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# The Application of Management and Leadership Theory to Healthcare

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#### **Abstract**

The differences between the roles, functions and superiority of management and leadership is widely debated. Through exploration of their definitions and a literature review, both foundational and current management and leadership theories are presented. The healthcare context, including the pre-hospital environment presents many challenges and circumstances highlighting the need for and importance of management and leadership; including role ambiguity, dynamic environments and engaged employees. Through application of the theories within the literature review to the healthcare context challenges and complexities, it is recommended that McGregor's Theory Y, open systems management as well as shared and transformational leadership are used within the healthcare setting.

## Introduction

Effective management and leadership are essential for any organization to achieve its objectives and to overcome challenges (Mahmood, Basharat, & Bashir, 2012). These two concepts are complementary of one another, yet the terms are not interchangeable (Mahmood et al., 2012). Management focuses on the organisation of people through the functions of planning, directing, controlling and coordinating to ensure an organisation is effective and efficient in achieving its goals (Day & Leggat, 2018; Mahmood et al., 2012). Leadership is a "process whereby an individual influence's a group of individuals to achieve a common goal" (Day & Leggat, 2018, p. 17). A manager may or may not be a good leader and leadership requires no formal authority (Mahmood et al., 2012). These definitions highlight that management is a function whereas leadership is a relationship (Mahmood et al., 2012). Having a clear distinction between the two terms alongside knowledge and understanding of both management and leadership theories is important for individuals wishing to improve their own work place practices to become successful managers and leaders (Day & Leggat, 2018). The role of management and leadership within the healthcare setting is especially important as they are crucial in ensuring the provision of high-quality, accessible care and improved health outcomes (Day & Leggat, 2018). Theories of management and leadership are presented separately, however as discussed, they co-exist and therefore have notable similarities. These theories are then introduced to frequent management and leadership challenges within the healthcare context and more specifically the pre-hospital and paramedic setting with recommendations made for future aspiring managers and leaders to improve their skill.

#### **Management Theories**

There are a number of paradigm shifts evident in management theories. Theories first emerged around the late 1890's to early 1990's during the industrial revolution where engineers focused on increasing productivity (Kwok, 2014). Since then management theories have evolved to include practical application, a human focus and most recently adaptive, systems thinking.

Scientific management theories were first introduced by Frederick Taylor. Taylor described management as a science, where workers had specific and separate roles. Through the division of labor and specialization Taylor proposed that efficiency and productivity would be improved (Mahmood et al., 2012). He introduced four principles of management; (i) Develop the science for each element of the job and replace rule-of-thumb, meaning find the best method to get the task done. (ii) Scientifically select, train and develop each worker to do their job. (iii) Supervise employees to ensure that the work is being performed in accordance with the scientifically developed methods. (iiii) Task and responsibility should be divided equally between employees and managers, so that managers can apply scientific management principles to planning the work and the workers can focus on performing tasks (Day & Leggat, 2018; Khorasani, 2017; Mahmood et al., 2012). Taylors scientific approach to management was criticized by unions at the time as it was believed people were doing more work for less pay. Additionally, during the industrial revolution many employees feared if they were to work to efficiently there would be no work left (Mahmood et al., 2012).

Overall, the theory was critiqued for ignoring the human element (Day & Leggat, 2018).

Following on from Taylors scientific management theory, there was a shift in thinking to administrative and bureaucratic theories which were centered around the introduction of rules and discipline as well as hierarchy and structures within an organization (Kwok, 2014). The administrative management theory was developed by Henry Fayol in 1916 and focused on the primary functions of management, describing his theory as a collection of principles, rules, methods and procedures (Khorasani, 2017). He established six primary functions of management and fourteen principles. The six primary functions are; forecasting, planning, organizing, commanding, coordinating and monitoring (Mahmood et al., 2012). The bureaucratic theory has been cited as a subset of the administrative paradigm (Khorasani, 2017), whereas others discuss it as its own school of thought (Kwok, 2014; Mahmood et al., 2012). The pioneer of bureaucratic management theory was Max Weber. Weber's theory of bureaucracy focuses on organizational structure (Mahmood et al., 2012). Through his seven characteristics of bureaucratic management he advocated for the division of organizations into hierarchies and for the establishment of authority and control, where the worker should respect the manager and follow detailed rules and procedures (Mahmood et al., 2012). These theories are considered to be most effective in large organizations, where change is unlikely or predictable and coordination of a large number of employees is needed to deliver a standardized service or product (Kwok, 2014). They are critiqued for being slow to respond to external change and for having heavy administrative overheads, where employees are viewed as tools rather than resources (McNamara, 2009).

During the 1920's and 1930's a series of studies were conducted at the Hawthorne Works in Chicago. Whilst these studies have been ridiculed for their lack of rigor in research and study design, they are credited with identifying that psychological factors are an important variable in worker output (Day & Leggat, 2018). These studies created the 'Hawthorne Effect', the recognition of the need for consideration of the human element in management theories and thus a paradigm shift and the formation of behavior management theories emerged (Day & Leggat, 2018; Kwok, 2014). There are two key theorists, Abraham Maslow and Douglas McGregor. Maslow created 'Maslow's Hierarchy of needs', a theory founded in psychology and published in 1943 (Maslow, 1943). Maslow's hierarchy is depicted in a pyramid, at the bottom is physiological needs which includes the need for food, water and oxygen. The next level is safety needs, followed by need for love, affection and belongingness. Next is the need for esteem, including self-esteem and esteem a person gets from others. The last level in Maslow's pyramid is needs for self-actualization, which describes as a person being able to be and do what they were 'born to do'. Maslow states that one cannot climb the pyramid of needs until the aforementioned level has been satisfied (Upadhyaya, 2014). This theory has been linked to organizational culture and employee motivation and is useful in helping managers lead their employees to become self-actualized (Upadhyaya, 2014). In a similar nature, McGregor's dual theory, known as Theory x and Theory Y outlined a new role for managers (Sorensen Peter, 2011). Rather than commanding and controlling, managers should assist employees in reaching their full potential (Kopelman). His Theory Y believes that employees are (i) not inherently lazy, (ii) capable of selfdirection and self-control and (iii) capable of providing important ideas/suggestions that will improve organizational effectiveness (Kopelman). Theory X implies the exact opposite and aligns with the earlier scientific and administrative management theories (Kopelman). As organizations began to deal with rapidly changing environments, increased task complexity and increased technological sophistication, Theory Y was a welcomed approach to a more participative and consultative management style (Sorensen Peter, 2011). Whilst his theory is binominal in nature, suggestive of just one best way to manage, McGregor recognized that Theory Y would not be appropriate in all situations (Kopelman).

Advancing this recognition of situation variance, the systems and contingency management theories emerged. The systems theory suggests that an open system is responsive and adaptive to its external environment through attainment of information and feedback, whereas a closed system is less sensitive to the external environment (Davis, 2007). The systems approach is focused on all the interdependent factors within an organization such as individuals, attitudes, structure and motives and the relationship between them (Day & Leggat, 2018). A manager is tasked with creating synergy between these elements to ensure the organization is managed as whole, with emphasis on long term goals (Day & Leggat, 2018). However, systems thinking is not pragmatic enough to serve as a theoretical framework for the understanding and practice of management and this is where the contingency theory has evolved (Luthans & Stewart, 1977). This theory takes a complex, open systems perspective advocating that universality in management is unrealistic and not beneficial (Luthans & Stewart, 1977). A manager should respond to a situation with identification and consideration of the key contingencies in an organization. This theory is widely adopted in the healthcare sector and is said to have greater practical application than open systems thinking alone (Day & Leggat, 2018; Luthans & Stewart, 1977).

# **Leadership Theories**

Early leadership theories focused on characteristics of successful leaders before shifting the focus to the context of leadership and the role of the follower. A key theme throughout leadership theories is the individualistic focus and how an individual's actions relate to leadership (Bolden, Gosling, Marturano, & Dennison, 2003; Day & Leggat, 2018). The first theory of leadership is known as the Great Man theory, this was centered around the belief that an individual was born with qualities that meant they were destined to lead. The use of the work man was intentional as leadership was thought of a concept that was primarily male and military based (Bolden et al., 2003). Similarly, trait theories identified qualities associated with successful leadership. It was believed if these traits could be isolated, then people with these could be selected, trained and installed into leadership positions (Bolden et al., 2003). Yet, despite years of research no consensus or consistency on the traits could be established and theories moved on to concentrate on what leaders actually do instead of their qualities (Bolden et al., 2003).

Leadership theories had focused on the characteristics and behaviors of leaders, yet little attention had been given to what constituted effective leadership in different situations.

Similar to management theories, a contingency/situational theory emerged. The contingency theory is best explored through the Hersey-Blanchard Model of Leadership. This model proposed four types of leadership styles. The readiness or developmental level of an employee in relation to a specific task acted as the key situational variable used to determine which leadership style should be employed (Bolden et al., 2003). The four styles he discussed are; directing, this style is used when the follower has a low level of readiness and needs clear instruction. Coaching is where the leader encourages two-way communication, trying to develop the follower's confidence and readiness level. Supporting is best suited to a subordinated who no longer needs direction, this is a relationship of shared decision making. Finally, delegating is appropriate for a follower who is motivated and competent with a high level of readiness (Bolden et al., 2003). The latter half of the Hersey-Blanchard model demonstrates how leadership theories began to move beyond focusing on a frontal figure who wants to lead, to an approach where the leader wishes to serve followers and build a relationship. Servant leadership is centered around the leader-follower relationship, with the aim to build mutual trust and empower followers (Day & Leggat, 2018). It moves away from traditional power models and has emphasis on interdependence between the leader and follower. This type of leadership is considered to most successful in multidisciplinary teams (Day & Leggat, 2018). Similarly, the emergent leadership approach advocates for the leader's role to be dissociated from the organisational hierarchy. It suggests that through examination of relationships a leader will emerge within a group and won't be predefined by characteristics or a position of power (Bolden et al., 2003).

Transactional leadership also focuses on the relationship of the leader-follower, however is task-orientated with employee motivation achieved through reward for effort, such as financial renumeration (Avolio, Walumbwa, & Weber, 2009). The leader- follower enter into a contract, where improvements in efficiency and productivity are valued (Bolden et al., 2003). This type of leadership is effective in structured, stable environments where routine is valued, or in a crisis situation where deviation cannot be tolerated (Day & Leggat, 2018). Transformational leadership is often depicted alongside or against transactional leadership. Transformational leadership seeks to inspire commitment among a group to achieve a vision (Day & Leggat, 2018).

Leaders provide their followers with a sense of purpose and aim to motivate them to go beyond their own self-interests for the good of the group (Bolden et al., 2003). This sense of purpose is more than an exchange of reward for effort as seen in transactional leadership. Transformational leadership is effective in turbulent, dynamic work environments and has been linked to improving employee productivity, morale and engagement (Day & Leggat, 2018).

Despite these potential benefits of transformational leadership, it has been suggested that there are pseudo transformational leaders as opposed to authentic (Avolio et al., 2009). This led to the development of authentic leadership, a subset of transformational leadership differentiated by the leader's true motivations (Day & Leggat, 2018). There is general consensus that an authentic leader displays balanced processing, internal moral perspective, relational transparency and self-awareness (Avolio et al., 2009). Meaning, an authentic transformational leader is true to themselves and their own guiding values, they enact these values in everything they do and they practice self-reflection. An authentic leader is transparent in their actions and links them to their values and behaviours (Day & Leggat, 2018).

The final leadership theory discussed is shared leadership. This theory aligns with contingency theories as well as authentic, transformational theories. Shared leadership is defined as "a dynamic, interactive influence process among individuals in groups for which the objective is to lead one another to the achievement of group or organizational goals" (Avolio et al., 2009, p. 431). Shared leadership is characterized by serial emergence of official and unofficial leaders, through reciprocal influence leadership is shared and developed across a team's life span. Shared leadership works best when teams have a shared purpose and similar understanding of the purpose, supportive of one another to achieve goals and input from all member is valued and appreciated (Avolio et al., 2009).

## Management and Leadership in Healthcare

Management and leadership are seen throughout every function and relationship in any organization (Day & Leggat, 2018). The healthcare environment, including the prehospital phase presents a number of unique circumstances and challenges (Day & Leggat, 2018). Whilst hospital care does vary from pre-hospital care, there is a paucity of literature detailing specific pre-hospital management and leadership conditions and therefore comparisons and inferences between the two similar but different environments have been made.

Almost one third of all health service managers in Australia have a health professional background (Buchhorn & Shannon, 2014). Making the transition from healthcare professional to manager is not always easy, nor successful (Prideaux, 1993). However, a clinical background can provide strengths in regard to managing a health service. The concept of 'insider knowledge' and appreciation of 'how things work', provide managers with the opportunity to influence change and maximize team outcomes by drawing on previous organizational knowledge (Buchhorn & Shannon, 2014). Despite these benefits, many clinicians now managers struggle to renegotiate relationships and often have conflicting loyalties between old peers and other levels of management (Buchhorn & Shannon, 2014). Furthermore, many managers with clinical backgrounds state they find it very hard to let go of their previous role as a clinician and that there training which had been grounded in systematic, scientific knowledge was not suited to the political approach of planning, decision making and coordinating (Prideaux, 1993). Ill-defined roles and a lack of understanding about roles can have a negative impact on individual job satisfaction and thus organizational outcomes (Day & Leggat, 2018). Research indicates that a good health service provider does not naturally make a good health service manager (Buchhorn & Shannon, 2014). There is a recognized need for new managers to be supported by both colleagues and superiors and further academic training to improve the required skills and competencies that are essential for a manager and leader to be successful within healthcare (Buchhorn & Shannon, 2014).

In addition to healthcare managers facing ambiguity within their roles, the healthcare environment in which they try to manage and lead is dynamic, risky and operates with uncertainty and complexity (Day & Leggat, 2018; Mercer, Haddon, & Loughlin, 2018). Leaders and managers operating in this environment need skills to manage their organization and personal competencies to influence individuals and groups (Day & Leggat, 2018). The pre-hospital setting provides a unique insight into leadership and management as often due to the uncertainty and fluidity of a paramedic's response, formal managers or leaders are rarely present and paramedics are required to step into and enact leadership for the purpose of patient care (Mercer et al., 2018).

This idea of informal and shared leadership is unilateral and interdependent between peers but can also be transferred across multi-agencies taking a situational approach (Mercer et al., 2018). The pre-hospital setting is not without formality and structure but it is recognized that the context in which management and leadership is enacted requires managers behavior to be supportive of and develop these informal shared leadership practices (Mercer et al., 2018).

It is evident the role of the health service manager and the environment they in which they are required to lead presents numerous challenges and complexities. Despite these difficulties, effective management and leadership is key in fostering employee engagement (Lowe, 2012). A high level of engagement is a strategic goal for many organizations (Lowe, 2012). Engagement is most commonly considered through a psychological lens and is defined as a "positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (Schaufeli, Salanova, González-Romá, & Bakker, 2002, p. 74). If a manager or leader can instill these behaviors within an employee, they are more likely to contribute to organization effectiveness beyond their defined job role (Saratun, 2016). In addition to the definition of engagement; trust, the opportunity to make improvements to work and use skills, understanding of organization goals and transparent communication and commitment from managers have been identified as key engagement drivers and influencing factors (Lowe, 2012). Ambulance branches have been identified to have very low engagement scores (West & Dawson, 2012). It is crucial healthcare managers and leaders work to improve employee engagement within healthcare organizations as low employee engagement levels are linked to mortality, poor patient health outcomes and poor patient satisfaction (West & Dawson, 2012).

## Management and Leadership Theories Application to Healthcare

It has been highlighted that many managers and leaders working within the healthcare context will have come from a clinical background, face complexity and uncertainty within their role and organization and be challenged with implementing successful practices to ensure positive patient outcomes. It is therefore evident that knowledge of the different theories of management and leadership and understanding of how to apply these to work place practices and behaviors is essential in overcoming these barriers and is discussed below.

Many clinicians who find themselves in a management or leadership position speak of filling that position in a reactive sense due to lack of succession planning (Buchhorn & Shannon, 2014). Additionally, they struggled with receiving authority from a title that offered them little to no leverage when taking action (Prideaux, 1993). The belief that a title will supply you with the ability and power to manage fits within bureaucratic management thinking. The hierarchical and authoritative structure of bureaucratic thinking, as well as operating on rationality and scientific based decisions may be more familiar to a clinical professional, yet it does not suit the healthcare manager (Day & Leggat, 2018).

Instead McGregor's Theory Y is a more appropriate management theory that should be practically implemented amongst healthcare managers. Clinicians becoming managers are well situated within and are likely to have many traits that enable them to enact the three requirements of McGregor's Theory Y. Through acceptance of a management position, it is evident there is desire for career progression. This demonstrates they are inherently motivated and not lazy. Further, achieving status of a professional is likely to require self-direction and control. Their previous position means they are embedded within the organization and are therefore capable of providing important ideas through their lived experience and existing relationships. This ability to 'bridge the gap' between managers and service providers and build unity within the team is considered a strength in enabling effective management (Buchhorn & Shannon, 2014). As discussed, McGregor's Theory Y management is best situated within complex, changing environments and supports the practice of open systems management (Sorensen Peter, 2011). Within both McGregor's Theory Y and more evidently the open systems management theory, responsiveness to the external environment is crucial (Davis, 2007). Being aware of your environment and how to best utilize it to gain support and assistance from those around through networking and shared, lateral influencing can aid in successful management (Avolio et al., 2009; Day & Leggat, 2018). This shared management and leadership moves away from the scientific theory approach of specialization. Through collaboration, selfconfidence can be developed and can aid in acknowledgement of one's own limitations, characteristics reflective of an authentic leader (Day & Leggat, 2018).

Every healthcare organization has a formal organizational chart that delineates responsibilities, however, for paramedics how work is actually accomplished follows unstructured paths guided by informal leaders (Day & Leggat, 2018; Mercer et al., 2018). Paramedics, through informal leadership adopt and enact the shared leadership theory and open systems management. Both of these theories are effective and appropriate in meeting the needs of the fluid environment. Managers should recognize that all paramedics have the ability to be leaders depending on the context, however, leadership is not viewed as a rotating role where turns are taken; nor is there disregard for formal leadership (Mercer et al., 2018). Instead, by applying shared leadership practices paramedics argue they can capitalize on individual strengths and maximize patient outcomes (Mercer et al., 2018). Paramedics often work in teams or with a partner, yet the emergence of a leader within a group is not defined by their qualification level, instead leadership roles are shifted based on urgency and observable skills (Mercer et al., 2018). Paramedics advocate for mutual partnership and see leadership as collective responsibility which aligns well with shared leadership principles (Bolden et al., 2003; Mercer et al., 2018). When interviewed paramedics consider any individual with the ability to influence, motivate and communicate as a leader. They discuss how an individual can create a vision and motivate others to fulfil that vision whether it be within their authority structure or not (Mercer et al., 2018). This language and perspective are reflective of the definition of leadership, as the ability to influence as opposed to the functional characteristics of management (Day & Leggat, 2018). Pre-hospital management literature is scarce, however through discussion of the environmental aspects of the prehospital setting and management theories it is hard to argue against the use of an open systems or contingency management theory. The ability to step in and out of roles and respect to the environmental contingencies appears to be most beneficial to paramedics and ultimately their patients (Mercer et al., 2018). Despite this strong evidence, paramedics can be seen to work in 'crisis' situations. Transactional and top down hierarchical leadership models have been advocated when in crisis mode (Avolio et al., 2009; Day & Leggat, 2018). However, the absence of a formal manager in every instance within the dynamic pre-hospital environment rebuts against this and questions the effectiveness of focusing on a singular leadership theory (Mercer et al., 2018).

Managers want to know how to get the best out of their employees. Job satisfaction, organizational commitment and staff wellbeing are predictors of organizational effectiveness and employee engagement (West & Dawson, 2012). To ensure employee engagement leaders should adopt transformational and authentic leadership approaches. These approaches prioritize trust, which has been cited as the most influential factor and number one driver of engagement (Lowe, 2012; Saratun, 2016). Further, through authentic leadership, ethical and value driven actions are applied allowing for trust to be developed (Day & Leggat, 2018). Additionally, transformational leadership seeks to motivate followers and create a shared vision for the future which is reflected in the vigor element of the engagement definition discussed earlier (West & Dawson, 2012). Similarly, within transformational leadership the follower acts without the need for formal reward and recognition in the same manner as they would under transactional leadership. This type of behavior reflects dedication which is another key construct of the engagement definition (West & Dawson, 2012). Finally, authentic transformational leadership has the ability to achieve a level of performance that is considered a success (Day & Leggat, 2018). Success can benefit the individual in feelings of engagement and job satisfaction (Day & Leggat, 2018) and benefit the organization and wider community through improved patient care and reduced poor health outcomes (West & Dawson, 2012).

## Conclusion

There is breadth of literature discussing the different management and leadership theories. Management theories have been discussed with regard to these paradigm shifts of thinking from scientific, to bureaucratic, human behavior and most recently open systems and contingency approaches. Leadership theories follow a similar pathway, focused on individual characteristics and traits that were actively sought after to identify a leader. Now, leadership theories focus on the relationship between the leader and follower and ways to influence and enhance the follower to not only succeed, but excel. Through discussion of management and leadership in the healthcare setting, including the pre-hospital environment, the challenges faced such as role ambiguity, dynamic environments, as well as the need for successful management and leadership to ensure employee engagement have been highlighted. It is now evident that within the healthcare sector, future managers and leaders are recommended to employ McGregor's Theory Y and open systems management theories and shared, authentic transformational leadership approaches to ensure success for themselves, their organization and their patients.

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