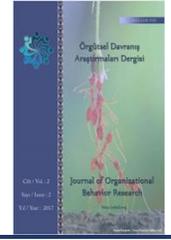




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LEADING PROFESSIONALLY DIVERSE WORKGROUPS OF HEALTHCARE PROFESSIONALS FOR IMPROVING QUALITY OF CARE

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ABSTRACT

The purpose of this paper is to unfold the internal dynamics of a workgroup of healthcare professionals and to identify leadership behaviors that can enhance the benefits of professional diversity to improve the quality of care. The present study explores the recent literature on leadership, professional diversity within workgroups of healthcare professionals, and their performance outcomes especially the quality of care. The finding reveals that the sub-group categorization is salient diversity generated process in the profession-based workgroup of healthcare professionals and shared perception of inclusiveness of workgroup leader can reduce the saliency of sub-group categorization and facilitates the full contribution of group members by creating psychological safety climate and workgroup inclusion to enhance the quality of care they delivered. This paper identified the salient process of diversity within the workgroup of healthcare professionals and explores the role of a shared perception of inclusive leadership in enhancing the quality of care, thereby offering a novel framework for future inclusive leadership and quality of care research. Leaders can capitalize on the proposed model to utilize the benefits of the presence of professional diversity within a workgroup of healthcare professionals to improve the quality of care.

Keywords: *Inclusive leadership, Professional diversity, Psychological safety climate, Workgroup inclusion, Quality of care.*

INTRODUCTION

The process of delivery of care is complex and multidimensional. Due to its complexity, it is usually broken down into tasks and delegated to the different healthcare professionals (Ren-Zhang *et al.*, 2020; Hanawi *et al.*, 2020). This is why; recent scholars consider the quality of care as a performance outcome of a workgroup of healthcare professionals belongs to different professions (West and Lyubovnikova 2013; Brimhall and Mor Barak, 2018, Brimhall, 2019). These workgroups whether working in traditional or deliberate combination of professional silos become multidisciplinary in nature and inherent the characteristics of diversity due to presence of two or more different professions (Harrison and Klein, 2007). These workgroups require effective information sharing and communication among group members to provide good quality of care (Kreps, 2016; Zijl *et al.*, 2020). On the contrary, the internal dynamics of a workgroup of healthcare professionals are less supportive for effective communication (Kreps 2016). The presence of status hierarchy (Gergerich *et al.*, 2019), and distinct professional identities (Mitchell *et al.*, 2015) make it a challenge for workgroup leaders to augment care-related information by the ability of group members to communicate with each

other. Consequently, there is a call in literature to find ways through which leader could lead to improve quality of care in the unique context of multidisciplinary or functionally diverse workgroups of healthcare professionals (Rosen *et al.*, 2018; Smith *et al.*, 2018; Sfantou *et al.*, 2017).

Therefore, the present study aims to unfold the internal dynamics of a multidisciplinary or professionally diverse workgroup of healthcare professionals to lead them effectively for improving quality of care by using the lens of categorization elaboration model. The categorization-elaboration model can shed light on how the presence of professional diversity within a workgroup of healthcare professionals can have both negative and positive effects on performance outcomes (i.e. quality of care). It also provides conceptual grounds for recognizing the dominant diversity generated process within the workgroup of healthcare professionals which helps in identifying appropriate behaviors of the leader for improving quality of care. The present study contributes to and extends the literature in several different ways. First, this study is a response to the call for much-needed research to identify the mechanism or ways through which workgroup leaders can lead multidisciplinary or functionally diverse workgroups of healthcare professionals to improve quality of care (Rosen *et al.*, 2018; Smith, Fowler-Davis, *et al.*, 2018; Sfantou *et al.*, 2017). Secondly, it identifies the dominant diversity generated process which unfolds the complexity of internal dynamics of the workgroup of healthcare professionals. Thirdly, it provides a fine-grained conceptualization of the inclusiveness of workgroup leaders. Finally, it contributes to the theory of quality of care, diversity, and CEM by offering propositions that explain how multidisciplinary or professionally diverse workgroups can be led for improving quality of care by looking at its internal dynamics through the lens of diversity and inclusion. It also extends the literature on CEM- model by conceptualizing its effects on both individual-level and group level. The study will not only find factors to resolve the internal group dynamic but also helps in solving the large-scale problem of improving the quality of care.

The first section of the study discusses the dominant process of diversity within workgroups of healthcare professionals and review previous works that have explored the effects of leadership in the context of multidisciplinary or professionally diverse workgroups of healthcare professionals. Then, it presents a multilevel theoretical framework (**Figure 1**) in which it has been identified that shared perception of inclusiveness of workgroup leader can enhance the quality of care by creating a psychological safety climate at the group level and perception of inclusion at the individual level within a diverse workgroup of health-care professionals.

Multilevel Effects of Functional Diversity: Identifying Dominant Process

The effects of the presence of multi-professional members on the group's dynamics can be explained by Categorization-Elaboration Model (CEM) (Van Knippenberg *et al.*, 2004). CEM suggests that diversity unfolds within workgroup in two processes that interact with each other and affects group performance i.e. information elaboration and sub-group categorization. The process of information elaboration refers to the exchange of information, discussion, and integration of different perspectives. The process of information elaboration refers to the exchange of information, discussion, and integration of different perspectives; it is referring to the “feature of diverse workgroup” and is considered as a cognitive positive consequence of



diversity. This cognitive positive consequence of diversity stems from the knowledge and information sharing of all group members and becomes a group property that resides at the group level. Whereas, CEM defines the process of subgroup categorization in terms of an individual's propensity to categorize self and similar others into "in-group" and dissimilar into other out-group. It is an effective consequence of diversity that resides at the individual level and usually instigates the negative consequence of diversity for the individual like inter-group bias. Both processes need to be effectively managed to enhance the benefit of combining different within workgroup (Van Knippenberg *et al.*, 2004). Recently, Homan *et al.*, (2020) argued that a clear understanding of the salient diversity generated process is important to manage its effects.

The context of the workgroup of healthcare is profession-based (Mitchell *et al.*, 2014) and more prone towards subgroup categorization. Distinct professional identities have arisen over time and consolidated with the presence of a rigid status hierarchy (Gergerich *et al.*, 2019; Nembhard and Edmondson, 2006). Salient status differences among group members' professional identities lead to the sub-group categorization and outweigh the benefits of information elaboration because of two main reasons. First, individuals in these workgroups are strongly identified with their group and do not consider themselves as part of the whole group (Mitchell *et al.*, 2014) and perceive that their professional perspective is not valued and welcomed within the group. Second, the presence of sub-group categorization results in information withholding due to fear of embarrassing reaction or disapproval (Homan *et al.*, 2020). These factors reduce the motivation and ability of an individual to communicate within the group which is a prerequisite for information sharing (Van Knippenberg *et al.*, 2004) and disrupt the delivery of effective care (Kreps, 2016). Thus, it is important to find leadership behaviors that can reduce the saliency of sub-group categorization for enhancing the quality of care by fostering a strong sense of workgroup inclusion and among individuals and creating a safe interpersonal climate to motivate and facilitate group members to exchange care-related information across their status line. Below we are presenting a literature review on the link between leadership, professional diversity within workgroups of healthcare professionals, and their performance outcomes especially the quality of care.

MATERIALS AND METHODS

To access the relevant literature, we conducted a manual search of the latest reviews (Homan *et al.*, 2020; Dinh *et al.*, 2020; Smith *et al.*, 2018). Relevant articles were identified through the backward and forward snowball technique in which reference lists of these articles were searched (Greenhalgh and Peacock, 2005). After that, to identify further studies, a search was conducted on relevant databases (Google Scholar and PubMed) for studies that looked at the effects of leadership on diversity generated process within multidisciplinary, inter-professional, functionally diverse, or functionally heterogonous workgroup of healthcare professional and its possible outcomes, published in peer-reviewed journals. The present study also included studies that focused on the link between leadership and quality of care.

RESULTS AND DISCUSSION



Literature has recognized leadership as a significant factor for strengthening and delivering good quality of care by workgroups of healthcare professionals (Sfantou *et al.*, 2017; Folkman, *et al.*, 2019). The review of literature conducted by different authors (e.g. Kossaiy *et al.*, 2017; Rosen *et al.*, 2018; Salas *et al.*, 2018) suggests that leadership and effective communication can enhance the quality of care delivered by healthcare professionals. McKean and Snyderman, (2019) persist that leaders of multi-professional groups can improve quality of care and safety by fostering a culture of quality improvement through clear and consistent communication of goals and plans within a workgroup. Similarly, Havig and Hollister, (2018) also revealed that the workgroups (wards) which have more active leadership can improve quality of care through the enhanced perception of insider status, psychological ownership, and shared mental models of workgroup members through effective communication within the group and with employees. On the contrary, scholars also revealed that workgroup leader [Frontline managers] face difficulty in integrating members from different professions (Folkman *et al.*, 2019), and leadership behaviors (e.g. directive leadership) limits the information exchange among group members for effective delivery of care.

The review of literature identifies that several different leadership behaviors and styles have been examined in the context of multidisciplinary or inter professional healthcare groups or teams such as collective leadership (Silva *et al.*, 2021), Shared leadership (Ong *et al.*, 2020; Aufegger *et al.*, 2019), transformational leadership (Mitchell *et al.*, 2014), directive and participative leadership (Zijl *et al.*, 2020), leader's approachability (Swain and Isherwood, 2020), inclusive leadership (Mitchell *et al.*, 2015) and active leadership (Havig and Hollister, 2018) but only a few have focused on the diversity generated processes (e.g. Zijl *et al.*, 2020 ; Nembhard and Edmodoson 2006, Hirak *et al.*, 2012; Mitchell *et al.*, 2015; Mitchell *et al.*, 2014) and very few linked it with quality of care (West *et al.*, 2014; Havig and Hollister, 2018; McKean and Snyderman, 2019). This work illustrates that workgroup leader has the potential of engaging diversity of viewpoints, experience, and staff roles and have a marked impact on health outcomes. It also reveals that interpersonal relationships, communication, information elaboration, shared team identity, psychological safety, and psychological safety climate are considered important mediators in the relationship of workgroup leader's behaviors and style and workgroup outcomes. These factors are also considered as an integral element for the delivery of good quality of care (Rosen *et al.*, 2018, Sfantou *et al.*, 2017; Koopmans *et al.*, 2018; Aranzamendez *et al.*, 2015).

Across studies, we have observed that it is well recognized the process of social or sub-group categorization mitigates the effect of information elaboration within a workgroup of healthcare professionals. but little is offered as to how a leader can manage the saliency of subgroup categorization (**Table 1**) that enable group members to feel that their unique perspective is welcomed while, at the same time, they also feel that they belong to the group (Randel *et al.*, 2018; Shore *et al.*, 2012). Although there is a plethora of literature that suggest perception of workgroup inclusion can reduce the subgroup categorization (Ferdman and Deane, 2014) and the perception of insider status (a related concept of inclusion) of an individual member can enhance the quality of care delivered by group (wards) (Havig and Hollister, 2018) but to the best of scholars' knowledge, there is no study which paid attention to the creation of a perception of inclusion within workgroup as a possible solution to reduce subgroup categorization and improve quality of care.



The work of Nembhard and Edmondson (2006), Hirak *et al.*, (2012), and Mitchell *et al.*, (2015) assess the potential of inclusive behavior of workgroup leaders to link diversity, unique capabilities, and perspectives to improve team performance. These studies identified that inclusive leadership can reduce the effect of perceived status difference by enhancing psychological safety, and team identity. These studies generally built on the conceptualization of Nembhard and Edmondson's (2006) which is based on inviting and appreciating others' input through words and deeds. They argued that status differences and safety climate are aspects that deter or encourage the voices of group members to be heard. This conceptualization of inclusive leadership focuses more on the leader to value the uniqueness of individuals to overcome status differences without identifying any concrete behaviors of the leader. While other work has focused more on the differentiated perception of inclusiveness of workgroup leaders (e.g. Carmeli *et al.*, 2010; Hirak *et al.*, 2012) which may differ according to the status or professional identity of group members. Regardless of other leadership styles, it is argued that inclusive leadership has more potential to accelerate the benefits of professional or functional diversity to improve the quality of care (Bradley, 2020). But there is a need for a more elaborative conceptualization of inclusive leadership (Randel *et al.*, 2018) which not only reduces the subgroup categorization within the group but also balances the need for belongingness and uniqueness by creating a safe interpersonal climate to enhance the quality of care.

Table 1. Leadership Style and Subgroup Categorization

Leadership styles	Characteristics	Effects on subgroup categorization
Directive and Participative leadership (Zijl <i>et al.</i> , 2020)	<ul style="list-style-type: none"> • Directive leadership improves communication by asking questions • Participative leadership focused on open communication and shared decision-making. 	<ul style="list-style-type: none"> • Directive leadership may not encourage low-status group members to communicate about an error or an adverse event or giving or asking about feedback because it limits the information exchange among group members (Armstrong, 2013) • Participative leadership may enhance communication within group members but its aspect of shared decision making is less relevant due to the presence of status hierarchy and subgroup categorization
Transformational leadership (Mitchell <i>et al.</i> , 2014).	<ul style="list-style-type: none"> • Considered as hierarchal leadership style, where leaders use their charisma to motivate individuals to achieve more than expected and look beyond self-interest (Nieuwboer <i>et al.</i>, 2019) 	In the context of health, it is considered as more leaders centric approach and often linked with the directive style of leadership (Orchard and Rykhoff, 2015) which may not reduce sub-group categorization or status hierarchy



*Shared and Collective leadership (West <i>et al.</i> , 2014; Forsyth and Mason 2017; Ong <i>et al.</i> , 2020).	<ul style="list-style-type: none"> • Focused on the change of leadership according to the situation for improvement of group performance or quality of care (West <i>et al.</i>, 2014). 	<ul style="list-style-type: none"> • It is more likely to work in mature groups. • It is a product of a team/group environment where social interactions are encouraged (Ong <i>et al.</i>, 2020) • Communication and psychological safety among group members are essential to build shared leadership (Aufegger <i>et al.</i>, 2019) • Conversely, clear leadership within group /teams is required for engendering safety and openness (Smith <i>et al.</i>, 2020) and may not effectively work in presence of subgroup categorization and status hierarchy.
Leaders Approachability (Swani and Isherwood, 2020)	<ul style="list-style-type: none"> • Easy availability and frequent visibility encourage team participants in decision making, inclusion and reduce barriers to ask a question and raising concerns. 	<ul style="list-style-type: none"> • It is more likely to combat with subgroup categorization and status hierarchy
Inclusive leadership (Nembhard and Edmodoson, 2006; Hirak <i>et al.</i> , 2012; Mitchell <i>et al.</i> , 2015)	<ul style="list-style-type: none"> • At Group level---engaging others in decision making by seeking and appreciating their input • At the individual level leader's openness accessibility and availability in interaction (Hirak <i>et al.</i>, 2012) 	<ul style="list-style-type: none"> • Inclusive leadership has more potential to reduce subgroup categorization and status hierarchy to improve quality of care (Bradley, 2020) multidisciplinary or professionally diverse groups.

*These three leadership behaviors are conceptually distinct but the way they are described in the literature seems to have more similarities (Smith, *et al.*, 2020).

Source: Multiple Sources from Literature

Theory and Propositions

In this section, the present study introduces propositions related to the proposed theoretical model.

Building Shared Perception of Inclusive Leadership for Improving Quality of Care

To deal with the saliency of subgroup categorization, the present study proposed to build a shared perception of inclusiveness of workgroup leadership. The shared perception of group



members is grounded in the idea that leader act similar with all group members (Dansereau *et al.*, 1984) subsequently group members build similar perception of leader's behaviors and create a group climate based on inclusion. The behaviors of leaders which can enhance and may serve to build the shared perception of inclusiveness of workgroup leader are openness, accessibility, and availability during the interaction. Through information processing theory (SIP) (Salancik and Pfeffer, 1978), if a member of a group finds workgroup leader open, accessible, and available to every group member regardless of their hierarchal status and professional identity (Mitchell *et al.*, 2015), it will generate informational cues about the willingness of workgroup leader to listen to their ideas and receptive to their input. It also encourages group members to actively consult with the leader and increase the instances of social interaction (Swani and Isherwood 2020). Social interaction draws people's interpretations together, making their interpretations more similar (Rentsch, 1990) and result in a shared perception of leaders' inclusiveness. It also mobilizes necessary information and resources that facilitated them to accomplish their task effectively (Swani and Isherwood 2020). The sharing of information from all professionals within the workgroup identifies all aspects of patient requirement and needs that bring accuracy in diagnosis and treatment (Salas *et al.*, 2018) which ultimately enhance the quality of care they delivered. In the line of the above discussion the present study proposed the following proposition.

Proposition 1: The openness, accessibility, and availability of work-group leaders built a shared perception of inclusiveness of leaders which can improve the quality of care.

Addressing the Saliency of Sub-Group Categorization: Nurturing the Perception of Workgroup Inclusion

The shared perception of inclusive behaviors (i.e. openness, accessibility, and availability) of workgroup leader can also balance the need for belongingness and uniqueness of group members to foster the individual perception of workgroup inclusion (Shore *et al.*, 2012) by creating a work environment which encourages group members to express their opinions, share information and feel part of the group. SIP suggests employees have the propensity to base their perceptions on heuristics such as perceived status hierarchy about their identities. When inclusive informational cues endorsed from the leader, they revise their pre-existing cognitive structure consider themselves as an important, valued, meaningful, and worthwhile member of a group. This satisfies the need for uniqueness and enhances their ability to participate and elevate the quality of communication and interaction which is essential to enhance the performance of multi-professional workgroup (Salas, 2018) and needed for the effective delivery of care (Rosen *et al.*, 2018). The consensus among group members that individuals from all status groups can comfortably access the group leader will encourage individuals to actively consult and interact with the leader (Brimhall, 2019). It fosters the feeling of support, justice, and equality which satisfy the individuals' need for belongingness (Randel *et al.*, 2018). These group-oriented behaviors of leaders foster feeling among group members that they are part of it (Swani and Isherwood, 2020) which leads to the delivery of high quality of care (Havig and Hostler, 2018).



Proposition 2: Shared perception of inclusiveness of workgroup leader will be positively related to the workgroup inclusion which ultimately enhances the quality of care delivered by workgroups of a healthcare professional.

Addressing the Saliency of Sub-group Categorization: Creating Psychological Safety Climate

Most of the care-related information goes unshared because members of the workgroup feel that the climate of work group is not safe for taking interpersonal risks. Shared perception of inclusiveness of workgroup leader reduces this effect by building shared perception of psychological safety. According to social information processing theory, employees use informational cues from the environment to derive meanings from events at the workplace and then decide how to behave (Salancik and Pfeffer, 1978). As work-group leaders have a higher status, they involve in direct interaction with the group members. Group members gather salient informational cues from the leader's behavior and shape perception of the work environment and act accordingly. These cues provide verbal assurance from the leader that a group member is encouraged to voice their unique perspective and opinions without fear of judgment and being criticized. It effectively engaged staff from different disciplines and hierarchical levels and encourages true participation. it result in an increased number of reporting of treatment errors (Appelbaum *et al.*, 2016), interpersonal communication and improves the quality of care delivered by them (Aranzamendez *et al.*, 2015; Rosen *et al.*, 2018; Aufegger *et al.*, 2019; O'Donovan *et al.*, 2019). Taking it together the present study proposes the following preposition.

Proposition 3: Shared perception of inclusiveness of workgroup leader will be positively related to the psychological safety climate which ultimately enhances the quality of care delivered by workgroups of a healthcare professional.

Besides, Psychological safety climate not only enhances the quality of care by accelerating the process of information but also helps in reducing sub-group categorization within diverse groups because it enables organizational efforts at fulfilling the psychological needs of the employee and limit the instances of discrimination within the workgroup (McLinton *et al.*, 2018). It facilitates pro-active voice behaviors and enhances the visibility of employees. Psychological safety climate is an important resource for perceived workplace inclusion (Shore *et al.*, 2018). It builds a perception among members that are fairly treated, individually recognized and has access to the resources, and feel included. Psychological safety climate generates the informational cues which strengthen the interpersonal relationships with leader and group members and create the perception of belongingness within the group. It also builds a sense of recognition of their uniqueness when they can present their unique perspective without the threat of being punished, this situation creates an optimal balance and satisfaction between both needs of belongingness and uniqueness, and people feel included (Shore *et al.*, 2012; Chung *et al.*, 2020), it also increases acceptance and trust among group members and when acceptance increases so do the feeling of inclusion increases. Psychological safety climate satisfies the employee's socio-emotional need of inclusion, workgroup member who feel included and more satisfied with their jobs (Brimhall and Mor Barak, 2018; Brimhall, 2019), which ultimately improve their performance and quality of care they delivered.

Proposition 4: Psychological safety climate is positively related to the perception of workgroup inclusion and improve quality of care delivered by a workgroup of healthcare professionals.



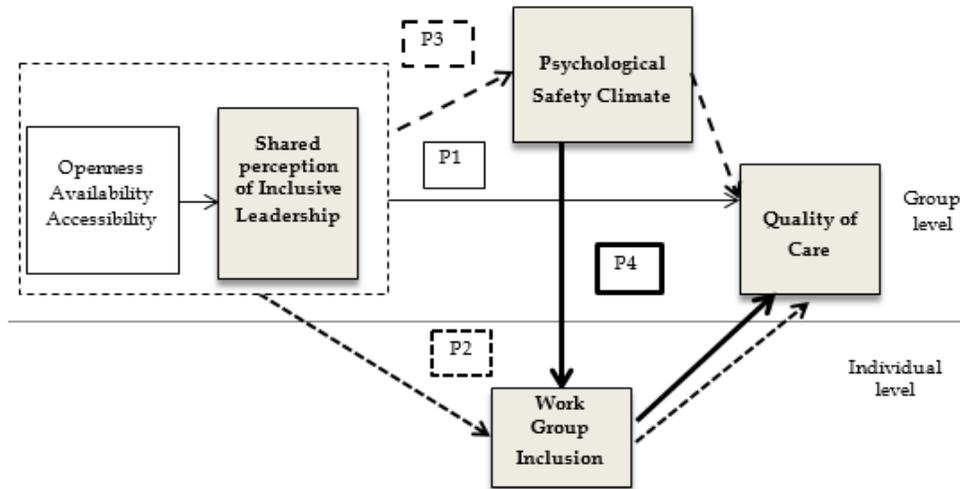


Figure 1. Multilevel effects of inclusive leadership on Quality of Care in Functionally Diverse Workgroup of Healthcare Professionals

In response to call of several scholars (e.g. Rosen *et al.*, 2018; Smith *et al.*, 2018; Sfantou *et al.*, 2017) for more research to identify the leadership behavior by understanding the unique context of multidisciplinary or functionally diverse workgroups of a healthcare professional to improve quality of care, this paper advances the argument that sub-group categorization is predominate process in the workgroup of healthcare professionals reduce the benefit of combining different perspectives. It requires a shared perception of inclusiveness of workgroup leaders which reduces sub-group categorization by fostering the perception of inclusion and creating a psychological safety climate.

Theoretical Implications

First, the present study contributes to the current conversation of leadership and diversity research by identifying predominant diversity-generated processes within a multidisciplinary workgroup of healthcare professionals (Homan *et al.*, 2020). The study extends the argument by identifying subgroup categorization is more prominent in the context of healthcare and offers a theoretically grounded model that provides insight into the role of a shared perception of inclusive leadership in harnessing communication and interpersonal relationship within diverse workgroups of healthcare professionals to enhance the quality of care. Second, the proposed framework to the theory of adds to the theory of quality of care by delineating its antecedents. It also advances theory by conceptualizing psychological safety climate as a predictor of perception of inclusion and by identifying antecedents of quality of care.

Practical Implications

The proposed model suggests that shared perception of inclusive leadership behavior can help to enhance performance outcome (i.e. quality of care) of workgroups in dynamic and uncertain settings like health care. It provides a framework for leaders to reduce subgroup categorization by creating an interpersonal risk-free climate within the group, and not only

gets a solution to pop-up problems during provision of care but also enhances the perception of inclusion within group members. The shared perception of group members about the inclusiveness of workgroup leader and psychological safety climate raised the feel of supportive work context. The proposed model guides leaders on how to develop strong interpersonal relationships with group members by being open and how to maintain these relationships by being accessible and available. This will also help workgroup managers to enhance the quality of care delivered by them even then when resources are not sufficient.

Research Implications

Our model should be tested empirically using both qualitative and quantitative techniques. In qualitative technique, the case of study methodology can be used to see how the inclusiveness of workgroup leaders enhances the quality of care in different health care organizations. Researchers can use quantitative methodologies, for example, questionnaires could be used to test the propositions. Future research can also study the role of cultural factors which can influence leadership behaviors like the power-distance orientation of leader. Researchers could also pay close attention to how organizational characteristics may affect the inclusiveness of leadership and psychological safety and inclusion of employees at both group level and individual level.

CONCLUSION

Health care organizations operate with multidisciplinary workgroups and in volatile and diverse environments struggle to improve quality of care, thereby enhancing the need for research to understand the role of leadership in managing effects of functional diversity on group process and outcomes. This study presents that leaders' behaviors can serve as a base of psychological safety climate and builds a supportive mechanism to create the perception of inclusion among group members where employees feel comfortable to take interpersonal risks and apply their unique perspective to work process, tasks which ultimately enhance the quality of care. This study offers testable propositions and future research directions which aim to understand the synergy of inclusive leadership and workgroup dynamics and quality of care.

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