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Supports and constraints to middle leadership development in higher education: A Q-methodology study

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Abstract
Middle leadership development in a Higher Education context can be understood as a complex endeavor, influenced by interactions and interrelations within multiple systems. We explored the perspectives of thirty-five male and female middle leaders on the conditions influencing their leadership development at one university in Qatar. Q methodology was applied to collect and analyze data quantitatively and qualitatively. A 40-statement Q-sample was developed based on a proposed conceptual framework inspired by complexity thinking, and consisting of three dimensions; intrapersonal, relational and institutional. Q factor analysis revealed four significantly different viewpoints regarding the conditions that participants perceived were most influential for their leadership development, namely (1) institutional goals, (2) a culture of trust, (3) senior leadership support, and (4) personal ambitions. Despite the differences in viewpoints, three common constraints to leadership development were also identified. The study has implications for middle leadership development, with its distinctive methodological, theoretical and contextual contributions.

Keywords: middle leadership development; higher education; complexity thinking; Q methodology; Qatar

Introduction

In Qatar and internationally, the restructuring of publicly-run higher education (HE) institutions has been dominated by new managerialism; characterised by the adoption of top-down corporate approaches and private sector practices (Ajayan & Balasubramanian, 2020; Butler, 2020). The rationale is to make HE more entrepreneurial, productive and accountable in delivering its services to a diverse student population (Lumby, 2019). Increased emphases

on performativity and productivity have led to a shift from administration and to the establishment of a management culture (Shepherd, 2018). The consequences for university leadership have been manifested in "a greater separation of academic work and management activity, increased control and regulation of academic work by managers, [and] a perceived shift in authority from academics to managers (Shepherd, 2018, p. 1668). Lumby (2019) thus describes managerialism as "a ubiquitous and strongly pejorative adjective when applied to leadership" (p. 1621).

These changes on the HE scene have particularly influenced the role of university-based academic middle leaders, e.g., heads of department, directors of centers and associate deans, placing them firmly at the center of university management procedures (Butler, 2020; Floyd & Dimmock, 2011). Specifically, the increasing pressure for performativity situates middle leaders "in a pivotal role between central management predilections and academic values and control" (Meek et al., 2010, p. 2). As academics who move into these leadership roles, they must acquire new skills, values, and knowledge to respond to increased institutional complexity (Freeman et al, 2020). Several dilemmas arise as they manage the combined functions of teaching, supervision and research, while simultaneously attending to delegated administrative and supervisory responsibilities (Butler, 2020; Freeman et al, 2020). Previous studies have also documented their experiences of higher workloads, longer work hours and lower research productivity, which influence their academic leadership development (Floyd & Dimmock, 2011; Floyd, 2016; Thornton, 2020).

It may be argued that middle leadership development is a highly complex endeavor (Thornton, 2020; Wallace et al., 2021), influenced by compromises that are negotiated within multiple systems, namely the intrapersonal, relational, and institutional. Inspired by complexity thinking and in particular the work of Clarke (2013) and Uhl-Bein et al. (2007), leadership development is no longer illustrated as an individualistic effort, as recent research and theory conceptualise leadership development from relational and systemic perspectives (Abdulla et al., 2022). Given the complexity of HE institutions, these multiple perspectives allow researchers to "capture the greater levels of uncertainty, ambiguity, interdependencies and interrelatedness that now characterize the environments in which organizations operate" (Clarke, 2013, 135). Within multiple system, several conditions support or hinder middle leaders' leadership development (Butler, 2020), as they encounter diverse experiences, successes and failures (Floyd & Dimmock, 2011; Floyd, 2016). Within the intrapersonal dimension, middle leaders are characterized as individuals with unique belief and value systems, identities and experiences; while the relational and institutional systems give rise to the influences of and interactions among organizational politics, structures, networks and relationships (Butler, 2020). Complexity thinking, thus, offers a useful lens to conceptualize leadership development as emerging within dynamic systems, rather than being primarily focused on leaders.

While interest in the field of HE leadership and management has grown over the last 2-3 decades (Floyd, 2022; Youngs, 2017), alongside increasing research into professional development of HE teaching (Chaaban et al., 2022), research into middle leadership *development* within the sector remains a relatively under-explored field both theoretically and empirically (Abdulla et al., 2022; Branson et al., 2016; Bryman, 2007). Moreover, the majority of recent studies have typically been conducted within western universities (Butler, 2020; Inman, 2009), with few studies found in the middle east (Abdulla et al., 2022), and not clearly focused on middle leadership experiences (Ajayan & Balasubramanian, 2020). There also appears to be no previous studies conducted in the Qatari context. To address this knowledge gap, the article aims to report on data from a QNRF-funded study which aimed to explore academic leadership and leadership development in this cultural context.

We have recognised that middle leaders are uniquely positioned amidst structural, professional and power relationships (Branson et al., 2016), and can be set aside structurally and professionally from both senior leaders and faculty. For this study, we employed Q methodology research to tap into the systems which enabled or constrained thirty-five middle leaders' leadership development, providing a rich understanding of the conditions that have enabled them to communicate, develop, synthesise and enact leadership practices at one university in Qatar. Q methodology is particularly useful in capturing the subjective experiences of middle leaders, that is by identifying their different perspectives and underlying viewpoints about their leadership development in a HE context. Accordingly, the study makes an original contribution to knowledge and adds to current literature on middle leadership development with its distinctive methodological, theoretical and contextual contributions. Identifying deficits and credits within multiple systems can initiate the discourse on how they may be proactively advanced or addressed.

Study context

Expanding its higher education system over the years, Qatar has invested in building a knowledge-based economy which improves education prospects for its citizens and ensures the country's competitiveness on the international landscape. The oil-rich country has utilised its budget surplus in financing education, human capital, research and development, and technology infrastructure. The increasing number of universities is testimony of such interest, with 32 universities operating in 2020 compared to 16 universities in 2014.

The university where this study took place is a government-owned and funded institution with aspirations to provide high-quality education in areas of national priority. It seeks to align its colleges and programs with established international standards and accreditation bodies. To achieve its goals, the university has undergone educational reform through several initiatives and strategic plans. Educational policies have commonly been directed toward globalization and modernization while remaining conscientious of preserving national and cultural identities. As one example, the tension between the need to introduce English as a medium of instruction and the threat of losing the status of the national language is salient in recent language policy at the university. The debate as to whether to adopt English and/or Arabic as the medium of instruction remains controversial. Currently, humanities and social sciences programs are mostly offered in Arabic, while scientific programs are offered in English.

Following common trends and reforms in HE systems globally, the university operates within a hierarchical and bureaucratic model of governance. Its organizational structure constitutes colleges as independent entities, each reporting to a higher senior leadership team. Middle leaders do not necessarily have direct contact with this team, and report to those within their immediate contacts at the college or department. As a centralised system, this gap is further consolidated by quality control measures which manage several functions within each college, such as student selection criteria, organizational structures, and hiring policies.

Similar to other Gulf Cooperation Council countries, the national context is one where the need for academic staff exceeds the supply of those with local expertise. For this reason, the number of expatriate faculty, including a mix of nationalities, surpasses that of Qatari nationals (ratio of 3:1), despite government efforts to counter-balance this deficit through a process of Qatarization – the targeted increase of employment opportunities for Qatari nationals in the private and public sector. This has proven somewhat challenging as the student population continues to grow, currently standing at ~23,000 students. To meet the needs of its growing student population, the university employs faculty both from western

and neighboring Arab countries, who are recruited on temporary working residencies for their experiences and qualifications in diverse areas.

Conceptual framework

Leadership studies have traditionally focused on the solo-heroic leader to the exclusion of equally important components of the leadership process, such as relationships and contexts (Bolden, 2011). Rejecting a reductionist viewpoint and accepting the assumption that HE institutions are complex adaptive systems (Clarke, 2013), we agree with the conceptualization put forward by Avolio (2007) in that leadership encompasses "the relevant actors, context (immediate, direct, indirect, etc.), time, history, and how all of these interact with each other to create what is eventually labeled *leadership*" (p. 25). Leadership is thus a function of leaders, their networks of interactions with others in the institution, and the greater complexity of the organizational context (Uhl-Bein et al., 2007). Within this amalgam of interactions and interrelations, leadership development emerges and is seen as the property of relationships and contextual influences, no longer residing in the individual (Doyle & Brady, 2018; Youngs, 2017). While systematic leadership development programs offer structured learning opportunities, this study refers to systemic leadership development opportunities which emphasise social capital and human capital, leading to organizational growth (Abdulla et al., 2022). Three levels of interrelatedness and systemicity are considered influential on leadership development, for which a succinct account in relation to middle leadership development is provided next.

Intrapersonal system

From a traditional individualistic perspective, the literature on leader development has revealed several intrapersonal dimensions that influence the capacity of leaders to be effective in their roles (Clarke, 2013; Wallace et al., 2021). Despite recent emphases on a wider perspective for leadership development, we confer that there is usefulness in considering individual leaders' abilities as distinguishing characteristics. Leader development has been concerned with developing certain knowledge, skills, attitudes, and competencies associated with formal leader roles (Wallace et al., 2021).

More recently, there has been a particular emphasis on the construction of personal and professional identities throughout the career span (Day et al., 2014), as well as the role of professional agency in identity renegotiations as leaders increasingly become aware of themselves; their strengths and weaknesses, and the structural enablers or constraints to their agency (Zhou & Deneen, 2020). With skill acquisition and experience, leaders acquire complex understandings and reasoning abilities that allow them to articulate definitions of leadership, describe their leadership principles, and grow in their self-identity as a leader (Wallace et al., 2021).

Despite the relatively straightforward notion of leader development compared to leadership development (Day et al., 2014), there appears to be three widely documented hindrances to leader development. Firstly, institutional engagement with learning and development for middle leaders is often lacking (Freeman et al., 2020). Secondly, studies have largely framed development as an outcome of *training*, suggesting a default view of learning as transmission (Franken et al., 2015). Thirdly, leader development is often synonymous with leadership development, yet this intrapersonal view of development fails to capture a broader conceptualization of leadership processes in HE (Clarke, 2013). These wider relational and institutional views of leadership development are discussed next.

Relational system

The possibilities for leadership development will necessarily reflect the multi-faceted and multi-dimensional relationships of middle leaders who navigate networks of professional and power relations, as they work up, down and across these intricate structures (Branson et al., 2016; Zhou & Deneen, 2020). Working through faculty necessitates their ability to influence others, participate in a community, manage group processes and facilitate communication sharing (Lumby, 2019), which become key components of their development as leaders (Wallace et al., 2021). These competencies will depend on social networking and relationships, and how positively they are perceived by those they are positioned to lead, lead for and lead with (Lumby, 2019).

Recent theories, such as relational leadership, adopt the perspective whereby relationships and relational expectations drive the complexity of middle leadership development (Branson et al., 2016). Middle leaders are uniquely positioned on the borderline between faculty and senior leaders. They need to find the right balance between exercising leadership roles and maintaining collegiality, or risk being seen in negative light (Lumby, 2019). Several studies have highlighted the tensions arising when middle leaders are set aside structurally from their colleagues and are expected to navigate previously established networks (Branson et al., 2016; Thornton, 2020).

Other theories have also been influential in shifting our understanding of leadership development from its individualistic focus to a more collective, social concept. Shared leadership and distributed leadership theories (Youngs, 2017) have highlighted the importance of interpersonal skill development for leaders and their wider social networks, as the bases for trust and respect (Clarke, 2013). Such theories situate leadership as a group quality, and give prominence to group processes, networks and structures (Bolden, 2011). Leadership development also becomes a social process whereby middle leaders' colleagues can become resources for learning, as are department artefacts (Day et al., 2014).

Previous studies have found formal transition periods in which middle leaders shadow an expert or receive mentoring support their leadership development (Inman, 2009; Thornton, 2020). To further develop their leadership, some studies have emphasised contextual learning among similarly positioned leaders, enabling them to discuss issues, seek advice, and challenge dominant discourses (Branson et al., 2016; Thornton, 2020). As a "product of active interaction with others and a critical reflection on experience," (Inman, 2009, p. 427), learning from informal processes alone may be insufficient unless coupled with more structured and formal activities situated within the institutional system discussed next.

Institutional system

As notions of leadership development have expanded beyond leader development, a wider systemic perspective has been popularised drawing on concepts of complexity leadership. In agreement with Clarke (2013), HE institutions are considered complex adaptive systems comprising of "many iterations or cycles of random interactions between agents operating within the system, who both act on and are acted on by the structures in which they are embedded" (p. 137-138), and in so doing generate novel behavior for the system as a whole. It is also important to note that the dynamic nature of complex systems involves interactions and interrelationships with other non-agentic institutional cultures and structures, including policies, practices, process, artifacts, and conditions (Walters, 2021). Accordingly, complexity occurs on multiple levels across various contexts in HE institutions (Wallace, 2021), further embedded within social, political, historical and economic systems at large.

Leadership development is seen as emerging within this complexity, where the interactions of the middle leader within the wider system become the central focus (Clarke, 2013; Doyle & Brady, 2018). A wider understanding of the affordances and constraints

dominating the leadership stage at the institutional level is thus needed (Freeman et al., 2020). For middle leaders, such constraints tend to be "particularly evident in systems with only top-down, hierarchical chains of authority, in systems with closely monitored, centralised goals, or in systems whose dominant ideology is authoritarian" (Uhl-Bein et al. 2007, p. 305).

The hierarchal nature of universities means that they usually operate with disproportionate access to resources, learning opportunities and authority (Bolden, 2011). These structural complexities create tensions for middle leaders who are "framed primarily in terms of responsibility and accountability to those above" (Franken et al., 2015, p. 191), while also remaining loyal to their academic colleagues. Also, their authority tends to be limited within the boundaries of delegation. They must implement university policies determined by others higher up in the hierarchy (Freeman et al, 2020; Zhou & Deneen, 2020), without necessarily taking an active role in their design or enactment (Franken et al., 2015). Finding a balance between their professional agency and external structures and demands has been found problematic (Zhou & Deneen, 2020).

Furthermore, many middle leaders promoted to these positions have neither prior leadership preparation nor a clear understanding of what the job entails. Institutional engagements with learning opportunities, including participation in formal or informal activities, are also relatively uncommon (Freeman et al, 2020). These opportunities are further constrained by institutional practices that favor knowledge transmission, rather than knowledge sharing, such that all staff, not just middle leaders, can be seen as contributors to knowledge generation and new learning for the organization (Franken et al., 2015).

Methodology

The data presented here was part of a larger study exploring academic leadership in the cultural context of Qatar. Stage one involved undertaking seventeen semi-structured life-history interviews with middle leaders in the case study university. While the findings from this stage will be reported elsewhere, the development of the concourse described below relied on the perspectives shared by these middle leaders who also worked within the same institution as the participants of this study. Following the development of the concourse, stage two involved recruiting thirty-five male and female middle leaders to take part in this study, which aimed to examine their perspectives on the conditions influencing leadership development. A Q methodology (henceforth Q) study was applied, guided by the following question: What are middle leaders' perspectives on the supports and constraints to their middle leadership development at one university in Qatar?

Q was developed by William Stephenson in 1935 from factor analytic theory to provide a systematic means for the scientific study of subjectivity (Watts & Stenner, 2012). Understanding such subjectivity is important because of the centrality of the human factor in most scientific research (Lundberg et al., 2020), specifically those which tap into participants' beliefs, values and experiences. Q supports this understanding by allowing access to participants' less-accessible perceptions (Watts & Stenner, 2012), clustering them together based on their similarities and differences. A central aspect of Q methodology is that it uses features of both qualitative and quantitative methods, and allows participants to express their subjective views idiosyncratically (Woods, 2012).

Traditionally, studies on subjectivity have often relied on qualitative methods, which may not support generalizations of findings, or on R-methods using correlations from surveys, that aim to objectify, explain, and reduce complex phenomena in straightforward ways. Neither method provides a practical (time-efficient) and applicable (quantitative) tool which would lead to a deeper account of the system dynamics influencing middle leadership development as the Q methodology applied in this study (Woods, 2012). Q is a useful

methodology in this sense, as it places the focus on the way middle leaders ascribe meaning to their experiences, how they perceive their roles and responsibilities, and what they identify as the supports and constraints to their middle leadership development. It also allows the identification of shared viewpoints on a topic and reveals areas of consensus and disagreement across these viewpoints. This is achieved without imposing categorizations, as is frequently the case in Likert-scale survey studies. Simultaneously, it helps to minimize the pitfalls of qualitative research, such as avoiding the exploration of sensitive topics. Therefore, using Q is considered a fitting methodology to explore the subjective viewpoints of middle leaders, while avoiding the sensitivity within the institutional environment they are situated in.

In compliance with methodological suggestions by Lundberg et al. (2020), we followed six steps in the construction and implementation of the research tool: (1) concourse development, (2) Q-sample construction, (3) participant Q sorting, (4) post-sorting activity, (5) factor analysis, and (6) factor interpretation. These steps are explained in some detail below:

Step 1 Concourse development

A concourse is a preliminary set of all conceivable statements about the topic under investigation, from which the data collection tool, or Q-sample, is derived. In developing these statements, we consulted two data sources, constituting conversational and informational qualities (Watts & Stenner, 2012). As this study is part of a larger project, we secured the conversational component by revisiting the finding from a life history study which involved seventeen middle leaders working at the case study university. These findings provided insights into the conditions influencing middle leadership development in this cultural context, which were then translated into a preliminary set of statements during the concourse development. For the informational component, we examined previous studies on middle leadership development, which contributed to a deeper understanding of this phenomenon and the addition of further statements. This process resulted in a concourse consisting of 72 statements.

Step 2 Q-sample construction

We used the conceptual framework inspired by complexity thinking as a tool to categorise and select items for the Q-sample. Accordingly, in grouping the statements into categories, we used the intrapersonal, relational and institutional dimensions as a starting point. The statements were further classified into several subcategories within each dimension (e.g., *identity* and *prior experiences* within the intrapersonal domain). This systematic categorization ensured that a diverse range of ideas from the concourse were captured, and that distinct and disparate elements were represented in the final Q-sample (Watts & Stenner, 2012). Despite this seemingly rigid categorization, we contended that the statements from the three dimensions should also be understood as interrelated and cross-dimensional. While this theoretical step is useful for a deductive results-based discussion of the conceptual framework, it can be further accommodated in Q methodology which tolerates the inductive emergence of new theories.

The initial Q-sample was translated into Arabic by two bilingual authors who were also familiar with the cultural and structural characteristics of this study's context. They gave particular attention to the word choice and syntax of each statement in order to facilitate participants' engagement and understanding. These statements were then piloted with two middle leaders in the context of this study to ensure clarity, as well as the necessity of revising the statements. This resulted in revising the wording in six statements and adding two more statements, which were also supported in the literature on middle leadership

development. The resulting 40-statement Q-sample can be found in Appendix 1. All items were assigned to one of the three dimensions in the conceptual framework adopted in this study, as shown in Table 1.

Table 1. Q sample development

Dimensions of middle leadership development	Statement number (N=40)
Intrapersonal dimension: identity, prior experiences, personal learning, career goals	10 statements 1, 7, 9, 18, 23, 26, 29, 31, 38, 40
Relational dimension: peers, senior leaders, colleagues/faculty, family	19 statements 2, 4, 5, 6, 8, 10, 12, 14, 16, 19, 20, 21, 22, 25, 27, 30, 32, 34, 37
Institutional dimension: policy, gender roles, conditions, professional development	11 statements 3, 11, 13, 15, 17, 24, 28, 33, 35, 36, 39

Step 3 Participant Q sorting

The Q sorting activity was administered face-to-face during the months of April and May 2022. An invitation was sent to 54 middle leaders at the university who held the positions of heads of department, directors of centers, or associate deans. The invitation included a description of the study, including research aims, procedures, and consent form following university ethical guidelines. A total of 35 middle leaders agreed to participate; including 25 males and 10 females. A research assistant facilitated a one-on-one sorting activity with the participants. Three sets of data were collected: (1) demographic information, (2) sorting distribution on a quasi-normal and symmetrical grid (see Figure 1), and (3) decision-making processes through a post-sorting survey with open-ended questions.
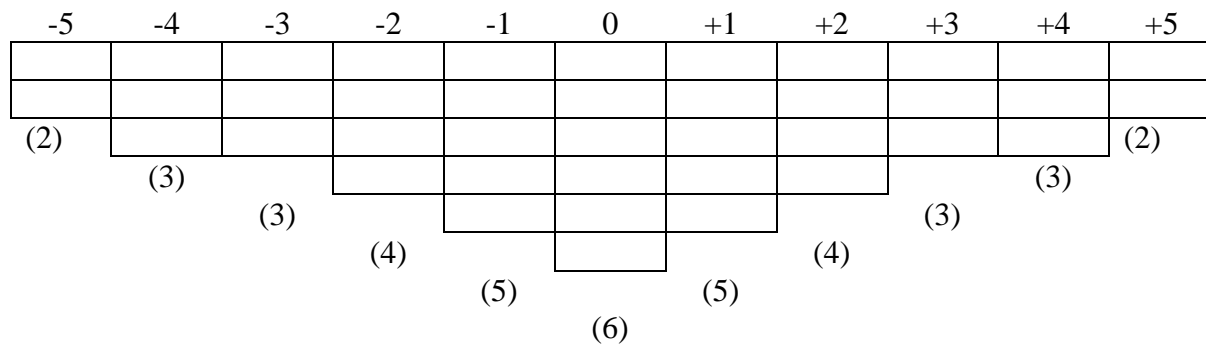

Figure 1. Sorting grid

During the sorting activity, participants rank-ordered the statements according to their perceived importance in influencing their leadership development. Participants assigned each item a hierarchical position on an 11-point sorting grid with values ranging from "less important" (-5) to "rather important" (+5), and completed a holistic configuration of their views with minimal interference from the researchers (Lundberg et al., 2020). Throughout this activity, participants were expected to constantly compare statements, as they are treated in relative rather than absolute terms (Woods, 2012).

Step 4 Post-sorting activity

During the post-sorting activity, participants were instructed to elaborate on the items placed towards the extreme ends of the grid in the form of written responses to open-ended questions. Specifically, they explained their reasoning behind sorting the statements ranked

as most important and those ranked as least important respectively, and whether they had further suggestions on conditions influencing their leadership development. This additional information was necessary to enrich the results of the Q factor analysis described in the next step.

Step 5 Factor analysis

The data obtained from the 35 completed grids were imported into KADE, a dedicated Q analysis software package (Banasick, 2019). The software performs a by-person factor analysis which can be contrasted with the traditional by-variable factor analysis in R methodology. In exploring the data, we used common techniques in Q, namely centroid factor extraction followed by a Varimax method to rotate the emergent factors to a simple structure (Watts & Stenner, 2012). These techniques were useful in including as many participants in the factor as possible. We discussed the results, specifically the statistical strength of each factor, and agreed on the accepted solution through consensus. A four-factor solution was deemed most suitable, based on statistical criteria for accepting a solution, namely eigenvalues of >1.00, explained variance, and at least two Q-sorts per factor (p<0.05) (McKeown & Thomas, 2013).

The selected four-factor solution explained 62% of the study variance. Two of the factors were contrasting, which is explained through the designation of the letters 2a and 2b. According to Q analysis (see Appendix 2), 24 of the 35 participants loaded significantly ($+/-$ 0.41 at the $p < 0.01$ level) on one of the four factors, including 18 males and 6 females. Among the 11 excluded Q sorts, there were 8 confounded sorts and 3 nonsignificant ones.

Step 6 Q factor interpretation

A single idealised Q-sort for each factor was created, typically termed factor array, which was obtained through a weighted averaging of all significantly loading Q sorts. We used abductive and iterative processes to interpret these factor arrays, which began with a within-factor interpretation supported by the data obtained from the demographic data and post-sorting answers to open-ended questions. To further understand the variations among the factors, or the viewpoints derived from the analysis, we examined the statements relative to one another, including distinguishing statements, consensus statements, and highest and lowest ranking statements in and across-factor interpretation procedure. This process resulted in writing a narrative interpretation for each viewpoint using the values of these statements and other statements in the factor array.

Results

According to the criteria discussed in Step 5 above, a four-factor solution emerged in the current study, accounting for 62% of opinion variance. The values assigned to individual statements in each factor and their Z-scores are shown in Table 2. The Z-score shows the degree of consensus and disagreement among participants, thus allowing insight into the complexity of the perspectives and the potential for distinct viewpoints to emerge. It is also useful in identifying statements that may be particularly influential in shaping different viewpoints, as those with higher z-scores are important in distinguishing between them. The statements are listed in ascending order, with those with the most consensus (smallest Z-score variance) between the four factors listed first and those with most disagreement (largest Z-score variance) listed last. In accordance with common practices in Q, the results are reported in the form of narratives, while integrating the quantitative values of the statements and qualitative elaborations provided by the participants during the post-sorting activity. In documenting results, the statement number and its assigned value are placed in parentheses, such that (10; -2) refers to statement 10 with the assigned value of -2 in the specific factor

array. Another common practice in Q is to refer to the factors as viewpoints to preserve the subjective character of the results. The headings attributed to each of the four viewpoints give them a shorthand identification of what they are about. The viewpoints were interpreted as follows: (1) institutional goals, (2) a culture of trust, (3) senior leadership support, and (4) personal ambitions influencing leadership development.

Table 2. Factor values for statements presented by level of consensus (from most consensus to most disagreement)

Statement #	DIM	F1	F2a	F2b	F3	Z-score variance
7	INT	0	0	0	0	0.009
34	REL	3	2	0	1	0.101
10	REL	-1	0	-1	-2	0.113
20	REL	2	1	0	0	0.114
25	REL	-1	2	0	1	0.133
1	INT	0	-3	-2	-2	0.19
37	REL	5	3	1	2	0.2
27	REL	-2	-1	-3	-1	0.226
28	INS	1	-2	0	1	0.274
35	INS	-3	-2	-1	-5	0.279
23	INT	1	-2	-1	-1	0.315
24	INS	4	0	1	-2	0.344
11	INS	-2	-1	-1	-4	0.357
26	INT	0	0	-2	2	0.415
31	INT	4	3	1	-2	0.423
33	INS	1	2	-3	0	0.506
9	INT	-2	1	2	0	0.51
22	REL	-2	1	3	1	0.523
2	REL	-4	0	-5	-4	0.606
40	INT	-1	-2	4	2	0.607
3	INS	-1	-4	2	-1	0.611
4	REL	-3	1	3	1	0.612
14	REL	4	5	0	3	0.619
19	REL	5	0	4	-1	0.622
32	REL	-5	-1	1	-4	0.71
39	INS	3	-3	2	2	0.757
8	REL	-4	-1	2	-3	0.777
5	REL	2	4	-1	-3	0.844
15	INS	1	-4	4	0	0.917
12	REL	3	1	-3	5	1.011
6	REL	2	5	-2	4	1.02
18	INT	-1	2	-4	4	1.027
30	REL	2	4	-4	-3	1.078
13	INS	-3	-5	1	-5	1.149
16	REL	0	4	-4	0	1.168
17	INS	0	-5	3	-1	1.2
21	REL	1	-3	5	3	1.22
36	INS	0	-4	5	3	1.373
29	INT	-4	-1	-2	5	1.532
38	INT	-5	3	-5	4	2.215

Note: F=Factor; DIM=Dimension; INT=Intrapersonal; REL=Relational; INS=Institutional

To give a detailed description of each viewpoint, Table 3 presents the number of participants loading on each viewpoint, its explained variance, the participants' group membership, and the highest- and lowest-ranked statements across the dimensions of the sensemaking conceptual framework. The demographic data was not delineated in this table as a precaution against the possibility of identifying the participants, and were presented in aggregated form. According to Table 3, there were both Qatari and Non-Qatari, female and male participants loading on each of the Viewpoints, except Viewpoint 2a which included only Non-Qatari males.

Table 3. Summary of viewpoint results

V	N	Explained variance	Group membership	Highest ranked #	Lowest ranked #
V1	14	26%	Female (N=3); Male (N=11)	37 (REL)	32 (REL)
			Qatari (N=2); Non-Qatari (N=12)	19 (REL)	38 (INT)
			Middle leadership years (M=10.5)		
V2a	3	13%	Male (N=3)	14D (REL)	13 (INS)
			Non-Qatari (N=3)	6 (REL)	17D* (INS)
			Middle leadership years (M=10.3)		
V2b	2	13%	Female (N=1); Male (N=1)	21D (REL)	38 (INT)
			Qatari (N=1); Non-Qatari (N=1)	36D* (INS)	2 (REL)
			Middle leadership years (M=5)		
V3	5	11%	Female (N=2); Male (N=3)	29D* (INT)	35D* (INS)
			Qatari (N=2); Non-Qatari (N=3)	12D* (REL)	13D (INS)
			Middle leadership years (M=7.6)		

Note: V=Viewpoint; N=Number of significantly loading sorts; D=Distinguishing statements at $p < .05$; D*= Distinguishing statements at $p < .01$

Viewpoint 1: Institutional goals

A total of 14 middle leaders loaded significantly on Viewpoint 1, accounting for 26% of the explained opinion variance. V1 middle leaders' leadership development was mainly influenced by their ability to achieve institutional goals. They were able to lead faculty in accomplishing institutional goals (37; +5) and work with senior leaders to achieve these goals (19; +5). As one noted: *"Working towards achieving institutional goals is my main goal. As a leader, all my leadership practices and professional roles are geared towards achieving them."* Accordingly, they were clear about what their leadership role entailed (24; +3) and aligned their leadership with overall institutional policies (24; +4). As one participant wrote: *"I have strong belief in respecting the institutional system and its philosophy; my role is to apply the policies placed by senior leadership."*

Despite being able to resolve conflicting viewpoints among faculty (34; +3), and facilitate a collaborative environment within the department/college (20; +2), they did not necessarily play a strong strategic role in the leadership of the institution (28; +1).

On an intrapersonal level, they did not take on this position to experience new career challenges (38; -5), and did not have ambitions of taking on a senior position in the future (29; -4). Further, shadowing another leader was not important for the transition to their new leadership role (32; -5), and support from a mentor did not help them in their leadership role (8; -4). One participant noted: *"My institution doesn't offer any such training to leaders."*

They also did not engage with leadership literature to learn about leadership practices and challenges (9; -2), as one participant commented: *"I don't believe leadership qualities can be learned from the literature."* These choices may be contrasted with their emphasis on prior experiences which were considered most helpful in their current leadership role (31; +4).

Support from a spouse (22; -2) and family (4; -3) were both distinguishing statements in Viewpoint 1, yet were not considered important for their leadership development. One participant stated: "*I believe work-related matters should be kept separate from family business. I try my best not to concern my family with these issues*."

Viewpoint 2a: A culture of trust

For Viewpoint 2a, a total of 3 middle leaders loaded significantly, accounting for 13% of the explained opinion variance. V2a middle leaders believed their leadership development was mostly supported within the relational system. They oriented their development towards the faculty/staff they led and strived to build a culture of mutual trust and respect (14; +5). They also distributed responsibilities and tasks to faculty who possessed relevant expertise (6; +5). To further consolidate this relational dimension, they encouraged knowledge sharing among faculty in their department/college (30; +4), supported the professional development of faculty in their department/college (5; +4), and fostered peer learning among faculty (16; +4). As one participant wrote: *"Trust between faculty encourages them to learn from one another, and to share knowledge and experiences. When tasks are distributed fairly, this helps to move the institution forward."*

These agentic behaviors shed light on the perspective that they were not well-informed about the expectations of their leadership role (17; -5) and were not clear about what their leadership role entailed (39; +-3), which were also significantly distinguished statements for V2a. As this participant noted: *"The university has deficits in leadership communication and it lacks a well-established plan for leadership development."* Accordingly, they depended on their agency to create their own roles through cultivating positive relationships and trust in their department/college.

Enacting agency in their leadership role was further revealed in spite of several constraints to their leadership development. Senior leaders did not support their leadership role (21; -3), and they did not have autonomy for decision making in their institution (3; -4). In addition, their leadership contributions were not appreciated by senior leadership (36; -4), who did not consult them in the process of reviewing policies which influenced their department/college (15; -4). Consequently, they did not play a strategic role in the leadership of the institution (28; -2), similar to V1. One participant wrote: *"As far as autonomy, the university operates with more centralised approach (top-down)."*

Further constraints to their leadership development arose from within the institutional system. For example, similar to V1, they had not received adequate training since they took on their leadership role (13; -5). They were also uncertain about participating in organised activities where peers regularly share relevant experiences (2; 0), and did not necessarily appreciate the opportunity to learn from other middle leaders (10; 0).

Viewpoint 2b: Senior leadership support

As a stark contrast to V2a, two middle leaders loaded significantly on Viewpoint 2b, also accounting for 13% of the explained opinion variance. Contrasting V2a, these participants saw senior leadership supports as more important. Thus, they believed senior leaders supported their leadership role (21; +5) and their leadership contributions were appreciated by senior leaders (36; +5), both as distinguishing statements for this viewpoint. Furthermore, senior leaders consulted them in the process of reviewing policies which influence their department/college (15; +4) and they were well-informed about the

expectations of their leadership role (17; +3). Relative to other viewpoints, V2b middle leaders had autonomy for decision making in their institution (3; +2). As explained by one participant: *"Without support of the university leadership, I will not be able to perform in an optimal way."*

Also contrasting V2a, these participants did not find support to their leadership development within the relational system. They did not distribute responsibilities and tasks to faculty who possess relevant expertise (6; -2), or create an environment for efficient communication among faculty (12; -3). They also did not encourage knowledge sharing among faculty in their department/college (30; -4) or foster peer learning among faculty (16; -4).

In regards to the availability of professional learning opportunities, V2b middle leaders received adequate leadership training since they took on their leadership role (13; +1), which was relatively important compared to the other viewpoints. Also distinguishing this viewpoint was the importance of receiving support from a mentor which helped them in their leadership role (8; +2), and shadowing another leader was considered important for the transition to their new leadership role (32; +1). One participant noted: *"shadowing another leader opened the opportunity to understand the tasks and requirements of my leadership role."*

In contrast to formal learning, they had not participated in organised activities where peers regularly share relevant experiences (2; -5), so informal peer support did not help them in their current role (27; -3). Also unlike other viewpoints, they did not actively seek learning opportunities to develop their leadership skills (18; -4), nor had they learned to lead through reflecting on their leadership experiences (26; -2).

Moreover, they received family (4; +3) and spouse support in their leadership role (22; +3), and were able to keep a suitable work-life balance (40; +4). Lastly, they did not take on this position to experience new career challenges (38; -5).

Viewpoint 3: Personal ambitions

A total of 5 middle leaders loaded significantly on Viewpoint 3, accounting for 11% of the explained opinion variance. Participants were centered on their intrapersonal goals for leadership development. Accordingly, they had ambitions of taking on a senior position in the future (29; +5), which significantly distinguished them from the other viewpoints. They also had taken on this position to experience new career challenges (38; +4) and actively sought learning opportunities to develop their leadership skills (18; +4). One participant explained: *"the leadership opportunity was a great step to enrich my experiences and professional careers, as it has opened many doors for me."*

Driven by their individual ambitions, they also considered creating an environment for efficient communication among faculty (12; +5) as important for their leadership development. As one participant explained: *"I am someone who must be working toward new accomplishments or tackling challenges in order to feel like I am making a meaningful impact...It is exciting for me to work creatively to find a solution. This can be done through communication and an open environment."*

Also centering on their agency, they have learned to lead through reflecting on their leadership experiences (26; +2), even though their prior leadership experiences did not help them in their current leadership role (31; -2). One participant wrote: *"Though I didn't have a formal leadership role prior to my current role, I believe I had many attributes and informal experiences to pave the way for me to be a successful leader."*

Contrasted with the intrapersonal supports, V3 middle leaders held negative views about institutional conditions. For instance, they had not received adequate leadership training since they took on their leadership role (13; -5). Further, they did not have the

opportunity to participate in individually-tailored leadership development activities (35; -5), nor did they think that the leadership development activities provided in their institution emphasised experiential learning (11; -4); both statements constituting distinguishing features of V3. Further, they did not appreciate the opportunity to learn from other middle leaders (10, -2), nor support the professional development of faculty in their department/college (5; -3).

Also constituting institutional constraints, their leadership was not strongly aligned with institutional policies (24; -2), and they did not work with senior leaders to achieve institutional goals (19; -1). According to one participant: *"There is no opportunity to participate in decision-making because everyone must follow the hierarchical system of the university."*

Discussion and implications

Inspired by complexity thinking, we have argued that middle leadership development is better understood as emerging within the context of HE institutions as complex adaptive systems. This involved shifting the focus from individual leader development towards seeing leadership development as a complex activity in which multiple actors, artifacts and conditions interact and interrelate in non-linear and often unpredictable ways (Clarke, 2013; Floyd & Fung, 2017), thus providing insight into the interactive dynamics through which leadership development emerges within HE institutions. Adopting Q methodology, the study proposed a conceptual framework for middle leadership development, representing intrapersonal, relational, and institutional dimensions. In addition to literature on middle leadership development, the socio-cultural context of the current study constituted the springboard for the construction of a 40-statement Q-sample, used to collect empirical data from thirty-five middle leaders at one university in Qatar.

Results of the study identified four significantly different viewpoints among the middle leaders regarding the most important influences on their leadership development, namely (1) institutional goals, (2) a culture of trust, (3) senior leadership support, and (4) personal ambitions. The results provided empirical evidence for the complexity of middle leadership development in this cultural context, evident in that all three dimensions were addressed as both most important and least important for the emerging viewpoints. It was further evident in the unique amalgam of influential conditions at any one time within each of the four viewpoints, including the interplay of personal capacities and goals, interactions with others, resources, and sociocultural conditions. Similar findings have been documented in western literature (Clarke, 2013; Freeman et al, 2020), suggesting that key issues for middle leadership development appeared fairly consistent regardless of cultural context. This may be explained by the increasing globalization and internationalization of the HE sector, which appear to impose constraints on middle leaders in Qatar similar to those documented internationally (Meek et al., 2010; Shepherd, 2018).

Succinctly, the four viewpoints alluded to the diversity of conditions that may influence middle leadership development, yet with some similarities. Constituting the majority of participants, V1 and V2b middle learners were found to rely on institutional conditions, including institutional goals and senior leadership supports. They similarly emphasised compliance and performativity directed toward the institution. They were clear on their leadership roles and strived to achieve institutional goals. However, V2b middle learners were further distinguished based on receiving senior leadership support and recognition for their contributions. They were also distinctively well-informed about the expectations of their leadership role and enjoyed autonomy for decision-making in the institution. On this note, the results do not satisfy expected differences between Qatari and Non-Qatari middle leaders, which may be interpreted in relation to the hierarchical system of

governance operating at this university, and the notion that middle leaders may rely on senior leadership as the main source of their leadership development.

By contrast, V2a and V3 middle leaders relied more prominently on their individual agency and ambitions, though with different targets. They similarly highlighted the need for agency due to lacking clarity about their leadership role and expectations. Accordingly, V2a middle leaders engaged in agentic actions through building a culture of mutual trust and respect, and distributing responsibilities to faculty as most important for their development. As experienced non-Qatari male middle leaders in this context, they have sufficient experience of interacting with a varied faculty body and understanding the dynamics of such diversity. Accordingly, V3 middle leaders seem to invest such diversity in opportunities for leadership development. Similarly, V3 middle leaders also enacted agency, yet focused on personal ambitions and career advancement opportunities. They sought new career challenges and aspired to take on senior positions in the future. The possibilities for promotion seem to be available to both Qatari and non-Qatari middle leaders as evident by the diversity of middle leaders adopting this viewpoint.

Despite the differences in V1, 2a and 3, they shared commonalities that distinguished them more clearly from V2b. With only two participants loaded on V2b, we may claim that the majority of participants in this study experienced similar constraints to their leadership development, including an evident lack of professional learning opportunities, senior leadership support, and autonomy. Similar results have been documented in extant literature (Franken et al., 2015; Wallace et al., 2021), though the current study highlighted the multi-systemic nature of the conditions influencing middle leadership development, particularly those arising from its hierarchical model of governance. These constraints are discussed in the following paragraphs in light of practical implications and recommendations for senior leaders working within similarly governed university institutions on the supports needed to further middle leadership development.

First, several researchers have commonly documented insufficient professional learning opportunities for middle leaders (Floyd, 2016; Freeman et al., 2020; Inman, 2009; Thornton, 2020). To this end, systemic and systematic structures are needed to institutionalise both formal and informal learning opportunities for developing middle leaders in a centralised context. A number of models exist for designing and implementing professional learning programs and can inspire the current context (Clarke, 2013; Thornton, 2020; Wallace et al., 2021). Particularly, such programs should be designed for middle leaders to acquire situational knowledge and skills in the form of contextual learning to have any practical benefits (Inman, 2009). Further, middle leaders should be encouraged to participate in learning that involves mentors, peers or colleagues to allow for sharing and interpreting experiences (Franken et al., 2015). Other researchers allude to the importance of experiential forms of professional learning which build on middle leaders' needs and experiences, and promote critical reflections on their leadership practices, relationships, artifacts, and conditions (Branson et al., 2016).

Second, a lack of senior leadership support and autonomy for decision-making were other common institutional factors challenging leadership development. The literature is replete in describing similar global challenges facing middle leaders in HE institutions (Branson et al., 2016; Thornton, 2020). The image of the middle leader as being pulled in many directions without much decision-making authority was common in this cultural context, and similarly in western contexts (Thornton, 2020; Floyd & Dimmock, 2011). We are not claiming that senior leaders decided not to support middle leadership development. Yet, the rigidity of the institutional system with its hierarchical structures, set policies and automated responses sometimes restricted such support. Within this university context, it became difficult for middle leaders to play a more strategic role, and engage in leadership

development that went beyond the mere enhancement of managerial skills, as revealed in V1, 2a and 3. As a contrasting viewpoint, V2b middle leaders showed how institutional supports facilitated their autonomy and participation in decision-making. However, as they looked up to those higher in the hierarchy, they tended to lose sight of those below, disregarding the importance of the relational aspect of their work.

One suggestion put forward by Branson et al. (2016) is to establish HE institutions as learning organizations, whereby all those in formal leadership positions "strive to create a deeper sense of relational connection and interdependence" throughout the organization (p. 143). Middle leadership development thus involves expanding the collective capacity of middle leaders, as well as the capacity of organizational members (Butler, 2020; Franken et al., 2015), and professional learning become a social process infused within the structure, culture, and processes that together characterise the social system (Clarke, 2013). These will necessarily require paying attention to how leadership and power are negotiated and enacted within the current context, and how middle leaders may be empowered to lead through social interactions and concurrence of the community (Doyle & Brady, 2018; Lumby, 2019).

Limitations and future perspectives

On reflection, this study has a few limitations. First, despite our intentions to address gender-based conditions during concourse development (see Step 1 above), study results did not allude to distinctions among female and male middle leaders. Because of higher acceptance rate among males, the recruitment of female middle leaders was uneven. Further studies are needed in similar cultural contexts to explore whether such differences exist. In this regard, exploratory qualitative studies may be more fitting to investigate differences in leadership development supports and constraints based on gender. Second, the only consensus statement among the four viewpoints constituted statement (#7) which identifies professional academic identity as influencing middle leadership development. However, all the middle leaders were consistently uncertain about such influence (7; 0). This result contradicts previous studies (Floyd & Dimmock, 2011; Zhou & Deneen, 2020), and may allude to differences in this specific cultural context, thus requiring further investigation.

Third, due to its dynamic and emerging nature, this study of middle leadership development was mainly explorative and diagnostic. Longitudinal studies that explore changing conditions over time may be needed. Fourth, we acknowledge the limitation of including the perspectives of middle leaders, without incorporating other perspectives from this study's context, such as senior leaders and faculty. Future qualitative studies may be necessary to represent the complex emergence of middle leadership development from different perspectives. Lastly, despite the importance of the sociocultural context for studies of this nature, we contend that recruiting participants from a single institution carries limitations for generalizability. Future studies can examine the experiences of participants from similar sociocultural contexts in comparative ways using the Q-sample from this study.

Conclusion

In responding to the demands of managerialism, the HE institution which is the context of the current study has risked diluting middle leadership development to the acquisition of managerial skills and competencies associated with the individual leader. This approach to leadership development is limited in its focus on human capital, to the exclusion of social capital which coincides more accurately with recent advancements in relational and systemic leadership theories and practices. We have argued that a complexity perspective captures the systemic nature of leadership and enables HE institutions to draw upon and support middle leadership development wholistically. This is not to negate the importance of individual-level development, but that the relational and institutional dimensions of middle

leadership development should also be considered for a more comprehensive understanding of its complexity. In sum, outcomes of the study revealed the importance of systemic and systematic supports for shaping the structure and culture where leadership development emerges. For middle leaders, these supports should particularly target professional learning opportunities, senior leadership support, and greater autonomy. As the university sector continues to experience major change, future attention to the complexity of governance is needed for a more transformational approach to leadership development.

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Appendix 1: Statements in the Q-sample

#	Statement
1	I am able to keep my research going in my leadership role.
2	I have participated in organized activities where peers regularly share relevant experiences.
3	I have autonomy for decision making in my institution.
4	My family supports me in my leadership role.
5	I support the professional development of faculty in my department/college.
6	I distribute responsibilities and tasks to faculty who possess relevant expertise.
7	My professional academic identity has been enriched upon taking on my leadership role.
8	Support from a mentor has helped me in my leadership role.
9	I engage with leadership literature to learn about leadership practices and challenges.
10	I appreciate the opportunity to learn from other middle leaders.
11	The leadership development activities provided in my institution emphasize experiential learning.
12	I create an environment for efficient communication among faculty.
13	I have received adequate leadership training since I took on my leadership role.
14	I strive to build a culture of mutual trust and respect with faculty.
15	Senior leaders consult me in the process of reviewing policies which influence my department/college.
16	I foster peer learning among faculty.
17	I was well-informed about the expectations of my leadership role.
18	I actively seek learning opportunities to develop my leadership skills.
19	I work with senior leaders to achieve institutional goals.
20	I facilitate collaborative environment within my department/college.
21	Senior leaders support my leadership role.
22	My spouse supports me in my leadership role.
23	I am able to keep teaching in my leadership role.
24	My leadership is aligned with overall institutional policies.
25	I foster emotional well-being among faculty.
26	I have learned how to lead through reflecting on my leadership experiences.
27	Informal peer support has helped me in my current role.
28	I play a strategic role in the leadership of the institution.
29	I have ambitions of taking on a senior position in the future.
30	I encourage knowledge sharing among faculty in my department/college.
31	My prior leadership experiences have helped me in my current leadership role.
32	Shadowing another leader was important for the transition to my new leadership role.
33	Male and female faculty have equal opportunities for leadership development in my institution.
34	As a result of my leadership, I am able to resolve conflicting viewpoints among faculty.
35	I have opportunity to participate in individually-tailored leadership development activities.
36	My leadership contributions are appreciated by senior leadership.
37	I am able to lead faculty in accomplishing institutional goals.
38	I took on this position to experience new career challenges.
39	I am clear on what my leadership role entails.
40	I am able to keep a suitable work-life balance in my leadership role.