

THE MEDIATING EFFECT OF PSYCHOLOGICAL CAPITAL ON THE
RELATIONSHIP BETWEEN AUTHENTIC LEADERSHIP, BURNOUT AND
WORK ENGAGEMENT: A STUDY IN THE HEALTH SECTOR



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BY

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PLAGIARISM

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

Date : 10/06/2022

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ÖZET

Sağlık sektöründe çalışanlar, sağlık hizmeti kullanan kişilere en verimli, güvenilir ve yüksek kaliteli bakımı sunmak için bitmeyen bir çaba gerektiren dinamik bir ortamda çalışırlar. Bu dinamik ortamdaki taleplerin baskısı, sağlık çalışanlarına rehberlik edebilecek, olumlu bir liderlik tarzını gerektirmektedir. Bu çalışma, psikolojik sermaye, işe bağlılık ve tükenmişlik konularına odaklanarak, sağlık sektöründe otantik liderliğin çıktılarını belirlemeyi amaçlamıştır. Buna ek olarak, model, psikolojik sermayenin, otantik liderlik ile işe bağlılık ve tükenmişlik ilişkilerinde aracı bir rol oynadığı varsayımı ile geliştirilmiştir. Sonuç olarak, bu tezin ilk amacı otantik liderlik, işe bağlılık ve tükenmişlik arasındaki ilişkiyi anlamak, ikinci amacı ise otantik liderlik, işe bağlılık ve tükenmişlik arasındaki ilişkide psikolojik sermayenin aracılık etkisini araştırmaktır. İlişkiyi araştırmak için, İstanbul, Anadolu Yakası'ndaki kamu ve özel hastane çalışanlarına çevrimiçi bir anket gönderilmiş ve veriler toplanmıştır. 371 kişiden yanıt alınmış ve analizleri gerçekleştirilmiştir. Sonuçlar istatistiksel araçlarla: SPSS ve AMOS ve istatistiksel yöntemlerle: güvenilirlik ve faktör analizi, geçerlilik testleri, regresyon analizi, yapısal eşitlik modellemesi, analiz edilmiştir. Analiz sonuçları, otantik liderliğin sağlık sektöründe çalışanların işe bağlılık ve tükenmişlik düzeylerini doğrudan etkileyen bir liderlik türü olduğunu göstermiştir. Ayrıca, psikolojik sermayenin otantik liderlikten olumlu etkilendiğini ve bunun sonucunda, olumlu iş sonuçlarını geliştirdiği (işe bağlılık) ve olumsuz iş sonuçlarını (tükenmişlik) azalmasını sağladığı ortaya konmuştur.

Anahtar Kelimeler: Otantik liderlik, Psikolojik Sermaye, İşe Bağlılık, Tükenmişlik, Sağlık Sektörü

ABSTRACT

Employees in the health industry perform in a vibrant setting that demands a ceaseless ambition to deliver the most productive, dependable, and high-quality care for the health care consumers. The constant demands require a leadership style that acts as guidance for healthcare workers, leading to positive work outcomes. This dissertation aimed to identify the outcomes of Authentic Leadership in the health industry by focusing on three vital work outcomes: Psychological Capital, Work Engagement and Burnout. Moreover, throughout the dissertation, Psychological Capital is assumed to perform a role in developing the other constructs. Consequently, the first objective of this dissertation was to understand the relationship between Authentic Leadership, Work Engagement and Burnout. The second objective was to investigate the mediating effect of Psychological Capital on the relationship between Authentic Leadership, Work Engagement and Burnout. The data was collected from the public and private healthcare sectors in the Anatolian Side of İstanbul by utilising an online survey to explore the relationship. 371 responses were received and examined in the analyses. The results were analysed through statistical tools: SPSS and AMOS, and statistical methods: reliability and factor analysis, validity tests, regression analysis, and structural equation modelling. The findings showed that Authentic Leadership is a leadership type that directly affects employees' Work Engagement and Burnout levels in the healthcare sector. Moreover, Psychological Capital is positively affected by Authentic Leadership and thus leads to developing positive (work engagement) and reducing negative (Burnout) outcomes.

Keywords: Authentic Leadership, Psychological Capital, Work Engagement, Burnout, Healthcare.

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CLAIM FOR ORIGINALITY

This is the first study to explore the effects of Authentic Leadership, Psychological Capital, Burnout which will be stated as Job Burnout throughout the thesis, and Work Engagement through an integrated model in the Turkish healthcare sector.

The dissertation is comprised of three original points:

1. It is an integrated model that provides an insight into the health industry in Turkey through positive psychology.
2. It helps to identify a leadership type that fits healthcare workers who are highly educated, self-determined individuals.
3. It describes the concepts through an investigation of Istanbul's Hospitals, where the Healthcare consumers are diverse in culture, gender, and psychology.
4. It brings a new perspective on how healthcare workers in Istanbul, Turkey, perceive the concepts, particularly for Authentic Leadership and Work Engagement, and distinguishes them from the original constructs.

These four features intend to increase the perspective of leaders, managers, organisational development professionals, and researchers to look at the concepts and the industry holistically where the results impact not just health industry workers but also healthcare consumers.

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LIST OF ABBREVIATIONS

AGFI	:	Adjusted Goodness-of-Fit Index
AL	:	Authentic Leadership
ALQ	:	Authentic Leadership Questionnaire
AMOS	:	Analysis of Moment Structures
AVE	:	Average Variance Extracted
CA	:	Cronbach's alpha
CFA	:	Confirmatory factoring analysis
CFI	:	Comparative Fit Index
COR	:	Conservation of Resources Theory
CR	:	Composite Reliability
EFA	:	Exploratory Factor Analysis
HTMT	:	Heterotrait-monotrait ratio of correlations
KMO	:	Kaiser-Meyer-Olkin
LLCI	:	Lower limit confidence interval
MSV	:	Maximum shared squared variance
NFI	:	Normed Fit Index
PCA	:	Principal Component Analysis
PhD	:	Doctor of Philosophy
POB	:	Positive Organizational Behaviour
PsyCap	:	Psychological Capital
RMSEA	:	Root mean square error of approximation
RMSR	:	root mean squared residual
RNI	:	Relative Noncentrality Index
SD	:	Standard Deviation
SEM	:	Structural Equational Modelling
SPSS	:	Statistical Package for the Social Sciences
TLI	:	Tucker-Lewis Index
ULCI	:	Upper limit confidence interval
UWES	:	Utrecht Work Engagement Scale
WHO	:	World Health Organization

1. INTRODUCTION

Heraclitus said, "The only constant in life is change", and it has existed as a constant from the beginning of time. Due to change, organisations face various challenges every day, especially today, due to the digital revolution; the forces of change are more prominent than ever. Organisations seek a solution to overcome the challenges and adapt to the environment. The adaptation process happens at every stage, yet its success usually lies in leadership. Consequently, leadership is one of the most popular subjects in the management field, and the popularity of the subject is not overblown. Leadership influences every level, from the organisational to the individual level. It shapes employees' mental state and personal development, and thus, it creates a particular work environment, depending on the leadership styles (Cummings & Oldham, 1997). Avolio & Gardner (2005) argue that in a context where the organizational environment is complex and unpredictable, it is crucial to foster a positive organisational climate, to lead effectively. A leader must incite courage, optimism, and trust accessible to the leaders by Authentic Leadership to promote a positive climate.

Although Authentic Leadership is comparatively one of the contemporary types of leadership method, there is a growing body of research in this area. The booming fame might be because of the state of the constant change in the world we live in. Change is so dizzying that it delivers unwanted outcomes, sometimes directly negative outcomes for individuals such as stress, burnout, and mental breakdowns or indirect outcomes by harming positive work outcomes such as Work Engagement (Azanza et al., 2013). Authenticity in leadership may serve as a beacon for the

followers in this rapidly changing ocean to ease people's minds when it comes to leadership.

Along with Authentic Leadership, the popularity of positive psychology is rising as well. Psychological Capital (PsyCap) is recognised as a resource to gain a competitive advantage in an organisation by enhancing individual development and performance (Erkanli & Ciftci, 2020). The construct both negative affiliations with mental problems such as Burnout and positive affiliations with well-being (Finch et al., 2020). Avey et al. (2008) also claim that individuals with higher PsyCap are expected to overcome stress more quickly, have more positive emotions, and, consequently, have greater work engagement.

Since PsyCap is a resource and its amount can differ from individual to individual, it can be analysed by utilising the conservation of resources theory (COR) (Hobfoll et al., 2018). According to the theory, people are urged to obtain, retain, foster, and preserve their resources, not to be stressed (ibid). The resource for struggling over can be distinguished into four types: objects, personal characteristics, conditions, and energies (Hobfoll & Lilly, 1993). Consequently, people will invest resources in handling stressful situations and protecting themselves from unfavourable consequences (Agarwal, 2016). Therefore, this study grounds its arguments about relevant subjects in the context of the COR theory perspective by examining Job Burnout as an unfavourable and Work Engagement as a favourable outcome.

The study's primary purpose is to guide leaders, managers, organisational development professionals and researchers that strive for a positive environment in a workplace by elaborating on the effect of Authentic Leadership on Job Burnout and Work Engagement in an organisation and whether Psychological Capital mediates this

relationship. To achieve the purpose, a non-experimental research design, called cross-sectional design, was employed in this study to explain the relationship between the concepts. The research instrument was a survey, the unit of analysis was individuals, and the research population will be the individuals who work in the health sector in Turkey.

Hospitals are complex systems that provide various services whose foremost intent is to perform convenient, fair, patient-focused, reliable, efficient, and effective services; simultaneously due to the nature of their service (Ferreira & Marques, 2019). Since the services vary, the responsibilities and positions of healthcare professionals vary as well, from clinical jobs, such as doctors, nurses, surgeons, to supportive or administrative jobs such as department manager, secretary, accountant, engineer, computer worker, cook and so forth (Kıdak & Aksaraylı, 2009). Those services have a delicate association due to the reciprocal interdependence of the links between them (Thompson, 1968). Consequently, the complexity and the nature of moral responsibility for the employees in the health sector put a heavy burden on their shoulders. Moreover, healthcare organisations also encounter various challenges due to continuous change, such as growing healthcare demands due to the increase in population, new diseases, increasing costs of health services, emerging treatment alternatives and medical technologies.

The Covid-19 pandemic and its heavy consequences on the health sector set a revitalised focus on healthcare in the world as it was unavoidable due to the value of being healthy. However, the unfair distribution of governmental resources for hospitals goes beyond the pandemic, and it is a general problem in the world (Day et al., 2018). Furthermore, in the epidemic conditions, people who work in the health sector are overwhelmed with personnel deficiencies, heavy workloads, and extended

shifts (Van de Voorde et al., 2016). Despite the steps towards normalizing society, the continuing battle against the epidemic in hospitals produces a feeling of abandonment, isolation, fatigue, and similar psychological burdens on the healthcare workers in Turkey.

1.1. Organisation of Research

The thesis begins with an introduction and an explanation of the purpose of the research. The following section will be the literature review, which will elaborate on Authentic Leadership, Psychological Capital, Burnout, and Work Engagement with a comprehensive evaluation, including their dimensions and the interaction between the concepts.

The research design and methodology chapter include the extent of the research, sampling procedures, the measurement instruments, research hypothesis, research model and the data collection method. In the following section, results and discussion will present statistical analysis and the result of data collection. The conclusion chapter will include the determinations of the findings, suggestions, and limitations. The final chapter will present the references to help the author produce the thesis.

1.2. Purpose of Research

This research aims to broaden the knowledge of whether Authentic Leadership affects Job Burnout and Work Engagement of the people in the health sector and whether Psychological Capital is relevant in this relationship. Although there is much research on various subjects in the health sector, this study aims to contribute to the literature by enriching it with a positive psychological viewpoint to create a better understanding of the issue and provide a positive perspective on the current and similar challenging environments.

1.3. Research Questions

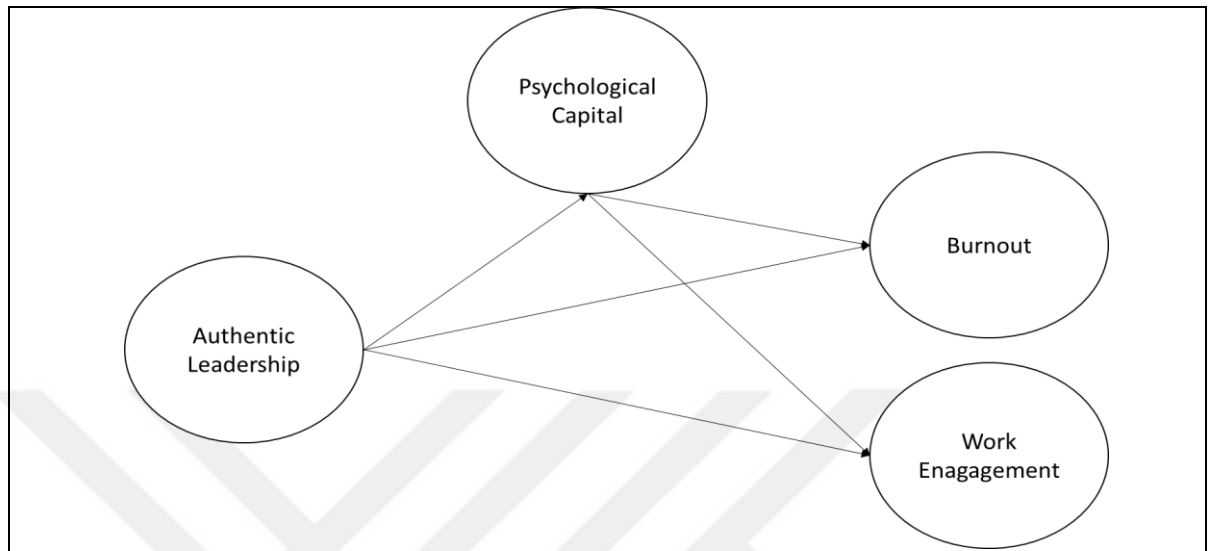
- Is Authentic Leadership related to Psychological Capital, Burnout, and work engagement?
- Is there a significant relationship between Authentic Leadership, Psychological Capital, and Burnout?
- Is there a significant relationship between Authentic Leadership, Psychological Capital, and work engagement?
- Does Psychological Capital mediate the relationship between Authentic Leadership and Burnout?
- Does Psychological Capital mediate the relationship between Authentic Leadership and work engagement?

Therefore, Figure 1 represents the conceptual model of this research. The variables of the research model can be placed as follows:

Independent Variable: Authentic Leadership

Mediating Variable: Psychological Capital

Dependent Variable: Job Burnout and Work Engagement

Figure 1.*Research Model***1.4. Importance of Research**

Humankind has been facing crises from the dawn of humanity, and during the challenging time, a decline in morality is anticipated, particularly in business and politics. According to Pearson & Clair (1998, p. 60), a crisis in an organisation is “a low-probability, high-impact event that threatens the viability of the organization and is characterized by ambiguity of cause, effect, and means of resolution, as well as by a belief that decisions must be made swiftly”. Consequently, organisations in crisis seek a remedy to fix it; however, challenges, moral dilemmas, and leadership problems during crisis times can cause Burnout and a decline in Work Engagement in the workplace. The negative job outcomes of Burnout and lack of Work Engagement are critical in every organisation; however, it is even more essential in the health sector as it is a unique sector where products or services are often disliked, and the consequence of care are uncertain, and responsibilities include human life. Due to the fact that it involves human life, the negative job outcomes can affect not just the profit

or satisfaction but also directly human life. Therefore, a leadership that inspires and lessens the psychological burden of employees is even more vital in this field. In addition to that, employees who have high Psychological Capital can overcome the negative outcomes of the demands of the job more efficiently. Thus, this research will aim to contribute to the literature by understanding whether a form of leaders in the health sector who demonstrate the ability to be true to their values, even in challenging times such as crisis, can influence Burnout and Work Engagement through Psychological Capital.

The research findings are expected to be a resource for researchers interested in the subject and guidance to improve health care services by understanding the nature of the constructs and reflecting on the outcomes for improving the conditions for the better. Moreover, it will be a tool to serve an individual, even if it is little, to overcome trials and tribulations in life.

2. LITERATURE REVIEW

This chapter comprises a review of related literature on Authentic Leadership, Psychological Capital, Job Burnout, work engagement, and the relevant constructs' components.

2.1. Development of Leadership Theories

Burns (1978, p. 2) stated that leadership “is one of the most observed and least understood phenomena on earth”. Shaw & Stogdill (1974) also support that there are numerous definitions of leadership concept as the definition change depending on whom defined the concept. Furthermore, although leadership thinking is an old concept, the term was added to the English vocabulary only about two hundred years ago (ibid). Thus, according to Takala (1998), the problem of an unclear definition of leadership is due to the concept adopted from the traditional vocabulary and transformed into the management literature without being accurately described.

A critical leadership scholar Rost defined leadership as "an influence relationship among leaders and followers who intend real changes that reflect their mutual purposes" (1991, p.102). Rost (1991) further argues that the number of definitions of leadership lacks comprehensive inclusivity as scholars who define leadership focus only on one discipline instead of focusing on multidisciplinary approaches. Robbins & Coulter, (2017) also support the notion of influencing in the leadership definition and further elaborate that leadership is a process of influencing a group to accomplish its goals. However, according to Ciulla (1999), the scholars focus too much on the definition and miss the real point of studying leadership: what is good leadership?

Leadership literature has challenged the definition and what is good leadership throughout the years. The theories have been refined and modified with each contribution. Every theory, even the oldest ones, is still relevant in varying degrees, and the impact of the theories depends on the setting in the leadership model applied. The major approaches for leadership concepts can be classified as the trait, behavioural, contingency, contemporary, and responsible leadership theories.

2.1.1 Trait Theories

From the early management literature to the 20th century, the "great man" leadership theories were predominant. The great man theories claimed that leaders were the chosen ones that inherited the leadership qualities, and it was their destiny to become leaders. Therefore, heritable traits differentiate individuals (Galton, 1869).

Starting in the early 20th century, the hereditarian perspective of great man theory transformed into trait theory, where the theories focused on the traits that make a leader instead of whether those traits are inherited or not (Maloş, 2011). The theory assumed that all leaders have certain stable traits that distinguish effective leaders from ineffective leaders (Hollander, 1992). According to Kirkpatrick & Locke (1991), leaders are different from ordinary people, and six main traits differentiate leaders from non-leaders:

- Drive
- Leadership motivation
- Honesty and Integrity
- Self-Confidence
- Cognitive Ability
- Knowledge of Business

- Other Traits: Charisma, creativity, flexibility

According to Robbins & Coulter (2017), trait theories help predict leadership; however, they are not enough to explain leadership and answer the questions about what makes leaders effective. Therefore, behavioural leadership theories emerge from developing a missing piece of the trait theories.

2.1.2. Behavioural Theories

The development of leadership research continued with the behavioural approach, which emphasizes a leader's behaviour instead of traits. Behavioural theories identify the behaviours that distinguish competent leaders from incompetent leaders (Robbins & Coulter, 2017). Therefore, contrary to trait theory, the behavioural approach claims that leadership is not defined by innate characteristics and can be learnt through training activities (Bryman, 1992).

The initial behaviour leadership researchers began with a similar approach to the trait theories (Van Seters & Field, 1990). One of the most notable research projects in behavioural approach, Ohio State University studies distinguished two major dimensions for leader behaviours: initiating structure and consideration (Robbins & Coulter, 2017). Initiating structure indicates a degree where a leader is concerned about achieving the tasks, and thus to realise it, defines and organises his and the other individual roles in the group, establish well-defined processes, and forms channels of information (Fleishmann, 1973). On the other hand, consideration emphasises a leader's concern and respect for the individual in the group and, consequently, group cohesion (Bass, 1990). Ohio state studies produced inconsistent findings, yet they showed initiation structure is crucial to the task accomplishment by supervising and organising the operation; on the other hand, the consideration

dimension improves employee satisfaction while reducing hatred and conflict in a group (Hackman & Johnson, 2013).

Michigan University studies also focused on identifying behavioural traits of leaders to improve effectiveness. The study revealed two different styles of leadership communication: production-oriented and employee-oriented (Robbins & Coulter, 2017). A production-oriented leader emphasises finalising the tasks, consequently achieving the goals, whereas an employee-oriented leader is concerned about motivating and developing followers and improving interpersonal relations in the group (Hackman & Johnson, 2013). The study showed that a leader high in "employee-oriented" was able to generate higher productivity and employee satisfaction than "production-oriented" leaders (Robbins & Coulter, 2017).

Later behavioural researchers advanced the behavioural theories that focus on characteristics by adapting them for managerial utilisation (Van Seters & Field, 1990). Blake and Moulton's managerial grid is one of the most cited approaches that focus on the managerial application of behavioural characteristics where the focus is the task and interpersonal approach of leadership communication style (Hackman & Johnson, 2013). The managerial grid used two dimensions: On the vertical axis, concern for people and on the horizontal axis, concern for production. The grid utilises a scale from 1 (low) to 9 (high) to assess a leader's use of these behaviours (Robbins & Coulter, 2017). The managerial grid approach suggests that the most effective leaders are rated nine on both sides of the axes (Van Seters & Field, 1990).

McGregor's theory X and Y is another theory that gained considerable attention (Van Seters & Field, 1990). Theory X and Theory Y are the fundamental approaches for administering employees in an organisation (McGregor, 1960). Theory X

managers believe that people dislike working inherently and avoid involving in productive activities whenever possible. For Theory X managers, people are extrinsically motivated to serve organisational needs; therefore, they need to be supervised and directed closely. On the other hand, Theory Y managers believe people are intrinsically motivated and seek responsibility as a source of innovation and creativity (Hackman & Johnson, 2013). According to McGregor (1960), Theory Y is not a remedy for all maladies. Nevertheless, it is essential for leaders not to limit themselves to the assumptions of Theory X and consider adopting the perception recommended by Theory Y.

2.1.3. Contingency Theories

The contingency approach has its roots in the critiques of the trait approach and the behavioural studies of leadership (Robbins & Coulter, 2017). Contingency in organisational theory and practice refers to a structure that depends on the influence of other factors or forces, and thus there is no best way; instead, any condition should be evaluated by considering the context and the situation (Suharyanto & Dwi Lestari, 2020). The earliest contingency studies in the literature focused on the relationship between environment, structure, and performance factors (Galbraith, 1977; Lawrence & Lorsch, 1979; Ven, 1974). However, later, researchers in the field started to utilise contingency perspectives on leadership and behavioural studies (Dienesch & Liden, 1986; Fiedler, 1967; Fiedler & Garcia, 1987; House & Mitchell, 1974; Vroom & Yetton, 1973). Consequently, according to the contingency perspective, there is no best behaviour or leadership style, and thus every action and reaction is situational (Robbins & Coulter, 2017).

Fiedler's Contingency Theory

Fred Fiedler developed one of the first contingency models for leadership, where the model suggested that group performance depends on leadership styles and situations (Hackman & Johnson, 2013). Furthermore, according to the model, there are two aspects to identify: Leadership styles and the various varieties of situations and fitting incorporations of leadership styles and situations (Robbins & Coulter, 2017). According to the model, leaders can be distinguished based on their ratings on the least preferred co-worker (LPC) scale, where the respondents' ratings of others with whom they would not like to work can provide relevant information regarding the respondents' leadership behaviour (Hackman & Johnson, 2013). A high LPC score indicates the respondents as relationship-oriented; on the other hand, a low LPC score shows that the person is task-oriented and engaged in productivity (Robbins & Judge, 2016)

Besides leadership style, a person's leadership ability is situational depending on three contingency dimensions: leader-member relationship, task structure and position power of the leader (Fiedler, 1972). Leader-member relationship refers to employees' level of confidence, trust, and respect for the leaders. Task structure is related to the degree of formalisation and structuration of the assignment. Finally, position power indicates a leaders' power over managerial activities such as hiring, firing, promotions, and salary reviews (Robbins & Judge, 2016). Fiedler's contingency model is outlined on a continuum from favourable to unfavourable situations for each dimension. According to the model, relationship-oriented leaders function better in moderately favourable situations, whereas task-oriented leaders are better in highly favourable or unfavourable situations (Hackman & Johnson, 2013). Finally, the model suggests that the leadership style for an individual is fixed;

therefore, there are two ways to improve leadership effectiveness: A new leader to fit the situation or adjust the situation to fit the leader (Robbins & Judge, 2016).

Path-Goal Theory

The path-goal theory of leadership is derived from the expectancy theory, one of the prominent motivation theories in the literature (Hackman & Johnson, 2013). According to the expectation theory, an individual's attitudes and behaviours can be predicted by assuming that successful task completion leads to valued outcomes (Vroom, 1964). Thus, path and goal theory claim that leaders play a pivotal role in influencing followers' perspectives of task paths and goal desirability (House & Mitchell, 1974). Consequently, leaders can increase the motivation and satisfaction of the employees by presenting their specific expectations for the targets (Hackman & Johnson, 2013).

According to the theory, leaders need to utilise four different communication styles to motivate their followers: directive, supportive, participative, and achievement-oriented leadership behaviours (House & Mitchell, 1974). Directive leaders let the followers know what is exactly expected of them and define a clear schedule and instructions about how the work is supposed to be done. Supportive leaders care about the followers' needs and desires; they behave friendly and easy to work with the followers. Participative leaders encourage followers to be involved with the decision-making process and ask their opinions before making a choice. Finally, achievement-oriented leaders demand followers to perform at their best, set challenging goals and expect continuous performance improvement (Robbins & Judge, 2016). Apart from the leadership styles, two contingency variables are the most influential agents in determining the relevant leadership communication style:

the characteristics of followers and the characteristics of the task (Hackman & Johnson, 2013). The characteristics of the task determine the leadership style expected to followers' outcomes are to be maximised; the characteristics of the followers explain how the leader's behaviour and the environment are interpreted (Robbins & Coulter, 2017).

Hersey and Blanchard's Situational Leadership Theory

Hersey and Blanchard's situational leadership theory was first introduced as a guide to managing new followers by employing more directiveness and then progressively displacing directiveness with supportiveness as employee seniority progressed (Hersey & Blanchard, 1969). The model evolved even further to a well-known contingency leadership theory that emphasises followers' readiness, and readiness is defined as the extent to which people have the ability and willingness to perform a task (Robbins & Judge, 2016). The four stages of readiness are:

R1: Followers are unable and unwilling to perform the task as they are not competent or confident.

R2: Followers are unable but willing to do the task. Thus, they are motivated but not competent.

R3: Followers are able but unwilling to perform the task where they are competent but not motivated.

R4: Followers are able and willing to perform the task (Robbins and Coulter, 2016).

Furthermore, similar to Fiedler's leadership model and Path-goal theory, the situational leadership model uses two distinct dimensions that determine the leader's

behaviour: tasks and relationship dimensions (Hersey et al., 2001). However, Hersey and Blanchard's situational leadership considers dimensions as high or low and then proposes four different leadership styles depending on the combination of the dimensions. The four leadership styles are: Telling (high task-low relationship), selling (high task-high relationship), participating (low task- high relationship), delegating (low task-low relationship) (Robbins & Coulter, 2017).

Therefore, if the followers' readiness is R1, the most suitable leadership style is telling to give clear and precise directions; if they are R2, selling by demonstrating a high task orientation; if they are R3, participate in promoting their willingness, finally, if the followers' readiness is R4, the leader just requires employing delegating style of leadership (Hersey et al., 2001).

2.2.4. Contemporary Theories

Today, the leadership literature shifted from focusing on the traits and behaviours of leaders to morals, values, and the relations between leaders and followers (Spector, 2014). Thus, the new concepts brought a renewed perspective to the leadership research where they emphasise the contemporary issues affecting leadership (Robbins & Coulter, 2017). Therefore, the following concepts will be discussed in the context of contemporary leadership: Transactional and Transformational Leadership, Leader-Member Exchange Theory, Charismatic Leadership, Servant Leadership, and Ethical Leadership.

Transactional and Transformational Leadership

Burns (1978) identified transactional and transformational leadership through a qualitative analysis of the biographies of numerous political leaders. Transactional leaders are identified as those who lead primarily by using social transactions (Robbins & Coulter, 2017). Transactional leaders emphasise clarifying tasks, standards, and goals and motivate their followers by exchanging incentives for their productivity (Hinkin & Tracey, 1999). On the other hand, transformational leaders are the ones that influence followers' attitudes regarding the organisation and strengthen the commitment to the organisation's purpose, goals, and strategies (Yukl, 1989). Transformational leaders emphasise higher ideals and moral values to increase the motivation of their followers (Tracey & Hinkin, 1998). Therefore, transformational leaders motivate followers to perform as expected, whereas transformational leaders inspire followers to go beyond expectation (Robbins & Coulter, 2017).

Transactional leadership consists of two different components: contingent reward and management by exception (active & passive) (Bass, 1985). The contingent reward component refers where the leaders' defining the functions followers must perform and the task conditions followers need to realise to reach the organisational, therefore, their individual goals (Kuhnert & Lewis, 1987). On the other hand, management by exception can be classified into two different styles. Active management by exception emphasises sustaining existing performance status by identifying and solving the problems, and passive management by exception refers to acting after the difficulties become problematic (Avolio & Bass, 2002). According to Bass (1990), transactional leadership utilises passive management by exception, where the main objective is to create and maintain a balance.

Initially, transformational leadership was defined as three distinct dimensions: idealised influence, intellectual stimulation, and individualised consideration (Bass, 1985). However, throughout further research, another dimension, inspirational motivation, was added as the fourth component (Bass & Avolio, 1994). The idealised influence dimension refers to whether the leader is seen as charismatic, influential, and self-sufficient by the followers (Bass & Avolio, 2004) and if the leaders can inspire a vision and sense of mission (Hackman & Johnson, 2013). Intellectual stimulation is about whether a leader promotes proposing new approaches without criticism if the followers' ideas oppose the leaders (Avolio & Bass, 2002). According to Hackman & Johnson (2013), intellectual stimulation stimulates intelligent problem-solving and decision-making. Dionne et al. (2004) further argue that leaders who utilise intelligent stimulation challenge followers to reason creatively and find solutions to challenging difficulties. Individualised consideration refers to being considerate and supportive of each follower (Hackman & Johnson, 2013).

Consequently, leaders see the followers as individuals, not just a part of a team (Dionne et al., 2004). Finally, inspirational motivation is the capability of a leader to serve as a role model for followers (Den Hartog et al., 1997). The dimension is also related to communicating the expectations that need to be met by the followers (Avolio & Bass, 2002). Hackman & Johnson (2013) argue that transformational leaders communicate the expectations by setting high standards, utilising symbols to adjust their efforts, and enhancing understanding of the goals. Thus, transformational leaders inspire purpose and motivation in their followers' efforts (Bass & Avolio, 1994).

Burn (1978) claimed that transformational and transactional leadership are the two ends of a continuum. However, according to Seltzer & Bass, (1990), they are not

the opposing approaches to the leadership styles; instead, they are complimentary. Transformational leadership emerges from transactional leadership; furthermore, transformational leadership augments transactional leadership by generating outcomes far beyond utilising transactional leadership alone (Robbins & Coulter, 2017).

Leader-Member Exchange (LMX) Theory

The LMX theory is defined as a dyadic relationship between leaders and followers (Dansereau et al., 1975). According to Graen & Scandura (1987), the leader's effectiveness is distinguished by the relationship with the followers. The social exchange theory heavily influences the theory that a transaction of tangible and intangible resources in social reciprocity between leaders and followers explains their relations patterns (Bernerth et al., 2016).

According to LMX theory, leaders build a special relationship with a small group of trusted followers that is called the in-group; due to time pressures, the rest of the followers fall into the out-group (Robbins & Coulter, 2017). Members in the in-group develop a high-quality relationship with the leader, where the leader is respected, and the members have high autonomy in problem-solving and decision making. In contrast, members in the outgroup have a lower quality relationship (Graen & Uhl-Bien, 1995). Consequently, high-quality relationships lead to greater performance ratings, less turnover, and higher job satisfaction (Robbins & Judge, 2016). On the other hand, in low-quality relationships, the members do not extend beyond the tasks related to the job description, and the relationship is more transactional (Liden & Maslyn, 1998). Furthermore, the outgroup followers can access lesser resources provided by the leader, resulting in fewer responsibilities and

obligations (Graen and Uhl-Bien, 1995). Moreover, the relationship between the leader and followers tends to remain steady over time (Robbins & Coulter, 2017).

According to Dienesch & Liden (1986), LMX has three dimensions: contribution, loyalty, and affect. However, Liden and Maslyn (1998) further included another dimension as professional respect.

Charismatic Leadership

Weber defined charisma as a characteristic that leads to commitment to the particular and extraordinary virtue, bravery, or model character of an individual, that sets the person apart from ordinary people and is treated as granted with extraordinary powers or qualities, which are not accessible to an ordinary people (Weber, 1947). According to Weber & Eisenstadt (1968, p. 2), charismatic authority's superiority is "... revolutionary and transvalues everything; it makes a sovereign break with all traditional and rational norms". However, Tucker (1968) argues that charismatic leadership and authority emerge when there is a crisis that the followers encounter; therefore, the leader is perceived as salvation by the followers.

House (1976) was the first researcher to describe the construct in the context of organisational behaviour where the researcher defined charismatic leadership as a characteristic that differentiated leaders from others due to the degree of dominance, self-confidence, need for influence and a firm conviction in her/his beliefs. Seyranian & Bligh, (2008) further claimed that charismatic leaders are the ones who have a vision and take individual risks to accomplish that vision by displaying extraordinary behaviours. House (1976) also argues that charismatic leaders employ four specific behaviours while leading their followers: goal articulation, role modelling, individual

image building, showing trust and expecting high performance from the followers, and promoting arousal behaviours.

Waldman et al. (1990) claim that leaders are the most influential when they employ both contingent reward and charisma, and through charisma, they add a unique variance to the leadership effectiveness that impacts beyond a contingent reward. Robbins & Judge (2017) also explain that charismatic leaders who utilise a vision and vision statements establish a common understanding with their followers where that recognition increases collaboration and performance.

Servant Leadership

Servant leaders are the ones that go beyond self-interest and emphasise assisting followers to progress and develop (Robbins & Judge, 2016). The term was first coined by Greenleaf (1970), and the concept was defined as a leadership style where a leader genuinely considers the needs of the followers and makes those needs a priority to empower and grow them. Boone (2019) further argues that servant leaders aim to discover the potential of their followers by valuing, honouring, and working relentlessly to bring out the power that exists in them. Servant leadership is a concept that concentrates fundamentally on serving with a holistic perspective by covering not just the followers but also institutions (Greenleaf, 1996).

There are many different explanations for the dimensions of servant leadership. Graham (1991) includes servant leadership in a charismatic leadership model as one of the dimensions: Weberian charismatic authority, personal celebrity charisma, transformational and servant leadership. According to Graham (1991), servant leadership is the moral part of charismatic leadership which focuses on humility and the moral development of followers (Spears & Lawrence, 2002). Liden et

al. (2008) considered servant leadership as a concept with ten characteristics: listening, empathy, healing, awareness, persuasion, conceptualization, foresight, stewardship, commitment to the growth of people and building community. On the other hand, Van Dierendonck (2011) argues that there are six dimensions: empowering and developing people, expressing humility, authenticity, interpersonal acceptance, stewardship, and providing direction. Franco & Antunes, (2020) stated that there is no consensus on the definition of the main dimensions of the theory.

Ethical Leadership

Ethical leadership is a leadership style that emphasises the morals and well-being of the followers as well as the profitability of the organisation (Treviño et al., 2000). Brown et al. (2005) defined it as “the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct through two-way communication, reinforcement and decision making”.

Ethical leaders are concerned with "we", focus on the common good, and finally emphasise what is best for the organisation and the community (Treviño et al., 2000). On the one hand, they strive to align the followers' goals with the organisational goals (Freeman & Stewart, 2006); on the other hand, they focus on the external community where they are perceived as honest and trustworthy decision-makers (Mendonca, 2001). Ethical leaders set ethical standards, be role models for their followers, and motivate and encourage followers to display ethical behaviours (Treviño et al., 2000).

Ethical leadership was initially considered a unidimensional theory (Brown et al., 2005); however, later research suggests various dimensions that describe an ethical leader (De Hoogh & Den Hartog, 2008; Fehr et al., 2014; Kalshoven et al., 2011).

According to De Hoogh and Den Hartog (2008), ethical leadership has three components: morality and justice, role disclosure and power-sharing. Kalshoven et al. (2011) claimed that ethical leadership consisted of seven different components: people orientation, fairness, power-sharing, concern for sustainability, ethical guidance, role clarification, and integrity. On the other hand, Fehr et al. (2014) suggest six dimensions to define ethical leadership: care/harm, fairness/ cheating, loyalty/betrayal, sanctity/degradation, authority/subversion, and liberty/oppression.

Authentic Leadership

The earliest marks of authenticity can be traced back to ancient advice in the Greek world, such as “Know thyself” and “To thine own self be true” (Snyder & Lopez, 2002). Furthermore, in the literature, the earliest and one of the most famous traces can also be seen in Shakespeare’s Hamlet (Shakespeare et al., 2003) by the words of a fictional character Polonius “This above all: to thine own self be true. And it must follow, as the night the day. Thou canst not then be false to any man. Farewell, my blessing season this in thee!” In the earliest philosophical literature, authenticity is frequently approached from a binary and static viewpoint, such as that one can be either authentic or inauthentic (Lacoste et al., 2014). In contemporary thinking, the term’s meaning extends beyond “knowing one’s self”. The term is accepted as a virtue by implying a way of acting (Varga, 2013), which is a dynamic process that is validated and authenticated by others (Lacoste et al., 2014). Thus, it is a commitment to a precise image of one’s moral values and how one interacts with others (Mazutis & Slawinski, 2015).

Authenticity gained popularity in the last couple of decades in organisational studies (Luthans & Avolio, 2003). One of the primary sources of this popularity is the

threat of false-self behaviour such as fraud, having a hidden agenda, and self-deception in organisations (Snyder & Lopez, 2002). Furthermore, being in an inauthentic state influences psychological tension on the individual level (Harter, 2002). On the other hand, being authentic correlated with a feeling of peace and comfort (Lenton et al., 2013). Taylor (1991) also claimed that today's society, which consists of technology-supported institutions, critically narrows our choices as they force societies and individuals to give importance to the instrumental reason that produces grave moral dilemmas. Authenticity is the key to solving those dilemmas.

Authenticity in daily business life means being genuine and distinctly conscious of one's nature and how it influences others (Hannah et al., 2011; Sharif & Scandura, 2014). Authenticity as a leadership style is distinguished from other leadership styles not because it is rooted in morals or ethics but because it enhances focus on self-awareness and transparency (Valentine et al., 2014). Moreover, the leaders with Authentic Leadership qualities can develop and lead most effectively by recognising their strengths and weaknesses and adjusting the situation using that self-recognition (Walumbwa et al., 2008). However, the term authenticity is old. Authentic Leadership gained popularity with Luthans & Avolio (2003) and George (2003). The expanding concern corresponded with the public concerns regarding profoundly broadcasted corporate scandals and noticeable manifestations of unethical or corrupted leaders in the media (Avolio et al., 2004; George, 2003; Walumbwa et al., 2008).

Consequently, George (2003) claimed authentic leaders have consistent core values and a solid commitment to all stakeholders with integrity and purpose. Kiersch & Byrne (2015) attribute Authentic Leadership to trustworthiness and honesty, resulting in higher leader effectiveness. It is a type of positive leadership required in

contemporary times, where the change happens to a surprising degree, the existed rules for organisations no longer apply in the hyperdynamic context, and the leaders must be transparent with their values, actions, and behaviours (Cameron & Dutton, 2003).

Authentic Leadership proposes that leaders serve authentically to improve workers' self-confidence and enhance their collaboration with management and colleagues (Avolio et al., 2004). It is regarded as necessary to respond authentically in current times due to a decrease in ethical leadership with societal difficulties (Cooper et al., 2005). Authentic leaders are described as the leaders who are genuinely conscious of how they think and how other people perceive their behaviours; can recognise others' viewpoints, morals and values, and care about their opinions by showing ethical, hopeful, optimistic, and resilient behaviour (Avolio et al., 2004).

Authentic Leadership initially claimed to have five distinct but interrelated components: self-awareness, relational transparency, internalized regulation, balanced processing of information, and positive moral perspective (Gardner et al., 2005). However, later, the conceptual overlap between the internalized regulation and positive moral perspective dimensions was identified, and thus dimensions merged into one dimension, defined as internalized moral perspective (Walumbwa et al., 2008).

Self-Awareness

The capacity to be self-aware is one of the most distinguishing factors separating humans from all other creatures (Crook, 1980). It is an individual's process to be conscious of its existence and give meaning to the components that form its existence (Silvia & Duval, 2001). Frankl (1997) further argues that being self-aware makes an individual free to define a purpose for that existence; consequently, self-awareness is the first step in searching for meaning. Walumbwa et al. (2008) also defined self-awareness as a process of searching for meaning and how this searching effort influences an individual's views of herself or himself at every step of the searching. Moreover, according to Gardner et al. (2005), self-awareness is not a final state for an individual but a start shaped by the influence of an individual's values, identity, feelings, goals, knowledge, abilities, capabilities, and environmental factors.

Self-awareness is a significant determinant of leadership success (Leary & Buttermore, 2003). The ability to think consciously about oneself has been proved to affect the leaders' decisions and inspire others (Taylor, 2010). Self-Awareness also supports leaders to lead the change by understanding internal struggles due to ego needs and desires, diagnosing organisational dysfunctions, reflecting on the actions taken, and avoiding stuckness (Higgs & Rowland, 2010). According to Goleman (1995), self-awareness requires not solely reading one's purpose and connections with others but the capability to be authentic in expressing oneself and treating others ethically. Therefore, being self-aware is crucial for being an authentic leader who challenges external pressures and listens to one's inner voice instead of external directions (George, 2003).

According to Gardner et al. (2005), self-awareness consists of four sub-elements: values, identity, emotions, motives, and goals. A leader high in self-awareness recognises their own strong and weak aspects and sees these versatile aspects as a strength (Avolio & Gardner, 2005). The recognition extends to the point that one can identify its values and behave by abiding by own values (George, 2003). Being self-aware of emotions is also an essential component of Authentic Leadership as the leaders high in self-awareness can identify their own and others' emotions and adjust their reactions to perform individualised behaviours (Gardner et al., 2005). Furthermore, authentic leaders act with a high level of moral integrity; being sincere and trustworthy are the core elements of their identity, which build a positive relationship with their followers (Luthans & Avolio, 2003). Moreover, authentic leaders' goals and motives, determined based on their genuine assessments of their strengths and weaknesses, are development-oriented for themselves and their followers (Gardner et al., 2005).

Balanced Processing

Another component of Authentic Leadership requires genuinely reflecting on judgment and events and not over/undervaluing one's capabilities (Thornhill, 2011). It concerns a balanced and fair assessment by knowing and accepting the negative and positive side of herself/himself and acting objectively by evaluating the situation objectively and harmoniously (Kernis, 2003). Leaders accumulate all sets of positive or negative information that concern them without denial or distortion, and thus they make objective and more self-aware decisions by utilising unbiased information (Corner, 2015). According to Gardner et al. (2005), through balanced processing, leaders can recognise their innate strengths and flaws, and through understanding inherent qualities, they can recognise their motivational biases.

Internalized Moral Perspective

Internalised moral perspective is an aspect that serves as a guide of personal moral standards used to self-regulate behaviours (Avolio et al., 2009). According to Walumbwa et al. (2008), an individual can be guided internally by internalized and non-contradictory principles over external determinants and influences. Especially when the situation involves facing challenging moral situations, leaders are expected to have a higher moral perspective and more profound and broader thinking to solve the mystery of moral challenges (Hannah et al., 2011). According to Avolio & Gardner (2005), authentic leaders have the inherent quality to utilise internalized moral perspectives to overcome moral difficulties.

Relational Transparency

Relational Transparency is about how one expresses herself or himself to others by revealing unique characteristics without pretending to behave falsely (Walumbwa et al., 2008). Avolio & Gardner (2005) also discussed that transparency in relations requires the leader to express his / her thoughts precisely and share information as straightforward as possible. The feeling of trust in the leader rises when the leader transparently shares information. Authentic leaders may reflect their true thought and feelings to their followers; however, these thoughts and feelings must be appropriate and constructive (Tabak et al., 2012). Openness and transparency will positively affect an organisation at all levels (Mazutis & Slawinski, 2015).

2.2. Psychological Capital

The following chapter will elaborate on the definition and concept of Psychological Capital. Then explain the four components that Psychological Capital is consisted of.

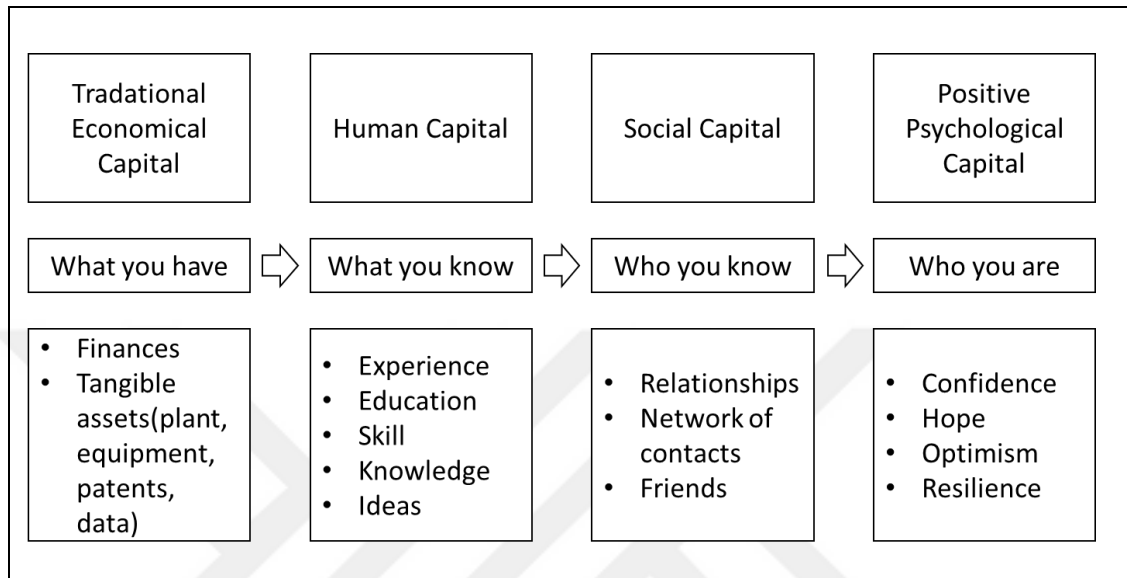
2.2.1. Conceptual Definition

Psychological Capital has emerged from the field of positive psychology (Luthans & Youssef, 2004). Positive Psychology has broadened the perspective of psychology from the field of curing the sickness to developing what is correct as well as fixing what is wrong, and the range of positive psychology includes subjects such as happiness, satisfaction, subjective well-being, optimism, hope, civic virtues, citizenship, work ethic at the individual, and group level (Snyder & Lopez, 2002). In addition to that, through positive psychology, the notion emerged, and the field claimed that positive organizational behaviour (POS), the strengths of the employees could be determined, measured, nurtured, and guided by this perspective, hence augmenting the performance of the organization (Luthans & Youssef, 2004).

The core of the Psychological Capital construct has drawn its ground idea about being a capital resource from another framework, psychological resource theory (Luthans & Youssef, 2007). According to psychological resource theory, individuals who lack required resources are negatively affected by their needs and thus have problems with their physical health and psychological well-being (Hobfoll, 2011). The definition of a resource is broad, and measuring the resources, such as self-esteem and self-efficacy, can be challenging (ibid). Nevertheless, Psychological resources are capital, just like economic, human, and social capitals, yet it

distinguishes themselves by developing the individual to the best version of itself (Luthans & Youssef, 2007).

According to Bourdieu (1986), economic capital is a financial asset of an individual which can be converted into money. Fischer et al. (1989) also defined capital as an asset that gradually generates a flow of income correlated to expenditure, consumption, exports, imports, and other monetary transactions. The economic perspective of capital that involves financial and tangible assets was prevalent throughout management history (Luthans et al., 2004). Nevertheless, after the 1960s, there has been a growing consensus on another essential part of the growth: the importance of people and their abilities, knowledge, competencies that support economic growth and the type of capital called human capital (Keeley, 2007). The acknowledgement of the value of intangible human capital is prominent in today's business (Luthans et al., 2004). Social capital represents an informal norm that fosters interaction between two or more entities, and it is not limited solely to individuals. However, it can be extended to more complex and comprehensive patterns of social networks (Fukuyama, 2010). It was defined by Bourdieu (1986, p. 17) as “the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition or, in other words, to membership in a group, which provide each of its members with the backing of the collectively-owned capital, a 'credential' which entitles them to credit, in the various senses of the word”. Avolio et al. (2004) claimed that social capital has critical value to organisations' success and competitive advantage; however, today, an organisation must go beyond that type of nature of assets and embrace Psychological Capital.

Figure 2*Capital Types*

Note: Avolio, Bruce J., Gardner, W. L., Walumbwa, F. O., Luthans, F., & May, D. R. (2004). Unlocking the mask: A look at the process by which authentic leaders impact follower attitudes and behaviours.

According to Luthans et al. (2007), Psychological Capital refers to the individual's positive psychological development status and is characterized by the following characteristics:

- 1- Making the necessary effort to overcome challenging tasks and having the confidence to perform those tasks (self-efficacy),
- 2- Possess positive expectations and thoughts to be successful now and in the future (optimism),
- 3- Resolution to achieve goals and, when necessary, revise the path leading to goals (hope),

- 4- Facing challenges and difficulties without giving up and recovering immediately from the challenges faced (resilience).

2.2.2. Components of Psychological Capital

Optimism

Optimism, individuals' generalization of positive events, taking them for granted and internalising them, leads to the perception of adverse events as temporary; optimists alienate themselves from negative events (Seligman, 2006). It tends to consider getting the best possible outcome from an event (Luthans & Avolio, 2003). According to Mischel (1979), optimism is a mechanism for an individual to make good about itself by judging itself more mercifully comparing to being judged by others; thus, it helps individuals prevent depression. Furthermore, Carver & Connor-Smith (2010) also stated that optimism produces cognitive, coping and contextual resources, which correlated to a higher level of engagement and lower levels of disengagement.

Optimistic people are characterised as those who foresee positive and desired outcomes to occur in the future, and pessimistic people are characterised as people who constantly have negative thoughts and believe that undesirable outcomes will happen (Luthans et al., 2007). However, as a Psychological Capital component, optimism is not just about predicting good outcomes that will happen in the future. The concept of optimism is based on causes and attributions that an individual uses to explain and interpret why something happens in the past, present, or future (ibid). According to Carver & Scheier (2002), optimistic people have a positive way of approaching problems, and they are more successful in coping with challenges than pessimistic people; moreover, the more optimistic they feel, the more effort they put

into their endeavours. This way of thinking reinforces the likelihood of accomplishing an individual's positive or negative expectations, thus creating a self-fulfilling prophecy (Luthans et al., 2007).

Although the concept of optimism, which (Luthans, 2002) interpreted as the core of positive organizational behaviour, was previously interpreted as a "trait-like" personality type, later studies describe it as a "state-like" feature as with other Psychological Capital dimensions (Carver & Scheier, 2002, Luthans et al., 2007). Seligman (2007) also supports that optimism is a state-like construct that consists of three casual explanatory dimensions:

- Permanence (Stable-Unstable): Pessimists consider that the causes of bad encounters that happen to them are permanent; optimists believe that the causes of these events are temporary. Conversely, optimists interpret the causes of good events as permanent; Pessimists think that good events are temporary.
- Pervasiveness (Global-Specific) Explanations: While the permanence dimension is related to time, the prevalence dimension is related to space. While pessimistic people seek the causes of bad events in universal explanations, optimistic people make more specific explanations. Conversely, optimists offer universal explanations for good events that happen to them, while pessimists give specific explanations.
- Personalization (Internal-External): Pessimists see the causes of their adverse events in themselves (internalisation), while optimists usually see it outside (externalisation). On the contrary, optimists who have

experienced good things look for reasons within themselves, while pessimists look outside.

According to Seligman (2007), low self-esteem frequently arises from internalising unfavourable events. Thus, for adverse situations, optimists attribute it to external (not my fault), unstable (temporary failure) and specific (problem only in this case), while pessimists attribute it to internal (my fault), stable (it will stay for a long time), and global (will remain in everything I do). Luthans & Youssef (2004) further claimed that optimists keep their motivation high by having positive expectations about achieving their future goals while maintaining their self-esteem and morale. On the other hand, pessimists deal with inertia, doubting themselves because of their negative expectations for the future (ibid). However, optimism is far from being a perfect state, and it involves the risks of ignoring the negative aspects of events. To limit the negative features of optimism, Schneider (2001) conceptualise realistic optimism, which can balance out the individual perspective of negative and positive aspects of events. Furthermore, Seligman (2007) also advocated the concept of flexible optimism, which is about not being overly optimistic, instead of considering the risks, rather than blindly believing in positive outcomes. Luthans et al. (2007) emphasise that optimism as a component of Psychological Capital needs to be flexible and realistic and not be at the extremes.

Self-Efficacy

The self-efficacy theory emerged from Bandura's Social Cognitive Theory (Bandura, 1994). Self-efficacy is an individual's belief in his/her capability to perform a task to achieve desired outcomes (Robbins and Judge, 2017). Moreover, self-efficacy makes it comfortable to embrace and welcome challenging responsibilities by

utilising individual strengths and skills. Moreover, it gives vitality to people to keep going (Luthans et al., 2007). Thus, the self-efficacy concept is not merely concerning an individual's skills but also the confidence in utilising the skills (Luthans & Youssef, 2004).

According to Luthans et al. (2007), five fundamental characteristics distinguish people with high self-efficacy from other people:

1. They set high goals for themselves and engage in challenging tasks.
2. They welcome and succeed in challenges.
3. They have high intrinsic motivation.
4. They make the necessary effort to achieve their goals.
5. They persist with determination when faced with difficulties.

Stajkovic & Luthans (1998) defined self-efficacy as a more specific type of state than optimism, as self-efficacy is the ability to successfully perform a particular task within the given field by utilising motivation, cognitive resources, and confidence in the abilities of an individual. Furthermore, Bandura & Locke (2003) found a strong relationship between self-efficacy, motivation, and performance level. Luthans & Youssef (2004) supported this relationship between self-efficacy and desired work outcomes: job satisfaction, organizational commitment, intention to leave, and perceived organizational effectiveness in cross-cultural workplace settings.

The studies showed that self-efficacy could be developed through training in the work environment (Bandura, 1994; Bandura et al., 1999; Combs & Luthans, 2007; Gist, 1989). Thus, it is a state-like attribute, similar to the other Psychological Capital

components (Luthans et al., 2007). According to Bandura (1994), there are four methods to improve Self-Efficacy:

- **Enactive Mastery:** The most effective way to generate a strong sense of self-efficacy is through enactive mastery, which concerns the successful completion of a particular task as success improves self-efficacy, whereas failure reduces it. Decreased self-efficacy appears in the early stages of their career when people feel insecure about their competence.
- **Vicarious Modelling:** Vicarious modelling is based on social cognitive learning theory. According to vicarious modelling, the models are sources of desire and motivation. Observing a comparable person who has completed a task increases the observer's belief in his abilities. Frequently, seeing someone succeed in a task increases our self-efficacy and vice versa.
- **Verbal Persuasion:** Verbal persuasion occurs when someone more experienced than an individual, such as a teacher or mentor, demonstrates a belief of trust. When people are persuaded to have confidence in themselves, they will strive harder, improving their chances of success.
- **Arousal:** The fourth and last component, arousal, provides a temporary increase in self-efficacy. People rely on their physical and emotional state to some extent in assessing their self-efficacy. People's mood influences how they evaluate their self-efficacy; While a positive mood boosts the feeling of self-efficacy, a negative mood causes demoralization and consequently decreases self-efficacy (Bandura & Lopez, 2008).

Hope

Hope is defined by Snyder (1994) as the belief and motivation an individual has about succeeding in a goal. Locke & Latham (2002)'s explanation of hope is similar to that description as it is defined as purposeful behaviour created in line with the desired goal. Feldman et al. (2009) also argue that hope determines success potential.

Optimistic people can set more challenging goals, and have more success, well-being, and positive emotions (Ciarrochi et al., 2015). On the other hand, people low in hopes may have more stress and Job Burnout (Horton & Wallander, 2001).

According to Snyder, a goal is an anchor for hope as it provides a direction and final destination for hopeful thinking and thus consists of two elements to reach that goal: Pathway and Agency thoughts (Snyder, 1994). Pathway thought refers to the routes that facilitate our success in attaining desired goals, and agency thought is the drive to tackle the routes to the goals (Snyder, 2000). Pathway thought to desired goals is essential to successful, hopeful thinking as this component of hope allows an individual to continue and create alternative paths even when the initial path to the goal is blocked (Snyder et al., 1998). On the other hand, the agency is a motivational component that inspires people to the paths devised for goals (Snyder, 2000). Individuals with a high of hope use internal speech patterns such as "I can do this", "I will not be stopped", "I will finish this" (Snyder et al., 1998), which allows the individuals to be flexible in adapting to alternative ways if he encounters obstacles on the initial path (Snyder, 2000).

According to Snyder (1994), hope can be defined as the sum of an individual's willpower, which refers to a mental capacity to find effective ways to achieve goals

and waypower, which is a driving force in hopeful thinking in hopeful thinking achieving goals. These two components of hope form an ongoing cycle by influencing each other, and while willpower drives the person to seek new ways, waypower ensures the continuation of determination by maintaining the flow of energy (Snyder, 2000). The willpower and waypower components of hope make the concept particularly relevant to the importance of intrinsic motivation, autonomy, and uncertainty in today's work environment (Luthans et al., 2007).

Resilience

Resilience is promoted as one of the core concepts of Positive Organisational Behaviour (PoB) (Luthans, 2002). The resilience concept is defined as a progressive process of positive adaptation against adversity (Hartmann et al., 2020). Masten & Reed (2002) also defined resilience as a series of events characterised as positive adaptive behaviour patterns that occur when faced with significant challenges or risks. Therefore, resilience refers to a broad conceptual framework that involves many concepts related to positive adaptation behaviours when a challenge is faced (Masten et al., 2007). Resilience in the organizational context refers to the positive psychological capacity that explains the elasticity of recovery in difficulty, unpredictability, disagreement and even positive change, growth, and increased responsibility (Luthans, 2002). Therefore, resilience includes recovery from distressing states and positive and challenging events (Luthans et al., 2007).

According to Luthans (2002), resilience is a state-like attribute which is steady over a particular duration yet changeable in the long term. Resilience is acknowledged as a personal resource that can be influenced by social resources from the contextual environment (Hartmann et al., 2020). Kinman & Grant (2011) found that people

high in resilience have more positive mental health, whereas those low in resilience show Job Burnout and emotional exhaustion symptoms. MacHe et al. (2014) argue that resilience affects affective behaviour and strengthens employee work engagement. The concept is investigated in diverse areas by researchers such as corporate organisations (Shin et al., 2012), healthcare (Gabriel et al., 2011), and the military (Lee et al., 2013). The change from the negative perspective in psychology to the positive perspective inspired by positive psychology was also seen in resilience studies, and that leads researchers from investigating the question "who is resistant" to "what characteristics make them resilient" to understand how to develop these characteristics (Luthans et al., 2007).

According to Coutu (2002), resilient individuals have three features, and to achieve real resilience, it is essential to have all three features:

1. Facing Reality: desire to face reality and accept it.
2. The Search for Meaning: meaningful connections formed between a more desirable future and the challenges of the present to make the present more manageable and make it easier to face even the most challenging situations.
3. Ingenuity: to produce innovative solutions to problems, even though there are limited tools in the face of difficulties.

Although resilience can be developed like other Psychological Capital components (Masten & Reed, 2002; Youssef & Luthans, 2005), it has a more reactive nature, unlike other Psychological Capital components (Luthans et al., 2007); Masten & Reed (2002) defined three resilience types that can be accommodated to business life. The first type is "asset-oriented" strategies. These strategies focus on developing the person's perceived current personal assets that increase positive outcomes. The

second is “risk-oriented” strategies. These strategies decrease the possibility of undesirable consequences of risk factors that can be prevented. The third group of strategies is “process-oriented” strategies which aim to stimulate basic defensive systems for development.

As a Psychological Capital component, resilience refers to the underlying value system that supports individuals to overcome challenging and overwhelming daily events, evaluate themselves, and connect with a more positive future to look forward to (Luthans et al., 2007). Jensen & Luthans (2006) claims that resilient, authentic leaders can look to their possible future selves and bring them back to their present actual selves, even during periods of failure. Bringing the future back to the present can result in leaders motivating themselves and others to higher performance. This perspective also suggests that individuals who are more motivated to develop and learn will likely sustain the effort to achieve challenging goals and expectations. Furthermore, motivation to learn and develop, like resiliency, can be developed in individuals or diminished, as often with poor leaders and ineffective managers (Luthans et al., 2007).

2.3. Job Burnout

The following chapter will elaborate on the definition and concept of Job Burnout. Then explain the three components that Job Burnout is consisted of.

2.3.1. Conceptual Definition

It is the ultimate point to understand Burnout in the work setting as it influences job commitment, job satisfaction, performance, and turnover, besides an individual's well-being (Dishon-Berkovits, 2018). As a concept first explained by Freudenberger (1974, p. 159), Burnout is "...becoming exhausted by making excessive demands on energy, strength, or resources". Maslach (1982) further investigates the issue and expands Burnout's definition with three development stages: emotional exhaustion, depersonalization - also known as cynicism - and lack of accomplishment caused by stress. Rudow (2010) claimed that emotional exhaustion and cynicism correlate positively with each other but negatively with lack of accomplishment; consequently, the second and third dimensions are coping strategies and not separate dimensions. However, according to Korczak et al. (2010), emotional exhaustion has the most significant influence among other dimensions first two aspects represent the core dimension of Burnout, whereas lack of accomplishment can be left out. Schwab & Iwanicki (1982) stated that the Burnout process could start with one of the Burnout dimensions without any order in the development process; therefore, a Burnout dimension does not have the trait of being the antecedent or consequent of the other.

According to Perlman & Hartman (1982), the origin of Burnout is associated with chronic stress in the working environment. Its results are associated with individual outputs such as physical and mental fatigue and organizational outputs such as apathy towards work and decreased work productivity. Pines (2018) also pointed out the threat of Burnout in the workplace as Burnout decreases employee motivation and eventually causes intention to leave; thus, organisations must be aware of supportive and problematic elements in the workplace and try to eliminate the obstructive factors. Bakker & Demerouti (2008) further classified the antecedents of Burnout into two categories: Situational and individual factors.

According to Maslach & Goldberg (1998), situational factors predict employee Burnout more strongly than individual variables. The situational factors of Burnout transpire due to the imbalance between job demands and job resources (physical, psychological, social, and organizational competencies required to meet job demands) (Bakker & Demerouti, 2008). High job demands and the inadequacy of job resources to meet these requirements make employees feel tired and withdraw themselves from work psychologically (Bakker et al., 2000). Excessive workload and long working hours, role conflict, role ambiguity, low participation in decisions, insufficient social support, organizational injustice, leader-member conflicts and many more determinants that are external can make employees' Burnout (Leiter & Maslach, 1988; Maslach & Leiter, 1997; Maslach & Goldberg, 1998; Schaufeli & Bakker, 2004). On the other hand, individual factors causing Burnout; include gender difference (Carlson et al., 2003), age and tenure (Brewer & Shapard, 2004), marital status and having children (Maslach & Jackson, 1985) the high level having expectations, being idealistic and putting his work at the centre of his life (Rose, 2013), having low self-esteem and self-confidence, having difficulty defining his

emotions, having an external locus of control (Armon et al., 2012) having a neurotic personality (Bakker et al., 2006) and other personal traits (Robbins and Judge, 2017).

Burnout causes critical consequences for both employees and organizations. These grim consequences involve high costs for both parties, from the loss of workforce due to the health problems in the individual's life to the decrease in productivity to the increase in the turnover rate in organisations (Maslach & Leiter, 2017). At the individual level, it causes physiological health problems; physical fatigue, sweating, palpitations, various systemic disorders (Angerer, 2003), psychological health problems, fatigue and irritability, sleep disorders (Burke & Greenglass, 2001), depression (Katsifaraki, 2013). Individuals undergoing Burnout can obtain harmful addictions such as alcohol and substance use to solve their problems (Angerer, 2003; Mattila et al., 2007). Burned-out employees experience a decrease in interaction and problems establishing relationships with their social environment and colleagues (Maslach et al., 2001). At the organisational level, Burnout caused an increase in employee turnover and absenteeism and decreased job satisfaction (Leiter & Maslach, 1999; Salvagioni et al., 2017). Decrease organizational commitment and organizational citizenship behaviour (Maslach et al., 2001; Swider & Zimmerman, 2010). In addition, individuals experiencing Burnout may manifest counterproductive work behaviours due to their negative feelings towards themselves and their organization (Penney & Spector, 2008).

2.3.2. Components of Job Burnout

According to Maslach (1976), Burnout has three distinct dimensions: emotional exhaustion (physical fatigue, exhaustion), cynicism (detachment from work), and a lack of personal accomplishment (self-doubt). According to the model, after any of the dimensions occurs, physical disorders, a decrease in organizational commitment, job turnover and absenteeism at work arise.

Emotional Exhaustion

Emotional exhaustion refers to decreasing one's emotional resources (Pienaar & Willemse, 2008). Emotional exhaustion in work refers to when the emotional demands exposed by others surround the person and are emotionally overloaded (Maslach & Leiter, 2017). Emotional exhaustion, defined as the increase in employees' feelings of fatigue and emotionally worn out, is mainly seen in those who work in fields where one-to-one relationships are intense (Jackson et al., 1986). Therefore, emotional exhaustion can frequently be observed in the healthcare sector due to direct communication between staff and patients (Maslach & Leiter, 2017), long working hours, lack of sleeping, high responsibility, and the risk of failure (Tziner et al., 2015). While interacting with people, the person experiencing emotional exhaustion feels a lack of energy and emotional resources due to the excess psychological and emotional demands (Gardner et al., 2009). The person with this emotional intensity experiences tension and frustration, reflecting that the person cannot act as selflessly and responsibly as before and is inadequate (Leiter & Maslach, 2003). Emotional exhaustion can manifest itself in different forms, such as getting frequent sick leaves, trying to stay away from the workplace if possible, coming to work late, leaving work early, less organizational commitment, high intention to leave (Jackson et al., 1986; Wright & Hobfoll, 2004). The negative

outcomes eventually occur as emotionally exhausted individuals do not have the energy to perform their work correctly; thus, they form manoeuvrings to evade suffering more resources (Hobfoll & Freedy, 1993).

Cynicism

Cynicism, also known as depersonalisation, represents the interpersonal context dimension of Burnout which involves an emotionless or indifferent reaction to people encountered in the workplace and is seen as an attempt to cope with stress by getting away from others (Maslach et al., 2001). It manifests as a hostile, indifferent, or excessively individual response to various aspects of the job, and it usually develops as a reaction to the overload of exhaustion and as an emotional concern for self-protection (Schaufeli et al., 1996). In this sense of self-preservation, the risk is the loss of idealism and the development of apathy towards other people; thus, the person becomes insensitive to clients, colleagues, and the business (Leiter & Maslach, 2003). Moreover, according to Jackson et al. (1986), people who are high in cynicism are likely to treat people as objects, and they often use object names instead of person names when talking about other people. They tend to categorise people in their minds, treat people they meet within the framework of stereotypical patterns, and as a result, they can turn into bureaucrats who act according to strict rules and principles (Maslach & Jackson, 1984). Individuals undergoing cynicism develop a type of emotional buffer when interacting with other people, thus generating a visible gap that eventually affects the individual's well-being and capacity to work effectively (Maslach et al., 2001).

Lack of Personal Accomplishment

Lack of personal accomplishment involves the individual's feelings of competence and achievement in the workplace. Feeling failure and inadequacy results in depression and leads to negative outcomes such as low morale, conflict, inefficiency with this process, inability to cope with problems and low self-efficacy (Hock, 1988). The sense of diminished self-efficacy is increased by a lack of professional resources and a lack of professional development opportunities and social support. This feeling of inadequacy makes the burnt-out employees think they made errors while choosing their career path and causes them to dislike the type of person they think they are (Maslach & Leiter, 2017). Thus, it forms a state of a person's negative evaluations of others that turns into a negative perspective for herself (Hock, 1988; Maslach et al., 2001). Therefore, Lack of personal accomplishment refers to the self-evaluation component of the Burnout process, which implies a sense of inadequacy and a decrease in success and productivity in the workplace (Maslach et al., 2001).

Moreover, People who lack personal accomplishment also lead to personal consequences apart from work-related problems such as feeling helpless in daily life and experiencing anxiety and stress (Maslach, 1982). Individuals who see themselves as incompetent begin to think that they cannot be successful in anything they produce and that the jobs they are successful in are small and insignificant. They are insecure in their abilities because they have lost confidence in themselves. When a person sees himself as incompetent, the person begins to perceive everything that happens to her/him as if it is his deficiency and sees all achievements as meaningless and worthless (Maslach & Leiter, 1997).

2.4. Work Engagement

The following chapter will discuss the definition and concept of work engagement. Then explain the antecedents and consequences of the construct.

2.4.1. Conceptual Definition

Work Engagement is a crucial factor that influences work outcomes. (Robbins & Judge, 2016) claim that Work Engagement may predict work outcomes better than conventional job attitudes. It is a psychological presence of the individual while doing his / her job, consequently concentrating all the employee's attention on his / her work and channelling his / her current energy to the tasks related to the work (Rothbard & Patil, 2012). According to Schaufeli et al. (2006), Work Engagement is a positive, satisfying, and work-related mood marked by vigour, dedication, and absorption.

As a concept first defined by Kahn (1990), Work Engagement is an individual experiential state involving engaging behaviours people display physically, emotionally, and cognitively in the work environment. Consequently, the interest in positive psychology, which advocates focusing on positive states instead of unfavourable conditions, leads researchers to focus on work engagement, which they accept as the positive equivalent or opposite end of the spectrum and complements the concept of Burnout (Bakker et al., 2008; Bakker & Demerouti, 2008). Maslach & Leiter (1997) claimed that Work Engagement is the exact opposite of Burnout and its dimensions: energy, involvement, and efficacy are the direct opposites of the three dimensions of Burnout: emotional exhaustion, cynicism, and lack of self-accomplishment. However, Schaufeli et al. (2002) suggest that Work Engagement is a different concept than Burnout, which has a negative association.

Moreover, Schaufeli et al. (2006) defined the dimensions of Work Engagement as vigor, dedication and absorption. The vigor dimension is characterised by a high level of energy and mental flexibility that assists the employee in making efforts in his work and persistently challenging the difficulties (Schaufeli et al., 2006). The second dimension, dedication, can be described as a sense of meaningfulness, enthusiasm, inspiration, the pride that one feels for her/his work and commitment to a task or a purpose. The third dimension of work engagement, absorption, is when an employee is profoundly occupied in her/his work and has trouble breaking away from work (Schaufeli & Bakker, 2004; Schaufeli et al., 2006).

Employees high in Work Engagement can perform better and deliver better financial results as they are strongly engaged and focused on their work. In addition, dedicated employees are more innovative and entrepreneurial and thus have more creative ideas and solutions (Bakker & Albrecht, 2018). Employees engaged in work are more component in solving difficulties, dealing with stress and change in the workplace, and are critical to organizational success (Kaliannan & Adjovu, 2015). Moreover, they are more considerate and supportive of their colleagues and can perform better as a team (Bakker & Albrecht, 2018). In addition to contributing to organizational work outcomes, it is argued that engaged employees are loyal to the organization, have lower absenteeism, and have lower intention to leave (Harter et al., 2020; Macey & Schneider, 2008). Moreover, engaged employees are more likely to aim to develop their skills to contribute to the work and the business output (Macey et al., 2009). Harter et al. (2020) found that employees are emotionally and mentally engaged in their work:

- when they know what is expected of them,
- when they perform work that will utilise their potential,

- when they work with their colleagues with whom they have good relations,
- when they see their work as meaningful and vital,
- when they believe that they have opportunities to improve themselves.

2.4.2. Components of Work Engagement

According to Schaufeli et al. (2006), Work Engagement has three distinct dimensions: vigor, dedication and absorption.

Vigor

Vigor refers to the individual with high energy and mental endurance while working. This energy leads to the desire to make more effort for the job. The individual is more resistant to difficulties and thus does not get tired quickly while facing challenges (Hicks et al., 2014). Organizations require employees with a high level of vigor as when employees' energy and vigor are high, their desire to succeed increases. Achievement motivation increases individuals' ability to present creative ideas and communicate with others (Carmeli et al., 2014). According to Schaufeli et al. (2002). Employees high in vigor more easily reveal their potential talent in their business life with powerful motivation and energy, and the ability to ensure continuity as a result of their efforts and sacrifices for the work they do by showing the following traits:

- High energy at work,
- Cheerful and energetic mood,
- Eagerness to go to work,
- Not getting bored during the long work hours,
- Mentally tough and ready to face problematic situations at work.

Dedication

Dedication is described as a strong commitment to work, meaningfulness, enthusiasm, motivation, dignity, and a sense of worth fighting for (Bakker et al., 2008). It involves going beyond commitment, being enthusiastic and creative, performing jobs with pride, and reacting when a negative situation occurs in the organization (Schaufeli et al., 2006).

Dedication, first, has been interpreted as the opposite of depersonalisation - cynicism- the sub-dimension of Burnout, and it is claimed that the level of dedication will be determined by measuring the sub-dimension of the Burnout scale, depersonalisation. However, later found out that its significance goes beyond cynicism, to find the meaning and purpose in work, being enthusiastic about it (Schaufeli & Bakker, 2004).

Dedication increases belonging and enables employees to work more eagerly, embrace the organisation's rules together with its purposes, and use initiative in the problems that arise (Van Scotter & Motowidlo, 1996). People high in dedication perceived work as:

- Purposeful and meaningful
- Exciting
- Something to be proud of
- A place that provides different career opportunities (Schaufeli et al., 2002).

Absorption

Absorption refers to an individual's concentration on work (Schaufeli & Bakker, 2004). It is when the individual is so immersed in the work that he or she does not understand how the time passes while doing the work he or she has performed. The concentrated individual is pleased to do his job and finds it challenging to take a break (Schaufeli et al., 2008). According to Upadyaya & Salmela-Aro (2015), absorption refers to the behavioural engagement concept that can be characterised as the core element of engagement.

Absorption has similarities with the flow, which was characterised as the top-performing state of optimal experience (Mirvis & Csikszentmihalyi, 1991). However, absorption is a more persistent, fully focused state of mind (Sheldon et al., 2015). According to Schaufeli et al. (2002), people high in absorption are entirely focused and happily engaged in their work. Thus, for such people:

- Time flies when they are working,
- Tend to neglect everything else around them,
- feel content during the intense workload,
- Can get carried away while working.

According to Upadyaya & Salmela-Aro (2015), absorption is positively associated with job satisfaction and organisational commitment. Van Bogaert et al. (2014) also found that absorption positively affects nurses' quality of care. Moreover, (Schaufeli et al. (2006) claimed that absorption can be contagious and may unconsciously transfer from the team to the people within the team.

3. PROPOSED MODEL OF THE STUDY AND HYPOTHESES

3.1. Research on Authentic Leadership and Psychological Capital

Authentic Leadership improve employees' motivation to commit to the organisation and influence their performance to increase organizational output (Avolio & Gardner, 2005; Clapp-Smith et al., 2009; Wong & Cummings, 2009). It also has a significant relationship with Psychological Capital levels (Wu & Nguyen, 2019). Moreover, Luthans & Avolio (2003) found that PsyCap is a resource for authentic leaders. Consequently, authentic leaders also use their resources to positively contribute to their followers' Psychological Capital Levels (Luthans & Avolio, 2003; Luthans & Youssef, 2007; Wang et al., 2014). Furthermore, leaders' authentic style can overcome the asymmetry between demand and resources through the balanced processing transparent communication (Walumbwa et al., 2010). Moreover, authentic leaders give honest and constructive feedback and display evident confidence in followers, thus inducing hope (Rego et al., 2012). Consequently, authentic leaders support collaborative relationships that present feedback and growth, equip employees with the determination to be resilient, and keep a positive mindset (Luthans et al., 2015). Gardner et al. (2005) further support that authentic leaders develop resilience in their employees by increasing the level of self-confidence and the intensity of positive emotions; Norman et al. (2005) also claimed that Authentic Leadership promotes positive psychological states of the followers, which leads to a positive increase in followers' resilience level. Moreover, by developing positive emotions and identification, authentic leaders develop followers' level of optimism and thus turn the pessimist perspective into an optimistic outlook (Avolio et al., 2004).

There are studies showing a positive and significant relationship between Authentic Leadership and Psychological Capital. According to McMurray et al., (2010), there is a positive and strong association between leadership behaviour and Psychological Capital based on research conducted on non-profit companies. Olaniyan & Hystad (2016) found that Authentic Leadership influences followers' well-being and PsyCap. Jensen & Luthans (2006) found that all the Psychological Capital components positively affect Authentic Leadership behaviours. (Woolley et al., 2011) also revealed that there is a positive relationship between Authentic Leadership and Psychological Capital. Niswaty et al. (2021) found that authentic leaders encourage employees' self-development and develop followers' PsyCap. Rego et al. (2012) found that people who lead by authentic leaders are higher positive Psychological Capital and creativity. Ul Haque et al. (2020) claimed that Authentic Leadership plays a vital role in developing Psychological Capital; moreover, it has other benefits, such as reducing stress. Luthans & Avolio (2003) emphasised that individual psychological resources create authentic leaders; consequently, employees' Psychological Capital (PsyCap) is developed by an Authentic Leadership style.

3.2. Research on Authentic Leadership, Job Burnout and Work Engagement

Leadership defines the extent of job resources that turns into one of the vital resources for followers' Work Engagement (Bakker & Demerouti, 2008). According to Tims et al. (2011), it is the core element that creates an engaged workplace as leaders can affect employees' affective attitudes and behaviours. Authentic leaders focus on developing their followers, which becomes a job resource that contributes positively to Work Engagement (Alok & Israel, 2012). Walumbwa et al. (2010) also claimed that Authentic Leadership is regarded as one of the primary ingredients to positively influence employees' attitudes and behaviour in an organisation, including

work engagement. (Oh et al., 2018)) also found that Authentic Leadership has a significant relationship with work engagement. Their findings validated that the leaders' Authentic Leadership behaviour positively affects the employees' work engagement.

According to Liu et al. (2014), authentic leaders positively influence levels of Work Engagement by providing a transparent and fair working environment.

According to Du Plessis & Boshoff, (2018), Authentic Leadership directly influences work engagement. Furthermore, this influence can be developed through PsyCap as the followers high in PsyCap perceived the leaders' behaviour more positively.

Leadership style can develop employee mental state and individual development positively or negatively (Oldham & Cummings, 1996). Spooner-Lane & Patton (2007) claimed that managerial support was crucial to reducing emotional exhaustion in new nurses. According to Laschinger & Fida (2014), Authentic Leadership was negatively correlated to workplace bullying, Job Burnout, and turnover. Laschinger et al., (2012) claimed that Authentic Leadership have an indirect and negative relationship with Burnout through higher levels of empowerment. Therefore, Authentic Leadership has a shielding purpose toward Burnout by ensuring suitable work conditions and thus discouraging bullying. Lee et al. (2018) also found that Authentic Leadership decrease nurses' intention to leave. Furthermore, this relationship is significantly mediated by Burnout.

3.3. Research on Psychological Capital, Job Burnout and Work Engagement

According to COR theory, people trying to obtain resources and lack of or abundance of those resources might lead to stress or reduced well-being (Hobfoll, 2012). In everyday life, if employees invest energy and individual resources into their

work without appropriate incentives such as training, career opportunities, or constructive feedback, consequently, they might undergo Job Burnout because of the consumption of their resources (Schaufeli & Salanova, 2011).

According to Laschinger & Fida (2014), PsyCap was negatively associated with Job Burnout. Adil & Kamal (2018) also found that positive PsyCap negatively influences Job Burnout. Zhou et al. (2017) further stated that as PsyCap is a positive mental state, a high level of PsyCap leads to a low level of Job Burnout, which leads to a low level of anxiety. Ding et al. (2015) found that Burnout dimensions: emotional exhaustion, depersonalization and lack of personal accomplishment are negatively correlated with PsyCap, and thus PsyCap has a significant role in the development of Burnout and the extent of Burnout. Ocak & Güler (2017) claimed that optimism as a Psychological Capital component negatively affects perceptions of inefficacy, and resilience negatively affects cynicism (depersonalization). According to Wang et al. (2012), PsyCap acts as a resource to overcome Burnout, and it functions as a mediating variable between work-family conflict and Burnout. Li et al. (2021) stated that internal factors are essential to prevent Burnout as external factors are more enduring and more challenging to change than internal factors; therefore, PsyCap is crucial to prevent learning Burnout as it is related to internal determinants. Spence Laschinger et al., (2012) stated that PsyCap is a guarding factor for nurses dealing with negative experiences at work; moreover, it mainly acts as an influential protector from emotional exhaustion. According to Garrosa et al. (2011), the personal resources of employees play a significant role in Burnout, and optimism, as a personal resource, has a dominant impact on emotional exhaustion and lack of personal accomplishment. However, its effect on depersonalisation (cynicism) is insignificant. Dwyer et al. (2019) claimed that PsyCap reduces the level of Burnout and turnover intention,

which supports its vital role in fostering positive transitional outcomes. Research conducted on nurses who deliver palliative indicated that PsyCap plays a vital role in dealing with the challenges of serving patients at the end of life (Frey et al., 2018).

Wang et al. (2021) also found in research conducted during the Covid-19 pandemic that, PsyCap directly reduce academic Burnout. De Pedro et al. (2021) also found that mandatory self-isolation during the covid-19 pandemic significantly reduces employees' PsyCap levels, yet their research in Spain shows that PsyCap is a critical factor in overcoming Burnout during the pandemic; moreover, organisations must improve psychological resources by providing them more resources such as training, social support from management and colleagues.

The components of PsyCap individually or together develop Work Engagement (Bakker & Demerouti, 2008). PsyCap generates a greater pool of resources, consequently growing an individual's mindset and presenting more prominent energy and engagement (Sweetman & Luthans, 2010). According to Halbesleben (2010), "personal resources (e.g. optimism and self-efficacy) were associated with work engagement. Chaurasia & Shukla (2014) found that under similar working conditions and resources, an individual's Work Engagement level is affected by PsyCap significantly; moreover, if there is a high positive leader-member interaction, PsyCap can be developed more efficiently; in return, it leads higher employee retention and works engagement. Avey et al. (2008) found a significant relationship between Work Engagement and Psychological Capital. Furthermore, in this relation, people's positive emotions operate in a mediating role.

In their study, Joo et al. (2015) found that PsyCap improves employees' work engagement; moreover, Authentic Leadership has a moderating role in this

relationship. Li et al. (2018) stated that based on the conservation of resources theory, there are two strategies of resource development: the Loss Spiral and the Gain Spiral. Loss Spiral makes an individual deploy more effort and energy to preserve the resources; however, it results in exhaustion in the long run. However, a gain spiral indicates having enough resources, and thus an individual can get additional resources such as PsyCap components conveniently, which leads to higher motivation and engagement. Xanthopoulou et al. (2007) also revealed that personal resources such as self-efficacy, optimism, and organizational-based self-esteem are determinants of employee commitment. Accordingly, dedicated people are people with high self-efficacy and believe that they can meet the job demands.

4. RESEARCH DESIGN AND METHODOLOGY

Research design is a blueprint for leading research by gathering, measuring, and interpreting the data (Creswell, 2014). Therefore, it is a decision about the type of data collection, sample, and measurements (Sekaran & Bougie, 2016). This study employed a cross-sectional design consisting of four diverse scales used to collect, sample, and measure the data.

According to Sekaran and Bougie (2016), a survey is a popular strategy that allows attaining quantitative and qualitative data. Moreover, a survey is a method to reach a larger sample and achieve higher external validity than other methods such as experimental focus groups.

The current study applied the Likert scale in the survey research. There are two benefits of using the Likert scale. First, unlike the yes/no question, the Likert scale allows measuring nuances (Johnson, 2016). As this study mainly investigates attitudes, beliefs, and opinions, the Likert scale is reliable and compatible with collecting such data. In addition to all those advantages, mail, or e-mail surveys, which are the tool for this study, prevent geographical dependence, thus allowing the researchers to reach a much broader population when compared with other survey conduction mediums (Erişen et al., 2013).

4.1. The Sampling Procedures

This study concentrates on the employees who work in the health sector in Turkey. Thus, the unit of analysis will be individuals. In the current study, the sample confidence level is 95% by utilising a convenience sampling method. The survey was conducted on the Anatolian side of Istanbul. The list of the hospitals in question was taken from the official website of the Provincial Health Directorate

(Sağlık Kurumları, 2022). The criteria that played a role in selecting these hospitals were that they were geographically located in the same region and therefore represented similar demographic structures.

4.2. The Measurement Instruments

Four measurement tools were applied in this study to measure related concepts: Authentic Leadership, Psychological Capital, Job Burnout, and work engagement.

A 16-item Authentic Leadership Questionnaire (ALQ) created by Walumbwa et al., (2008) was employed to explain employees' judgment of the level of authentic behaviours of their leaders. ALQ consists of four dimensions: Relational Transparency (5 items), Internalized Moral Perspective (4 items), Balanced Processing (3 items) and Self Awareness (4 items). The scale was translated and validated in Turkish by Tabak et al., (2012) and found that Cronbach's Alpha for Relational Transparency was 0.86, for Internalized Moral Perspective 0.83, for Balanced Processing 0.85 and for Self-Awareness 0.90. A 5-point Likert scale ranging from "Strongly disagree" to "Strongly agree" is used to obtain ordinal data.

Psychological Capital was a scale developed by Luthans et al. (2007), and it consists of 24 questions that explain four Psychological Capital components (self-efficacy, hope, optimism, and resilience). A 5-point Likert scale ranging from "Strongly disagree" to "Strongly agree" was used to obtain ordinal data and translated into Turkish and validated by Akçay (2014). Cronbach's Alpha on Akçay's adaptation for self-efficacy was 0.94, for hope 0.87, for optimism 0.82 and for resilience 0.82.

For the Burnout dimensions (emotional exhaustion, cynicism, and personal accomplishment), Maslach Burnout Inventory (Maslach, 1982) will be used. The

scale has 22 items that cover three dimensions. The scale had a Cronbach's alpha of 0.83 and was translated into Turkish by Ergin (1992). Ergin (1992) also tested and found that Cronbach's Alpha's for emotional exhaustion was 0.83, for cynicism 0.71 and for personal accomplishment 0.71. A 5-point Likert scale ranging from "rarely" to "always" is used to obtain ordinal data).

Work Engagement was measured with the seventeen-item version of the Utrecht Work Engagement Scale (UWES) (Schaufeli et al., 2006). The UWES indicates three underlying dimensions, which are measured with three items each: vigor, dedication, and absorption. The three dimensions of engagement were combined additively to create an overall Work Engagement scale. The scale was translated into Turkish and validated by Eryılmaz and Doğan (2011). A 5-point Likert scale ranging from "Strongly disagree" to "Strongly agree" is used to obtain ordinal data. On the Eryılmaz & Doğan (2012)' adaptation, Cronbach's Alpha's values were 0.87 for vigor, 0.87 for dedication, and 0.84 for absorption.

4.3. Research Hypotheses

H₁: Authentic Leadership of the leaders has a significant and positive impact on Work Engagement.

H₂: Authentic Leadership of the leaders has a significant and negative impact on Job Burnout.

H₃: The relationship between Authentic Leadership and Work Engagement is mediated by Psychological Capital.

H₄: The relationship between Authentic Leadership and Job Burnout is mediated by Psychological Capital.

4.4. The Data Collection Method

To explain the relationships, the online survey collection method has been chosen for this empirical research. Moreover, this study aims to increase external validity by accessing a more extensive sample by using an online tool. To collect the data, close-ended questionnaires were used. The survey was conducted in February 2021. The target respondents for the questionnaire were employees in the health sector in Turkey who work in public and private hospitals on the Anatolian side of İstanbul. The data of the collected reviews were analysed through statistical instruments and techniques. Statistical Package for the Social Sciences (SPSS) version 25.0 and AMOS software was used to analyse the data.

4.5. The Evaluation of the Research Findings

4.5.1. Statistical Analysis of the Study

The current study's analysis started with a descriptive analysis to discover the frequencies and percentage of the sample regarding gender, age, education, and tenure, total work experience, occupation.

Following descriptive statistics, normality is tested by considering Skewness and Kurtosis levels. According to George & Mallery (2010), the values for skewness and kurtosis within -2 and +2 are regarded as satisfactory to show normal univariate distribution.

The third step evaluated the factors through Confirmatory factoring analysis (CFA). CFA is utilised if there is a clear theory about the model (Orcan, 2018). The current study employed valid and localised scales already part of the theories and translated and validated in Turkish. Therefore, CFA was used for the factor analysis of the scales. However, the CFA results showed a lack of model fit and discriminant

validity for Work Engagement and Authentic Leadership. According to Decoster & Hall, (1998). If CFA results provide a lack of fit, it is acceptable to test the model in EFA (Exploratory Factor Analysis) to understand the disparities.

Consequently, for Authentic Leadership and work engagement, factor analyses were estimated by principal component analysis with varimax rotation, and then CFA was utilised. On PCA (Principal Component Analysis) and CFA, items less than 0.70 were removed as suggested by Hair et al. (2010). According to Hair et al., (2010), standardized loading estimates should be ideally 0.7 or greater, yet the values within 0.5-0.7 are also acceptable.

The fourth step was to discover the validity and reliability of the scales. Thus, the construct reliability of the scales is evaluated. To possess an adequate construct validity, the measurements must have a strong relationship for convergent validity and no relationship for discriminant validity. Convergent validity explains the degree of the correlation between the latent variable, and on the other hand, discriminant validity shows to what degree the latent variables are different. Convergent validity can be evaluated through Average Variance Extracted (AVE) and Composite Reliability (CR). According to Fornell & Larcker, (1981), to achieve convergent validity, AVE must be higher than 0.5, yet between 0.4 and 0.5 is also acceptable if composite reliability is higher than 0.6. However, to achieve discriminant validity, AVE should be larger than the square of the correlation between the two factors (Hair et al., 2010).

The heterotrait-monotrait ratio of correlations (HTMT) analysis was also utilised to understand discriminant validity for each construct. It has a greater sensitivity to detect discriminant validity than Fornell and Larcker criterion (Ab

Hamid et al., 2017). The Cronbach's alphas are also tested to measure their reliability. According to Sekaran & Bougie, (2016), Cronbach Alfa's less than 0.60 are recognised to be inadequate, 0.70-0.80 adequate, and those over 0.80 good to measure inter-item consistency.

Finally, to understand the relations between variables, Pearson's Correlation analysis used Hayes Process Methods and Structural Equational Model to test the mediation effects.

4.5.2. Descriptive Analysis

Sekaran & Bougie (2016, p.278) defined data analysis as "getting a feel for data". Thus, the current study's data is analysed through descriptive statistics to get insight into the respondents' characterisation, presented in Table 1.

The results show that 73, 9% of the respondents are female (274), whereas 26, 1% are male (97). Most respondents are between 21 and 30 years (%38) and 31-40 years (%41, 2). Most of the respondents have a graduate degree (%40,2). 33, 7% of respondents have work experience between 1 and 3 years in the current organisation. Moreover, the total work experience of respondents indicates that 31, 5% of respondents have 1-5 years of work experience, followed by 6-10 years of work experience (27,2%). Among the eight diverse occupational categories, most respondents work as GP/Specialist Doc (38, 8%) and Nurse (28,3%).

Table 1*Sample Characteristics*

N=371	Category	Frequency	Percent
Gender	Female	274	73,9
	Male	97	26,1
Age	<20	4	1,1
	21-30	141	38,0
	31-40	153	41,2
	41-50	39	10,5
	51-60	34	9,2
Education	High School	27	7,3
	Graduate	149	40,2
	Masters	110	29,6
	PhD	85	22,9
Tenure	<1	72	19,4
	1-3	125	33,7
	4-6	78	21,0
	7-9	31	8,4
	>10	65	17,5
Total Work Experience	1-5	116	31,3
	6-10	101	27,2
	11-15	71	19,1
	16-20	28	7,5
	>21	55	14,8
Occupation	Assistant Doc	55	14,8
	Nurse	105	28,3
	Intern Doc	4	1,1
	Admin Staff	16	4,3
	Prof/Doc Dr	2	,5
	Medical Technician	42	11,3
	Medical Secretary	3	,8
	GP/Specialist Doc	144	38,8

4.5.3. Factor and Reliability Analysis

Before proceeding with the factoring analysis, the Mahalanobis test is conducted, and the test results indicate that there was no outlier for the data set. Following the Mahalanobis test, a normality test is employed. Hair et al. (2010) suggested that if Skewness is between -2 to +2 and Kurtosis is between -7 to +7, in addition to that, if the sample size is above 200, then the data can be considered as normally distributed (Table 2). Table 2 further shows that skewness and kurtosis for each dependent variable were found between -1 / +1; therefore, data were normally distributed, and parametric tests could be conducted.

Table 2

Skewness and kurtosis

Variable		Statistic	Std. Error
PsyCap	Skewness	-,294	,127
	Kurtosis	,854	,253
Work Engagement	Skewness	-,248	,127
	Kurtosis	-,172	,253
Burnout	Skewness	-,058	,127
	Kurtosis	-,578	,253

Confirmatory factor analysis (CFA) is a method that examines whether there is a relationship between observed variables and their latent variables (Orcan, 2018). According to Hair et al. (2010), the primary purpose of CFA is to answer whether the measurement model is valid or not. The fit indices of CFA results will be reviewed to understand whether the model is valid or not. CFA provides various fit indices, Hair et al. (2010) state that a researcher can rely on at least one absolute fit and one incremental fit index during the CFA test. According to Hu & Bentler, (1999), some of the absolute fit indexes are the Goodness-of-Fit Index (GFI), the Adjusted Goodness-of-Fit Index (AGFI), root mean squared residual (RMSR), and the root

mean square error of approximation (RMSEA). Some examples of the incremental fit indexes are the Normed Fit Index (NFI), the Tucker-Lewis Index (TLI), Relative Noncentrality Index (RNI), and Comparative Fit Index (CFI).

In this study, CFA is utilised as there is a solid theoretical foundation of the constructs. However, the constructs that do not show a valid model fit on CFA are analysed through principal component analysis and tested with CFA to adopt Structural Equational Modelling. For EFA and Hayes Process, IBM SPSS version 25, on the other hand, IBM SPSS AMOS version 24 is applied for CFA and SEM.

Table 3

Threshold for Fit Measures

Fit Measures	Descriptions	Threshold
Chi-square/df (cmin/df)	The relative chi-square	<3 good, <5 permissible
CFI	Comparative Fit Index	>.95 great, >.90 good, >.80 permissible.
GFI	Goodness-of-Fit Index	>.95
SRMR	Root mean squared residual	<.09
RMSEA	Root mean square error of approximation	<.05 good, .05-.10 moderate, >.10 not permissible.

Source: Hu and Bentler (1999), Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. **Structural Equation Modeling**, 6(1), 1–55.

Authentic Leadership scale, the fit measurements (Table 4) showed that the model is acceptable after cutting off the item RT4 and item B1.

Table 4

Authentic Leadership Fit Measures

Fit Measures	Threshold	Authentic Leadership Results	Status
Chi-square/df (cmin/df)	<3 good, <5 permissible.	2,211	Good
CFI	>.95 great, >.90 good, >.80 permissible.	0, 978	Great
GFI	>.95	0, 922	Not Acceptable
AGFI	>.80	0,888	Acceptable
SRMR	<.09	,0361	Good
RMSEA	<.05 good, .05-.10 moderate, >.10 not permissible.	,057	Moderate

After the model fit confirmation, the scale's construct validity has been tested.

Table 5

Validity and Reliability of Authentic Leadership Scale

Authentic Leadership	Cronbach's alpha	Composite Reliability	Average Variance Extracted (AVE)
Self-Awareness	0,885	0,887	0,663
Relational Transparency	0,856	0,854	0,595
Moral Perspective	0,871	0,882	0,651
Balance Processing	0,817	0,819	0,693

Although reliability criteria are met, discriminant validity did not meet the Fornell and Larcker criterion due to the high correlation between the factors. The heterotrait-monotrait ratio of correlations values less than 0.90 is acceptable, but ideally, it should be less than 0.85. However, since the original model cannot satisfy the discriminant validity, EFA is conducted.

Table 6*Authentic Leadership Discriminant Validity*

	CR	AVE	MSV	MaxR(H)	RelTran	MorProc	BalanPro	SelfAwa
RelTran	0,857	0,602	0,876	0,867	0,776			
MorProc	0,871	0,628	0,876	0,875	0,936	0,792		
BalanPro	0,794	0,568	0,943	0,825	0,895	0,855	0,754	
SelfAwa	0,887	0,663	0,943	0,894	0,861	0,811	0,971	0,814
HTMT	RelTran		MorProc		BalanPro		SelfAwa	
RelTran	-							
MorProc	0,940		-					
BalanPro	0,918		0,896		-			
SelfAwa	0,869		0,819		0,981		-	
RelTran: Relational Transparency, MorProc: Moral Perspective, BalanPro: Balanced Processing, SelfAwa: Self Awareness								

According to Hair et al., (2010), factor loadings should be more than 0.70; however, between 0.60 and 0.70 is acceptable. Therefore, in this study, the Varimax rotated component matrix indicates two factors by eigenvalue 1 (Table 7), Item 4 and item 10 cut off due to low factor loadings. Moreover, items 2 and 3 were taken off due as they loaded high in two factors. Kaiser-Meyer-Olkin Measure of Sampling Adequacy resulted in 0.945, more than acceptable level, 0.80, and Bartlett's Test of

Sphericity found significant. Furthermore, two factors explain 0.68 of the variances according to principal component analysis.

Table 7

Varimax Rotated Component Matrix of Authentic Leadership

Factors	Factor Loadings
Self-Awareness / Balanced Processing	
Knows when it is time to reevaluate his or her position on important issues.	,809
accurately describes how others view his or her capabilities.	,804
listens carefully to different points of view before coming to conclusions	,787
seeks feedback to improve interactions with others.	,778
analyzes relevant data before coming to a decision	,751
shows he or she understands how specific actions impact others	,673
Moral Perspective / Relational Transparency	
makes decisions based on his or her core values.	,773
demonstrates beliefs that are consistent with actions.	,770
says exactly what he or she means.	,758
Masks you to take positions that support your core values.	,715
makes difficult decisions based on high standards of ethical conduct.	,698
displays emotions exactly in line with feelings.	,695

Based on two factors, CFA is reproduced to advance with further analysis. For all items, Standardised regression weights were found to be more than 0.70 (Table 8).

Table 8. Standardised regression weights of Authentic Leadership

Indicators	Latent Variable	Estimate
Knows when it is time to reevaluate his or her position on important issues.	Self-Awareness / Balanced Processing	,871
Accurately describes how others view his or her capabilities.	Self-Awareness / Balanced Processing	,831
listens carefully to different points of view before coming to conclusions	Self-Awareness / Balanced Processing	,803
Seeks feedback to improve interactions with others.	Self-Awareness / Balanced Processing	,788
Analyses relevant data before coming to a decision.	Self-Awareness / Balanced Processing	,814
shows he or she understands how specific actions impact others	Self-Awareness / Balanced Processing	,739
makes decisions based on his or her core values	Moral Perspective / Relational Transparency	,792
Demonstrates beliefs that are consistent with actions.	Moral Perspective / Relational Transparency	,850
Says exactly what he or she means.	Moral Perspective / Relational Transparency	,725
Makes difficult decisions based on high standards of ethical conduct.	Moral Perspective / Relational Transparency	,754
Asks you to take positions that support your core values.	Moral Perspective / Relational Transparency	,802
Displays emotions exactly in line with feelings.	Moral Perspective / Relational Transparency	,710

Table 9 indicates that the 2-factor model has higher model fit results comparing to the 3-factor model.

Table 9

Authentic Leadership Fit Measures Comparison

Fit Measures	Threshold	3 Factors	2 Factors
Chi-square/df (cmin/df)	<3 good, <5 permissible.	2,211	1,938
CFI	>.95 great, >.90 good, >.80 permissible.	0,978	0,984
GFI	>.95	0,922	0,958
AGFI	>.80	0,888	0,936
SRMR	<.09	0,0361	0,0257
RMSEA	<.05 good, .05-.10 moderate, >.10 not permissible.	,057	,050

The two-factor model for Authentic Leadership achieved discriminant validity by detecting discriminant validity with Fornell and Larcker criterion and HTMT Analysis (Table 10.)

Table 10

Authentic Leadership (2 Factors) Discriminant Validity

Factors	CR	AVE	MSV	MaxR(H)	SABP	MPRT
Self-Awareness / Balanced Processing	0,919	0,654	0,676	0,923	0,809	
Moral Perspective / Relational Transparency	0,899	0,598	0,676	0,905	0,822	0,774
HTMT Analysis	SABP			MPRT		
SABP	-					
MPRT	0,836			-		
SABP: Self Awareness / Balanced Processing, MPRT: Moral Perspective /Relational Transparency						

Finally, the validity and reliability of the factors are analysed. The results showed that the Cronbach's alpha for the Authentic Leadership scale is 0.940, for Self-Awareness & Balanced Processing, CA is 0.920, and for Moral Perspective & Relational Transparency, CA is 0.896. Both composite reliability and average variance extracted are above the minimum criteria (Table 11).

Table 11

Validity and Reliability of Authentic Leadership Scale (2 Factors)

Authentic Leadership	Cronbach's alpha	Composite Reliability	Average Variance Extracted (AVE)
Self-Awareness & Balanced Processing	0,920	0,919	0,654
Morel Perspective & Relational Transparency	0,896	0,899	0,598

Psychological Capital is tested by CFA; factor loadings less than 0.70 are omitted except for keeping factor loadings close to 0.70. Therefore, item 5, 6, 7, 9, 12, 13, 15, 16, 18, 19, 20, 23, and item 24 were cut off due to low factor loadings.

Table 12*Standardised regression weights of Psychological Capital*

Indicators	Latent Variables	Estimate
I feel confident helping to set targets/goals in my work area	<--- Self-Efficacy	,754
I feel confident contributing to discussions about the organization's strategy	<--- Self-Efficacy	,681
I feel confident in representing my work area in meetings with management	<--- Self-Efficacy	,678
I feel confident analysing a long-term problem to find a solution	<--- Self-Efficacy	,716
I can think of many ways to reach my current work goals	<--- Hope	,690
Right now, I see myself as being pretty successful at work	<--- Hope	,755
At the present time, I am energetically pursuing my work goals	<--- Hope	,705
I am optimistic about what will happen to me in the future as it pertains to work.	<--- Optimism	,655
I always look on the bright side of things regarding my job.	<--- Optimism	,808
I feel I can handle many things at a time at this job.	<--- Resilience	,695
I can get through difficult times at work because I've experienced difficulty before	<--- Resilience	,757
I usually manage difficulties one way or another at work	<--- Resilience	,691

CFA outcomes revealed that the fit measures of the PsyCap scale could be regarded as a good model fit. Solely CFA and RMSEA are slightly above the good

level; nevertheless, as they are still in the tolerable range, thus the model is accepted (Table 13).

Table 13

Psychological Capital Fit Measures

Fit Measures	Threshold	AL Results	Status
Chi-square/df (cmin/df)	<3 good, <5 permissible.	2,751	Good
CFI	>.95 great, >.90 good, >.80 permissible.	0, 952	Great
GFI	>.95	0, 945	Close to Acceptable
AGFI	>.80	0, 911	Acceptable
SRMR	<.09	,0418	Good
RMSEA	<.05 good, .05-.10 moderate, >.10 not permissible.	.069	Moderate

PsyCap scale achieved discriminant validity by detecting discriminant validity with Fornell and Larcker criterion and HTMT Analysis.

Table 14*Psychological Capital Discriminant Validity*

	CR	AVE	MSV	MaxR(H)	Self-Efficacy	Hope	Optimism	Resilience
Self-Efficacy	0,800	0,501	0,707	0,803	0,708			
Hope	0,760	0,514	0,673	0,763	0,773	0,717		
Optimism	0,699	0,540	0,520	0,724	0,551	0,721	0,735	
Resilience	0,758	0,511	0,707	0,761	0,841	0,820	0,596	0,715
HTMT Analysis	Self-Efficacy		Hope		Optimism		Resilience	
Self-Efficacy	-		-		-		-	
Hope	0,761		-		-		-	
Optimism	0,545		0,731		-		-	
Resilience	0,844		0,824		0,609		-	

Furthermore, the results revealed that the Cronbach's alpha for PsyCap is 0.881; exclusively, resilience is inferior to the adequate level of 0.70. However, it is accepted that as the value is close to the acceptable level, the factors further resulted in good composite reliability so as not to deviate from the theory. Moreover, the average variance extracted is above the minimum criteria (Table 15).

Table 15*Validity and Reliability of Psychological Capital Scale*

PsyCap	Cronbach's alpha	Composite Reliability	Average Variance Extracted (AVE)
Self-Efficacy	0.799	0,800	0,501
Hope	0.753	0,760	0,514
Optimism	0.754	0,699	0,540
Resilience	0.687	0,758	0,511

Burnout is examined by CFA; factor loadings less than 0.70 are eliminated except for keeping factor loadings close to 0.70. Therefore, item 4, 7, 9, 14, 15, 16, 19, 20,21, 22 were omitted from the scale item 17 is retained on the scale so as not to diverge from the theory that measure the sub-construct; furthermore, model fit is achieved with this item on the CFA (Table 16).

Table 16*Standardised regression weights of Burnout*

Indicators		Latent Variable	Estimate
I feel frustrated by my job.	<---	Emotional Exhaustion	,640
I feel burned out from my work.	<---	Emotional Exhaustion	,933
Working with people all day is really a strain for me.	<---	Emotional Exhaustion	,686
I feel fatigued when I get up in the morning and have to face another day on the job	<---	Emotional Exhaustion	,756
I feel used up at the end of the workday.	<---	Emotional Exhaustion	,741

Indicators		Latent Variable	Estimate
I feel emotionally drained from my work	<---	Emotional Exhaustion	,836
I feel exhilarated after working closely with my colleagues	<---	Lack of Personal Accomplishment	,672
I can easily create a relaxed atmosphere with the people.	<---	Lack of Personal Accomplishment	,500
I feel very energetic.	<---	Lack of Personal Accomplishment	,725
I worry that this job is hardening me emotionally.	<---	Cynicism	,860
I have become more callous toward people since I took this job.	<---	Cynicism	,869
I feel I treat some people as if they were impersonal objects.	<---	Cynicism	,649

Burnout fit measures (Table 17) revealed that apart from GFI, which is below the acceptable level of .95, fit measures indicate the model has a good fit to proceed with further analysis.

Table 17

Burnout Fit Measures

Fit Measures	Threshold	AL Results	Status
Chi-square/df (cmin/df)	<3 good, <5 permissible.	3,740	Permissible
CFI	>.95 great, >.90 good, >.80 permissible.	0, ,943	Good
GFI	>.95	0, 919	Below Acceptable
AGFI	>.80	0, 871	Acceptable
SRMR	<.09	,0596	Good
RMSEA	<.05 good, .05-.10 moderate, >.10 not permissible.	.086	Moderate

The Burnout scale produced discriminant validity by identifying discriminant validity with Fornell and Larcker criterion and HTMT Analysis (Table 18).

Table 18

Burnout Discriminant Validity

	CR	AVE	MSV	MaxR(H)	EE	LoPA	Cyn
Emotional Exhaustion (EE)	0,897	0,595	0,421	0,930	0,771		
Lack of Personal Accomplishment (LoPA)	0,670	0,409	0,401	0,694	0,633	0,639	
Cynicism (Cyn)	0,839	0,638	0,421	0,869	0,649	0,460	0,799
HTMT Analysis	EE			LoPA		Cyn	
Emotional Exhaustion	-			-		-	
Lack of Personal Accomplishment	0,582			-		-	
Cynicism	0,708			0,482		-	

Moreover, the outcomes revealed that (Table 19) the Cronbach's alpha for the Burnout scale is 0.895 among the sub-factors "Lack of Personal Accomplishment" is observed below the satisfactory level of 0.70. However, the sub-factor is accepted as the value is close to the acceptable level so as not to deviate from the theory. However, the average variance extracted for "Lack of Personal Accomplishment" exposed below the acceptable level; nevertheless, as composite reliability is greater

than 0.6, the convergent validity of the construct is accepted (Fornell & Larcker, 1981).

Table 19

Validity and Reliability of Burnout Scale

Burnout	Cronbach's alpha	Composite Reliability	Average Variance Extracted (AVE)
Emotional Exhaustion	0.898	0,897	0,595
Lack of Personal Accomplishment	0.674	0,670	0,409
Cynicism	0.807	0,839	0,638

CFA is conducted for the Work Engagement scale to test the theory based on the current data. Item 8 was cut off due to low factor loading; however, item 7 kept keeping the sub construct intact. The model fit results (Table 20) showed a poor fit on four different indicators.

Table 20

Work Engagement Fit Measures

Fit Measures	Threshold	AL Results	Status
Chi-square/df (cmin/df)	<3 good, <5 permissible.	15,379	Not Acceptable
CFI	>.95 great, >.90 good, >.80 permissible.	0, 885	Permissible
GFI	>.95	0, 850	Not Acceptable
AGFI	>.80	0, 681	Not Acceptable
SRMR	<.09	,0779	Acceptable
RMSEA	<.05 good, .05-.10 moderate, >.10 not permissible.	,197	Not Acceptable

Although reliability standards are met, discriminant validity did not reach the Fornell and Larcker criterion (Table 21). On the other hand, HTMT outcomes indicate that the results are not ideal but acceptable. Nevertheless, since the original model cannot satisfy the discriminant validity due to Fornell and Larcker criterion and HTMT results between Absorption and Dedication are close to the unacceptable level of .90, EFA is conducted.

Table 21

Work Engagement Discriminant Validity

	CR	AVE	MSV	MaxR(H)	Vigor	Dedication	Absorption
Vigor	0,917	0,787	0,809	0,945	0,887		
Dedication	0,783	0,555	0,809	0,884	0,899	0,745	
Absorption	0,672	0,530	0,644	0,842	0,697	0,802	0,728
HTMT Analysis	Vigor			Dedication		Absorption	
Vigor	-			-		-	
Dedication	0,822			-		-	
Absorption	0,736			0,898		-	

For the Work Engagement scale, the Varimax rotated matrix is employed, Item 8 due to low factor loading and Item 9 due to low factor loading and possessing similar factor loadings in two factors, cut off. The results revealed that the items are loaded into the two factors by eigenvalue 1. Kaiser-Meyer-Olkin Measure of Sampling Adequacy resulted in 0.872, more than acceptable level, 0.80, and Bartlett's Test of Sphericity found significant. Furthermore, according to principal component analysis, two factors explain 0.74 of the variances (Table 22).

Table 22*Varimax Rotated Component Matrix of Work Engagement*

Factors	Factor Loadings
Vigor / Dedication	
At my work, I feel strong and vigorous	,914
At my work, I feel bursting with energy.	,910
I am enthusiastic about my job.	,839
When I get up in the morning, I feel like going to work.	,819
I feel happy when I work intensely.	,577
Dedication / Absorption	
My job inspires me.	,787
I am immersed in my work.	,756
I am proud of the work that I do	,743

CFA is reproduced to advance with further analysis based on the two-factor model. Except for item 7, which is taken off, Standardised regression weights were found to be more than 0.70 (Table 23).

Table 23*Standardised regression weights of Authentic Leadership*

Indicators		Latent Variable	Estimate
At my work, I feel strong and vigorous	<---	Vigor / Absorption	,859
At my work, I feel bursting with energy.	<---	Vigor / Absorption	,785
I am enthusiastic about my job.	<---	Vigor / Absorption	,944
When I get up in the morning, I feel like going to work.	<---	Vigor / Absorption	,852
I feel happy when I work intensely.	<---	Vigor / Absorption	,713
My job inspires me.	<---	Dedication	,832
I am proud of the work that I do	<---	Dedication	,851

CFA outcomes revealed that the model with two factors could be regarded as a sufficient model fit compared to the 3-factor model as all fit indicators resulted in a good fit for the model (Table 24).

Table 24

Work Engagement Fit Measures Comparison

Fit Measures	Threshold	3 Factors	2 Factors
Chi-square/df (cmin/df)	<3 good, <5 permissible.	15,379	2,857
CFI	>.95 great, >.90 good, >.80 permissible.	0, 885	0, 989
GFI	>.95	0, 850	0,974
AGFI	>.80	0, 681	0,940
SRMR	<.09	,0779	,0341
RMSEA	<.05 good, .05-.10 moderate, >.10 not permissible.	,197	,071

The two-factor model for Work Engagement achieved discriminant validity by detecting discriminant validity with Fornell and Larcker criterion and HTMT Analysis (Table 25).

Table 25*Work Engagement Discriminant Validity (2 Factor Model)*

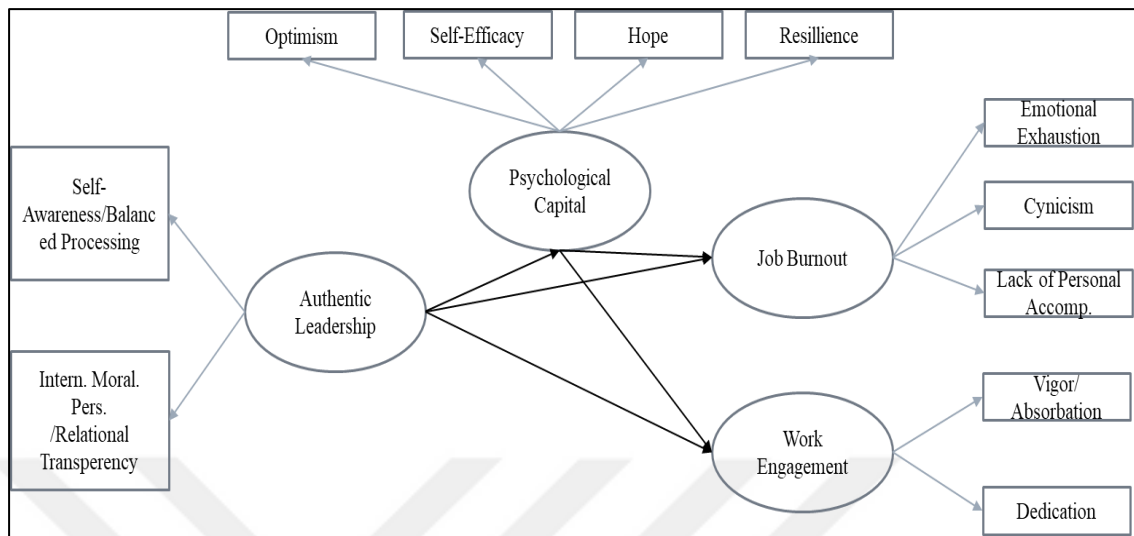
	CR	AVE	MSV	MaxR(H)	Vigor / Absorption	Dedication
Vigor / Absorption	0,919	0,696	0,492	0,942	0,834	
Dedication	0,829	0,709	0,492	0,830	0,701	0,842
HTMT Analysis	Vigor / Absorption					Dedication
Vigor / Absorption	-					
Dedication	0,689					-

Finally, the validity and reliability of the factors are analysed. The results showed that the Cronbach's alpha for the Work Engagement scale is 0.914, Vigor & Absorption 0.922, and dedication 0.828. Both composite reliability and average variance extracted are above the minimum criteria (Table 26).

Table 26*Validity and Reliability of Work Engagement*

Work Engagement	Cronbach's alpha	Composite Reliability	Average Variance Extracted (AVE)
Vigor / Absorption	0.922	0,919	0,696
Dedication	0.828	0,829	0,709

Figure 3. New Model After Factoring Analysis



The variance inflation factor (VIF) was measured for the new model (figure 3) to avoid a multicollinearity problem. According to Narayanan et al., (1993) if VIF is greater than 10, it would reveal a multicollinearity problem. VIF estimated less than 10 for the new model based on collinearity statistics.

4.5.4. T-test, One-way Anova Analyses

Table 27

Independent t-test results of gender and variables

	Female (n = 274)		Male (n = 97)		Levene's Test for Equality of Variances		T-Test	
Variables	Mean	SD	Average	SD	F	Sig	t	Sig (2-tailed)
Authentic Leadership	3.0322	.84901	3.1400	.99409	3.939	.048	-.952	.343
PsyCap	3.7533	.57214	3.9046	.53047	.762	.383	369	.023
Burnout	2.9814	.82195	2.6744	.72170	3.868	.050	369	.001
Work Engagement	3.3186	.89120	3.4683	.83497	1.599	.207	369	.149

T-test analysis (Table 27) shows no statistically significant difference between Authentic Leadership/gender and Authentic Leadership/work engagement. On the other hand, t-test results revealed a statistically significant difference between Psychological Capital and gender ($P = .023 < 0,05$). Males showed higher Psychological Capital mean score ($3,904 \pm 0,53047$) than females ($3.753 \pm 0,572$). The results further showed that there is a statistically significant difference between Burnout and gender ($P = 0.01 < 0,05$). Females showed higher Burnout mean score ($2,981 \pm 0,822$) than males ($2,674 \pm 0,722$). However, the data indicated that the number of female respondents is higher than males which affected the t-test.

Table 28*One-Way ANOVA Test Results – Age*

Variables	Age	N	Mean	SD	Levene Statistic	Anova	
					Sig	F	P
Authentic Leadership	<20	4	3.1667	.53142	.232	2.024	.090
	21-30	141	3.0030	.90213			
	31-40	153	3.0212	.82847			
	41-50	39	3.0577	1.06103			
	51-60	34	3.4657	.85751			
PsyCap	<20	4	3.9167	.61237	.232	2.103	.080
	21-30	141	3.7837	.60635			
	31-40	153	3.7653	.54221			
	41-50	39	3.7030	.53318			
	51-60	34	4.0441	.46972			
Burnout	<20	4	2.7500	.97895	.698	1.062	.375
	21-30	141	2.9551	.80064			
	31-40	153	2.9254	.81544			
	41-50	39	2.8397	.83910			
	51-60	34	2.6569	.73820			
Work Engagement	<20	4	3.6429	.71429	.675	3.083	.016
	21-30	141	3.3141	.88726			
	31-40	153	3.2586	.86008			
	41-50	39	3.4945	.82512			
	51-60	34	3.7941	.88776			

Table 28 shows that age significantly impacts Work Engagement but has no meaningful effect on the other variables: Authentic Leadership, Psycap, Burnout.

Tukey posthoc test was conducted for age's influence on work engagement, and the results showed a meaningful difference between the 21-30 years old group and 51-60 years old group (0.033), 31-40 years old and 51-60 years old group (0.011). 51-60 years participants showed the highest mean score ($\mu_{51-60} = 3,794 \pm 0,888$) compared to the lowest mean scores of 31-40 years participants ($\mu_{31-40} = 3,259 \pm 0,887$) and the second-lowest mean scores of 21-30 years participants ($\mu_{21-30} = 3,314 \pm 0,860$).

Table 29*One-Way ANOVA Test Results - Education*

Variables	Education	N	Mean	SD	Levene Statistic	Anova	
					Sig	F	P
Authentic Leadership	HighSchool	27	3.1852	1.03603	.540	2.024	.049
	Graduate	149	3.1756	.87428			
	Masters	110	3.0356	.85741			
	PhD	85	2.8510	.88052			
PsyCap	HighSchool	27	3.8426	.69312	.033	2.103	.880
	Graduate	149	3.7830	.61013			
	Masters	110	3.8167	.56540			
	PhD	85	3.7637	.42780			
Burnout	HighSchool	27	2.9259	.89644	.628	1.062	.986
	Graduate	149	2.9161	.82202			
	Masters	110	2.8826	.79277			
	PhD	85	2.8912	.78448			
Work Engagement	HighSchool	27	3.6402	.93792	.197	3.083	.308
	Graduate	149	3.3404	.86890			
	Masters	110	3.2896	.83825			
	PhD	85	3.3866	.92183			

Table 29 indicates that education has a meaningful effect on Authentic Leadership, however, is no meaningful effect on the other variables: Psycap, Burnout, and work engagement. Tukey posthoc test was conducted for education's influence on Authentic Leadership, and the results showed a difference between graduate degrees and PhD holders (0.036). PhD holder participants showed a relatively lower mean score ($\mu_{\text{PhD}} = 2,851 \pm 0,880$) compared to the graduate holder participants ($\mu_{\text{Graduate}} = 3,175 \pm 0,874$). The results further showed that high school graduate participants showed relatively the highest mean score ($\mu_{\text{High school}} = 3,185 \pm 1,36$).

Table 30*One-Way ANOVA Test Results - Tenure*

Variables	Tenure	N	Mean	SD	Levene Statistic	Anova	
					Sig	F	P
Authentic Leadership	<1	72	3.0012	.95880	.039	2.880	.023
	1-3	125	2.9187	.73098			
	4-6	78	3.0470	.92996			
	7-9	31	3.4167	.88244			
	>10	65	3.2449	.98490			
PsyCap	<1	72	3.8113	.54529	.886	1.909	.108
	1-3	125	3.7133	.53195			
	4-6	78	3.8301	.58840			
	7-9	31	4.0108	.48340			
	>10	65	3.7769	.63415			
Burnout	<1	72	2.7940	.81072	.977	1.771	.134
	1-3	125	3.0447	.75910			
	4-6	78	2.8397	.81537			
	7-9	31	2.9570	.84898			
	>10	65	2.7910	.84486			
Work Engagement	<1	72	3.4266	.86099	.686	3.102	.016
	1-3	125	3.1714	.85580			
	4-6	78	3.3810	.82425			
	7-9	31	3.3318	.81013			
	>10	65	3.6242	.97270			

Table 30 reveals that tenure has a meaningful effect on Authentic Leadership and work engagement; however, is no meaningful effect on the other variables: Psychap, Burnout. Tukey posthoc test conducted for tenure's influence on Authentic Leadership and work engagement. The results showed a meaningful difference between the Authentic Leadership of the group working for 1-3 years and the group working for 7-9 years (0.040). 1-3 years participants showed the lowest mean score ($\mu_{1-3} = 2.918 \pm 0, 654$) compared to the highest mean scores of 7-8 years participants ($\mu_{7-9} = 3.417 \pm 0,158$). There is also a meaningful difference in the Work Engagement of the group who has been working for 1-3 years and the group who has

been working more than 10 years (0.006) 1-3 years participants showed the lowest mean score ($\mu_{1-3} = 3,1714 \pm 0,856$) compared to the highest mean scores of 10 years participants ($\mu_{10} = 3,624 \pm 0,973$).

Table 31

One-Way ANOVA Test Results – Total Work Duration

Variables	Total Work Duration	N	Mean	SD	Levene Statistic	Anova	
					Sig	F	P
Authentic Leadership	1-5	116	3.0129	.81632	.364	1.738	.141
	6-10	101	3.0710	.89787			
	11-15	71	2.9202	.89036			
	16-20	28	3.0595	.87544			
	>21	55	3.3227	.99627			
PsyCap	1-5	116	3.7550	.56842	.535	1.168	.324
	6-10	101	3.8498	.56446			
	11-15	71	3.7054	.62723			
	16-20	28	3.7887	.43419			
	>21	55	3.8833	.52499			
Burnout	1-5	116	2.9763	.81002	.853	3.330	.011
	6-10	101	2.7616	.81027			
	11-15	71	3.1268	.80201			
	16-20	28	2.9167	.76343			
	>21	55	2.7000	.75591			
Work Engagement	1-5	116	3.3547	.89591	.243	4.193	.002
	6-10	101	3.3069	.83724			
	11-15	71	3.0946	.89343			
	16-20	28	3.5663	.65000			
	>21	55	3.6909	.89416			

Table 31 shows that total work duration has a meaningful effect on Burnout and work engagement, however, is no meaningful effect on the other variables: Authentic Leadership and PsyCap. Tukey posthoc test conducted for total work duration's influence on Burnout and work engagement. The results showed that there is a meaningful difference in the Burnout of the group that has been working 6-10

years and the group who has been working 11-15 years (.027), and the group who has been working 11-15 years and more than 21 years (.025).

The results further showed that 21 years participants showed the lowest mean score ($\mu_{>21} = 2.700 \pm 0,756$) compared to the highest mean scores of 11-15 years participants ($\mu_{11-15} = 3.127 \pm 0,802$). The 6-10 years participants showed the second-lowest mean score ($\mu_{6-10} = 2.762 \pm 0,810$).

There is also a meaningful difference in the Work Engagement of the group that has been working for 11-15 years and the group that has been working for more than 21 years (.001). The results showed that 11-15 years participants resulted with the lowest mean score ($\mu_{11-15} = 3,095 \pm 0,893$); on the other hand, the group who had been working more than 21 years resulted in the highest ($\mu_{>21} = 3,691 \pm 0,894$).

Table 32*One-Way ANOVA Test Results - Occupation*

Variables	Occupation	N	Mean	SD	Levene Statistic	Anova	
					Sig	F	P
Authentic Leadership	Assistant Doc				.179	1.530	.156
	Nurse	55	2.8712	.76994			
	Intern Doc	105	3.1325	.87031			
	Admin Staff	4	3.5000	1.14261			
	Prof/Doc Dr	16	3.0000	.76376			
	Medical	2	3.7500	.00000			
	Technician	42	3.2837	.98654			
	Medical	3	3.6944	1.29189			
	Secretary	144	2.9867	.906s13			
PsyCap	GP/Specialist				.756	1.034	.407
	Doc						
	Assistant Doc						
	Nurse	55	3.6591	.50924			
	Intern Doc	105	3.7937	.55974			
	Admin Staff	4	3.8333	.64550			
	Prof/Doc Dr	16	3.8177	.57993			
	Medical	2	3.5000	.11785			
	Technician	42	3.9286	.68831			
Burnout	Medical	3	4.1389	.75615	.304	1.746	.097
	Secretary	144	3.7969	.54353			
	GP/Specialist						
	Doc						
	Assistant Doc						
	Nurse	55	3.0970	.77592			
	Intern Doc	105	2.9405	.85647			
	Admin Staff	4	2.4375	.97034			
	Prof/Doc Dr	16	3.1094	.68294			
Work Engagement	Medical	2	3.5000	.11785	.422	1.671	.115
	Technician	42	2.6329	.79187			
	Medical	3	2.9444	.97658			
	Secretary	144	2.8565	.78040			
	GP/Specialist						
	Doc						
	Assistant Doc						
	Nurse	55	3.1792	.82534			
	Intern Doc	105	3.3252	.87851			
	Admin Staff	4	3.0714	.84515			
	Prof/Doc Dr	16	3.2500	.87676			
	Medical	2	3.4286	.00000			
	Technician	42	3.7517	.91558			
	Medical	3	3.3333	.57735			
	Secretary	144	3.3542	.87981			
	GP/Specialist						
	Doc						

Table 32 finally shows that the occupation has no meaningful effect on the variables.

4.5.5. Correlation Analysis

Pearson's correlation coefficient (r) is utilised to test the strength of the relationship between the variables in the model based on the hypotheses, which can be seen below:

- Authentic Leadership of the leaders has a significant and positive relationship with Work Engagement.
- Authentic Leadership of the leaders has a significant and negative relation with Job Burnout.
- Authentic Leadership of the leaders has a significant and positive relation with Psychological Capital.
- Psychological Capital has a significant and positive relation with Work Engagement.
- Psychological Capital has a significant and negative relation with Job Burnout.

According to Schober & Schwarte, (2018), if the Correlation Coefficient (r) is between 0.00-0.10, the association can be interpreted as negligible if it is between 0.10-.0.39 is a weak correlation, between 0.40-0.69 is moderate, between 0.70-0.89 strong, and if it is between 0.90-1.00 it is a very strong correlation.

Table 33 shows a significant but weak positive correlation between Authentic Leadership and Work Engagement (0,393); furthermore, the sub-dimensions of Authentic Leadership have a positive and significant relationship with work engagement's sub-dimensions. Self-awareness/balance processing has a positive and weak correlation with Vigor/absorption (0,374) and a positive and weak correlation with dedication (0,334). Moral perspective/relational transparency has a positive and weak correlation with Vigor/absorption (0.372) and a positive and weak correlation with dedication (0.355).

Table 33*Correlations Between Authentic Leadership and Work Engagement*

		AL	SABP	MPRT	V/A	DC	WE
AL	r	1	,939	,936	,374	,367	,393
	Sig. (2-tailed)		,000	,000	,000	,000	,000
SABP	r	,939	1	,759	,329	,334	,350
	Sig. (2-tailed)	,000		,000	,000	,000	,000
MPRT	r	,936	,759	1	,372	,355	,387
	Sig. (2-tailed)	,000	,000		,000	,000	,000
AL: Authentic Leadership, SA/BP: Self Awareness/Balanced Processing, MPRT: Moral Perspective/Relational Transparency, V/A: Vigor/Absorption, DC: Dedication, WE: Work Engagement							

Table 34 shows the association between Authentic Leadership and Burnout, and the results reveal a significant but weak, negative correlation between Authentic Leadership and Burnout (-0,359). Table 24 also shows that the sub-dimensions of Authentic Leadership have a negative and significant relationship with Burnout's sub-dimensions. Self-awareness/balance processing has a negative and weak correlation with emotional exhaustion (-0,320), a negative and weak correlation with lack of personal accomplishment (-0,204), and a negative and weak correlation with cynicism (-0,202). Moral perspective/relational transparency has a negative and weak correlation with emotional exhaustion (-0,374), a negative and weak correlation with lack of personal accomplishment (-0,270), and a negative and weak correlation with cynicism (-0,218).

Table 34*Correlations Between Authentic Leadership and Burnout*

		AL	SABP	MPRT	EX	PA	CM	BT
AL	r	1	,939	,936	-,370	-,252	-,202	-,359
	Sig. (2-tailed)		,000	,000	,000	,000	,000	,000
SABP	r	,939	1	,759	-,320	-,204	-,162	-,303
	Sig. (2-tailed)	,000		,000	,000	,000	,002	,000
MPRT	r	,936	,759	1	-,374	-,270	-,218	-,371
	Sig. (2-tailed)	,000	,000		,000	,000	,000	,000
AL: Authentic Leadership, SA/BP: Self Awareness/Balanced Processing, MPRT: Moral Perspective/Relational Transparency, EX: Emotional Exhaustion, PA: Lack of Personal Accomplishment, CM: Cynicism, BT: Burnout								

Table 35 indicates a significant, positive, and weak correlation between Authentic Leadership and Psychological Capital (0.399). The sub-dimensions of Authentic Leadership have a positive and significant relationship with Psychological Capital's sub-dimensions. Self-awareness/balance processing has a positive and weak correlation with self-efficacy (0,294), a positive and weak correlation with hope (0,245), a positive and weak correlation with optimism (0,350) and a positive and weak correlation with resilience (0,286). Moral perspective/relational transparency has a positive and weak correlation with self-efficacy (0,316), a positive and weak correlation with hope (0,297), a positive and weak correlation with optimism (0,393) and a positive and weak correlation with resilience (0,245).

Table 35*Correlations Between Authentic Leadership and Psychological Capital*

		AL	SABP	MPRT	SE	HP	Opt	Res	PC
AL	r	1	,939	,936	,325	,288	,395	,283	,399
	Sig. (2-tailed)		,000	,000	,000	,000	,000	,000	,000
SABP	r	,939	1	,759	,294	,245	,350	,286	,361
	Sig. (2-tailed)	,000		,000	,000	,000	,000	,000	,000
MPRT	r	,936	,759	1	,316	,297	,393	,245	,387
	Sig. (2-tailed)	,000	,000		,000	,000	,000	,000	,000
Authentic Leadership, SA/BP: Self Awareness/Balanced Processing, MPRT: Moral Perspective/Relational Transparency, SE: Self Efficacy, HP: Hope, Opt: Optimism, Res: Resilience, PC: Psychological Capital									

Table 36 shows the relationship between Psychological Capital and Work Engagement. The results revealed a significant, positive, and moderate correlation between Psychological Capital and Work Engagement (0,504). The sub-dimensions of Psychological Capital have a positive and significant relationship with work engagement's sub-dimensions. Self-efficacy has a positive and weak correlation with vigor/absorption (0,290) and dedication (0,321). Hope has a positive and moderate correlation with vigor/absorption (0,462) and dedication (0,451). Optimism also has a positive and moderate correlation with vigor/absorption (0,512) and dedication (0,463). Finally, resilience has a positive and weak correlation with vigor/absorption (0,280) and dedication (0,364).

Table 36*Correlations Between Psychological Capital and Work Engagement*

		PC	SE	HP	Opt	Res	V/A	DC	WE
PC	r	1	,844	,846	,714	,824	,474	,488	,504
	Sig. (2-tailed)		,000	,000	,000	,000	,000	,000	,000
SE	r	,844	1	,588	,402	,649	,290	,321	,312
	Sig. (2-tailed)	,000		,000	,000	,000	,000	,000	,000
HP	r	,846	,588	1	,530	,619	,462	,451	,484
	Sig. (2-tailed)	,000	,000		,000	,000	,000	,000	,000
Opt	r	,714	,402	,530	1	,432	,521	,463	,531
	Sig. (2-tailed)	,000	,000	,000		,000	,000	,000	,000
Res	r	,824	,649	,619	,432	1	,280	,364	,323
	Sig. (2-tailed)	,000	,000	,000	,000		,000	,000	,000
SE: Self Efficacy, HP: Hope, Opt: Optimism, Res: Resilience, PC: Psychological Capital, V/A: Vigor/Absorption, DC: Dedication, WE: Work Engagement									

The correlations between Psychological Capital and Burnout can be examined in Table 37. The table indicates a significant, negative, and weak correlation between Psychological Capital and Burnout (-0,448). The sub-dimensions of Psychological Capital have a negative and significant relationship with Burnout's sub-dimensions. Self-efficacy has a negative and weak correlation with emotional exhaustion (-0,214), lack of personal accomplishment (-0,486) and cynicism (-0,313). Hope has a negative and weak correlation with emotional exhaustion (-0,374) and cynicism (-0,270) and a negative and moderate correlation with lack of personal accomplishment (-0,544). On the other hand, optimism has a negative and weak correlation with lack of personal accomplishment (-0,486) and cynicism (-0,302). Moderate and negative correlation with emotional exhaustion (-0,518). Lastly, resilience has a negative and weak correlation with emotional exhaustion (-0,207), lack of personal accomplishment (-0,440) and cynicism (-0,182).

4.5.6. Regression Analysis

Regression analysis is employed to evaluate the relationship between the dependent and independent variables. According to Baron & Kenny (1986), there are three steps to understanding mediation. The first step starts with testing the association between the independent and dependent variables (path c). The second step involves testing whether the independent variable is associated with the mediator (path a). Finally, the third step involves testing whether the assumed mediator is related to the dependent variable (path b). If the association between path a and path b are statistically significant, then it can be claimed that there is a mediation. If path c' is not significant in the presence of the mediation variable (a.b), it is full mediation; if c' is significant but has less explanatory value in the presence of the mediating variable, it is partial mediation.

Table 38 shows the mediating role of Psychological Capital between Authentic Leadership and Burnout. In the first step, the independent variable Authentic Leadership is regressed on the dependent variable, Burnout, and the results indicated that Authentic Leadership had a significant effect on Burnout. In the second step, the independent variable Authentic Leadership is regressed on the mediator variable, Psychological Capital and the results indicated that Authentic Leadership had a significant effect on Psychological Capital. Thirdly, the independent variable Authentic Leadership and mediator variable Psychological Capital predicting depending variable Burnout was tested. The results indicated that PsyCap is partially mediated the relation between Authentic Leadership and Burnout ($C = C' + a*b$: -359 = -196 + 0.399* -410).

Table 38

Multiple Regression of Authentic Leadership and Psychological Capital as the mediator variable on Burnout

	B	SEb	β	p
First Regression (Authentic Leadership is regressed on Burnout)				
Constant	3.899	.141	-	.000
Authentic Leadership	-.326	.044	-.359	.000
Second Regression (Authentic Leadership regressed on PsyCap)				
Constant	3.018	.097	-	.000
Authentic Leadership	.253	.030	.399	.000
Third Regression (Authentic Leadership is regressed on Burnout through PsyCap)				
Constant	5.666	.246	-	.000
Authentic Leadership	-.178	.044	-.196	.000
PsyCap	-.586	.069	-.410	.000
Adjusted R ² : 0.127 for the first, 0.157 for the second and 0.266 for the third regression				

Table 39 shows the mediating role of Psychological Capital between Authentic Leadership and Burnout. In the first step, the independent variable Authentic Leadership is regressed on the dependent variable; Work Engagement and the results indicated that Authentic Leadership had a significant effect on work engagement. In the second step, the independent variable Authentic Leadership is regressed on the mediator variable, Psychological Capital, and the results indicated that Authentic Leadership had a significant effect on Psychological Capital. Thirdly, the independent variable Authentic Leadership and mediator variable Psychological Capital predicting depending on variable Work Engagement was tested. The results indicated that PsyCap is partially mediated the relation between Authentic Leadership and Work Engagement ($C = C' + a*b$: $393 = .228 + .399* 413$).

Table 39

Multiple Regression of Authentic Leadership and Work Engagement as the mediator variable on Burnout

	B	SEb	B	p
First Regression (Authentic Leadership is regressed on Work Engagement)				
Constant	2.171	.151	-	.000
Authentic Leadership	.388	.047	.393	.000
Second Regression (Authentic Leadership regressed on PsyCap)				
Constant	3.018	.097	-	.000
Authentic Leadership	.253	.030	.399	.000
Third Regression (Authentic Leadership is regressed on Work Engagement through PsyCap)				
Constant	.235	.263	-	.000
Authentic Leadership	.225	.047	.228	.000
PsyCap	.642	.074	.413	.000
Adjusted R ² : 0.152 for the first, 0.293 for the second and 0.157 for the third regression				

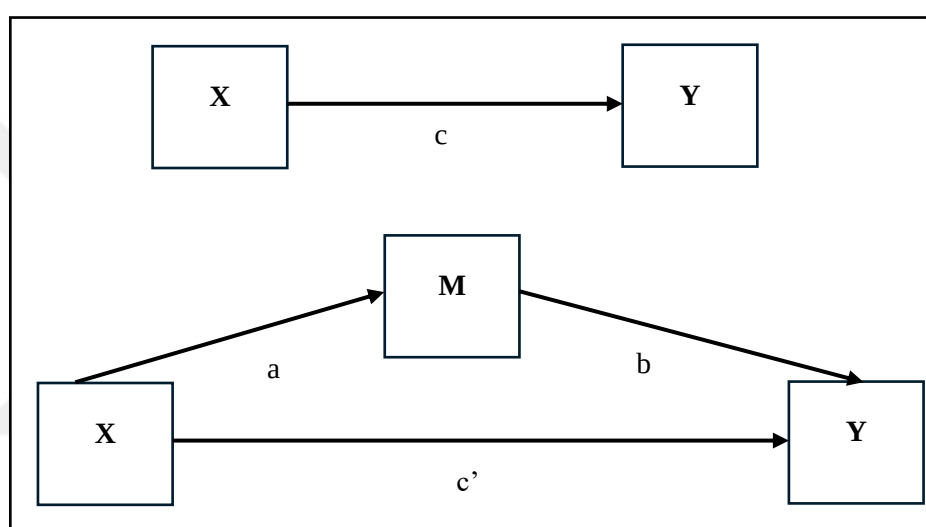
According to Zhao et al. (2010), Baron and Kenny test can be substituted with the Hayes mediation process, which provides more accurate results through the robust bootstrap test. Therefore, Hayes's bootstrapping method is also utilised to test the hypothesis. The macro is applied by extracting the package from the SPSS program. The bootstrapping method resamples the data set thousands of times and creates simulated samples to estimate the indirect effects of the simulated data set without making assumptions based on the sample distribution.

Thus, in the current study, Authentic Leadership is considered as an independent variable (x) due to the structure of the tested model, Burnout and Work Engagement (y) are considered as the dependent variable, and finally, Psychological Capital (m) is tested as mediating variable. Due to the nature of the model, Hayes Model 4 is used to test the relationship by the 95% confidence interval of the indirect

effects was achieved through 5,000 bootstrap samples (Figure 3). The equation of the mediation is expressed as " $c = c' + ab$ " for the total effect of the independent variable (x) on the dependent variable (y) through mediation; on the other hand, the indirect effect is the effect of the x on the y, excluding the mediation, expressed by " $c' = c - ab$ " (Preacher & Hayes, 2008).

Figure 4

Hayes Model 4



Note: Preacher, K. J., & Hayes, A. F. (2008). Contemporary Approaches to Assessing Mediation in Communication Research BT - The Sage sourcebook of advanced data analysis methods for communication research

Firstly, the effect of Authentic Leadership on Work Engagement with the mediation of Psychological Capital is tested. The coeff column of Table 40 indicates the coefficients of the equation, and the P column shows the p-value related to each coefficient. Therefore, there is statistical evidence of mediation in the relationship between x and y. Thus, the results show that there is a significant and positive relationship between Authentic Leadership and Psycap (a), Psycap and Work

Engagement (a.b), and Authentic Leadership and Work Engagement (c') as the p-value of the interaction among the variables is lower than 0,05.

Table 40

Hayes Process / Authentic Leadership on Work Engagement through PsyCap

				%95 Confidence Interval	
Relationship Between Variables	Coeff	Standard Error	P	LLCI	ULCI
Authentic Leadership → PsyCap (a)	.2533	.303	.0000	.1937	.3130
PsyCap → Work Engagement (a.b)	.6417	0.741	.0000	.4959	.7874
Authentic Leadership → Work Engagement (c')	.2552	0.471	.0000	.1326	.3177

Table 41 shows the indirect effect, which is tested using non-parametric bootstrapping. If the effect happens between the lower and upper bound of the 95% confidence interval, and if the lower and upper bounds do not include zero, then the inference is that the indirect effect is significant; if it happens outside of the confidence interval, then the indirect effect is insignificant. The results show that the indirect effects of Authentic Leadership on work engagement, which PsyCap mediates, are statistically significant, and there is a positive predictive relationship between the variables (IE=.1646, 95%, (CI=.1112, .2186)). Direct effect (IE=.2252, 95% (CI=.1326, .3177)) and Total Effect (IE=.3877, 95% (CI=.2947, .4807)) are also

significant. Consequently, there is a complimentary mediation of PsyCap between the independent and dependent variable as the relationship between Authentic Leadership and Work Engagement is significant and $a.b.c > 0$ ($a.b.c = 0, 0,037 > 0$) indicates complementary mediation (Zhao et al., 2010). The complementary mediation term is the same term as partial mediation, coined by Baron and Kenny (1986) and extracted by the hierarchical regression method.

Table 41

Bootstrap results / Authentic Leadership on Work Engagement through Psycap

				%95 Confidence Interval	
Variables' Effects	Effect	Standard Error	P	LLCI	ULCI
Direct Effect of Authentic Leadership on Work Engagement	.2252	0.471	.0000	.1326	.3177
Indirect Effect on Authentic Leadership on Work Engagement	.1646	0.281		.1112	.2186
Total Effect of Authentic Leadership on Work Engagement	.3877	0.472	.0000	.2947	.4807

The effect of Authentic Leadership on Burnout with the mediation of Burnout is tested. Table 42 shows a significant and negative relationship between PsyCap and Burnout (a.b) and Authentic Leadership and Burnout (c') as the p-value of the interaction among the variables is lower than 0,05. The significant and positive relationship between Authentic Leadership and PsyCap (a) can also be detected in the results, which produced the same outcome as Table 28 (coefficient: 0,2533).

Table 42

Hayes Process / Authentic Leadership on Burnout through PsyCap

				%95 Confidence Interval	
Relationship Between Variables	Coeff	Standard Error	P	LLCI	ULCI
Authentic Leadership → PsyCap (a)	.2533	.303	.0000	.1937	.3130
PsyCap → Burnout (a.b)	-.5855	0.694	.0000	-.7221	-.4490
Authentic Leadership → Burnout (c')	-.1777	0.441	.0001	-.2645	-.0910

Table 43 shows that the indirect effects of Authentic Leadership on Burnout, which is mediated by PsyCap, is statistically significant and there is a negative predictive relationship between the variables (IE=-.1483, 95%, (CI=-, 1997 -,1028)). Direct effect (IE=-.1777, 95% (CI=-.2645, -.0910)) and Total Effect (IE=-.3261, 95% (CI=-.4128, -.2393)) are also significant. Therefore, it can be claimed that there is a complimentary mediation of PsyCap between Authentic Leadership and Burnout as

the relationship between the variables is significant and $a.b.c > 0$ ($a.b.c = 0, 0,02635 > 0$) indicates complementary mediation.

Table 43

Bootstrap results / Authentic Leadership on Burnout through Psycap

				%95 Confidence Interval	
Variables' Effects	Effect	Standard Error	P	LLCI	ULCI
Direct Effect of Authentic Leadership on Burnout	-.1777	0.441	.0001	-.2645	-.0910
Indirect Effect on Authentic Leadership on Burnout	-.1483	.0245		-,1997	-,1028
Total Effect of Authentic Leadership on Burnout	-.3261	.0441	.0000	-,4128	-,2393

4.5.7. Structural Equational Model

A structural equational model is employed to understand the association between the variables. As a first step, the model fit was analysed to proceed with the further analysis. Table 44 shows that apart from AGFI and GFI, the model fit indicators show a good fit for the model.

Table 44

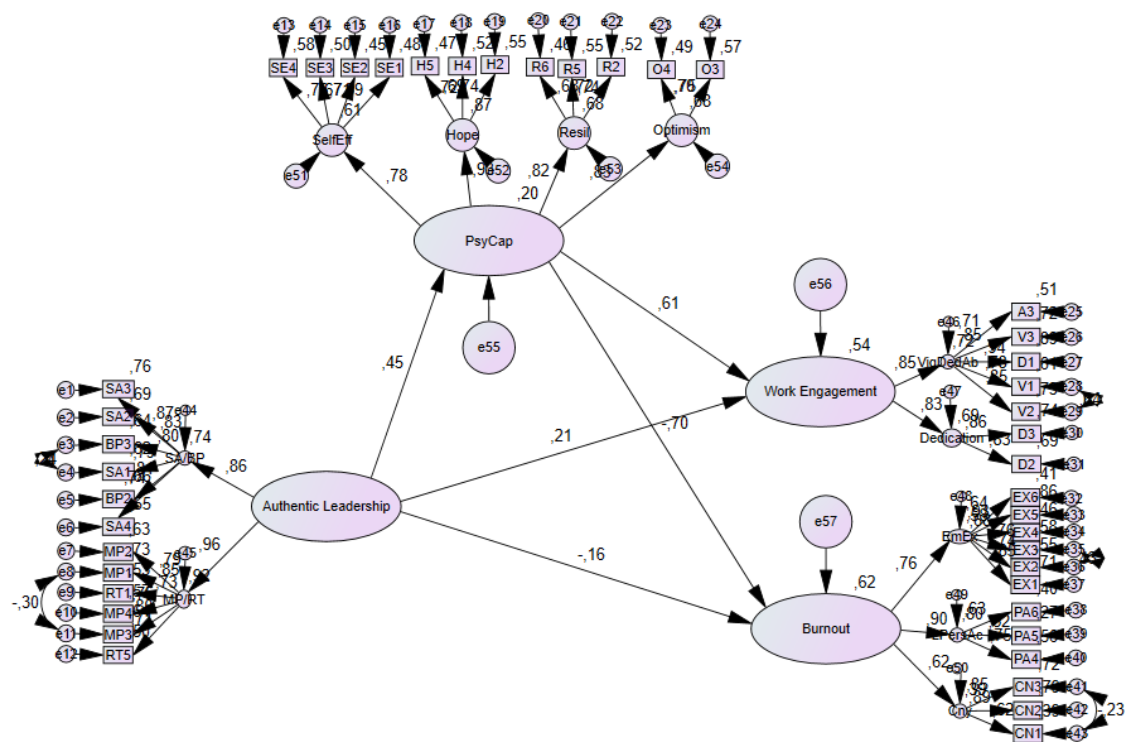
Structural Equational Model Fit Measures

Fit Measures	Threshold	SEM	Status
Chi-square/df (cmin/df)	<3 good, <5 permissible.	2,240	Good
CFI	>.95 great, >.90 good, >.80 permissible.	0,898	Good
GFI	>.95	0,803	Below the threshold
AGFI	>.80	0,778	Below the threshold
SRMR	<.09	0,0868	Good
RMSEA	<.05 good, .05-.10 moderate, >.10 not permissible.	,058	Moderate

Figure 5 displays the structural equation model that consists of the constructs. The model shows that the components of Authentic Leadership: self-awareness/balance processing, and moral perspective/relational transparency are tested as one construct. Furthermore, Work Engagement components: vigor and absorption, also resulted in one construct.

Figure 5

Structural Equational Model



Standardized Regression Weights (Table 45) showed that there is a significant positive relationship between Authentic Leadership and Psychological Capital (0,325), Authentic Leadership and Work Engagement (0,183), and Work Engagement and Psychological Capital (0,723). On the other hand, the relationship between Authentic Leadership and Burnout (-0,122) and PsyCap and Burnout is negative and significant (-0,743).

Table 45

Standardized Regression Weights

DV	Path	IV	Estimate	S.E.	C.R.	P
PsyCap	<---	AL	0,325	0,051	6,330	***
WE	<---	AL	0,183	0,053	3,480	***
Burn	<---	AL	-0,122	0,047	-2,586	,010
WE	<---	PC	0,723	0,088	8,197	***
Burn	<---	PC	-0,743	0,103	-7,211	***
AL: Authentic Leadership, WE: Work Engagement, Burn: Burnout, PsyCap: Psychological Capital						

Bootstrapping is performed with a bias-corrected confidence interval of 95 % through SPSS Amos to estimate the mediation. Similar to the Hayes process, the bootstrapping method of AMOS provides confidence intervals. If the estimate occurs between the lower and upper bound of the 95% confidence interval, and if the lower and upper bounds do not include zero, then the conclusion is that the indirect effect is significant; if it falls outside of the confidence interval, then the indirect effect is insignificant. The results (Table 46) reveal that PsyCap mediates the positive effect

between Authentic Leadership and Work Engagement significantly (Estimate=0,235, $p < 0,05$, (CI=0,129 - 0,475)). On the other hand, PsyCap mediates negative effect between Authentic Leadership and Burnout significantly (Estimate=-0,242, $p < 0,05$, (CI=-0,491, -0,148)). Finally, the results show that Psychological Capital competitively mediates the relationship between Authentic Leadership and Work Engagement and Authentic Leadership and Burnout.

Table 46

Bias-Corrected Percentile Method of the Model

Parameter	Estimate	Lower	Upper	P
AL-->PsyCap-->Work Engagement	0,235	0,129	0,475	,000
AL-->PsyCap-->Burnout	-0,242	-0,491	-0,148	,000

Table 47

Hypothesis Results of the Research

#	Hypothesis	Analysis Method	Status
H1	Authentic Leadership of leaders has a significant and positive impact on Work Engagement.	Baron and Kenny, Hayes, SEM	Accepted
H2	Authentic Leadership of leaders has a significant and negative impact on Job Burnout.	Baron and Kenny, Hayes, SEM	Accepted
H3	The relationship between Authentic Leadership and Work Engagement is mediated by Psychological Capital.	Baron and Kenny, Hayes, SEM	Accepted
H4	The relationship between Authentic Leadership and Job Burnout is mediated by Psychological Capital.	Baron and Kenny, Hayes, SEM	Accepted

5. DISCUSSION and CONCLUSION

The study's findings will be discussed and compared with the related literature in the final chapter. Moreover, the importance of the study and its managerial implications will be addressed. Finally, the limitations of this study and suggestions for future research will be explained.

5.1. Findings of the research

This study aimed to explain the influence of Authentic Leadership on Work Engagement and Burnout and whether Psychological Capital performs a mediating role in this relationship. Below is a summary of the hypotheses that are supported:

- There is a significant and positive relationship between the concepts of Authentic Leadership and work engagement.
- There is a significant and negative relationship between the concepts of Authentic Leadership and Burnout.
- The relationship between Authentic Leadership and Work Engagement is mediated by Psychological Capital.
- The relationship between Authentic Leadership and Job Burnout is mediated by Psychological Capital.

Authentic leadership represents being genuine while being aware of personal strengths and limitations and attributes pertaining to the outside world in a relatively objective way. The concept itself is broad and can be practised in different contexts. Moreover, the business outcomes researched in this study are also broad concepts that have been defined, conceptualised, and researched in many different contexts. However, this study focused on the health sector in Turkey, more specifically, the

state and private hospitals in İstanbul, Anatolian side, to formulate a clear boundary for the study.

The demographic characteristics of the study revealed that 73,9% of the respondents were female, whereas 26,1% were male. 41,2% of respondents was between 31 and 40 years old, followed by 38% of respondents who were between 21 and 30 years old, and the majority of the respondents had a graduate degree (40,2%). 33, 7% of respondents have tenure between 1 and 3 years in their organisation. Moreover, the total work experience of respondents shows that 31,5% of respondents have 1-5 years of work experience, followed by 6-10 years of work experience (27,2%). Among the eight different occupational categories, most respondents work as either a GP/Specialist Doc (38,8%) or a Nurse (28,3%).

The findings showed that gender did not produce a variation in Authentic Leadership and Work Engagement but caused a significant difference in PsyCap and Burnout.

The age of respondents causes a significant difference only in work engagement, yet no meaningful variation on Authentic Leadership, PsyCap and Burnout. Moreover, the results showed that the main difference in the influence of age on Work Engagement occurs in the age range between (21-30) and (51-60) and in the age range between (31-40) and (51-60). The 51-60 years old group has higher Work Engagement than the 21-30 and 31-40 age groups. However, the 21-30 age group has higher Work Engagement than the 31-40 age group. Therefore, it can be said that Work Engagement for the people who work in the healthcare sector is high when they are younger; initially, it decreases gradually over time, followed by a steady increase

back towards or even above the initial Work Engagement level. Thus, the findings indicate that age significantly impacts work engagement.

Interestingly, Authentic Leadership is the only variable upon which education produces a meaningful effect; moreover, the only significant distinction observed was when comparing the respondents with graduate degrees to the respondents with PhD Degrees.

Consequently, education makes a difference in the perception of Authentic Leadership of the followers. High School graduates have the highest score on Authentic Leadership; furthermore, the results showed that the higher the education level, the lower the perception of Authentic Leadership. Thus, it can be said that education might influence the level of authenticity expectations from the leaders. However, there is no significant impact on the other variables: Psycap, Burnout, and work engagement.

Tenure causes a significant variation in Authentic Leadership and work engagement. The findings indicate that people with the range 1-3 years and 7-9 years of tenure differentiate from each other. Moreover, there is also a variation between the respondents who have 1-3 years of tenure and more than ten years. Furthermore, the results showed that people who have more than ten years of tenure had higher Work Engagement than the other tenure groups. Therefore, similar to the relationship between age and work engagement, Work Engagement levels shift depending on a person's career journey in an organisation throughout the years. However, tenure has no meaningful effect on the other variables: Psycap, Burnout.

Total work duration had a meaningful effect on Burnout and work engagement. The findings showed that the difference starts after six years of total work duration;

moreover, there is a variation between the respondents working between 6-10 years and 11-15 years and those working between 11-15 years and more than 21 years. Furthermore, total work duration also showed that Work Engagement is high in the first years of healthcare workers' careers; however, it gradually decreases until a point when they are in the 16th year of their career. Total work duration also influences Burnout levels. The Burnout level is the highest when they are in the middle of their career (11-15 year group), yet it decreases from that point to its lowest point for people with more than 21 years of total work duration. However, total work duration did not cause any variance in Authentic Leadership or PsyCap. Furthermore, the findings showed that occupation produces no variance in any of the variables.

The survey instruments are tested with CFA, as the primary purpose of CFA is to answer whether the measurement model is valid or not when there is a solid theoretical foundation of the constructs. However, during the analyses, Authentic Leadership and Work Engagement survey instruments did not show the model fit initially. Therefore, first EFA and then CFA are conducted for those two constructs. Items with low factor loading were eliminated from the scale to achieve a strong fit for each instrument. Finally, factor and reliability analyses revealed a strong fit with KMO and Cronbach's Alpha values in which each culture scales' values were higher than 0.85. Moreover, both composite reliability and average variance extracted are above the minimum criteria for all the instruments.

The analysis supported Neider & Schriesheim (2011) claim that respondents do not always perceive Authentic Leadership dimensions as distinguishable. Leadership characteristics are perceptual, and authenticity is in the "eye of the beholder". This study shows that the respondents perceived Authentic Leadership's two dimensions, self-awareness, and balanced processing, as one dimension. The targeted healthcare

workers work in an environment where fair and objective assessment is crucial. Elstein & Schwarz (2002) state that making decisions is a complex process for the healthcare providers that require significant cognitive effort; thus, healthcare providers must listen to the patient diligently to make an accurate diagnosis and choose the appropriate treatment management program. Considering that a single healthcare provider must go through an arduous process to make objective decisions in the workplace, it is understandable that they expect a similar commitment from their leaders. This study revealed that leaders' expectations that healthcare providers listen to patients are also an expectation that healthcare providers have of their leaders; leaders must listen to healthcare workers and decide objectively.

Being a leader, as described, requires self-awareness. The leader must make a self-aware and fair decision considering all aspects of themselves (internal values) and acting objectively by evaluating the situation harmoniously. Thus, the subconstruct (Self Awareness/Balanced Processing) is called "Introspective Processing".

Introspective means searching for one's feelings or thoughts. The origin of introspective comes from the Latin word "introspicere", which means look into and observe. The root word, spec means "look or see", the prefix intro means "within", and the suffix -ive means "condition" (Vadasy & Nelson, 2012). Therefore, leaders in the healthcare sector need to examine their thoughts and emotions, consciously observe the conditions, and make decisions through balanced processing.

The results further showed that Authentic Leadership's two subconstructs internalised moral perspective and relational transparency, were perceived as one subconstruct. According to Durkheim (1997, p. 331), "... Morality consists in solidarity with the group and varies according to that solidarity. Cause all social life to vanish, and moral life would vanish at the same time, having no object to cling to."

Thus, morality is inseparable from social solidarity, depending on the interdependence between the people in a society. Consequently, society shapes morality and how people perceive it. The healthcare professionals in Turkey perceive that when there is relational transparency between the leader and the follower, the followers perceive the leader to be high in an internalised moral perspective. The leader communicates core values and determinations and demonstrates justice at work. However, as the degree of transparency is not complete and varies depending on the relationship between the follower and the leader, the degree of transparency can be referred to as "translucent". Therefore, the subconstruct perceived by the respondents is called the "Inter-Translucent Morality".

Finally, similar to Authentic Leadership, the respondents perceived Work Engagement differently, and the results showed that work engagement's two subconstructs, vigor and absorption, were perceived as one subconstruct. Culturally, it is perceived as "hard work brings success", and those who perform their job vigorously need to be absorbed by the work (Arslan, 2000). The ideas cannot be separated as one leads to the other. Primarily for the healthcare providers, one cannot be distracted by the external factors due to the nature of the job, and when they treat patients, they need to work vigorously without any break. Therefore, the subconstruct perceived by the respondents is called "Vigorous Involvement" as it represents the degree of being absorbed to which an employee participates in their work.

Correlations between the constructs and sub-constructs after the EFA and CFA procedure were tested to gain an insight into the research model after CFA and reveal interdependencies. The components of Authentic Leadership, Introspective Processing (self-awareness/balance processing) and Inter-Translucent Morality (moral perspective/relational transparency) positively affect both work engagements'

components: Vigorous Involvement (vigor/absorption) and dedication. However, the level of influence is slightly more when all Authentic Leadership elements are considered as a whole. Authentic Leadership's components also influence the components of Burnout. However, the most prominent component that is affected positively is Cynicism. Furthermore, the results showed that Introspective Processing (self-awareness/balance processing) has the highest positive impact on the Burnout level of the employees.

Each Psychological Capital component is affected by the components of Authentic Leadership; however, it is most predominately affected by Authentic Leadership as a whole construct. Among the subdimensions, optimism is the most influenced constructed through Introspective Processing (self-awareness/balanced processing) and Inter-Translucent Morality (moral perspective/relational transparency).

Moreover, Psychological Capital's components on Work Engagement showed that every component of PsyCap increases individual components of Work Engagement positively. Furthermore, among the components, optimism showed the highest degree of influence on Work Engagement, which is even more significant than the influence of PsyCap as a whole. Burnout's components are also affected by each Psychological Capital component. Nevertheless, unlike Work Engagement's interaction with PsyCap, resilience highly influences Burnout's dimension and Burnout, as a whole.

The first hypothesis of this study investigated the relationship between Authentic Leadership and Work Engagement by claiming there is a positive relationship between the constructs. Authentic Leadership consists of four sub-dimensions: Self-Awareness, Relational Transparency, Moral Perspective, and Balance Processing.

Self-Awareness makes leaders conscious of their own and others' emotions and regulates their responses to deliver individualised actions. Relational Transparency makes leaders emphasise expressing themselves to others by unveiling novel features without pretending to act deceitfully. Internalised moral perspective assists leaders as a model of individual moral criteria utilised to self-regulate behaviours. Finally, balance processing gives possibilities to the leaders to identify their inherent strengths and imperfections; by understanding those qualities, not over or underestimating the situations or individual capabilities.

The dependent variable of the first hypothesis, work engagement, consists of three sub-dimensions: vigor, dedication, and absorption. Vigor refers to the people who have great spirit and mental fortitude while working, which drives people to deliver more effort and overcome challenges. Dedication refers to being passionate and productive while working, caused by a solid commitment to work. Finally, absorption refers to being immersed in the workplace where the individual does not comprehend how time passes while performing their job.

Although individual dimensions are essential to understand for the independent and dependent variables, they were being investigated holistically in this study as all those individual dimensions create Authentic Leadership behaviour and Work Engagement constructs. Thus, this study examined Authentic Leadership as one construct and Work Engagement as another consisting of sub-dimensions in SPSS for regression and later on AMOS for SEM.

Hypothesis one, which claimed a significant and positive relationship between the concepts of Authentic Leadership and work engagement, was supported ($\beta=.388$; Adjusted $R^2= 0.152$ / Direct Effect: 0.2252; $p<0,00$ / Estimate: 0,183; $p < 0.05$). The

finding is relevant to the outcomes of similar studies (Alok & Israel, 2012; du Plessis & Boshoff, 2018; Liu et al., 2014; Walumbwa et al., 2010).

The second hypothesis of this study investigated the relationship between Authentic Leadership and Burnout by claiming there is a negative relationship between the constructs. The independent variable Authentic Leadership is the same construct that was analysed in the first hypothesis. However, its relationship with a different dependent variable is examined this time. The dependent variable Burnout consisted of three sub-dimensions: Emotional exhaustion, Cynicism (Depersonalisation), and Lack of Personal Accomplishment.

Emotional exhaustion refers to a decrease in one's emotional resources due to emotional demands exposed by others at work. Thus, an individual who is high in emotional exhaustion feels fatigued and emotionally worn out. Cynicism, also labelled as depersonalisation, means an emotionless or indifferent response to people in the workplace, also seen as a coping method with stress. Finally, a lack of personal accomplishment indicates the self-evaluation element of Burnout, which means a feeling of insufficiency.

Similar to hypothesis one, individual dimensions of Burnout are vital to understanding; however, as Burnout is a high order construct, this study investigated the variable holistically and, thus, examined Authentic Leadership as one construct and Burnout as another consisting of sub-dimensions in SPSS for regression and later on AMOS for SEM. Hypothesis two, which claimed a significant and negative relationship between the concepts of Authentic Leadership and Burnout was supported ($\beta = -.359$; Adjusted $R^2 = 0.127$ / Direct Effect: $-.1777$; $p < 0.00$ / Estimate: -

0,122; $p < 0.05$). The finding is relevant to the outcomes of similar studies (Laschinger et al., 2012; Laschinger & Fida, 2014; Spooner-Lane & Patton, 2007).

The third hypothesis examined the mediation role of Pyscap between Authentic Leadership and work engagement. PysCap is a high order construct consisting of four components: Optimism, Self-Efficacy, Hope and Resilience. Optimism refers to having positive expectations and beliefs to be prosperous now and in the future. Self-efficacy is about performing the required effort to succeed in challenging duties and the determination to complete those tasks. Hope refers to the perseverance to accomplish goals and, when needed, change the way leading to goals (hope); finally, resilience means not giving up when facing difficulties and obstacles and recovering immediately from the burdens faced.

The mediation was tested firstly through SPSS, through Baron and Kenny mediation method and the Hayes process method. Then, SEM analyses were conducted through AMOS to get a more profound understanding of the model. Baron and Kenny mediation testing results showed that PsyCap is partially mediated the relationship between Authentic Leadership and Work Engagement ($C = C' + a*b$: $393 = .228 + .399 * 413$). The findings partially supported the hypothesis that claims PsyCap has a mediation effect between the variables, which are not fully mediated but partially mediate the relationship.

The Hayes process method is also tested to investigate the regression further. The Hayes method presents point estimates and confidence intervals to assess the significance or non-significance. The results showed PsyCap mediates that the indirect effects of Authentic Leadership on work the relationship between Authentic Leadership and Work Engagement significantly and positively. However, similar to

the Baron and Kenny method results, there is a complimentary (partial) mediation of PsyCap between the independent and dependent variables.

Finally, the SEM method further investigates the relationship by performing bootstrapping with a bias-corrected confidence interval of 95 % to estimate the mediation. The results showed that PsyCap partially and positively mediates the relationship between Authentic Leadership and Work Engagement (Estimate: 0.235, Lower: 0,129, Upper: 0,475, $P < 0,05$). The finding is relevant to the outcomes of similar studies by Avey et al. (2008), Joo et al. (2015), and Li (2018).

The fourth and final hypothesis investigated the mediation role of Pyscap between Authentic Leadership and Burnout. The same measures were used for the mediation, starting with the Baron and Kenny mediation, the Hayes process, and SEM through AMOS.

Baron and Kenny mediation testing outcomes revealed that PsyCap is partially mediated the relationship between Authentic Leadership and Burnout ($C = C' + a*b$: $-359 = -196 + 0.399* -410$). The findings partially confirmed the hypothesis that PsyCap has a mediation effect between the variables, which are not fully mediated but partially mediated in the relationship.

The Hayes process method is also tested to investigate the regression further. The results revealed that PsyCap mediates the indirect effects of Authentic Leadership on work the relationship between Authentic Leadership and Burnout significantly and negatively. Nevertheless, similar to the Baron and Kenny method results, there is a complimentary (partial) mediation of PsyCap between the independent and dependent variables.

Finally, the SEM method further investigates the relationship by implementing bootstrapping with a bias-corrected confidence interval of 95 % to estimate the mediation. The results determined that PsyCap partially and positively mediates the relationship between Authentic Leadership and Burnout (Estimate: -0,242, Lower: -0,491, Upper: -0,148, $P < 0,05$). The finding is similar to the study conducted by Du Plessis & Boshoff (2018), indicating that Authentic Leadership directly influences work engagement, and the relationship can be improved with PsyCap.

5.2. Discussion

Healthcare is the fastest-growing sector that is being challenged with ever-changing diseases in our fast-paced world. From psychological illnesses to viruses that mutate constantly and quickly, people are looking to healthcare workers for a solution, which puts a great responsibility on their shoulders. Additionally, some difficulties such as personnel shortages, lack of mentoring, training and development, insufficient time with patients, long working hours, and contagious diseases severely harm healthcare workers' mental and physical health. Furthermore, as technological advances and improvements in medicines and disease and treatment procedures are common in the healthcare sector, healthcare workers must continuously improve and update themselves, which puts even more burden on their shoulders.

The difficulties of the healthcare sector produce infinite work outcomes. The mental burden of being a healthcare worker nowadays is immense. One of the main problems, stress, comes with high uncertainty and heavy workload, which leads to more severe personal problems such as Burnout, alienation, anxiety, and depression. Personal problems lead to obstacles in the work environment, such as internal conflict, anger issues, lack of quality services, medical errors, missed or delayed diagnosis, inconsistent follow-up after hospitalisation, inadequate monitoring after

treatment, delayed action on test outcomes and more. The problems in the work environment are critical in the health industry as it directly affects the level of national health quality. Therefore, addressing such problems is crucial to improving healthcare quality, not only as a nation but worldwide. This dissertation intends to address this issue by mainly focusing on two different work outcomes, Burnout and work engagement. On one side of the coin, Burnout is one of the most common problems that healthcare workers face, and it is a problem that leads to more severe consequences personally and professionally. On the other side, Work Engagement is vital to enhance healthcare workers' performance which directly influences the quality of the services for patients. This dissertation concentrated on those work outcomes by studying what factors may impact them. Two prominent influencing factors examined were Authentic Leadership, a leadership type where the leaders are self-aware, process information in a balanced way and have an internalised moral perspective, and Psychological Capital, a state-like construct that is open to development. The model presented in this dissertation presents a relationship that starts with Authentic Leadership and its influence on PsyCap, which leads to Burnout and work engagement. Therefore, this study will contribute to the literature by increasing understanding of the characteristics of the relationship between healthcare workers in Turkey.

Healthcare workers work in a dynamic environment distinguished by a continuous drive to perform the most efficient, dependable, and high-quality care for healthcare consumers. Leadership assumes a significant role in shaping the elements of the working environment, including the individuals that constitute the organisation. The outcome of the leadership process may differ, it may facilitate healthy working conditions with mentally strong employees that can tackle complex obstacles related

to healthcare delivery, or it may harm the services that lead to problems in the whole national health system. Thus, this dissertation focused on Authentic Leadership, where leaders are self-aware of their strengths and weaknesses, limitations and emotions, and are transparent about their beliefs and values. It is a leadership style whereby the healthcare workers in Turkey may be influenced positively by having genuine mission-driven leaders concentrated on outcomes which are not swayed by external influences.

The dissertation results indicate that Authentic Leadership positively influences Psychological Capital, which is a state-like construct consisting of Optimism, Self-efficacy, Hope and Resilience. By being a state-like, second-order construct, each component is open to being developed by Authentic Leadership individually; however, they have a more significant effect when considered simultaneously as a whole. Moreover, the results show that Authentic Leadership also positively influences work engagement. Work Engagement is a concept that is also defined as a state where a person feels positive, fulfilled, and excited at work.

This study supported that Authentic Leadership plays a vital role in improving healthcare workers' positive state of mind. It is crucial to recognise that even in a sector as challenging as healthcare, where people have to work under challenging conditions with great responsibility, Authentic Leadership may make a difference in their mental state by supporting Psychological Capital and increasing how they engage in their work. Moreover, developing a positive mindset may lead to other positive work outcomes, which are not the focus of this study. Nevertheless, it is worth considering the ways in which national health services can be improved. Therefore, it can be deduced that Authentic Leadership influences the positive

mindset of the people at the individual level, which may very well affect the macro levels.

One of the most frequent concerns observed in an organisation, Burnout, consists of emotional exhaustion, cynicism (depersonalisation), and lack of personal accomplishment, which have naturally been a problem for the health industry. The nature of healthcare has always been demanding. Consequently, the extensive work duration, volatility, time constraints, and life-risking conditions due to high demand made the working environment for the healthcare workers a high risk for psychological wellbeing and perception of safety. This study aimed to understand whether Authentic Leadership and Psychological Capital influenced the level of Burnout negatively. Authentic leaders are perceived as valuing their followers as they give their efforts to the cause while understanding themselves and those around them. They are often perceived as a role model by their followers and a champion creating a favourable working environment. Therefore, such a leadership style may lead to higher morale and better mental health.

The results support that Authentic Leadership reduces the level of Burnout of healthcare workers for the population that has been targeted. The findings emphasise the importance of Authentic Leadership in the healthcare sector. Burnout leads to various outcomes, from lack of productivity to anxiety disorders, and it goes beyond the individual level problem; it affects the whole organisation. Moreover, in a sector such as healthcare, which is pivotal for the national quality of life, the consequences of Burnout would be more severe. Accordingly, the findings illustrate a meaningful perspective to overcome this problem by showing that Authentic Leadership is a type of leadership that can reduce Burnout and thus indirectly affect the issues caused by Burnout.

Finally, this study aimed to answer whether Psychological Capital formed a bridge between Authentic Leadership and work engagement/Burnout. Although Authentic Leadership influences PsyCap, Work Engagement and Burnout individually, the relationship gets more potent with the influence of PsyCap. Furthermore, it also means Authentic Leadership develops higher PsyCap, and through that development, higher Work Engagement, and lower Burnout. Thus, even partial mediation of PsyCap reveals that the construct plays a vital role in improving Work Engagement and reducing Burnout.

The findings present another perspective on the conditions in the healthcare sector. It is a sector where the employees are highly educated and component with their job. Moreover, they all have the self-determination to perform their job better with an ethical attitude. Furthermore, the medical doctor follows the Hippocratic oath culture, which is rooted in the nature of the profession. In such a field, a leadership type that is highly moral, genuine, and aware of others will promote followers to be authentic. PsyCap, being a state-like construct, is positively affected by Authentic Leadership and thus leads to positive outcomes. Therefore, this study revealed that Authentic Leadership is a leadership type that may be a solution for many different issues in the healthcare sector.

This study was conducted in Istanbul, one of Turkey's most populous and cosmopolitan cities, which also indicated that even in hectic work conditions, Authentic Leadership still had an influence on followers. Furthermore, the results revealed that PsyCap partially mediates, which shows that many different factors may act as a bridge in that relationship, which is worth acknowledging.

5.3. Managerial Implications

The findings of this dissertation also offer different perspectives on managerial implications. In the following section, those suggestions are appraised based on the results.

Increasing interest in positive psychology leads researchers to investigate how to live a more meaningful life and increase happiness and productivity by focusing on the positive aspects of the individuals. One of the most pivotal concepts in positive psychology, Psychological Capital, is a vital concept contributing to individual wellbeing. In the healthcare sector, where a dynamic work environment, heavy workload, and constant pressure exists, the importance and necessity for high Psychological Capital are even more critical. Consequently, the healthcare sector organisations require exploration of methods to foster and sustain employees' wellbeing and engagement to provide better services, minimise faults, and improve the national quality of life.

A leadership style is one of the antecedents of Psychological Capital and plays a vital role in shaping organisational factors. The type of leadership is instrumental to the health of the organisation. The results showed that Authentic Leadership could make a difference in the healthcare sector to act as a starting point to develop Psychological Capital and influence other work outcomes such as Work Engagement and Burnout. Therefore, organisations must recognise that Authentic Leadership might help solve various industrial challenges by reducing negative aspects and developing positive ones. Moreover, Authentic Leadership can shape organisational outcomes beyond the initial effect by developing Psychological Capital.

Thus, acknowledging the impact of positive psychology and promoting a positive work environment through Authentic Leadership would be the first step for the organisations in the industry. Furthermore, training and development activities can be conducted to understand Authentic Leadership and improve employees' Psychological Capital. Leaders of organisations can design tools to develop every dimension of PsyCap, such as knowledge sharing sessions where they share and appreciate their success stories to improve self-efficacy to set development goals and incentives to improve their hope. Further, leaders must realise that by focusing on the components of PsyCap wholistically as one entity, they would have a more significant positive impact on their organisations as the effect of the individual components of PsyCap are considered together as one entity is more potent than considering the components of PsyCap individually.

5.4. Limitations and Future Research

It is crucial to keep various issues in mind when interpreting the results of this study. First, the study is based on a survey tool which provides a snapshot of a single observation where there is limited control over the influence of variables. Moreover, the survey tool, by nature, creates another challenge to judging cause and effect relations in this study. Consequently, future research may utilise a longitudinal design for more robust causal interpretations for the area being researched. The second limitation is regarding the research sample. Only the employees from the healthcare field from İstanbul, Anatolian side, were chosen as a research sample. Therefore, generalising the results must be done cautiously when applying them to other cities, nations, and sectors. Consequently, it leads to the third limitation. This study was performed in one culture, İstanbul, Turkey. Therefore, results only exhibit a particular culture. The culture was not the study's focus; however, the effect of culture may have had an influence on the results. Thus, future researchers may need to take into account cultural considerations when studying the model in the same industry. This study provide a wholistic perspective of private/state hospitals and the departments in the healthcare industry. Further studies may examine the model by investigating every department and the types of the hospitals individually. Finally, the dependent variables considered in this study were Burnout and work engagement; however, future studies could consider other dependent variables within the presented model as Authentic Leadership and Psychological Capital can lead to numerous work outcomes, improving working conditions in the health sector. Therefore, it is possible to investigate the other work outcomes to enrichen the perspective of the model.

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Appendices

Appendix A. Demographic Questions of the Questionnaire

Değerli Katılımcı,

Bu araştırma, otantik liderliğin, psikolojik sermaye aracılığıyla tükenmişliğe ve işe bağlılığa etkisini ölçmek için tasarlanan geniş kapsamlı akademik bir çalışmadır.

Yeditepe Üniversitesi İşletme Bölümünde Doç. Dr. Senem Göl Beşer yönetiminde Evren Serindağ tarafından bir doktora tez çalışması çerçevesinde yapılmaktadır.

Kişisel bilgilerin kesinlikle istenmediği ve tüm verilerin gizlilik çerçevesinde değerlendirileceği bu ankette, verdiğiniz yanıtlar bilimsel bir araştırmaya ışık tutacak ve sadece bu amaçla kullanılacaktır.

Soruların doğru ya da yanlış cevapları yoktur, sizden ricamız anketi cevaplarken çalıştığınız iş yerinin koşullarını düşünerek ve "mevcutta olanı" dikkate alarak aşağıda belirtilen her bir ifadeye ne ölçüde katıldığınızı belirtmenizdir.

Araştırmaya verdiğiniz destek için şimdiden çok teşekkürler.

Saygılarımızla,

Evren Serindağ

1. Cinsiyetiniz

- (1) Kadın
- (2) Erkek

2. Yaşınız

- (1) 20 ve Altı
- (2) 21-30
- (3) 31-40
- (4) 41-50
- (5) 51-60
- (6) 61 ve Üstü

3. Eğitim Durumunuz

- (1) Lise
- (2) Lisans
- (3) Yüksek Lisans
- (4) Doktora

4. Mevcut işyerinizdeki çalışma süreniz

- (1) 1 yıldan az
- (2) 1-3 Yıl
- (3) 4-6 Yıl
- (4) 7-9 Yıl
- (5) 10 Yıldan Fazla

5. Toplam çalışma süreniz

- (1) 1-5 Yıl
- (2) 6-10 Yıl
- (3) 11-15 Yıl
- (4) 16-20 Yıl
- (5) 21 Yıldan Fazla

6. Mesleğiniz

- (1) Asistan Doktor
- (2) Uzman ve Pratisyen Doktor
- (3) Profesör / Doçent Doktor
- (4) Hemşire
- (5) Ebe
- (6) Tıbbi Sekreter
- (7) Diğer (Fizyoterapist ,
diyetisyen, tıbbi laboratuvar-
protez-ortez-ameliyathane-
radyolojiteknikeri, odyolog, att,
paramedik....)

Appendix B. Authentic Leadership Questionnaire

Anketi doldururken, bu ifadelere ne ölçüde katıldığınızı işaretleyerek belirtiniz.	Kesinlikle Katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Kesinlikle Katılıyorum
7.Benim amirim ne demek istiyorsa onu açıkça söyler					
8.Benim amirim hata yaptığında kabul eder					
9.Benim amirim herkesin düşündüklerini söylemesini teşvik eder					
10.Benim amirim insanlara acı gerçekleri söyler					
11.Benim amirim açıkça vurduğu duyguları hissettikleriyle tam olarak aynıdır					
12.Benim amirim inandıklarıyla yaptıkları tutarlıdır					
13.Benim amirim kararlarını değer yargılarına göre verir					
14.Benim amirim insanların da kendi değer yargılarının arkasında durmasını ister					
15.Benim amirim ahlaki boyutu yüksek standartlara dayalı zor kararlar verir					
16.Benim amirim derinden inandıklarına ters olan görüşlerin belirtilmesine ısrar eder					
17.Benim amirim karar vermeden önce ilgili bilgiyi enine boyuna inceler					
18.Benim amirim sonuca varmadan önce değişik görüşleri dikkatle dinler					
19.Benim amirim başkaları ile etkileşimi/iletişimi geliştirmek için geri besleme arayışı içinde olur					
20.Benim amirim yeteneklerinin başkaları tarafından nasıl değerlendirildiğini bilir					
21.Benim amirim önemli konulardaki tavrını ne zaman yeniden değerlendirmesi gerektiğini bilir					
22.Benim amirim özel/şahsi durumlarının insanları nasıl etkilediğini anlar ve bunu onlara belli eder					

Appendix C. Psychological Capital Questionnaire

Aşağıdaki ifadeler şu anda kendi hakkınızda ne düşündüğünüzü tanımlamaktadır. Anketi doldururken, bu ifadelere ne ölçüde katıldığınızı işaretleyerek belirtiniz.	Kesinlikle Katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Kesinlikle Katılıyorum
23.Uzun vadeli bir probleme çözüm bulma konusunda kendime güvenirim					
24.Üstlerimle yaptığımız toplantılarda kendi alanımı çok iyi temsil ederim					
25.Kurumun izleyeceği stratejinin ne olacağı hususunda yapılan tartışmalara kendime güvenerek iştirak ederim					
26.Çalıştığım alana ilişkin hedef ve amaçların belirlenmesine katkıda bulunma konusunda kendime güvenirim					
27.Kurum dışındaki insanlarla (örneğin tedarikçilerle, hastalarla) herhangi bir sorunu görüşmek için iletişim kurmada kendime güvenim tamdır.					
28.Çalışma arkadaşlarımı işle ilgili tatmin edici şekilde bilgilendiririm					
29.İşler tıkandığında, bu durumdan kurtulmaya yönelik birçok çare/yol bulurum					
30.Halihazırda iş hedeflerime enerjik bir şekilde ulaşmaya çalışıyorum					
31.Her sorun için birden fazla çözüm vardır					
32.Halihazırda işimde oldukça başarılı olduğuma inanıyorum					
33.İş hedeflerime ulaşmak için pek çok yol bulabilirim					
34.İşle ilgili kendime koymuş olduğum hedefleri şu anda gerçekleştiriyorum					
35.İşte başarısız olduğumda, bundan kurtulmakta ve yoluma devam etmekte zorlanıyorum					
36.İş ortamında meydana gelen güçlüklerin bir şekilde üstesinden gelirim					
37.Zorunluluk halinde, işte kendi başımın çaresine bakarım					
38.Stresli işleri kendime dert etmem, soğuk kanlılıkla halletmeye bakarım					
39.Deneyimlerim sayesinde iş yerindeki zorlukların üstesinden gelebiliyorum					
40.Bu işte aynı anda birden fazla şeyin üstesinden gelebilirim					
41.İşte belirsizlik söz konusu olduğunda, sonucun hep en iyi olmasını ümit ederim					
42.İşte bazı şeylerin ters gitme ihtimali varsa, ters gider					
43.İşimle ilgili konularda bardağa hep dolu tarafından bakarım					
44.İşimle ilgili gelecekte yaşayacaklarım konusunda iyimserim					
45.Bu işte hiçbir şey benim istediğim şekilde olmaz					
46.İşime bakış açım şudur: “her gecenin bir sabahı vardır” veya “her işte bir hayır vardır”					

Appendix D. Burnout Questionnaire

Aşağıdaki ifadeler şu anda kendi hakkınızda ne düşündüğünüzü tanımlamaktadır. Anketi doldururken, bu ifadelere ne ölçüde katıldığınızı işaretleyerek belirtiniz.	Kesinlikle Katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Kesinlikle Katılıyorum
47.İşimden soğuduğumu hissediyorum.					
48.İş dönüşü kendimi ruhen tükenmiş hissediyorum					
49.Sabah kalktığımda bir gün daha bu işi kaldıramayacağımı hissediyorum					
50.İşim gereği karşılaştığım insanların ne hissettiğini hemen anlarım.					
51.İşim gereği karşılaştığım bazı insanlara sanki insan değilmiş gibi davrandığımı fark ediyorum.					
52.Bütün gün insanlarla uğraşmak benim için gerçekten yıpratıcı					
53.İşim gereği karşılaştığım insanların sorunlarına en uygun çözüm yollarını bulurum.					
54.Yaptığım işten yıldığımı hissediyorum.					
55.Yaptığım iş sayesinde insanların yaşamına katkıda bulunduğuma inanıyorum.					
56.Bu işte çalışmaya başladığımdan beri insanlara karşı sertleştim.					
57.Bu işin beni giderek katılaştırmasından korkuyorum.					
58.Kendimi işimde çok şeyler yapabilecek güçte hissediyorum					
59.İşimin beni kısıtladığını hissediyorum.					
60.İşimde çok fazla çalıştığımı hissediyorum.					
61.İşim gereği karşılaştığım insanlara ne olduğu umurumda değil.					
62.Doğrudan doğruya insanlarla çalışmak bende stres yaratıyor					
63.İşimin gereği karşılaştığım insanlarla aramda rahat bir hava yaratırım					
64.İnsanlarla yakın bir çalışmadan sonra kendimi canlanmış hissedirim.					
65.Bu işte birçok kayda değer başarı elde ettim.					
66.Yolun sonuna geldiğimi hissediyorum.					
67.İşimdeki duygusal sorunlara serinkanlılıkla yaklaşırım					
68.İşimde karşılaştığım insanların, bazı problemlerinin nedeni sanki benmişim gibi davrandıklarını düşünüyorum.					

Appendix E. Work Engagement Questionnaire

Aşağıdaki ifadeler şu anda kendi hakkınızda ne düşündüğünüzü tanımlamaktadır. Anketi doldururken, bu ifadelere ne ölçüde katıldığınızı işaretleyerek belirtiniz.	Kesinlikle Katılmıyorum	Katılmıyorum	Kararsızım	Katılıyorum	Kesinlikle Katılıyorum
69.İşimde kendimi enerji dolu hissedirim					
70.İşimde kendimi güçlü ve dinç hissedirim					
71.İşim bana çalışma şevki verir					
72.Sabah kalktığımda işe gitmek için istekliyimdir					
73.Yoğun bir şekilde çalışırken kendimi mutlu hissedirim					
74.Yaptığım işle gurur duyuyorum					
75.Çalışırken kendimi işime kaptırırım					
76.Çalışırken etrafımdaki her şeyi unuturum					
77.İşimi ilginç ve özel bulurum					