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**Toward a Universalistic Behavioural Model of Perceived Managerial and Leadership Effectiveness for the Health Services Sector**

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## Abstract

The crucial importance of developing strong, effective medical, clinical, and administrative managers and leaders at all levels within healthcare organizations has been well highlighted in the literature. However, much extant management and leadership development (MLD) provision for healthcare professionals has been the subject of considerable criticism. Furthermore, the need for explicit training programmes for physician leaders, nurse managers, and other managers/leaders within the health services sector has increasingly been recognized around the globe. Within this context, our multiple cross-case/cross-nation comparative study responds to numerous calls for clarification regarding the specific managerial (manager/leader) behaviours expected of physicians, nurses, and other healthcare professionals who act in management/leadership roles. Our two-fold aim has been to: i) identify similarities and differences between the findings of five past qualitative critical incident studies of effective and ineffective managerial behaviour observed within British, Egyptian, Mexican, and Romanian public hospitals, respectively, and ii) if possible deduce from the identified commonalities a healthcare-related behavioural model of perceived managerial and leadership effectiveness. Adopting a philosophical stance informed by *pragmatism, epistemological instrumentalism, and abduction*, we used realist qualitative analytic methods to code and classify into a maximum number of discrete behavioural categories the empirical source data obtained from the five previous studies. We found high degrees of empirical generalization which resulted in the identification of five positive (*effective*) and 4 negative (*ineffective*) behavioural dimensions (BDs) derived from 14 positive and 9 of 17 negative deduced behavioural categories (BCs). These BDs and BCs are expressed in the form of an emergent two-factor *universalistic behavioural model of perceived managerial and leadership effectiveness*. We suggest the model could be used to critically evaluate the relevance and appropriateness of existing training provision for physician leaders, nurse managers, and other healthcare managers/leaders in public hospitals, or to inform/shape the design of new explicit training programmes informed and shaped by healthcare-specific management research, as called for in the literature. Our findings lend empirical support for 19 of the 80 competencies constituting the International Hospital Federation's IHF Global Competency Directory (GCD) published in 2015. However, significantly none of our derived BDs and underpinning BCs indicative of 'supporting', 'motivating' and 'showing care for the personal well-being of staff' behaviours overlap with any of the GCD competencies.

**Keywords:** Managerial and leadership effectiveness; cross-case/cross-nation comparative analysis, universalistic behavioural model; perceptions; health services sector

Toward a Universalistic Behavioural Model of Perceived Managerial and Leadership  
Effectiveness for the Health Services Sector

**Introduction**

There is a growing body of evidence that effective leadership and effective management are important to the success of healthcare organizations, with various contemporary writers highlighting the need for strong effective medical, clinical, and administrative leadership at all levels of healthcare management regardless of the organizational setting (1-6). Developing more effective managers/leaders is of crucial importance due to the demands, complexities, and responsibilities of modern healthcare organizations which are too important to be left to “accidental leaders” (7). As other recent literature suggests, there is a lack of depth to the managerial skills and breadth of leadership styles of many physician leaders whose most common style is that of the “autocrat” which does not help guiding a team to excellence (8); whilst in the field of nursing the leadership attributes and behavioural competencies characterizing effective nurse managers (leaders) are said to be critical for effective nursing management (9-10). Yet in the United States of America (USA), prior to 2009, little attention had been given to the issue of leadership-related competencies when training physicians, although a few medical schools had begun offering physician-leadership programmes (11). Likewise in Canada, few graduate medical education programmes had provided training explicitly designed for developing effective physician leaders (11). Furthermore, according to Mianda and Voce (13), both in the USA and in other high-income countries (HICs) there has been a paucity of scholarly attention given to the leadership development [and management development] of physicians, nurses, and other healthcare professionals. According to these writers, only three relevant studies were conducted prior to 2009 (Australia: n=2; Belgium: n=1), and just 21 were carried out between 2009 and 2017 (Australia: n=4; Ireland: n=4; Switzerland: n=1; United Kingdom (UK): n=9; USA: n=3).

However, Hernandez et al (1) have drawn attention to another pre-2009 study carried out in the UK (see 14) and to a more contemporary study conducted in the Netherlands (see 15).

Literature suggests that much of the extant management and leadership development (MLD) training provision for healthcare professionals has been the subject of considerable criticism; and that the need for explicit healthcare training programmes for physician leaders, nurse managers, and other medical, clinical, and administrative managers within the health services sector is increasingly being recognized around the globe (2, 13, 16, 17). For example, Daly, Jackson, Mannix, Davidson and Hutchinson (18) lament from an Australian perspective that “a standard definition of what defines effective clinical leadership remains elusive”, that the “theory of clinical leadership is in an early stage of development”, and in healthcare “there is very limited empirical support for specific approaches to enacting effective models” (pp.77-78).

Notwithstanding the development of competency models by at least eight research teams in USA healthcare organizations (see 1), and despite increasing awareness of the importance of leadership, Hargett, Doty, Hauck, et al. (19) claim that: i) understanding of the competencies of effective leadership remains limited, ii) leadership development programmes for healthcare professionals tend to be based on business leadership models which lack emphasis on [the] subtle aspects unique to healthcare leadership, iii) few explicit healthcare leadership models exist; and iv) none of the models being used in undergraduate and postgraduate medical education programmes at various universities in the USA seem to facilitate effective leadership learning.

Similarly, within the UK context, McDonald (20) complains that leadership development programmes in the healthcare sector vary widely; often lack a theoretical base; and many lack a sense of how they fit with individual or organizational goals. Furthermore, West and West (21), noting that off-the-shelf management/leadership-related behavioural competency frameworks are used to inform MLD programmes in the British National Health Service (NHS), complain that despite thousands of publications on the topic of leadership

“much of what is written about leadership development in the NHS is based on fads and fashions rather than on theory-driven evidence”, and that “relatively little research [has been] conducted to a high academic standard” (p.1). This might explain why Mianda and Voce (13) who were seeking to identify a healthcare-*specific* model to inform clinical leadership development interventions among physicians, nurses, and other healthcare professionals in hospital settings in low and middle-income countries (LMICs) such as South Africa, found no relevant models deduced from management/leadership research conducted in the health services sector of any HIC. They concluded: i) there was a need for research to identify a holistic conceptualization of frontline clinical leadership in LMIC settings with a focus both on the skills and competencies required to support optimal clinical care; and ii) any resulting findings should then be used to inform and shape clinical leadership development programmes in these countries. Their conclusion lends support for our focus on both high and low/middle income countries in our research.

The dearth of high-quality contemporary healthcare-specific managerial behaviour research is a significant cause of concern, particularly bearing in mind many MLD programmes designed to achieve excellence in healthcare organizations fail due to the lack of engagement of clinical and medical staff and their reluctance to change (3). Such concern is echoed in Spurgeon et al.’s (5) assertion that enhanced levels of medical engagement are required to improve organizational performance, and that medical leadership is the required mechanism to achieve greater engagement. This assertion lends support to Storey and Holti’s (22) view that a clarification of the managerial behaviours expected of physicians, nurses, and other healthcare professionals who act in management/leadership roles is required. Clarification is essential for ensuring the relevance and effectiveness of physician and nurse development programmes, and for ensuring the efficacy of the various behavioural competency frameworks and multi-score (360 degree) feedback questionnaires used to assess

the behavioural effectiveness of managers and leaders in healthcare organizations (21, 23). Furthermore, as most of the behavioural competency frameworks used to inform the design of MLD programmes for healthcare professionals in the NHS are based on theories and models derived from management/leadership research conducted in non-healthcare settings, there have been numerous calls for evidence-based approaches using ‘best evidence’ derived from empirical research carried out in healthcare-specific contexts. (6, 24)

Our study is a response to these various calls for clarification of the managerial and leadership behaviours expected of managers/leaders within healthcare organizations. It compares the findings of five qualitative critical incident technique (CIT) studies of manifested managerial behaviour observed and perceived as effective or ineffective by managerial staff (managers/leaders) and non-managerial employees within public hospitals in Egypt, Mexico, Romania, and the UK, respectively. The outcome has been an emergent healthcare-specific *universalistic behavioural model of perceived managerial and leadership effectiveness*.

### **Literature Review**

Within healthcare organizations, the terms ‘management’ and ‘leadership’ are blurred and tend to be used interchangeably (5, 25). Consequently, as for the past studies from which we have obtained our empirical source data, the use in this paper of the term ‘managerial behaviour’ refers to both ‘manager behaviour’ and ‘leader behaviour’. Furthermore, the word leadership in the term *perceived managerial and leadership effectiveness* refers to the ‘supervisory leadership’ performed by designated managers/leaders at all levels. Thus, our use of the word ‘leadership’ includes what is understood within healthcare organizations by the terms ‘medical leadership’, ‘clinical leadership’, and ‘managerial leadership’ as performed by physician leaders, nurse managers, and/or other healthcare professionals in managerial roles at different levels of the management hierarchy-whether designated as a manager or a leader. However, it excludes the ‘strategic leadership’ additionally performed

by executive leaders and top managers. Thus, the subject focus of our study is consistent with the broad range of managers and leaders for whom the US-based National Center for Healthcare Leadership (NCHL) developed its health leadership competency model (HLCM) for use in healthcare management and leadership roles performed in nursing and medicine (NCHL,26).

### ***Medical and Clinical Management/Leadership in the Health Services Sector***

From a North American perspective, few manager behaviour or leader behaviour studies were carried out within healthcare organizations during the 1980s and 1990s (27).

Furthermore, few have been carried out during the past two decades as indicated by our recent literature searches. We have found just four North American studies that explored specifically effective physician leader behaviour, and none that specifically explored effective nurse manager behaviour. McKenna, Gartland and Pugno (28) surveyed the perceptions held by 110 physician leaders, physician educators, and medical students in Kansas City, Missouri, regarding the extent to which nine behavioural competencies are important for effective physician leadership. Taylor, Taylor and Stoller (29) carried out a structured interview-based exploratory study of aspiring and established physician leaders within the Cleveland Clinic Lerner College of Medicine, Cleveland, Ohio, from which they identified three common recurring themes of requisite qualities and skills, namely: knowledge, emotional intelligence, and vision. Hopkins, O'Neill and Stoller (3) explored effective physician leadership by conducting 53 critical incident interviews with 28 physicians identified as emerging leaders, also at the Cleveland Clinic, Cleveland, Ohio, and identified eight predominant leadership competencies. At the Duke University School of Medicine, Durham, North Carolina, Hargett et al. (19) identified six broad healthcare leadership competencies by conducting three focus groups involving a total of 19 clinical faculty members in administrative or leadership roles. As no attempts were made to



generalize the results of any of these studies to other specific healthcare settings, the findings appear to be *context-/organization-specific*. As Frich et al. (25) observe, there is a lack of a common (generalized) physician leadership development competency framework within North America which, they claim, presents a challenge in the healthcare field. Similarly, we have found no significant contemporary managerial behaviour studies carried out within healthcare organizations in the UK, other than that of Alimo-Metcalfe and Alban-Metcalfe (30) who focused their ‘repertory-grid’ study on ‘transformational leadership’ performed by top managers within the British National Health Service (NHS), and two emic replication critical incident managerial behaviour studies conducted by Author 1 with various co-researchers (see Appendix 1).

Regarding nursing management within other HICs, and in LMICs, we have identified only three contemporary empirical studies that specifically explored the issue of what behaviourally distinguishes effective from ineffective nurse managers/leaders. Within medical centres and regional/district hospitals in Taiwan, Li, Jen, Ing, et al. (31) identified 10 critical skills (competencies) required by nurse managers to accomplish effectively what was perceived to be their critical managerial activities. In the health and social services sector of Ireland, McCarthy and Fitzpatrick (32) conducted a study to identify and define the competencies required for effective nursing management using role analysis, individual interviews, and focus group workshops. More than 300 nurse managers plus 80 other healthcare professionals, managers, and service colleagues were involved. These researchers identified seven generic competencies relevant to nurse managers and 13 additional level-specific competencies relevant to directors (n=5), middle managers (n=5), and front-line managers (n=3). In the New Zealand healthcare sector, Hughes, Carryer, Boldy et al. (9) explored the perceptions of a sample of nurse managers (n=149). Using a pre-coded survey instrument that was developed in the early 1990s, they identified 14 attributes considered

most important to achieve managerial effectiveness. A comparison by us of these three sets of Taiwanese, Irish, and Kiwi findings conducted at a semantic level of analysis indicates a limited degree of convergence. Two of the 10 critical skills identified in Taiwan (*creativity/innovation; planning and organizing*) appear convergent in meaning with 1 of the 7 competencies identified in Ireland (*initiation and innovation*) and with 2 of the 15 attributes identified in New Zealand (*planning and evaluation; organizing*), respectively. Additionally, two other competencies identified in Ireland (*evidence-based decision-making; relationship building*) are convergent with two other attributes identified in New Zealand (*decision-making; interpersonal relations*), respectively. Overall, of the combined number of ‘critical skills’, ‘competencies’ and ‘attributes’ identified by these three studies, 28.13% (n=9) appear to be *context/nation-general* and 71.87% *context/nation-specific*. This finding suggests there is a lack in HICs and LMICs of a comprehensive, generalized behavioural competency framework derived from empirical healthcare-*specific* managerial behaviour research in multiple countries that has relevance for physician leaders, nurse managers, and other healthcare managers which is transferable across national boundaries. Additionally, it could be argued the finding lends support to those researchers who claim national culture is a determinant of individuals’ respective cognitive styles (i.e. how they perceive, think, solve problems, learn, and relate to others) which some occupational psychologists consider to be a fundamental factor determining individual and organizational behaviour, including the behavioural styles of managers/leaders (see 33). However, as Armstrong, Cools and Sadler-Smith (33) claim, the evidence for gross differences due to national culture is not conclusive because there is considerable empirical support across occupational groups in various countries (e.g. Australia, Italy, Slovakia, UK, USA) for Kirton’s Adaption-Innovation (KAI) precept that cognitive style is independent of culture. This latter empirical evidence helps justify the recent push from US based healthcare management professional associations to

identify common competencies needed by healthcare managers and others in leadership roles within all types of healthcare organizations in the USA and other countries, as discussed in the following section.

### ***Professionalisation of the Healthcare Management Workforce Globally***

The push to professionalize the healthcare management workforce has led to the development of the afore-mentioned HLCM Competency Model, and of the Healthcare Leadership Alliance (HLA) Competency Directory. The latter directory was derived from a review of literature relating to management and leadership inside and outside public and private sector healthcare industries, and from the expert opinion of professionals in hospital administration, medical practice administration, nursing administration, and healthcare financial management. It is comprised of five competency domains underpinned by 300 competencies, and was used by the International Hospital Federation (34) as the basis from which to derive a Global Competency Directory (GCD). The GCD is comprised of the same five HLA competency domains, namely: *Leadership; Communication and Relationship Management; Professional and Social Responsibility; Health and Healthcare Environment; and Business*. These domains are underpinned solely by competencies (n=80) that have salience across numerous global health systems. According to Hernandez et al (1), five US derived competency models of which one is the HLA directory, plus the European ‘Public health leadership competency framework model’ and the British ‘NHS medical/clinical leadership competency frameworks’, share common attributes to some extent with all five competency domains of the GCD. However, although these generalized healthcare management-related competency models and directories have been useful for informing ‘curriculum development’ in medical schools, with regard to informing ‘criteria development’ for HR systems (e.g. selection, performance appraisal, 360 degree assessment tools, LMD training) we suggest they are likely to be criticized for: i) being too general with statements that do not provide enough guidance as to the specific types of managerial activities and behaviours expected; ii)

containing too many competencies with little indication given as to those that are relevant and/or critical for success at different levels of healthcare management and leadership; or iii) being too comprehensive which means processes for using them become too cumbersome and too time consuming (see also Hamlin (35)). For these latter purposes more parsimonious competency models are required which, we argue, should focus on the specific behavioural competencies that managers/leaders need to develop and manifest if they are to be perceived effective by their stakeholders (i.e. superiors, peers, and subordinates). This is because stakeholder perceptions can be more important than objective performance measures in determining the reputation of a manager or leader for being effective or ineffective. How they are perceived by their respective stakeholders is an important determinant of managerial success (or failure). This is because the type of behaviours they exhibit cause superiors, peers, and other key stakeholders to give or withhold important resources such as information and cooperation; and cause subordinates/followers to either willingly accept or deliberately ignore their leadership (see 36).

### ***Research Purpose and Questions***

As previously mentioned, the empirical source studies in public hospitals upon which our multiple cross-case/cross nation comparative study is based, explored perceptions of the types of managerial behaviour that differentiate most effective/effective managers/leaders from least effective/ineffective managers/leaders. The two-fold aim of our study is to: i) identify commonalities between the findings of our five empirical source studies; and ii) if possible, deduce from the identified empirical generalizations a healthcare-related behavioural model of perceived managerial and leadership effectiveness. Hence, the study addressed two specific research questions as follows:

*RQ1.* To what extent are the behavioural indicators (BIs) of perceived managerial and leadership effectiveness previously identified within public hospitals in four culturally diverse countries ‘similar’ or ‘different’?

*RQ2.* Can those BIs identified as ‘similar’ be classified and grouped into discrete generic behavioural categories and expressed in the form of an emergent universalistic behavioural model of perceived managerial and leadership effectiveness for the public healthcare sector?

## **Method**

### ***Empirical Source Data***

Our study is based on ‘replication logic’ and ‘cross-case comparative analysis’, as adopted by the researchers of the five empirical source studies from which we obtained our data (for details see Appendix 1). Our empirical source data were comprised of sets of behavioural categories/statements (BSs) of effective and ineffective managerial performance that had resulted from these CIT managerial behaviour studies conducted within public hospitals in Egypt, Mexico, Romania, and the UK, respectively. When briefing the CIT informants who participated in each study: Effective Managerial Performance was defined as: *behaviour which you would wish all managers/leaders to adopt if and when faced with similar circumstances or situations*; and Ineffective Managerial Performance was defined as: *behaviour which, if it occurred repeatedly or even once in certain circumstances, might cause you to begin to question or doubt the ability of that particular manager/leader in that instance*. Specific details of these studies, four of which have been published in academic journal articles and one in a contributed book chapter, are given in Table 1. These details include the subject focus, the number of CIT informants, the volume of critical incidents (CIs) collected, and the number of BSs deduced. Further specific details of the common research design, methods, and processes adopted and executed by the researchers of all five studies can be found in Appendix 1.

INSERT Table 1 ABOUT HERE

### ***Data Analysis***

The units of analysis were the deduced sets of BSs obtained from the five empirical source studies. Author 1 independently subjected these to a three-stage inductive coding and

categorization process (37) conducted at a semantic level of analysis. The first stage involved *open coding* to identify the salient units of meaning of each BS (i.e. 1<sup>st</sup>-order concepts). The second stage involved *axial coding* to identify those BSs that were the same as, similar to, or contained an element of congruent meaning with one or more other BSs; these were then grouped into discrete behavioural categories (BCs) (i.e. 2<sup>nd</sup> -order concepts). For a BC to be considered *nation-general* and potentially *universalistic*, it had to be underpinned by BSs from at least one of the two ‘Western’ and two of the three ‘non-Western’ BS data sets. A descriptive label was subsequently created to describe the essence of meaning held in common with all the BSs constituting each deduced BC. Independent of each other, Author 2 and Author 3 used these descriptive labels as ‘coding categories’ to code and categorize deductively the same sets of obtained BSs. The results of their respective analyses were compared against those of Author 1. Where there were differences, these were reconciled through critical discussion until a consensus was reached. The third stage of coding involved subjecting the deduced BCs to *selective coding* to identify core categories around which they could be integrated to form a smaller number of derived behavioural dimensions (BDs) (i.e. 3<sup>rd</sup>-order aggregate dimensions).

#### ***Ensuring Trustworthiness of the Findings.***

The internal validity (*credibility*) and reliability (*dependability*) were ensured through ‘realist triangulation’ whereby the empirical source data had been obtained from multiple empirical replication studies conducted in four culturally diverse countries. Furthermore, the five sets of data were strongly comparable because: i) the researchers of the source studies had adopted the same research design and process protocols; ii) ‘functional equivalence’ was assured because the focus of all five studies was the same, and iii) ‘semantic equivalence’ of the collected CIT data and derived BSs by the three ‘non-Western’ studies was ensured through rigorous back-and-forward translation from the language of those countries to English, and vice versa, using the services of bilingual native English speakers.

Dependability was ensured through investigator triangulation whereby the BCs deduced by Author 1 were used as coding categories by Authors 2 and Author 3 for their independent comparative analyses. The three authors engaged subsequently in code cross-checking to arrive at a consensus result regarding the coding and categorization of the analysed BSs. Their results were then sent for counterchecking to Author 4 who acted as a confirmatory auditor.

### **Results**

Of the 122 positive BSs obtained from the five empirical source studies, only 5(4.10%) contained no convergent meaning with any other positive BS, and just 2 of the 117(1.71%) negative BSs had no convergent meaning with any other negative BS. The *open* and *axial* coding led to the identification of 14 positive (*effective*) and 17 negative (*ineffective*) behavioural categories (BCs), as shown in Table 2 with the respective number of BSs

INSERT Table 2 ABOUT HERE

from each of the five empirical source studies underpinning each BC also shown. Of the 17 deduced negative BCs, eight contain one or more units of meaning that describe the absence (i.e. acts of omission) of the types of behaviour depicted by one or more of 11 of the 14 deduced positive BCs. These negative BCs are juxtaposed beneath the corresponding positive BCs; and, as can be seen, are either wholly (N10, N12, N14, N15 and N17) or in part (N11, N13 and N16) ‘near mirror opposite’ in meaning with the respective corresponding positive BCs. Consequently, each group of juxtaposed BCs could be regarded as belonging to one and the same behavioural construct. The other nine deduced negative BCs (N1 to N9), which like the positive BCs (P1 to P14) describe ‘acts of commission’, are listed in the bottom part of Table 2. For illustration and information specific details of the BSs underpinning three of the positive BCs are presented in Table 3.

INSERT Table 3 ABOUT HERE

The *selective* coding of the resulting 14 positive (*effective*) BCs and remaining nine negative (*ineffective*) BCs led to the identification of five positive and four negative behavioural dimensions (BDs), as shown typed in **bold** in Table 2. We suggest these nine derived generic cross-national BDs can be regarded as constituting an emergent two-factor *universalistic behavioural model of perceived managerial and leadership effectiveness* relevant to public hospitals. A graphical representation (*data structure*) of the stage-by-stage progression from ‘raw’ empirical source data (BSs: 1<sup>st</sup>-order concepts) to derived dimensions (BDs:3<sup>rd</sup>-order aggregate dimensions) is presented in Figure 1.

INSERT Figure 1 ABOUT HERE

### **Discussion**

The most significant finding of our inquiry is the high degree of sameness in the way that people within the five collaborating British, Egyptian, Mexican, and Romanian public hospitals perceive and describe effective and ineffective managerial (manager/leader) behaviour. Hence, it appears that for physician leaders, nurse managers, and other healthcare professional managers and leaders within these hospitals to be perceived effective by their superiors, peers, and subordinates, they need to exhibit the types of behaviour described by the 14 positive BCs listed in Table 2 and avoid exhibiting the 17 negative BCs also listed in Table 2.

Comparing our work with that of other researchers, we have found no obvious convergence of meaning between the specific results of our study and those of 3 of the 4 previously cited US-based effective physician leader studies, or of the findings that resulted from the effective nurse manager studies in Taiwan, Ireland, and New Zealand, respectively. However, 5 of our 14 derived positive BCs (P4, P5, P6, P11 & P14) lend support to 4 of the 6 healthcare leadership competencies identified by Hargrett et al (2017) at the Duke University School of Medicine in the USA, as follows: *Personal Integrity* (P11. Personal approach and open and trusting relationship with staff); *Pursuing Excellence* (P4. Good at monitoring,



controlling, and maintaining high staff performance); *Building Relationships* (P6. Assists staff personally when they are overloaded with work and/or facing difficult work-based situations, and P14. Listening to and communicating well with staff and exchanging ideas); *Thinking Critically* (P5. Good at handling difficult situations and/or recognizing and quickly resolving problems).

The identified high degrees of similarity across our five compared cases are in sharp contrast to the identified high degrees of difference between the nursing management studies of Li et.al. (31), McCarthy et al. (32), and Hughes et al. (9) in Taiwan, Ireland, and New Zealand, respectively. Furthermore, our findings challenge current predominant discourse which asserts the effectiveness of certain types of managerial behaviour or styles of management/leadership is contingent on the situation (i.e. being *context-specific*). They provide little support for Flanagan and Spurgeon's (38) assertion that managerial effectiveness in the British NHS is situationally dependent and varies from one organization to another. On the contrary, only 2.93% (7 of 239) of the compared BSs that describe the types of effective and ineffective managerial behaviours observed within public hospitals in four culturally diverse countries are divergent in meaning; and not one appears to be *organization-specific* or *nation-specific*. Furthermore, the fact that even the 4.10% (5 of 122) of BSs obtained from our five empirical source studies show no signs that stakeholder perceptions of managers/leaders' behaviour are *country-specific*, lend empirical support for Kirton's KAI theoretical precept that cognitive style is independent of national culture; which in turn supports the current push to develop global/universalistic behavioural competency models for the health services sector.

Thus, we have generated a body of new knowledge that could: i) be used as 'best evidence' to inform and support specific evidence-based approaches to leadership development in healthcare as advocated by West et al. (6), and ii) have relevance and

transferability within public hospitals across multiple culturally diverse countries, thereby illustrating the desired ‘shared learning across different countries’ as called for by Willcocks (24). Furthermore, we suggest the BDs and underpinning BCs that constitute our emergent *universalistic behavioural model of perceived managerial and leadership effectiveness*, which have been solely deduced from contemporary healthcare-*specific* research, are more likely to be accepted and utilised by health services managers, physicians, nurses, and other healthcare professionals due to their *sector-specific* nature, than off-the-shelf competency frameworks or models derived from research carried out in business or other organizational sectors that are assumed to be *sector-general*.

Interestingly, 71.43% (n=10) of our derived positive BCs lend support to 23.75% (n=19) of the competencies (n=80) constituting the IHF derived Global Competency Directory (GCD). Of these 19 GCD competencies, the vast majority (n=17) underpin the ‘Leadership’ (n=6 of 9), ‘Communications and Relationship Management’ (n=7 of 11), and ‘Professional and Social Responsibility’ (n=4 of 15) competency domains; and of the 32 GCD competencies underpinning the ‘Business’ competency domain only the two competencies that underpin the ‘Human Resource Management’ sub-domain are supported by our findings. Our overlapping BCs, which describe perceptions of manager/leader behaviours associated with effective healthcare manager performance, complement the overlapped GCD competencies and offer a rich source of new insights and better understanding of those global healthcare management competencies. Significantly, our study lends no empirical support for any of the GCD ‘Health and Healthcare Environment’ domain competencies. Surprisingly, none of the GCD competencies converge in meaning with any of the positive BCs underpinning the ‘supporting and motivating staff’ and well-being component of the ‘showing care for the personal well-being and development of staff’ dimensions of our emergent universalistic healthcare competency model. These findings of

non-convergence are a cause of concern which, we suggest, should be explored as part of the ongoing discourse on global healthcare management competency models.

### ***Limitations and Future Research***

The study has two potential limitations: First, there is an imbalance between the amounts of CIT data collected for the Mexican and Romanian ‘empirical source studies’ (n= 233 CIs and n=313 CIs respectively) compared to the much larger CIT data sets (n>400 CIs) collected for the other three studies; and an imbalance between the 36 Mexican BSs versus 48 to 54 BSs resulting from the other four inquiries. Second, it is unknown as to whether ‘data saturation’ was reached by any of these five emic replication managerial behaviour studies. This means there could be other BCs yet to be identified. Hence, further inquiries should be undertaken within other public hospitals within the four nations with the purpose of not only obtaining a more comprehensive understanding of how healthcare people perceive and judge the behavioural effectiveness of those in management and/or leadership roles, but also to test and refine the BCs that have emerged from our present study. A future direction for research could be to conduct more equivalent emic replication managerial behaviour studies within public hospitals in other culturally diverse countries with the aim of developing (if possible) a *context-general/global-relevant* ‘universal behavioural model of perceived managerial and leadership effectiveness’ for the health services sector.

### **Practical Implications and Conclusion**

We suggest our emergent two-factor *universalistic behavioural model of perceived managerial and leadership effectiveness* is sufficiently generalized, relevant, and transferable, for use as a behavioural competency framework against which to critically evaluate the content of extant MLD programmes, or to inform and shape the creation of new programmes designed specifically for: i) healthcare managers/leaders within the hospitals that collaborated in the five studies from which we obtained our empirical source data, thereby helping them to improve their individual and collective performance and effectiveness, and for ii) indigenous

medical, clinical, and administrative managers/leaders in other public hospitals within the four countries and perhaps also in other countries. Our emergent model could also be used as a complementary body of ‘best evidence’ in support of the ongoing international collaborative effort to develop a globally relevant, generalizable, physician leadership curriculum that marries a well-accepted leadership framework with an established competency-based medical education framework, as called for by Chan et al. (13).

Additionally, the BCs underpinning the five BDs constituting our model, plus the BS findings of the five empirical source studies from which they were derived, provide a rich source of indicative insights and explanatory understanding of the specific types of critical positive (*effective*) and negative (*ineffective*) managerial behaviours that healthcare managers and leaders at every level of management need to emulate or avoid exhibiting if they are to be perceived competent in performing successfully their respective roles in ‘leadership’ ‘communications and relationship management’, ‘human resource management’, and many of their ‘professional and social responsibility’ activities. Furthermore, in the aftermath of the Covid-19 pandemic, which has placed huge stresses and strains on most hospitals worldwide, we anticipate there will likely be: i) more calls for ‘evidence-based’ MLD initiatives and programmes informed by globally relevant healthcare management competency models, including the IHF Global Competency Directory, to educate, train, and develop physicians, nurses, and other healthcare professionals, and ii) questions raised regarding the extent to which the perceived behavioural effectiveness of managers and leaders had fully met the needs and expectations of their respective staff. Hence, we suggest it will become even more crucial to seek a better understanding of how best to manage and lead staff in the ever-changing context of healthcare organizations. In conclusion, we hope our emergent ‘universalistic behavioural model’ will offer useful insights to those who need to reflect critically upon current management/leadership practices within the health services

sector, including those who design MLD initiatives with the aim of bringing about change and improvement.

**Ethical Issues:** Our five empirical source studies were conducted in strict accordance with the ‘*IRB protocols for research involving human subjects*’ issued by the universities of the respective researchers.

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## **APPENDIX 1**

Empirical Source Studies: Details of the adopted philosophical approach, research methods, processes, and ethical considerations

### **Philosophical Approach**

Our empirical source studies were based on ‘replication logic’ and ‘cross-case comparative analysis’ (Eisenhardt, 1989), and were informed by Tsang and Kwan’s (1999) notion of theory development through *empirical generalization* replication and Berry’s (1989) *derived etic* approach to applied research. The philosophical stance adopted by the researchers of these studies was based on the ‘pragmatic approach’ (Morgan, 2007) and Friedrichs and Kratochwil’s (2009) notions of *epistemological instrumentalism* and *abduction*. Hence, they assumed a post-positivist (*empirical realist*) ontology and a constructivist-interpretivist (*transactional-subjectivist*) epistemology (Hamlin, 2015; Ponterotto, 2005).

### **Research Methods and Processes**

The theoretical foundation guiding the empirical source studies, which also informs our present multiple cross-case/cross-nation comparative study, relied on the *Multiple Constituency Model of Organizational Effectiveness* (see Tsui (1990) and *Implicit Leadership Theory* (Eden and Leviatan, 1975). Adopting a common research aim, design and data collection/analysis protocol, the subject focus of all five studies (cases) was on senior, middle and first-line managers/leaders from any department (medical, clinical, administrative, etc.), though in two cases it also included top managers. Research participants were recruited through a process of *purposive convenience* sampling except for the Mexican study when *snowball* sampling had to be deployed. The researchers of each study used Flanagan’s (1954) critical incident technique (CIT) as adapted by Author 1 for his first managerial behavior study (Hamlin, 1988) and used subsequently for his first replication study in a British NHS Trust hospital (Hamlin, 2002). This involved collecting concrete examples (critical incidents-CIs) of effective and ineffective managerial behaviour as observed by purposive yet convenience samples of managerial and non-managerial physicians, nurses, other healthcare professionals, and administrative staff within the respective collaborating public hospitals. In accordance with the common CIT protocol, all research informants were volunteers (informed consenting participants) who had first been briefed about the study and research process. The briefing included the definitions and explanations of key terms-such as ‘critical’, ‘incident’, ‘critical incident’ and ‘effective/ineffective managerial performance’. The CIT interviewing involved informants being asked to reflect on the past six to nine months, and to recall up to a total of 10 CIs of managerial behaviour which they had personally observed which, at the time, they thought were examples of *effective* or *ineffective* managerial behaviour. The offered CIs could include examples of behaviour exhibited by the CIT interviewees’ immediate managers/leaders, or their superiors. If they held a management/leadership position they were not allowed to describe CIs relating to their own management/leadership practice. The collected CIs were coded and classified through a process of *open* and *axial* coding (Flick, 2014) applied at the semantic level of analysis in search of *sameness*, *similarity*, or at least an *element of congruent meaning*. The CIs that converged in meaning were accordingly grouped to form discrete categories. The derived positive (*effective*) and negative (*ineffective*) categories were then interpreted, and behavioral statements (BSs) created to describe the essence of meaning held in common with all their respective constituent CIs (n= 3 minimum to 12 maximum). The resulting sets of positive and negatives BSs were then deemed to be

behavioral indicators and contra-indicators of perceived managerial and leadership effectiveness.

### **Ethical Considerations**

At least one of the co-researchers of all five studies was an academic who ensured the research was conducted in accordance with the 'research ethics' policy and protocols of their respective universities which included strict codes of anonymity. Thus, the research informants were not allowed to reveal the role position and identity of the managers/- leaders whose behaviours they were describing.

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**Table 1** Empirical source data used for multiple cross-case/cross-nation comparative study

Five empirical source studies	Subject focus of studies*	No. of CIT informants	No. of CIs collected	No. of effective BSs	No. of ineffective BSs	Total Number of BSs
<b>Public Hospitals</b>						
Case UKC: <i>An 'acute' British NHS hospital</i>	S, M. & FL	57	405	26	26	52
Case UKD: <i>A 'specialist' British NHS hospital</i>	S, M & FL	60	467	25	24	49
Case EGT: <i>An Egyptian public hospital</i>	T, S, M & FL	55	450	25	23	48
Case MXO: <i>A Mexican public hospital</i>	M & FL	27	233	18	18	36
Case ROM: <i>A Romanian public hospital</i>	T, S, M & FL	35	313	28	26	54
Totals		234	1,868	122	117	239

**Legends**

T, S, M, FL = Top, senior, middle, and first-line managers

CIT= Critical incident technique. CIs= Critical incidents. BSs= Behavioural statements

**Empirical Source Studies:**

**Case UKC:** Hamlin, R. G. (2002) A study and comparative analysis of managerial and leadership effectiveness in the National Health Service: an empirical factor analytic study within an NHS Trust Hospital *Health Services Management Research* 2002; 15: 1-20.

**Case UKD:** Hamlin, R. G., Cooper, D. J. (2007) Developing effective managers and leaders within healthcare and social care contexts: an evidence-based approach, In: Sambrook, Stewart, JD, editors. HRD in the public sector: the case of health and social care, London: Routledge, 2007, 187-212.

**Case EGT:** Hamlin, R.G., Nassar, M., Wahba, K. Behavioural criteria of managerial and leadership effectiveness within Egyptian and British public sector hospitals: An empirical study and multiple-case/cross-nation comparative analysis. *Human Resource Development International* 2010; 13(1):43-64.

**Case MXO:** Hamlin, R.G., Ruiz, R., Wang, J. (2011). Perceived managerial and leadership effectiveness within Mexican and British public sector hospitals: An empirical study and cross-nation comparative analysis. *Human Resource Development Quarterly* 2011:22(4):491-517.

**Case ROM:** Hamlin, R. G., Patel, T (2012) Behavioural indicators of perceived managerial and leadership effectiveness in Romanian and British public sector hospitals. *European Journal of Training and Development* 2012; 36 (2/3):234-261

**Table 2** Behavioural dimensions (BDs) derived from the behavioural categories (BCs) deduced from behavioural statements (BSs) obtained from empirical source studies

<b>Positive Behavioural Dimensions (PD1 to PD5)</b> Positive Behavioural Categories (P1 to P14) Near Mirror Opposite Negative Behavioural Categories (N10 to N17)	
<b>PD 1) Planning, directing, monitoring, and controlling</b>	
P1 Good planning and decision-making (UKC: 2 BSs; UKD: 1 BS; EGT: 2 BSs; MXO: 0 BS; ROM: 1 BS)	N10 Poor planning and decision making and/or bad judgment (UKC: 3 BSs; UKD: 1 BS; EGT: 4 BSs; MX1: 1 BS; ROM: 1 BS)
P2 Prepares well for meetings and runs them effectively (UKC: 2 BSs; UKD: 1 BS; EGT: 1 BS; MXO: 0 BS; ROM: 1 BS)	
P3. Develops forward plans and strategies to ensure staff have clear direction and/or the necessary resources/- working conditions to perform effectively (UKC: 2 BSs; UKD: 2 BSs; EGT: 1 BS; MXO: 2 BSs; ROM: 3 BSs)	N11 [ <i>Places unreasonable work demands on staff and/or</i> ] fails to provide them with adequate/- proper work conditions/equipment (UKC: 1 BS; UKD: 1 BS; EGT: 1 BS; MXO: 2 BSs; ROM: 1 BS)
P4 Good at monitoring, controlling, and maintaining high staff performance (UKC; 1 BS; UKD: 1 BS; EGT: 4 BSs; MXO: 3 BSs; ROM: 3 BSs.)	
P5. Good at handling difficult situations and/or recognizing and quickly resolving problems (UKC: 3 BSs; UKD: 3 BSs; EGT: 1 BS; MX:0 BS; ROM: 5 BSs)	N12 Weak control and toleration of poor performance from others (UKC: 1 BS; UKD: 1 BS; EGT: 1 BS; MX1: 1 BS; ROM: 0 BS)
<b>PD 2) Supporting and motivating staff</b>	
P6 Assists staff personally when they are overloaded with work and/or facing difficult work-based situations (UKC: 1 BS; UKD: 2; BSs; EGT: 1 BS; MXO: 3 BSs; ROM: 1 BS)	N11 Places unreasonable work demands on staff <i>and/or fails to provide them with adequate/proper work conditions/-equipment</i> (UKC: 1 BS; UKD: 1 BS; EGT: 1 BS; MXO: 2 BSs; ROM: 1 BS)
	N13 Depriving staff of support [ <i>help, guidance, training, trust, recognition or praise</i> ] (UKC: 1 BS; UKD: 1 BS; EGT: 1; BS; MXO: 1 BS; ROM: 0 BS)
P7 Values and gives recognition to staff who achieve high performance (UKC: 1BS; UKD: 1 BS; EGT: 1 BS; MXO: 1 BS; ROM: 3 BSs )	N13 Depriving staff of <i>support [help, guidance, training, trust, recognition or praise]</i> (UKC: 2 BSs; UKD: 3 BSs; EGT: 3; BSs; MXO: 2 BSs; ROM: 5 BSs)
P8 Delegates well and empowers (UKC: 3 BSs; UKD: 2 BSs; EGT: 1 BS; MXO: 1 BS; ROM: 2 BSs)	
<b>PD 3) Showing care for the personal well-being and development of staff</b>	
P9 Shows care by providing understanding and sensitive help and support to staff stressed by difficult personal issues (UKC: 2 BSs; UKD: 3 BSs; EGT: 3 BSs; MXO: 2 BSs; ROM: 1 BS)	N14 Lack of care or concern for staff experiencing work or personal problems (UKC: 0 BS; UKD: 2 BSs; EGT: 1 BS; MX1: 1 BS; ROM: 4 BSs)
P10 Actively supports staff in identifying and meeting their learning and development needs (UKC: 1 BS; UKD: 2 BSs; EGT: 3 BSs; MXO: 3 BSs; ROM: 3 BSs)	N13 Depriving staff of support [ <i>help, guidance, training, trust, recognition or praise</i> ] (UKC: 2 BSs; UKD: 3 BSs; EGT: 3 BSs; MX1: 2 BSs; ROM: 5 BSs)
<b>PD 4) Exhibiting open, trusting, consulting, and inclusive behaviour</b>	
P11 Personal approach and open/trusting relationship with staff (UKC: 3BSs; UKD: 3 BSs; EGT: 3 BSs; MXO: 2 BSs; ROM: 3 BSs)	N13 Depriving staff of <i>support [help, guidance, training, trust, recognition or praise]</i> (UKC: 2 BSs; UKD: 3 BSs; EGT: 3 BSs; MXO: 2 BSs; ROM: 5 BSs)
P12 Involves staff in decision-making and/or consults with them to elicit their opinions/views (UKC: 5 BSs; UKD: 3 BSs; EGT: 3 BSs; MXO: 1 BS; ROM: 4 BSs)	

N15 Non-listening/non-consulting behavior (UKC: 4 BSs; UKD: 2 BSs; EGT: 1 BS; MX1: 1 BS; ROM: 1 BS)
<b>PD 5) Communicating with staff and keeping them well informed</b>
P13 Keeping staff well informed on matters affecting them (UKC: 1 BS; UKD: 1 BS; EGT: 0 BS; MXO: 1 BS; ROM: 2 BSs) N16 Failing to inform people [ <i>and/or communicate information appropriately</i> ] (UKC: 5 BSs; UKD: 1 BS; EGT: 0 BSs; MXO: 1 BS; ROM: 4 BS)
P14 Listening to and communicating well with staff and exchanging ideas (UKC: 2 BSs; UKD: 1 BS; EGT: 2 BSs; MXO: 0 BS; ROM: 4 BSs) N16 Failing to [ <i>inform people and/or</i> ] communicate information appropriately (UKC: 5 BSs; UKD: 1 BS; EGT: 0 BS; MXO: 1 BS; ROM: 4 BS) N17 Unwillingness to listen to staff (UKC: 1 BS; UKD: 1 BS; EGT: 0 BS; MXO: 1 BS; ROM: 1 BS)
<b>Negative Behavioural Dimensions (ND1 to ND4)</b> Negative Behavioural Categories (N1 to N9)
<b>ND 1) Self-serving and/or inconsiderate behaviour</b>
N1 Manipulative, self-serving, or selfish behaviour (UKC: 3 BSs; UKD: 3 BSs; EGT: 2 BSs; MX1: 3 BS; ROM: 2 BS)  N2. Unfair, unequal, preferential and/or inconsiderate treatment of staff (UKC: 1 BS; UKD: 2 BSs; EGT: 2 BSs; MX1: 4 BSs; ROM: 1 BS)
<b>ND 2) Intimidating and/or undermining behaviour</b>
N3 Intimidating behavior (UKC: 4 BSs; UKD: 1 BS; EGT: 2 BSs; MX1: 1 BS; ROM: 0 BS)  N4 Undermining staff, colleague managers and/or organizational systems (UKC: 4 BSs; UKD: 5 BSs; EGT: 1 BS; ROM: 2 BSs)
<b>ND 3) Managerial slackness and/or avoidance behaviour</b>
N5 Below standard execution of managerial role, responsibilities, and tasks (UKC: 3 BSs; UKD: 2 BSs; EGT: 1 BS; MX1: 1 BS; ROM: 2 BSs)  N6 Ignoring and avoiding behavior (UKC: 2 BSs; UKD: 3 BSs; EGT: 2 BSs; MX1: 1 BS; ROM: 4 BSs)  N7 (7) Poor organisation and allocation/delegation of tasks/work (UKC: 2 BSs; <i>UKD: 1 BS; EGT: 1 BS; MX1: 1 BS; ROM: 2 BSs</i> )
<b>ND 4) Inappropriate autocratic and closed-minded behavior</b>
N8. (8) Is negative to ideas/views of staff and/or closed to innovation and change (UKC: 1 BS; UKD: 1 BS; EGT: 2 BSs; MX1: 1 BS; ROM: 1 BS)  N9. (9) Dictatorial, authoritarian, or inappropriate autocratic behavior (UKC: 2 BSs; UKD: 0 BS; EGT: 3 BSs; ROM: 1 BS)
<b>Note:</b> The component parts of those negative BCs typed in <i>italics</i> relate to different 'mirror-opposite' positive BCs.

**Table 3** Illustration of positive (*effective*) behavioral categories (BCs) with underpinning coded behavioural statements (BSs)

**P5) Good at handling difficult situations and/or recognizing and quickly resolving problems**

UKC: When faced with urgent or difficult problems/situations is good at making decisions and following them through and keeping promises; Recognizes problems and takes the necessary action; Responds quickly and appropriately to staff/work problems.

UKD: When problems occur, he/she deals with them quickly and fairly; Responds quickly and appropriately to staff work problems; Recognizes and acts appropriately when things are going wrong.

EGT: Is good at *controlling*, resolving problems, and *achieving results with minimum loss of tim.*;

MXO Is an effective problem solver-proactively solves problems in a timely manner.

ROM: Recognises and finds solutions to problems, and takes the necessary action to reduce or eliminate them; Reacts quickly and calmly to changing and/or stressful situations, and to staff problems, and is quick to take action and/or provide answers; Anticipates trends and potential problems, and introduces preventive measures or innovations as appropriate; Reacts quickly and gives help (answers) to staff experiencing problems; Adopts a flexible/-adaptable approach to dealing with changing situations and/or staff with different motivational drivers [i.e. problematic situations].

**P9) Shows care by providing understanding and sensitive help and support to staff stressed by difficult personal issues**

UKC: Deals with difficult and personal issues with sensitivity (e.g. disciplinary or emotive situations). Gives time to listen to staff with problems or worries relative to work or personal issues.

UKD: Listens to staff on personal issues and acts to support the member of staff; Deals with personal and difficult situations [confronting staff] with sensitivity; Works with staff to support flexible working practice. (e.g. permits the rearrangement of workload/pattern in line with staff members' personal circumstances).

EGT: Provides trusted and dependable help and support (including psychological support) to staff who are under stress, whether caused by work related difficulties and problems or by a personal situation; Takes care of all his staff and treats them as a 'family'; Manages his staff in a considerate, courtly, and sympathetic manner.

MXO: The manager is understanding of the personal needs [issues] of his employees and [if appropriate] authorizes them to leave work early or miss work under certain circumstances; Allows employees free and fast access to services provided by own and other hospital departments (e.g. to an employee who needs a personal test done in the laboratory).

ROM: Gives help and support to staff confronted with difficult [*work and personal*] situations.

**P11) Personal approach and open/trusting relationship with staff**

UKC: Is approachable and makes him/herself readily available to staff (e.g. adopts open door policy; always got time to listen); Uses a personal approach to leadership and takes the time to get to know staff on a personal level (e.g. calls you by name regardless of rank; regularly 'walks the patch' to see how people are getting on; balances needs of the organization with those of the individual). Develops a sense of trust with staff (e.g. ensures staff can talk to him/her on matters of confidentiality; does not break confidences).

UKD: Makes time to talk to staff (e.g. engenders a feeling of value in staff by showing an interest in their work). Develops trusting relationships with his/her staff (e.g. does not break confidences of staff); Uses a personal approach to leadership (e.g. develops a sense of trust).

EGT: Is approachable, and takes time to know staff at a personal and social level, though retaining some distance; Creates a good, friendly, happy and familiar working environment; Develops a sense of trust with staff (e.g. keeps promises; shares information; is honest in his dealings with people).

MXO: Shows availability to listen to the needs of employees and helps them as necessary; Is always able [i.e. available] to provide technical advice and helpful answers to employees' questions relating to work.

ROM: Is open to staff, listens to their suggestions, and *encourages them to make suggestions*; Communicates *very clearly and openly* with staff. *Gives honest and immediate feedback to staff on their work, performance, and/or on problematic issues confronting them*, and exhibits honesty and integrity in all other dealings with people.

**Note:** Where BSs contain two salient units of meaning and underpin two different BCs, the non-relevant part of the BS is typed in *italics*

Figure 1. *Data structure outlining the derivation of one positive behavioural dimension (BD)*

