Master in Health Care Management

Thesis

"Leadership and employee's attitudes among healthcare professionals- Evidence from healthcare in Greece"

by

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- The concept and the practice of leadership is synchronous with the birth of human civilization (Sarachek, 1968).However, there is not a universal definition of the term “leadership” in the literature.
- According to Kotter (1995), leadership could be defined as “a set of processes that creates organizations in the first place or adapts them to significantly changing circumstances. Leadership defines what the future should look like, aligns people with that vision, and inspires them to make it happen despite the obstacles”.

- Leadership is the most influential factor in shaping organisational culture. The leadership task is to ensure direction, alignment and commitment within teams and organisations.

- According to Schein (1985), leadership and culture can be thought of as “two sides of the same coin and additionally, “the unique and essential function of leadership is the manipulation of the culture”.

- Interestingly, different leadership theories have been established to highlight different organizational problems, and to “predict proposed circumstances as a result of different behaviors” (Bass & Avolio, 1993

- Bass and Avolio (1994) developed a leadership model called the Full Range Leadership (FRL) model. This model proposes that leaders use multiple behaviors to influence their followers. The Full Range Leadership model includes three leadership styles: **transformational, transactional and passive/avoidant leadership.**
- The transformational leadership style illustrates the importance to inspire and motivate followers through compelling vision, individual support, and, empowerment..
- The transactional leadership style emphasizes the necessity of exchange rewards or punishment for any positive work performance or lack of satisfactory performance with followers.
- laissez-faire leaders react only when performance levels have already decreased (Avolio et al., 1999).

Two categories:

- as “focusing on human relationships or task completion”. “Relationally focused leadership” focalizes on people and relationships, for instance transformational leadership (Bass and Avolio, 1994) and authentic leadership which highlights “leader’s insight, relational transparency and fairness on the part of leaders

- task focused leadership styles are mainly transactional leadership, in which leaders reward their followers in exchange for tasks completed (Bass and Avolio, 1994)

- Bass (1985) proposed transformational leadership theory which suggests that most of the leaders have the characteristics of both the transformational and transactional leadership styles. The **effective leaders use both leadership styles at various situations based on the task and the followers** (Bass and Avolio 1994

- Globally, contemporary healthcare sector is confronted by workforce challenges, changing consumer expectations and demands, fiscal constraints, increasing demands for access to healthcare system, the necessity to improve patient centered care, and issues concerned with levels of quality and safety of health care ,financial pressures, rapidly rising public expectations.

- The healthcare field has changed dramatically in the past few years. Health care poses special leadership challenges because of the complexity of health care institutions.
- hospitals are very costly, dynamic, complex environments, which constitute the cornerstone of the health care system. Health care organisations are comprised of **human systems where individuals of diverse social, cultural, educational and professional backgrounds interact with one another** in an effort to achieve successful management of the health care system ensure the provision of safe, efficient, and high-quality healthcare services

- In healthcare there is distinction between leadership in the person of the chief executive (or his or her directors) and team or clinical leadership which refers to healthcare professional groups such as doctors, nurses and multidisciplinary teams which are the face of care of which the patient is most aware.

- According to Garruba et *al* (2011), **clinical leadership** could be defined as the "ability to influence peers to act and enable clinical performance, provide peers with support and motivation, play a role in enacting organizational strategic direction, challenge processes, to possess the ability to drive and implement the vision of delivering safety in healthcare"

- Nicol, Mohanna and Cowpe, (2014) suggest that clinical leadership should encompass all clinical healthcare workforce, regardless of profession, whereas all members of the health care team are potential leaders in a concept of 'distributed leadership', which underlines that healthcare professionals are eligible to become 'leaders' without having a formal leadership position of managerial authority.

- clinical leaders could be approached as team leaders who are encouraged to “create a strong sense of team identity by ensuring that the team has formed a clear and inspiring vision of the team’s work, there is clarity about the team’s members roles and responsibilities,

- Stoller J. (2017) stated that “clinicians lead all the time. They lead patients through the difficult maze of illness, families through the travails of ill loved ones, their peers through the challenge of studying the science of medicine and nursing, and controlling both tough decisions and complex organizations.”

- Clinicians are well established leaders who lead in hierarchical, highly structured environments, like in wards, in intensive care unit, in emergency department, or the operating room, the supervisors oversee their clinical fellows, the chief physician or chief nurse oversee residents and nurses of a particular nursing unit respectively, physicians lead patients, (Stoller J.,2017).

- Current leaders in health care typically distinguished themselves and provide a service to the community of healthcare workforce as Chair of Department, Chief of Section/Division, Chief Medical Officer, Head Nurse, Nurse Manager, Head allied healthcare professional or other formal leadership positions.
- However, all clinicians are called to lead in their daily practice.

- Effective clinical leadership in the context of these dynamic and challenging hospital settings has been associated with a broad range of positive consequences. It is a prerequisite to sustain the optimal healthcare system performance , to accomplish health reform plans, timely care delivery, system integrity and efficiency
- clinical leaders should be characterized as being **clinically credible**, which means to be recognized by colleagues as being commited to clinical work and having clinical competence and social skills as well.
- The **effective 21st century leader** will not only be excellent and able to come up with innovative ideas, but also will be able to “go 3 levels down and broadly comprehend what the person at the third level is doing

- Health and wellbeing is “a state of complete physical, mental and social wellbeing and not merely the absence of disease

- according to the World Health Organization (WHO), “a healthy workplace is one in which workers and managers collaborate to use a continual improvement process to protect and promote the health, safety and well-being of all workers and the sustainability of workplace”

- Employee wellbeing is a form of domain-specific wellbeing. Van de Voorde et al. (2011) distinguish the three dimensions of ‘employee wellbeing—happiness, health and relationship wellbeing’. Work-related happiness is defined as job satisfaction, work-related health is defined as burnout, specifically emotional exhaustion and relationship wellbeing is defined as ‘harmonious work relationships between colleagues and leaders’.

- Healthcare worker’s well-being might not only be beneficial to the individual clinician, but also be valuable to the delivery of high-quality health care.

- Dimensions of physician well-being which could be measured include: burnout, engagement, professional fulfillment/satisfaction, fatigue, emotional health/stress, and various dimensions of well-being/quality of life, negative medical consequences of physician impairement (eg, professional or diagnostic errors, fatigue, medical errors, sickl eave, sleep deprivation, cognitive impairement).

- the `triple aim' of healthcare delivery (improving patient experience and outcomes and reducing costs) a fourth dimension should be added: improving healthcare staff experience and therefore well-being of healthcare workforce.

- team leadership is invited to set an example from the top in order to shape a culture where wellbeing of team members is highly valued and the patient-centered healthcare as well.

Job satisfaction

- This is the "feeling employees have about their job in general" (Smith et al. 1975). It is a "multidimensional construct with specific facets of satisfaction related to income, work, supervision, professional opportunities, benefits, organizational practices and relationships with colleagues" (Misener et al. 1996).
- Research demonstrates that employees who are characterized as being satisfied with their job are more likely to be productive and might intent to stay on the job (McNeese-Smith 1997).

Burnout

- Burnout is a combination of exhaustion, cynicism, and perceived inefficacy resulting from long-term job stress
- Burnout is defined as a "prolonged response to chronic emotional and interpersonal stressors on the job" .It results from an intense and strongly asymmetrical relationship between the "giver" and the "receiver". Burnout is the result of a complex interaction between environmental stressors, genetic vulnerabilities, and coping styles. It leads to emotional exhaustion, depersonalization, and a sense of decreased personal accomplishment.
- Organisational and individual consequences

- Job performance substitutes a multifaceted dimension which is utilized by scholars as a determinant of occupational health whereas is correlated to employee's productivity (Koopmans *et al.* 2011)**.**

- Especially, as far as healthcare organisations are concerned, job performance is widely used as a measurement outcome and an indicator of the quality of healthcare services (Firth-Cozens and Mowbray, 2001), (Ham, 2003)**.**

- The aim of this study is to examine the relationship between team leadership and the attitudes of healthcare professionals regarding the job performance, burnout, job satisfaction and the well-being of employees.

- following the JD–R (job demands–resources model) (Bakker, Demerouti and Sanz-Vergel, 2014) will investigate the role of effective clinical leadership as a valuable job resource which might lead to the well-being of employees
- this model will explore the mediating role of burnout, job satisfaction and job performance on the relationship between the leadership and well-being of healthcare professionals.

- For this particular study, **effective healthcare leaders** are defined as those displaying both **transformational and transactional** features according to Transformational Leadership Theory.

- Literature supports that transformational leadership theory (which encompasses both transformational and transactional traits) is well recognised in healthcare and that this leadership theory is related to staff satisfaction, unit or team performance, organisational climate and turnover intentions.

- Additionally, there is strong evidence that transformational leadership is positively correlated to work-life balance, well-being of employee's, positive nursing outcomes, patient safety, openness about errors, and patient and staff satisfaction
- The literature provides strong evidence that effective and positive forms of healthcare leadership play a key role in promoting and establishing the well-being of healthcare workforce, high levels of job satisfaction, high levels of job performance and lowering the incidence of burnout

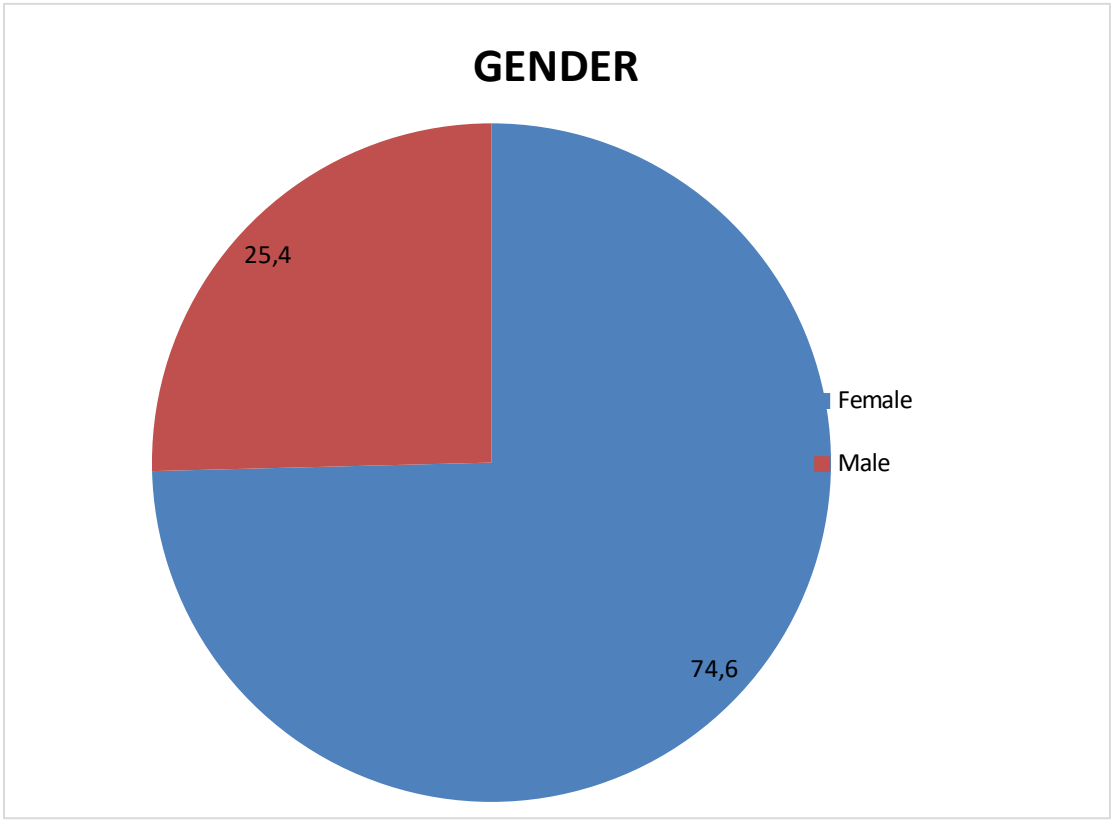
- **an effort was made to answer the 7 hypotheses of this study which are presented below:**
- Effective leadership is related to job satisfaction, burnout, job performance and well-being of healthcare professionals.
- The three leadership styles are related to demographic characteristics (age, gender, working experience, profession and formal position of responsibility).
- The three leadership styles are related to well-being, job satisfaction, burnout, job performance and self-reported errors.
- Job satisfaction is related to job performance and well-being of healthcare professionals.
- Burnout is related to job performance and well-being of healthcare professionals.
- Job performance is related to the well-being of healthcare professionals.
- Demographic characteristics are related to well-being, job satisfaction, burnout, job performance and self-reported errors.

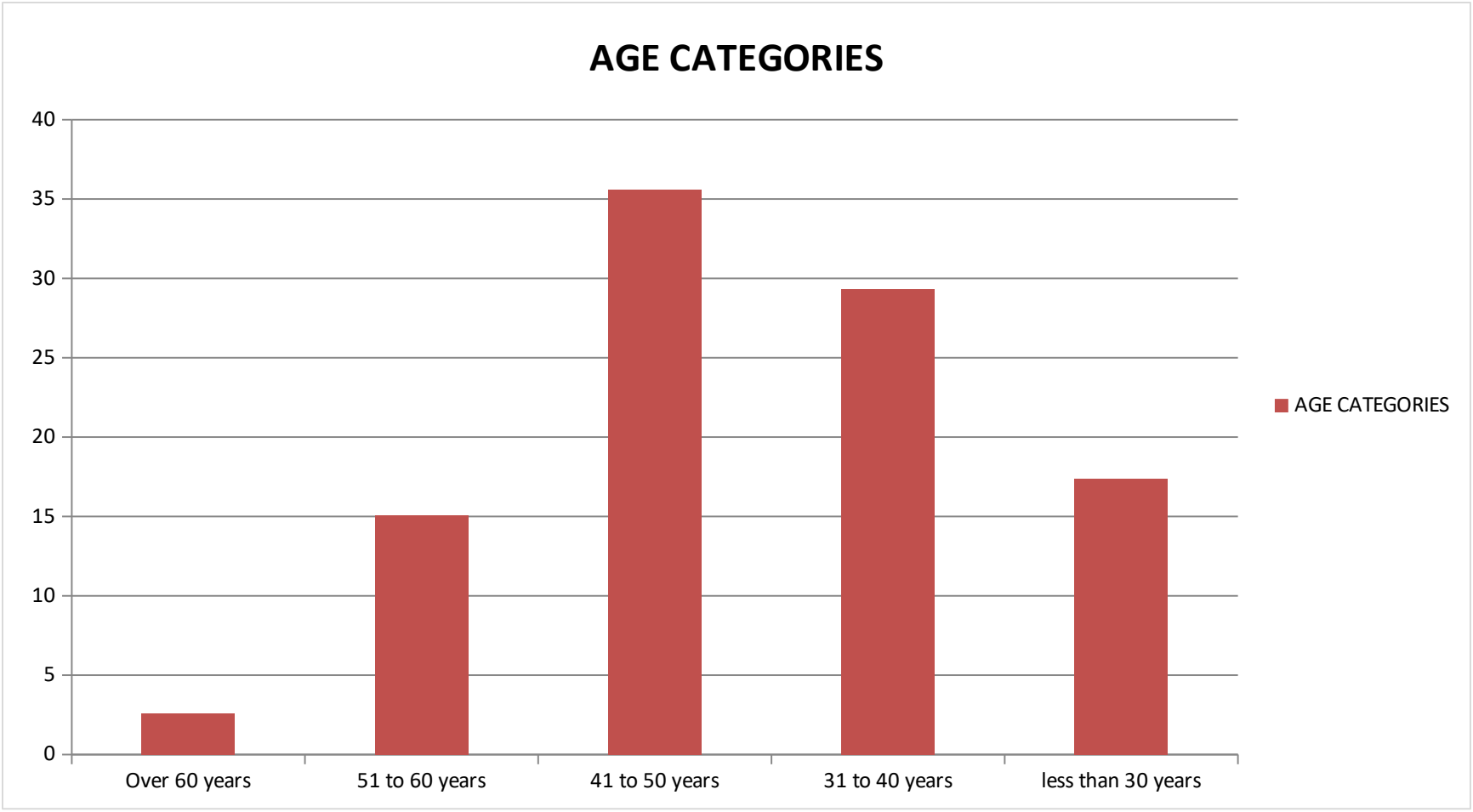
- The **target population** of this study consisted of healthcare professionals who were working in a hospital setting. More specifically, doctors, nurses and allied healthcare professionals (including medical laboratory technicians, radiographers, physiotherapists), who were working in public tertiary and secondary hospitals located in the Regions of Central and Western Macedonia, Greece, were invited to voluntarily complete the questionnaires in December 2019

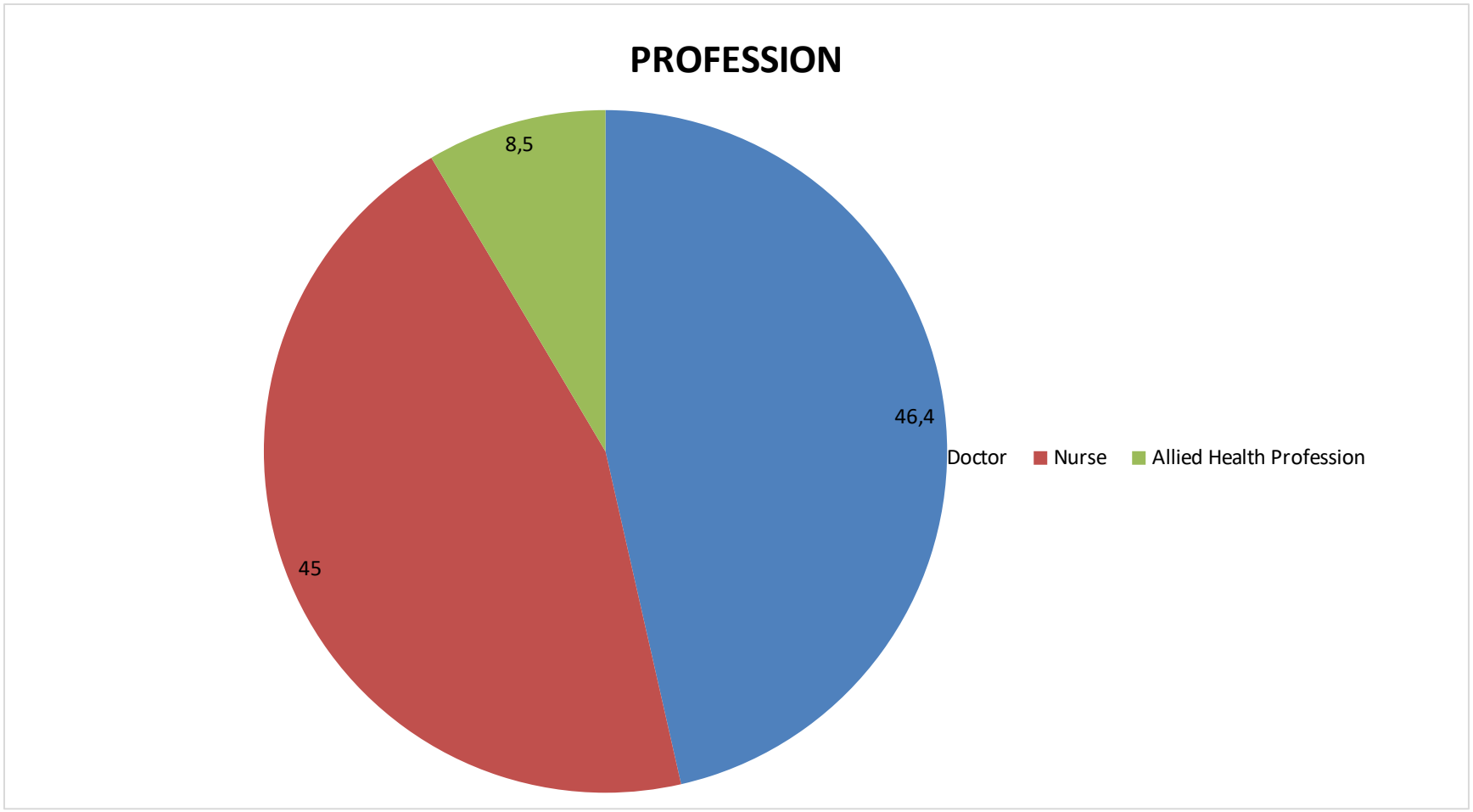
- 400 paper questionnaires were distributed to healthcare professionals and consequently 306 questionnaires were returned completed, representing a response rate of 76.5%. In addition, 45 electronic questionnaires, which were created by using Google forms and emailed to healthcare professionals, were completed.

- The data were coded into Microsoft Excel, and then transferred into the statistical software SPSS. v25 for analysis.
- The majority of descriptive methods used were frequencies, means and standard deviations and minimum and maximum values that are presented in the form of Tables in order to have a general idea about the sample's characteristics.
- The reliability of the scales used was tested with the Cronbach's Alpha statistic, and the scores constructed from those scales were tested for normality with the Kolmogorov-Smirnov and Shapiro-Wilk Tests.
- Many items were recoded according to each scale's instructions. In order to answer the seven hypotheses of this study, the parametric t-test and one-way ANOVA tests were used.
- For relations between interval variables, this study utilized the Pearson correlation coefficient test and for relations between categorical variables the Chi-square test was conducted. The confidence level was set to a = 0.05.

- **Demographic Characteristics**

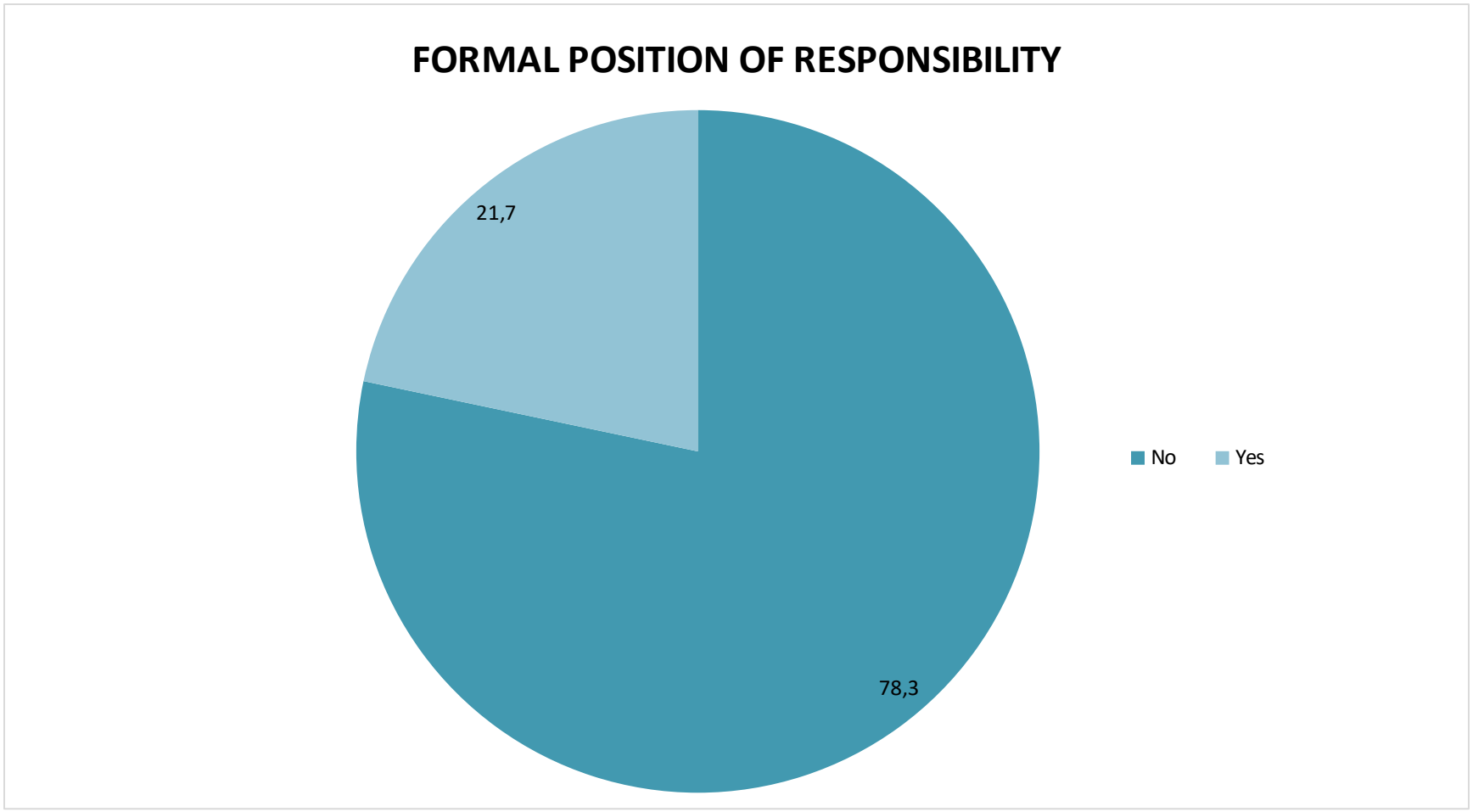



AGE CATEGORIES
40
35
30
25
20
15
10
5
0
Over 60 years
51 to 60 years
41 to 50 years
31 to 40 years
less than 30 years
AGE CATEGORIES


PROFESSION
8,5
46,4
45
Doctor
Nurse
Allied Health Profession


WORKING EXPERIENCE
50
45
40
35
30
25
20
15
10
5
0
Over 15 years
11 to 15 years
6 to 10 years
Less than 5 years
WORKING EXPERIENCE

WORKING EXPERIENCE	
Over 15 years	44.4%
6 to 10 years	23.4%
Less than 5 years	23.1%
11 to 15 years	9.1%


FORMAL POSITION OF RESPONSIBILITY
21,7
78,3
No
Yes

Well-Being Scale

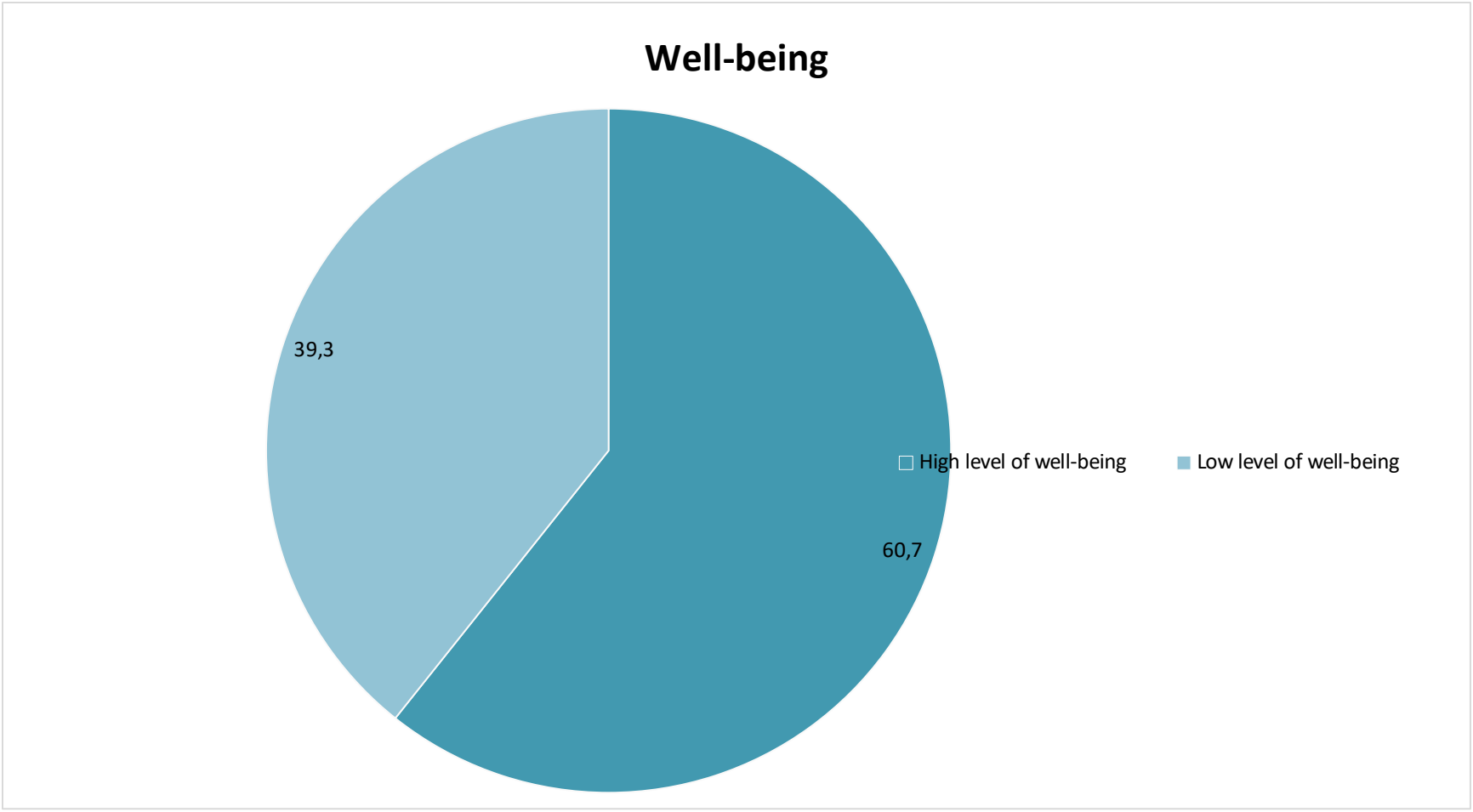
- A 9-item Well-Being Index was used to measure the well-being of participants in relation to their work (Dyrbye, Satele and Shanafelt, 2016)

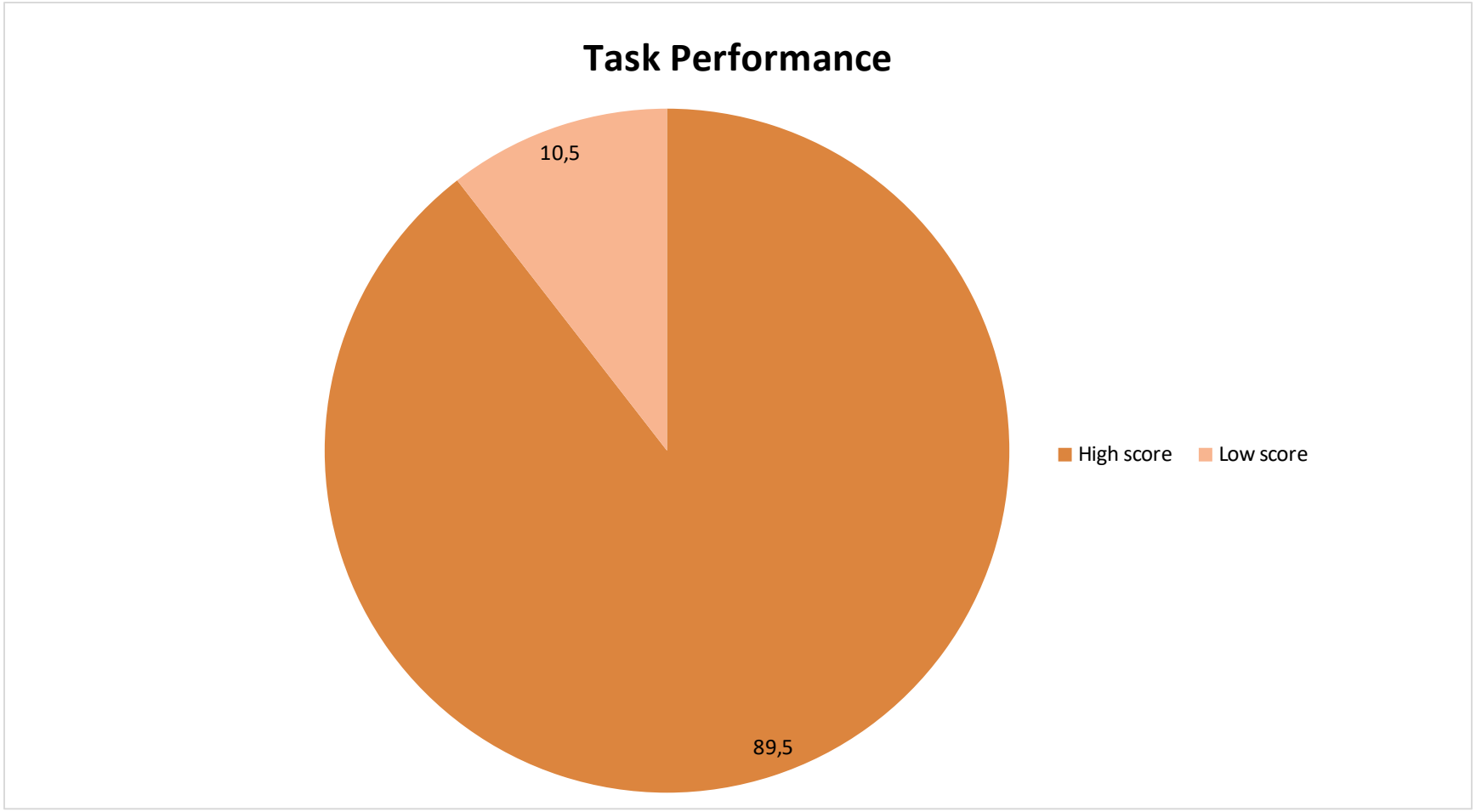
Job Performance Scale

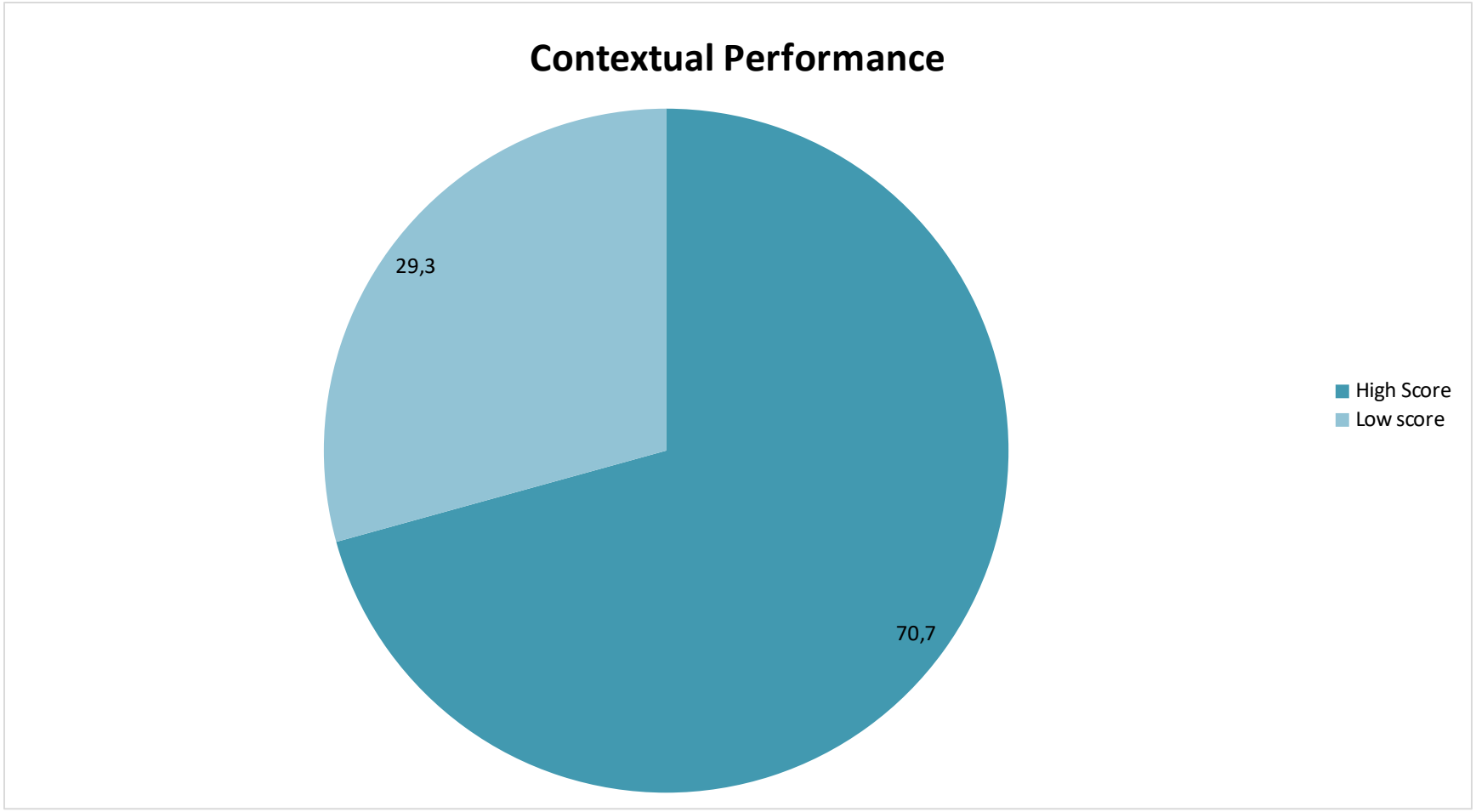
- Job performance was measured by a total of 21-items (see Appendix-Job performance-Task Performance, Contextual Performance and Counter-productive work behavior). A total of 19 items were taken from the Individual Work Performance Questionnaire (Koopmans et al, 2014) that were divided into 3 broad dimensions, Task Performance, Contextual Performance and Counter-productive work behavior.
- Two additional modified items related to self-reported suboptimal patient care, which measured self-reported errors, were taken from two studies (Colin P. West et al, 2006 and Mickey Trockel et al, 2018*)*. The participants were invited to answer Question1: "In the past 3 months, I made a medical error which had major potential to cause harm to patient's health or patients' clinical outcomes."(**Major Error)**
- the Question 2: "In the past 3 months, I made a medical error which had little potential to cause harm to patient's health or patients' clinical outcomes."(Minor Error)

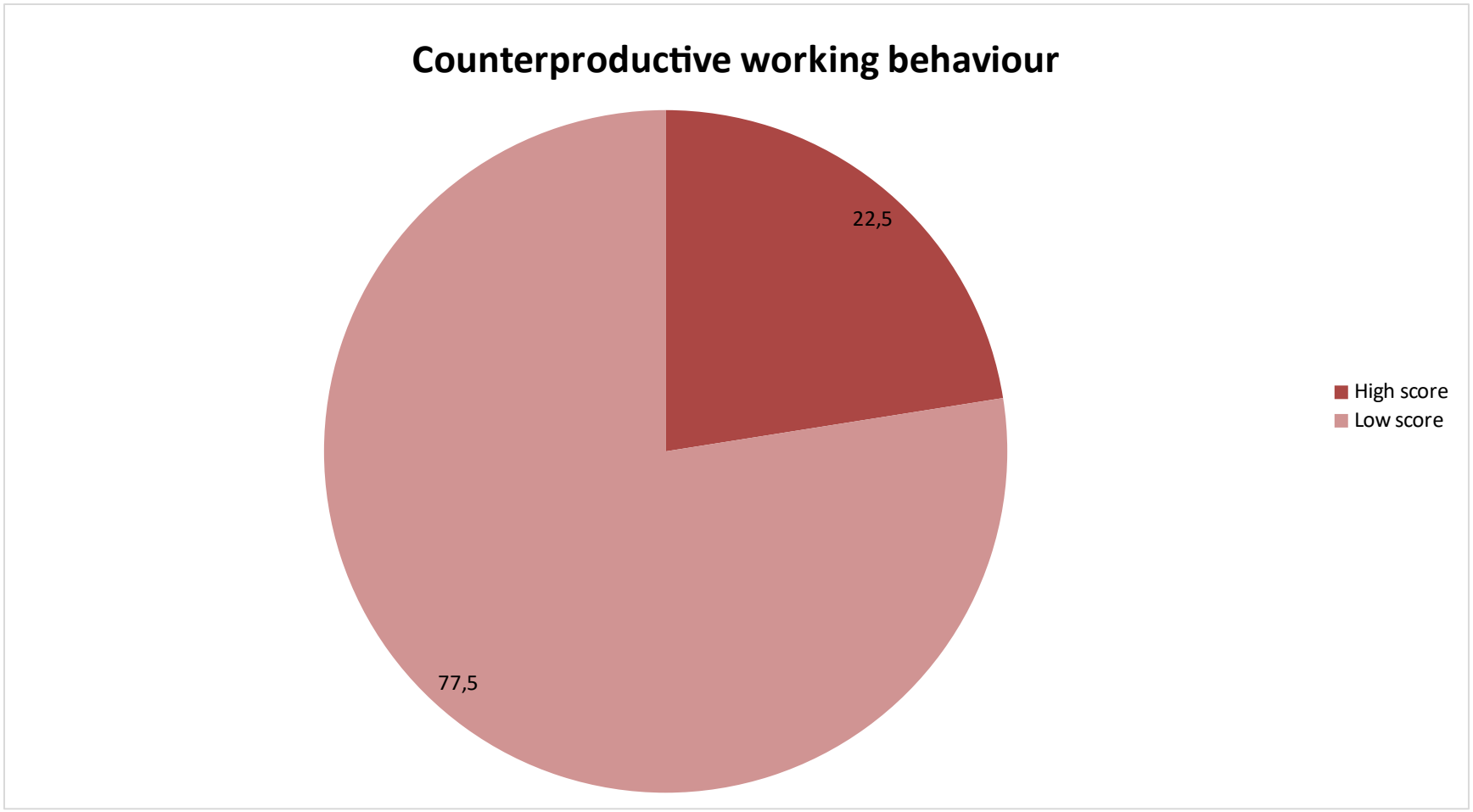
- Burnout was measured with the Maslach Burnout Inventory (Maslach et al, 1996). A total of 22-items were answered with a 7-point (0-6) Likert-scale and were divided into 3 dimensions (Emotional Exhaustion, Depersonalization and Personal Accomplishment)

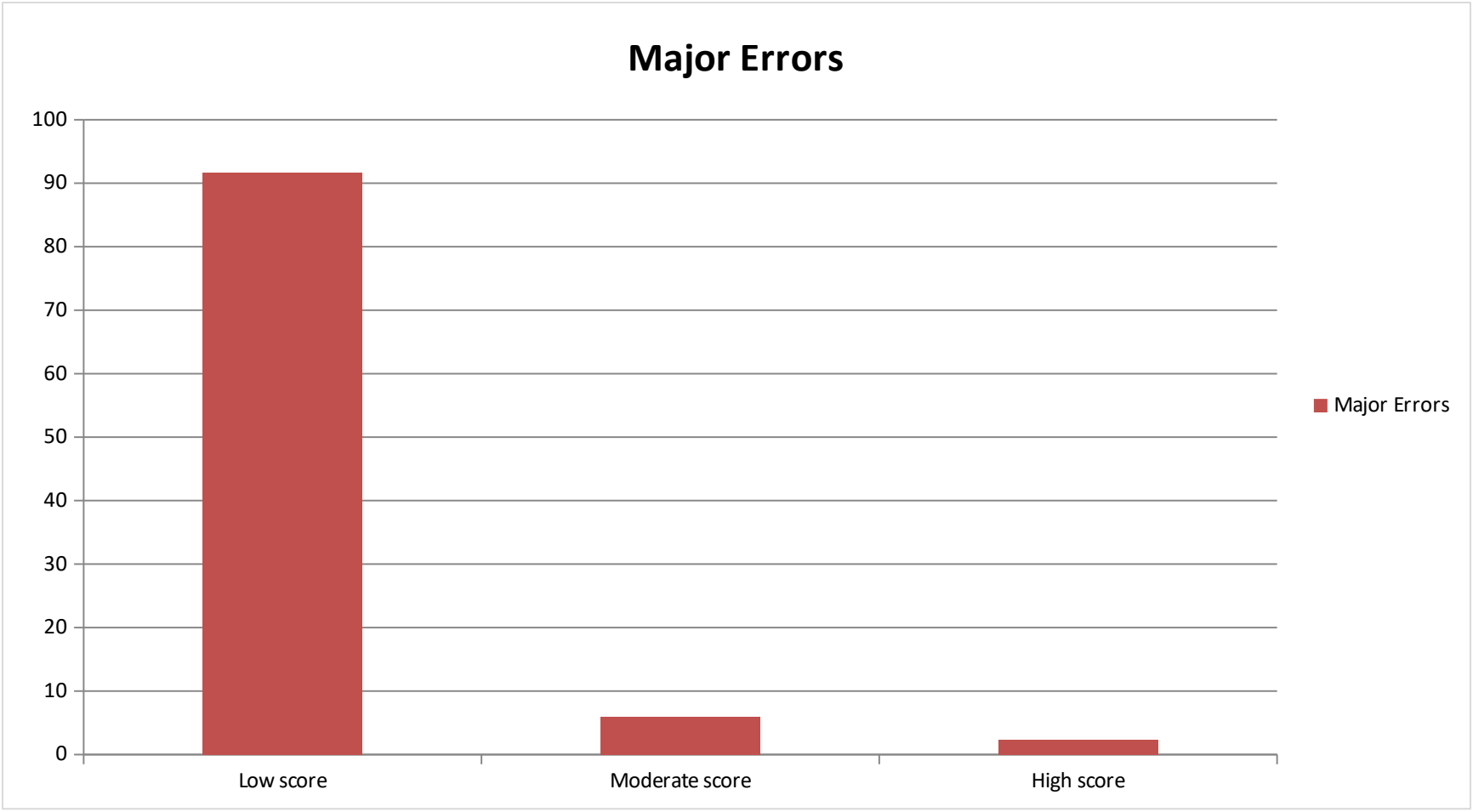
- Job Satisfaction was measured with three questions taken from a 2013 study (Ang S.A. et al, 2013).

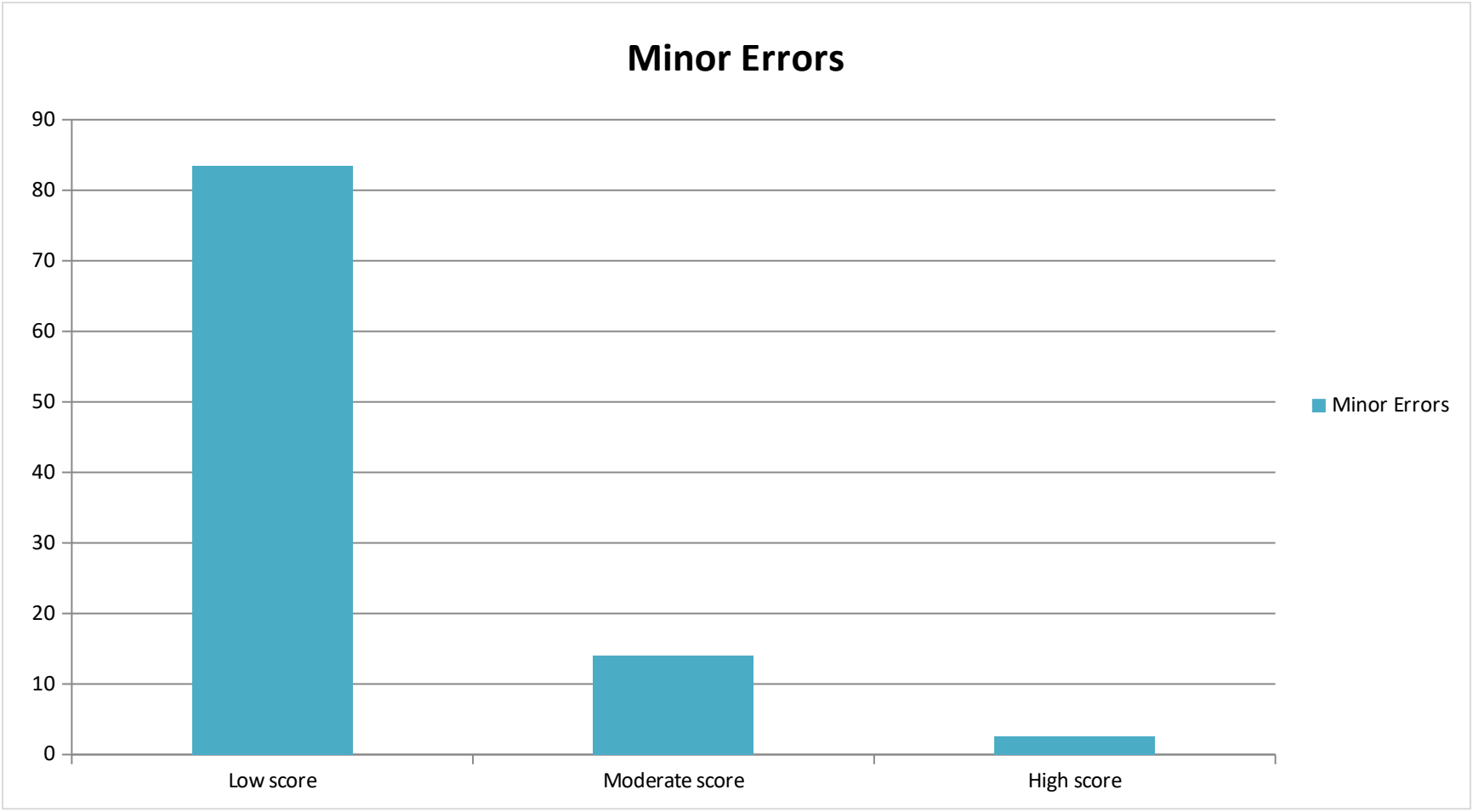

Well-being
39,3
60,7
High level of well-being
Low level of well-being

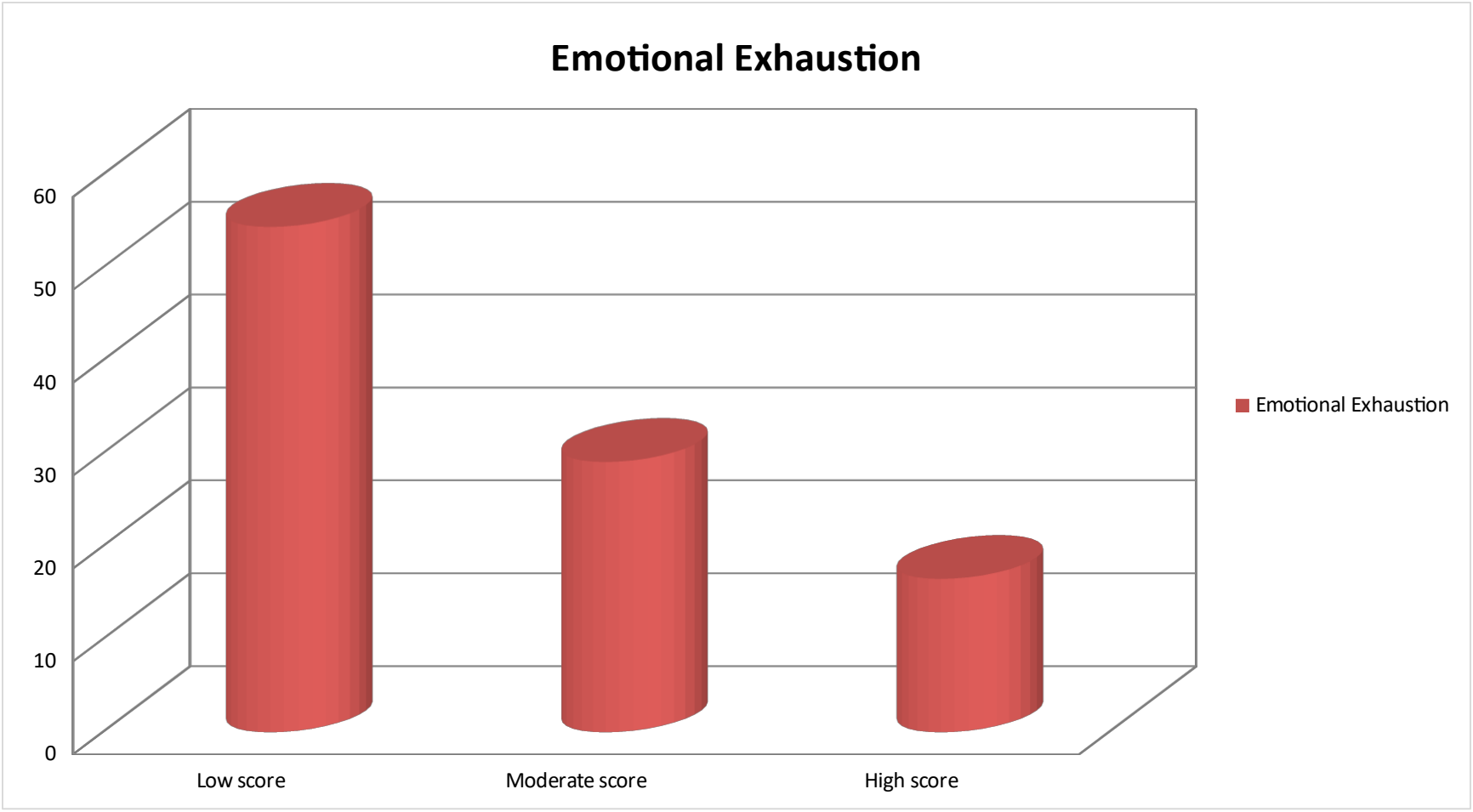

Task Performance
10,5
89,5
High score
Low score

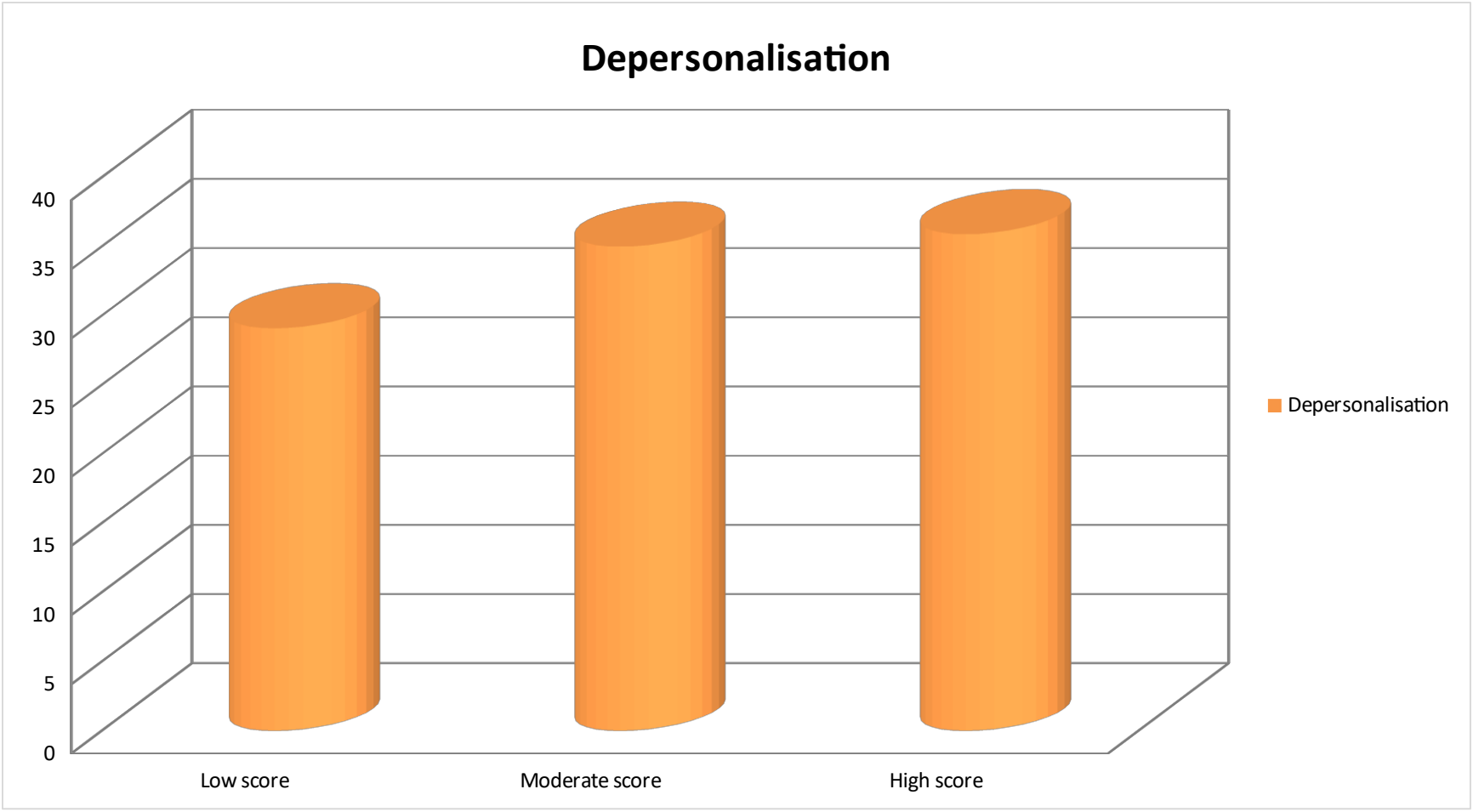

Contextual Performance
29,3
70,7
High Score
Low score

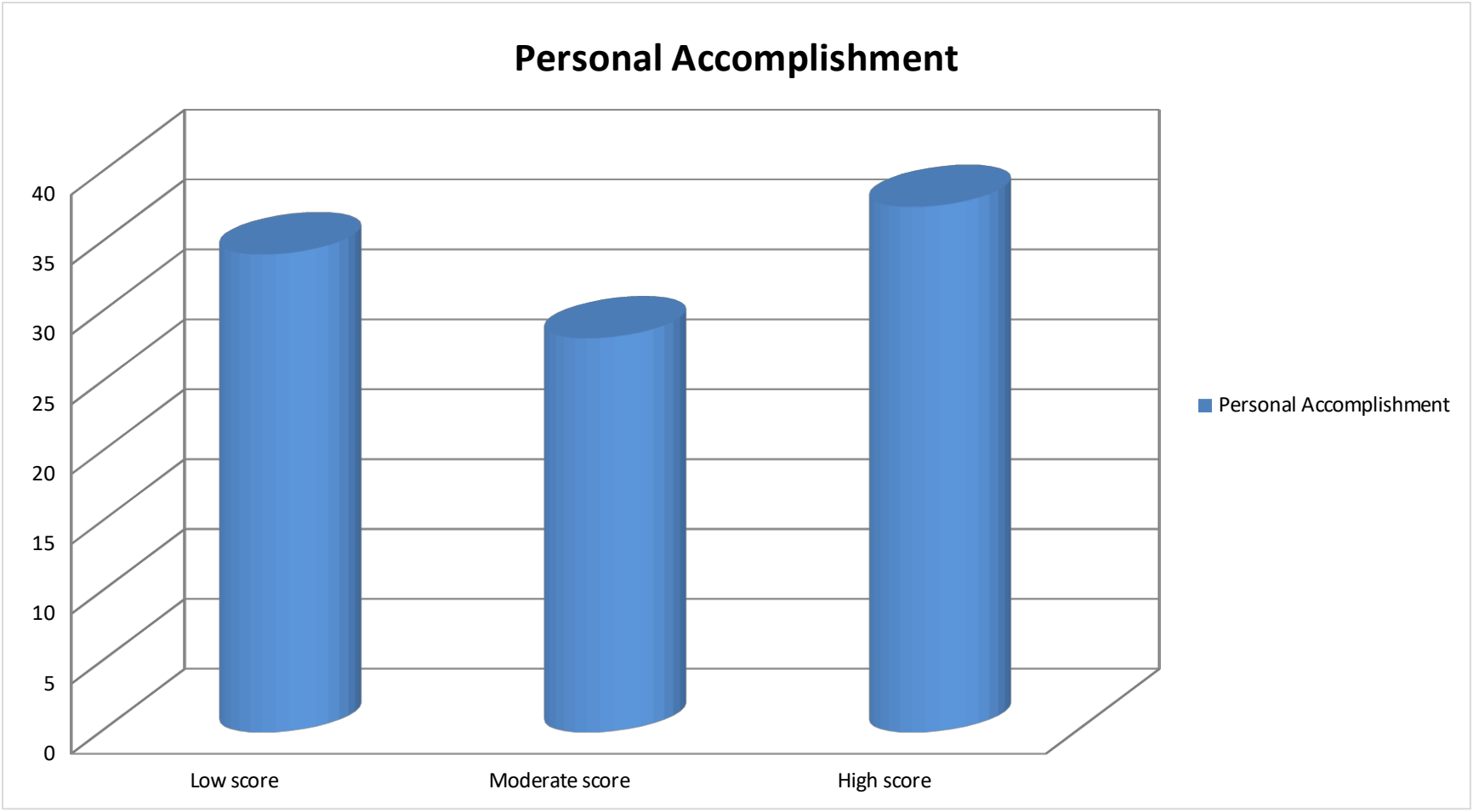

Counterproductive working behaviour
22,5
77,5
High score
Low score

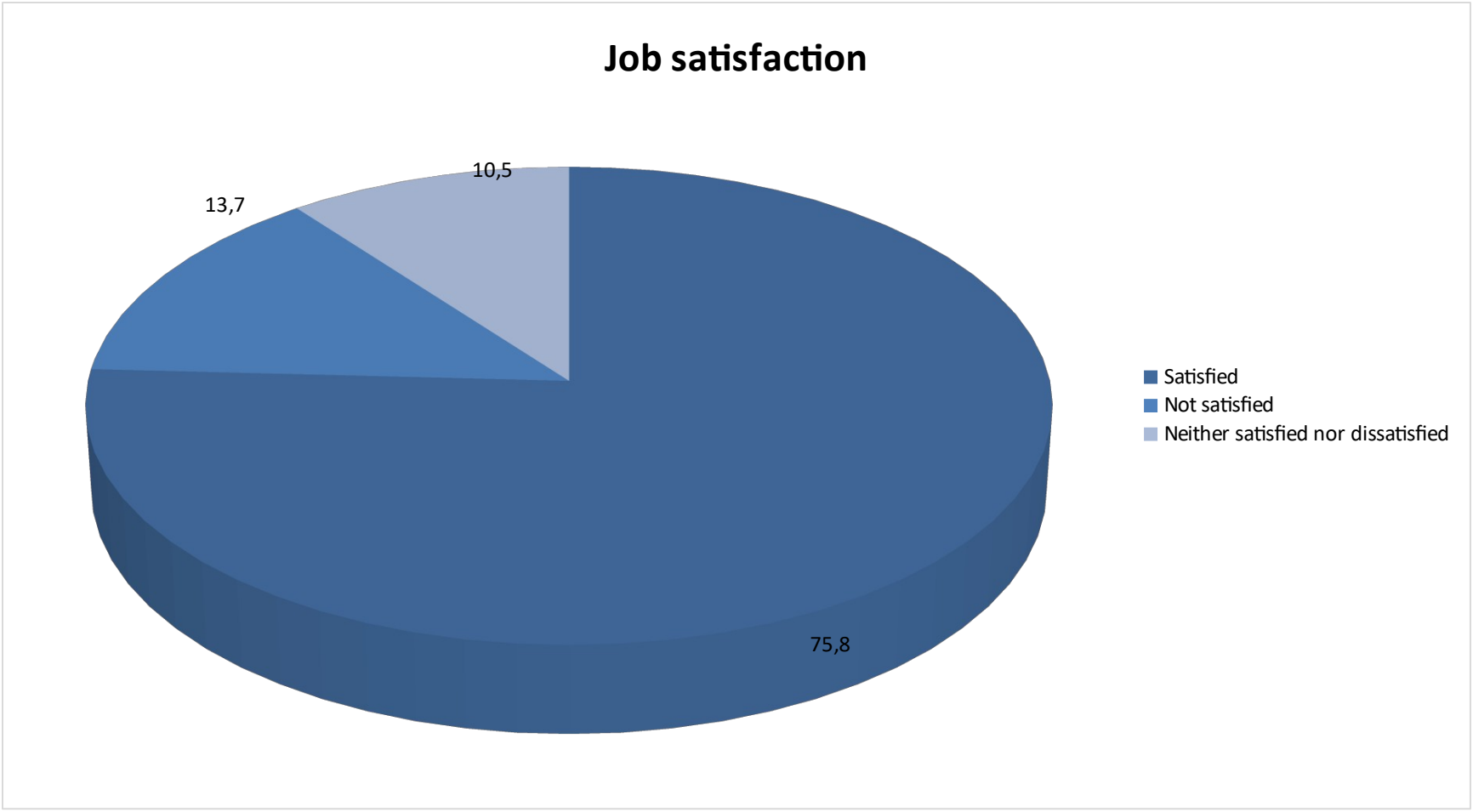

Major Errors
100
90
80
70
60
50
40
30
20
10
0
Low score
Moderate score
High score
Major Errors


Minor Errors
90
80
70
60
50
40
30
20
10
0
Low score
Moderate score
High score
Minor Errors


Emotional Exhaustion
60
50
40
30
20
10
0
Low score
Moderate score
High score
Emotional Exhaustion


Depersonalisation
40
35
30
25
20
15
10
5
0
Low score
Moderate score
High score
Depersonalisation


Personal Accomplishment
40
35
30
25
20
15
10
5
0
Low score
Moderate score
High score
Personal Accomplishment


Job satisfaction
10,5
13,7
75,8
Satisfied
Not satisfied
Neither satisfied nor dissatisfied

- Leadership Style was determined with the Multifactor Leadership Questionnaire (MLQ, Form 6S) *(*Bass, B.,Avolio, B, 1992), (Gift Vinger, Frans Ciliers, 2006*)* that consists of 21 questions that are divided into 7 factors
- Each factor corresponds to a certain leadership style with a total of 3 styles defined (transformational, transactional and passive).
- It should be emphasized that by using this form of MLQ the respondents were invited to self-evaluate their own leadership competencies with regard to specific leadership behaviors regardless of holding a formal leadership position at her/his work or not.
- Furthermore, Leadership was defined as "Effective" when the respondent demonstrated a main leadership style that wasn't passive.

STYLE OF LEADERSHIP	
Transactional	37.0%
Transformational	29.6%
Passive/Laissez-faire	22.2%
No Preference	11.2%
EFFECTIVE LEADERSHIP	
Effective	70.4%
Passive	24.8%
No Preference	4.8%

1st Hypothesis

- ***"Effective leadership is related to job satisfaction, burnout, job performance and well-being of healthcare professionals."***

The first hypothesis was answered with 4 T-tests. This study defined Effective leadership as a non- Passive leadership type, therefore the mean of the 4 scores of satisfaction, burnout, performance and well-being were compared between individuals who demonstrated effective leadership traits and those with passive leadership traits.

T-tests with Effective Leadership	P-values
Well Being	0.568
Job Performance	0.067
Burnout	0.172
Job Satisfaction	0.808

Therefore, the 1st **hypothesis** is rejected, except for the fact that there might be a positive correlation between effective leadership and job performance, as the test for job performance was marginally at the edge of statistical significance (p-value 0.067).

2nd Hypothesis

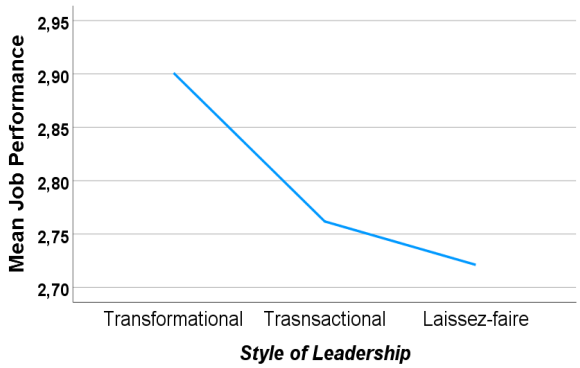
- ***"The three leadership styles are related to demographic characteristics (age, gender, working experience, profession and position of responsibility)"***
- Since all variables were categorical, the Pearson's Chi-Square test was used to detect disproportionate combinations of answers.
- No results were found to be statistically significant, indicating that Demographic characteristics aren't related to the style of Leadership.

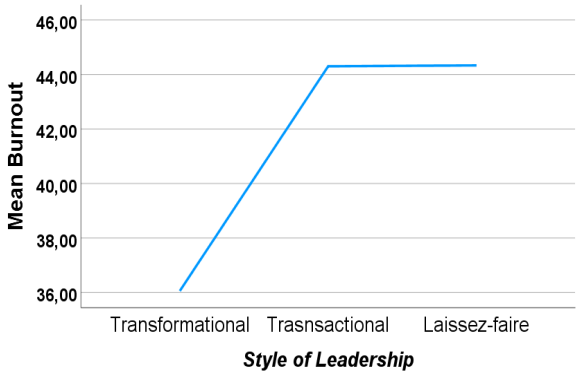
Variables	Chi-Square (p-value)
Style of Leadership * Gender	0.861
Style of Leadership * Age Categories	0.062
Style of Leadership * Profession	0.863
Style of Leadership * Work Experience	0.606
Style of Leadership *Formal Position of Responsibility	0.951

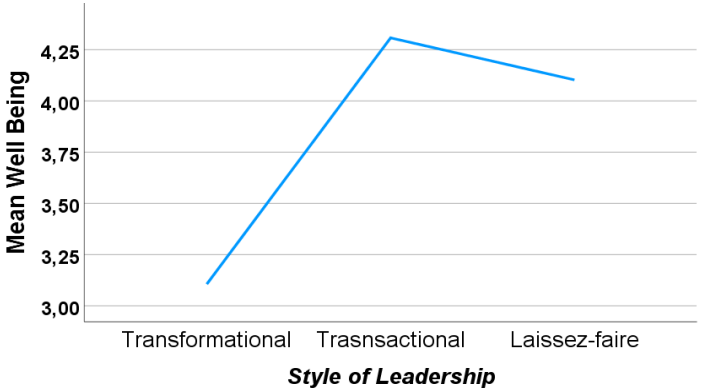
- **3rd Hypothesis**
- ***"The three leadership styles are related to well-being, job satisfaction, burnout, job performance and self-reported errors."***
-
- The third hypothesis was answered by conducting one-way ANOVA tests in order to compare the five scores with the Leadership style categories

Well Being	**0.001**
Self-Reported Errors	0.223
Job Performance	0.016
Burnout	0.007
Job Satisfaction	0.074

- Consequently, the **3rd hypothesis** was partially supported as Transformational **Leadership style** was found to be **positively** correlated to **Job Performance** and **Well-being** and **negatively** correlated to **Burnout.**







- **4th Hypothesis**
- ***"Job satisfaction is related to job performance and well-being of healthcare professionals."***
- For the fourth hypothesis, the Pearson correlation coefficient tests were used since all the variables were scores. Both correlations were significant. A positive correlation was found between job satisfaction and job performance (Pearson, $r = + 0.393$, p – value < 0.0005), and a negative correlation was found between job satisfaction and well-being score (Pearson, $r = - 0.409$, p – value < 0.0005).
- Therefore, the **4th hypothesis** was accepted as **Job Satisfaction** was found to be
- **positively** correlated to both **Job Performance** and **Well-being**.

5th Hypothesis

"Burnout is related to job performance and well-being of healthcare professionals"

- For the fifth hypothesis, the Pearson correlation coefficient tests were used since all the variables were scale-scores. The two tests revealed two statistically significant results. Burnout levels were found positively correlated with the well-being score (Pearson, $r = +0.627$, $p - value < 0.0005$).

- Additionally, burnout levels were found negatively correlated with job performance levels (Pearson, $r = -0.605$, $p - value < 0.0005$), which indicates that higher levels of burnout tend to be aligned with lower levels of job performance for the respondents

- As a result, the **5th hypothesis** was accepted, since two strong **negative** correlations between **Burnout** and **Well-being**, and between **Burnout** and **Job Performance** were depicted.

6th Hypothesis

- ***"Job performance is related to the well-being of healthcare professionals."***
- The sixth hypothesis was also answered with the Pearson correlation coefficient test. A significant negative correlation was found between job performance score and the well-being score of healthcare professionals (Pearson, $r = -0.309$, $p - value < 0.0005$).
- Subsequently, the **6th hypothesis** was accepted as **Job performance** was found to be **positively** correlated to the **Well-being** of healthcare professionals.

7th Hypothesis

"Demographic characteristics are related to well-being, job satisfaction, burnout, job performance and self-reported errors."

- The seventh and final hypothesis was answered by conducting T-tests and one-way ANOVA tests in order to compare the five scores with each of the five demographic characteristics

Grouping Variables	Well Being	Self-Reported Errors	Job Performance	Burnout	Job Satisfaction
Gender	0.088	0.000	0.004	0.098	0.172
Position of Responsibility	0.005	0.170	0.000	0.000	0.065
Age Categories	0.027	0.160	0.001	0.002	0.568
Profession	0.229	0.000	0.000	0.114	0.139
Work Experience	0.246	0.012	0.000	0.003	0.812

- **Gender Differences**
- Gender differences are presented in Figures 26 and 27 below. **Males** on average had a **higher score** on **self-reported errors** (*M = 0.93*) than females (*M = 0.56*). Furthermore **males** reported a **lower job performance** score (*M = 2.67*) than females (*M = 2.83*).

- **Position Differences**
- Formal position of responsibility differences are presented in Figures 28-30. Individuals working in a **formal position of responsibility (formal leadership position**) had a **higher job performance** (*M =2.95*) than those who didn't (*M = 2.74)*. Additionally, participants working in a formal position of responsibility reported **lower burnout scores** (*M = 33.28*) than those who didn't (*M = 43.91*). Furthermore, those in a position of responsibility reported a lower well-being score (meaning a **higher level of well-being**, *M = 3.01*) than the rest (*M = 4.04*). This finding is in alignment with the fact that being in a formal leadership role may buffer well-being, as one may experience feelings of autonomy (control) as a leader, which is negatively correlated with burnout. Cydulka and Korte (2014) found that clinicians in professional leadership roles of any kind report more satisfaction and less burnout.
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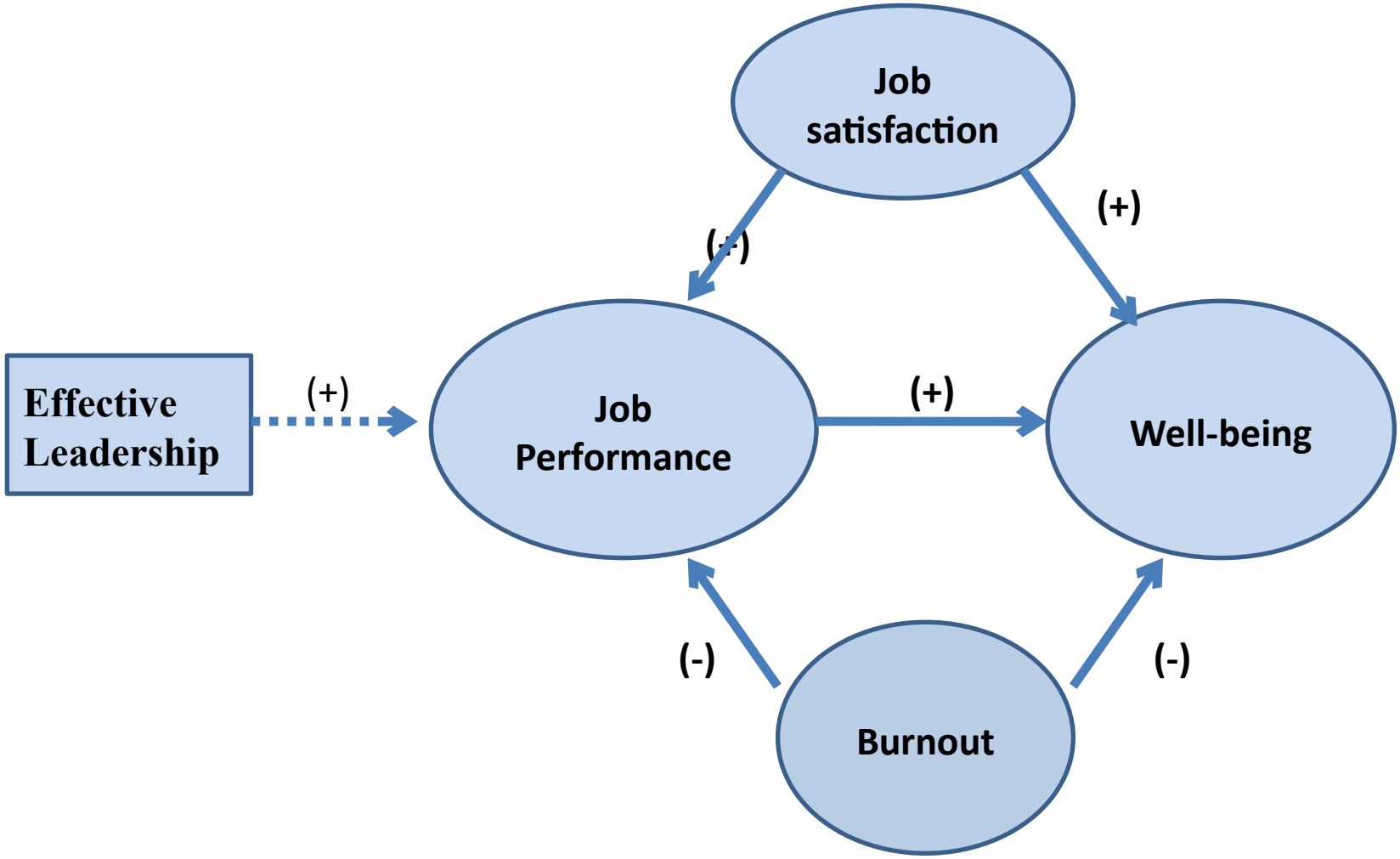
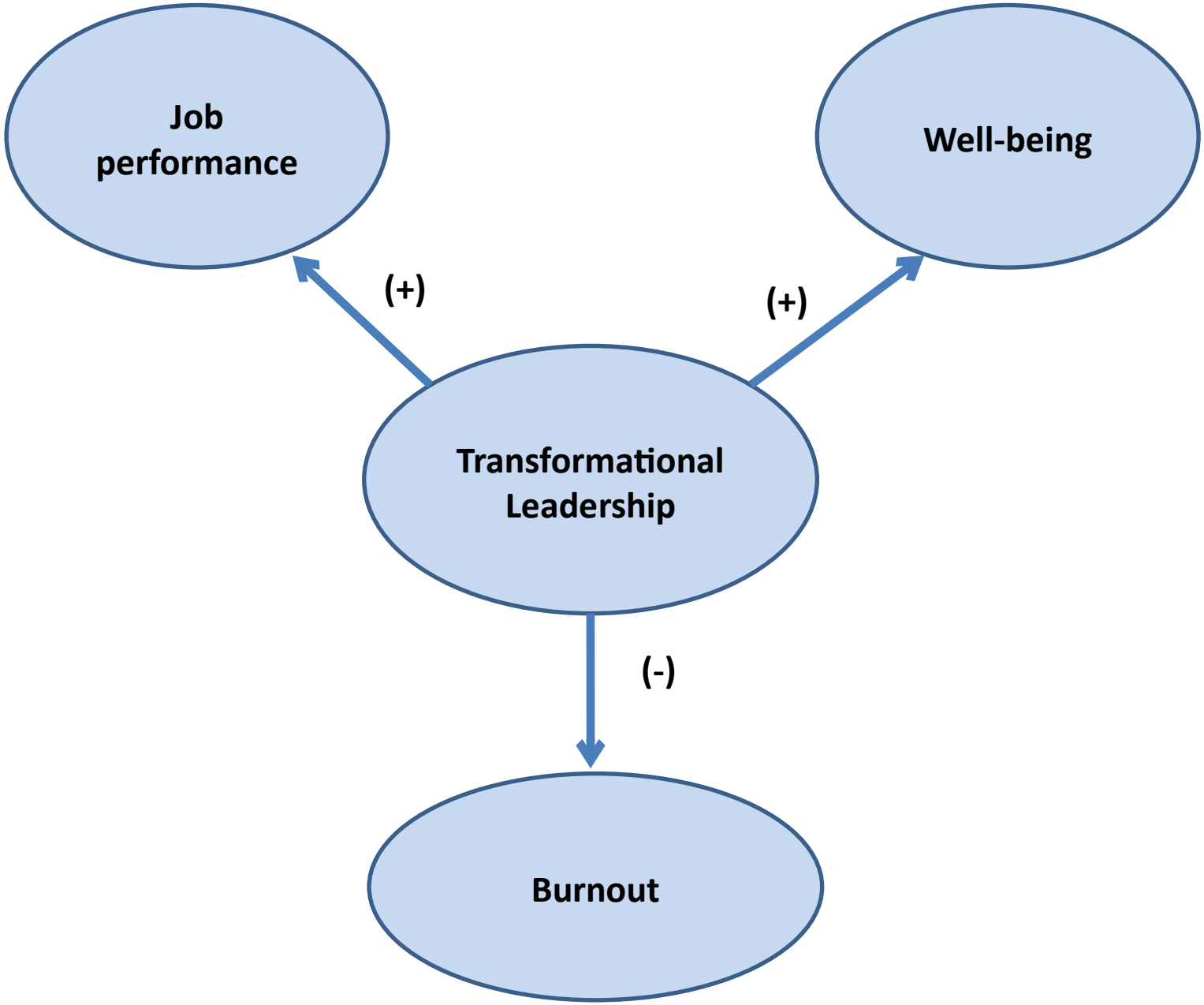
- **Age Differences**
- As the **age of the respondents increases**, their **job performance** levels also **increase**, whereas their **burnout levels decrease** and this finding agrees with the study of Spickard (2002), which supported that burnout levels in clinicians tend to decrease with age and that the fact that younger clinicians need to sacrifice their personal/family life for their career will exacerbate burnout and fatigue
- **Profession Differences**
- Additionally **doctors reported more errors** (*M = 0.86*) than nurses (*M = 0.61*) and other staff (*M = 0.51*). Lastly, **other staff reported higher levels of job performance** (*M = 2.97*) than nurses (*M =2.87*) and doctors (*M = 2.67*).

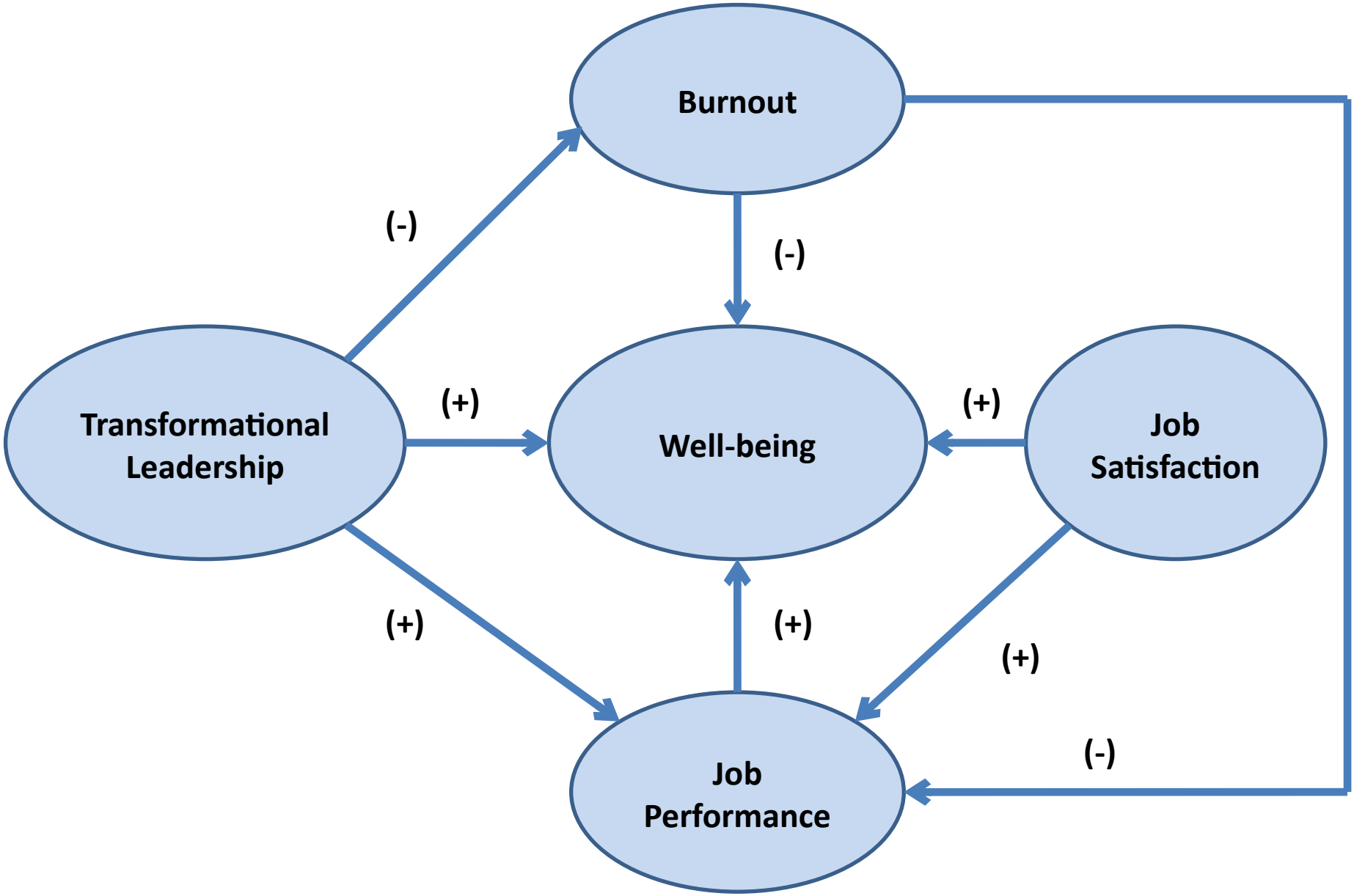
Work-Experience Differences

- As the years of the **working experience increase**, **self-reported errors** tend to also **decrease**, **job performance** levels tend to **increase** and **burnout** levels tend to **decrease** which is consistent with the fact that early career healthcare seem to follow a more “idealistic” approach and a compassionate-empathic attitude may also explain why they are more exposed to burnout risk than the late career clinicians (Kalani et al, 2018).

In an effort to summarize the findings of this particular research, we could propose the following models:


Job satisfaction
(+)
(+)
Effective Leadership
(+)
Job Performance
(+)
Well-being
(-)
(-)
Burnout


Job performance
Well-being
(+)
(+)
Transformational Leadership
(-)
Burnout


Burnout
(-)
(-)
Transformational Leadership
(+)
Well-being
(+)
Job Satisfaction
(+)
(+)
(+)
Job Performance
(-)

Discussion

- The interesting finding of this study is the fact that the positive form of **transformational leadership style was recognized as one of the most important and fundamental factor within healthcare organisations which plays a fundamental role in acknowledging the essence of well-being** of healthcare workforce on one hand, and constantly promoting the well-being of employee's, one the most demanding challenges that healthcare organizations are invited to cope with in the contemporary hospital setting.

- Finally, it should be underscored that the final model of this study is in alignment with the findings of many studies regarding the **beneficial role of transformational in promoting job satisfaction, encouraging job performance to be augmented and mitigating the deleterious effects of burnout in order to finally ensure the well-being of healthcare professionals.** (Cummings et al, 2008, Wong et al 2013).