Everett, M., Serrano-Fuentes, N., Van Bogaert, P., Vassilev, I., & Reeves, D. (2018). The Importance of External Contacts in Job Performance: A Study in Healthcare Organizations Using Social Network Analysis. *International Journal of Environmental Research and Public Health*, 15(7), 1345. doi:10.3390/ijerph15071345
- Martinez Jaime, M. M., Albores Gallo, L., & Marquez Caraveo, M. E. (2012). Mental health integrity of clinical staff at a psychiatric hospital, associated to burn-out and toxic management. *Salud Mental*, 35(4), 297–304.
- Martínez-Zaragoza, F., Benavides-Gil, G., Martín-del-Río, B., Fernández-Castro, J., Ato-García, M., & Solanes-Puchol, Á. (2017). Flow in Nurses. *Holistic Nursing Practice*, 31(5), 303–314. doi:10.1097/hnp.0000000000000225
- Maslach, C., & Leiter, M. P. (1997). *The Truth about Burnout How Organizations Cause Personal Stress and What to do about it* (1st ed.). Jossey-Bass: San Francisco, CA.
- Mateu i Serra, A. (2013, September 20). *Spain – Ministry of Health of Catalonia – Public Health Secretary*. <https://eurohealthnet-magazine.eu/ministry-of-health-of-catalonia-public-health-secretary/>
- Meng, Y. S., & Xiao, J. J. (2015). *Study on the Influence of Spiritual Leadership on Hospitality Industry Employee Engagement*. Proceedings of the 11th Euro Asia Conference on Environment and CSR: Tourism, Society and Education Session (Part II) 96–105.
- Mester, C., Visser, D., Roodt, G., & Kellerman, R. (2003). Leadership style and its relation to employee attitudes and behaviour. *SA Journal of Industrial Psychology*, 29(2). doi:10.4102/sajip.v29i2.100

- Miedaner, F., Kuntz, L., Enke, C., Roth, B., & Nitzsche, A. (2018). Exploring the differential impact of individual and organizational factors on organizational commitment of physicians and nurses. *BMC Health Services Research*, 18(1). doi:10.1186/s12913-018-2977-1
- Milner, K., & Hendler, D. (2012). Ethical leadership, psychological safety and employee engagement. *International Journal of Psychology*, 47, 510.
- Mitonga-Monga, J., & Hlongwane, V. (2017). Effects of employees' sense of coherence on leadership style and work engagement. *Journal of Psychology in Africa*, 27(4), 351–355. doi:10.1080/14330237.2017.1347757
- Moumen, M., & El Aoufir, H. (2017). Quality, safety, and environment management systems (QSE): analysis of empirical studies on integrated management systems (IMS). *Journal of Decision Systems*, 26(3), 207–228. doi:10.1080/12460125.2017.1305648
- Mohiuddin, Z. A. (2017). Influence of Leadership Style on Employees performance: Evidence from Literatures. *Journal of Marketing & Management*, 8(1). 18–30.
- Mullins, L. J. (2007). *Management and Organisational Behaviour*. (8th ed.). London: Financial Times /Prentice-Hall.
- Munyewende, P. O., Rispel, L. C., & Chirwa, T. (2014). Positive practice environments influence job satisfaction of primary health care clinic nursing managers in two South African provinces. *Human Resources for Health*, 12(1), 1–14. doi:10.1186/1478-4491-12-27
- Muthia Roza, L., & Yuki, F. (2016). The Influence of Perceived Organizational Support on Work-Life Balance with Transformational Leadership as The Moderating Variable. In: *Proceeding International Conference Local wisdom for Re-Thinking Global Solutions*, 21–23 September 2016, Padang.
- Narcy-Combes, M.-F. (2008). Zoltàn Dörnyei, *Research Methods in Applied Linguistics*. Asp, (53-54), 197–198. doi:10.4000/asp.294
- Ni, H. (2017). The Relationship among Leadership Style, Employees Engagement and Management Performance in Grid Company. *DEStech Transactions on Engineering and Technology Research*, (ameme). doi:10.12783/dtetr/ameme2016/5758
- Noordin, F., & Jusoff, K. (2009). Levels of Job Satisfaction amongst Malaysian Academic Staff. *Asian Social Science*, 5(5). doi:10.5539/ass. v5n5p122

- Northouse, P.G. (2007). *Leadership: Theory and Practice*. (4th ed.). Thousand Oaks, CA: Sage Publications.
- Ntsoane, D. R. (2017). *Occupational stress, burnout and work engagement of social workers in the Limpopo Province*. [Doctoral dissertation, NorthWest University]. Kirkland, Washington.
- O'brien, R. M. (2007). A Caution Regarding Rules of Thumb for Variance Inflation Factors. *Quality & Quantity*, *41*(5), 673–690. doi:10.1007/s11135-006-9018-6
- Ortega, V. (2003). Adaptación al castellano de la versión abreviada de la “Survey of Perceived Organizational Support”. *Encuentros en Psicología Social*, *1*(1), 3–6. Retrieved from <https://bit.ly/2SAZnRx>
- Paternalistic Leadership Style: Types, Examples. (n.d.). *Studios Guy*.
<https://studiousguy.com/paternalistic-leadership-style-types-examples/>
- Peng, W. (2018). A Study of Relationship between Perceived Organizational Support and Work Engagement of Administrative Staff in Newly-Established Universities of China. *Journal of Social Science Research*, *12*(2), 2756–2763. doi:10.24297/jssr. v12i2.7575
- Pérez-Fuentes, M. D. C., Molero Jurado, M. D. M., Gázquez Linares, J. J., & Oropesa Ruiz, N. F. (2018). The role of emotional intelligence in engagement in nurses. *International journal of environmental research and public health*, *15*(9), 1915.
doi.org/10.3390/ijerph15091915
- Popli, S., & Rizvi, I. A. (2015). Exploring the relationship between service orientation, employee engagement and perceived leadership style: a study of managers in the private service sector organizations in India. *Journal of Services Marketing*, *29*(1), 59–70. doi:10.1108/jsm-06-2013-0151
- Puente Martorell, M. L. (2010). *The Health Care System in Catalonia: Evolution and Strategic Orientation from the Perspective of the Catalan Health Service* (1st ed.). Catalan Health Service.
<https://catsalut.gencat.cat/web/.content/minisite/catsalut/publicacions/docs/sistema-atencio-salut-catalunya-angles.pdf>
- Qi, L., Liu, B., Wei, X., & Hu, Y. (2019). Impact of inclusive leadership on employee innovative behavior: Perceived organizational support as a mediator. *PLOS ONE*, *14*(2), e0212091. doi: 10.1371/journal.pone.0212091

- Robaee, N., Atashzadeh-Shoorideh, F., Ashktorab, T., Baghestani, A., & Barkhordari-Sharifabad, M. (2018). Perceived organizational support and moral distress among nurses. *BMC Nursing, 17*(1). doi:10.1186/s12912-017-0270-y
- Robone, S., Rice, N., & Smith, P. C. (2011). Health systems' responsiveness and its characteristics: A cross-country comparative analysis. *Health services research, 46*(6pt2), 2079-2100. doi:10.1111/j.1475-6773.2011.01291.
- Rouzegari, Sh. (2013). *Relationships between personality traits and attachment to parents and peers, with delinquent behavior among adolescents in Tehran, Iran*. [Master's thesis, Universiti Putra Malaysia]. <http://psasir.upm.edu.my/id/eprint/39223>
- Safaria, T., Othman, A. B., & Abdul Wahab, M. N. (2010). Religious Coping, Job Insecurity and Job Stress among Javanese Academic Staff: A Moderated Regression Analysis. *International Journal of Psychological Studies, 2*(2). doi:10.5539/ijps. v2n2p159
- Saleem, H. (2015). The Impact of Leadership Styles on Job Satisfaction and Mediating Role of Perceived Organizational Politics. *Procedia - Social and Behavioral Sciences, 172*, 563–569. doi: 10.1016/j.sbspro.2015.01.403
- Sales, F. (2016, Apr 13). *Paternalistic leadership*. TechTarget page. <https://searchcio.techtarget.com/definition/paternalistic-leadership?>
- Sarti, D. (2014). Leadership styles to engage employees: evidence from human service organizations in Italy. *Journal of Workplace Learning, 26*(3/4), 202–216. doi:10.1108/jwl-09-2013-0066
- Schaufeli, W. B., Martínez, I. M., Pinto, A. M., Salanova, M., & Bakker, A. B. (2002). Burnout and Engagement in University Students. *Journal of Cross-Cultural Psychology, 33*(5), 464–481. doi:10.1177/0022022102033005003
- Schaufeli, W., & Bakker, A. (2003). *Utrecht work engagement scale: Preliminary manual*. Utrecht: Occupational Health Psychology Unit, Utrecht University.
- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: a multi-sample study. *Journal of Organizational Behavior, 25*(3), 293–315. doi:10.1002/job.248
- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The Measurement of Work Engagement with a Short Questionnaire. *Educational and Psychological Measurement, 66*(4), 701–716. doi:10.1177/0013164405282471

- Schmitt, A., Den Hartog, D. N., & Belschak, F. D. (2016). Transformational leadership and proactive work behaviour: A moderated mediation model including work engagement and job strain. *Journal of Occupational and Organizational Psychology*, 89(3), 588–610. doi:10.1111/joop.12143
- Schultz, C., & Bezuidenhout, A. (2013, July). A leadership initiative to enhance employee engagement amongst engineers at a gold mining plant in South Africa. In *2013 Proceedings of PICMET'13: Technology Management in the IT-Driven Services (PICMET)* (pp. 1192-1199). IEEE.
- Sellgren, S. F., Ekvall, G., & Tomson, G. (2008). Leadership behaviour of nurse managers in relation to job satisfaction and work climate. *Journal of Nursing Management*, 16(5), 578–587. doi:10.1111/j.1365-2934.2007.00837.x
- Shantz, A., Alfes, K., & Latham, G. P. (2014). The Buffering Effect of Perceived Organizational Support on the Relationship Between Work Engagement and Behavioral Outcomes. *Human Resource Management*, 55(1), 25–38. doi:10.1002/hrm.21653
- Sharifi, H. P., & Sharifi, N. (2001). *Research methods in the behavioral sciences*. Tehran: Sokhan.
- Sharma, A., Goel, A., & Sengupta, S. (2017). How does Work Engagement vary with Employee Demography? *Procedia Computer Science*, 122, 146–153. doi: 10.1016/j.procs.2017.11.353
- Shuck, B., & Herd, A. M. (2012). Employee Engagement and Leadership. *Human Resource Development Review*, 11(2), 156–181. doi:10.1177/1534484312438211
- Simpson, M. R. (2009). Engagement at work: A review of the literature. *International Journal of Nursing Studies*, 46(7), 1012–1024. doi: 10.1016/j.ijnurstu.2008.05.003
- Smolowitz, J., Speakman, E., Wojnar, D., Whelan, E.-M., Ulrich, S., Hayes, C., & Wood, L. (2015). Role of the registered nurse in primary health care: Meeting health care needs in the 21st century. *Nursing Outlook*, 63(2), 130–136. doi: 10.1016/j.outlook.2014.08.004
- Snowball Sampling: Definition, Method, Advantages and Disadvantages. (n.d). Questionpro. <https://www.questionpro.com/blog/snowball-sampling/>

- Sobel, M. E., Hout, M., & Duncan, O. D. (1986). Saving the Bath Water. *Sociological Methods & Research*, 14(3), 271–284. doi:10.1177/0049124186014003003
- Solberg, S., Whelan, N., & Coady, R. (2014). The Role of Leadership for Increased Employee Engagement in Health Care: A Case Study. *International Journal of Qualitative Methods*, 13, 549–550.
- St Patrick's. (2019, April 17). What is the Difference between Healthcare and Social care? <https://www.st-patricks.ac.uk/blog/posts/2019/april/what-is-the-difference-between-healthcare-and-social-care/>
- Storm, K., & Rothmann, S. (2003). A psychometric analysis of the Utrecht Work Engagement Scale in the South African police service. *SA Journal of Industrial Psychology*, 29(4). doi:10.4102/sajip.v29i4.129
- Strom, D. L., Sears, K. L., & Kelly, K. M. (2014). Work Engagement. *Journal of Leadership & Organizational Studies*, 21(1), 71–82. doi:10.1177/1548051813485437
- Strydom, A. (2011). *The Job Satisfaction of Academic Staff Members on Fixed-term Employment Contracts at South Africa Higher Education Institutions*. [Doctoral dissertation, University of the free state Bloemfontein]. <http://hdl.handle.net/11660/1747>
- Sue, V. M., Griffin, M. T., & Allen, J. Y. (2013). Beyond adoption: individual differences in the use of personal health record features in an integrated healthcare organisation. *International Journal of Biomedical Engineering and Technology*, 11(3), 252. doi:10.1504/ijbet.2013.055375
- Tarsik, N., Kassim, N., & Nasharudin, N. (2014). Transformational, Transactional or Laissez-Faire: What Styles do University Librarians Practice? *Journal of Organizational Management Studies*, 1–10. doi:10.5171/2014.194100
- Taylor, R. (1990). Interpretation of the Correlation Coefficient: A Basic Review. *Journal of Diagnostic Medical Sonography*, 6(1), 35–39. doi:10.1177/875647939000600106
- Thompson, B. (2004). The “significance” crisis in psychology and education. *The Journal of Socio-Economics*, 33(5), 607–613. doi: 10.1016/j.socec.2004.09.034
- Tshilongamulenzhe, M. C., & Takawira, N. (2015). Examining the gender influence on employees' work engagement within a South African University. *Risk Governance and*

- Control: Financial Markets and Institutions*, 5(2), 110–119.
doi:10.22495/rgcv5i2c1art5
- Tungisa Kapela, D., & Pohl, S. (2017). Soutien organisationnel, solidarités sociales et engagement des employés: le rôle modérateur de la pauvreté laborieuse. *Le Travail Humain*, 80(3), 241. doi:10.3917/th.803.0241
- Uçar, A. C., Eren, E., & Erzençin, E. (2012). Determination of the Relationship Between Leadership Perceptions of Blue Collars and Organizational Outcomes by Using MLQ Analysis. *Procedia - Social and Behavioral Sciences*, 41, 196–208. doi: 10.1016/j.sbspro.2012.04.024
- Wagner, R., & Harter, J. K. (2006). *12: The great elements of managing*. Washington, DC: The Gallup Organization.
- Wang, Z. (2015). *Reaping benefits employee proactive personality: Roles of team proactivity composition, perceived organizational support, and work engagement*. Dissertation Abstracts International: Section B: The Sciences and Engineering, 75(9-B(E)).
- Wang, D. S., & Hsieh, C. C. (2013). The effect of authentic leadership on employee trust and employee engagement. *Social Behavior and Personality: An International Journal*, 41(4), 613–624. doi:10.2224/sbp.2013.41.4.613
- Wang, Z., Li, C., & Li, X. (2016). Resilience, Leadership and Work Engagement: The Mediating Role of Positive Affect. *Social Indicators Research*, 132(2), 699–708. doi:10.1007/s11205-016-1306-5
- Wang, X., Liu, L., Zou, F., Hao, J., & Wu, H. (2017). Associations of Occupational Stressors, Perceived Organizational Support, and Psychological Capital with Work Engagement among Chinese Female Nurses. *BioMed Research International*, 2017, 1–11. doi:10.1155/2017/5284628
- Washburn, K. D. (2017). *Effects of Authentic Leadership Style and Nurse Engagement on Patient Satisfaction* (Walden Dissertations and Doctoral Studies).
<https://scholarworks.waldenu.edu/dissertations/4339>
- Xanthopoulou, D., Bakker, A. B., Kantas, A., & Demerouti, E. (2012). Measuring burnout and work engagement: Factor structure, invariance, and latent mean differences across Greece and the Netherlands. *International Journal of Business Science & Applied Management (IJBSAM)*, 7(2), 40–52.

- Xyrichis, A., & Lowton, K. (2008). What fosters or prevents interprofessional teamworking in primary and community care? A literature review. *International Journal of Nursing Studies*, 45(1), 140–153. doi: 10.1016/j.ijnurstu.2007.01.015
- Yang, R., Ming, Y., Ma, J., & Huo, R. (2017). How do servant leaders promote engagement? A bottom-up perspective of job crafting. *Social Behavior and Personality: An International Journal*, 45(11), 1815–1827. doi:10.2224/sbp.6704
- Yasin Ghadi, M., Fernando, M., & Caputi, P. (2013). Transformational leadership and work engagement. *Leadership & Organization Development Journal*, 34(6), 532–550. doi:10.1108/lodj-10-2011-0110
- Yildirim, F., & Naktiyok, S. (2017). The mediating role of organizational support in the effect of transformational leadership on employee empowerment. *Polish Journal of Management Studies*, 16(1), 292–303. doi:10.17512/pjms.2017.16.1.25
- Yi-wen, Z., & Yi-qun, C. (2005). The Chinese version of Utrecht Work Engagement Scale: An examination of reliability and validity. *Chinese Journal of Clinical Psychology*, 13(3), 268–270.
- Yongxing, G., Hongfei, D., Baoguo, X., & Lei, M. (2017). Work engagement and job performance: the moderating role of perceived organizational support. *Anales de Psicología*, 33(3), 708. doi:10.6018/analesps.33.3.238571
- Yukl, G. (2008). How leaders influence organizational effectiveness. *The Leadership Quarterly*, 19(6), 708–722. doi: 10.1016/j.leaqua.2008.09.008
- Yukl, G. (2009). Leading organizational learning: Reflections on theory and research. *The Leadership Quarterly*, 20(1), 49–53. doi: 10.1016/j.leaqua.2008.11.006
- Yukl, G. (2012). Effective Leadership Behavior: What We Know and What Questions Need More Attention. *Academy of Management Perspectives*, 26(4), 66–85. doi:10.5465/amp.2012.0088
- Yukl, G., Mahsud, R., Prussia, G., & Hassan, S. (2019). Effectiveness of broad and specific leadership behaviors. *Personnel Review*, 48(3), 774–783. doi:10.1108/pr-03-2018-0100
- Zacher, H., & Winter, G. (2011). Eldercare demands, strain, and work engagement: The moderating role of perceived organizational support. *Journal of Vocational Behavior*, 79(3), 667–680. doi: 10.1016/j.jvb.2011.03.020

- Zareen, M., Razzaq, K., & Mujtaba, B. G. (2014). Impact of Transactional, Transformational and Laissez-Faire Leadership Styles on Motivation: A Quantitative Study of Banking Employees in Pakistan. *Public Organization Review*, 15(4), 531–549.
doi:10.1007/s11115-014-0287-6
- Zhang, X., & Bartol, K. M. (2010). Linking Empowering Leadership and Employee Creativity: The Influence of Psychological Empowerment, Intrinsic Motivation, and Creative Process Engagement. *Academy of Management Journal*, 53(1), 107–128.
doi:10.5465/amj.2010.48037118
- Zhu, W., Avolio, B. J., & Walumbwa, F. O. (2009). Moderating Role of Follower Characteristics with Transformational Leadership and Follower Work Engagement. *Group & Organization Management*, 34(5), 590–619. doi:10.1177/1059601108331242
- Zhu, X., & Wu, X. (2004). Class Noise vs. Attribute Noise: A Quantitative Study. *Artificial Intelligence Review*, 22(3), 177–210. doi:10.1007/s10462-004-0751-8
- Zinbarg, R. E. (2006). Estimating generalizability to a latent variable common to all of a scale's indicators: A comparison of estimators for ω_h . *Applied Psychological Measurement*, 30(2), 121–144. doi: 10.1177/0146621605278814
- Zone, E. J. (2013). *The relationship of perceived organizational support, job satisfaction, and years of online teaching experience to work engagement among online undergraduate adjunct faculty members* (Order No. 3570880). Available from ProQuest Central; ProQuest Dissertations & Theses Global; Social Science Premium Collection. (1419934767). <https://search.proquest.com/dissertations-theses/relationship-perceived-organizational-support-job/docview/1419934767/se-2?accountid=15292>

APPENDIXES

Appendix A

Study Questionnaires

Le agradezco que haya aceptado contestar a este cuestionario sobre las condiciones de trabajo de las enfermeras. Con sus repuestas colaborará con un proyecto sobre la motivación y el compromiso de las enfermeras y su relación con el apoyo que reciben de sus supervisoras y de la organización, con el objetivo de desarrollar programas de mejora laboral. Todos los datos serán estrictamente anónimos y confidenciales. Si usted tiene alguna pregunta u observación sobre las preguntas, por favor no dude en contactar conmigo (mehrad.aida@gmail.com).

Muchas gracias por su colaboración,

Aida Mehrad

Universidad Autónoma de Barcelona (UAB)

Section A

Datos socio-demográficos

- 1) ¿Acepto participar en este estudio?
Si No
- 2) ¿Cuántos años tiene? ---
- 3) Género
Femenino Masculino Prefiero no decirlo
- 4) Estado civil
Soltero Casado Otros
- 5) Experiencia laboral
Menos de 15 años Más de 15 años
- 6) Indique su área de trabajo
Atención primaria y comunitaria
Atención hospitalaria
Atención socio sanitaria
Docencia e investigación
- 7) Indique la provincia en donde está su centro de trabajo principal ---

Section B

Multifactor Leadership Questionnaire - Cuestionario de Liderazgo (MLQ)

Preguntas	Nunca	De vez en cuando	A veces	Bastante	Casi siempre
1.Me ayuda a cambio de mis esfuerzos.					
2.Reexamina sus suposiciones críticas para ver si son adecuadas					
3.Evita intervenir hasta que los problemas se agraven.					
4.Presta atención a las irregularidades, fallos, excepciones y desviaciones con respecto a la norma esperada.					
5.Evita involucrarse cuando surge algún problema importante.					
6.Nos habla de los valores y creencias más importantes para ella.					
7.Está ausente cuando se le necesita.					
8.Busca diferentes perspectivas a la hora de solucionar los problemas.					
9. Habla del futuro con optimismo.					
10.Me hace sentir orgullosa de trabajar con ella.					
11.Señala de forma concreta quién es la responsable de lograr unos determinados objetivos de rendimiento.					
12.Espera a que las cosas vayan mal antes de actuar.					
13. Habla con entusiasmo acerca de los logros que deben alcanzarse.					
14.Hace ver la importancia de llevar a cabo lo que nos proponemos.					
15.Dedica tiempo a la enseñanza y a la formación.					
16.Deja claro lo que uno puede recibir si se consiguen los objetivos.					

	Nunca	De vez en cuando	A veces	Bastante	Casi siempre
17. Demuestra que cree firmemente en el dicho “si no está roto no lo arregles”.					
18. Va más allá de su propio interés en beneficio del grupo.					
19. Me trata más como persona individual que como miembro de un grupo.					
20. Deja que los problemas se vuelvan crónicos antes de actuar.					
21. Actúa de forma que se gana mi respeto.					
22. Concentra toda su atención en subsanar los errores, reclamaciones y fallos.					
23. Considera las consecuencias éticas y morales de sus decisiones.					
24. Lleva un registro de todos los fallos.					
25. Da muestras de poder y confianza en sí misma.					
26. Presenta una visión convincente del futuro.					
27. Hace que dirija mi atención hacia los fallos a la hora de cumplir lo establecido.					
28. Evita tomar decisiones.					
29. Considera que tengo diferentes necesidades, capacidades y aspiraciones que otras personas.					
30. Me hace contemplar los problemas desde muchos ángulos diferentes.					
31. Me ayuda a desarrollar mis capacidades.					
32. Sugiere nuevas maneras de realizar el trabajo asignado.					
33. Retrasa la respuesta a las cuestiones urgentes.					
34. Enfatiza la importancia de tener un sentido colectivo de la misión a realizar.					
35. Expresa satisfacción cuando cumplo las expectativas.					

	Nunca	De vez en cuando	A veces	Bastante	Casi siempre
36.Muestra confianza en que se conseguirán los objetivos.					
37.Es efectiva a la hora de satisfacer mis necesidades en el trabajo.					
38.Usa métodos de liderazgo satisfactorios.					
39. Me hace rendir más de lo que yo esperaba.					
40. Es eficaz a la hora de representarme ante la autoridad superior.					
41.Trabaja conmigo de forma satisfactoria.					
42.Potencia mi deseo de tener éxito.					
43.Es eficaz a la hora de cumplir las demandas de la organización.					
44.Incrementa mi deseo de trabajar más.					
45.El grupo que dirige es eficaz.					

Section C

Utrecht Job Involvement Scale - Encuesta de Bienestar y Trabajo (UWES)

Preguntas	Nunca	Casi nunca	Algunas veces	Regularmente	Bastante veces	Casi siempre	Siempre
1.En mi trabajo me siento llena de energía							
2.Mi trabajo está lleno de significado y propósito							
3.Mi trabajo está lleno de significado y propósito							
4.Soy fuerte y vigorosa en mi trabajo.							
5.Estoy entusiasmada con mi trabajo.							
6.Cuando estoy trabajando olvido todo lo que pasa alrededor de mí.							
7. Mi trabajo me inspira.							
8.Cuando me levanto por las mañanas tengo ganas de ir a trabajar.							
9. Soy feliz cuando estoy absorta en mi trabajo							
10. Estoy orgullosa del trabajo que hago.							
11. Estoy inmersa en mi trabajo.							
12. Puedo continuar trabajando durante largos períodos de tiempo.							
13.Mi trabajo es retador							
14. Me “dejo llevar” por mi trabajo							
15. Soy muy persistente en mi trabajo							
16. Me es difícil ‘desconectarme’ de mi trabajo							
17. Incluso cuando las cosas no van bien, continué trabajando							

Section D

Organizational Support Test Perceived - Apoyo Organizacional Percibido (POS)

Preguntas	Muy en desacuerdo	Moderadamente en desacuerdo	Ligeramente en desacuerdo	En duda	Levemente de acuerdo	Moderadamente de acuerdo	Muy de acuerdo
1.La organización valora mi contribución a su bienestar.							
2.Si la organización pudiera contratar a alguien con un salario más bajo para reemplazarme, lo haría.							
3.La organización falla en apreciar cualquier esfuerzo adicional de mi parte.							
4.La organización considera encarecidamente mis objetivos y valores.							
5.La organización ignoraría cualquier queja mía.							
6.La organización desatiende mis intereses cuando adopta decisiones que me afectan.							
7.La ayuda de la organización está disponible cuando tengo un problema.							
8.La organización realmente se ocupa de mi bienestar.							
9.La organización está dispuesta a esforzarse para ayudarme a ejecutar mi trabajo lo mejor que pueda.							
10.Aunque yo hiciese el mejor trabajo posible, la organización no lo notaría.							
11.La organización está dispuesta a ayudarme cuando necesite un favor especial.							
12.La organización se interesa por mi satisfacción general en el trabajo.							

	Muy en desacuerdo	Moderadamente en desacuerdo	Ligeramente en desacuerdo	En duda	Levemente de acuerdo	Moderadamente de acuerdo	Muy de acuerdo
13. Se le dieran la oportunidad la organización se aprovecharía de mí.							
14. La organización muestra muy poca preocupación por mis opiniones.							
15. La organización se interesa por mis opiniones.							
16. La organización se enorgullece de mis logros en el trabajo.							
17. La organización procura hacer mi trabajo tan interesante como sea posible.							

Appendix B

Map of Catalonia, Spain

