

The Journal of Applied Research

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Foreword

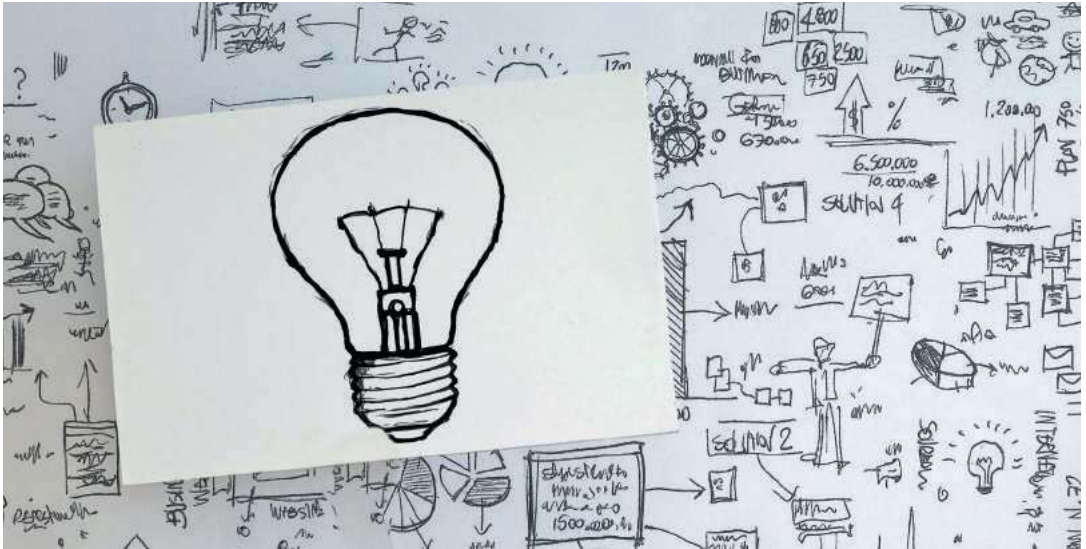
Emotional Intelligence, Psychological Safety, and Critical Thinking - Three Critical Elements in Contemporary and Future Industries

The rapidly evolving landscape of modern industries is characterized by fast technological advancements, diverse employee demographics, and increasing complexity. To navigate this terrain effectively, skills and attitudes that extend beyond technical expertise become critical (Eisenbeiss et al., 2008). The collection of papers included in this publication touches upon three vital attributes, namely emotional intelligence, psychological safety, and critical thinking, as they are experienced in specific work contexts.

Emotional intelligence is an essential component of personal and professional success, as it enhances interpersonal skills, empathy, and self-awareness (Mayer & Salovey, 2016). Indeed, in industry, emotional intelligence fosters an environment where employees can thrive, resulting in improved job satisfaction, reduced turnover, and heightened productivity. In their paper, *Transformational Leadership Style and Emotional Intelligence Impact Leadership Effectiveness Among Charge Nurses: The Case of a Public Hospital in Malta*, Chris Camilleri and Emanuel Camilleri examine the impact of leadership styles and emotional intelligence among charge nurses working at Mater Dei Hospital Malta to identify a leadership effectiveness model. Taking a different perspective, Claire Vassallo and Melvin Mizzi examine another important facet of emotional intelligence, specifically motivation and its impact on performance in their paper *The Impact of Remote Working on Motivation: A Study in the Public Service of Malta*.

Emotional Intelligence thrives in psychologically safe workplaces where employees feel valued, respected, and free to voice their opinions (Edmondson, 2018). Indeed, employee psychological safety contributes to individual and collective performance in contemporary industries (Detert & Burris, 2016). This is addressed in the study by Elaine Dimech and Jonathan L. Portelli who focus on *Evaluating the Degree of Psychological Safety and Individual Perceptions Among Radiographer Teams*. Melvin Mizzi and Emanuel Camilleri share their findings on the effect of various antecedents; leadership types; and motivation among nurses working at the inpatient Medical, Surgical and Specialty Units, Mater Dei Hospital Malta, in their paper *The Effect of Dominant Antecedents, Leadership Types, and Motivation on Nurse Retention at a Major Public Hospital*.

Christine Storage in her paper, *Building an Employer Brand: The Value of Social Media for Employee Recruitment and Retention in Five-Star Hotels in Malta*, examined the need for more knowledge and alignment with consumer and company strategies to develop a comprehensive employer brand strategy. Indeed, Critical thinking, the hallmark of an educated mind, is a vital skill set for professionals in any industry (Pennycook et al., 2015). In an era marked by an unprecedented abundance of data and information, professionals are required to evaluate, analyse, and synthesize information effectively, to discern the signal from the noise, and make well-informed decisions based on evidence and logic (Halpern, 2022).



Taking another perspective, Nadine Delicata looks at the *Barriers to Critical Thinking in Healthcare: an Assessment from the Perspective of Leadership in a Maltese Hospital* and examines the importance of integrating critical thinking in everyday decision-making in a multidisciplinary context. Roger Gatt and Mario Cassar also take a critical stance as they explore and compare the nature of the marketing efforts of *Perceptions on the Marketing of International Education: Understanding the Efforts of English Language Schools and Higher Education Institutions in Malta*.

The three foundational components of emotional intelligence, psychological safety, and critical thinking, are central to this edition of the IDEA Journal of Applied Research. In each of their papers the authors examine practices within distinct contexts, highlighting precise methodologies and findings, and provide policy recommendations for stakeholders at various levels of implementation.

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01 The Transformational Leadership Style & Emotional Intelligence Impact Leadership Effectiveness Among Charge Nurses:

The Case Of A Public Hospital In Malta.

Chris Camilleri & Dr Emanuel Camilleri

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Abstract

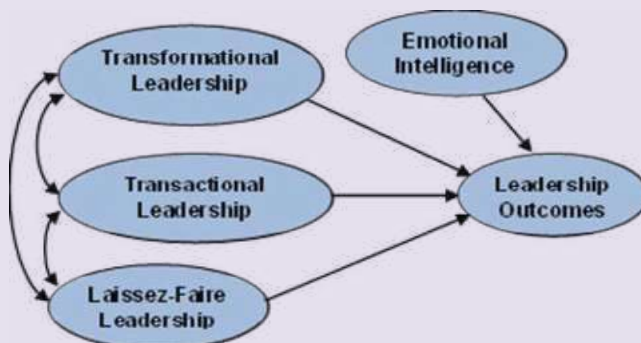
Objectives: To succeed in fulfilling their mission and vision, healthcare organisations have recognised the importance of emotional intelligence and suitable leadership styles to achieve effective leadership. Effective leadership improves the quality of services and promotes a healthy working environment. This study sought to examine the impact of leadership styles and emotional intelligence among charge nurses working at Mater Dei Hospital Malta to identify a leadership effectiveness model.

Methods: This study develops a leadership effectiveness model for charge nurses using Structural Equation Modelling (SEM) by examining causal relationships between leadership styles and emotional intelligence that are assumed to impact leadership effectiveness (outcomes) in their organisation.

Results: SEM outcomes suggest that the transformational leadership style and emotional intelligence have the greatest impact on leadership effectiveness in terms of the three dimensions of leadership outcomes, namely extra effort, productivity, and job satisfaction.

Conclusions: SEM outcomes suggest that a transformational leadership style, which encourages and inspires employees to innovate and develop new ways to grow and improve the path to an organisation's future success; and emotional intelligence, which is the ability to understand and manage one's emotions, as well as recognise and influence the emotions of others, have the greatest impact on leadership effectiveness.

Key words: Transformational; Transactional; Laissez-Faire; Leadership Effectiveness; Emotional Intelligence; Structural Equation Modelling.



Conceptual Effective Leadership Model for Charge Nurses

GRAPHICAL ABSTRACT

Highlights:

- Transformational leadership improves leadership effectiveness.
- Leadership effectiveness may be improved by guiding and coaching senior staff nurses.
- Emotional intelligence abilities may increase through events, conferences, and team building.
- Charge nurses' emotional intelligence may incentivise subordinates to perform better.
- SEM provides a causal-effect relationship model showing the impact of leadership styles and emotional intelligence on leadership effectiveness.

Introduction

The rapid change in technology, harsh competition, demographics, globalisation, and increasing costs have made many institutions worldwide face vigorous and intricate business situations. For these reasons, many organisations including the healthcare sector, have recognised the importance of enhancing their managers' effective leadership ability, since this improves the quality of their services and promotes a healthy working environment, whilst ensuring the success of their mission and vision (Alloubani et al., 2019). In the domain of healthcare, charge nurses are ward-based managers who function as information channels between top management and nurses.

Guyton (2012) argued that because charge nurses can interact with their subordinates every day, they can influence their behaviour by exercising effective styles of leadership, to achieve and ensure optimal performances from the available resources, which in turn will influence the provision of nursing care to patients. Emotional intelligence is considered an indispensable attribute that highly contributes to effective leadership and is a vital quality that competent charge nurses should have in their repertoire (Reshetnikov et al., 2020).

Theoretical Framework

The theoretical framework for this study is based on the leadership theory developed by Bass (1985) and on the full-range leadership model developed later by Avolio and Bass (1991). This model evolved from the work that was conducted by Burns (1978). However, whilst Burns (1978) examined the moral dimension of leadership, Bass was more interested in its efficacy. Generally, Bass examined how a leader inspires their followers. Therefore, Bass (1985) extended Burns' (1978) theory by explaining the psychological processes that cause transformational and transactional leadership and how transformational leadership could be measured, as well as how it impacts follower motivation and performance (Bass, 1985). Avolio and Bass (1991) envisaged three main leadership styles namely transformational, transactional, and laissez-faire that could be assessed in relation to leadership effectiveness (or outcomes) using the multifactor leadership questionnaire.

On the other hand, emotional intelligence is defined as the ability to perceive, use, understand, manage, and handle emotions (Colman, 2008).

Colman (2008) argues that people with high emotional intelligence can recognise their own emotions and those of others; use emotional information to guide thinking and behaviour; discern between different feelings and label them appropriately; and adjust emotions to adapt to environments. Goleman's (1996) research was based on a mixed model of emotional intelligence that was applied to investigate the relationship between emotional intelligence, leadership styles, and leadership effectiveness. Emotional intelligence is viewed as the collection of skills and characteristics that drive leadership performance (Goleman, 1998).

The Concept of Transformational Leadership

Transformational leadership is viewed as the most effective among all leadership styles since it is a process that changes and transforms (Weng et al., 2015). Leaders in transformation mode lead by example and recognise when a change is required. These leaders develop strategies to create a new vision that incorporates the required change by influencing, supporting, and guiding their followers beyond self-interest, to perform at their best, through inspiration and motivation (Hall et al., 2016; Schieltz, 2020). In response, as a positive working environment is promoted, the level of satisfaction is enhanced as followers feel engaged, committed, and appreciated by their leaders.

According to Northouse (2018), transformational leadership focuses on employees, through the exertion of values; ethics; emotions; behaviour; and standards, to make them aware that they can achieve unexpected outcomes, which lead them to perform at their maximum potential. Likewise, transformational leadership in healthcare contributes to leadership effectiveness by decreasing conflict (Munir et al., 2012); increasing motivation (Cowden, Cummings and Profetto-McGarth 2011); and job satisfaction (Wang, Chontawan and Nantsupawat, 2012).

The Concept of Transactional Leadership

In contrast, a transactional leader schedules short-term reachable objectives to ensure effectiveness, efficiency, and quality (Al-Malki and Juan, 2018). Cummings et al., (2010) contend that in transactional leadership, subordinates execute the instructions given by their leaders to meet the defined organisational goals. Therefore, employees are motivated through the achievement of personal needs to perform at high levels to meet these organisational goals. Furthermore, performance is monitored by the leader and remedial measures are only taken if the employer falls short to meet established standards. Burns (1978) implies that transactional leadership highlights the exchange of action or reward that happens between a leader and his followers, based on standards and policies.

The Concept of Laissez-faire Leadership

The term Laissez-faire is a French phrase that translates to "letting people do as they choose." Laissez-faire leadership is completely contrary to micromanaging. Laissez-faire leadership is considered a passive, negative (Alfadhlah and Elamir, 2019), and destructive (Tayfur and Tosunoglu, 2016) style of leadership. Many authors have defined laissez-faire as a non-leadership style because the leaders do not eventually lead and do not stand against concerns (Durmuş and Kırca, 2020); they never take decisions (Alfadhlah and Elamir, 2019); do not enhance personal development (Tayfur and Tosunoglu, 2016); and therefore, create disagreement, role ambiguity and role conflict in their subordinates (Ahmed et al., 2021).

According to Alfadhlah and Elamir (2019), a laissez-faire leader gives subordinates freedom of choice to independently solve any problems that might occur. They argue that this type of leadership style hinders the progress of an organisation as it delays decisions, avoids responsibilities, and decreases leaders' effectiveness. Moreover, it is contended that the laissez-faire style negatively influences motivation (Chaudhry and Javed, 2012); reduces innovative behaviour (Durmuş and Kırca, 2020); and decreases work productivity (Uysal et al., 2012). However, the NSLS Foundation (2022) argues that laissez-faire leadership can be positive in certain environments since it allows subordinates to have the autonomy to make their own decisions and manage their own desks. This type of laissez-faire leader gives their team support, guidance, consultation, and training when it is needed, but trusts them to handle the details

and execution of their tasks and projects (NSLS Foundation, 2022).

Ahmed et al., (2021) assert that laissez-faire leadership may not always be associated with scarcity, indifference, or insensitivity towards the needs of co-workers under one's responsibility. They argue that laissez-faire leaders are happy to delegate tasks and do not object if their teams make mistakes when undertaking a task. However, they still hold them accountable for their mistakes and successes. Freedom is an important priority for laissez-faire leaders, and they empower their teams to make their own decisions and manage their work as they see fit (NSLS Foundation, 2022). Therefore, laissez-faire leadership is most effective when subordinates have the expertise to conduct their task well (Ahmed et al., 2021). According to NSLS Foundation (2022), subordinates must be resourceful; dependable; ambitious; are confident in their abilities; and require little to no oversight.

Standish (2019) claims that a laissez-faire leadership style can at times enhance creativity and motivation in highly skilled staff since they can learn how to adjust to different situations and find the most appropriate solution to a given concern. This is why this leadership style is highly applicable where innovation and creativity are essential, such as advertising, technology, and fashion. Giltinane (2013) argued that the laissez-faire leader could be viewed as a substitute for leadership as described in the substitute theory, which validates the leadership effectiveness of this style of leadership. A study conducted by Costa (2016) found that laissez-faire leaders encourage employees to work independently with little or no guidance and highlighted that this leadership style can be effective in a setting in which employees have many years of experience.

The Concept of Leadership Effectiveness

Eurac (2023) views effective leadership as the successful exercise of personal influence by an individual, which results in accomplishing one or several goals because of the coordinated efforts of those who are led. In a healthcare environment, effective leadership needs to focus on relationships based on values, culture, and safety to enhance excellent care and increase healthcare outcomes and patient satisfaction.

According to Durmuş and Kirca (2020), leadership effectiveness will positively influence staff professional development, job satisfaction, and motivation, which, in turn, decreases conflicts and role ambiguities. Leadership styles influence the accomplishment and effectiveness of organisational strategies (Wasylikiw et al., 2015); and the leadership behaviour shown while guiding followers towards a vision is one of the most important attributes of effective leadership (Ali, Emolla and Aref, 2016).

However, Cummings et al., (2010) claimed that the literature rarely indicates how leadership should be performed or how to examine which type of leadership style leads to negative or positive outcomes. They argue that the promotion of effective leadership in healthcare settings is given less importance when compared to other industries. These authors agreed that effective healthcare leadership should be aimed at improving the quality of patient care while nourishing employee satisfaction. The leadership behaviour applied when guiding subordinates towards a mission contributes to leadership effectiveness to a great extent.

It is argued that leaders should be both flexible when considering different workplace circumstances, and effective by being able to bring the best out of their subordinates to perform at high standards. In addition, charge nurses must understand the effects of their leadership style and be aware of all key aspects that contribute to optimal performance. Charge nurses are required to align organisational goals, mission, and vision to maximise staff engagement and increase effectiveness while improving the provision of high-quality care (Ali, Emolla and Aref, 2016; Costa, 2016). The Avolio and Bass (1991) leadership questionnaire implies that leadership effectiveness is not a leadership style but a consequence of the applicable leadership styles.

The Concept of Emotional Intelligence

According to Kamal et al., (2017), emotional intelligence is defined as the ability to understand and manage one's emotions, as well as to recognise and influence the emotions of others. Effective leaders view emotional intelligence as an essential ability to identify and resolve their employees' concerns. Therefore, emotional intelligence is regarded as a significant factor in many leadership styles (Prezerakos, 2018). Traditionally, leaders assessed the performance of their employees in terms of efficiency and timeliness.

However, in the long term, this was seen as restraining the employees' growth and productivity, which negatively affected their desire to remain with the organisation (Landry, 2022).

Many leaders are now resorting to emotional intelligence as a key element when assessing the performance of their employees. Emotional intelligence facilitates the leaders' understanding of the emotion and motivation of the employees towards their work, consequently extending their assessment beyond efficiency, timeliness, productivity, and target. In the healthcare context, charge nurses should be able to deal with negative emotions such as anxiety, anger, and frustration, while promoting positive emotions, which enhance individual goals and team effectiveness. In return, positive emotions will build a trusting relationship with employees and hence, maximise their potential to perform at high standards (Tyczkowski et al., 2015).

Emotional intelligence is considered one of the main components for the development of effective leadership and can be measured using intrapersonal and interpersonal competence skills that include a total of four competencies (Prezerakos, 2018). 'Self-awareness' and 'Self-management' are two dimensions that measure interpersonal skills, whilst 'Social awareness' and 'Relationship management' are the other two dimensions that measure intrapersonal interactive skills. In each dimension, there are other measurable competencies that make one performance distinct from the other.

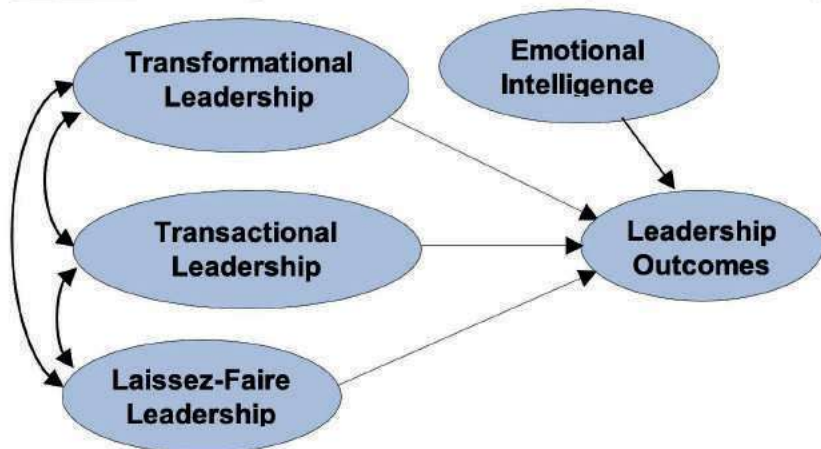
Landry (2022) contends that, over the years, emotional intelligence has evolved into a must-have skill for managers and has been found to be the strongest predictor of performance. She argues that if managers lack emotional intelligence, this could have more far-reaching consequences, resulting in lower employee engagement and a higher turnover rate. Additionally, Landry (2022) asserts that even when managers excel at their job technically, if they cannot then effectively communicate with their team or collaborate with others, those technical skills will get overlooked. Therefore, by mastering emotional intelligence, managers can continue to advance their personal success as well as the success of the organisation.

Methodology

The purpose of this research is to develop a leadership effectiveness model for charge nurses working at Mater Dei Hospital using Structural Equation Modelling (SEM) by examining causal relationships between leadership styles and emotional intelligence that are assumed to impact leadership effectiveness (outcomes) in their

organisation. Therefore, a key objective is to improve how charge nurses manage and influence their subordinates, thus, ensuring effectiveness and high-quality patient care. The theoretical model depicted in Figure 1 was tested by the administration of a survey.

Figure 1. Conceptual Effective Leadership Model for Charge Nurses



Research Design

A quantitative, cross-sectional, non-experimental, correlational survey design was employed using SEM. A quantitative approach was selected because both the independent variables, namely, the three leadership styles and the four dimensions of emotional intelligence as well as the dependent variable regarding leadership effectiveness, could be clearly defined and quantified. A

non-experimental and correlational design was deemed to be the most appropriate approach because the independent variables that were measured on constant scales were attributes of the participants that already existed. A survey approach was chosen because it allowed for the generalisation of findings, therefore minimising potential bias (Polit & Beck, 2004).

Data Collection

Data collection about leadership styles, emotional intelligence, and leadership effectiveness was specifically collected from charge nurses working at Mater Dei Hospital. Participants were asked to complete an online survey because it is cost-effective and non-time-consuming that gives access to a large sample size (Ball, 2019). An information letter that included a weblink to the online questionnaire was forwarded to the participants by means of an email through an intermediary, who was a charge nurse.

The instrument used in this research study reflected the research questions and respective hypotheses. The full questionnaire consisted of 71 items. Initially, the questionnaire was tested on a pilot sample of several charge nurses to ensure that the instructions and questions presented were fully understood. Instructions were prepared to explain the purpose of the questionnaire and how it should be completed. Voluntary participation was requested, and anonymity was guaranteed.

The research population consisted of 203 eligible charge nurses working at Mater Dei Hospital. The research survey was administered during paid working hours to a random sample of 167

charge nurses. Applying the sample size calculator, a sample size of 134 was the minimum required to achieve a confidence level of 95% with a real value being within $\pm 3.2\%$ of the measured/surveyed value. However, this procedure achieved an overall response rate of 77% (129 respondents). Therefore, in this case, there is a 95% chance that the real value is within $\pm 5.22\%$ of the measured/surveyed value. Between 5% and 7% confidence interval is deemed to be acceptable (LoBiondo-Wood & Haber, 2002).

Research Instrument and Operationalisation of Measures

This section provides an overview of all measures that are included in the study. All items of the different scales are measured by using a Likert system rating scale. The details of all the measures are shown in Table 1. The questionnaire comprised two key instruments, namely, the multifactor leadership questionnaire (MLQ) created by Bass and Avolio (2004) and the emotional competence inventory version 2.0, developed, and standardised by the Hay Group (2002).

Table 1. Details of the Measures Used in the Study

Variable	Definitions of variable	Items
<i>Transformational Leadership</i>	An attitude that encourages and inspires employees to innovate and develop new ways to grow and improve the path to an organisation's future success.	20
Idealized influence attribute	Where leaders receive trust and respect.	4
Idealized influence behaviour	Where leaders exhibit excellent behaviour and might sacrifice their own needs to improve the objectives of their team (Moss & Ritossa, 2007).	4
Inspirational motivation	The degree to which a leader states a vision that is attractive and encouraging to followers (Judge & Piccolo, 2004). Leaders strengthen followers by viewing the future with optimism (Antonakis et al, 2003), and act in ways that motivate those around them by providing meaning and challenge to their followers' work (Bass et al, 2003).	4
Intellectual stimulation	The degree to which the leaders stimulate their followers' endeavours to be innovative and creative (Limsila & Ogunlana, 2008), and consider old organizational problems with a new perspective (Moss & Ritossa, 2007).	4
Individualized consideration	The extent to which a leader attends to each follower's needs and listens to the concerns and needs of each follower and can understand and share the feelings of another. Also, the degree to which leaders provide support, encouragement, and coaching to followers (Yukl, 2006).	4
<i>Transactional Leadership</i>	Focuses on exchanges that occur between leaders and their followers (Northouse, 2007); and aiding followers to fulfil their own self-interests (Bass, 1999). They clarify followers' duties, their performance objectives, and the tasks that must be completed (Eptropaki & Martin, 2005).	8
Contingent Reward	The degree to which a leader determines rewards in exchange for followers' efforts to satisfy organisational goals, such as clarification of work vital to obtain rewards and use of incentives to influence motivation.	4
Active (management by exception)	The degree to which a leader watches followers closely for mistakes or role violations (Northouse, 2007). Active leaders check follower behaviour, predict problems, and take corrective actions before the behaviour makes severe difficulties (Judge & Piccolo, 2004).	4
<i>Laissez-Faire Leadership</i>	These leaders display a passive indifference towards their followers (Moss & Ritossa, 2007); are inclined to move out from the leadership role and offer little direction or support to followers (Kirkbride, 2006).	8
Passive (management by exception)	Leaders do not actively seek out deviations from desired performance and only take corrective action when problems occur (Pounder, 2001).	4
Passive involvement	They avoid making decisions and are indifferent to the needs of their followers.	4
<i>Emotional Intelligence</i>	Ability to understand and manage your own emotions, as well as recognise and influence the emotions of those around you.	20
Self-Awareness	Ability to see yourself as others see you and have a good sense of your own abilities and current limitations.	5
Self-Management	The ability to stay focused and think clearly even when experiencing powerful emotions; able to adapt to different situations; achievement-oriented; and have a positive outlook.	5
Social-Awareness	The ability to sense, understand, and respond to the organisation's needs and to what other people are feeling.	5
Relationship Management	The ability to manage, influence, and inspire emotions in others through coaching and mentoring; conflict management; teamwork; and inspirational leadership.	5
<i>Leadership Effectiveness</i>	Extent entity achieves its goals and performs its task (Erkutlu, 2008).	9
Extra effort	Extent leaders motivate followers toward the extra effort.	3
Productivity	Extent leaders can improve followers' performance beyond expectation and cultivate creativity and innovation.	4
Satisfaction	Extent leaders can increase their followers' job satisfaction.	2

Notes: Leadership Types are measured by forty-five items of the multifactor leadership questionnaire (MLQ) created by Bass and Avolio (2004) which consists of the three leadership types and Leadership Effectiveness. The questionnaire is rated on a five-point Likert scale ranging from 0 = "not at all" to 4 = "frequently, if not always" that covered various aspects of leadership. Out of the forty-five items, twenty items assessed transformational leadership, eight assessed transactional leadership, eight assessed Laissez-faire leadership, and nine assessed leadership outcomes (effectiveness). Emotional Intelligence is measured by twenty items of the Hay Group (2002) scale that consists of four dimensions. The questionnaire is rated on a five-point Likert scale ranging from 1 = "never" to 5 = "always" that covered competencies of emotional intelligence organised into four dimensions, namely "Self-awareness", "Self-management", "Social awareness", and "Relationship management", having five items for each dimension.

Data Analysis

Structural equation modelling (SEM) was applied as the main statistical method in this study. SEM permits separate relationships for each of a series of dependent variables and provides the proper and most efficient estimation procedure for a series of separate multiple regression equations estimated simultaneously. Unlike multivariate analysis of variance and canonical correlation that allows only a single relationship between dependent and independent variables, SEM permits multiple relationships between the dependent and independent variables. The model shown in Figure 1 was assessed in a holistic manner.

Furthermore, both principal component factor analysis with varimax rotation and SEM confirmatory factor analysis were used to determine the validity of the constructs. Both methods confirmed the validity of the constructs used. With SEM, for a construct to be valid it must be shown that both convergent and discriminant validity are achieved. Anderson and Gerbing (1988) suggest that an appropriate method for evaluating convergent validity in SEM is to examine the construct loadings and determine whether each indicator's estimated coefficient is significant, that is, whether the estimated coefficients are greater than twice their standard error. Each construct is examined according to Anderson and Gerbing's (1988) criterion, and with very few exceptions, the estimated coefficients were found to be greater than twice their standard error. Therefore, convergent validity is achieved. Additionally, Bagozzi and Phillips (1982) suggest that discriminant validity in SEM is achieved if the unconstrained models have a significantly lower Chi-square than constrained models. For all constructs, the unconstrained models appear to have a significantly lower Chi-square compared with the constrained models. Therefore, discriminant validity was achieved as well.

Composite reliability (measuring internal consistency) for path analysis, in line with Hair et al., (1998) was adopted. A high composite reliability value indicates high reliability. Normally the acceptable threshold for composite reliability is ≥ 0.50 (Hair et al., 1998). Most scales show a composite reliability of ≥ 0.50 . Hair et al. (2014) have modified their acceptance criteria for composite reliability values to between 0.60 and 0.70. Therefore, composite reliability values of less than 0.60 show a lack of internal consistency reliability. However, this depends a lot on how many items a particular scale contains. Smaller numbers of scale items tend to result in lower reliability levels, while larger numbers of scale items tend to have higher levels. Table 1 illustrates that several scales have 4 or fewer items that impact their reliability.

The predictive validity of the measures is tested by evaluating the correlation between dependent and independent variables. EQS 6.4 is used to test simultaneously the hypothesized linkages between the model variables. EQS provides weights indicating the strength and direction of the associations of hypothesized variables. The methodology adopted in this study adheres to the seven-stage approach suggested by Hair et al., (1998). Furthermore, the parameter estimates are tested for feasibility and acceptability (Bentler, 1995). No negative error variances are found, and all standardized coefficients appear to be less than 1.0 (Hair et al., 1998).

Results

Descriptive Statistics and Bivariate Correlations

Table 2 provides the means; standard deviations; Cronbach Alpha reliability coefficients (for non-single items on a diagonal); and bivariate correlations for the various relevant variables. The findings suggest that the Transformational leadership style appears to be the most dominant style, followed by Transactional leadership, with the Laissez-Faire leadership being the least influential. The findings indicate that Leadership Effectiveness has a strong relationship with all the dimensions of the Transformational Leadership style. Moreover, the findings suggest that Leadership Effectiveness does not have a significant relationship with the Active (management by exception) dimension of the Transactional Leadership style. Additionally, the findings suggest that Leadership Effectiveness is not strongly related to the dimensions of Laissez-Faire leadership.

The findings indicate that all the Emotional Intelligence dimensions are significantly and positively related to all the dimensions of Transformational Leadership and the Contingent Reward dimension of Transactional Leadership. However, the dimensions of Emotional Intelligence either have a negative relationship or no relationship at all with the Laissez-Faire leadership dimensions, and the Active (management by exception) dimension of Transactional leadership. It is interesting to note that the dimensions of Emotional Intelligence are also strongly related to the Leadership Effectiveness dimensions, particularly Productivity and Satisfaction. However, there seems to be a weaker link with the Extra Effort dimension of Leadership Effectiveness. The findings show that all the dimensions of Emotional Intelligence have a high positive correlation to the Productivity dimension of Leadership Effectiveness.

Model Testing

Various SEM revisions are tested to ensure that the most appropriate model was attained. The Maximum Likelihood (ML) method was applied. According to Olsson et al. (2000), ML is considerably more insensitive to variations in sample size, but, in general, more stable and demonstrates higher accuracy in terms of empirical and theoretical fit compared to the other estimators. After removing linkages that were not within the acceptable significance level, the revised model depicted in Figure 2, showing the standardized coefficients, appears to provide acceptable fit indices for the data set.

It should be noted that a confirmatory factor analysis through SEM is conducted for each multi-dimensional construct with composite reliabilities being calculated. Because all the constructs in SEM are exogenous, only the measurement model and the associated correlation matrices for exogenous constructs and indicators need to be considered. Table 3 shows that the composite reliabilities for the scales used in the model are mostly reliable since they are within the recommended $\geq .50$ acceptable threshold, with minor exceptions. As stated previously, the ML method was used to investigate the covariance matrix of the items

Table 2. Correlations between the Variables and Reliability Coefficients (Cronbach's alpha at the diagonal for non-single items)

Variable	Mean	Sd	Transformational Leadership					Transactional Leadership		Laissez-Faire Leadership		Leadership Effectiveness		Emotional Intelligence						
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Transformational																				
1 Idealized influence attribute	2.9	0.53	0.887																	
2 Idealized influence behaviour	3.2	0.50	.458**	1.000																
3 Inspirational motivation	3.1	0.55	.408**	.569**	1.000															
4 Intellectual stimulation	3.0	0.53	.404**	.586**	.609**	1.000														
5 Individualized consideration	3.3	0.53	.385**	.494**	.532**	.665**	1.000													
Transactional																				
6 Contingent Reward	3.1	0.49	.477**	.613**	.485**	.483**	.425**	0.750												
7 Active (management by exception)	2.1	0.80	.052	.037	.100	.170	.008	1.000	0.047											
Laissez-Faire																				
8 Passive (management by exception)	0.6	0.59	-.160	-.081	-.153	-.105	-.203*	-.054	.054	0.764										
9 Passive involvement	0.4	0.49	-.304**	-.263**	-.234**	-.179*	-.176*	-.238**	-.095	.424**	1.000									
Effectiveness																				
10 Extra effort	2.6	0.54	.247**	.389**	.399**	.293**	.279**	.417**	-.048	-.102	-.075	0.735								
11 Productivity	3.2	0.56	.469**	.555**	.657**	.458**	.428**	.544**	.146	-.119	-.363**	1.000								
12 Satisfaction	3.2	0.55	.433**	.390**	.457**	.419**	.435**	.391**	.121	-.327**	-.294**	.187**	1.000							
Emotional Intelligence																				
13 Self-Awareness	3.9	0.51	.289**	.384**	.396**	.495**	.485**	.426**	-.052	-.131	-.193*	.159	.416**	.337**	0.920					
14 Self-Management	3.9	0.51	.270**	.401**	.556**	.441**	.509**	.401**	-.014	-.164	-.279**	.244**	.554**	.403**	.717**	1.000				
15 Social-Awareness	3.9	0.44	.298**	.427**	.414**	.526**	.492**	.357**	-.016	-.202*	-.282**	.123	.486**	.405**	.657**	.589**	1.000			
16 Relationship Management	3.9	0.40	.368**	.367**	.481**	.458**	.513**	.412**	-.053	-.206*	-.260**	.190*	.565**	.335**	.580**	.682**	.611**	1.000		

** = Correlation is significant at the 0.01 level (2-tailed).

* = Correlation is significant at the 0.05 level (2-tailed).

Table 3. Reliability of Scales: Composite Reliability

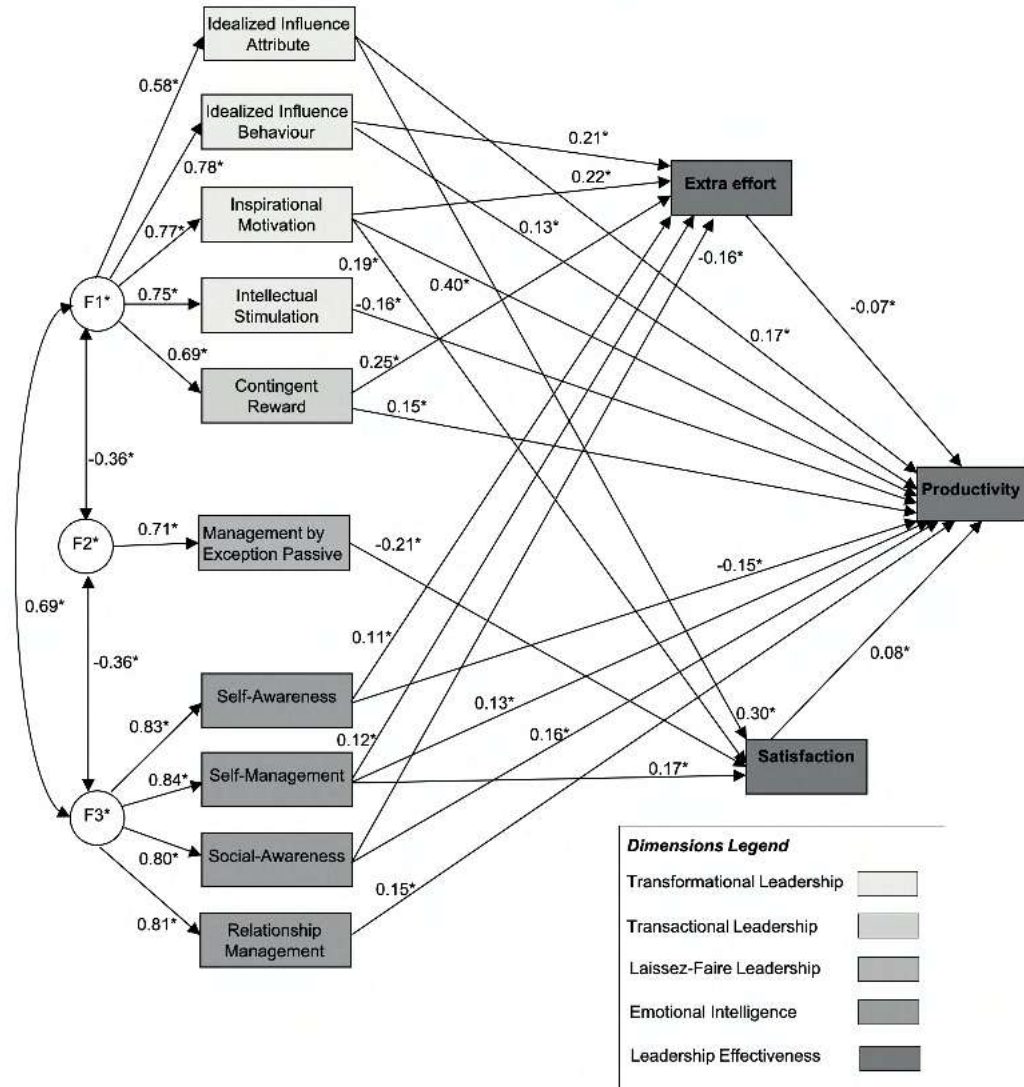
Exogenous Constructs	Composite Reliability	No of Items
Transformational Leadership		
Idealized influence attribute	.365	4
Idealized influence behaviour	.543	4
Inspirational motivation	.731	4
Intellectual stimulation	.716	4
Transactional Leadership		
Contingent Reward	.473	4
Passive (management by exception)	.562	4
Laissez-Faire Leadership		
Passive involvement	.591	4
Emotional Intelligence		
Self-Awareness	.776	5
Self-Management	.769	5
Social-Awareness	.777	5
Relationship Management	.920	5
Leadership Effectiveness		
Extra effort	.169	3
Productivity	.724	4
Satisfaction	.429	2

The goodness-of-fit of the model is evaluated using absolute and relative indices. Table 3 shows the absolute goodness-of-fit indices that are calculated. These include the chi-square goodness-of-fit index; goodness-of-fit index (GFI); adjusted goodness-of-fit index (AGFI); root mean square error of approximation (RMSEA); normative fit index (NFI); and comparative fit index (CFI), amongst others.

Table 3. Effective Leadership Model for Charge Nurses with Fit Indices

Particulars	Value
Fit Indices	
Bentler-Bonett: Normed Fit Index	0.92
Bentler-Bonett: Non-Normed Fit Index	0.94
Comparative Fit Index (CFI)	0.97
Bollen's (IFI) Fit Index	0.97
McDonald's (MFI) Fit Index	0.91
Joreskog-Sorbom's GFI Fit Index	0.93
Joreskog-Sorbom's AGFI Fit Index	0.85
Root-Mean-Square Error of Approximation (RMSEA)	0.07
Chi-Square Values	
CHI-SQUARE	66.112
DF	41
Significance	0.022
Reliability Values	
Cronbach's Alpha	0.858
Reliability Coefficient RHO	0.904

Figure 2. Revised Effective Leadership Model for Charge Nurses



The attained GFI and CFI values, which are greater than .90, and RMSEA (0.07) which is smaller than or equal to .08 are indicative of an acceptable fit (Cudeck and Browne, 1993). Moreover, the AGFI (0.85) is shown to be at the acceptable threshold since it is very close to the 0.90 threshold. Had the sample size been larger, all the fit indices would far exceed the 0.90 level. The chi-square goodness-of-fit index indicates that the assumed SEM model is to be rejected.

is particularly dependent on the sample size (La Du and Tanaka, 1989). As the sample size increases, the chances of rejecting the model (whether true or false) escalate since the increased sample size makes it more likely to detect discrepancies between the implied and observed covariance matrices (Byrne, 2001; Bagozzi and Yi, 1988). However, in this case, the chi-square value can be used as an appropriate fit index due to the small number of cases in the data set.

However, a critique regarding the validity of using chi-square to evaluate the model fit is that it

Bentler (1990, 1992), and Hu and Bentler (1999) suggest the comparative fit index (CFI) to cater for sample size with a threshold of .95 being considered a well-fitting model. In this case, the CFI is .97 using the ML method, which is therefore considered as an acceptable fit. The findings in Table 3 indicate that the model fit is good. This implies that sufficient support for accepting the hypothesised research model has been found.

The model in Figure 2 and Table 4 shows the direct, indirect, and total effect of the Leadership Styles and Emotional Intelligence factors on Effective Leadership (using the ML model) to answer the research question: *What is the impact of the leadership types and emotional intelligence on leadership effectiveness for Charge Nurses working at Mater Dei Hospital Malta?*

The Effective-Leadership model in Figure 2 shows that the Transformational Leadership style is the dominant leadership type that impacts the three dimensions of Effective Leadership. The Transactional Leadership dimension of Contingent Reward has a significant positive relationship with the Extra Effort and Productivity dimensions of Effective Leadership. However, the findings suggest that Contingent Reward does not impact the Job Satisfaction dimension of Effective Leadership.

Interestingly, the Passive Management by Exception dimension of the Laissez-Faire Leadership style has a significant negative relationship with

the Satisfaction dimension of Effective Leadership but does not appear to impact the Effective Leadership dimensions of Extra Effort and Productivity.

Another interesting finding is the relationship between the dimensions of Emotional Intelligence and the dimensions of Effective Leadership. The findings suggest that the dimensions of Emotional Intelligence, except for Relationship Management have a significant relationship with the Extra Effort dimension of Effective Leadership. However, whilst the Emotional Intelligence dimensions of Self-Awareness and Self-Management have a positive relationship with Extra Effort, the Social-Awareness dimension has a negative relationship.

Moreover, all the dimensions of Emotional Intelligence have a significant relationship with the Productivity dimension of Leadership Effectiveness. However, the Self-Awareness dimension has a negative relationship with Effective Leadership, while the other dimensions have a positive relationship. It is also noted that, except for the Self-Management dimension of Emotional Intelligence, none of the other dimensions have a significant relationship with the Satisfaction dimension of Effective Leadership. The findings also suggest that Self-Management has a significant positive impact on the Satisfaction dimension of Effective Leadership.

Table 4. Direct, Indirect and Total Effect of Leadership and Emotional Intelligence Factors on Leadership Effectiveness (ML model)

	V8	V9	V10	V11	V14	V17	V20	V22	V25	V26	V27	V28
	Attribute	Behaviour	Motivate	Stimulate	Reward	Passive Manage	Extra Effort	Satisfaction	Self-Aware	Self-Management	Social Aware	Relation
V20												
Extra Effort												
Direct		0.206	0.223		0.248				-0.114	0.121	-0.161	
Indirect		0.000	0.000		0.000				0.000	0.000	0.000	
Total		0.206	0.223		0.248				-0.114	0.121	-0.161	
V21												
Productivity												
Direct	0.167	0.130	0.397	-0.160	0.151	0.000	-0.072	0.082	-0.150	0.134	0.159	0.147
Indirect	0.296	0.206	0.409	0.000	0.248	-0.210	0.000	0.000	-0.114	0.291	-0.161	0.000
Total	0.463	0.336	0.806	-0.160	0.399	-0.210	-0.072	0.082	-0.264	0.425	-0.002	0.147
V22												
Satisfaction												
Direct	0.296		0.186			-0.210				0.170		
Indirect	0.000		0.000			0.000				0.000		
Total	0.296		0.186			-0.210				0.170		

Discussion & Conclusion

The SEM model in Figure 2 demonstrates that Transformational Leadership is the most dominant leadership style adopted by Charge Nurses working at Mater Dei Hospital followed by Transactional Leadership, with Laissez-Faire Leadership being the least influential. This finding is not surprising since Transformational Leadership is an attitude that encourages and inspires employees to innovate and develop new ways to grow and improve the path to organisational success. Therefore, the findings suggest that most Charge Nurses walk the talk and do things as stipulated by their training. Nursing is a highly disciplined profession, where trust (idealised influence attribute) and credibility (idealised influence attribute) are essential.

Charge Nurses must lead by example, therefore, they inspire their subordinates by providing mentorship, to positively influence them through motivation while encouraging them to be creative and innovative (inspirational motivation and intellectual stimulation). However, Individualized Consideration, which is the extent a leader attends to each follower's needs and listens to the concerns and needs of each follower and can understand and share the feelings of another, does not enter the model. This may indicate that the Charge Nurses may be focusing on ensuring that patient care is maximised but neglect the individual needs of their subordinates. This finding may also suggest that, although Charge Nurses have a high degree of trust, respect, and altruism as they inspire and motivate their followers, they tend to take their subordinates for granted and neglect their individual needs. This may be due to the high pressure that the nursing profession endures, particularly when studies show the high level of burnout that nurses sustain.

The findings suggest that Intellectual Stimulation (a dimension of Transformational Leadership) has a significant negative correlation with the Productivity dimension of Effective Leadership. A plausible explanation for this is that Intellectual Stimulation is the degree that leaders stimulate their followers' endeavours to be innovative and creative (Limsila & Ogunlana, 2008); and consider old organisational problems with a new perspective (Moss & Ritossa, 2007). However, producing new innovative solutions may, in the short-term, slow down the productive process, since thinking of ways of doing things differently consumes precious time in a nursing environment, where

attention to the patient's needs and care requires instantaneous action.

The Contingent Reward dimension of Transactional Leadership has a significant positive relationship with the Extra Effort and Productivity dimensions of Effective Leadership. Contingent Reward is the degree a leader determines rewards in exchange for the followers' efforts to satisfy organisational goals, such as clarification of work vital to obtain rewards and the use of incentives to influence motivation. Therefore, Contingent Reward acts as an incentive for the nursing staff to put in extra effort, with the aim of enhancing productivity.

Furthermore, the Active (management by exception) dimension of Transactional Leadership does not feature as part of the Effective Leadership model. The Active (management by exception) dimension is the degree a leader watches followers closely for mistakes or role violations (Northouse, 2007). Active leaders check follower behaviour, predict problems, and take corrective actions before the behaviour makes severe difficulties (Judge & Piccolo, 2004). However, in a nursing environment where attention to the patient's needs and care requires instantaneous action, the Charge Nurse would likely prefer to set standards and exchange actions or rewards with their staff when these standards are satisfactorily attained, rather than to take corrective action to prevent complications when standards are not met.

Laissez-Faire leadership in a nursing environment is considered a negative non-leadership style as confirmed by the work of Sfantou et al. (2017), and Saeed et al. (2014). As stated previously, nurses must work according to set standards and rules where attention to the patient's needs and care requires instantaneous action. Therefore, nurses are constrained to work according to a set of explicit procedures, with little room for individual innovation and creativity. Having said this, Laissez-Faire leadership works best when the staff is experienced and needs little assistance and encouragement to perform well because they know exactly what their job entails. However, in a nursing environment standard procedures and rules must be strictly observed.

The findings suggest that the Passive Involvement dimension of Laissez-Faire leadership is not part of the Effectiveness Leadership model. This is not surprising because Charge Nurses do not avoid making decisions. Additionally, passive involvement also means that the leader is indifferent to the needs of their followers, which confirms the absence of Individualised Consideration in the Leadership Effectiveness model.

The reader may recall that Individualized Consideration is the extent a leader attends to each follower's needs and listens to the concerns and needs of each follower and can understand and share the feelings of another.

The findings suggest that Emotional Intelligence has a similar impact on Effective Leadership as Transformational Leadership. However, unlike the Transformational Leadership dimensions, all the Emotional Intelligence dimensions form part of the Effective Leadership model. Whilst Self-Awareness and Self-Management have a significant positive impact on the Extra Effort dimension of Effectiveness Leadership, the Social Awareness dimension has a negative impact. This suggests that having the ability to sense, understand, and respond to the organisation's needs and to what other people are feeling may hamper the leaders' ability to motivate nurses towards making an extra effort. In other words, motivating subordinates towards making an extra effort may not be in the best interest of the organisation's needs and what other people are feeling.

Moreover, all the dimensions of Emotional Intelligence have a significant positive relationship with the Productivity dimension of Leadership Effectiveness, except for the Self-Awareness dimension, which has a negative impact on this dimension. However, Self-awareness is viewed as the ability to focus on oneself and how one's actions, thoughts, or emotions do or don't align with one's internal standards. In a nursing environment, adhering to explicit rules and procedures is a fundamental standard practice. In such an environment, Charge Nurses need to act with caution, which may slow down their productivity.

It is interesting to note that only the Self-Management dimension of Emotional Intelligence has a significant (positive) impact on the Satisfaction dimension of Effective Leadership. Such a finding is not surprising when one considers that Self-Management is the ability to stay focused and think clearly even when experiencing powerful emotions; the ability to adapt to different situations;

the ability to be achievement-oriented; and the ability to have a positive outlook.

When examining the relationship between the three dimensions of Effective Leadership, the findings show that the Extra Effort dimension has a low significant negative impact on the Productivity dimension. This may be due to the negative influence of Social-Awareness on Extra Effort. Social-Awareness attempts to balance the organisation's needs and what other people are feeling with productivity. In a nursing environment, the patient's healthcare takes priority as an organisational objective, which may conflict with productivity. This is a classic case of "Customer Orientation" versus "Production Orientation." In a nursing and healthcare environment, "Customer Orientation" will be given a higher priority over productivity.

On the other hand, the model findings suggest that the Satisfaction dimension has a significant positive impact on the Productivity dimension. This finding is expected since the extent that leaders can increase their followers' job satisfaction (Satisfaction dimension) is likely to improve the followers' performance beyond expectation and cultivate creativity and innovation (Productivity dimension).

To the researcher's knowledge, no other studies have been conducted locally researching the three leadership styles, emotional intelligence, and leadership effectiveness in the nursing industry. The limited local studies on these topics constituted an obstacle in conducting this study as there was no point of reference for comparisons. Also, the quantitative method used in this study might have limited the chances to discover other elements other than the survey items. Despite the relatively large sample size, other public and private healthcare organisations were not included in this study. Moreover, this research study was conducted using self-reports on only charge nurses as leaders to be rated. In consequence, the self-report approach may have created an over or underestimation in the leadership styles, and emotional intelligence attributes. This study could have also included staff nurses together with charge nurses. This would have included an assessment from the follower's point of view. In such a way, the perceptions of both staff and charge nurses could have been compared to analyse any differences in the responses between the two. However, this was very difficult to do given the limited timeframe available.

Conclusions

In conclusion, SEM outcomes suggest that the transformational leadership style and emotional intelligence have a great impact on leadership effectiveness in terms of the three dimensions of leadership outcomes, namely extra effort, productivity, and job satisfaction. Furthermore, SEM outcomes suggest that a transformational leadership style, which encourages and inspires employees to innovate and develop new ways to grow and improve the path to an organisation's future success; and emotional intelligence, which is the ability to understand and manage one's emotions, as well as recognise and influence the emotions of others, have the greatest impact and are of fundamental value to enhance leadership effectiveness.

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02 Building an Employer Brand: The Value of Social Media for Employee Recruitment and Retention in Five-Star Hotels in Malta.

Justine Storage

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Abstract

Objectives: This research explored the utilisation of employer branding by human resources managers within five-star hotels in Malta. The study concentrated on two aspects: external branding, which targets potential employees, and internal branding, which is aimed at current employees. Additionally, the study examined the role of social media as a communication tool for connecting with and engaging the employee demographic.

Methods: An inductive qualitative study was carried out to investigate employer branding practices in the context of five-star hotels in Malta. Semi-structured interviews were conducted with six human resources managers to collect in-depth data. The participants were selected using purposive sampling, and thematic analysis was applied to analyse the interview data.

Results: This study revealed that employer branding is not fully acknowledged in five-star hotels in Malta. Although human resources managers implement some elements of employer branding, there is a need for more knowledge and alignment with consumer and company strategies to develop a comprehensive employer brand strategy. The findings highlight the significance of employer branding in employee recruitment and retention, consistent with existing literature. Furthermore, the research underscores the significance of social media in enhancing both internal employee engagement and external employee attraction.

Conclusion: The study highlighted the significance of employer branding for five-star hotels in Malta in the development of employee recruitment and retention. Moreover, the value of social media as a tool to communicate with both current and potential employees was recognised.

Keywords: "Employer branding", "Human resources management", "Social media", "Communication"

Highlights

- This research confirms the concept of employer branding encompassing the hotel's behaviour and identity, yet it reveals a gradual uptake and insufficient awareness of its significance in Maltese hotels.
- The research underlines the need for enhanced investment in employer brand management within five-star hotels in Malta to effectively address recruitment challenges and reduce turnover rates.
- By focusing on both external and internal communication, the study reveals that employer branding not only enhances the organisation's external image but also motivates and retains existing employees.
- The findings emphasise the significance of aligning human resources practices with employer brand strategies and collaborating with marketing teams to create a consistent and compelling brand message.
- The use of social media platforms by organisations is crucial as it enables direct engagement with a vast audience, enhances brand visibility, fosters two-way communication, and facilitates building authentic relationships with potential and current employees



Abbreviations

- *EB: Employer branding*
- *EVP: Employee value proposition*
- *HR: Human resources*

Introduction

The concept of employer branding (EB) has gained recognition within the field human resources (HR) management on an international, as well as a local level. Ambler and Barrow (1996) define EB as a package of functional (such as career advancement opportunities), economic (such as salary), and psychological (such as atmosphere and management behaviours) benefits associated with a specific company. EB, a crucial facet of human resources management, offers a powerful solution for the challenges of employee recruitment and retention in the hospitality industry. It aligns with the corporate brand, distinguishing employers in a competitive market. By establishing an EB, a company not only

attracts potential employees but also motivates, engages, and retains its workforce. Effective employer brand management ensures employees understand the company's offerings and reasons to choose it. This strategic approach guides decision-making, providing a clear identity, image, and distinct attributes that make a company an appealing employer (Gehrels, 2019; Keohane, 2014; Coaley, 2019). This research study investigates the implementation of EB in five-star hotels in Malta and the use of social media to enhance an employer's brand by effectively communicating with internal and external employees.

Literature Review

In 2019, the travel and tourism industry accounted for 333 million jobs globally. However, due to the COVID-19 pandemic, the industry suffered significant job losses, with 62 million jobs being lost in 2020 (Jus et al., 2022). This led to a decline in the travel and tourism sector's contribution to global GDP, dropping from 10.3% in 2019 to 5.5%. However, in 2021, with the easing of restrictions, the GDP contribution from travel and tourism increased to 6.1% (World Travel & Tourism Council [WTTC], 2021). In Malta, travel and tourism accounted for 21.1% of total employment in 2019, dropping to 18.1% in 2020. With the reopening of borders, the contribution to total employment in Malta increased to 19.1% in 2021 (WTTC, 2021).

The hospitality industry relies heavily on a skilled workforce to provide quality service, but recruitment and retention of employees remain challenging (Gehrels, 2019). The labour-intensive nature of the industry and the negative perception of hospitality jobs contribute to high turnover rates. Effective leadership, management practices, and enhancing the employer brand are essential to reduce labour turnover and increase employee loyalty and motivation (Christensen, Hughes & Rog, 2008).

EB, as outlined by Ambler and Barrow (2019), serves to establish a unified structure across an organisation through the collaboration of human resources and marketing functions. This framework enhances focus, productivity, recruitment, and staff retention. The goal of EB is to align all strategies and campaigns with a shared vision, mission, or values, creating the employer value proposition (EVP). This EVP communicates the company's dedication to its employees and sets behavioural expectations, managed by human resources, and promoted to both potential and current employees.

In service-oriented sectors like hotels, employee interaction significantly shapes the brand. Employees embody the brand promise during customer interactions, thus, attracting and retaining suitable employees is vital for maintaining brand integrity. EB aims to transform employees into brand ambassadors, promoting the company as an ideal workplace with clear goals and employee commitment.

EB involves both external and internal communication. External branding focuses on potential employees and utilises tools like social media, corporate social responsibility, websites, conferences, sponsorships, and advertising to establish the company as an attractive workplace

(Morya, 2017). Internal branding targets existing employees and entails conveying brand values, communicating the company’s market value, and encouraging employee engagement through meetings, briefings, training, orientation, and HR announcements (Morya, 2017).

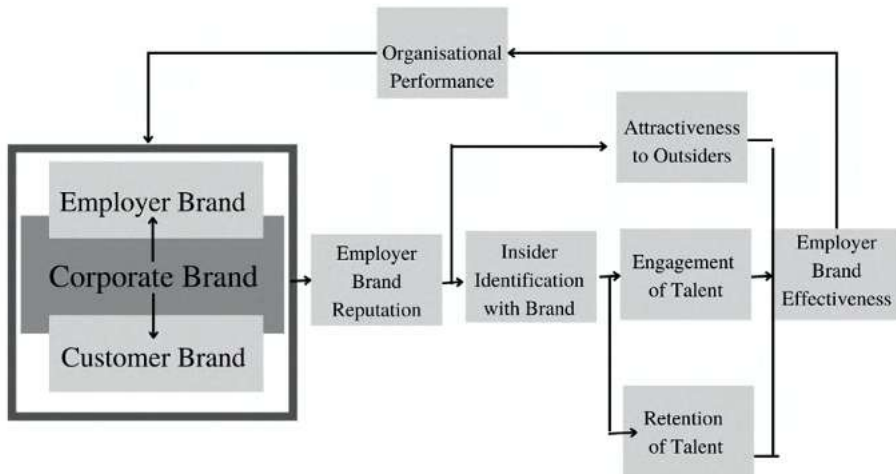


Figure 1: Integrated Brand Model
Source: Gehrels and de Looij, 2011, Figure 1, p, 45

Technology has improved organisational performance and revolutionised recruitment practices by enabling cost-effective communication and reaching a broader audience (Ladkin & Buhalis, 2016). Recently, social networking platforms have gained prominence and are extensively used for employment-related activities. Individuals can now share information and experiences through various digital avenues like blogs, videos, social media, forums, websites, and chat rooms (Ladkin & Buhalis, 2016).

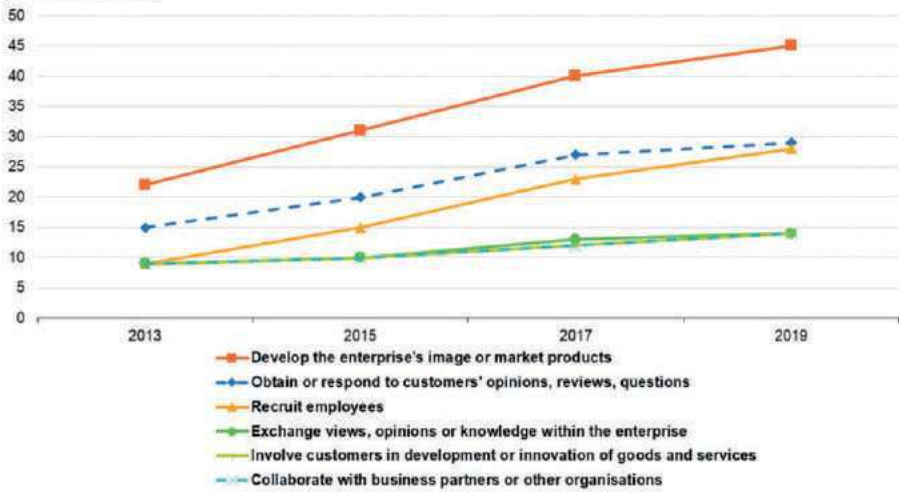
brand equity, and word of mouth. It also allows businesses to improve customer relationship management by interacting directly with customers (Thaichon & Ratten, 2021).

According to the Digital 2022: Global Overview Report, as of January 2022, 62.5% of the global population used the internet, spending an average of 7 hours per day online. Out of this population, 58.4% actively engage on social media platforms, spending an average of 2 hours per day. Notably, Malta ranks fourth in terms of social media adoption, with 447,000 active users on different platforms among its total population (Digital 2022: Global Overview Report). These statistics highlight the importance for organisations to establish and maintain an online presence, particularly on social media platforms.

Eurostat reports that companies adopt social media for various purposes, including communication with external sources, internal communication, and specific activities like recruitment. In 2019, 45% of companies in the European Union (EU) made use of social media to enhance their company image and promote their products or services. Additionally, 28% of companies leveraged social media as a tool for employee recruitment, while 14% utilised it for internal purposes such as sharing views or knowledge within the organisation (Eurostat, 2020).

Social media marketing is used strategically to increase customer satisfaction, perceived value, positive attitude, participation, brand loyalty,

Enterprises using social media, by purpose of use, EU-28, 2013, 2015, 2017 and 2019
(% of enterprises)



Source: Eurostat (online data code: isoc_cismp)



Figure 2: Use of social media by enterprises
Source: Eurostat Statistics Explained: social media - statistics on the use by enterprises, 2020

Problem Statement

The research study was motivated by the researcher’s personal experience working in the five-star hotel industry in Malta. The researcher observed the lack of emphasis on EB within the industry and delved into the theories of EB and how they could be applied to hotels. The employment crises resulting from the COVID-19 pandemic further sparked the researcher’s curiosity about the potential of employer brand practices to mitigate its negative impact. The researcher sought to better understand the significance of

EB and its role in employee recruitment and retention.

Additionally, the researcher chose to incorporate social media as a crucial communication tool and explored the potential synergies between social media and employer branding.

Methodology

This inductive research study adopted a constructivist worldview, focusing on understanding how the participants derive meaning in a specific context. In the realm of business management, interdisciplinary theories from psychology, sociology, and statistics are applied, with this study concen-

trating on HR and marketing management. The empirical data, sourced from the researcher’s experience within Malta’s hotel industry, informed the study’s questions, making the study empirical.

Aims and Objectives

Focused on the hospitality sector’s challenges of poor reputation and high employee turnover, this study explored the role of EB and social media within Maltese hotels. The study aimed to explore how EB can strengthen employee recruitment and retention strategies and, concurrently, how social media can amplify EB’s impact.

Research Questions

Through a qualitative research design, the study addressed the objectives through a set of pre-determined questions. Four research questions were designed for this study, outlined in Table 1.

Research Design

This study was conducted using a qualitative research methodology to explore the motivations and underlying rationales that drive actions related to EB. In this study, an inductive approach was taken to understand the theory of EB and the use of social media from the perspective of HR managers in five-star hotels in Malta.

Research Tool

For this study, the researcher chose to conduct interviews as the qualitative data collection method. In order to achieve established aims for this study, it was necessary to explore how individuals interpret their experiences and subsequently progress towards defining the ways in which HR

managers incorporate EB and social media into their strategies for employee attraction and retention. This was achieved by adopting a constructivist worldview to the study.

Exploratory semi-structured interviews were conducted, allowing for diverse perspectives from field experts. Open-ended questions were used to encourage detailed discussions and participants elaboration on the topic. Six initial questions and four additional questions were prepared to facilitate the interviews. All interviews were recorded and transcribed in real time using the digital tool called Otter.ai. The transcribed data was then analysed through thematic analysis using coding.

Q1	How is employer brand management used by human resources managers within five-star hotels in Malta?
Q2	What social media channels and tools are used to shape the employer brand?
Q3	How is social media integrated for external communication (recruitment) of the employer brand?
Q4	How is social media integrated for internal communication (retention) of the employer brand?

Table 1: Research questions for the study

Sample Selection Procedure

For the sample selection in this research study, a purposive sampling technique was employed. The target population consisted of HR Managers employed in five-star hotels in Malta. No gender was specified, though participants needed to be knowledgeable and experienced in the area of interest and capable of expressing their opinions and experiences effectively.

At the time of this study, a total of fifteen five-star hotels in Malta and Gozo were listed with the Malta Tourism Authority. Since this study focused

specifically on Malta, the two hotels in Gozo were excluded. Among the remaining registered five-star hotels in Malta, two brands had multiple properties. To maintain diversity, only one property per brand was considered for interviews. Additionally, one smaller hotel with distinct operational differences from the others was also excluded. As a result, the final selection for the study consisted of ten five-star hotels in Malta. A sample size of six participants was chosen to ensure in-depth engagement with each case while allowing for analysis of similarities, differences, and patterns.

Participant	Job Role	Experience (Years)
Interviewee 1	Human Resources Manager	15 years
Interviewee 2	Cluster Human Resources Manager	3 years
Interviewee 3	Human Resources Manager	3 years
Interviewee 4	Director of Human Resources	14 years
Interviewee 5	Training Manager	2 years
Interviewee 6	Human Resources Manager	4 years

Table 2: Participant Demographics

Procedures for data collection and analysis

The data analysis for this research study involved the use of a structural coding method. Codes were created based on the research questions and interview transcripts, and these codes were then grouped into themes using thematic analysis following Braun and Clarke's (2006) six step method.

The interviews were recorded and transcribed in real time using the digital tool Otter.ai. Subsequently, the transcribed data was manually coded, organised into main themes and sub-themes, and analysed in connection with the existing literature.

Ethical Considerations

This study followed ethical principles such as autonomy, kindness, and integrity to protect participants. Confidentiality, anonymity, and the vol-

untary nature of participation were emphasised during the study. Written consent was obtained via a participation consent form from participants prior to conducting any interviews. Furthermore, participant autonomy was respected in accordance with GDPR 2018. Data collection, storage, and usage were clearly explained to participants, and their confidentiality was ensured. The principle of beneficence was upheld by ensuring that the information gathered would not be used against participants, and data confidentiality was maintained through anonymisation. The principle of justice was followed to ensure equality, fairness, and the prevention of exploitation or abuse. Participants were informed of their right to withdraw from the study at any point, and measures were taken to avoid any moral harm or financial disadvantage for the participants, or the companies involved.

Results

Thematic Analysis

In this study, fourteen codes were identified based on the interview and research questions, and these codes were assigned to the relevant sections of the transcribed text. Thematic analysis

was then conducted to identify patterns and establish common themes in the data. Table 3 provides an example of the coding process and the resulting themes.

Data Experts	Code	Sub-Theme	Themes
"it's not an official strategy"	Brand/Strategy	Measures toward Employer Branding	Employer Branding
"We work collaboratively with the marketing department."	Department Use	Responsibility of Employer Branding	Employer Branding
"LinkedIn...and Facebook, Instagram."	Social Media	Social Media Channels	External Communication
"for the internal employees...We have a group on Facebook and a group on WhatsApp."	Internal Communication	Internal Communication Channels	Internal Communication
"all out KPIs, all our goals, are retention."	Retention	Employee Retention	The Impact of the COVID-19 Pandemic

Table 3: Thematic Data Analysis

The analysis of participants' experiences and knowledge resulted in the identification of four main themes. Table 4 presents the main themes and their corresponding sub-themes derived from this research study. These main themes were chosen based on the data collected from the interviews, and they provide a structured framework to address the research questions effectively.

Main Themes	Sub-Themes
Employer Branding	<ul style="list-style-type: none"> o Measures towards Employer Brand Strategy o Internal Responsibility of Employer Branding o The Value of Company Culture
External Communication	<ul style="list-style-type: none"> o External Communication Channels o External Content Shared for Employee Attraction
Internal Communication	<ul style="list-style-type: none"> o Internal Communication Channels o Internal Content Shared for Employee Engagement
The Impact of the COVID-19 Pandemic	<ul style="list-style-type: none"> o The Impact on the Hotel Industry Image o The Impact on Employee Recruitment o The Impact on Employee Retention

Table 4: Identified Themes and Sub-Themes

Theme 1: Employer Branding

One of the aims of this study was to investigate the use of EB in five-star hotels in Malta. The participants identified several commonalities in their EB practices. They shared insights into their current circumstances, including challenges encountered, and provided their perspectives on future developments.

1. Measures towards an Employer Brand Strategy

The sub-theme focused on how HR managers in five-star hotels in Malta implement employer brand management. While only one participant had official EB practices in place, all participants recognised the importance of having an EB strategy.

When asked about the overall goal of their EB efforts and how they measure success, participants provided varying responses. Four participants mentioned using employee surveys to gauge employee satisfaction, while one participant emphasised the importance of daily communication between management and employees. Two participants considered turnover rate and employee retention as measures of success.

Additionally, four participants highlighted the significance of brand image and the quality of applicants received as indicators of successful EB practices. Two participants also mentioned evaluating interactions and engagement on social media platforms as a measure of success. Overall, although a comprehensive EB strategy may not be fully established among the participants, they adopt various measures to assess the effectiveness of their EB efforts.

2. Internal Responsibility of Employer Branding

All six participants emphasised the importance of collaboration between the HR and marketing teams in producing and implementing employer brand communication. However, the primary responsibility for generating and creating content lies with the HR department.

Participants acknowledged the need to work closely with the marketing department to ensure alignment with brand standards and to avoid any conflicting messages. The HR department determines the content requirements, which are then passed on to the marketing team for implementation or assistance in creating content.

Limited resources, including human resources,

skills, and knowledge, were identified as challenges in effectively implementing EB initiatives. Participants expressed the need for dedicated individuals with expertise in EB to drive these efforts and ensure their success. Some participants mentioned the lack of sufficient time and energy to fully focus on EB due to other responsibilities.

Overall, the participants recognised the collaborative nature of EB, with the HR department taking the lead in content generation and the marketing department supporting the implementation. However, challenges related to resources and expertise were identified, highlighting the need for dedicated personnel and greater support for EB initiatives.

3. The importance of company values and culture

The objective here was understanding how HR managers use the company's values and culture to build the employer brand. The hotels, especially those belonging to international chains, emphasised the importance of strong brand values that are shared with employees during the onboarding process.

Participants mentioned conducting comprehensive training sessions to familiarise recruits with the company's values and mission statement. They highlighted the significance of orientation days and other training programs that emphasise the brand philosophy and values. Ongoing training and reinforcement of these values were also mentioned.

Moreover, three out of six hotels discussed how they communicate their company values to the external job market to attract potential employees. They emphasised showcasing the values through recruitment campaigns, sharing stories of team members who embody the values in action, and presenting the company's culture and practices. They believed that potential employees are more interested in how the values are demonstrated and experienced in practice.

Overall, the majority of respondents acknowledged the significance of effectively communicating company values and culture through employee stories and tangible demonstrations. This serves as a crucial aspect of EB.

Theme 2: External Communication

The study focused on exploring how social media is used as a communication tool for EB. The study aimed to understand the commonalities in external communication practices, including the channels employed and the nature of the content shared, based on the interview data.

1. External Communication Channels

The focus of this sub-theme was to understand the use of social media as an external communication channel for EB. All interviewees acknowledged the significance of social media and identified LinkedIn, Facebook, and Instagram as the primary platforms used. Some participants also mentioned the potential use of TikTok as a future channel. Additionally, three participants mentioned the use of third-party recruitment websites and global career platforms to communicate job vacancies. Two interviewees highlighted the creation of separate Facebook and Instagram pages specifically dedicated to sharing employee-related content with the external market. The decision to have separate pages was driven by the need to target different audiences and ensure relevant content.

The interviewees also discussed the provision of social media communication training or guidelines to team members to maintain the brand image and authenticity. Overall, the findings emphasised the importance of social media as a communication tool for EB and provide insights into the channels used and the practices followed.

2. External Content Shared for Employee Attraction

Here the aim was to highlight the content shared for external communication to attract employees. Five out of six interviewees emphasised the importance of sharing content related to their workforce and work environment to showcase their hotel as an excellent place to work. These five hotels actively engage in this type of communication, while one hotel does not currently engage in such practices.

The participants mentioned various topics that are used to create content, including team events, activities at the hotel, employee achievements, hotel awards, job vacancies, information about team members, corporate social responsibility activities, announcements of high-profile roles, CSR initiatives, and other engaging and informative posts. They underlined the significance

of storytelling and sharing success stories of employees who have grown and been recognised within the company.

Theme 3: Internal Communication

This research study aimed to explore how social media is used for internal communication to enhance the employer brand. The theme of internal communication focuses on the various tools and methods highlighted by the interviewees when communicating with the current workforce.

1. Internal Communication Channels

The six interviewees discussed the channels used for internal communication within their hotels, adopting a combination of online and offline approaches. Online communication primarily involved private Facebook pages or groups, with one participant mentioning the use of WhatsApp. Two participants mentioned the adoption of a private online platforms for internal communication, namely, Beekeeper and Hotel Kit. Offline methods included daily briefing meetings, team meetings, and notice boards. All participants acknowledged the importance of internal communication by involving employees in the hotel's daily operations.

2. Internal Content Shared for Employee Engagement

The participants explained that various types of messages are conveyed to the internal team using both online and offline tools. The content shared among all six participants included hotel results, guest feedback, team events, operational changes, and general announcements. Online platforms such as Facebook groups, and WhatsApp were used for instant communication, while offline methods such as meetings, notice boards, and pre-shift briefings were also employed. The hotels adopted practices from EB theories to shape their internal communication and ensure employee engagement.

Theme 3: The Impact of the COVID-19 Pandemic

The COVID-19 pandemic was a significant topic of discussion in the interviews, with all six participants expressing the challenges they faced and the subsequent impact on employee recruitment and retention. The participants highlighted the increased importance of EB efforts in response to the pandemic.

1. The Impact on the Hotel Industry Image

The COVID-19 pandemic presented significant challenges for hotels, leading to operational disruptions, employee losses, and a shift in employee mentality. The participants described the pandemic years as firefighting years, marked by uncertainty and survival. They also observed a negative perception of working in the hotel industry, particularly among younger generations, who prioritise work-life balance and flexibility.

To counter these perceptions, the participants highlighted EB measures aimed at improving work-life balance and flexibility. Efforts such as promoting wellness, offering flexible working hours, and transparently communicating working conditions were mentioned. The participants acknowledged the need for stronger EB practices to make the hotel industry more attractive to potential employees.

2. The Impact on Employee Recruitment

The COVID-19 pandemic had a considerable impact on recruitment within the hotel industry, as mentioned by the participants. They highlighted a phase of intense recruitment following the dismissal and resignation of a considerable number of employees. The pandemic experience was described as traumatic, leading some employees to seek a fresh start or return to their home countries. Participants also mentioned the challenge of rebuilding their workforce after a period of being over-resourced.

The participants acknowledged the difficulty of recruiting quality employees locally, noting that although they received numerous applications, many were not relevant or of high quality. They mentioned investing significant time and energy to attract quality candidates and anticipated this as an ongoing challenge in the recruitment process.

Discussion

Employer Branding

In today's competitive business landscape, attracting and retaining talented employees is a critical challenge for organisations across industries. As mentioned in the literature by Koehane (2014), the goal of EB is to establish the organisation as the preferred employer and engage employees as brand ambassadors, ultimately leading to higher retention rates and a competitive advantage in attracting top talent. In the context of the five-star hotel industry in Malta, this study aimed to provide insights regarding the adoption and implementation of EB strategies. The study highlighted that while certain elements of EB are

cess.

3. The Impact on Employee Retention

All six participants emphasised that employee retention is a primary focus for hotels. They mentioned that after going through a phase of intense recruitment following the COVID-19 pandemic, they have reached comfortable levels of staffing and are now directing their efforts towards retaining their teams. They acknowledged the high turnover rate in the hospitality industry, particularly due to seasonality, but expressed the importance of retaining core team members.

The participants recognised that investing in training and retaining employees is more valuable than constantly recruiting and dealing with a revolving door of staff. They stressed that employee retention is a crucial measure of success and discussed the challenges of maintaining a stable workforce while also attracting new talent. Building a strong core team and ensuring the happiness and engagement of current employees were key goals for retention.

Various methods are adopted to involve and empower employees. These included internal communication, creating initiatives such as photo competitions, encouraging employees to contribute to social media content, and recognising employees as brand ambassadors. The participants believed that employee involvement and engagement have a positive impact on motivation and performance.

Overall, the participants discussed the shift in focus from recruitment to retention and highlighted the importance of employee engagement and morale in ensuring the long-term success of their teams.

evident in the hotels' practices, there is a need for further investment and resources to fully embrace EB and align HR practices with the concept. The lack of resources, including manpower, knowledge, and skills, may explain this delay, which resonates with the researcher's prior observations from working within the industry.

Coaley (2019) emphasised the need for alignment between HR and marketing to establish a strong employer brand, ensuring a unified message to the employee market and a competitive edge.

The study's findings support this idea, with participants highlighting the importance of collaboration between these departments. However, some hotels deviate from this practice, allowing HR to manage separate communication streams, potentially leading to conflicting messages to the employee market

The Role of Communication in Employer Branding

External Communication

External communication plays a crucial role in attracting potential employees to the organisation. Hotels need to showcase their unique attributes and value proposition through various external communication channels, such as social media platforms, job portals, career fairs, and industry events (Morya, 2017). The study revealed that while some hotels may have a presence on platforms like Facebook, Instagram, and LinkedIn, there is often a lack of a consolidated approach and synchronisation of postings between EB and other corporate pages. To avoid mixed messages and ensure consistency, it is essential to integrate employer brand communication with corporate and consumer brands (Coaley, 2019).

The study's findings align with existing literature on employer branding, specifically in external communication to potential recruits. One effective strategy, mentioned in the study by Manjunath et al. (2019) is to leverage social media platforms to share employee-centric stories, successes, and the working environment. Hotels in this study amplified this notion by explaining how they showcase authenticity by sharing employee stories through platforms like Facebook, Instagram, and LinkedIn to aid with recruitment. By providing a glimpse into the organisation's culture and values, hotels create an emotional connection with potential employees and demonstrate their commitment to the well-being and growth of their workforce.

Internal Communication

Internal communication is equally important in fostering employee motivation, engagement, and retention. It serves as a means to align employees with the organisation's vision, mission, and values, creating a sense of belonging and purpose (Morya, 2017). The study revealed that hotels in Malta employ various modes of internal communication, including team meetings, daily briefings, training programmes, and HR announcements. While these traditional methods are still prevalent, social media platforms have

emerged as a primary tool for internal communication.

The study showed that Facebook, in particular, has gained popularity as an internal communication platform in the hotel industry in Malta. This is in line with the data found where the largest number of users in Malta, 360 thousand users, are on Facebook (Digital 2022: Malta). It allows for real-time information sharing, employee recognition, and engagement within the workforce. By creating dedicated groups or pages, hotels facilitate knowledge sharing, collaboration, and create a sense of community among employees. However, it is important to note that face-to-face communication is still valued, especially when sharing sensitive information or discussing company results, as it is perceived to be more effective and fosters a personal connection.

The Importance of Social Media in Employer Branding

In today's digital era, social media platforms have become indispensable for organisations in reaching their target audience effectively. The study uncovered that hotels in Malta actively maintain a social media presence on platforms such as Facebook, Instagram, and LinkedIn. Facebook receives the most emphasis due to its popularity among the Maltese population, while Instagram serves as an extension of the brand presence, showcasing visually appealing content and experiences. LinkedIn, on the other hand, is used as a professional space for sharing employee-related content, particularly for recruitment purposes (Ladkin & Buhalis, 2016).

Establishing a strong online presence on social media platforms enables hotels to engage with their target audience, including potential employees, existing employees, customers, and industry professionals (Gehrels, Wiene & Mendes, 2016). The study reiterated that through regular postings, storytelling, and interactive content, hotels effectively communicate their employer brand, values, culture, and unique employee experiences. Social media also provides an opportunity for real-time engagement, feedback, and dialogue with the audience, creating a sense of transparency and authenticity. To maintain this, hotels actively monitor and respond to comments and messages received on these platforms, as it influences the audience's perception of the organisation and its commitment to employee satisfaction.

Employee Value Proposition (EVP)

An EVP captures the unique benefits, rewards, and opportunities that an organisation offers to its employees. It is essential to align the EVP with the organisation's brand identity and values to ensure consistency and authenticity in the messaging (Coaley, 2019). In agreement with this literature, hotels in Malta aim to clearly define their EVP and differentiate themselves from competitors, which in turn helps to attract and retain talent.

Conclusions

This qualitative research study aimed to comprehensively understand EB in five-star hotels in Malta and the role of social media as a communication tool. The findings suggest that EB is still emerging in the industry, with HR managers gradually implementing practices from this concept. However, further investment is needed to develop an employer brand strategy aligned with the hotels' overall brand strategies.

Social media platforms, particularly Facebook, Instagram, and LinkedIn, are used by hotels to communicate with both current and potential employees. By showcasing the hotel's values, culture, career opportunities, and commitment to employees, social media helps attract potential recruits. Additionally, social media is used to communicate with and engage the current workforce, increasing employee integration and retention.

The study confirms the hospitality industry's poor image as an employer, which was exacerbated by the COVID-19 pandemic. Hotels are addressing this issue by implementing EB practices to improve working conditions and promoting work-life balance. However, industry-wide efforts are still needed to overcome the negative perception.

Recruitment and retention challenges are acknowledged in the industry, prompting a focus on building strong retention programs. Employer brand management can foster a culture of trust, respect, and empowerment within hotels.

Overall, while hotels in Malta are gradually embracing the concept of EB, there is a lack of knowledge and emphasis on its importance. The

In the context of the hotel industry in Malta, the study presented some common components of an EVP, which include competitive salary and benefits packages, career development opportunities, training and upskilling programmes, work-life balance initiatives, employee recognition, and a positive and inclusive work environment. The hotels conduct regular surveys and feedback sessions with employees to understand their evolving needs and preferences which helps them to tailor the EVP to align with employee expectations and attract the right talent.

study highlights the need for further investment and awareness in this area.

Limitations of the Study

The present study has several limitations that should be acknowledged. Firstly, the sample size, although meeting the requirements of a qualitative study, may not fully represent the entire five-star hotel industry in Malta. Out of the ten potential participants contacted, only six agreed to participate, resulting in a reduced sample size. Therefore, the findings may not be fully generalisable to all five-star hotels in Malta.

Another restriction is the limited availability of literature specific to EB in the context of Malta's hospitality industry. While general literature on EB in the hospitality industry and social media was accessible, local data specific to Malta was lacking. This restricted the study's ability to provide a comprehensive understanding of the specific practices and challenges faced by hotels in Malta.

These limitations highlight the need for further research with a larger sample size and more extensive literature review to enhance the understanding of EB and social media usage in the five-star hotel industry in Malta.

Recommendations for Practice and Management

The findings of this study emphasise the need for increased investment in EB management within five-star hotels. By developing and implementing a strong EB strategy and allocating sufficient resources to maintain it, hotels can reap long-term benefits in terms of employee recruitment and retention.

Recommendations for Future Research

To gain a comprehensive understanding of EB, future investigation can be made using a similar

research design to obtain an understanding from the perspective of marketing managers within five-star hotels in Malta. In addition, a quantitative research method can provide insights from the perspective of hotel employees to determine the success of EB practices implemented by hotels. Further research can also delve deeper into the use of social media to gain a more comprehensive understanding of individuals' social media habits, particularly regarding EB. By pursuing these research avenues, a more holistic and nuanced understanding of EB and its impact can be achieved.

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03 The Impact of Remote Working on Motivation: A Study in the Public Service of Malta

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Abstract

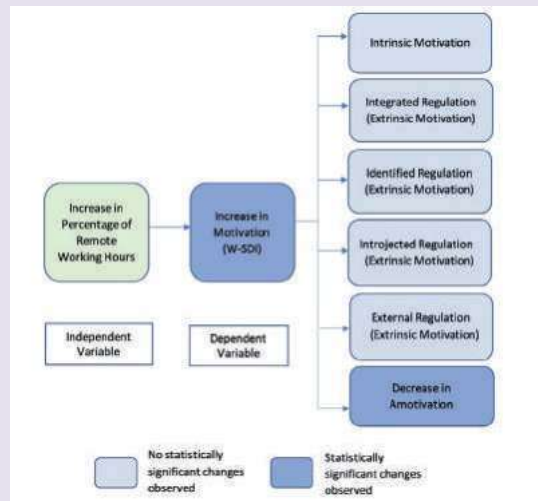
Objectives: Motivation drives performance, and thus, it is imperative that the Public Service of Malta understands how remote working is impacting public officers' motivation. Thus, this study aims to determine the impact of remote working on motivation in the Public Service of Malta from the Self-Determination Theory perspective.

Methods: A quantitative and correlational research design was used to analyse the relationship between the percentage of remote working hours and motivation.

Results: A positive and statistically significant correlation between the percentage of remote working hours and motivation was found. However, no statistically significant correlation was found between the percentage of remote working hours and the intrinsic and extrinsic types of motivation. The only statistically significant correlation was a negative correlation with amotivation. It was also concluded that there is no statistically significant difference amongst the motivation of employees who work remotely through their voluntary decision and those whose remote working arrangement was implemented by management.

Conclusion: Whilst an increase in the percentage of remote working hours was associated with a higher level of motivation, this increase was not attributed to an increase in intrinsic motivation, but to a decrease in amotivation. Finally, enhanced motivation was observed with increased satisfaction of working arrangements, which may imply that offering and supporting remote working may increase the motivation of public officers.

Keywords: "remote working", "motivation", "Public Service", "Self-Determination Theory"



Highlights

- A positive and statistically significant correlation was found between the percentage of remote working hours and motivation.
- This increase was not derived from enhanced intrinsic motivation (highest quality motivation in the self-determination continuum) but from a decrease in amotivation (lowest quality motivation in the self-determination continuum).
- The results also showed that motivation is not impacted by whether remote working is implemented by management or voluntary applied for by public officers.
- This study revealed a positive correlation between motivation and the satisfaction of working arrangement and that the absolute majority of participants wanted to work, at least a part of their working hours, remotely.
- This indicates that offering remote working may aid in enhancing motivation amongst public officers in the Public Service of Malta.

Abbreviations

DCSs – Directors Corporate Services
OPM – Office of the Prime Minister
P&SD – People and Standards Division
SDT – Self-Determination Theory
WEIMS – Work Extrinsic and Intrinsic Motivation Scale
W-SDI – Work Self-Determination Index

Introduction

In the past decade, remote working has become increasingly popular, mainly owing to technological advances and the covid-19 pandemic (Korunka, 2022). Gajendran and Harrison (2007) define telecommuting as “an alternative work arrangement in which employees perform tasks elsewhere that are normally done in a primary or central workplace, for at least some portion of their work schedule, using electronic media to interact with others inside and outside the organization” (p. 1525). Various studies focused on analysing the benefits and challenges of remote working (Nickson & Siddons, 2011; Beno, 2021). Researchers have also sought to analyse how remote working affects motivation or job satisfaction (Bailey & Kurland, 2002; Bloom et al., 2015; Caillier, 2016; Davidescu et al., 2021; Golden & Veiga, 2005; Hedström & Munoz, 2021). In the Maltese Public Service, teleworking has been offered as part of family friendly measures since 2008. Yet, there is still a literature gap in studies focusing on the impact of remote working on motivation, conducted in the Public Service of Malta.

Motivation is crucial at work as it is the driving force behind employees’ performance (Ryan & Deci, 2000). Pinder (2008) defines work motivation as “a set of energetic forces that originates both within as well as beyond an individual’s being, to initiate work-related behaviour, and to determine its form, direction, intensity and duration” (p. 11). There are various theories on motivation and needs that can be applied in work context; however, when analysing the literature on remote working and motivation, most of the latest studies have incorporated the Self-Determination Theory (SDT) (Caligiuri & De Cieri, 2021; Camilleri, 2021; Gagné et al., 2022; Hedström & Munoz, 2021; Jamal et al., 2022; Nikander, 2021; Virtanen, 2020). The SDT provides a framework for measuring the motivational profile of “what kind is being exhibited at any given time” (Ryan & Deci, 2000, p. 69). Moreover, validated instruments to measure the different types of motivation postulated by the SDT already exist. Thus, the SDT will be used to determine the impact of remote working on motivation in the Public Service of Malta. This will be analysed by answering

the following research questions:

1. Is there a relationship between the percentage of remote working hours and the motivation level of public officers?
2. Which types of motivation are impacted by remote working?
3. Is the motivation of public officers who voluntarily decided to work remotely higher than those whose remote working arrangement was implemented by management?

To address the research questions, the study will follow a systematic approach. Firstly, it will review the literature pertaining to the Self-Determination Theory (SDT) and its relationship with remote working. The methods employed for data collection and analysis will then be described in detail. Subsequently, the study will present its findings. These findings will be thoroughly analysed and compared with relevant literature and previous research to provide answer the three research questions. Finally, this study will conclude by offering recommendations, suggestions for future research and an acknowledgement of any limitations encountered during the research process.

The Self-Determination Theory (SDT)

The SDT stems from the assumption that human beings are “inherently curious, self-motivated, and growth-oriented” (Martela, 2020, p. 1). The SDT posits that human behaviour is motivated through the satisfaction of the three innate universal psychological needs, which are autonomy, competence and relatedness (Caligiuri & De Cieri, 2021; Gagné & Deci, 2005; Ryan & Deci, 2017).

The first need is autonomy which relates to “the need to self-regulate one’s experiences and actions” (Ryan & Deci, 2017, p. 10). This entails having the freedom and opportunity to fully control one’s actions based on one’s interests and values without having any controls or interferences, either through internal or external forces (Cook & Artino Jr, 2016; Ryan & Deci, 2017).

The second need, competence, refers to individuals' need to feel "effective and masters of their environment" (Gagné et al., 2022, p. 378). Accordingly, employees are motivated when they effectively use their skills and/or gain new ones, which enable them to successfully accomplish tasks and challenges (Gagné et al., 2022; Lange & Kayser, 2022). The last need postulated by the SDT is relatedness, which refers to individuals' need for belongingness and connectedness with others (Rigby & Ryan, 2018). When this need is unmet, it manifests in feelings of isolation, lack of belongingness and lower engagement (Spagnoli et al., 2021).

The Self-Determination Continuum

The SDT not only distinguishes between extrinsic and intrinsic motivation but also differentiates between six different types of motivation along a self-determination continuum. Self-determination refers to "the degree to which the motivations emanate from the self" (Coccia, 2018, p. 225). At one end of the continuum is amotivation (least autonomous or self-determined motivation), whilst at the other end is intrinsic motivation (most autonomous or self-determined motivation) (Dryselius & Pettersson, 2021). The four types of extrinsic motivation lie in the middle of the continuum and differ in the extent to which motivation is autonomous or controlled (Gagné & Deci, 2005).

i. Amotivation

It reflects a state in which employees lack motivation and have no inherent intention or interest to execute their tasks, or do not find value in their work (Gagné & Deci, 2005; Ryan & Deci, 2017; Rigby & Ryan, 2018).

ii. External Regulation (Extrinsic Motivation)

When an individual performs a task solely and purely to obtain a reward or to avoid a negative consequence (Cook & Artino Jr, 2016; Dryselius & Pettersson, 2021; Hedström & Munoz, 2021;). An example is an employee who has an "I work when the boss is watching" attitude (Gagné & Deci, 2005, p. 334).

iii. Introjected Regulation (Extrinsic Motivation)

When the internal behaviour is controlling and internally pressuring the person to act and perform a task (Chen et al., 2020; Gagné & Deci, 2005; Gagné et al., 2022). As an example, an employee is motivated to do a task to prove himself, for pride or to avoid guilt or shame (Camilleri, 2021; Gagné & Deci, 2005; Ryan & Deci, 2000).

iv. Identified Regulation (Extrinsic Motivation)

Employees are motivated to perform a task because they perceive value in the activity which is "congruent with the person's goals and values" (Dryselius & Pettersson, 2021, p. 13). As an example, an employee performs a particular task or job to attain career goals or certain lifestyle (Tremblay et al., 2009).

v. Integrated Regulation (Extrinsic Motivation)

When an employee fully internalises and integrates the activity "to the point that it becomes part of a person's habitual functioning and part of the person's sense of self" (Gagné et al., 2022, p. 629). Thus, an employee will perform a job because it is a part of his/her life or because the job "has become a fundamental part of who I am" (Tremblay et al., 2009, p. 28).

vi. Intrinsic Motivation

The individual himself/herself is inherently interested in the activity (Gagné & Deci, 2005). As a result, intrinsic motivation is the highest-quality level of motivation and self-determination as it stems out of the individual's self-interest and volition (Furnham & Macrae, 2021; Gagné & Deci, 2005; Ryan & Deci, 2017; Rigby & Ryan, 2018).

Remote Working Frequency and Motivation

Several studies attempted to investigate the relationship and impact of remote working on motivation. Bailey and Kurland (2002) noted that remote working had limited impact when its frequency was low and they concluded that there was not enough evidence to state that remote workers have higher levels of motivation. Nevertheless, various other studies indicated that remote working positively affects motivation (Davidescu et al., 2021; Munusamy, 2016; Palumbo et al., 2022; Rupietta & Beckmann, 2018; Virtanen, 2020). Golden and Veiga (2005) explored further the relationship between remote working and motivation in a large high-tech firm. Their findings revealed a curvilinear relationship between the intensity of telework and job satisfaction, whereby teleworking was positively related to job satisfaction up to 15.1 hours per week, after which, job satisfaction declined slightly and plateaued. Similarly, a study by Caillier (2016) conducted amongst US federal government employees revealed that the motivation of employees was highest when working remotely two to three days a week. For this study, it is postulated that:

Hypothesis 1 (H1) – Increasing the percentage of remote working hours enhances public officers’ motivation

Null Hypothesis (H0) – Increasing the percentage of remote working hours does not enhance public officers’ motivation

Remote Working and Intrinsic Motivation

Relating to the SDT’s three basic needs, remote working offers employees’ greater autonomy and flexibility over when, where and how to work (Allen et al., 2015; Dryselius & Petterson, 2021; Gajendran & Harrison, 2007; Jamal et al., 2022). Brunelle and Fortin (2021) studied the impact of remote working on employees’ satisfaction at work in terms of the satisfaction of their three basic psychological needs. Their study revealed that remote workers experienced greater satisfaction of autonomy, competence and relatedness needs than office workers. Gagné and Deci (2005) assert that “work climates that promote satisfaction of the three basic psychological needs will enhance employees’ intrinsic motivation” (p. 337). To this effect, the following hypothesis is formulated:

Hypothesis 2 (H2) – Increasing the percentage of remote working hours enhances intrinsic motivation

Null Hypothesis (H0) – Increasing the percentage of remote working hours does not enhance intrinsic motivation

Voluntary vs Implemented Remote Working and Motivation

In the first teleworking policy of the Public Service of Malta (OPM Circular No 6/08), teleworking was entirely voluntary and could not be imposed by the head of the department (OPM, 2008). In contrast, the Remote Working Policy, which was in effect between October 2021 and March 2023, allowed the Head of Department to implement remote working and oblige public officers in a particular section or through the whole department, to switch partly or entirely to remote working (OPM, 2021). Anderson and Kelliher (2020) argue that enforced remote working offers no choice as to when and where to work, “and as a result employees are less likely to perceive greater autonomy, nor to feel a sense of gratitude to their employer for allowing them to work away from the workplace” (p. 679). Consequently, the following hypothesis is formulated:

Hypothesis 3 (H3) – Public officers working remotely on a voluntary basis have higher levels of motivation than public officers whose remote working arrangement was implemented by management

Null Hypothesis (H0) – Public officers working remotely on a voluntary basis do not have higher levels of motivation than public officers whose remote working arrangement was implemented by management

Methodology

In analysing the impact of remote working on motivation, this study took a deductive approach. A correlational research design was used to determine if there is a relationship between variables and how a change in one variable affects the outcome of the other variable (Gravetter & Wallnau, 2014; Thomas, 2021). The two main variables of this study were the percentage of remote working hours (independent variable) and the motivation level (dependent variable).

The Questionnaire

This research used a quantitative research approach to determine correlations, using an online self-completion questionnaire. The questionnaire was composed of three sections: demographics, remote working and motivation. Demographic data was gathered to determine participants' profile. Data on remote working was gathered to enable the authors to decipher the percentage of remote working hours of respondents, their opportunity for remote working, their remote working experience as well as their views on remote working frequency. Finally, the last section measured respondents' motivation. The Work Extrinsic and Intrinsic Motivation Scale (WEIMS), as developed by Tremblay et al. (2009), was used to measure motivation grounded in the SDT (Appendix).

The WEIMS has a total of eighteen items; six subscales (corresponding to the six types of motivation) with three items each. Participants were asked to indicate the extent to which the eighteen statements correspond to the reasons why they were currently involved in their work. The WEIMS generates the Work Self-Determination Index (W-SDI) which measures the motivation and self-determination level of employees. The following formula, as presented by Tremblay et al. (2009, p. 216), was used to determine the W-SDI:

$$W-SDI = (+3 \times \text{Intrinsic Motivation}) + (+2 \times \text{Integrated Regulation}) + (+1 \times \text{Identified Regulation}) + (-1 \times \text{Introjected Regulation}) + (-2 \times \text{External Regulation}) + (-3 \times \text{Amotivation})$$

In the formula, subscales representing controlled motivation were weighted negatively, whilst subscales representing autonomous motivation were weighted positively (Spivack & Milosevic, 2018). Moreover, the higher the level of control or auton-

omous motivation represented by the subscale, the larger the weight value. The possible scores for W-SDI ranged between ± 36 , whereby the higher the score, the higher the level of self-determined motivation (Tremblay et al., 2009).

Data Gathering Methods

The target population for this study were officers in the grades of 'Senior Clerk', 'Executive Officer' and 'Assistant Principal' in the Public Service of Malta. Choosing these three grades, enabled the researcher to have a good number of views from both remote workers as well as non-remote workers. The questionnaire was sent to the People and Standard Division (P&SD) to be disseminated to the whole target population (1,410). The P&SD sent the questionnaire to Directors Corporate Services (DCSs) who forwarded it to heads of departments falling under their remit for their subsequent dissemination to target participants. As a result, the authors do not have the actual number of participants this survey was disseminated to.

Ethical Considerations

The IDEA Academy Ethical Review Board (IREB) and P&SD gave approval to conduct this study. In addition, permission was also sought for the use of the WEIMS. In this regard, Dr Tremblay, Dr Blanchard and Dr Pelletier were contacted by email, whereby they granted their approval to use the published questionnaire. Unfortunately, the contact information for the other authors could not be found. Prior to commencing the questionnaire, participants were provided with an introductory page that outlined the scope of the research and emphasised the voluntary and anonymous nature of their participation.

Validity and Reliability

The WEIMS instrument was used to measure motivation, which already had its validity tested and confirmed (Tremblay et al., 2009). No changes to the questionnaire published by Tremblay et al. (2009) were made; thus, the validity and reliability of the WEIMS are also applicable to this study (Chai et al., 2017; Wallander, 2016). The sample data was tested for internal consistency using Cronbach's alpha (IM = 0.82; INTEG = 0.82; IDEN = 0.75; INTRO = 0.79; EXT = 0.68; AMO = 0.67) and the coefficients indicated satisfactory internal consistency since all values exceeded 0.65 (Bryman, 2012; Tremblay et al., 2009).

Moreover, the questionnaire was piloted prior to dissemination in order to clear ambiguities in questions, whilst control of bias was ensured as the researcher had no interaction with participants throughout the study.

Since the questionnaire was distributed by the P&SD, and not by the authors, the authors had no control over whom the questionnaire was disseminated to, and thus, there could have been a risk that the questionnaire was sent to participants who do not form part of the target popula-

tion. To address this issue, a control was included in the questionnaire, whereby participants had to choose whether their grade was 'Senior Clerk', 'Executive Officer', 'Assistant Principal, or 'other'. Participants who selected 'other' were disqualified from the survey. This control proved to be highly effective as 90 officers who attempted to do the survey were disqualified after having chosen 'other'. The total number of usable questionnaires was 115, having a confidence level of 95% and a margin of error of 8.8% (SurveyMonkey, 2023).

Results

Demographics

The following table presents the descriptive statistics of the demographic characteristics of participants.

		Frequency	Per cent
Age	18-35	20	17.4
	36-45	25	21.7
	46-55	50	43.5
	56-65	20	17.4
	Total	115	100
Gender	Female	98	85.2
	Male	17	14.8
	Total	115	100
Grade	Senior Clerk	27	23.5
	Executive Officer	41	35.7
	Assistant Principal	47	40.9
	Total	115	100

Table 1: Demographics – Descriptive Statistics

Remote Working

25.2% of participants worked exclusively from the office, whilst 74.8% worked a proportion of their hours remotely. Only 3 participants (2.6%) worked exclusively remotely. 68.3% of remote workers were performing remote work as a result of their voluntary decision, whilst 31.7% were doing so after remote working had been implemented by management. At large, participants preferred the hybrid working arrangement (81.8), with the most popular options being 2 days of remote working (20.9%), 3 days (20.9%) and 4 days of remote working (28.7%).

Remote workers were asked to rate their satisfaction level on a number of factors, when comparing their remote working experience to working from the office. The Friedman Test was performed, which showed that there is a statistically significant difference between the mean rating scores.

	Mean	Std. Deviation
Managerial / leadership support	4.45	0.816
Management trust	4.46	0.801
Team / co-workers relationship	4.38	0.841
Work-life balance	4.51	0.818
Well-being	4.41	0.904
Work performance	4.60	0.762
Physical remote workplace	4.42	0.765
Autonomy to perform work	4.49	0.716
Professional development	4.33	0.816
Feedback and communication	4.47	0.716
Level of controls imposed on you (ex. Monitoring)	4.38	0.743

$\chi^2(10)=26.73, p=0.003$

Table 2: Remote Working Satisfaction Factors

Motivation

The motivation of participants was determined through the W-SDI. Intrinsic motivation had the highest mean (4.73), whilst amotivation had the lowest mean (2.58). Normality tests showed that the W-SDI satisfies the normality assumption, while the distribution of the six subscales’ scores was skewed. Thus, parametric tests will be used to analyse data relating to W-SDI and non-parametric tests will be used to analyse data relating to the six types of motivation.

	W-SDI	Intrinsic Motivation	Extrinsic Motivation				Amotivation
			Integrated Regulation	Identified Regulation	Introjected Regulation	External Regulation	
Mean	7.58	4.73	4.55	4.17	3.59	4.28	2.58
Std. Deviation	8.299	1.516	1.596	1.580	1.718	1.531	1.306

Table 3: Motivation – Descriptive Statistics

Motivation (W-SDI) and Remote Working

To establish whether a relationship exists between motivation and the percentage of remote working hours, the reserachers conducted a Pearson correlation coefficient test. Both the test and the scatter graph show a statistically significant positive relationship between motivation (W-SDI) and the percentage of remote working hours ($r = 0.188, p < 0.05$). Thus, H1 of this study, which states that ‘increasing the percentage of remote working hours enhances public officers’ motivation’, is accepted.

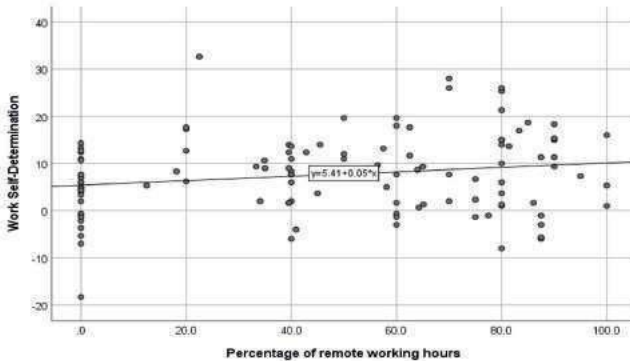


Figure 1: Remote Working Hours (%) and W-SDI

Remote Working and the Six Types of Motivation

The Spearman correlation test was used to analyse the relationship between remote working hours and the six types of motivation (Table 4). From the Spearman correlation test ($p=0.016$, $p>0.05$) and from the scatter graph, it can be concluded that there is no correlation between

intrinsic motivation and remote working hours since the correlation coefficient (0.016) is very close to 0 and the p-value (0.863) exceeds the 0.05 level of significance. Thus, H2 of this dissertation, which specifies that 'increasing the percentage of remote working hours enhances intrinsic motivation' is rejected.

		Intrinsic Motivation	Extrinsic Motivation				Amotivation
			Integrated Regulation	Identified Regulation	Introjected Regulation	External Regulation	
Percentage of remote working hours	Correlation (ρ)	0.016	0.116	0.130	0.046	-0.056	-0.205
	P-value	0.863	0.217	0.166	0.628	0.551	0.028

Table 4: Spearman Correlation - Remote Working Hours (%) and Motivation Types

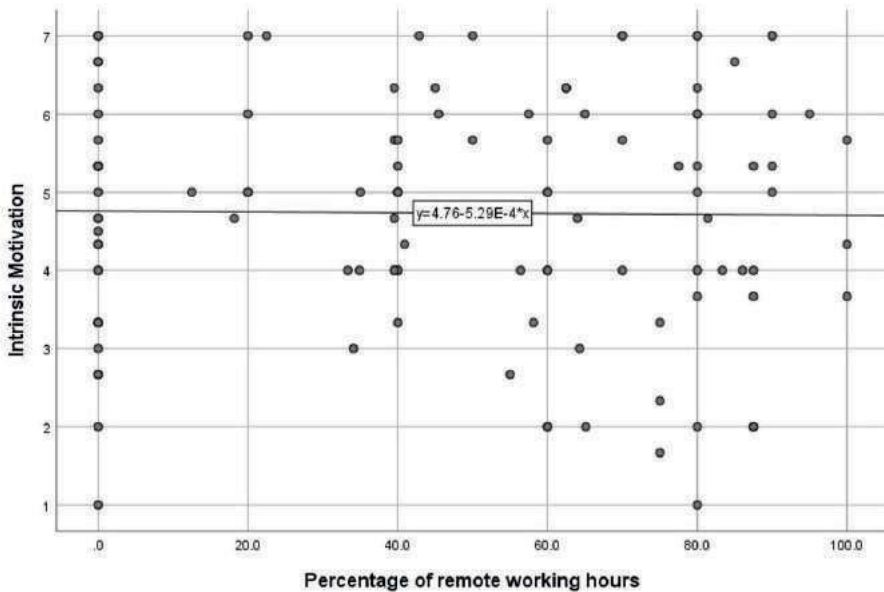


Figure 2: Remote Working Hours (%) and Intrinsic Motivation

As per Table 4, the p-value of the Spearman correlation test is greater than 0.05 for all motivation sub-scales, except for amotivation. This implies that there is no statistically significant relationship between the percentage of remote working hours and intrinsic motivation as well as the four

types of extrinsic motivation. On the other hand, the Spearman correlation coefficient revealed a negative statistically significant relationship between remote working hours and amotivation ($p=-0.205$, $p<0.05$).

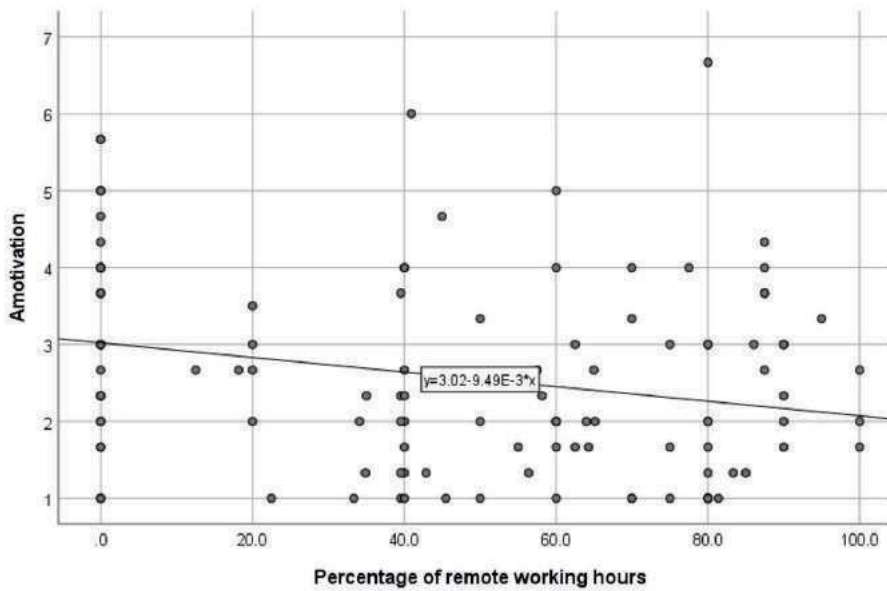


Figure 3: Remote Working Hours (%) and Amotivation

Voluntary vs Implemented Remote Working

The independent samples t-test was used to identify if there is a statistically significant difference in the motivation of public officers working remotely through their voluntary decision and the motivation of public officers whose remote working arrangement was implemented by management. The result showed that the motivation (W-SDI) is marginally higher for those employees

whose remote working arrangement was implemented by management (9.67) than those who work remotely through their voluntary decision (9.21). However, the result was not statistically significant ($p > 0.05$). Consequently, H3 'public officers working remotely on a voluntary basis have higher levels of motivation than public officers whose remote working arrangement was implemented by management', is rejected.

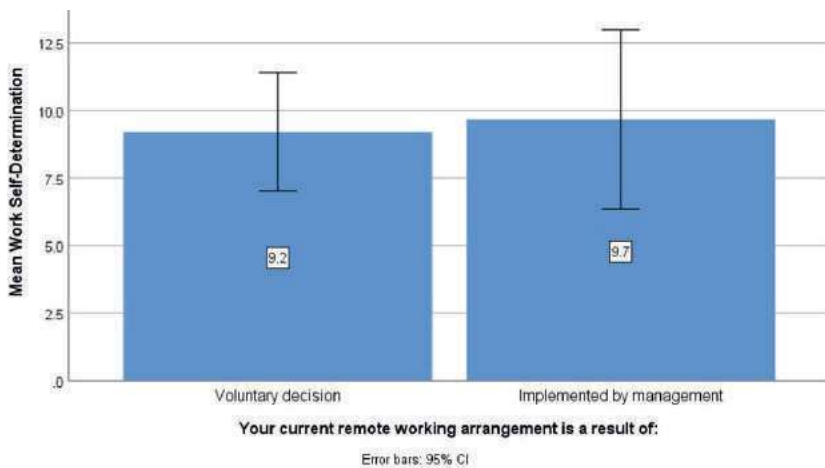


Figure 4: Motivation - Voluntary vs Implemented Remote Working

Further Analysis

Using the ANOVA test, the results showed that the W-SDI did not differ significantly amongst participants based on age, gender, grade, education and remote working tenure. This implies that the impact of these variables on public officers' motivation was not statistically significant. The Spearman correlation test showed a statistically significant positive relationship between motivation (W-SDI) and the satisfaction of working arrangements ($p=0.257$, $p < 0.05$). Moreover, the

results showed that the overwhelming majority of public officers working remotely were satisfied with their current working arrangement. This contrasts with non-remote workers, who were much less satisfied.

Discussion

Research Question 1: Is there a relationship between the percentage of remote working hours and the motivation level of public officers?

H1 confirms a statistically significant positive relationship between the percentage of remote working hours and motivation. This indicates that as the percentage of remote working hours increased, a higher level of motivation amongst remote workers was observed. This supports the ample literature and studies which indicate and show that remote working is associated with higher levels of motivation (Bloom et al., 2015; Davidescu et al., 2021; Felstead & Henseke, 2017; Munusamy, 2016; Palumbo et al., 2022; Rupiotta & Beckmann 2018; Virtanen, 2020). Contrasting to Caillier (2016) and Golden and Veiga's (2005) studies, this study shows that amongst public officers in the Public Service of Malta, the correlation between remote working and motivation continues to increase linearly as the percentage of remote working hours increases (Figure 1).

According to the SDT, self-determined motivation depends on how public officers "perceive their work environment as supportive of their basic psychological needs" of autonomy, competence and relatedness (Orsini & Rodrigues, 2020, p. 1). In fact, remote workers were highly satisfied with the various factors they were asked to rate including autonomy to perform work, feedback and communication, and management support. This signifies that a needs-supportive environment during remote working may have contributed to the increase in motivation. This corresponds to Brunelle and Fortin's (2021) study, whereby remote working was found to have a moderating role in explaining the relationship between the three psychological needs and job satisfaction. Thus, in interpreting the result of H1, the increase in motivation may have been de-

rived from the fact that as the percentage of remote working increased, participants felt that the three psychological needs were being satisfied to a greater extent.

Research Question 2: Which types of motivation are impacted by remote working?

Intrinsic motivation is important as it is viewed as the highest quality level of motivation in the SDT continuum (Rigby & Ryan, 2018). Findings did not support H2, as there was no statistically significant correlation between remote working hours and intrinsic motivation. Comparing and contrasting the finding of H2 with the result of H1, indicates that whilst remote working resulted in an increase in motivation, this increase was not attributed to the enhancement of the intrinsic type of motivation.

From the SDT perspective, studies have shown that intrinsic motivation is undermined by controls, pressures and deadlines (Ryan & Deci, 2000). In this regard, it may be the case that whilst remote working may have provided an enhanced autonomy-supportive environment, its positive benefits may have been offset by the negative effects of the increased controls during remote working. In fact, respondents' score on the satisfaction of the level. In fact, respondents' score on the satisfaction of the level of controls imposed during remote work, albeit they were still satisfied, was the second lowest

In addition, gains made in motivation through greater satisfaction from autonomy and competence needs during remote working, may have also been offset by the reduced social interactions (Allen et al., 2005). In fact, respondents' score of their satisfaction on the team/co-workers' relationship was the same as their satisfaction on the levels of controls.

The lowest score was given to participants' satisfaction with their professional development, which may suggest that remote working may not have provided optimal opportunities for learning and growth. These factors may partially explain the reason behind the lack of correlation between remote working and intrinsic motivation in this study.

Further to H2 of this study, the relationship between the percentage of remote working hours and the six types of motivation was analysed. Interestingly, the only statistically significant relationship found was with amotivation (Figure 3). This indicates that the increase in self-determined motivation (H1) may be attributed to a reduction in amotivation rather than an increase in intrinsic motivation (graphical abstract).

Remote Working and Amotivation

Amotivation represents the lowest quality motivation amongst the six types of motivation (Rigby & Ryan, 2018). The results obtained in this study indicate that as the percentage of remote working hours increased, the amotivation score fell, that is, there were less instances where public officers lacked motivation. Whilst there is a literature gap in studies relating to the impact of remote working on amotivation, two main reasons may have led to the reduced amotivation score.

Firstly, a lower score in amotivation as remote working frequency increased may signify that, as heads of departments in Farrugia's (2021) dissertation remarked, remote working may not be ideal for those who lack motivation. As a consequence, public officers who lacked motivation may not have been given the opportunity to work remotely. Thus, coupling it with the result of H1, this may imply that the increase in self-determined motivation was not caused by greater satisfaction of the three psychological needs postulated by SDT but due to the fact that persons lacking motivation were not given high intensity remote working.

On the other hand, the negative correlation between remote working and amotivation may signify that remote working may have provided a better need-satisfying work environment for those who lacked motivation than compared to when working from the office. The reduction in the amotivation score may signify that remote workers find significantly more value in their tasks when compared to office workers.

Research Question 3: Is the motivation of public officers who voluntarily decided to work remotely higher than those whose remote working arrangement was implemented by management?

The findings of this study do not support H3; that is, public officers' motivation does not seem to be impacted by whether remote working was adopted voluntarily or by management. A possible reason for this finding could be that when the management implemented remote working, participants may have viewed it as a positive benefit, and as such did not negatively impact their motivation. Another alternative assumed possibility could be that whilst remote working may have been an initiative of the management, the management could have given a degree of autonomy to public officers to decide the percentage of remote working hours themselves. As a result, it may be the case that since the autonomy need was still satisfied, the motivation of those whose remote working was implemented and those who voluntarily applied for it did not differ significantly.

Conclusions

In determining the impact of remote working on motivation in the Public Service of Malta, this study identified a positive and statistically significant relationship between the percentage of remote working hours and motivation. It was also observed that the motivation of public officers increased with an increase in the satisfaction of their current working arrangement. Further analysis was conducted to determine which types of motivation were impacted by remote working. The findings showed no statistically significant correlation between the percentage of remote working hours and the intrinsic type of motivation and the four types of extrinsic motivation. However, a negative and statistically significant correlation was identified between the percentage of remote working and amotivation. Thus, whilst an increase in the percentage of remote working hours was associated with a higher level of motivation, this increase was not attributed to the enhancement of the intrinsic type of motivation, but to a decrease in amotivation. Finally, it was concluded that in the Public Service of Malta there was no statistically significant difference in the motivation level of remote working officers, regardless of whether the choice to work remotely was voluntary or implemented by management.

Recommendations

Based on the aforementioned conclusions, the researchers put forward several recommendations to help the Public Service enhance motivation while working remotely, particularly intrinsic motivation.

i. Remote Working Arrangement - This study identifies a positive relationship between remote working and both motivation and the satisfaction of working arrangement. Moreover, remote workers were more satisfied with their working arrangements than non-remote workers. Interestingly, 95.7% of participants remarked that they would like to work remotely. Therefore, supporting and accommodating public officers' working arrangement needs may aid in enhancing their motivation.

ii. Redesign Work - It is recommended that public service departments re-engineer processes and restructure how they provide services in order to allow more opportunities for remote working. This could include offering more online services, such as online customer care and job rotation. Furthermore, in line with the SDT, the work design of remote workers must satisfy the autonomy, competence and relatedness needs of public officers.

iii. Leadership - Needs supportive manag-

ers/leaders are crucial in satisfying public officers' autonomy, competence and relatedness needs and in enhancing their motivation during remote working.

iv. Reduce Controls - Managers must measure public officers' performance based on their outcomes and outputs rather than monitoring their online time during remote working. Moreover, managers should not put greater expectations and tighter deadlines for those working remotely than those working from the office.

Areas of Future Research

The findings of this study, as well as the limitations of this research, indicate that further research is required to fill in the gaps identified in this study as well as to conduct a more accurate and in-depth analysis of the impact of remote working on motivation in the Public Service of Malta.

1. Future research could be conducted in an experimental or quasi-experimental research design in order to determine more accurately the cause-and-effect relationship between remote working and motivation in the Public Service of Malta.

2. This study cannot rule out that there is reverse causality in the sense that the level of motivation of employees may determine the extent of remote working hours of public officers (Golden & Veiga, 2005). Future studies may be able to provide more insight into this.

3. A longitudinal research design may be used to analyse the impact of remote working on motivation over time.

4. Qualitative research could delve more deeply and provide richer explanations of the factors that impact motivation during remote working.

5. Whilst this study focused on three grades within the Public Service, future studies could also gather the views of all public service officers in Malta.

6. Further research could analyse the extent to which the three psychological needs are satisfied during remote and non-remote (office) working.

7. This study identified a literature gap in studies relating to remote working and amotivation. Future research could explore and analyse the factors that lead to this. Moreover, further research could explore whether remote working can be used as a motivation tool for officers who lack motivation.

Limitations of the Study

In conducting this research, a number of limitations encompassed this study. This study could have been able to determine more accurately the impact and casual relationship between remote working and motivation in the Public Service of Malta through the use of an experimental research design (Saunders et al., 2009). However, since the authors do not have the authority to shift employees to work remotely, a non-experimental correlational research design was used. As a correlational cross-sectional study, this research lacks the ability to establish causal relationships between remote working and motivation (Tremblay et al., 2009). Although efforts were made to control for various variables, it remains possible that other factors may influence the level of motivation. This study relied on data obtained through self-reports, and, thus, participants may have provided inaccurate data due to poor memory or confusion in understanding and answering questions, or they may have even deliberately provided wrong, inflated, underreporting or imprecise responses (Thomas, 2021; Tremblay et al., 2009). The target population was made up of three specific grades, and thus, inferences can only be made to those three grades. Another limitation of this study is that the authors were unable to know if the questionnaire was disseminated to the whole target population. Final-

ly, the results obtained, predominantly reflected the views of female participants.

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04 Evaluating the Degree of Psychological Safety and Individual Perceptions Among Radiographer Teams

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Abstract

Objectives

Psychological safety, as the belief that an individual can freely express opinions, without any negative repercussions, must be safeguarded in all organisations. This is no exception to the healthcare industry where professionals experience workplace interpersonal risks, which influence their behaviours, hindering their ability to provide high-quality patient care in highly complex environments. The purpose of this study was to evaluate the degree of psychological safety and its influencing factors among radiographer teams employed within the Maltese public health sector. Additionally, the study investigated radiographers' individual perceptions on the degree of psychological safety, based on their varying demographics.

Methods

Following a comprehensive literature review, a conceptual model incorporating the factors influencing psychological safety was developed. This informed the design of an online survey, which was based on established instruments. The quantitative survey was distributed via email to every eligible radiographer within the national health service in Malta in July – August 2022.

Results

A response rate of 41% from the total 223 radiographers was attained. Findings revealed moderately positive perceptions of psychological safety, while the influencing factors were rated between moderately negative to moderately positive. Additionally, it was observed that the radiographers' perception of psychological safety was not influenced by their demographics, unlike some of the influencing factors which were affected by the radiographers' gender, nationality, the radiographer team, their organisational tenure, and position.

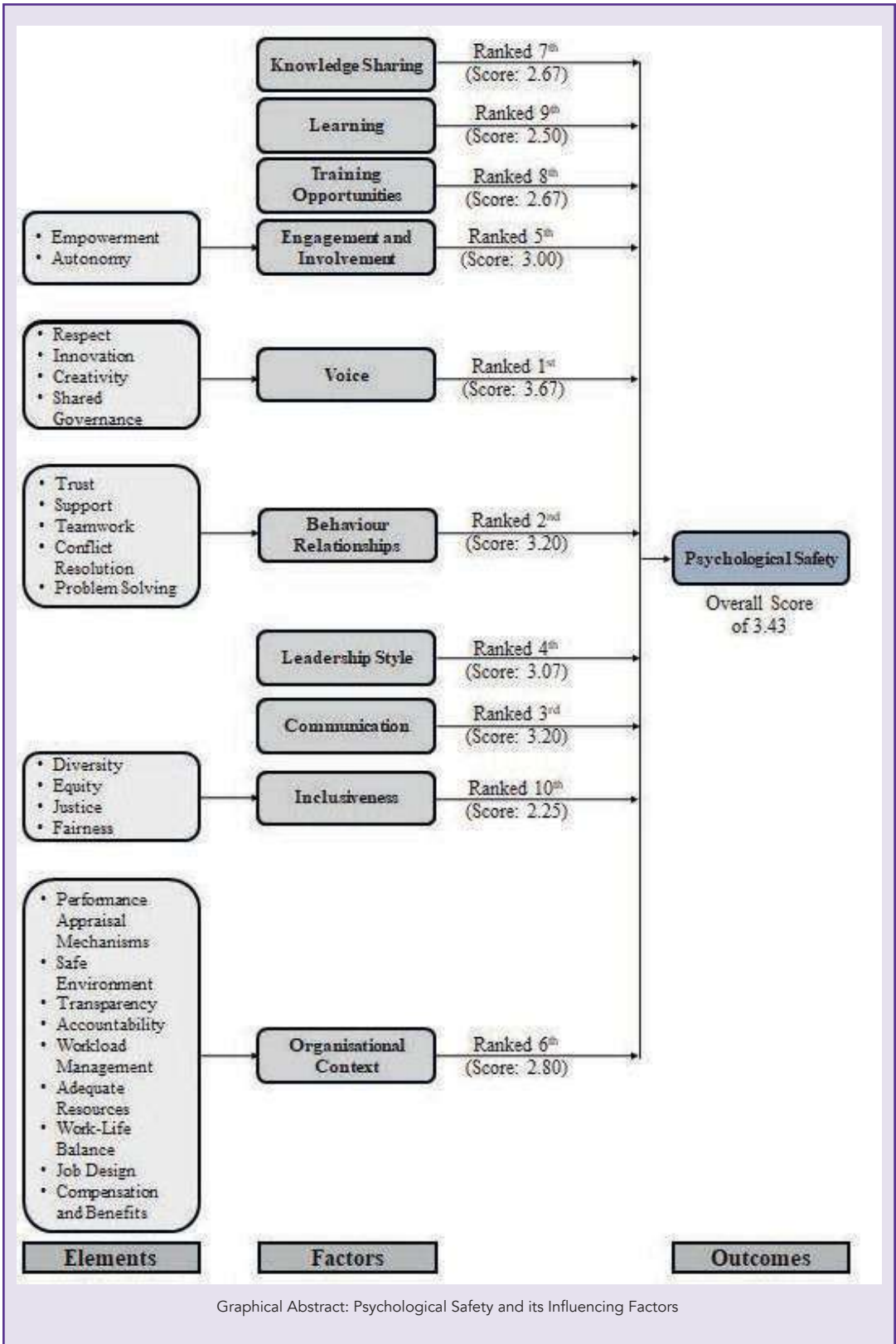
Conclusions

Despite the moderately positive results attained for psychological safety among radiographer teams, this study indicates room for improvement. Therefore, a tailor-made, multi-level strategic intervention is necessary to establish psychological safety successfully within the organisation.

Keywords: "Psychological Safety", "Safety Culture", "Healthcare Management", "Healthcare Teams", "Job Satisfaction".

Highlights

- While psychological safety has been widely researched amongst various health professionals globally, this concept has yet to be researched among radiographers. Consequently, following an extensive literature review, a comprehensive conceptual framework was developed comprising additional factors towards the preservation of psychological safety among radiographer teams, upon which the research survey tool for this study was subsequently based.
- The study outlined which factors merited improvement among the teams, and these will consequently be presented to the respective managerial bodies to enhance psychological safety for radiographers.
- The factor of inclusiveness among the radiographers ranked lowest with a moderately negative score, while the voice factor ranked highest on the Likert-scale.
- Radiographers occupying a managerial position had diverse, more positive perspectives of psychological safety than the rest of the radiographers.
- Despite the moderately positive results attained for psychological safety among radiographer teams, this study indicates room for improvement.



Graphical Abstract: Psychological Safety and its Influencing Factors

Introduction

Psychological Safety

The concept of psychological safety was defined by Maslow et al., (1945) as the sense of confidence, safety, and fear detachment, crucial to address current and future individual needs, claiming that psychological safety reassures individual employees when undertaking change, aiding them to overcome anxiety due to uncertainty in shifting from the status quo (Ming et al., 2015). Kahn, (1990), defined psychological safety as the individual's perception of whether it is secure to indulge in interpersonal risks, such as engaging in open communication, asking queries, and seeking feedback. Consequently, Brown and Leigh, (1996) lifted the conception of psychological safety to the organisational level, whereby the management and organisational environment must be supportive, providing clear job roles, and permitting individual self-expression, ultimately augmenting individual outcomes in terms of employee satisfaction, behaviours, motivation, and performance. Edmondson, (1999) raised the concept from an individual to the team level, relating to whether team members are able to speak freely, share similar beliefs and intellectual reasoning, feel trusted and respected. She explained how the occupational environment setting should provide a safe environment for interpersonal risks and actions, without any negative repercussions (Edmondson et al., 2016).

Psychological Safety in Healthcare

Employees within every organisation experience uncertainty and have to cope with a variety of interpersonal risks and occupational health hazards within the workplace setting, which impact an individual's cognitive behaviour and emotions, constraining self-consciousness, motivation, and psychological well-being (Ming et al., 2015; WHO, 2022). Healthcare professional teams, including radiographers, inevitably experience various occupational conditions including biological infections and chemicals hazards, violence and harassment, augmented workloads, heightened stress levels, fatigue, burnout, radiation exposure, and heavy loads in manual handling. Furthermore, they are exposed to other conditions which deplete their motivation levels at the workplace, impacting their physical and mental well-being, namely extended working hours, delays and machine breakdowns, meagre salaries, limited training and development programmes, infrastructural and welfare deficiencies, ineffective communication and leadership, staff shortages and lack of resources (Rajan, 2018; WHO,

2022).

Psychological safety must be safeguarded in all organisations within every industry, particularly within the healthcare sector, since it is profoundly dependent on healthcare professionals, including radiographers, who work together in multidisciplinary healthcare teams to ensure efficient, safe, high-quality healthcare in highly complex, demanding, and rapidly evolving environments, for patients experiencing vulnerability due to injury or disease (O'Donovan et al., 2020). Unfortunately, healthcare organisations are still characterised by a culture of fear and low psychological safety, necessitating the development and implementation of suitable interventions to improve psychological safety. This was further accentuated by the crisis of the Covid-19 pandemic, hence psychological safety must be measured constantly over time, as this can be depleted by new multiple emerging factors, which require various healthcare teams to adapt in order to address additional challenges (O'Donovan et al., 2020).

Radiographer Teams

Within the local healthcare setting, radiographers are generally employed in two main settings, namely diagnostic radiography and therapeutic radiography. In the public health service, diagnostic radiographers generally work in the Medical Imaging Department (MID), utilising X-ray, Ultrasound, Computed Tomography (CT), and Magnetic Resonance Imaging (MRI) machines to diagnose diseases within the Accident and Emergency, Outpatients, Operating Theatres, and hospital wards. Conversely, therapeutic radiographers work in the Radiotherapy Department (RTD) within the Oncology setting, to treat cancer patients. Moreover, a minute number of radiographers occupy a managerial role in administration and radiation protection (Table 1).

Hospital	Radiographer Teams	Total (N)	Grand Total	Percentage (%)
MDH	A&E	20	158	70.85%
	Angiosuite	6		
	Bone Density	1		
	Catheterisation Lab	7		
	CT	14		
	General Team & Dentals	26		
	General and Vascular Ultrasound	4		
	GUS	11		
	Mammography	8		
	MRI	17		
	Nuclear Medicine	10		
	Theatres & Mobiles	16		
	On Rotation	18		
SAMOC	Radiotherapy	29	29	13.00%
GGH	Medical Imaging	11	11	4.93%
Primary Health	Health Centres	13	15	6.73%
	SVPR	2		
NBSU	Breast Screening	3	3	1.35%
Management	Administration	4	7	3.14%
	Radiation Protection and Safety	3		
Population Grand Total (N)			223	100%

Table 1: Radiographer Teams in Malta
Source: Provided by a Radiography Senior Allied Practitioner (2022)

Purpose of the Study

Every radiographer team employed with the Maltese public health sector, operating in diverse locations, experiences different working conditions and multiple factors, which could impact on their psychological safety at the workplace. This steered the aim of the study to evaluate the degree of psychological safety, by investigating the presence of the influencing factors towards psychological safety, among different radiographer teams working in the local public health service in Malta and Gozo. The following objectives and research hypotheses were consequently devised to attain the aim of the study.

• **Objective 1: To identify the varying factors contributing towards psychological safety from the literature reviewed, and consequently design a research tool to evaluate the de-**

gree of psycho-

logical safety among the different radiographer teams.

• **Objective 2: To assess the radiographers' individual perceptions on the degree of psychological safety, based on the demographic control variables.**

o **H1 to H7: The perceived degree of psychological safety was dependent on gender, age, nationality, tenure, radiographer team, organisational position, and educational level.**

Methodology

The literature reviewed outlined various influencing factors of psychological safety, which must be present for psychological safety to be preserved within work environments, such as in healthcare. These factors must be accompanied by different compulsory elements or antecedents, to maintain psychological safety and shape the culture within organisations. After reviewing multiple studies concerning psychological safety from the literature, a comprehensive conceptual framework was developed comprising of the factors towards the preservation of psychological safety, upon which the research survey tool for this study was

subsequently based (Figure 1). It was also noted that several influencing factors enable or hinder the preservation of workplace psychological safety, either independently or even collectively. This emphasises the need for such factors to be measured and evaluated at individual, team, and organisational level. Figure 2 depicts how the factors are interlinked together by means of the different coloured arrows, in that for instance enhancing knowledge, sharing, learning, and training opportunities within the organisation will augment employee engagement and involvement.

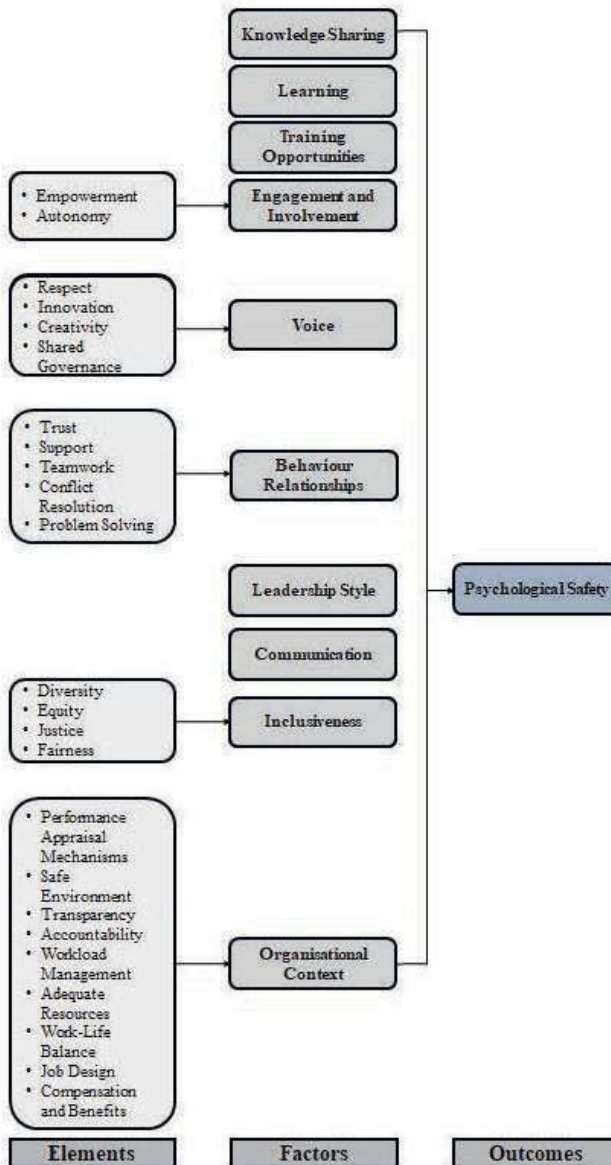


Figure 1: Conceptual Framework for this Study

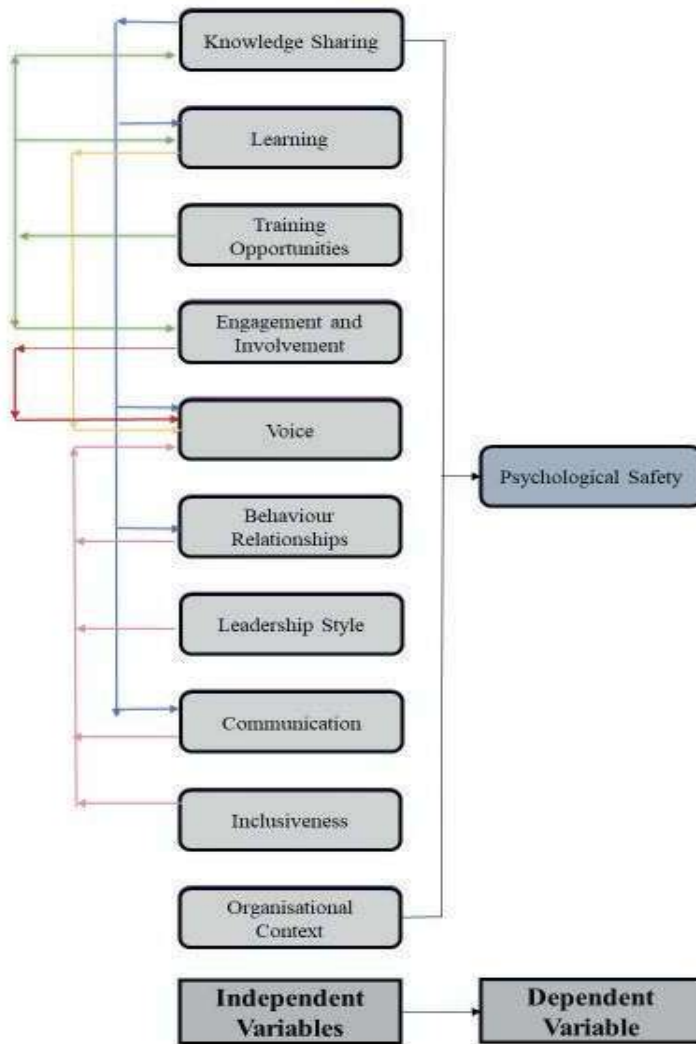


Figure 2: Depicts the Relationships Between the Influencing Factors of Psychological Safety

Research Design

The concept of psychological safety and its contributing factors are widely researched in the literature. Therefore, the post-positivist philosophical assumption was applied to this study, since such an approach allows researchers to begin with an already verified theory, and then collect the necessary data to either support or reject that theory (Saunders et al., 2009). A deductive approach was applied for this study, utilising quantitative methods for data collection since the intent of the study was to test an existing theory, by examining the relationship among the variables, through the collection and analysis of numeric

data using statistical procedures (Saunders et al., 2009). The quantitative approach is based on the belief that there is a single reality that must be discovered, by asking the appropriate questions through a survey strategy, to aggregate the data and analyse common patterns with the use of statistical tests, charts, and tables, to test the hypotheses generated (Bordens and Abbott, 2011; Sheppard, 2021).

Study Population

The study recruited the entire radiography population, comprised of a total of two hundred and twenty-three (223) radiographers employed with the Maltese public health sector, operating within the diverse locations in Malta and Gozo. No sampling techniques were utilised, but rather a census was performed due to the population size being limited. Therefore, in an effort to gather sufficient responses and data, the research tool was distributed to every eligible participant within the population, with the intent of enhancing the generalisability of results.

Research Tool

An online survey questionnaire, a common technique used for data collection within quantitative research methodologies (Saunders et al., 2009), was utilised to collect data in this study. The questionnaire was drafted by the researcher using the Google Forms platform, based on established research instruments assessing psychological safety and the different contributing factors from multiple studies. A two-part survey was developed to attain the data required to quantify the relationships between the variables. The first part consisted of (1) an eligibility question to ensure that the participants were employed as radiographers within the Maltese public health sector and (2) eight (8) demographic questions. The survey did not collect any personal identifiable information. The second part comprised of forty-four (44) Likert scale statements pertaining to each of the factors depicted in the conceptual model, to determine the degree of psychological safety among the different teams. The Likert-style rating scale questions required the respondents to answer whether they strongly disagree or agree, from a five-point scale, with the presented statements.

Content Validity and Reliability Assessment

In an effort to assess content validity, three professional experts with a minimum of seven years of experience in research and radiography, namely a senior radiographer and two radiography academics from the University of Malta (UM), were asked to rate, on a four-point scale, whether each question was relevant or not with the research aims and objectives, (Saunders et al., 2009). The majority of the questions was rated as relevant or highly relevant to the study, attaining an overall content validity index of 1 confirming a good content validity, since the value attained was greater than 0.90 (Polit and Beck, 2018). Moreover, to assess reliability, twenty-one (21) participants from the population were anonymously and random-

ly chosen and they were asked to complete the questionnaire on two attempts with a two-week time interval. On the first attempt, fourteen (14) responses were gathered, while on the second try nine (9) responses were collected. To evaluate this test-retest reliability, the Pearson Correlation Co-efficient (r) for each statement was plotted on a scatter graph, with the majority of the dots plotted rested between 0.40 and 1, confirming reliability of the questionnaire. The Cronbach's Alpha co-efficient was additionally calculated to measure the internal consistency, attaining a collective Cronbach co-efficient for the entire survey of 0.906, confirming that the research tool was strongly reliable, as this was higher than the requisite value of 0.70.

Distribution of the Research Tool

Completing the questionnaire was completely voluntary and anonymous, taking around fifteen (15) minutes to complete. In line with ethical committee requirements, three intermediary persons were appointed on the researcher's behalf to send out an email invitation to all radiographers working with the public health service in Malta. This invitation included an information letter and a link to the online Google Forms questionnaire. The Society of Medical Radiographers Malta (SRM) also acted as an intermediary contact in the process of sending the invitation email to all member radiographers. Data collection commenced from the last week of July 2022 up until the last week of August 2022; two reminders were sent with a two-week interval in between to try and augment the response rate.

Quantitative Statistical Analysis

SPSS was used to analyse the quantitative data from the questionnaire, utilising descriptive analysis to describe and aggregate the constructs of interest, presenting them in tables and graphs, while inferential analysis tested the hypotheses. Prior to analysing the data collected, this was converted into a numeric format by using a codebook to guide the coding process. The statements which conveyed the opposite meaning from that of their underlying construct were reversed before they were compared or combined with the items that were not reverse coded (Saunders et al., 2009; Bhattacharjee, 2012).

For the first objective, descriptive statistics were calculated to gather the aggregate mean scores for each of the contributing factors towards psychological safety. Subsequently, the aggregate mean score for psychological safety was calculated. Consequently, the aggregated scores of each contributing factor towards psychological safety were then plotted per radiographer team to identify the common factors characterising each team.

For the second objective, inferential hypothesis testing was necessary to identify whether the control demographic variables of gender, age, nationality, organisational tenure, radiographer team, organisational status, and educational level affected the perception on the degree of psychological safety. The non-parametric Kruskal-Wallis Test was performed, as an alternative to the ANOVA Test, allowing a comparison of the scores of a continuous variable for three or more groups (Pallant, 2016).

Ethical Considerations

Permission to conduct the study was attained from the IDEA Academy Research Ethics Committee. The researcher also asked the three intermediary contacts and the SRM for their approval to act on the researcher's behalf. Consequently, the clinical chairs and departmental managers of

the different radiographer teams, gave their permission to conduct the study among the radiographers under their lead. The researcher also obtained clearance from the hospital CEO and from the respective Data Protection Officers (DPOs).

No specific personal data, through which individual participants could be easily identified or traced, was collected from the participants. A password protected electronic file, which could only be accessed by the researcher, was created to keep all data collected confidential in order to abide by the Data Protection Act (2018). Moreover, participant anonymity was maintained as the questionnaire was sent by email through the intermediary contacts. Additionally, each completed questionnaire was numbered as a point of reference for the purpose of data analysis, while no hard copies were collected or kept. The invitation email also included an information letter explaining the research study and all ethical considerations to the participants, declaring that confidentiality and anonymity were preserved and that the questionnaire could be completed on voluntary basis. Furthermore, the information letter also stated that, by agreeing to complete and submit the questionnaire, the participants automatically granted their consent to participate in the study.

Results

Response Rate

Following sample power analysis, the target was to attain a minimum of one hundred and forty-two (142) responses, from the two hundred and twenty-three (223) radiographers, which would yield a confidence level of 95% with a 5% margin of error. However, following one month of data collection with two reminders, ninety-two (92) responses were gathered. This resulted in a response rate of forty-one percent (41%), allowing for a confidence level of 95%, with a 7.69% margin of error. Given that the average response rate for online

surveys ranges between thirty (30%) to forty-four percent (44%) (Wu et al., 2022), the response rate for this study was considered satisfactory. Nevertheless, it was acknowledged that the response rate among some individual radiographer teams was poor, especially those operating within MDH. This limited the researcher, in that the original idea to investigate the perceptions across the individual teams was no longer possible. Therefore, for the purpose of data analysis the teams were grouped by hospital instead as shown in Figure 3.

Responses Per Hospital

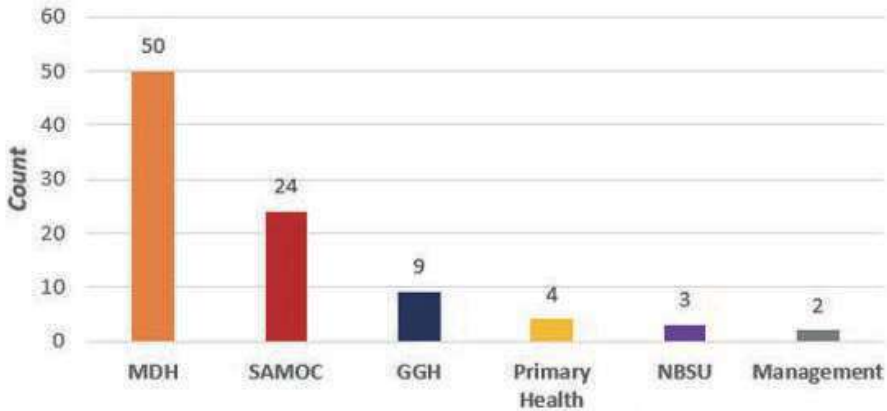


Figure 3: Responses by Hospital

Demographic Analysis

The frequency analysis conducted revealed that profiles attained from the responses were a reflective of the actual proportions within the radiography population, in that 66.1% (n=61) were females while 33.7% (n=31) were males. 65.2% (n=60) of the respondents were aged between 20 to 35 years; while 33.7% (n=31) aged 36 to 55 years; and 1.1% (n=1) were aged 56 and over. 92.4% (n=85) were of Maltese nationality; 4.4% (n=4) were non-Maltese European Nationals and 3.3% (n=3) were Non-European Nationals. In terms of organisational tenure, 31.6% (n=29) of the radiographers were employed for less than five years; 45.7% (n=42) had between 6 to 15 years of experience; 16.3% (n=15) were employed between 16 to 25 years, while 6.6% (n=6) had over 26 years of experience. It was noted that di-

agnostic radiographers do not operate within the same radiographer team for their entire employment but shift from one team to another as they specialise in one specific modality or are shifted to meet the exigencies of the department. Conversely, therapeutic radiographers operate within an individual specialist team. Moreover, the analysis depicted that, as radiographers accumulated more years of experience, they escalated further in their organisational position along the Allied Health Professional (AHP) scale ladder, progressing in their level of studies. In fact, 23.9% (n=22) occupied professional scales 10 and 9, 67.4% (n=62) were in scales 8 and 7, while 8.7% (n=8) were in scales 6 and 5, whereby the majority of the radiographers possessed either a bachelor's, master's, or doctoral degree, as shown in Figure 4.

Education

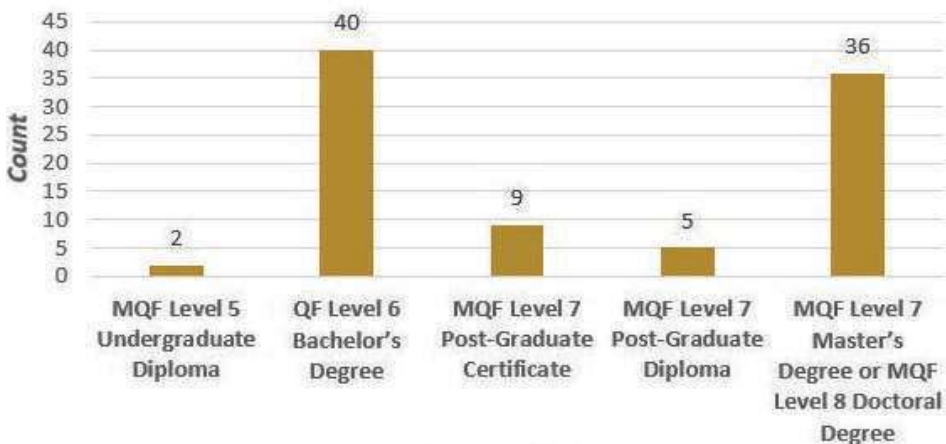


Figure 4: Radiographers' Educational Level

Perception of Psychological Safety Among the Teams

The statements pertaining to each factor influencing psychological safety were aggregated to calculate the mean score for each variable, for each participant. Consequently, a normality test was conducted using the Kolmogorov-Smirnov statistic for each of the dependent and independent variables. A significance (Sig.) value of more than 0.05 indicates a non-significant result implying that the data is normally distributed (Pallant, 2016). The results obtained for normality indicated that the majority of the variables, apart from the dependent variable of psychological safety, had a significance value of less than 0.05 and, therefore, violated the assumption of normality. Pallant (2016) suggests that when the tests for normality fail, non-parametric statistics should be used instead of parametric statistics. There-

fore, in this study, instead of stating parametric descriptive statistics such as the means and standard deviation, non-parametric descriptive statistics like the median and interquartile range (IQR), were reported instead.

When analysed by hospital, the degree of psychological safety ranked lowest with 3.29 at the NBSU, while the highest score of 3.90 was attained at GGH (Table 2 and Figure 5). The aggregate score of 3.43 for psychological safety indicates that there is room for improvement to enhance the psychological well-being of radiographers employed with the public health sector in Malta and Gozo. The degree of psychological safety ranked lowest at the NBSU, highlighting the need for further actions to improve their level of psychological safety.

Hospital	N	Degree of Psychological Safety	
		Median	IQR
MDH	50	3.35	1.14
SAMOC	24	3.43	0.64
GGH	9	3.90	1.21
Health Centres and SVPR	4	3.86	1.71
NBSU	3	3.29	-
Management and Administration	2	3.36	-
Aggregate Score	92	3.43	1.11

Table 2: Degree of Psychological Safety per Hospital

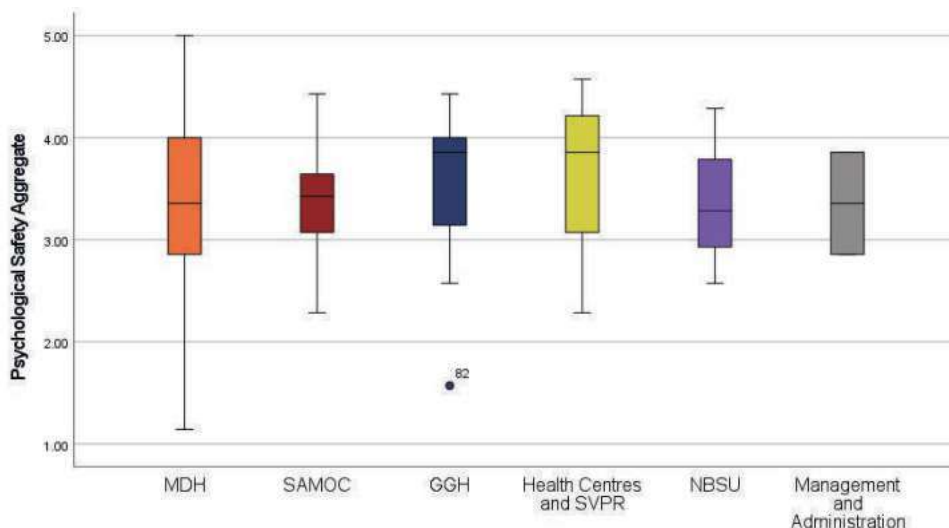


Figure 5: Psychological Safety Across the Hospitals

Moreover, the median scores for the influencing factors ranged between a moderately positive score of four (4) to a moderately negative score of two (2) for the teams operating at MDH, SAMOC, GGH, and Primary Health. On the other hand, the scores of the team at the NBSU ranged between a moderate score of three (3) to a very negative score of one (1). Conversely, the median scores for the managerial team ranged between a moderately positive score of 3.5 and a

very positive score of 4.5 on the Likert-scale. In summary, this further accentuates that the team at the NBSU requires further actions to improve their level of psychological safety. Contrarily, the radiographers occupying a managerial or administrative role had a rather different, more positive perspective, than the rest of the radiographers (Figure 6). Nevertheless, this result was generated from the responses of only two participants.

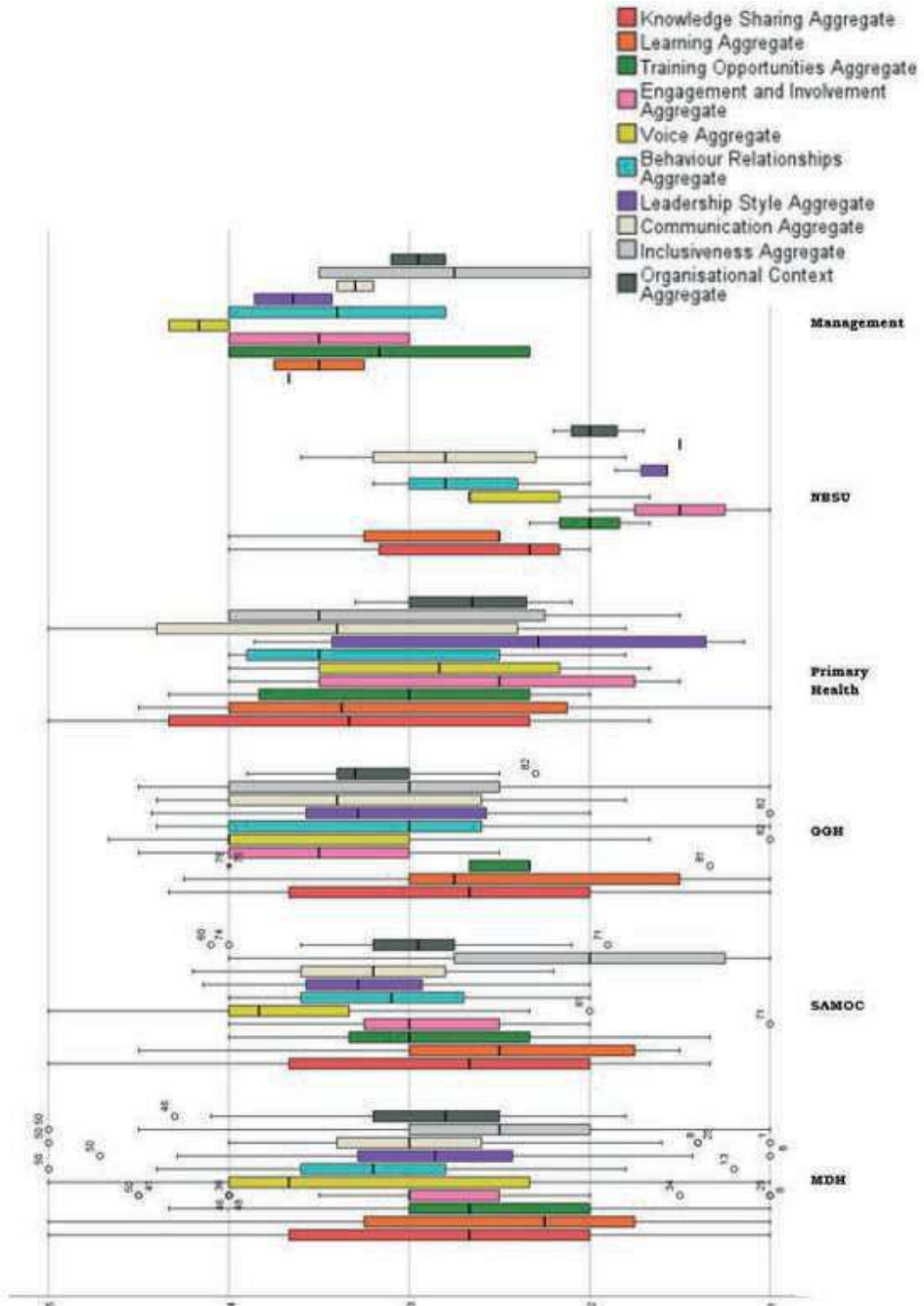


Figure 6: Influencing Factors of Psychological Safety Across Hospitals

Perception of Psychological Safety Based on Demographics

When testing hypotheses 1 till 7, in an effort to investigate whether the radiographers' perception on the degree of psychological safety was influenced by their demographic factors, it was found that no statistically significant difference was noted between genders ($p=0.147$), different age groups ($p=0.132$), different nationalities ($p=0.458$), organisational tenure ($p=0.845$), the team they worked in ($p=0.909$), their organisational position ($p=0.510$), or their educational level ($p=0.224$). Hence, H1o, H2o, H3o, H4o, H5o, H6o, and H7o were retained, as the significance values obtained were greater than 0.05. However, when delving deeper to investigate whether the influencing factors were affected by the dif-

ferent demographics, it was noted that females had a lower perceived level than males with regards to knowledge sharing ($p=0.010$), learning ($p=0.024$), voice ($p=0.012$), leadership ($p=0.005$), and communication ($p=0.021$). Furthermore, non-Maltese European nationals had lower perceptions of communication ($p=0.029$) and inclusiveness ($p=0.020$) at the workplace. A curvilinear relationship was noted for learning ($p=0.005$), engagement and involvement ($p=0.009$), and the leadership style ($p=0.022$) in that employees who had been working for less than a year had similar views to those who had been working for twenty-one (21) years or more, but had differing, more positive views to those who had been employed between a year to twenty (20) years (Figure 7).

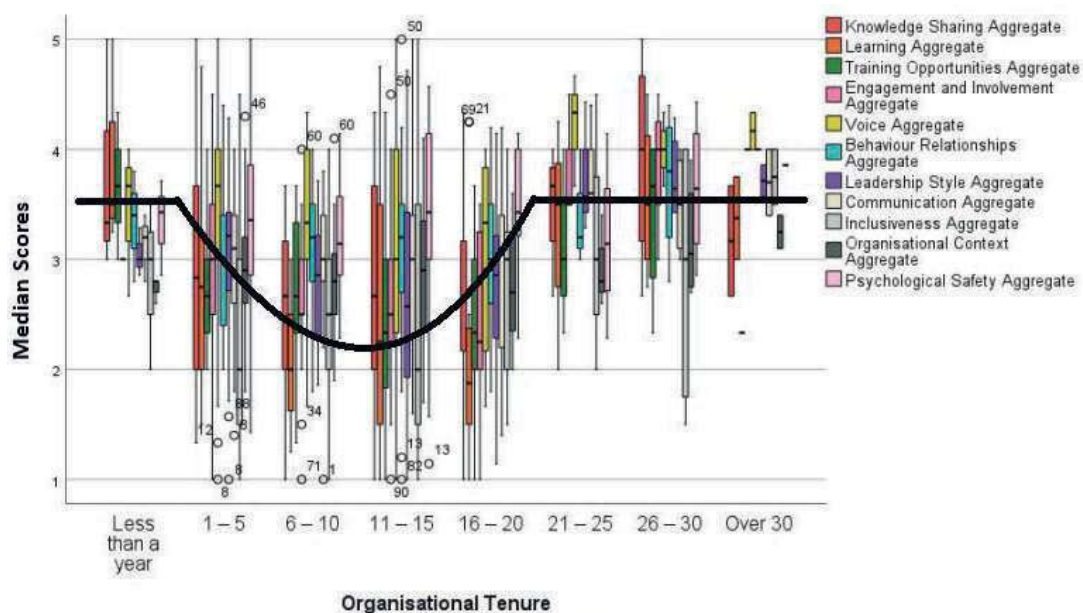


Figure 7: Curvilinear Relationship in terms of Organisational Tenure

Discussion

Psychological safety was initially researched by Edmondson (1999), who stated that this phenomenon exists within groups or teams as a product of interactions at the workplace. Psychological safety determines the level of team performance, based on the degree of knowledge sharing, learning, training, engagement, voice, behaviour relationships, leadership, communication, inclusiveness, and the organisational context. Psychological safety is particularly crucial within high-risk work environments like the healthcare industry, which is predominantly dependent on the performance of healthcare professionals,

who must feel psychologically safe to engage in quality improvement initiatives, and implement new techniques, towards the effective delivery of safe high-quality patient care (O'Donovan and McAuliffe, 2020). Radiographers, who are highly skilled healthcare professionals, are an integral part of the multidisciplinary team (MDT), occupying a fundamental role in improving patient outcomes and experiences. Therefore, the psychological safety of radiographers is essential to ensure high-quality care (Rajan and Phil, 2014; Rajan, 2018).

Perception of Psychological Safety Among the Teams

Collectively, the participating radiographers from the different teams reported a moderately positive perception of psychological safety. The participants outlined that they were often able to voice problems, and they could ask other teammates, who valued individual skills and talents and did not act in a way that undermined the efforts of others, for help. However, it was pointed out that team members did not feel safe to take risks within the team, due to the fact that if they made a mistake, it was often held against them. Moreover, radiographers indicated that, at times, they felt rejected for being different. These perceptions of psychological safety were comparable to the findings attained in the study by Edmondson et al., (2016), whereby healthcare professionals from different healthcare teams reported similar moderately positive perceptions, with a mean score of 4.2 on a seven-point Likert-scale.

The team at the NBSU reported the lowest degree of psychological safety (3.29), suggesting that further action may be required to enhance their psychological safety. This might be attributed to the fact that apart from being such a small team, this particular team operates in isolation in a separate location from the rest of the teams. Consequently, this team reported a lack of training opportunities, less engagement and involvement in comparison to the other teams, limited occasions to voice opinions, as well as inadequate leadership and working conditions. This was accentuated by the study of Tkalic et al., (2022), in that psychological safety is facilitated by face-to-face interactions. Therefore, teams that operate remotely or are segregated from the rest, tend to experience decreased levels of psychological safety, as the case of the NBSU, which operates as a stand-alone entity within the national health system.

Radiographers occupying a managerial or administrative role had a different, more positive perspective than the rest of the radiographers. This was similarly evident in the study by Edmondson et al., (2016), who noted increased mean scores among participants occupying an executive managerial position, when compared to those participants operating within the lower hierarchical levels of healthcare organisations. This might be attributed to the fact that status differences may amplify perceptions, in that managers enjoy a greater professional status than healthcare professionals occupying a more clinical role. In sum-

mary, a hierarchical organisational system may hinder psychological safety for those occupying a lower status, but grants enhanced perceptions of well-being to those employees among the higher ranks of the system (Edmondson et al., 2016). Nevertheless, it is acknowledged that these results could have been affected by the low number of responses gathered from these two teams, which could have skewed the results.

Perception of Psychological Safety Based on Demographics

The Kruskal-Wallis testing of hypotheses H1 to H7 enabled the researcher to determine whether the degree of psychological safety was affected by the different demographic control variables of the individual radiographers. This statistical analysis revealed that gender did not influence the radiographers' level of psychological safety in this study. This mirrors the study by Heijdens, (2022), who conducted a quantitative comparative analysis of the behaviours of twenty-one (21) males and six (6) females, and reported no difference in the overall perceptions of psychological safety between genders. Similarly, the author went on to investigate whether the individual influencing factors of psychological safety were affected by gender differences. Contrarily to this study, Heijdens, (2022) reported that there was no statistical difference between genders for the influencing factors of knowledge sharing and learning, voice and supportive leadership. The difference in results might have been attributed to the fact that the study by Heijdens, (2022) recruited more males than females, while contrarily in this study the majority of the participants were females, affecting the generalisability of results.

Statistical analysis revealed that age did not influence the radiographers' degree of psychological safety. This result opposed what was reported in the quantitative study by Idrees et al., (2017), who had noted that older generation employees had diverse, more dominant perceptions of psychological safety than younger employees. Data was collected from two hundred and sixty-five (265) workers operating in the construction industry in Pakistan, out of which 54.7% pertained to the younger age group (18-35 years), while 45.3% made up the older generation group aged 35 years and over. The discrepancy in results between the two studies might potentially have been affected by the fact that the participants originated from different industries and cultures. Additionally, responses of this study were gathered primarily from younger employees, with fewer older generation radiographers.

Contrastingly, in the study by Idrees et al., (2017), the participants were more equally distributed across the age groups.

This study's findings revealed that psychological safety was not influenced by nationality. However, upon testing whether the individual factors influencing psychological safety were affected by nationality, statistical differences were noted for communication and inclusiveness, in that non-Maltese European nationals had lower perceptions than the rest of the radiographers. Conversely, the research by Singh et al., (2013), reported that psychological safety was dependent on racial diversity, due to the fact that a statistically significant difference was noted for racial minorities when compared to their white Caucasian counterparts. This quantitative study was conducted in the United States among supervisors and employees in a production organisation of which hundred (100) were White Caucasians, forty-eight (48) participants were Hispanics, and seventeen (17) belonged to other racial minority groups. The incongruity in results between the two studies may be attributed to the fact that the majority of radiographers who participated in this study were Maltese, with very few foreign nationals who submitted a response. Moreover, the participants of the two studies originated from diverse industries.

No statistically significant difference was found with regards to whether organisational tenure influenced the radiographers' perception of psychological safety, in terms of the number of years they have been employed with the Maltese public health sector. This was similar to the result attained in the research by Edmondson, (1999), who, likewise, reported no statistical difference between psychological safety and organisational tenure, in terms of the total years of service. However, a statistically significant difference was noted for learning, engagement, and leadership, as the radiographers who had been working for less than a year had similarly positive views to those who had been working for twenty-one (21) years or more, but had differing, more positive views to those who had been employed between a year to twenty (20) years. This particular curvilinear relationship was also reported by Koopmann et al., (2016), who conducted a quantitative survey among five hundred and sixty-seven (567) employees operating in a research and development team within a major technology entity in China. This curvilinear pattern originates because new recruits do not have adequate data and experience to judge and, therefore, may perceive

an augmented level of psychological safety. Conversely, employees with a moderate tenure have had more time to engage in information and learning, which led them to experience greater conflicts and uncertainty, degrading their psychological safety. On the other hand, individuals with a longer tenure have had extensive time to attain a deeper understanding and behaviour of relationships, greater task knowledge, and conflict resolution, resulting in heightened perceptions of psychological safety (Koopmann et al., 2016).

The dependence of psychological safety on the radiographer team was also evaluated, but no statistically significant difference was found. This is consistent with the findings reported by Edmondson et al., (2016), whereby radiographers from the different teams reported similar perceptions of psychological safety. However, a difference was found for the influencing factors of engagement, leadership, and the organisational context, on the grounds that the team at the NBSU reported lower perceptions, while the managerial team recorded higher perspectives than the rest of the radiographer teams. In turn, this is consistent with the findings reported by Tkalic et al., (2022), whereby teams which are segregated from the rest, as the case with the NBSU, recorded lower scores, while those occupying a managerial role scored higher on the Likert-scale when compared to the rest of the radiographer teams (Edmondson et al., 2016).

The statistical analysis established no statistically significant difference between the degree of psychological safety and the radiographers' organisational position. This is similar to what was reported by Edmondson, (1999). Conversely, a statistical difference was noted for the influencing factors of learning and leadership, coherent with the curvilinear relationship determined in H5. Radiographers working within the public health sector in Malta and Gozo progress upwards on the hierarchy ladder as they attain further qualifications and accumulate more years of service (Ministry for Health, 2020). Hence why this result was consistent with that discussed in H5, in that low level scale 10 and 9 radiographers with few years of experience had similarly positive perceptions to higher level scale 6 and 5 radiographers who had more years of experience within the organisation, but diverse, more positive views than middle level scale 8 and 7 radiographers (Koopmann et al., 2016).

Finally, the Kruskal-Wallis test determined that the educational level did not affect the radiographers' perception of psychological safety. This contrasted with the findings of Zhou and Pan, (2015) who, from their quantitative study among three hundred and fifty-eight (358) employees working within two IT firms in a southern province of the People's Republic of China, noted a positive relationship between psychological safety and the educational level. These diverse findings may be affected by the fact that the studies recruited participants from diverse industries and different cultures.

Limitations

The population recruited for the study was limited and very specific pertaining to the radiography population employed with the Maltese public health sector, affecting the generalisability of results. Moreover, to fulfil the ethical considerations to safeguard participant anonymity and confidentiality, the researcher was forbidden to

approach the participants in person. Hence, an online link to the questionnaire was forwarded by four intermediary contacts to the participants eligible to participate. Furthermore, the data collection period of the study was set during the summer months of July and August 2022, which are the preferred months for vacation leave among the radiographers. This affected the response rate of the study, impacting the reliability of the results. Additionally, the low responses gathered from the individual teams operating within MDH restricted the researcher from analysing data and comparing the findings across the distinct teams. Instead, the researcher was compelled to group the teams and analyse the data by hospital. The low response rate might have potentially also affected the analysis conducted, whereby the researcher attempted to uncover whether the perception of psychological safety was influenced by the individual demographic characteristics of the radiographers.

Conclusion

This study served to determine the current level of psychological safety as reported by radiographer teams within the public health sector, contributing towards acquiring an insight of the local setting upon which future studies and improvement strategies should be devised. The radiographers who consented to participate in this study reported moderately positive perceptions of psychological safety. The team reporting the lowest score for psychological safety overall was the team at the NBSU, while the team at GGH ranked highest with a moderately positive score. The factors influencing psychological safety at the workplace were rated between moderately negative to moderately positive, whereby inclusiveness ranked lowest with a moderately negative score, while the voice factor ranked highest with a moderately positive score on the Likert-scale. The influencing factors of psychological safety ranked lowest among the NBSU team, but highest for the managerial team, which had diverse, more positive perspectives than the rest of the radiographers. Statistical analysis revealed that the radiographers' perception of psychological safety was not influenced by their individual demographic characteristics. Conversely, some of the influencing factors were proven to be affected by the radiographers' gender and nationality, and the radiographer team, as well as by their organisational tenure and position.

This study gave more voice to the radiographers and highlighted the need for management to improve psychological safety for all radiographer teams, through the dissemination of information and engagement of all involved stakeholders. Psychological safety is a multi-level concept and,

therefore, an adequate multi-level interventional approach is necessary to establish psychological safety successfully. The strategic actions to improve psychological safety must be designed and tailor-made based on the measured individual experiences of the healthcare team members, as suggested by Grailey et al., (2021) and Kingston et al., (2022). While there is a demonstrable presence of psychological safety among healthcare teams, there is always room for improvement. Managers and leaders alone cannot improve the degree of psychological safety. Consequently, all involved stakeholders must exert the necessary efforts, within all levels of the organisation, to create and maintain a psychologically safe workplace environment.

Acknowledgements

Appreciation goes to Ms. Amy Edmondson, who granted permission to utilise and amend her established research tool, to measure psychological safety in this study.

Special thanks to those radiographers who allocated time to complete the questionnaire, providing sufficient responses for data analysis to draw results and recommendations, with the intent to augment the degree of psychological safety among radiographer teams in Malta and Gozo.

This research was submitted to IDEA Academy in accordance with the requirements for the award of the degree of Master of Science in Healthcare Management and Leadership.

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05 Barriers To Critical Thinking In Healthcare: An Assessment From The Perspective Of Leadership In A Maltese Hospital

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Abstract

Objectives: Healthcare leaders with strong critical thinking skills are in a better position to navigate today's complex healthcare environments, make informed decisions and deliver high-quality patient care. Hospital leadership is multidisciplinary; both senior and frontline leadership are equally important and need good critical thinking skills. This study explores barriers to critical thinking among healthcare leaders within a Maltese hospital.

Methods: A mixed methods sequential research approach was adopted. Semi-structured qualitative interviews were initially conducted with senior leaders, followed by member checking. Interview findings were then used to inform the questionnaire for frontline leaders. Inductive thematic analysis was used to ensure reliability and validity until data saturation was reached and no new themes emerged.

Results: Interviews provided various perspectives on barriers to CT within the hospital work setting. No significant differences resulted between senior and frontline leaders, with common themes including leadership, a culture of fear, the need for training and development, and the importance of integrating critical thinking in everyday decision-making in a multidisciplinary context.

Conclusions: This study provided an overview of the complexities of critical thinking and the challenges that hospital leaders face in their decision-making processes. Recognising and addressing these barriers would enable leaders to improve organisational dynamics and provide a safe environment based on trust and mutual respect, nurturing a learning culture that encourages and supports critical thinking, ultimately enhancing quality and patient care.

Keywords: "critical thinking"; "barriers"; "healthcare leadership"; "organisational change and improvement"; "organisational culture".



GRAPHICAL ABSTRACT

Highlights

1. Barriers to critical thinking in hospital leaders include time constraints, lack of planning, competing work commitments, stress, lack of knowledge and access to training and development.
2. A culture of psychological safety is key to supporting critical thinking and organisational learning as leaders feel their contributions matter and they can speak without fear.
3. Critical thinking is enabled by reflective leaders who promote trust, take time to build supportive relationships, and who themselves model critical thinking by challenging beliefs and assumptions, giving value to opposing views, and welcoming constructive criticism.
4. Critical thinking is enhanced by an open culture based on good peer relationships and interdisciplinary collaboration.
5. Cultivating a hospital culture that values CT requires addressing barriers, fostering an environment that encourages respectful dialogue and exchange, incorporating CT into policies and processes, and promoting interdisciplinary collaboration and knowledge sharing.

Abbreviations

- CT:** Critical Thinking
DPO: Data Protection Officer
GDPR: General Data Protection Regulation
IREB: Information Research Ethics Board

Introduction

Dating back to ancient Greece, Critical Thinking (CT) is related to concepts such as “knowledge, active argumentation, reasoning, initiative, intuition, application, analysing complex meanings, identification of problems, envisioning alternatives and making value judgements”. CT is “larger than the sum of its parts” as it is a process that encourages attitudes to explore, redefine, or understand continuously. It, therefore, results in a process of purposeful reasoned interaction between an individual and their interaction with a situation or surrounding circumstances (Bittner and Tobin, 1998).

CT has been described as one of the core competencies of healthcare leadership (Hargett et al., 2017) as healthcare leaders must be able to “analyse complex situations, identify potential problems and develop effective solutions” (Sharpley et al., 2023). CT skills are therefore important in hospital leadership and can significantly impact the quality of patient care and organisational effectiveness.

Hospitals are prime examples of critical healthcare settings where CT is necessary to drive effective clinical decision-making, resulting in improved quality and better patient outcomes. “Hospitals are complex socio-political entities, and the ability for engagement and leadership among health professionals can be hampered by power dynamics, disciplinary boundaries, and competing discourses within the organisation” (Daly et al., 2014). Therefore, Hospital leaders must be able to challenge assumptions, critically assess evidence, and make informed evi-

dence-based decisions. They must also be able to support staff in developing these CT skills to create a culture of learning and continuous quality improvement.

The health workforce is one profession in which CT is critical. Health practitioners in various disciplines face increasing demands and complexities through rapid technological advances in health promotion and disease prevention, illness management, economic forces, and a constantly changing health system. Over the last 25 years, research in critical thinking has been carried out in many fields, including education, healthcare, business, engineering, and leadership development (Paul and Elder, 2008; Hawkins, 2010; Mian-da and Voce, 2017; Facione, 2020; Dwyer, 2023).

However, CT has not been formally taught or assessed in the curricula of healthcare professionals except in nursing. In fact, most of the literature associating CT with healthcare leadership relates mostly to nursing and nursing education (Krupat E. et al., 2011). This is especially relevant as the hospital leadership team in the twenty-first century is multidisciplinary, involving both clinical and non-clinical professionals. Moreover, a leadership ‘gap’ between traditional executive leaders and frontline leaders may also result in different perceptions of barriers to CT in a healthcare organisation (Blumenthal et al., 2012; Longenecker C. and Longenecker P., 2014). This research aims to contribute to the literature by exploring the barriers to CT in a multidisciplinary hospital leadership team.

The inability to think critically can result in significant consequences, including poorer health outcomes or inequality of health services. However, research about barriers to CT in a multidisciplinary hospital leadership team appears to be very limited, and none have been identified in the Maltese healthcare system. This study addresses this need by exploring barriers to CT in a multidisciplinary hospital leadership team in the Maltese healthcare system, including executive and frontline leaders in clinical and non-clinical fields. The research questions were:

1. What are the barriers faced by hospital leaders in implementing critical thinking?
2. Are there any differences in perceptions between hospital executives and frontline leaders?

Methodology

Both qualitative and quantitative research methods were used in this study. The sequential employment of the mixed methods approach enabled the researcher to supplement findings

elicited by one method with those elicited by another. The mixed methods approach utilised to explore the research questions is depicted in the figure below:

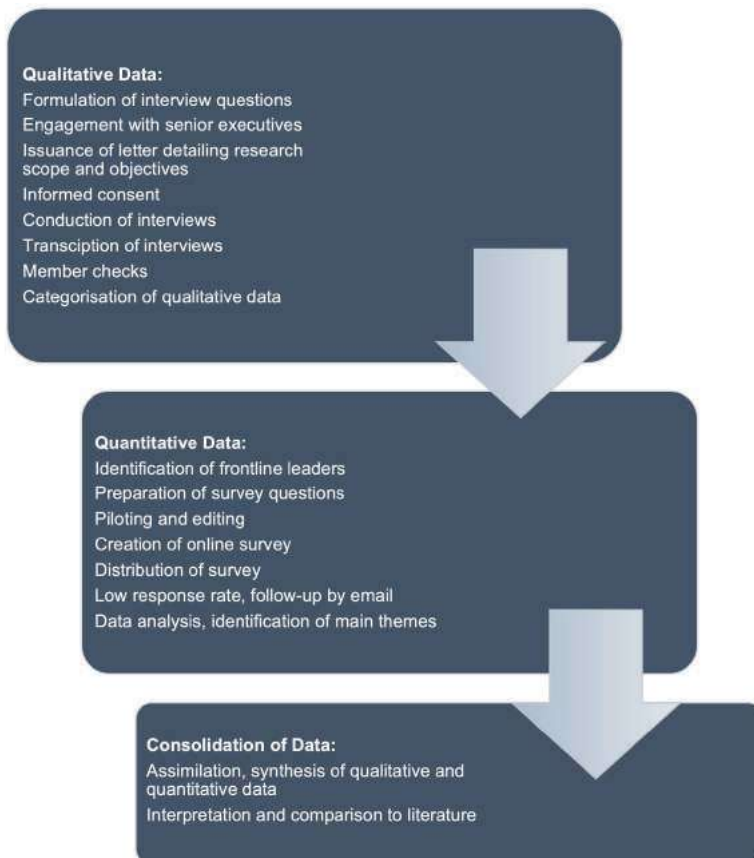


Figure 1. Outline of the Mixed Methods Approach

Research Approach

The researcher opted for an inductive approach to facilitate the collection and analysis of qualitative data, that is, the interviews, and to identify recurring patterns and themes related to barriers to CT in the hospital. This step was followed by a quantitative method, namely, the survey, to complement the qualitative findings and provide a more comprehensive understanding, bridging the gap between theory and practice. This approach enabled the researcher to:

- explore the research topic before generalising its findings to a larger population (Creswell and Creswell, 2017)
- allow for cross-verification of different data sources or triangulation (Malterud, Siersma and Guassora, 2016)
- provide a more comprehensive picture than either method would have alone.

Research Design

No validated survey instrument was discovered during the literature research that could serve the purposes of this study. For this reason, the research from the literature review was used to inform semi-structured questions for the individual face-to-face interviews, which were then analysed through thematic analysis to formulate online questionnaires to gain an in-depth understanding of the perspectives of healthcare leaders on barriers to CT.

Research Validity and Data Triangulation

Four aspects were considered in evaluating the trustworthiness of qualitative research: credibility, dependability, confirmability, and transferability (Lincoln and Guba, 1990). Audio-recording of interviews, verbatim transcriptions and member checking of transcripts ensured credibility and accuracy in capturing the participants' responses. Dependability was established through a transparent audit trail of the study's aims, design, data collection and analysis methodologies, and presentation of the findings. Confirmability was ensured by a collaborative data analysis effort between the interview and the questionnaire findings to reduce researcher bias. The convergence or corroboration of findings from both sources allowed for data triangulation, enhancing the robustness and comprehensiveness of the research and providing a more holistic understanding of the research topic. Finally, this study ensured the sample was representative by including all executive and frontline leaders in the hospital. Data saturation was also achieved during the data col-

lection, enabling the study's transferability. Given the researcher's positionality, participation in the online survey was based on anonymity to minimise potential bias.

Researcher's Positionality

The researcher has worked in healthcare leadership in the Maltese healthcare system for more than 20 years, with responsibilities including significant change management and organisational culture transformation, hence the interest in hospital leadership and barriers to CT in healthcare organisations. The researcher acknowledges that this unique perspective introduces bias in the study. This was mitigated through triangulation of findings and by reassuring participants of confidentiality and anonymity and reminding them of their right to withdraw from the study at any point. It would have been ideal for interviews to be carried out by an independent researcher, but this was not possible in the timeframe available.

The Sample

The study was conducted in a Maltese hospital during May and June 2023, and the researcher was granted access to all senior executives as well as all frontline leaders across all hospital departments, including clinical and non-clinical fields.

The most appropriate approach for selecting participants to collect data-rich information was purposive sampling, as recommended by Patton in 2005. In the case of the face-to-face interviews, all 4 senior executive hospital leaders were included, each with more than 10 years of leadership experience in their respective field of speciality, as being most suited to provide in-depth information regarding their experiences and perceptions of barriers to CT in the hospital. Table 1 lists the characteristics of senior hospital executives – further details were not included as individuals could be easily identified given the research context.

Participant No.	Age	Gender	Educational Level	Background	Experience in Leadership (yrs)	Experience in current position (yrs)
1	45-55	M	Master's	Clinical	>15	4
2	35-45	M	Master's	Non-Clinical	>10	5
3	55+	M	Master's	Clinical	>15	5
4	35-45	F	Master's	Non-Clinical	>10	4

Table 1. Characteristics of Executive Leaders

Analysis from the in-depth interviews was then used to inform the online questionnaire, which combined a series of Likert-rated statements with several open-ended questions. The sample included all 14 frontline leaders in the hospital who are responsible for a unit or department and who are one step down in the hospital's organisational chart from the four senior executive leaders. This helped to ensure a broad representation of frontline leadership across hospital departments,

including clinical and non-clinical fields such as medical, nursing, pharmacy, allied health, quality management, laboratory, human resources, finance and administration, facility management, engineering, and procurement. Out of the 14 frontline leaders invited, 12 consented to participate. Table 2 lists their characteristics. An additional participant was later secured to confirm data saturation.

Participant No.	Age	Gender	Background
1	55+	M	Clinical
2	55+	M	Non-Clinical
3	55+	F	Non-Clinical
4	35-45	M	Non-Clinical
5	25-35	M	Non-Clinical
6	35-45	M	Non-Clinical
7	25-35	F	Clinical
8	35-45	F	Non-Clinical
9	35-45	F	Non-Clinical
10	35-45	F	Clinical
11	55+	M	Clinical
12	35-45	F	Non-Clinical
13	25-35	M	Non-Clinical

Table 2. Characteristics of Frontline Leaders

Sample size determination in qualitative research typically relies on the richness of data collected until data saturation, where no new information is gathered from participants (Malterud, Siersma and Guassora, 2016). The study achieved data saturation with 16 participants, and one additional participant was recruited to confirm data saturation. Therefore, a total of 17 participants participated in the study.

Data Collection and Preparation

The research procedure involved a mixed methods sequential exploratory study. In the first phase, interviews with 4 hospital executives were organised. An invitation email was sent out one week in advance and all 4 participants contact-

ed the primary researcher to confirm their participation directly via telephone calls or emails. The interviews commenced with general questions such as "What are the barriers to CT?", "In what ways do you model CT?" and "How do you integrate CT into the decision-making process?" Exploratory questions, such as "Explain more." "What is your example?" or "What do you mean?" were used to provide richer nuances. Each interview session lasted between 30 to 60 minutes. Audio recording was used during the interviews. The interviewer also sought permission from each participant to email the interview transcript back to him or her. This allowed participants to review and amend their responses.

All interviews were conducted by the same researcher, ensuring a higher degree of consistency.

In the second phase, frontline hospital leaders were invited to participate in an anonymous online survey involving Likert statements and three open-ended questions. An invitation email was sent with a link to an online form requiring the participant to provide informed consent before

completing demographic data and an online survey.

All interviews were transcribed verbatim and emailed to participants for member-checking prior to the data analysis. All the participants confirmed their agreement with the content of the transcripts.

Data Analysis

Data analysis was conducted through inductive thematic analysis, which is driven by the data rather than by pre-existing conceptions (Clarke, Braun and Hayfield, 2015). The transcripts were repeatedly checked individually and against other transcripts throughout the data analysis process to ensure a thorough thematic analysis based on Braun and Clarke's six-step approach (Braun and Clarke, 2006).

Upon confirming the interview transcripts, which were used as source data for the study, the thematic analysis technique was used to methodically identify, arrange, and understand patterns of themes within the data set. First, the researcher read each transcript multiple times to achieve familiarity with the data and identify common ideas. Significant terms, ideas and quotes in the data were highlighted and re-worded into concise codes. Coding was conducted manually as time was limited, and codes were then used to generate themes. The emerging themes were reviewed in light of the coded data to assess for

correlation and their pertinence to the research question. Themes were then described and identified by their uniqueness and relevance to the research question. The sixth and last stage was to analyse and report the findings.

Open-ended questions from the online survey were analysed in a similar manner to ensure data saturation and that no new themes emerged. Although it would have been ideal to employ statistical tools to analyse the Likert statements, this study was significantly limited by time and a descriptive analysis approach was adopted instead.

Ethical considerations

Approvals from IDEA Academy's IREB, hospital management and hospital DPO were sought and obtained prior to data collection. Information letters detailing ethical and GDPR safeguards were distributed ahead of the study. Informed consent was obtained prior to interviews and online surveys.

Results

Research Aims

Two primary research questions guided this research project. Firstly, it aimed to identify and understand the barriers hospital leaders encounter when implementing CT in their work. Secondly, it intended to investigate whether there exist any variations in perceptions between hospital executives and frontline leaders regarding the implementation of CT. These research questions served as the foundation for exploring the challenges and potential disparities within the healthcare leadership context. Results are summarised hereunder, followed by more detailed findings about the three main emerging themes.

Findings and Results

All four interviews provided different perspectives on barriers to CT in the hospital and the

role of organisational culture in influencing CT. All provided recommendations on how management can address these barriers to improve CT in the organisation, with common themes including the role of leadership and organisational dynamics in providing a safe environment based on trust and mutual respect, the need for access to education, training opportunities and continuous learning, and the importance of integrating CT into decision-making. While some themes overlap, each interviewee brings unique perspectives and suggestions, emphasising the multifaceted nature of promoting CT in different contexts within a hospital organisation.

These concepts are primarily reflected in the findings from the online survey, with no significant differences emerging in perceptions of frontline leaders, except for time and pressure ranking less important than other barriers. Open-ended questions revealed that frontline leaders did not have enough awareness of the

concept and importance of CT. Themes reflected those from the interviews, such as a culture of fear, the importance of leadership-driven CT, the lack of training and development, and the need to integrate CT in everyday decision-making in a multidisciplinary context.

The results are summarised in Table 3 below

Theme	% Weighting by Senior Executives	Statement	% Rating by Frontline Leaders				
			Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Barriers	100	There are barriers/challenges in the department/organisation that hinder the promotion of critical thinking.	7.7	7.7	7.7	76.9	0
	100	Fear of superiors and a hierarchical structure are barriers to critical thinking in the department/organisation.	7.7	15.4	7.7	61.5	7.7
	75	High-stress situations and pressure to find quick solutions often lead to reactive decision-making instead of allowing time for thoughtful planning and critical thinking.	0	23.1	15.4	46.2	15.4
	100	There is a need for dedicated resources and support for training and development to promote critical thinking in the department/organisation.	0	7.7	7.7	46.2	38.5
	25	Information overload can restrict critical analysis of the received information and hinder effective decision making.	7.7	23.1	23.1	38.5	7.7
	100	Organisational politics and power dynamics can hinder critical thinking in hospital leaders.	0	0	7.7	69.2	23.1
Leadership	100	Mentors and coaches have a valuable role in developing critical thinking skills among hospital leaders.	0	0	0	53.8	46.2
	100	Leaders have a responsibility to mentor and coach their team members to develop their critical thinking skills, fostering empowerment, responsibility, and ownership.	0	0	0	15.4	84.6
	100	The department/organisation provides a safe environment for staff to question assumptions and challenge the status quo in their work.	0	23.1	15.4	53.8	7.7
	75	Leaders value and appreciate feedback, ideas and suggestions from staff, fostering a culture of critical thinking.	0	7.7	30.8	53.8	7.7
	50	Building trust and fostering good relationships with team members are essential for creating a safe environment that encourages challenging each other's ideas.	0	0	0	23.1	76.9
	75	The department/organisation encourages open, respectful dialogue and consideration of different perspectives through discussions and debates even in hierarchical relationships.	0	7.7	46.2	46.2	0
Learning Culture	100	Exposing employees to new ideas and perspectives by visiting other organizations or similar teams in different settings would enable the organisation to challenge traditional thinking.	0	0	0	53.8	46.2
	100	The department/organisation provides time for reflection, access to training, and opportunities for continuous learning.	0	15.4	15.4	69.2	0
	100	The department/organisation integrates critical thinking into decision-making processes.	0	30.8	23.1	46.2	0
	75	A multi-disciplinary approach to decision-making processes encourages critical thinking through the exchange of diverse perspectives.	0	7.7	15.4	46.2	30.8
	100	The impact of critical thinking on patient outcomes and organisational performance is measured and evaluated in the department/organisation.	7.7	38.5	23.1	30.8	0

Table 3: Summary of Results

Barriers to CT

All the senior executives said they consider the hierarchical structure and/or authority as a significant barrier to CT in the hospital, with interviewee 3 stating that "Employees may feel hesitant or afraid to question or challenge decisions made by their superiors due to a culture where the leader's word is final. The hierarchical structure limits the free flow of communication and inhibits bottom-up thinking". Interviewee 2 expanded on

this, saying that the hierarchical mindset encouraged experienced individuals to dismiss the input of those with less experience, inhibiting open discussion. 77% of frontline leaders agreed that there are barriers to CT in the hospital, with 69% agreeing that fear of superiors and a hierarchical structure are barriers to CT in the organisation.

Interviewee 1 said that encouraging CT requires challenging the status quo, even when it involves questioning superiors or colleagues. 75% of the executive leaders also mentioned “groupthink,” “the tendency of individuals to conform”, and the “lack of independent thinking” resulting in a tendency to rely on established protocols and procedures without questioning their applicability to specific situations or problems, or “copying what others do instead of thinking outside the box”.

75% of the executive leaders also mentioned time constraints in a busy hospital and the pressure to find quick solutions in a fast-paced environment as hindering CT and leading to reactive decision-making instead of allowing time for thoughtful planning and critical evaluation. Interestingly, 23% of frontline leaders disagreed, while 62% agreed with time constraints as an important factor. On a similar note, interviewee 3 mentioned information overload in a digital age where healthcare professionals lack the time to analyse readily available information critically. This results in a tendency to rely on established protocols and procedures without questioning their applicability to specific situations or problems (availability bias). Information overload was rated as less important in frontline leaders, with only 46% agreeing that it can restrict CT.

50% of the executives also mentioned that group discussion was an important factor in the context of a diverse hospital leadership team. The lack of interdisciplinary collaboration often leads to a siloed work environment and, thus a lack of exchange of ideas, with different professions having different agendas. Another executive said that it was important for all stakeholders to be present and actively involved in the decision-making process. 77% of frontline leaders rated the multidisciplinary approach to decision-making as an important factor in CT.

Lack of training was also considered a barrier to CT by all executives, with interviewee 4 expanding on this to say that there is very often a focus on generic training based on existing policies, procedures and guidelines and no specific training or resources dedicated to CT. This was corroborated by interviewee 4, who said that providing education and ongoing training programmes specifically tailored to CT in healthcare is crucial. 85% of frontline leaders felt a need for dedicated resources and training and development.

All executive leaders mentioned emotional fac-

tors and personal biases as barriers to CT. Emotional factors included fear, emotional attachment to patients, insecurity of managers who may feel threatened by subordinates who challenge them, but also biases such as the “bandwagon effect” or “groupthink” already mentioned, with staff tending to align one’s beliefs or actions with those of a larger group, often due to the perception that it is the more popular or socially accepted opinion. Interviewee 3 mentioned biases arising from past experiences, resulting in disregarding contradictory evidence or making decisions without considering a broader range of data and an attitude of “this is the way we have always done it”. This was strongly reflected in frontline leaders, where 94% agreed that organisational politics and power dynamics can hinder CT.

The role of leadership in enabling CT

All four executives said creating the right environment was critical so that staff could feel “safe” and comfortable in questioning assumptions and challenging the status quo. Providing time and space where open dialogue could be encouraged and “different perspectives” considered, without staff needing to fear retribution or negative consequences for expressing their thoughts and challenging the status quo, was considered important by all interviewees. Interviewee 2 considered planning and preparedness as critical to providing the right environment, arguing that “by proactively anticipating and planning for issues, more time and space can be allocated for reflection and CT”. Interestingly, 23% of frontline leaders argued that the organisation did not provide a safe environment and only 46% agreed that open dialogue was encouraged in discussions and debates.

75% of executives emphasised the role of leadership in fostering a supportive and open environment, claiming that leaders needed to “model openness and acceptance” and to “guide discussions rather than impose solutions”, thus encouraging others to contribute to the discussion and come up with their own solutions. Interviewees 1 and 4 specified that values of trust, curiosity and mutual respect are necessary to facilitate CT and for people to be willing to accept solutions even if they differ from their own. Interviewee 1 claimed, “By encouraging open dialogue and considering different perspectives, CT can be enhanced, even in hierarchical relationships”. Relationship-building is considered key in nurturing trust and mutual respect, and 2 out of the 4 interviewees say they dedicate a lot of time to fostering good relationships in their teams. Interviewee 4 states:

“Once they trust you, and they know they can challenge you without offending you and you are not going to take offense in what they say, but you sit with them and show them that you actually appreciate their ideas - and sometimes their ideas are better than yours - you start creating that kind of culture that it is ok to challenge each other. And that it is expected to challenge each other. I think it starts from there, the relationship, a good relationship”.

All frontline leaders agreed that fostering trust and good team dynamics are important in creating a safe environment for CT.

All participants stated that mentors and coaches play a vital role in developing CT skills among hospital leaders and frontline staff. Both senior and frontline leaders (100%) are responsible for mentoring and coaching their team members to develop their CT skills, and therefore, according to interviewee 1, “fostering empowerment, responsibility, and ownership”. Interviewee 2 linked mentoring to a safe environment and said that “engaging in one-to-one discussions, asking questions and allowing individuals to think for themselves, promotes trust and autonomy”. Mentors and coaches can enhance thinking skills by providing “guidance and support, encourage mentees to consider different perspectives, and foster a continuous improvement mindset” (interviewee 4) and “constructive feedback, facilitating discussions, and encouraging thinking outside the box” (interviewee 3). Interviewee 4 also mentioned the concepts of “huddles” for group coaching and a “buddy system” for individual mentoring, sometimes even from outside the organisation.

A Culture of Organisational Learning

All the executives highlighted different aspects of training and development, saying that access to training and opportunities for ongoing learning can support CT among staff. Interviewees 1 and 4 emphasised the value of exposure to other organisations or teams in different settings to expose staff to new ideas and perspectives, saying that this exchange of experiences can challenge traditional thinking. 100% of frontline leaders such that such exposure would be useful. 50% of the interviewees criticised the educational system in Malta as not preparing individuals to think critically. Interviewees 2 and 4 both mentioned standards and guidelines but from differing perspectives. Interviewee 2 claimed that guidelines and standards can foster CT provided they explain the underlying rationale, enabling the employee

to apply CT and adapt the standard to their specific context. Interviewee 4 sees current training on standards and procedures as hindering CT, saying that training and development need to be rethought with CT in mind. This is also mentioned by interviewee 3, who argued that providing education and ongoing training programmes specifically tailored to CT is crucial, and that access to “evidence-based practice guidelines, research articles and resources that encourage continuous learning and development can support CT skills”. Additionally, interviewee 3 claimed that:

“Cultivating a culture that values CT requires addressing barriers, fostering an environment that encourages respectful dialogue and idea-sharing, incorporating CT into policies and processes, and promoting interdisciplinary collaboration and knowledge sharing”.

Interviewee 1 highlighted the importance of self-criticism and feedback in integrating CT into decision-making processes. Reflecting on decisions and seeking internal criticism can help improve CT skills and decision-making over time. The same interviewee asserted that CT starts from the top and that unless leadership engages in CT, it would be impossible for this to permeate throughout the organisation. This is echoed in some of the comments made by frontline leaders, where 31% disagreed that CT is integrated into decision-making. Interviewee 4 believed that “CT can be integrated within the culture of the organisation by the leaders living it, showing that it is ok to do so”. Interviewee 2 gave value to planned approaches and emotional engagement as ways to model CT, whilst interviewees 3 and 4 both emphasised the need to sometimes address barriers individually instead of in a broader group setting. On the other hand, all interviewees mentioned to varying degrees the importance of leadership ensuring stakeholder involvement and interdisciplinary exchanges to integrate CT into hospital decision-making.

All interviewees and 43% of frontline leaders acknowledged that measuring the impact of CT on the hospital was challenging, as it was difficult to prove a direct link between the improvement of organisational outcomes and CT. Interviewee 4 suggested this could be carried out through qualitative methods such as employee engagement surveys, focus groups and feedback sessions.

Interviewee 3 added that CT should have an impact on most organisational KPIs, the difficulty arose in linking CT to specific KPIs also because of the time lag, but suggested that retention and loyalty to the company could reflect whether the organisation allowed space for CT, being “not just a concept;” by “being more inclusive as an organisation where people feel they can contribute more, the CT approach provides an environment that makes me look forward to work with such a such an entity”. Interviewee 3 suggested that CT should be recognised as a core com-

petency in performance appraisal and that “we need to recognise and reward individuals who show a strong CT or demonstrate very good CT skills” interviewee 4 expanded on the concept of recognition, saying that “Once people start realising that their thoughts and ideas are being heard, and implemented, then they will come up with more”. In fact, all interviewees mentioned that putting into practice decisions based on CT would ensure staff felt “safe” and “encourage them to do the same”.

Discussion

It is clear from these findings that barriers to CT in leaders at the hospital being studied reflect those found in the literature. Barriers due to organisational structure and hierarchy, as identified by Bittner and Tobin (1998), Oberg and Andenoro (2019), and Wong and Kowitlawakul (2020), include time constraints, stress, fear and competing work commitments. The lack of dedicated time reflected by respondents echoes Cornell’s findings that quality time for planning and, reflection, and time to anticipate rather than react to issues, are important considerations (Bittner and Tobin, 1998; Cornell et al., 2011; Oberg and Andenoro, 2019; Wong and Kowitlawakul, 2020).

Hospital leaders cited lack of knowledge and training access as another CT barrier. While most senior leaders were familiar with the concept, some frontline leaders confirmed there was a lack of awareness on the concept of CT and its value to the decision-making process. Individual attributes, such as the lack of independent thinking and the tendency of individuals to conform, resonate with Edmondson’s work on how adoptive conformers inhibit organisational learning (Edmondson A.C., 2004) and with Wong’s findings that lack of self-initiative and knowledge pose barriers to CT and critical reasoning (Wong and Kowitlawakul, 2020).

Leadership characteristics perceived to encourage or support critical thinking are consistent with Castelli’s reflective leadership framework, where leaders can create a safe environment that

promotes trust, where they build supportive relationships including coaching and mentoring, and where they themselves model CT by challenging beliefs and assumptions, value opposing views and welcome constructive criticism. The need for leaders to engage in positive reinforcement and sharing of lessons learned is also in keeping with the reflective leadership model (Looman, 2003; Sims, Hewitt and Harris, 2015; Castelli, 2016; Malik et al., 2021).

The need for a safe learning environment is also reflected in Edmondson’s work on psychological safety culture in hospitals (Edmondson and Lei, 2014). Respondents feel this safety is key to learning and facilitating CT, as they will feel their contributions matter and can speak without fear. This is also reflected in the finding that hospital leaders value multidisciplinary collaboration in CT, leading to a more diverse range of perspectives and improving decision-making and care outcomes (Schot, Tummers and Noordegraaf, 2020). This confirms findings from the literature that CT is enhanced by an open culture based on good peer relationships and collaboration between disciplines.

Conclusions

The study faced several limitations that should be considered when interpreting the study results. Time was a significant constraint, as was the small sample size, which impacted the generalizability of the findings. Although data triangulation was attempted by incorporating in-depth interviews and online questionnaires, there was insufficient time to analyse the quantitative data from the questionnaires using statistical instruments.

This study assumes that participants provided accurate and honest responses during interviews and questionnaire surveys, and that the selected sample of participants adequately represents the diversity of healthcare leadership roles and experiences. Given the researcher's position, it would have been ideal for the interviews to be conducted by a second researcher, but this was not possible given the timeframe involved.

Despite these limitations, this study has yielded further understanding and knowledge of the complexities of critical thinking in Maltese healthcare leadership and the challenges that hospital leaders face in their decision-making processes. This research reveals that barriers to CT among leaders in a Maltese hospital reflect those identified in the existing literature. These barriers include issues related to organisational structure and power dynamics, individual attributes, leadership styles and the need for a psychological safety culture.

By addressing barriers to critical thinking, healthcare leaders can be empowered to challenge assumptions, make informed decisions, and navigate the complex healthcare environment effectively. A deeper understanding of the contextual

factors that shape decision-making processes in a hospital can help hospital management identify specific cultural barriers that hinder CT and inform strategies for creating a more conducive environment that encourages open communication, innovation, and continuous learning.

Research findings can inform the design and implementation of leadership development programmes within the healthcare sector. By identifying barriers to CT, the research can guide the inclusion of specific modules or components to enhance CT skills among healthcare leaders. This can result in more effective leadership, better problem-solving, and improved decision-making processes, benefiting patient care and organisational outcomes.

Additional research is required to look at specific strategies and interventions that can be implemented to overcome barriers to critical thinking in hospital leadership. Furthermore, exploring the impact of organisational culture and leadership styles on critical thinking can contribute to a better understanding of this topic.

This study provides a foundation for further research and emphasises the value of fostering CT skills among healthcare leaders. Leaders create context, and in the hospital environment, part of creating this context is the cultivation of a CT culture. In today's healthcare landscape, a CT culture implies psychological safety and supports continuous learning and improvement, resulting in improved decision-making, team performance and patient outcomes.

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06 The Effect of Dominant Antecedents, Leadership Types, and Motivation on Nurse Retention at a Major Public Hospital

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Abstract

Objectives: Concerns regarding dissatisfied and continuing nurse shortages suggest the necessity of having a healthy workplace environment. The nursing profession is progressively becoming more stressful, compounded with soaring burnout rates and mental exhaustion. This study sought to examine the effect of various antecedents; leadership types; and motivation among nurses working at the inpatient Medical, Surgical and Specialty Units, Mater Dei Hospital Malta, to ascertain their impact on nurse retention.

Methods: This study develops an employee retention model for nurses using Structural Equation Modelling (SEM) by examining causal relationships between various attributes that are assumed to enhance the individual nurse's desire to remain a member of their organisation.

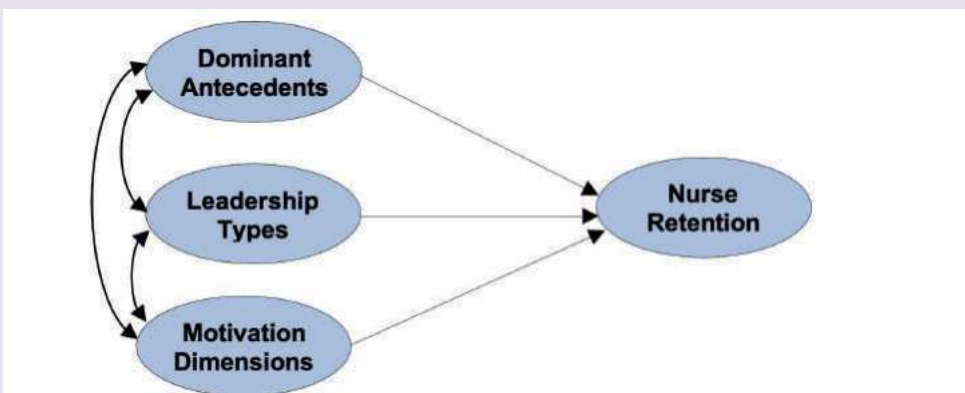
Results: SEM outcomes suggest that nurse retention is not impacted by antecedents and leadership types, except for supportive leadership. Organisation commitment (OC) has a high positive impact on overall motivation, with the recognition/reward dimension having a positive impact on overall nurse retention.

Conclusions: SEM outcomes suggest that positive work environments enhanced a motivating atmosphere that encourage nurse retention; leadership types impact nurse retention differently; Organisational Commitment positively impacts Motivation that ultimately promoted nurse retention; and retention strategies must address the physical aspects, particularly burnout and exhaustion.

Keywords: "Nurse Retention"; "Motivation"; "Leadership"; "Antecedents"; "Structural Equation Modelling."

Highlights

- Nurse staff retention strategies are essential for resolving the constant nursing staff shortages.
- SEM provides a causal-effect relationship model between various variables.
- Having the right type of working environment fosters nurse retention.
- Leadership types affect the nurse retention dimensions in different ways.
- OC aids in creating a working environment that encourages nurse retention.
- Retention strategies must explicitly address physical effects, particularly burnout and exhaustion that are viewed as crucial factors to enhance or impede the nurse retention.



Graphical Abstract: Conceptual Motivation-Leadership-Nurse Retention Model

Introduction

The healthcare sector is undoubtedly undergoing unprecedented challenges, with both nursing leaders and staff nurses playing an indispensable role in overcoming them. This study sought to investigate the effect of various antecedents, leadership types, and motivation among nurses working in the inpatient setting at Mater Dei Hospital Malta, namely at the Medical, Surgical, and Specialty Units to ascertain their impact on nurse retention. Healthcare professionals, especially nurses, strive to maintain high-quality service through efficient and effective seamless care provision, whilst being wary and accustomed to leadership challenges and consequences of system revamps (Duncan et al. 2014). Continuing staff shortage concerns coupled with complaints of high nurse-to-patient ratio and disenchanted nursing staff, point towards the need for a healthy workplace environment without jeopardizing nurses' health and well-being (Van Bogaert and Clarke, 2018).

Consequently, the nursing profession is progressively becoming ever more stressful, compounded with soaring burnout rates and mental exhaustion. Nurses struggle to cope with work overload, task ambiguity, emotional demands, relatives, inter-professional conflict, poor social support, and inter-professional arguments. Hashemzadeh et al. (2000) argues that stress leads to anxiety, harsh

behaviour, decreased job satisfaction, and lack of self-control. Larahjeira (2012) further acknowledges that occupational stress embraces the physical and mental well-being of nursing staff. Accordingly, the way nurses are treated through the various leadership types and their individual level of motivation affect their retention level within their current workplace, and are viewed as indispensable factors affecting the quality in patient care. Additionally, these factors provide invaluable information for nursing management to develop strategies to increase motivation and ensure that trained personnel remain at their current workplaces. Therefore, this paper examines the research question: *What is the impact of the dominant antecedents, leadership types, and motivation on nurse retention?*

Our study has several limitations: (a) the study utilised only self-report measures for the predictor variables. While individuals strive to achieve consistency in their self-reported response pattern, it could be that the variables pertaining to the predictors are clustered (Kasl, 1978); and (b) variables examined are not exhaustive, other variables that possibly have an explicit direct and indirect effect on nurse retention could have been included in the study.

Theoretical Framework

Understanding the Concept of Leadership

Leadership is a management function with its primary focus revolving around people, social interaction, and a process that imparts organisational goals (Skansi, 2000). Marquis and Huston (2002) argue that there exists a consensus regarding the characteristics of effective leaders. Such leaders develop a strong belief system with trusting relationships, optimism, teamwork, courage, sound preparation, and clear communication pathways (Moiden, 2002). Northouse (2001) argues that leadership type and style originated from the rudimentary proposition of contingency theory in leadership. Mosadeghard (2003) described leadership styles as an array of attitudes, deeds, features, and competencies moulded on distinctive and structural values, leadership engagement, together with trustworthiness of stakeholders in various circumstances. Therefore, it is argued that leaders influence their subordinates by guiding meaningfully, motivating, bolstering morale, instilling commitment, loyalty, and directing towards goal attainment (Ellis and Hartley, 2009).

In the health sector, multiple leadership initiatives are coordinated to guide clinical governance, citizenship, and clinical leadership development. Such initiatives harmonise leadership through integrating a multi-professional dimension enabling and overcoming directorate barriers and share a culture of clinical governance through empowering the healthcare workforce and envisaging acceptance of responsibilities requesting accountability within the organisational hierarchy. According to Valentine and Smith (2000), this flow causes a series of clinical audits, risk management strategies, user participation, evidence-based practice through continuous professional development, communication threads, team building skills and reflective journals. Critical importance has been demonstrated, as front-line leaders seek to develop an integral teamwork approach, enabling a visible process, and imparting clear and concise explanations to actively manage outcomes through a collaborative approach (Outhwaite, 2003).

This study applies the Path-Goal Theory in relation to how leaders motivate followers to achieve assigned goals, specifically the House and Dessler (1974) instrument. Moreover, the path-goal theory suggests that every type of leadership behaviour impacts differently the follower's motivation, which is dependent on the followers' attributes and the task features. In this study three leadership types are taken into consideration, namely, instrumental, supportive, and participative leadership. According to Barling et al. (2011), the path-goal theory has two objectives, namely, to identify roles and behaviours of effective leaders, and to explore situational contingencies that modify those behaviours. House and Mitchell (1974) argue that the extent that leader behaviour is acceptable and satisfying, is contingent on how subordinates see such behaviour either as an immediate source of satisfaction or instrumental to future satisfaction. While Kreitner and Kinicki (2007) view leadership behaviour as motivational if it mitigates obstacles that interfere with goal achievement, and gives direction and support required by subordinates by linking meaningful rewards to goal attainment. Consequently, a key leadership role is the alignment of individual goals with organisational goals that enable the realisation of such goals by inspiring the individual to attain these goals, clarifying the path towards goal accomplishment, and making sure that goals are valuable to the followers.

House and Mitchell (1974) view instrumental leadership behaviour as clarifying expectations, assigning specific tasks, and specifying procedures to be followed. In this manner, an instrumental leader provides subordinates with clear and specific instructions to perform their tasks, the timeline for the task, and the standards of performance measurement. However, supportive leadership is seen as the degree to which leader behaviour can be characterised as friendly and approachable, and considerate for the needs of subordinates. Therefore, a supportive leader shows concern for the wellbeing and needs of the subordinates and treats them as equals. The final leadership aspect is participative leadership.

Participative leadership is the degree to which leaders allow subordinates to influence decisions by asking subordinates for input and suggestions. In this fashion, a participative leader involves subordinates in decision making by asking for ideas, opinions and takes their suggestions into account. Accordingly, path-goal leadership suggests that the efficacy of a leader is influenced by

the interaction of leadership behaviours, in terms of being instrumental (directive), supportive, and participative, with two key contingency factors, namely subordinate attributes and environment. According to Kreitner and Kinicki (2007) the contingency factors are basically the situational variables that cause one leadership style to be more effective than another. Subordinate attributes include: (i) need for autonomy that refers to the desire of subordinates to be independent and in self-control; (ii) need for achievement that refers to the subordinates' instinct of striving for and attaining a level of excellence (Feldman, 2001); (iii) locus of control that is the desire of subordinates to be "master of their own fates" or whatever happens to them in life is a result of "luck, chance, or outside people and events" (Daft and Marcic, 2008); and (iv) perceived ability being the subordinates' apparent ability to perform tasks and achieve goals.

On the other hand, the environmental characteristics any include several factors, such as task structure, which is the extent that a task, job, or work assignment is simple, repetitive, and unambiguous (House and Dessler, 1974). Another factor is role ambiguity that refers to experiencing lack of clarity about what is expected of one, how one will be evaluated, and the criteria for evaluation (House, 1996). According to Nissa (2003), role ambiguity also refers to the extent an employee is experiencing uncertainty about its role, such as authority, responsibilities, time allocation, relationship with co-workers, directives, and policies. Stress, is another factor, which refers to the body's biological response to an intense physical, emotional or mental demand/threatening situation placed on it by oneself or others (Ellison, 1998).

Organisational success depends on human resources that favour goal attainment through efficient and effective personnel that contribute towards implementing the organisations' mission and vision. Consequently, organisational success is highly dependent and interlinked with varying degrees of engagement with sub-ordinates (Aarons, 2006).

Consequently, increasing attention is now being attributed towards participative leadership styles. Participative leadership is seen as playing a pivotal role among determinants, such as job satisfaction, motivation, and retention towards current units/departments. According to McCallin (2003), managing relationships within a participative leadership approach involves interplay between interpersonal dynamics, interaction and communication streams between healthcare professionals in a multi-disciplinary team; between the participative leader and team members at a particular workplace; between team members and service or end users; and between team members and the organisation.

Huang et al. (2010) argue that the basis for leadership lies in trust, informed commitment, and autonomy. Owing to human resources' indispensable nature, leaders learn through observation, behaviour, communication skills, and attitudes of their corresponding employee's performance. Therefore, an avid understanding of the subordinates' basic needs, wants, capabilities and attributes enhances organisational commitment, and replicates job satisfaction, motivation, and retention. As a result, effective leadership evokes the prompt aptitude to diagnose situational requirements and act accordingly. Critical analysis of the situation develops on both a technical and an individual level. The technical aspect pertains to an immediate clinical decision, whilst at an individual level it pertains to coordinating care as needed. Accordingly, effective leadership entails knowing and strategizing the utmost in each situation (Moiden, 2002a; Moiden, 2002b).

Understanding the Concept of Motivation

Healthcare is dependent on the optimal functioning of the human resource capacity, with nurses being the main proficient group within health service institutions (World Health Organisation, 2002), consequently motivating levels of concurrent employees is crucial within this workforce. In like manner, nurses epitomise the principal category of the healthcare workforce and sum up to 80% of direct patient care (Antrobus, 1997). According to Moody and Pesut (2006, p.17) motivation is defined as: "a value-based, psycho-biologically stimulus-driven inner urge that activates and guides human behaviour in response to self, other, and environment, supporting intrinsic satisfaction and leading to the intentional fulfilment of basic human drives, perceived needs and desired goals."

Motivation may be depicted as the degree of individual willingness to apply and preserve efforts that guide organisational goals (Franco et al., 2002). Highly motivated healthcare workers foster professional responsibilities adding up to better outputs, stronger behaviour and implement verbal and outcome empowerment. Work motivation runs parallel with their intent to stay in their current unit (Brewer et al., 2009) and enhances job satisfaction (De Loach and Monroe, 2004). Should the organisation fail to succeed in motivating its workforce then performance levels are likely to dwindle and the attrition rates escalate (Mosadeghrad, 2014). Cowing (2009) acknowledges that dissimilar motivational strategies on employees creates an array of outcomes as individuality compounds complex and diverse characteristics. Motivation may be intrinsic or extrinsic to the individual. Intrinsic motivation corresponds to an inner drive leading organisational team members to meet personal and organisational objectives (Hee et al., 2016). This guides individuals to find pleasure in their activities (Ryan and Deci, 2000). Intrinsically motivated employees form behaviours, inspirations and perform their responsibilities duly without external effects. Intrinsic motivation corresponds with self-interest, is operationally driven, and defined within the parameters of self-gratification (Muogbo, 2013).

On the other hand, extrinsic motivation is an external dynamism that guides individuals to achieve personal and organisational aims. Extrinsic motivation uses responsibilities by implementing coercion or instructions to achieve rewards. Such rewards may consist of bonuses, pay and auxiliary benefits but not exclusively (Muogbo, 2013). Extrinsic motivation enables nurses to attain work behaviours triggered by external stimuli for their own acquisition and subsequently their organisation. Improving personnel performance is central to healthcare. However, frequently healthcare workers opt to employ their energy on maintaining the status quo rather than challenging it (Melia, 2006). Work motivation spawns the process of cognition and consciousness. Once nurses articulate their own priorities whilst reflecting and evaluating their job-related capabilities, strengthening their motivating factors follows. However, nursing managers ought to prompt and arouse a supportive organisational environment by providing feedback that instils development and productivity (Dunbar, 2003).

Consequently, charge nurses need to explore nurses' goals, wants, prospects, desires, and the various motives that force nurses to behave in a particular manner.

Hertting et al. (2004) argue that nurses are driven by respectable collaboration, flanked by the nursing management and the multidisciplinary team, whilst experiencing social support within the team (Tummers et al., 2002) and the creation of a positive team spirit enhancing a favourable atmosphere. De Cooman et al. (2008) acknowledge working culture as being indispensable for enhancing professional contacts who value the nursing status. More so, possessing social contacts enables nurses to make work life challenging and worthwhile through exchanging feedback, knowledge, and skills with other members of the multidisciplinary team. Van den Berg et al. (2008) emphasised autonomy in decision making as a powerful motivating principle, particularly when job demands are great. It is argued that the nursing profession within the COVID-19 pandemic era is a case in point. Demands are incessant, information is either insufficient or requires further investigations, and planning of concurrent and emerging activities is highly uncertain.

Having skills that are unchanged by specified operations or transformations may also negatively affect work motivation. Hertting et al. (2004) argue that nurses are motivated by opportunities that evoke learning, sharing of knowledge, or getting supervisory attention. Manongi et al. (2006) found that an unprecedented line of duty coupled with staff scarcities, lack of inter-professional support, and foggy career goals were key demotivating pathways that characterise a department. Moreover, it was also revealed that high workload has a negative relationship with nurses' motivation. Adib et al. (2004) found that organisational culture and structure systematically affected nurses' power and motivation. However, De Cooman et al. (2008) found that working circumstances, feasible shifts, maintaining a work-life balance, remuneration, and job security were not viewed as the optimal motivating factors for nurses. Conversely, Camerino et al. (2008) in their study of 7,516 nurses from seven European countries concluded that staff working on day shifts possessed better involvement, motivation and satisfaction over staff who worked permanently on night shifts.

Moreover, various research studies found that healthcare workers who perceived that they were adequately remunerated were motivated to pro-

vide better performance (Bertone et al., 2016), quality services (Kurtzman et al., 2011), and increase their retention and satisfaction (Bogossian et al., 2014). This is confirmed by June (2013) who found that nurses who were content with their remuneration scheme had 3.4 times higher work motivation. Studies regarding personal characteristics and motivation have produced a mixture of findings. For instance, Kantek et al. (2015) found that age, professional experience, duration of service, and institutional experience were not good predictors of motivation. These findings suggest that participants aged 24 years or less were motivated by status, authority, and mentoring others. Furthermore, nurses with up to ten years-experience were motivated by opportunities for promotion. Additionally, Smerek and Peterson (2007) in their study found a lack of correlation between motivating factors and the personal attributes of age and duration of professional experience. However, perceived appreciation and recognition were found to be effective motivating factors. These findings were confirmed by other studies of Polyzos et al. (2006), Karakaya and Ay (2007), and Willis-Shattuck et al. (2008) that showed appreciation and the perception that nursing efforts are valued were significant motivating factors within the nursing workforce.

Ryan and Deci (2000) argue that self-directed regulation contributes towards motivation through the following psychological needs, namely, relatedness by offering a sense of belonging within a group and mutual respect; competence by ensuring productive outputs through the achievements of desired outcomes; and autonomy through sharing freedom of choice and initiative. Cai et al. (2011) argues that prioritizing on needs, such as work climate, up-surgings prospects, skill mix, respecting authority, propagating autonomy, and proper management of workloads and demands will increase nurse motivation. Koch et al. (2013) argued that not all nurses are driven by professional values, but the dominant values were found to be benevolence, self-direction, and hedonism. For instance, Reutter and Northcott (1993) view the healthcare setting as supporting care providers to deliver care and compassion, even at the nurses' own health detriment. This has been repeatedly demonstrated during the COVID-19 pandemic.

Hertting et al. (2004) posit that the nursing profession exerts its effects on the nursing workforce through internal psychological states, depicted as experienced worthiness of work; knowledge; and the responsibilities divulged by the work itself. It is argued that with an array of health care systems both within the local scenario and international setting, nurses' work motivation levels and factors are highly affected and vary from one organisation to another. Accordingly, it is argued that healthcare managers and policymakers need to consider updating their motivational strategies on a nationwide dimension to support professional development, self-determination, and leverage intrinsic motivation.

Understanding the Concept of Nurse Retention

Buchanan et al. (2018) argue that evidence of global nursing shortage is an accepted phenomenon. Gambino (2010) examined nursing shortage projections over a 10-to-20-year span and found that such shortage is aggravated by an increasingly aging nursing workers in conjunction with an aging population, combined by added needs for acuity and institutionalization (O'Brien-Pallas et al. 2003). According to Zurn et al. (2005), nursing shortage may be tackled by boosting the nursing requisition into the profession; retaining current nursing members; and attracting registered nurses back into the nursing workforce. This study takes only the nurse retention aspect into consideration. Moos (1994) posit that nurse retention factors directly correspond to job fulfilment or dissatisfaction, while Bratt et al. (2000), and Garrett and McDaniel (2001) argue that job satisfaction or dissatisfaction strongly affect nursing retention. Furthermore, their findings suggest that burnout and exhaustion cause dissatisfaction at the workplace. Therefore, to foster staff retention, organisations need to build a conducive working environment to satisfy the nurses' desire for safe workplaces, whereby quality in healthcare is promoted. Core-Lisle et al. (1999) suggest that workloads have increased drastically, resulting in a decreasing service excellence, and increasing levels of frustration, causing dwindled resilience within the nursing team. Wiskow et al. (2010) suggest that poor work environments coupled with unsustainable and heavy workloads may also prompt medical errors. Therefore, it is argued that retention strategies must explicitly address physical effects, particularly burnout and exhaustion, which are viewed as crucial factors that enhance or impede the nursing workforce.

In a cross-sectional analysis, Aiken et al. (2002) found that nurses having the highest nurse-to-patient ratio had burnout and dissatisfaction rates more than double the percentage rate of nurses with lower nurse-to-patient ratios. Moreover, 43% of the nurses having very high levels of burnout and discontent rates planned to quit their jobs within a year, while only 11% of nurses who did not lament of burnout and dissatisfaction were likely to quit their jobs. Zurn et al. (2005) found that the retention rate of a younger nursing workforce is influenced by personal and professional advancement opportunities, whereas senior nurses are more likely to be attracted towards retraining, flexibility in working shifts, and family-friendly measures. Shelander (2006) highlighted a number of values that create positive work environments to foster staff retention that include: intra-organisational diversity, trust and team orientation; communication; accountability; adequate staffing ratios; competent, credible, and visionary leadership; shared decision-making strategies; supportive ground for continuous professional development; recognition and value nursing contributions; and recognition of meaningful nursing practice. These values were largely confirmed by studies conducted by Davidson et al (1997); Nevidjon and Erickson (2001); Laschinger et al. (2001); Ingersoll et al. (2002); and Force (2005).

Leurer et al. (2007) in a qualitative study conducted in Canada amongst experienced nurses spanning across diverse practice areas, found seven retention strategies that were cited by respondents. These included: involvement and communication; recognition of effort; ample staffing ratios; supportive management; flexible work schedules; support for novel nurses through guidance and mentorship; and professional development. These findings generally confirm Shelander's (2006) values, cited previously. No monetary recognition themes emerged from Leurer et al.'s (2007) study. Cameron et al. (2004) argues that lack of organisational recognition suggests insufficiency of initiatives due to a lack of understanding by higher management. They maintain that even small gestures of appreciation and acknowledgement of the value for the nursing profession fosters nurse retention. Taunton et al. (1997) in a study conducted at four urban acute hospitals and which focused on the link between nurse managers, leadership, and nursing staff intent to stay, found that nurse retention may be improved through positive leadership behaviour towards nursing staff.

Similar findings were revealed by Boyle et al. (1999). They found that a leader who valued input from subordinates, promoted sufficient information and staff-level decision making, and maintained a strong sense of commitment, encouraged retention. Consequently, leadership style should reflect flexibility, be customer-centric, responsible, effective, and innovative (Fletcher, 2001). Larrabee et al. (2010) conducted a study amongst registered nurses at five hospitals to examine relationships between intent to stay, job satisfaction, psychological empowerment, job stress and stress resiliency. Stress resiliency was found to be a predictor for psychological empowerment, situational stressors, and job satisfaction that impacted the nurses' intention to stay within their work unit. Dissatisfaction at the workplace coupled by stress is viewed as triggering increased absenteeism, inadequate staffing ratios, and most importantly jeopardizing the provision of safe care. Various other studies focused on approximating the costs of nurse turnover. Generally, the findings suggest that at a cumulative level, nurse turnover costs within a health care organisation are significant and were found to contribute to negative effects on quality care (Yin & Jones, 2013).

Other studies focused on the complex connection of nurse turnover patterns, staffing ratios, cost, and quality care effects. Kutney-Lee et al. (2015) found that vital features include participatory and supportive management, clinical career prospects, flexible schedules, promoting professional autonomy, providing continuing education, and sound nurse staffing ratios. Nurse turnover within magnet hospitals were reported to be lower, while nurse job satisfaction was higher when correlated to non-magnet hospitals (Friese et al., 2015). Experience has shown that retention must not be addressed in isolation. The various studies cited above show that obvious connections exist between nursing retention, job satisfaction, motivation, and participative leadership, which are all considered to be critical aspects within the healthcare workforce. It is also important to recognize that at different times within one's career, nurses might exhibit the potential to transfer as a consequence of organisational mobility, due to personal issues or geographical setbacks to sustain life priorities (Flinkman et al., 2010). Therefore, not all job mobility is associated with negative effects. However, each organisation must assess the trends and patterns related to nurse turnover.

Relationships between Dominant Antecedents, Leadership Types, and Motivation on Nurse Retention

Studies regarding the relationship between various antecedents, such as personal attributes (including remuneration) with leadership types, motivation and nurse retention have provided diverse results some of which are contradictory. For instance, a number of research studies found that healthcare workers who perceived that they were amply remunerated were motivated to enhance performance (Bertone et al., 2016), provide better quality services (Kurtzman et al., 2011), and increase their retention and satisfaction (Bogossian et al., 2014). This was also confirmed by June (2013), who found that nurses that were content with their remuneration scheme had far higher work motivation. However, Leurer et al. (2007) and De Cooman et al. (2008) found that remuneration was not viewed as one of the optimal motivating factors for nurses.

Other studies regarding personal characteristics and motivation have also produced a mixture of results. For example, Kantek et al. (2015) found that age, professional experience, duration of service, and institutional experience were not good predictors of motivation. However, they showed that nurses with up to ten years-experience were motivated by opportunities for promotion, whilst those aged 24 years or less were motivated by status, authority, and mentoring others. Consequently, the factors that motivated nurses seemed to vary with age. On the other hand, Smerek and Peterson (2007) found a lack of association between motivating factors and the personal attributes of age and duration of professional experience, whilst perceived appreciation and recognition were found to be effective motivating factors. There seems to be consensus amongst researchers that perceived appreciation and recognition are effective motivating factors. For example, Polyzos et al. (2006), Karakaya and Ay (2007), and Willis-Shattuck et al. (2008) showed that appreciation and the perception that nursing efforts are valued, were significant motivating factors within the nursing workforce.

De Cooman et al. (2008) found that working circumstances for nurses, such as feasible shifts, maintaining a work-life balance, remuneration, and job security were not viewed as optimal motivating factors.

In contrast, Hertting et al. (2004) show that working circumstances, such as respectable collaboration supported by nursing management and a

multidisciplinary team, including social support within the team (Tummers et al., 2002) and the creation of a positive team spirit enhanced a favourable motivating atmosphere. They argue that nurses are motivated by opportunities that evoke learning, sharing of knowledge, or getting supervisory attention. This is supported by Adib et al. (2004) who found that organisational culture and structure systematically affected nurses' power and motivation. Manongi et al.'s (2006) study found that a serious nurse demotivating factor is a high workload. While a study by Camerino et al. (2008) embracing seven European countries found that staff working on day shifts possessed better involvement, motivation and satisfaction over staff who worked permanently on night shifts.

In terms of nurse retention, the literature indicates that social climate is viewed as a crucial cause of work dissatisfaction or elation, which may initiate a nurse's desire to remain or leave their current workplace. For instance, Aiken et al. (2002) found that nurses having the highest nurse-to-patient ratio had burnout and dissatisfaction rates that were far greater than those with lower nurse-to-patient ratios, with the consequence that a large number of these nurses planned to leave their current jobs. The findings suggest that the retention rate for nurses may be influenced by age. For example, Zurn et al. (2005) found that younger nurses were more likely to remain if they perceived personal and professional advancement opportunities, whereas senior nurses tend to remain if they had retraining prospects, flexible working shifts, and family-friendly measures. Studies conducted by Davidson et al (1997); Nevijon and Erickson (2001); Laschinger et al. (2001); Ingersoll et al. (2002); Force (2005); Shelander (2006); and Leurer et al. (2007) all found that the retention rates for nurses are dependent on val-

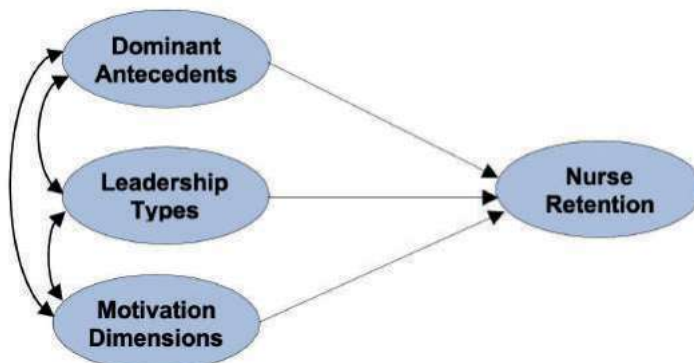
ues that create positive work atmospheres, such as diversity, trust and team orientation; adequate staffing ratios; communication; accountability; competent, credible, and visionary leadership; shared decision-making; continuous professional development; and recognition and appreciation of nursing services.

The literature findings suggest that when applying path-goal theory every type of leadership behaviour impacts differently the follower's motivation, which is dependent on the followers' attributes and the task features (House and Dessler, 1974). For example, Boyle et al. (1999) found that a leader who truly appreciates input from subordinates tends to promote a working environment that fosters a strong sense of commitment that encouraged nurse retention. Kutney-Lee et al. (2015) found that features like participatory and supportive management in conjunction with other measures facilitated nurse retention. Therefore, nurse retention needs to be viewed in an overall context, since various studies cited above, suggest strong association between nursing retention and leadership style, job satisfaction, and motivation.

Towards a Nurse Retention Model: Antecedents, Leadership Type, and Motivation

Based upon the above literature review, a theoretical model that lies at the basis of our empirical study is shown at Figure 1. The research question is: What is the impact of the dominant antecedents, leadership types and motivation on nurse retention? Consequently, the primary hypotheses are: (1) dominant antecedents are good predictors of nurse retention; and (2) nurse retention is a consequence of both leadership type and motivation.

Figure 1. Conceptual Motivation-Leadership-Nurse Retention Model



Methodology

Sample and Design of the Study

The theoretical model depicted in Figure 1 was tested by the administration of a survey. The research population consisted of 1096 eligible nurses working across Mater Dei Hospital's medical, surgical and speciality wards/units and departments. The research survey (see Appendix 2) administration was based on a population census during paid working hours. Initially, the questionnaire was tested on a pilot sample of 50 nurses to ensure that the instructions and questions presented were fully understood. Instructions were prepared to explain the purpose of the questionnaire and how it should be completed. Participation was voluntary and anonymity was guaranteed. This procedure achieved an overall response rate of 35% (380 respondents) of which 72% were female, with a mean age of 33.2 years. Applying the sample size calculator, a sample size of 285 or more is required to achieve a confidence level of 95% with a real value being within $\pm 5\%$ of the measured/surveyed value. Moreover, the achieved response rate of 380 means that there is a 95% chance that the real value is within $\pm 3.98\%$ of the measured/surveyed value.

Measures

This section provides an overview of all measures that are included in our study. All items of the different scales are measured by using a Likert system rating scale. The details of all the measures are shown at Table 1.

Data Analysis

Structural equation modelling (SEM) is the major statistical method applied in this study. SEM allows separate relationships for each of a set of dependent variables and provides the suitable and most efficient estimation technique for a series of separate multiple regression equations estimated simultaneously. Unlike multivariate analysis of variance and canonical correlation that allow only a single relationship between dependent and independent variables, SEM allows multiple relationships between the dependent and independent variables. Therefore, the model shown in Figure 1 is tested in a holistic manner.

Furthermore, SEM using confirmatory factor analysis is utilized to determine the validity of the constructs. For a construct to be valid it must be shown that both convergent and discriminant validity are achieved. Anderson and Gerbing (1988) suggest that an appropriate method for evaluating convergent validity in SEM is to examine the construct loadings and determine whether each indicator's estimated coefficient is significant, that is, whether the estimated coefficients are greater than twice their standard error. Each construct is examined according to Anderson and Gerbing's (1988) criterion, and all the estimated coefficients are found to be greater than twice their standard error. Therefore, convergent validity is achieved. Furthermore, Bagozzi and Phillips (1982) suggest that discriminant validity in SEM is achieved if the unconstrained models have a significantly lower Chi-square than constrained models. For all constructs, the unconstrained models appear to have a significantly lower Chi-square compared with the constrained models. Therefore, discriminant validity is achieved as well.

Composite reliability (measuring internal consistency) for path analysis, in line with Hair et al. (1988) is adopted. A high composite reliability value indicates high reliability. Normally the acceptable threshold for composite reliability is ≥ 0.50 (Hair et al., 1998). All scales show a composite reliability of ≥ 0.50 . The predictive validity of the measures is tested by evaluating the correlation between dependent and independent variables. EQS 6.4 is used to test simultaneously the hypothesized linkages between the model variables. EQS provides weights indicating strength and direction of the associations of hypothesized variables. The methodology adopted in this study adheres to the seven-stage approach suggested by Hair et al. (1998). Furthermore, the parameter estimates are tested for feasibility and acceptability (Bentler, 1995, p. 610). No negative error variances are found, and all standardized coefficients appear to be less than 1.0 (see also Hair et al., 1998).

Table 1. Details of the Measures Used in the Study

Variable	Definitions of variable
Motivation	
General Motivation	Desire to work hard, being paid well and having job security.
Burnout	Extent of feeling emotionally drained and dreading to go to work.
Job Satisfaction	Extent of being satisfied with the job, colleagues, and supervisor.
Intrinsic Job Satisfaction	Extent of being satisfied with opportunities to use one's ability, achieving something worthwhile, doing something valuable.
Organisational Commitment	Extent of being proud to work for organisation and being part of it, share common values, and feeling committed and inspired by the organisation.
Conscientiousness	Extent of relying on colleagues; working hard, efficiently, and correctly; and doing things without being asked.
Timeliness and Attendance	Extent of being punctual and always present at work.

Table 1. Details of the Measures Used in the Study (continued)

Variable	Definitions of variable
Leadership Type	
Instrumental Leadership	Subordinate perceptions of their leader with respect to three aspects. Leader behaviour directed at clarifying expectations, assigning specific tasks, and specifying procedures to be followed.
Supportive Leadership	Degree to which leader behaviour can be characterized as friendly and approachable, and considerate of the needs of subordinates.
Participative Leadership	Degree to which leaders allow subordinates to influence decisions by asking subordinates for input and suggestions.
Nurse Retention	
Recognition and Rewards	Extent of feeling respected by colleagues and their talents were appreciated; contributions were acknowledged; felt supported by their charge nurse and believed that their charge nurse was approachable and provided encouragement/feedback about their work.
Professional Role	Extent respondents believed they made a difference with patient care; were satisfied with their chosen specialty; felt that job expectations were realistic; would like to be working at institution in 5 years; and believed that they were supported, and felt comfortable communicating with patients/families.
Mentoring	Extent respondents believed that their work was challenging; having other nurses to assist during new circumstances and having a positive role model to observe unit; enjoyed socializing with team members outside working hours; believed that their nurse educator was approachable; believed that their preceptor provided them with a sound foundation; and believed that their educator provided encouragement/ feedback.
Scheduling Flexibility	Extent of having the option of working shorter shifts and would consider staying employed if given the option of shorter shifts.
Personal characteristics	
Age	The age of employee
Gender	The gender of the employee as Male = 1, Female = 2, Other = 3
Marital Status	The employee's present status with a choice of Single=1; Single with Partner=2; Married=3; Divorced/separated=4; Widower=5
Qualifications	The level of education of the employee, with a choice of Diploma =1; Degree = 2; Master = 3; PhD = 4
Total years of experience	Total years of nursing experience
Position Tenure	Years of experience at current position

Notes:

Personal Attributes in our study include the following list of one-item measures: age, gender, marital status, qualifications, total years of nursing experience, and years of experience at current position.

Leadership Types are measured by 19 items of the House and Dessler (1974) scale that consists of the three leadership types (see Appendix 2).

Motivation and its dimensions are measured by 22 items using the Mbindyo et al. (2009) scale regarding a multidimensional motivation scale that consists of seven dimensions (see Appendix 2).

Nurse Retention and its dimensions are measured by 30 items using the Baptist Health Nurse Retention Questionnaire that consists of a multidimensional nurse retention scale comprising of four dimensions (see Appendix 2).

Results

Descriptive Statistics and Bivariate Correlations

Appendix 1 provides the means; standard deviations; Cronbach Alpha reliability coefficients (for non-single items on diagonal); and bivariate correlations for the various relevant variables. The bivariate correlations illustrate that the age antecedent has a low negative association with general motivation, and the burnout and timeliness/attendance dimensions of motivation (-.131, -.138, -.124; $p < 0.05$ respectively). These findings suggest that older nurses tended to be less motivated, which is supported by the fact that they display an attitude for tardiness and endure less burnout. These findings partly support the results of Kantek et al. (2015) who showed that factors affecting nurse motivation varied with age. Moreover, age is shown to have a low negative correlation with supportive leadership (-.115; $p < 0.05$), which is expected, since older nurses would require less supervision and are expected to be more independent. The findings suggest that age has a low negative relationship with the mentoring and scheduling flexibility dimensions of nurse retention (-.240, -.176; $p < 0.01$ respectively). These findings support Aiken et al. (2002) results that the retention rate for nurses may be influenced by age. Moreover, Zurn et al. (2005) had found that older nurses tend to remain if they had flexibility in working shifts and family-friendly measures.

Gender does not seem to be an influencing antecedent. However, it is interesting to note that female nurses appear to be less motivated (-.148; $p < 0.01$) but are more conscientious (.145; $p < 0.01$). These findings seem to be reasonable, since 72% of the respondents were female, who in a Mediterranean culture, are likely to have higher family commitments than their male counterparts, consequently the lower motivation. This supports Manongi et al.'s (2006) finding that a serious nurse demotivating factor is a high workload. In this case, female nurses have a higher workload when one takes into consideration their workplace and family commitments. Marital status has a low negative relationship with the mentoring and scheduling flexibility dimensions of nurse retention (-.186, -.152; $p < 0.01$ respectively). This suggests that married nurses view these dimensions as an added burden. These findings are consistent with results related to age discussed previously.

The findings regarding the qualifications antecedent suggests that those who are more qualified have a lower organisational commitment (-.110; $p < 0.01$) but are more conscientious (.122, $p < 0.01$). Therefore, higher qualified nurses are likely to be more diligent and may seek higher promotions outside their normal workplace. It is interesting to note that the more qualified nurses are more predisposed to mentoring (.103; $p < 0.01$), are more receptive to scheduling flexibility, and prefer participative leadership (.119; $p < 0.01$). However, these nurses were not satisfied with their professional role (-.111; $p < 0.01$). Bivariate correlations also indicate that the total years of experience antecedent has a negative relationship with the motivation dimensions of burnout, job satisfaction, and timeliness/attendance (-.114, -.102, -.129; $p < 0.05$ respectively).

Moreover, the mentoring and scheduling flexibility dimensions of nurse retention and supportive leadership have a low negative relationship with total years of experience (-.258, -.180, -.126; $p < 0.05$ respectively). These findings are consistent with the other findings displayed above, in that the more experienced nurses are less receptive to changing their routine related to mentoring and schedule flexibility, and do not require close supervision (supportive leadership). This in turn may result in less stress but lower job satisfaction and higher inclination to tardiness.

The findings suggest that position tenure appears to be the most influencing antecedent. The bivariate correlations indicate a low negative correlation with a number of dimensions related to motivation, leadership, and nurse retention (-.138, -.155, -.184, -.163, -.138, -.262, -.137; $p < 0.01$ respectively). These findings suggest that remaining too long in the same organisational hierarchical position contributes to lower job satisfaction, lower propensity to participate in mentoring and agreeing to flexible scheduling, and are more insulated to praise (i.e., rewards and recognition) and less dependent on their supervisor for directions, support, and the need for participating in decision making (i.e., general apathy). Consequently, the findings suggest that a certain degree of job mobility is essential for nursing positions.

Model Testing

Various SEM revisions are tested to ensure that the most appropriate model was attained. Due to the relatively small number of complete cases (277) both the Maximum Likelihood (ML) and Generalised Least Squares (GLS) methods were adopted. According to Olsson et al. (2000), ML is considerably more insensitive to variations in sample size, but in general more stable and demonstrates higher accuracy in terms of empirical and theoretical fit compared to the other estimators. However, they claim that while GLS requires well-specified models, it allows small

samples to do an acceptable job in terms of theoretical and empirical fit. After removing linkages that were not within the acceptable significance level, the revised model depicted in Figure 2 and showing the standardized coefficients, appears to provide acceptable fit indices for the data set. It should be noted that a confirmatory factor analysis through SEM is conducted for each multi-dimensional construct with composite reliabilities being calculated based on the following formulae (Hair et al., 1998, p. 624):

$$\text{Composite reliabilities} = \frac{(\text{Sum of standard loadings})^2}{(\text{Sum of standardized loadings})^2 + \text{Sum of indicator measurement error}}$$

Where: Indicator measurement error = 1 - (Sum of standard loadings)²

Because all the constructs in SEM are exogenous only the measurement model and the associated correlation matrices for exogenous constructs and indicators need to be considered. Table 2 shows that the composite reliabilities for the scales used in the model are highly reliable since

they are within the recommended $\geq .50$ acceptable threshold. As stated previously, both ML and GLS methods were used to investigate the covariance matrix of the items.

Table 2. Reliability of Scales: Composite Reliability

Exogenous Constructs	Composite Reliability
Leadership Type	
Instrumental Leadership	.915
Supportive Leadership	.942
Participative Leadership	.900
Nurse Retention	
Recognition and Rewards	.942
Professional Role	.511
Mentoring	.770
Scheduling Flexibility	.814
Motivation	
General Motivation	.729
Burnout	.777
Job Satisfaction	.627
Intrinsic Job Satisfaction	.754
Organisational Commitment	.886
Conscientiousness	.686
Timeliness and Attendance	.500

The goodness-of-fit of the model is evaluated using absolute and relative indices. Table 3 shows the absolute goodness-of-fit indices that are calculated, these include the chi-square goodness-

of-fit index; goodness-of-fit index (GFI); adjusted goodness-of-fit index (AGFI); root mean square error of approximation (RMSEA); normative fit index (NFI); and comparative fit index (CFI).

Table 3. Motivation-Leadership-Nurse Retention Model Fit Indices

Model	N	Chi-sq.	df	Sig.	GFI	AGFI	RMSEA	NFI	CFI
GLS	277	137.899	82	.00	0.94	0.90	0.050	0.91	0.96
ML	277	164.267	81	.00	0.93	0.89	0.061	0.97	0.99

The attained GFI and CFI values, which are greater than .90, and RMSEA (GLS, 0.050; ML, 0.061) that is smaller than or equal to .08 are indicative of an acceptable fit (Cudeck and Browne, 1993). Moreover, the AGFI (GLS, 0.90; ML, 0.89) is shown to be at the acceptable threshold. The chi-square goodness-of-fit index indicates that the assumed SEM model is to be rejected. However, a critique regarding the validity of using chi-square to evaluate the model fit is that it is particularly dependent on the sample size (La Du and Tanaka, 1989). As the sample size increases, the chances of rejecting the model (whether true or false) escalate since the increased sample size makes it more likely to detect discrepancies between the implied and observed covariance matrices (Byrne, 2001; Bagozzi and Yi, 1988). However, in this case the chi-square value can be used as an

appropriate fit index due to the small number of cases in the data set.

Bentler (1990, 1992), and Hu and Bentler (1999) suggest the comparative fit index (CFI) to cater for sample size with a threshold of .95 being considered a well-fitting model. In this case the CFI is 0.96 for GLS and 0.99 for ML, which is therefore considered as an acceptable fit. The findings at Table 3 indicate that the model fit is good. This implies that we have found sufficient support for accepting the hypothesised research model. Additionally, Table 4 demonstrates that there were only small differences in the standardized coefficients using the GLS and ML methods.

Table 4. Differences in the Standardized Coefficients using the GLS and ML Methods

	Recognition/Reward		Professional Role		Mentoring		Scheduling Flexibility	
	GLS	ML	GLS	ML	GLS	ML	GLS	ML
Instrumental Leadership	0.23*	0.17*		-0.05*	0.24*	0.12*	-0.16	-0.17*
Supportive Leadership	0.24*	0.28*	0.39*	0.42*	0.12*	0.23*	0.19*	0.21*
Participative Leadership	0.12*	0.15*	-0.28*	-0.25*	-0.06*	-0.03*		
Overall Motivation	0.40*	0.34*	0.47*	0.44*	0.40*	0.33*	0.04*	0.04*
Overall Nurse Retention	0.68*	0.69*	0.24*	0.24*	0.30*	0.31*	0.12*	0.12*

(* $p < .05$)

The model in Figure 2 and Table 5 shows the direct, indirect and total effect of leadership and motivation factors on overall motivation and nurse retention (using the GLS model) to answer the research question: *What is the impact of the dominant antecedents, leadership types and motivation on nurse retention?*

The Motivation-Leadership-Nurse Retention model at Figure 2 shows that the personal antecedents did not feature in the model. One should note that the bivariate correlations showed very small association between the personal antecedents and the dimensions of motivation, lead-

ership type, and nurse retention. Consequently, the hypothesis that the dominant antecedents are good predictors of nurse retention is rejected outright. Furthermore, Table 4, which shows the standardized coefficients using both the GLS and ML methods show that nurse retention is a consequence of both leadership type and motivation, except for participative leadership and the scheduling flexibility dimension of nurse retention. Therefore, the hypothesis that nurse retention is a consequence of both leadership type and motivation is mostly accepted. A possible explanation for the above findings will be provided in the next section.

Figure 2 Revised Motivation-Leadership-Nurse Retention Model with Standardized Coefficients

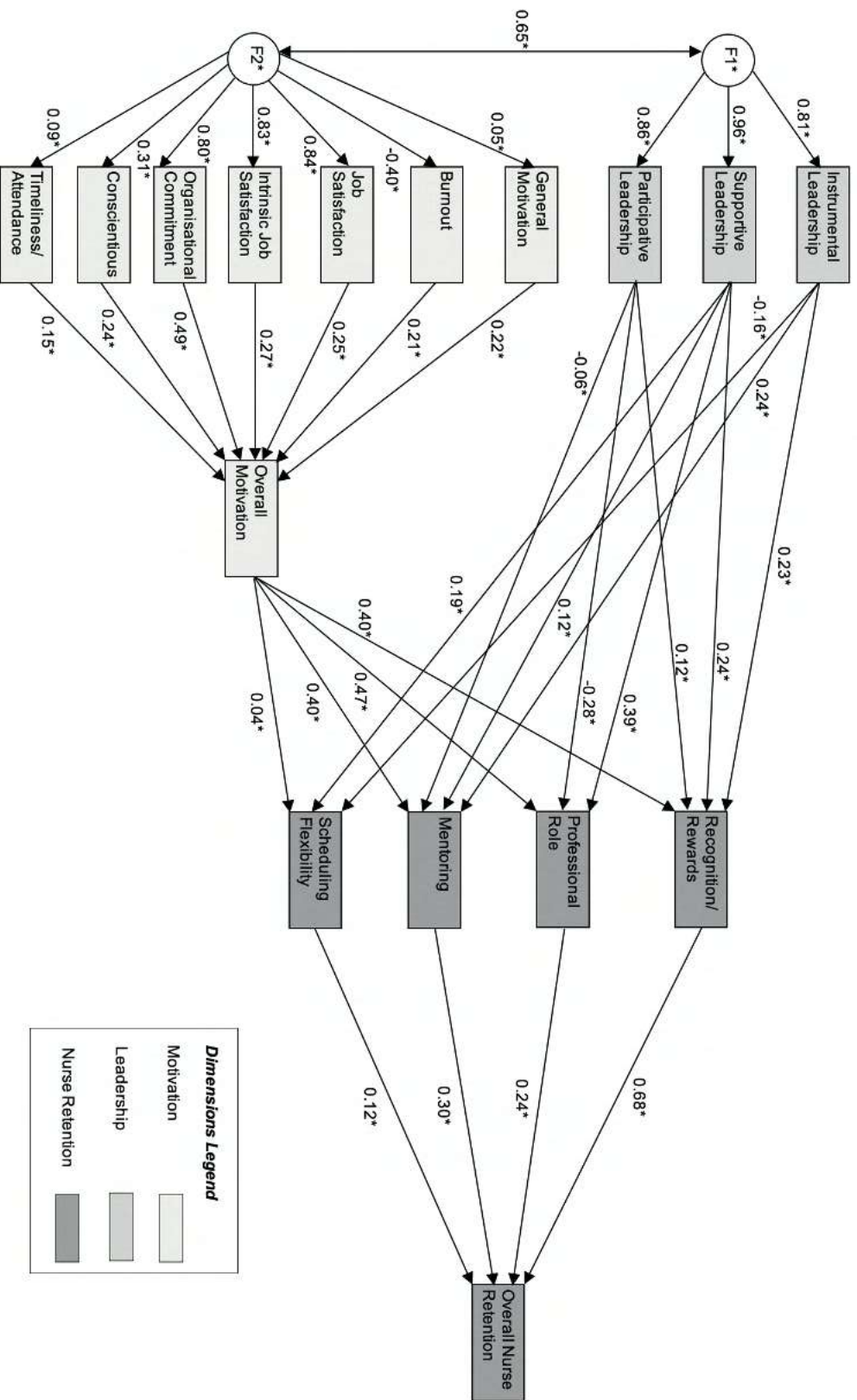


Table 5. Direct, Indirect and Total Effect of Leadership and Motivation Factors on Overall Motivation and Nurse Retention (GLS model)

Relationship	Overall Motivation	Recognition/Rewards	Professional Role	Mentoring	Scheduling Flexibility	Nurse Retention
Instrumental Leadership→						
Direct		0.228		0.236	-0.163	0.000
Indirect		0.000		0.000	0.000	0.206
Total		0.228		0.236	-0.163	0.206
Supportive Leadership→						
Direct		0.237	0.393	0.119	0.194	0.000
Indirect		0.000	0.000	0.000	0.000	0.311
Total		0.237	0.393	0.119	0.194	0.311
Participative Leadership→						
Direct		0.119	0.281	-0.059		0.000
Indirect		0.000	0.000	0.000		0.003
Total		0.119	0.281	-0.059		0.003
General Motivation→						
Direct	0.219	0.000	0.000	0.000	0.000	0.000
Indirect	0.000	0.087	0.104	0.087	0.008	0.110
Total	0.219	0.087	0.104	0.087	0.008	0.110
Burnout→						
Direct	0.210	0.000	0.000	0.000	0.000	0.000
Indirect	0.000	0.083	0.100	0.083	0.008	0.106
Total	0.210	0.083	0.100	0.083	0.008	0.106
Job Satisfaction (JS)→						
Direct	0.254	0.000	0.000	0.000	0.000	0.000
Indirect	0.000	0.101	0.120	0.100	0.009	0.127
Total	0.254	0.101	0.120	0.100	0.009	0.127
Intrinsic JS→						
Direct	0.274	0.000	0.000	0.000	0.000	0.000
Indirect	0.000	0.109	0.130	0.109	0.010	0.138
Total	0.274	0.109	0.130	0.109	0.010	0.138
Organisation Commitment→						
Direct	0.485	0.000	0.000	0.000	0.000	0.000
Indirect	0.000	0.192	0.230	0.192	0.017	0.244
Total	0.485	0.192	0.230	0.192	0.017	0.244
Conscientiousness→						
Direct	0.237	0.000	0.000	0.000	0.000	0.000
Indirect	0.000	0.094	0.113	0.094	0.009	0.119
Total	0.237	0.094	0.113	0.094	0.009	0.119
Timeliness/Attendance→						
Direct	0.154	0.000	0.000	0.000	0.000	0.000
Indirect	0.000	0.061	0.073	0.061	0.006	0.078
Total	0.154	0.061	0.073	0.061	0.006	0.078

$p < .05$

Discussion & Conclusion

The SEM outcomes show that the personal antecedents do not have an impact on Motivation and Nurse Retention. This supports previous studies, particularly that of Kantek et al. (2015). A possible reason for this is that the working circumstances for nurses, such as respectable collaboration (Hertting et al., 2004), social support (Tummers et al., 2002), and the creation of positive team spirit enhanced a favourable motivating atmosphere, in this way encouraging nurse retention, rather than personal attributes, such as age, gender, marital status, experience, and position tenure.

The SEM model indicates that the three leadership types, namely, Instrumental; Supportive; and Participative leadership all impact the dimensions of nurse retention, but in different ways. This tends to support the claim by House and Dessler (1974) that every type of leadership behaviour impacts differently the follower's motivation, consequently the desire to remain at the workplace. For instance, while Instrumental leadership has a moderate positive relationship with Recognition/Rewards and Mentoring, it has no impact on Professional Role and a negative impact on Scheduling Flexibility. This finding is viewed as being reasonable because Instrumental Leadership is directed towards clarifying expectations, assigning specific tasks, and specifying procedures, which is consistent with Recognition/Rewards and Mentoring, but is not susceptible towards having shorter working shifts.

Moreover, Supportive Leadership has a small to moderate positive relationship with all the dimensions of Nurse Retention. This supports the findings of Laschinger et al. (2001); Ingersoll et al. (2002); Force (2005); Shelander (2006); and Leurer et al. (2007), who all found that the retention rates for nurses were dependent on values that create positive work environments, such as communication; diversity, trust and team orientation; accountability; adequate staffing ratios; competent, credible, and visionary leadership; shared decision-making; continuous professional development; and recognition and appreciation of nursing services.

Participative Leadership provides a mixture of relationships. The SEM model suggests that Participative Leadership has a rather low positive relationship with the Recognition/Rewards dimension of Nurse Retention, which may be explained by the fact that this type of leadership permits

nurses to influence decisions through input and suggestions. Consequently, giving the nurses a sense of valuable contribution and recognition. On the other hand, Participative Leadership displays a small to moderate negative relationship with the Professional Role and Mentoring dimensions of Nurse Retention. The reason for this may be due to the perceived inconsistency of the attributes of Participative Leadership (contribution to decisions) to the extent that nurses believed they were satisfied with their chosen speciality, and job expectations (Professional Role) and the extent that nurses believed that their work was challenging (Mentoring). This rational is supported by the fact that Participative Leadership has no association with the Scheduling Flexibility dimension of Nurse Retention, since this dimension measures the extent of having the option of working shorter shifts, therefore a better social climate. For instance, Aiken et al. (2002) found that nurses having the highest nurse-to-patient ratio had burnout and dissatisfaction rates that were far greater than those of nurses with lower nurse-to-patient ratios, with the consequence that a large number of these nurses planned to quit their jobs.

The findings indicate that Organisational Commitment had by far the highest positive relationship with Motivation, followed by the Intrinsic Job Satisfaction; Job Satisfaction; and Conscientiousness dimensions. These dimensions contribute to creating a working environment that encourages nurses to be inspired towards goal-oriented behaviour and having a sense of belonging, consequently increasing their desire to remain with the organisation. The SEM outcomes illustrates that Motivation has the highest positive impact on the dimensions of Nurse Retention with the exception of the Scheduling Flexibility dimension. These findings support Moos's (1994) conclusions that nurse retention factors directly correspond to job fulfilment or dissatisfaction. The findings also confirm the study outcomes of Bratt et al. (2000), and Garrett and McDaniel (2001) who found that job satisfaction or dissatisfaction strongly affect nurse retention, with burnout and exhaustion causing dissatisfaction at the workplace.

Therefore, it is argued that retention strategies must explicitly address physical effects, particularly burnout and exhaustion that are viewed as crucial factors to enhance or impede the nurse retention.

Finally, this study focused on a public hospital in Malta. Therefore, caution should be exercised with the generalisation and interpretation of results due to cultural differences. Malta has

a Mediterranean European culture and is both a member of the European Union and the British Commonwealth, with English being an official national language that is specifically used in official health files. Having said this, cross-cultural research is needed to determine whether the outcomes of our study can be generalised across countries, particularly those of the European Union.

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07 Perceptions on the marketing of international education: Understanding the efforts of English Language Schools and Higher Education Institutions in Malta

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Abstract

Objectives: The purpose of this study is to explore the nature of the marketing efforts of English as Foreign Language (EFL) schools and Higher Education Institutions (HEIs) in Malta to attract international students to study in Malta. Additionally, the study seeks to identify any similarities and differences in their marketing activity and explores the views of EFL schools and HEIs on the idea of collaboration in view of their marketing efforts that would benefit both parties.

Methods: The study adopted a qualitative method and an inductive approach. Semi-structured interviews were conducted with nine marketing professionals from EFL schools and HEIs that were selected by purposeful sampling. The interview transcripts were analysed through Thematic Analysis, and the eight emergent themes were used to address the research questions.

Results: The study reveals that the marketing efforts of EFL schools and HEIs in Malta consist of several strategies. Emphasis was made on the importance of having the appropriate staff, having partner agents abroad in the targeted countries, and having the proper communication channels to reach international students. The findings suggest that the international marketing efforts of EFL schools and HEIs have a lot in common and that institutions are interested in collaborating on marketing initiatives to increase the number of international students studying in Malta, however, to varying degrees.

Conclusion: EFL schools and HEIs emphasised three perspectives on marketing to recruit international students to study in Malta, namely, having the right team of staff, maintaining strong business relations with partner agents abroad, and using proper promotion and communication strategies to reach international students. The study indicates several similarities and fewer differences to varying degrees between the marketing efforts of EFL schools, state-owned and private HEIs, relating to the students' ages and nationalities, courses offered, promotional channels, and Malta as a study destination. In view of collaboration in marketing efforts, the majority of EFL schools and HEIs expressed an interest and provided several ideas on how this can be achieved.

Keywords: "English as a Foreign Language" "Higher Education" "International Students" "Marketing in Education"



The various aspects of the marketing efforts of EFL schools and HEIs to attract international students.

Highlights

- Tens of thousands of international students travel to Malta each year to study in English language schools or at tertiary level in higher education institutions.
- EFL schools and HEIs emphasised three aspects of their marketing efforts to attract international students to Malta, namely, having the right team of staff, maintaining strong relationships with partner agents abroad, and using proper communication strategies to attract international students.
- Other critical aspects in the marketing efforts include the pricing of courses, high-quality standards, the physical premises and Malta as a study destination, and the support offered to international students.
- Several similarities and fewer differences seem to exist between the marketing efforts of EFL schools and HEIs to recruit international students to Malta.
- The study indicates that EFL schools and HEIs are largely interested in collaboration for marketing purposes.
- The benefits of collaboration include tapping into new markets and promoting Malta as a global education destination.

Introduction

The context of the study

For decades, Malta has attracted thousands of international students to study in English as a Foreign Language (EFL) schools or at tertiary level in Higher Education Institutions (HEIs). At the time of the study, Malta had thirty-four EFL schools offering a range of English language courses for international students (ELT Council, n.d.). Additionally, international students travelled to Malta to pursue education at a tertiary level in state-owned or privately owned HEIs. The study focused on HEIs licensed by the Malta Further and Higher Education Authority (MFHEA) and offered qualifications at levels 5, 6, 7 or 8 of the Malta Qualifications Framework (MQF), which amounted to seventy institutions at the time of the study (MFHEA, n.d.). Unlike EFL schools, most HEIs offered programmes that attract both local and international students (NSO, 2022).

International students who travel to study in Malta

In 2022, the EFL schools collectively attracted 56,675 international students to Malta (NSO, 2023) from various countries. It is worth mentioning that prior to the Covid-19 pandemic, the number of enrolments was significantly higher registering: a total of 83,610 international students enrolled on EFL programmes in Malta (NSO, 2020). Contrastingly, the number of international students following educational programmes in HEIs in Malta in the academic year 2020/2021 was considerably lower. Collectively, HEIs in Malta attracted 3233 international students, which amounted to 17.6% of the total number of tertiary students that same year, with the rest of the students being Maltese (NSO, 2022).

Purpose of the study

The number of international students that study in EFL schools and HEIs in Malta is significant (NSO, 2023; NSO, 2022), considering the coun-

try's geographical size. The importance of international students in Malta is not only tied to their contribution to the local economy, resulting from a revenue stream from tuition fees (Qureshi & Khawaja, 2021), accommodation fees, and other expenditures during their study stays in Malta, but also to the cultural diversity, which enriches the educational institutions they study in and the local communities (Bhandari, Robles & Farrugia, 2018). Additionally, given the rising competition and internationalisation among educational institutions (Binsardi & Ekwulugo, 2003), it was worth exploring the marketing efforts implemented by educational institutions in Malta to attract international students to Malta. Specifically, this study sought to explore the nature of the marketing activity of EFL schools and state-owned and private HEIs to attract international students. Moreover, it explored the views of EFL schools and HEIs on the idea of collaboration in view of their marketing efforts that would benefit both parties.

Research questions

In line with qualitative research methods, the study sought to answer one general research question and two associated sub-questions (Creswell, 2014). The main research question (RQ1) explored how educational institutions in Malta describe and understand the marketing of their courses to international students. Additionally, the two secondary questions, RQ2 and RQ3, investigated similarities and differences in the international marketing efforts adopted by EFL schools and HEIs, and gathered views on possible collaboration between EFL schools and HEIs from a marketing perspective.

RQ1: How do marketing professionals in EFL schools and state-owned and private HEIs in Malta describe and understand the marketing of their courses to international students?

RQ2: How are the international marketing efforts adopted by EFL schools and HEIs similar and different?

RQ3: How do marketing professionals view collaboration between EFL schools and HEIs from a marketing perspective?

Methodology

The study utilised a qualitative method and inductive approach. Semi-structured interviews with marketing professionals from nine educational institutions were conducted to gather perspectives on the research topic. As Seale (2018) pointed out, qualitative interviewing can acquire a level of depth and complexity that is not possible with other approaches, for instance, survey-based approaches. The researcher formulated a set of open-ended questions to guide the interviews and data collection, following Creswell's (2014) perspective that open-ended interview questions allow for better elicitation of opinions and detailed experiences from participants. The collected data was analysed to answer the research questions.

Research instruments

In line with Pezalla, Pettigrew and Miller-Day (2012), when using semi-structured interviews, the researcher, who acted as an interviewer, served as the primary data collection tool in this qualitative study. The semi-structured interviews were conducted individually and face-to-face with the participants in an effort to explore their perceptions of marketing efforts to recruit international students to study in Malta. The researcher used a predetermined list of interview questions and, at times, participants were asked to clarify or elaborate on their responses. The formulation of the questions (see Appendix 1) was guided by the literature review and the research questions. Moreover, due to the similarities in the research topics, the interview questions were modelled on and adapted from two studies conducted in Canada and the USA, (Eaton, 2009; Gomez de la Fuente, 2016). The sixteen interview questions were aimed at gathering data related to the respondents' marketing experience, the meaning of marketing, marketing strategies, the various aspects of the educational marketing 7Ps, and perspectives on collaboration between EFL schools and HEIs in terms of marketing.

Population and Sampling

The identified study population consisted of a hundred and four educational institutions, comprised of thirty-four EFL schools (ELT Council, n.d.) and seventy HEIs, seven of which were state-owned and sixty-three private HEIs (MFHEA, n.d.). An invitation letter was sent out addressing

the marketing professionals of the institutions. As a result, nine marketing professionals were interviewed, four from EFL schools, one from a state-owned HEI, three from private HEIs, and one from a private educational institution that is both an EFL school and a private HEI. The participants were purposefully selected based on their years of experience and knowledge about the research topic. According to Creswell (2014), purposeful sample methods are preferable to the random sampling method in qualitative studies because the participants interviewed would be able to provide insight into the research questions. The researcher gathered data pertinent to the research questions through interviews and, after the ninth one, the researcher reached the point of diminishing returns and noted that respondents were not providing any new data relevant to the study.

Interview process

The interviewees' participation in this study was entirely voluntary and each signed a consent form outlining the goals of the study, the data-gathering methods, and an assurance of confidentiality throughout the study. The data collection and management were in accordance with the 2018 General Data Protection Rules (GDPR). Interviews lasted between thirty to fifty minutes each and were audio recorded. The recordings were transcribed, and each participant was given the possibility to review the transcript to confirm the accuracy of the content and validate the material (Boblin et al., 2013). The transcripts were used for data analysis.

Data analysis

Inductive thematic analysis (TA) was used to evaluate the qualitative data gathered. According to Braun and Clarke (2012), an inductive TA is driven by the data rather than pre-existing conceptions, and analysis is a bottom-up process shaped by the data content. The nine interview transcripts were used as the source data, and the TA technique was utilised to identify, arrange, and understand patterns of themes within the data set. Moreover, the six-step approach to coding and theme development (Braun & Clarke, 2006), which is a widely used method for TA (Smith, 2015), was applied to this study.

Results

The emergent themes

Through the thematic coding of the interview transcripts, eight themes emerged pertaining to the research questions of this study. The themes relate to the pull factors that attract international students to study in a particular country, the

meaning of marketing in the context of education, and the Promotion, People, Price, Place, and Process elements of the 7Ps of education marketing. The eight themes, which were given codes from T1 through to T8, are listed in Table 2.

Theme	Theme title
T1	International students who travel to study in Malta
T2	Perspectives on the meaning of marketing
T3	Promotional channels for international education marketing
T4	Course pricing strategies
T5	Attractiveness of the premises and the location of the educational institutions
T6	People involved in marketing
T7	Support offered to international students
T8	Collaboration between EFL schools and HEIs

Table 1: The eight emergent themes

International students who travel to study in Malta (T1)

The findings shed light on the nationalities and ages of the international students, the courses they enrol on, and the respondents' perceived reasons for the students' choices.

The respondents indicated that international students travel to Malta from five continents: Asia, Africa, Europe, North America, and South America. The countries of origin and world regions of the international students, as mentioned by the respondents, are listed in Appendix 2.

The findings indicated that international students visiting Malta vary in age, with some being in their late teens and early twenties, and others aged between thirty and sixty. Additionally, international students enrol on a wide variety of courses including General English, Business English, English for Special Purposes, Exam preparation courses, Teen camps, Language and Culture, and Teacher Training courses. Other courses at MQF levels, 5, 6, 7, and 8 include, for instance, health-care management, elderly care and nursing, leadership, tourism, and courses in engineering, humanities, sciences, medicine, and health sciences among others.

Moreover, the respondents' perceived reasons for which international students enrol on the courses include the reputation of the educational institution, accreditations which denote quality courses, and a wide selection of programmes offered which lead to an internationally recognised qualification. Furthermore, the findings seem to indicate that many third-country nationals study

in Malta to obtain an internationally recognised qualification with prospects of working in Malta or another country. Additionally, positive word of mouth from family and friends, recommendations from agents, reviews of past students, and the fact that English is often the language of instruction in educational institutions, also influence international students' choices to study in Malta.

Perspectives on the meaning of marketing (T2)

Respondents discussed the importance of marketing in recruiting international students to study in Malta. Having a dedicated team that works towards the aims and objectives of the educational institution and maintaining strong business relationships with international partners who market the courses on behalf of the educational institutions in Malta, are considered to be crucial aspects. Additionally, international advertising and promotion of the courses, understanding the target markets' needs, and developing courses to meet those needs are among other important marketing elements. Moreover, quality delivery of services is a key factor in increasing the chances of returning clients. The findings also indicate challenges that educational institutions face due to global competition. Firstly, promoting Malta as a country, at times to markets that have very limited knowledge or none at all about Malta, and, secondly, convincing international students of the quality courses offered in Malta.

Promotional channels used for international education marketing (T3)

Participants mentioned various promotional channels that are used in their marketing efforts. These include the institution's website, social media platforms and online channels which showcase student life, special events, virtual tours of the institution's premises, and student testimonials. Additionally, having a network of agents and maintaining regular contact with them, is effective in promoting and recruiting international students to Malta. A recurring topic in the findings was the crucial role of staff members in promotional efforts, for instance, having staff members who are of the same nationality or can speak in the mother tongue of agents and students of the targeted countries enhances marketing efforts by creating a strong cultural bond. Moreover, academic and non-academic staff working at the educational institution also act as promotional channels, as the quality service offered and their interactions with international students can encourage them to recommend courses to their family and friends abroad.

Course pricing strategies (T4)

The findings indicated that EFL schools and HIEs believe course fees are fair and reflect course quality. With regards to international competition, several participants remarked that similar courses cost more in the UK, the USA, and Canada. Additionally, course fees in Malta are competitive with other European countries, Australia, and New Zealand. However, Cyprus was mentioned as a strong competitor for EFL programmes. Contrastingly, although prices are generally competitive, in view of tertiary education, some areas of study may be offered at lower prices in Eastern European countries. The findings seemed to indicate that while course fees are affordable for European students, they are less so for third-country nationals due to the currency exchange and differences in costs of living. In an effort to address this, institutions mentioned using strategies that aim to provide financial assistance to international students, for instance, instalment payment options, promotional offers, and fee waivers through scholarships.

Attractiveness of premises and location (T5)

The study revealed that factors that attract international students to Malta include the premises and the location of educational institutions, and Malta as a country. Factors such as well-equipped physical spaces, comfortable classrooms, amenities, a pleasant location with adequate accom-

modation options, and good public transport connections may influence a student's choice of an educational institution over another and contribute to the overall study experience.

Findings also seemed to indicate that Malta's attractiveness as a study destination is related to its Mediterranean lifestyle, climate, friendliness of people, safety, small size, lower cost of living in comparison to other countries, such as the UK and Ireland, and affordable accommodation. Additionally, being an English-speaking country, forming part of the EU, and its proximity and connectivity to other European countries seem appealing to international students as it allows them to go on mini holidays abroad while in Malta. Furthermore, part-time work opportunities and Malta's link to the tourism industry also attract students to the country. Moreover, some students, for instance, Indian nationals, may perceive Malta as a step towards building a career in Europe by acquiring internationally recognised qualifications and working within the Schengen zone. Nevertheless, findings indicated that one of the challenges for educational institutions in some target countries is that students would not have heard about Malta. Contrastingly, the findings highlighted some concerns, namely, the inconveniences caused by increased traffic and the construction industry, which may taint Malta's traditional character and charm, and the increase in accommodation rates over the past years which may cause Malta to lose its competitive edge to competitor countries.

People involved in marketing (T6)

The findings seem to indicate that whilst marketing teams may be responsible for recruiting international students, they are often not solely responsible for it. Academic and administrative staff play a crucial role in marketing efforts as their interpersonal approach when in contact with international students constitutes an integral marketing aspect. Moreover, during recruitment and the enrolment stages, the assistance provided to international students is critical to the marketing efforts because if support is not offered promptly, the risk is that the international student will go elsewhere or even choose another country over Malta.

Support offered to international students (T7)

The respondents discussed the support provided by educational institutions to international students from the enrolment stage and throughout their study stay in Malta. The importance of handling international students' enquiries and the

provision of adequate information about their course and journey to Malta was emphasised. At times, this is accomplished by hosting informative webinars. Alternatively, initial information is provided by a partner agent who acts as the bridge between the international student and the educational institution in Malta, or by employees who work in the target country and support international students before travelling. Additionally, findings indicated that educational institutions offer academic support and assistance with cultural adjustment and accommodation. Some institutions offer counselling and wellness services, 24/7 emergency contact numbers and, in the case of minors, extra care and constant supervision.

Views on collaboration between EFL schools and HEIs (T8)

The findings seemed to reveal that EFL schools have different levels of interest in collaborating with HEIs. Some of the respondents mentioned

that offering English language courses to students studying in HEIs would be of benefit to EFL schools because it would increase their enrollments. Nevertheless, others seemed to believe that most HEIs already provide their own English language programmes. Contrastingly, given the large numbers of EFL students in Malta, some respondents from EFL schools seemed to believe that HEIs would benefit more than EFL schools from such collaborations.

The majority of the respondents from HEIs perceived collaborations with EFL schools as beneficial as this would allow international students to study English while following a course at a higher education level. Additionally, HEIs could also develop new markets consisting of students from EFL schools who seek tertiary education in Malta. Finally, the findings indicated concerns that the high level of competition may, in time, hinder collaboration between educational institutions.

Discussion

In the following sections, the eight themes are discussed in relation to the main research question and the two secondary ones. Table 5 lists the

themes, the research questions they address, and the related theories.

RQ	Identified theme	Related theory
RQ1 RQ2	1. International students who travel to study in Malta 2. Perspectives on the meaning of marketing 3. Promotional channels used for international education marketing 4. Course pricing strategies 5. Attractiveness of the location of the educational institutions 6. People involved in marketing 7. Support offered to international students.	<ul style="list-style-type: none"> ▫ Push and pull factors that attract international students to a particular country. ▫ The four characteristics of services, marketing ▫ The 7Ps of educational marketing
RQ3	8. Collaboration between EFL schools and HEIs	

Table 2: Themes, the research questions and related theory

Marketing professionals describe the marketing of their programmes

In relation to RQ1, the findings seemed to indicate three predominant perspectives on the meaning of marketing, namely, the importance of having the right staff, having sound business relations with partner agents, and adopting good communication strategies.

The first perspective emphasises the importance of the People strategy in the 7Ps of educational marketing and suggests that all the staff working

at educational institutions are considered to have a marketing role in view of the services that are offered to international students. This is consistent with the argument stating that the effective marketing of educational programmes necessitates that the people involved in the programme possess the proper qualifications and training to deliver the content, and are able to effectively communicate the value and benefits of the programme to enrolled and potential students (Kotler et al., 2015; Jones, 2018).

Moreover, aligned with Mainardes et al. (2012), having the right people working in educational institutions is crucial because the interpersonal interaction of a staff member with a student becomes an element of the services being offered.

The second perspective on marketing obtained from both EFL schools and HEIs emphasised the importance of having good business relations with partner agents abroad who market and promote, in their mother tongues, the courses in the home countries of the international students, on behalf of the educational institutions in Malta. In line with Kotler and Keller (2016), who described the goal of marketing as “meeting needs profitably”, the findings suggested that educational institutions learn about the needs of international students in target markets through agents and, in turn, offer courses to meet those needs.

Thirdly, in line with Elken (2019) who stated that marketing efforts are typically linked to an increasingly globalised and competitive industry, marketing entails promoting the educational institution and the uniqueness of the courses internationally.

This perspective highlighted the importance of Promotion, another crucial element in the 7Ps described by Belch and Belch (2021), as the coordination of marketing efforts to provide information about, promote, and sell the services offered.

High-quality courses

The findings described an array of courses offered to international students by EFL schools and HEIs in Malta. As findings indicated, the various elements that seem to make the courses attractive to international students include the high quality confirmed by accreditation bodies, the large variety, and the flexibility to be tailor-made to specific needs. Additionally, courses that are part of the Erasmus+ programmes, industry-related courses that serve as a gateway for employment, and MQF-accredited courses all seem to attract international students. Such qualities are elements of the Programme strategy that EFL schools and HEIs use to attract and recruit international students, which are in line with the pull factors that attract international students to study in a particular country (OECD, 2019). Contrastingly, given the international and local competition, findings depicted the preoccupation that agents would choose one educational institution over another based, not only on the quality of the courses, but also on the highest commission

offered.

Price of courses

The findings indicated that the pricing of courses is another important element in the marketing efforts. Most education institutions perceive their course fees to be competitive when compared to competitor countries. Additionally, in line with Nicolescu (2009), who stated that students and their families frequently consider pricing as an indicator of the quality of the tuition and services they will receive, findings indicate that some educational institutions have high course fees with no adverse effect on the number of enrolments. The affordability of courses to different world markets is also a concern, with Malta’s fees being less affordable for third-country nationals. Findings seemed to show that educational institutions use pricing strategies to make the courses more affordable for such markets. In line with Altbach (2004), these marketing efforts are pull factors that draw students to a particular country. Promotional pricing strategies are used by educational institutions to offer a temporary incentive to encourage their target audience to purchase their services (Kotler & Keller, 2016).

Promotional tools

The findings indicated that educational institutions in Malta use a combination of communication channels to market their courses internationally. Firstly, consistent with Kotler et al. (2019), who highlighted the importance of digital channels to provide information for targeted audiences, educational institutions use several digital marketing tools to interact with prospective international students, namely, websites, social media platforms, mobile apps, blogs, paid digital advertising, email marketing, and SEO. Secondly, participation in education fairs abroad provides educational institutions with opportunities for face-to-face meetings with prospective agents and international students. Thirdly, positive word of mouth is an effective promotional tool for international students as they recommend courses to family and friends abroad. Moreover, in line with Belch & Belch (2021), who stated that the widespread usage of social media had changed traditional word-of-mouth into viral word-of-mouth as communications spread rapidly across different platforms, students are likely to share their experiences in Malta with their friends on their social media channels. Lastly, having a network of agents in the target countries is considered to be a vital tool for recruiting international students, despite the high commission costs.

Place of the educational institution

In accordance with Ivy (2008), the findings showed that educational institutions give importance to the physical environment where courses are held, as well as Malta as a study destination. In line with the literature, findings indicate that educational institutions consider that being part of the EU, having competitive prices when compared to competing countries (Wulz & Rainer, 2015), and having English as the language of instruction in HEIs in Malta (Rivza & Teichler, 2007) are factors that attract international students. Additionally, the mild weather (Mazzarol, Kemp & Savery, 1997), the friendliness of its people and the Mediterranean lifestyle, being considered a safe country (Wulz & Rainer, 2015), and the employment opportunities for students (Mazzarol, Kemp & Savery, 1997) are among other attractive factors. Contrastingly, concerns about the increasing traffic in Malta and the inconveniences caused by the construction industry could adversely affect international students' stay in Malta.

Support offered to international students

The final aspect that emerged from the findings in relation to the marketing efforts was the support offered to international students. This aspect aligns with Starck & Zadeh (2013), who explained that the element of Process includes all the administrative and operative processes, which, among others, relate to student enquiries, enrolment and registration processes, progress, and certification. Additionally, findings suggested that the support offered during students' stay in Malta includes help with accommodation-related matters and adjustment to a new culture, support related to social and emotional well-being, and visa and residence permit processes. Moreover, in accordance with Kotler et al. (2019), the constant supervision given to minors and the aca-

demical support offered to their international students during their study in Malta, seem to reflect the educational institutions' dedication to helping international students succeed academically.

Similarities and differences in marketing efforts

In the process of analysing the findings, the researcher identified several similarities and fewer differences to varying degrees between the marketing efforts of EFL schools, state-owned and private HEIs. The identified similarities and differences are linked to the students' ages and nationalities, the courses offered, promotional channels, and Malta as a study destination.

Differences in ages and nationalities

The study indicated that international students in Malta fall within a wide age range. EFL schools attract young students, including children and teenagers, as well as adults, while HEIs primarily attract adults. The age range of the target students influences marketing efforts and services offered by institutions. For instance, marketing efforts of EFL schools would need to reach the parents of the youngsters, apart from the students themselves, to greater extents than in the case of HEIs. In view of nationalities, the findings indicate that international students travel to Malta from numerous countries worldwide. The countries mentioned by the participants are represented in a Venn diagram in Figure 1, presenting the home countries of the students in EFL schools, state-owned HEIs and private HEIs. Those nations mentioned by more than one type of educational institution were placed in the intersections between the circles.

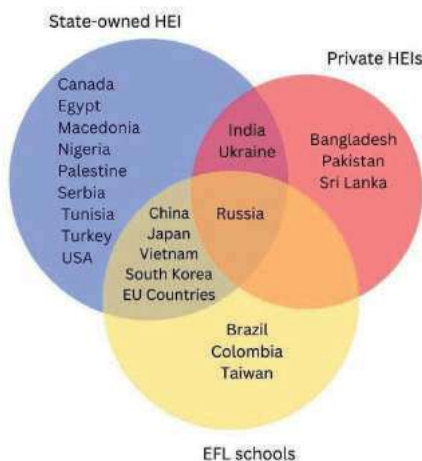


Figure 1: Home countries of students in EFL schools, state-owned and private HEIs

The findings seemed to indicate that EFL schools and state-owned HEIs attract international students from a wider range of countries than private HEIs, which focus on countries such as India, Bangladesh, Pakistan, and Sri Lanka, where international students may want to come to Malta for two reasons: (1) to advance academically, and (2) due to work prospects in Malta and EU countries. This ties in with Altbach (2004), who lists the aspiration for better job prospects as a key factor in attracting international students to study abroad.

High-quality courses, a common factor

Although the nature of the courses offered by EFL schools and HEIs is different, the findings indicated the importance given to the high quality of the courses offered as a common factor. EFL schools focus on having various accreditations for

quality assurance, while HEIs adhere to the MQF regulations for internationally recognised qualifications.

In concurrence with Wulz & Rainer (2015), findings suggested that quality standards act as pull factors that attract international students to Malta.

Similarities and differences in promotional channels

The findings related to the promotional elements described by the respondents are presented in Table 6, together with the matching elements from the Promotional Mix (Belch & Belch, 2021), specifically, digital and internet marketing, personal selling, advertising, sales promotion, and direct marketing.

Promotional Elements	Promotional Mix	Marketing	EFL	State HEIs	Private HEIs
Website	Digital/Internet		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Social media platforms	Digital/Internet		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Personal selling	Personal selling		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Word of mouth	Advertising		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Partner agents abroad	Personal selling		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Email	Direct marketing		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Paid digital advertising	Advertising		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Students' testimonials	Advertising		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
The staff themselves	Direct marketing		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Education fairs	Personal selling		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Travel to meet agents	Personal selling		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
SEO	Digital/Internet		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Virtual tour of schools	Digital/Internet		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	-
Short video clips	Digital/Internet		<input checked="" type="checkbox"/>	-	-
Mobile apps	Digital/Internet		<input checked="" type="checkbox"/>	-	<input checked="" type="checkbox"/>
Promotional offers	Sales Promotion		<input checked="" type="checkbox"/>	-	<input checked="" type="checkbox"/>
Ability to speak foreign languages	Personal selling		<input checked="" type="checkbox"/>	-	<input checked="" type="checkbox"/>
Printed leaflets	Advertising		-	-	<input checked="" type="checkbox"/>
Blog	Digital/Internet		-	-	<input checked="" type="checkbox"/>
Banners	Advertising		-	-	<input checked="" type="checkbox"/>
Scholarships	Sales Promotion		-	<input checked="" type="checkbox"/>	-

Table 3: Promotional elements used by EFL schools and HEIs

The findings indicated that the promotion elements used by EFL schools, state-owned HEIs and Private HEIs are broadly similar rather than different. Out of the twenty-one elements presented in the findings, seventeen elements are commonly used in marketing efforts by EFL schools and HEIs. The findings indicate that four elements, namely, scholarships, printed leaflets, banners, and blogs were only referred to by HEIs.

Malta's attractiveness to international students: similarities and differences

The findings showed many similarities in how EFL schools and HEIs explained the attractiveness of Malta as an education destination. These include Malta as an English-speaking country with mild weather and sunshine, a hub to other European destinations, a safe place, and a lower cost of living in comparison to other competitor countries such as the UK and Ireland. Contrastingly, views related to work opportunities that Malta offers to international students and Malta serving as a steppingstone for possible careers in other EU countries, only emerged from findings related to HEIs.

Views on collaboration between EFL schools and HEIs

In view of RQ3 which refers to the collaboration in marketing efforts between EFL schools and HEIs from a marketing perspective, findings seemed to indicate that most of the EFL schools and HEIs expressed an interest in collaboration and provided several ideas on how this can be achieved. While some respondents mentioned perceived benefits for their respective educational institutions, others expressed some reservations. Several EFL schools and HEIs mentioned the potential for collaboration in the form of a partnership whereby an EFL school would provide language courses for international students at HEIs when required, and EFL schools would benefit through an increased number of enrollments. The benefit for HEIs would be in offering English language tuition to international students who need to improve their language skills to complete their studies. Nevertheless, the findings indicated some uncertainty about the prospects of collaboration due to the competitive nature of the market.

Another idea on collaboration, presented in the findings, was to create and promote joint courses, for instance, a Business English course, delivered by an EFL school, and an accredited course in Management delivered by an HEI, which would be in line with the marketing concept of carefully

planning and designing courses that would benefit the target markets (Kotler & Keller, 2016). Additionally, the findings reflect the views of EFL schools, who consider a collaboration with HEIs as prestigious and of added value to their programmes which may positively influence a student's choice of an educational institution. Lastly, the findings highlighted Malta as an established destination in the global EFL industry, but not for higher education. Nevertheless, the findings highlighted the fact that Malta as a study destination is a common factor for EFL schools and HEIs alike, and collaboration in marketing could potentially increase Malta's global positioning as a destination for higher education and strengthen its place in the EFL global market.

Limitations and recommendations

One of the limitations of this study was the time frame in which it was conducted. More representative findings could be obtained from a longer study involving more educational institutions or by gathering the perspectives of international students studying in EFL schools and HEIs to explore what attracted them to Malta. The findings revealed the perspective of marketing Malta as an education destination for both EFL and higher education. However, this could require government entities to be on board. Therefore, a study involving educational institutions and the government ministries of Education and Tourism could provide more insight into marketing strategies for promoting Malta as an international education destination.

Conclusions

This research sought to explore the perspectives of EFL schools and HEIs on their marketing efforts to recruit international students to study in Malta. Three marketing perspectives were emphasised, namely, having the right team of staff, maintaining strong business relations with partner agents abroad, and using proper communication strategies to attract international students. Furthermore, the study looked at similarities and differences in the marketing efforts adopted by EFL schools and HEIs. Similarities exist in the promotional elements used, as well as the importance given to offering high-quality courses. Significant differences relate to the different age groups and nationalities of the international students targeted by EFL schools and HEIs. Other similarities relate to perspectives on Malta's attractiveness as an education destination, however, the work opportunities for international students in Malta or other EU countries once they obtain an MQF-accredited qualification were only highlighted by HEIs. Lastly, the study indicates that EFL schools and HEIs are interested in collaboration for mar-

keting purposes. The benefits of collaboration include tapping into new markets and promoting Malta as a global education destination. The fact that HEIs would possibly benefit more from collaboration than EFL schools was highlighted. Lastly, the findings present the idea of collaborating to promote Malta, both as an EFL destination and as a higher education destination. However, EFL schools, HEIs, and other significant stakeholders have to be on board for this goal to be achieved.

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