Vocational education and training in South Africa: leaders' perceptions of a mentoring framework in a professional development programme

Received 1 April 2023
Revised 12 July 2023
26 September 2023
6 November 2023
20 November 2023
Accepted 20 November 2023

Katharina Prummer
Professorship of Technical Education, School of Social Sciences and Technology, Technical University of Munich, Munich, Germany
Salomé Human-Vogel
Department of Educational Psychology, Faculty of Education, University of Pretoria, Pretoria, South Africa, and
Daniel Pittich
Professorship of Technical Education, School of Social Sciences and Technology, Technical University of Munich, Munich, Germany

Abstract

Purpose – The South African vocational education and training (VET) sector is required by legislation to redefine postsecondary education, advance industrialisation and expand the job market to address unemployment in the country. Yet, VET leaders' heterogenous educational and occupational backgrounds do not enable them to address the needs of the VET sector. Continuous professional development of leaders in the education sector needs to include support structures such as mentoring.

Design/methodology/approach – The present study sought to investigate how VET managers in South Africa perceive three different types of mentoring – individual, peer group and expert-based key performance area (KPA) mentoring – during a part-time professional leadership development programme. Using interactive qualitative analysis (IQA), the authors collected and analysed data from focus group discussions (n = 24) and individual interviews (n = 21) from two cohorts of the programme.

Findings – The results revealed that individual mentoring represented the most important driving mechanism, followed by peer group mentoring and expert-based KPA mentoring. Participants identified leadership as a prerequisite for their development. Emotions formed the final outcome of the mentoring framework.

Research limitations/implications – Based on the findings, the authors suggest investigating the role played by leaders' interpersonal competences such as emotional competence in the workplace. Additionally, research needs to clarify if and how mentoring can support leaders to develop interpersonal competences in formal and informal settings.

Originality/value – The study offers empirical evidence on a three-pillar mentoring framework adopted in a professional development programme for leaders in VET in South Africa. It highlights the importance of individual, social and emotional factors.

Keywords Mentoring, South Africa, Vocational education and training, Professional development, Educational leadership, Peer group mentoring, Well-being

Paper type Research paper

Funding: The authors disclosed receipt of the following financial support for the research of this article: This work was supported by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH (grant number: 81243014).

International Journal of Mentoring and Coaching in Education
Vol. 13 No. 2, 2024
pp. 195-213
Emerald Publishing Limited
2046-6854
DOI 10.1108/IJMCE-03-2023-0032

Introduction

South Africa's unemployment rate of 64.4% remains high and is not matched by a growing economy that can provide employment (Kraak, 2008; South Africa Statistics [SAS], 2021). The vocational education and training (VET) sector bears the responsibility to redefine postsecondary education and plays a role in advancing industrialisation and expanding the job market (National Advisory Council on Innovation [NACI], 2021). It accommodates 50 colleges, 710,000 enrolled students and 3,500 senior and middle management staff. However, according to the 2021 innovation report for VET colleges, there are numerous challenges that affect the South African VET sector including top-down governance and failure to pursue workplace-based training opportunities (NACI, 2021). These are obstacles to innovation, and the VET system lags behind the general education system (Mestry, 2017; Naiker and Mestry, 2015). Badenhorst and Radile (2018) regard the issue from a managerial point of view, hypothesising "that ineffective and fragmented leadership ... may be to blame for this state of affairs" (p. 91). Robertson and Frick (2018) state that for the VET sector, "There is now a need for leaders with broader skills, vocational competence and pedagogic knowledge to replace the traditional educational leaders" (p. 77). Additionally, the innovation report suggests a "renewal of the ... leadership environment" (NACI, 2021, p. 7). International research highlights the connection between good leadership and school improvement, which has seen a rising interest in educational leadership development (Mitchell, 2013).

VET leaders' educational and occupational backgrounds are heterogeneous in terms of "qualifications, experience and working conditions"; they do not address the needs of the VET sector, and they have therefore had limited impact (Robertson and Frick, 2018, p. 75). To address this problem, the Department of Higher Education and Training embarked on a joint project with the Education, Training and Development Practices Sector, Education and Training Authority and the German Corporation for International Cooperation in 2018 to "enhance ... the leadership and management capacities of VET college personnel" (Gesellschaft für internationale Zusammenarbeit [GIZ], 2019, p. 2). This resulted in the creation of a postgraduate diploma, a professional part-time programme for leaders to acquire competences related to the key performance areas (KPAs) of the South African VET system. It aims to support transformation and quality enhancement from within the VET sector, focusing on managers as drivers for change.

A development-based programme for VET leaders should consider their diverse backgrounds and demanding workplace situations. Part-time professionals require additional support structures to balance work, study and family. Mentoring has become an essential aspect of professional development programmes, enabling reflection and assisting professionals in organisational (Baranik *et al.*, 2010) and emotional matters (Claro and Perelmiter, 2022) as well as in developing synergies (Mullen and Lick, 1999) and competences (McCormack and West, 2006; McNamara *et al.*, 2014).

The research conducted as part of this programme contributes to understanding how a mentoring framework might function as a relevant support system in developing specific competencies in the VET system. The programme introduces a three-pillar mentoring framework to support leaders' professional development on individual, social–communicative and KPA-related levels. Using interactive qualitative analysis (IQA), we identified the drivers and outcomes the mentoring framework posed for the participants of the programme.

Development of the programme

The joint project members (listed above) identified a South African and a German university to implement the programme in collaboration. Curriculum development commenced in 2019

and included stakeholder engagements with the VET sector and visits to VET colleges to determine and understand the sector's needs. The programme focuses on leaders in the "middle space" (Armstrong, 2015), mainly campus managers and heads of departments; however, a few principals have also joined the programme.

Four principles guided curriculum development:

(1) An inquiry-based approach allows participants to tackle authentic questions related to VET.

(2) A competency-based approach addresses the existing skills gap at management level.

(3) A blended mode of delivery includes work-based learning to enable the transfer of knowledge into the work context.

(4) A mentoring framework supports the development of participants.

The aim was to develop a curriculum that would directly address the needs and challenges of campus managers in the VET context and support the transformation and quality enhancement of the VET sector in South Africa. The one-year programme consists of nine modules divided into two semesters that are based on the following KPAs:

(1) curriculum, teaching and learning;

(2) managing and leading people;

(3) managing physical infrastructure and finance;

(4) managing and developing innovation and quality.

Theory

Continuous professional (leadership) development

Continuous professional development, both in South Africa and internationally, has mainly focused on teachers and medical staff overseeing other positions in the education sector, such as (middle space) leaders, and school quality improvement was rarely connected with educational leadership preparation and development (Eacott and Asuga, 2014).

Lifelong learning makes continuous development integral to professionals' career trajectories. Luneta (2012) defined continuous professional development for teachers as a process of "upgrading and updating" skills necessary for "long-term professional competence" (p. 161). We conceptualise leadership as a profession that can be developed (Örtenblad, 2018), and we take a humanistic view when we refer to leadership as an umbrella term, implying that leaders execute managerial tasks at the same time (Falk, 2003). Christie (2010) described the relationship between leadership, management and headship in South Africa: post-apartheid South Africa ambitiously implemented policies based on Anglophone research and theory to bring about change. However, Western perceptions of leadership led to uncertainty about the field related to the mismatch of leadership models and organisational complexity, a limited research base on educational leadership and shifting discourses from administration to management to leadership.

Against the background of South Africa's education system, Bolam (2008) suggested using policy development as a starting point for designing such programmes and emphasised the need for strategies to be "consistent with [prior] knowledge and skills and appropriate to their particular organisations, tasks, staff and contexts – institutional, local and national" (p. 161). Previously, the South African National Qualification for Principalship provided a one-size-fits-all programme that ignored the specific contexts of VET (Van der Westhuizen and Van Vuuren, 2007). Yet, context-specific professional development is

relevant for VET, owing to the changing tasks of school leadership and leaders' heterogenous backgrounds. It needs to be competence-based to foster a direct application of the content to the workplace (Pittich and Tenberg, 2013).

Competences

One of the primary goals of learning is to develop professional competencies. We understand competence as the propensity to act in a self-organised way, including with respect to knowledge and its application on a practical level (Erpenbeck *et al.*, 2017). With leadership development as a basis, we apply the model of Mendenhall *et al.* (2013), which focuses on managing business and organisational acumen, people and relationships, and managing self.

Based on Mendenhall's model, our structural model operationalised leadership competencies such as vision and strategic thinking, social–communicative competencies, team skills, leading change and flexibility. These are framed by the individual's disposition and their work context. Postgraduate and part-time development programmes are challenging for professionals due to their various responsibilities. This raises the question of how educational institutions can best support learners in acquiring competencies that they can transfer to their work environment.

To support leaders in their professional development, we recognise mentoring to support and frame this process. In a case study, McCormack and West (2006) provided evidence that group mentoring supports women in developing key career competencies for university. Similarly, a national professional programme in Finland used mentoring to develop clinical leadership competencies (McNamara *et al.*, 2014). Mentoring can support individuals to develop professional competencies depending on the context in which the programme is located.

Mentoring

Mentoring can be a useful mechanism for supporting specific professional development needs and competencies. Definitions of mentoring focus on dyadic relationships that involve hierarchical differences and divergent experiences between mentor and mentee. Additionally, we view mentoring as a "developmental, intentional, and generative" process that is "contextually driven" (Mullen, 2012, pp. 7–8). Evolving digital practices, changing organisational environments and globalisation prompted a shift from more traditional dyadic mentoring schemes to a plethora of approaches to mentoring practice (Eby, 1997), which range from individual to peer mentoring practices.

Grocutt *et al.* (2022) summarised findings that suggest mentoring increases leadership identity, transformational leadership behaviour and affective well-being. Further studies investigating the role of mentoring in leadership development are scarce. Claro and Perelmiter (2022) in a meta-analysis reported that mentoring has a moderate positive effect on the emotional well-being of youth. Well-being has not played a major role in mentoring programmes, especially in leadership development. Rather, the focus has been on satisfaction, trust and emotional intelligence (Hobson = van Nieuwerburgh, 2022). In education, Kutsyuruba *et al.* (2019) revealed a strong correlation between mentoring and well-being among beginner teachers. However, the mentoring was not formalised. Findings on more formalised mentoring programmes have suggested that mentoring offers opportunities for increased well-being and empowerment (Wilcoxen *et al.*, 2020). It also links formalised programmes, which include mentoring to leadership roles (Bell *et al.*, 2021).

Mentoring in education can function as a mechanism in early career or later career stages depending on its purpose – focusing on individual and/or organisational outcomes. Rhodes (2012) identified the preparation stage, the early headship incumbency and the later headship

incumbency in school settings. Mentoring educational leaders can serve various purposes – transition to new roles, fostering interactions and specific professional development focusing on leaders' identity and technical skills (Cowin *et al.*, 2016; Oleszewski *et al.*, 2012). Rhodes and Fletcher (2013) recommended that mentoring be used to support educational leaders' self-efficacy. In a qualitative study, Muir (2014) suggested that critical reflection in formal mentoring can influence leaders' identity. However, middle-space educational leaders mainly have received informal mentoring through senior staff members (Searby *et al.*, 2017).

The mentoring framework

Following the theoretical basis of this study, in this section, we will explain the formalised mentoring framework of the programme, which is aimed at middle-space leaders. It includes three mentoring types – individual professional mentoring (IPM), peer group mentoring (PGM) and key performance area mentoring (KPAM) – all of which the leaders participate in (Table 1). The three types frame the content-related modules of the programme and provide a mechanism which targets the different needs and perspectives that professionals in such programmes exhibit.

The IPM focuses on developing individual expertise and is provided continuously during contact periods and scheduled virtual consultations where required. Participants gain relevant leadership competencies through an individualistic approach set in the form of traditional one-on-one mentoring. The IPM enables them to engage in what Collinson and Collinson (2009) call blended leadership set between "strategic priorities and competing responsibilities" in VET in South Africa (Robertson and Frick, 2018, p. 73).

The KPAM focuses on the participants' professional challenges. This type of mentoring is application-oriented and uses feedback to facilitate reflection. Experts in the four KPAs act as mentors for specialised consultation. KPAM mainly takes place during contact sessions through group discussions and panels. The focus on subject-area-related mentoring allows participants to choose one area they identify as relevant to their leadership and work context and require support with. Support that targets the KPAs of VET college leaders acknowledges South Africa's distinctive challenges. While KPAM forms a new type of mentoring, we partly connect it to topical mentoring, which refers to giving individuals specific information related to their profession (Irby *et al.*, 2017).

The PGM is concerned with cooperative, collaborative and social learning (Hall and Jaugietis, 2011). The peer groups are constructed to comprise leaders across the different KPAM groups. Its objective is to create opportunities for participants to develop contextual intelligence through sharing their experiences. The sharing of experiences and best practices fosters social–communicative competencies. Peer relations are vital in the cultural context of the programme. It refers to the South African concept of *ubuntu* – the interconnectedness we experience as part of a group (Geber and Keane, 2017). PGM takes place online and during contact sessions.

Mentoring type	Perspective	Aim	Organisation
Individual professional mentoring (IPM)	Individual	Leadership competencies	One-on-one meetings
Key performance area mentoring (KPAM)	Contextual	KPA-specific competencies	Expert-led meetings in small groups
Peer-group mentoring (PGM)	Cultural/ social	Social and communicative competencies	Peer-group meetings with participants across different KPAM groups

Source(s): Authors' own creation

Table 1. Overview of mentoring framework

Research question

VET leaders in South Africa have diverse educational and occupational backgrounds and need competence development, which requires adequate support. The mentoring framework, described earlier, provides an innovative approach to integrate individual, cultural and contextual factors specific to South Africa. Additionally, it is based on research showing how mentoring supports professional development with regard to organisational, emotional and competence-related factors (Baranik *et al.*, 2010; Claro and Perelmiter, 2022).

To understand how participants in the programme perceive this framework, we took an emic approach to eliciting participants' experiences of the mentoring framework by using IQA (Northcutt and McCoy, 2004).

We therefore formulated the following research questions:

RQ1. Which factors contribute to participants' perceptions of and reactions to the mentoring framework in the programme?

RQ2. How do these factors relate to one another in a perceived system of influence or cause and effect?

The ability of humans to make causal judgements is essential for decision-making, and research suggests that humans can construct causal explanations effortlessly in perception (Human-Vogel and Mahlangu, 2009; Körding *et al.*, 2007). However, making sophisticated generalisations about the world based on sparse data is not fully understood (Tenenbaum *et al.*, 2011). Zheng *et al.* (2020) acknowledged that providing more information may not necessarily lead to better predictions, especially when considering decision-making under conditions of uncertainty or in combination with prior knowledge and beliefs (Rottman and Hastie, 2014). IQA is based on the idea that humans are capable of making causal judgements based on sparse data. Still, it also considers recent findings that suggest judgements can vary depending on how they are combined with participants' perceptions and lived experiences.

Methodology

We used IQA (Northcutt and McCoy, 2004) for data collection and analysis to investigate the research questions. IQA is a social–constructivist systems approach to qualitative research, which builds on phenomenology, systems theory and grounded theory. It provides a systematic, rigorous, replicable and verifiable methodology to create meaning from a phenomenon, and its outcome is a visual depiction – called a system influence diagram (SID) – of participants' understanding of the phenomenon. IQA relies on group processes to create and analyse data, which are used in a second step to identify the individuals' perspectives of a phenomenon (Northcutt and McCoy, 2004). The researcher's bias towards the researched phenomenon and power relations between researchers and participants are mitigated because the participants function both as the data source and as analysts. Additionally, IQA allows for a verifiable audit trail of the analytical and interpretive steps, thereby increasing the trustworthiness of the results. It also helps to "manage the influence of organizational politics and protects minority voices and perspectives" (McCoy, 2013, p. 7).

As international researchers, we are aware of postcolonial arguments and critical studies, which imply that we have to free ourselves from what Eacott and Asuga (2014) called a "catchup" (p. 920) logic since "Africa has unique needs and challenges" (Terblanche and Passmore, 2019, p. 4). The cross-cultural nature of our research project means that we wanted to prioritise the perspectives of our participants, rather than imposing our own perspectives on the data, thereby avoiding analysis of the data as a colonising practice of (colonisers) exercising sovereignty over others and taking away the voice of those asked (Chilisa and Phatshwane, 2022).

Sample and data collection

Because of COVID-19 pandemic restrictions, we collected the data in two consecutive sessions using the virtual Blackboard Collaborate platform (Table 2). To run a complete IQA process, we used the first cohort of VET managers participating in the programme in 2020. With the second cohort of the programme in 2021, we aimed to back up how the categories related to one another by using the categories developed by cohort 1. Researchers and participants were already familiar with each other because the researchers were involved in the programme from the beginning. This made establishing trust and maintaining engagement during the IQA process in the online setting easier. We slightly adapted the IQA focus group process to address the virtual nature of the data collection. The online setting also hindered the interactivity in the focus group sessions because participants needed to familiarise themselves with the process.

Ethical clearance was obtained from both participating universities. We informed participants in writing and orally about the purpose and the structure of the data collection. This included opportunities and risks of participation as well as rights and obligations. All participants gave written consent.

We used Mentimeter Pro and CryptPad to collect the data, which we pseudonymised at the earliest possible stage. Our main unit of analysis was the group's beliefs about the phenomenon, and to protect the participants' identities, we did not collect individual characteristics.

IQA research flow phase I

In phase 1, participants with lived experience of the phenomenon being studied generated their thoughts in a focus group format. Then they sorted them into categories that we describe as affinities.

Focus group

The study conducted two focus groups with 24 participants (first n = 13 duration 180 min; second n = 11 duration 153 min) to investigate their perceptions of the mentoring framework in the study programme. The participants generated their thoughts about their experiences with the framework through a silent brainstorming activity, which produced 175 responses (n1 = 110, n2 = 65). The participants then organised their responses into groups and subgroups of meaning through an inductive coding process. Initially, naming these groups as an axial coding exercise was done separately from the grouping process. However, due to the virtual environment, we combined the two steps and facilitated them in smaller groups of four to five participants. Focus group 1 clustered the responses into nine affinities, and focus group 2 clustered them into five affinities. The names produced by both groups were evaluated and transferred into the final affinity relationship table (ART; Table 3).

The affinities were arranged in an ART where participants analysed their data by indicating through theoretical coding how the affinities were related to one another. In a theoretical coding exercise for two affinities (e.g. A and B), there are three possible options:

Method	Cohort 1 (2020) n =	Cohort 2 (2021) n =
Focus group (developing themes)	24	0
Interview (describing themes)	21	0
Relationship table (relating themes)	21	8

Source(s): Authors' own creation

Table 2. Overview of sample and data collection in November 2020 and November 2021

Number	Name
1	Actions
2	Benefits
3	Challenges
4	Development
5	Emotions
6	Individual professional mentoring (IPM)
7	Key performance area mentoring (KPAM)
8	Leadership
9	Peer group mentoring (PGM)
10	Support

Source(s): Authors' own creation

Table 3. Affinities

A influences B (A→B), B influences A (A←B) or no relationship between the two (A<>B). The ARTs can be analysed at group level and individual level. In line with our research questions, we analysed the group level (Table 4). IQA uses the Pareto principle or 80/20 rule "to determine the minimum number of relationships to be included … that explains the maximum amount of variation in the system" (Human-Vogel and Van Petegem, 2008, p. 460).

IQA research flow phase 2

The next step involved "rationalizing the system" (Northcutt and McCoy, 2004, p. 170). A composite inter-relationship diagram (Table 5) was created, representing an aggregation of all responses for each relationship pair in the ARTs.

For each affinity pair, the relationship was recorded twice, with an arrow indicating the direction (left or up). The delta values were calculated by subtracting the inward arrows from the outward arrows. The delta values were sorted in descending order (Table 6). Affinities with a positive delta describe primary drivers (no inward arrows) or secondary drivers of the system. In contrast, affinities with a negative delta describe primary outcomes (no outward arrows) or secondary outcomes. If affinities have an equal number of inward and outward arrows, they are called circular or pivots.

Affinity pair relationship	Affinity pair relationship	Affinity pair relationship
1 → 2	3 → 4	5←10
1←3	3 → 5	6 → 7
1 → 4	3←6	6 → 8
1←5	3←→7	6 → 9
1←6	3←8	6 → 10
1←7	3←9	7 → 8
1 → 8	3←10	7 → 9
1 → 9	4 → 5	7 → 10
1 → 10	4←6	8←9
2←3	4←7	8 → 10
2←4	4←8	9 → 10
2 → 5	4←9	
2←6	4←10	
2←7	5←6	
2←8	5←7	
2←9	5←8	
2←10	5←9	

Source(s): Authors' own creation

Table 4. Affinity pair relationship

	1	2	3	4	5	6	7	8	9	10	OUT	IN	Δ
1		↑	←	↑	←	←	←	↑	↑	↑	5	4	1
2	←		←	←	↑	←	←	←	←	←	1	8	−7
3	↑	↑		↑	↑	←		←	←	←	4	4	0
4	←	↑	←		↑	←	←	←	←	←	2	7	−5
5	↑	←	←	←		←	←	←	←	←	1	8	−7
6	↑	↑	↑	↑	↑		↑	↑	↑	↑	9	0	9
7	↑	↑		↑	↑	←		↑	↑	↑	7	1	6
8	←	↑	↑	↑	↑	←	←		←	↑	5	4	1
9	←	↑	↑	↑	↑	←	←	↑		↑	6	3	3
10	←	↑	↑	↑	↑	←	←	←	←		4	5	−1

Source(s): Authors' own creation

Table 5. Inter-relationship diagram

	1	2	3	4	5	6	7	8	9	10	OUT	IN	Δ
1		↑	↑	↑	↑	↑	↑	↑	↑	↑	9	0	9
2	↑		↑	↑	↑	←	↑	↑	↑	↑	7	1	6
3	←	↑		↑	↑	←	←	↑	↑	↑	6	3	3
4	↑	↑	←		←	←	←	↑	↑	↑	5	4	1
5	←	↑	↑	↑		←	←	↑	←	↑	5	4	1
6	↑	↑	←	↑	↑			←	←	←	4	4	0
7	←	↑	↑	↑	↑	←		←	←	←	4	5	−1
8	←	↑	←	←	↑	←	←		←	←	2	7	−5
9	←	←	←	←	↑	←	←	←		←	1	8	−7
10	↑	←	←	←	←	←	←	←	←		1	8	−7

Source(s): Authors' own creation

Table 6. Inter-relationship diagram sorted

The visual representation of the inter-relationship diagram is the SID, which is similar to a path diagram. Next, the affinities were arranged in topological zones in descending order of delta, and the relationships are indicated using arrows facing "in the direction of the relationship as represented in the inter-relationship diagram" (Ananth and Maistry, 2020, p. 8). To present a comprehensive SID, the IQA process involved uncluttering the SID by systematically removing links that were mediated through other relationships; for example, A is related to B and C; B is related to C, so the connection between A and C can be removed, since it is explained by the indirect paths A–B and B–C. The uncluttered SID was the basis for the second phase of the IQA research flow, which involved semi-structured interviews to explore participants' experiences of the affinities. Participants were asked about their perceptions of the relationship between the affinities in the ART to create individual SIDs or, in the next step, a composite group SID.

Interviews

The affinities the participants produced, grouped and named in the focus group sessions provided the basis for the interviews. In the first part of the interview, the interviewers asked the participants to share their experiences of each affinity. In the second phase, the participants explored their perspectives of the relationships among the affinities, allowing for three options as described earlier. The interviews were transcribed verbatim using MAXQDA, without correcting grammatical formulations, and coded according to the affinities generated in the focus groups. To protect the anonymity of the participants, we used

codes (A1–A4; B1–B3, B6; C1, C2, C4, C5; D1–D5; E1, E2, E4–E6) which were allocated during the interview process.

Results

SID

We will first explain the structural aspects of the system using the combined SID (Figure 1), which reflects the themes involved, the zones in which they appear and feedback loops. In a second step, we will draw on the interviews and provide a summary of each theme.

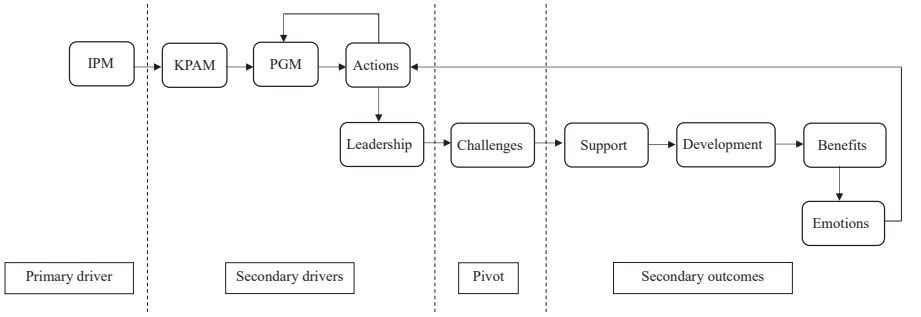

Figure 1.
SID

Source(s): Authors' own creation

The primary driver of the mentoring framework was the IPM. The KPAM and the PGM represented secondary drivers. Additionally, "leadership", "support" and "actions" functioned as secondary drivers in the mentoring experiences of the participants. These five affinities presented the cause or influencer of the mentoring framework.

The "challenges" associated with the mentoring worked as a neutral pivot. The affinities – "support", "development", "benefits" and "emotions" – formed the outcome or results of the cause–effect relationships. There were two feedback loops. In the first feedback loop, we saw a reciprocal relationship in which PGM influenced actions but actions simultaneously fed back into the peer group system. We named this first feedback loop "community of practice" (Figure 2). The second feedback loop showed how "actions" directly influenced leadership and were affected by emotions.

Figure 2.
Summarised SID

Source(s): Authors' own creation

The second feedback loop spanned the first feedback loop across the remaining affinities, including all outcomes, representing the lived mentoring experience. We named this "mentoring in action".

IPM: primary driver

At the beginning of the training, most participants expressed doubt and uncertainty about this type of mentoring. Three participants mentioned that the concept was unclear; some found it difficult (B1, B3). Overall, the IPM seemed to have created a safe space for participants "because [they] can be truthful about [their] experience, journey, fears, pressure, emotions . . . and when I go home, I'm feeling lighter to be able to continue with the training"

(D3). For most, it related to their position as a leader, where the IPM enabled them to "critically evaluate [themselves and] look at [their] own professional development" (B3) even beyond the end of the programme.

Emotionally, the participants viewed the IPM as rewarding and exciting. IPM "is really about providing support and allowing you to be in a space, where you are not left alone and then you end up dropping out of the course" (A4).

KPAM: driver

Participants described the KPAM as a learning space where peers developed together through best practices: "You can listen to other people who have the same frustrations, whether it's connectivity, administration and management" (A4). Participants across all four KPAs highlighted the value of the application-oriented approach: "If I hadn't done that, I wouldn't have been able to collaborate and to change something at my own institution" (C1). The actions entailed listening, posing questions, working on case studies and sharing information. Peer learning in a team and the perceived growth in the selected KPA and in the leaders' selves were named as developmental aspects of the KPAM. The emotions associated with KPAM were encouragement, which led to a relaxed environment.

PGM: driver

PGM focused on building participants as peers and as a team, providing a resource for growth. Participants viewed the PGM as their conscience, safety net and highlight of the course. "It is actually a powerful way of ... looking at ... your peers, your KPAs, your individual mentoring" (D3), fostering a community of practice. Sharing information and best practices were vital components for the participants to benchmark their VET organisations and evaluate their leadership competencies.

Initially, participants felt hesitant, scared to open up and competitive during the PGM. Some even felt guilty for missing sessions. They experienced challenges such as dealing with dominant individuals and peer pressure. Participants described the support within the PGM as "give and take" (C1). Motivational aspects played a significant role in preventing participants from dropping out. The programme also provided networking opportunities and a social aspect, allowing participants to develop network avenues.

Actions: driver

In the focus groups, this theme comprised two subgroups, namely *physical* and *cognitive* actions. Participants identified cognitive actions as learning and reflecting including emotional engagement. On the one hand, challenges were described as stimulating and thought provoking. On the other hand, participants experienced it as challenging and demanding. Physical actions included how to work, communicate with and engage other people. One participant described the connection between the two subgroups: "Cognitive is something that I have to think in my mind what I must physically do to implement" (D3). Another (A4) said, "If you know the benefits ... you will be in a good cognitive space and physically you will be willing to push yourself". For one participant, the "actions have definitely got a huge impact on peer mentoring". Further actions associated with the mentoring framework included peer support and development.

Leadership: driver

> We were given the opportunity to lead, take the initiative, come up with ways of dealing with an assessment or how to solve specific problems, present different challenges that we are having on campuses, so it gave us the opportunity to express our leadership capabilities. (E4)

Participants connected leadership with their development, which was initiated through their reflection as leaders. This extended to "opportunities . . . for the people that I am leading, for them to grow in their professional career or as professionals" (E2). Throughout the programme, participants started to rethink their working process and ways of applying different leadership styles: "You cannot say, I am now a strategic leader or whatever, but I am, from now on, striving to become a strategic leader and a strategic thinker and also to look into the wellbeing of myself as well" (A2) and "I found myself in a situation where I literally reflected to say . . . 'Which leadership style do I think would be best suited, to manage this particular situation?'" (E2).

Challenges: pivot

The most frequent challenges reported by participants were Internet connectivity and technology: "I felt, in the beginning, unsure . . . with technology and because we hadn't learned all these latest technologies' (D2). Another common challenge among the participants was a healthy work–life–study balance, which increased due to "the demand of the programme combined with my workload due to COVID-19" (A2). Additionally, they reported issues with group work in the programme owing to the idea that leaders worked individually. The cognitive load was another challenging factor for the participants' thinking as leaders. Additionally, for some of them, it had been a long time since they had participated in a professional development programme. Nevertheless, a participant reported that "KPA mentoring provides me with the ammunition to deal with the challenges" (E2).

Support: outcome

Participants felt supported by the mentors in the three mentoring types. However, lecturers, tutors and peers as well as supervisors in their workplace also provided support. Physically, the respondents felt supported through the material provided to them via the online platform, such as concepts, videos, podcasts and readings. A forum and WhatsApp group added to the support they received. On an emotional level, participants saw the support as a means for personal and professional growth, which gave them guidance and motivation. One participant stressed that they "cannot make it without the support" (D3). Another stated, "I cannot be master of everything. I will need support" (E6).

Development: outcome

The mentoring framework allowed the participants to reflect upon their professional development, where "the mentoring assisted me to look at the areas where I have to improve" (D2). Some connected their "own development . . . [with] how I support staff in their development" (D2). By changing the perspective, "my colleagues, they are saying to me I have really grown in my leadership" (B3). Additionally, the participants developed as leaders during the programme by "seeing things differently . . . understand[ing] there is a different perspective" (A2). Specific aspects that were developed included time management, working with technology, communication and action research, approaching challenges, social reflection, accepting criticism, emotional intelligence, working as a team and supporting and developing one another. Some remarked that "there will always be a next step to grow in terms of leadership" (C1) and that they moved "to the practical – where [they]'ve applied it" (D1). Looking at the PGM, the participants developed one another by "mov[ing] together to the same level" (C4).

Benefits: outcome

The participants associated various benefits with their development as leaders during the mentoring: strategic thinking, individual pace, self-discovery of abilities, teamwork, effective

communication, approaching tasks, implementation and increased self-confidence and technological skills. They perceived these benefits as a process in which they continuously improved. The IPM brought a reverse facet: "Other people learned from you . . . that is growing and making an impact together" (D3). Through a "community of practice" (D4, E4, E2), the "one-on-one" (B3) setting and the possibility to network, the participants felt and received support during the mentoring sessions. Furthermore, the benefits extended to their workplace: "Now that you went back to your own environment, you had a person . . . whenever you [were] in need of advice or assistance" (B1).

Emotions: outcome

The focus groups identified two subthemes: *well-being* and *resentment*. Emotions that participants experienced in terms of well-being were expressed as feeling happy and comfortable. Emotions associated with resentment were described as "the very first session, one experienced mixed emotions: you are anxious, you don't know what to expect . . . you are scared' (E2). Another participant remarked, "When you study, you go through much pressure. Sometimes you have this feeling of resentment, you are overwhelmed, you feel like you are not well" (D3). However, through the programme, participants had a better understanding of their own well-being needs as leaders and the well-being needs of their staff. Emotions associated with the PGM included 'feel[ing] guilty because the connectivity failed in my group" (A1). Another participant identified "that you feel better . . . you feel healthier, you worry less, because . . . there's somebody who . . . would say 'I'm always available should you experience any problem"" (A4). The emotions experienced through the PGM related to the support of peers: "In instances where I felt that I was confused . . . they became my safety net, they became my social inspiration, and we could assist one another" (E2).

Discussion

In this IQA study, we investigated leaders' perceptions of the mentoring approach presenting a SID and the individual responses clustered according to the affinities at a group level. As past research has suggested, mentoring can support the development of leaders in structured programmes, resulting in better leadership performance (Grocutt *et al.*, 2022) and increased competencies (McCormack and West, 2006). The SID shows that individualisation functions as a prerequisite in this development setting since IPM was associated as the only primary driver in the framework. The KPAM takes on researchers' arguments that leadership development needs to be specific to institutional, local and national contexts (Bolam, 2008). Furthermore, the KPAM dealing with context-specific aspects functions as a connector between the IPM and the PGM, linking individual development to a social component. Then, the PGM links to cognitive and physical actions, indicating that a peer base is necessary to set things in motion.

The "community of practice" feedback loop (Figure 2) formed the backbone of drivers in the mentoring framework and presented a connecting link between the remaining drivers, IPM and KPAM, as well as leadership. Social learning forms the notion of a community of practice in which members within a set framework construct and exchange knowledge and understanding through practice (Campbell *et al.*, 2022). Our research clarifies that social and communicative aspects of learning, such as those on which the PGM focuses, are closely connected to actions that result in the outcomes of the mentoring experience. Especially in the South African context, it shows how important community building and shared knowledge are for professional development. Furthermore, it connects to Western research on learning communities, which indicates that virtual communities of practice support leaders to develop and transform school leadership (Irby *et al.*, 2022).

The findings contribute to how leadership functions as a driver of the mentoring framework and not, as expected, as an outcome, since the programme is described as a leadership development programme. We observed in the data that leadership forms a prerequisite for (competence) development. During the mentoring sessions, participants were able to enact leadership through actions. Formal requirements for this included gaining knowledge and (self-) reflection. These speak to the concept of identity, which Murrell and Onosu (2022) perceived as central in leadership development, as "leaders must see themselves and be viewed by others … in their assigned role" (p. 176). Alongside professional development, mentoring relationships can therefore develop and transform leaders' identities through actions and their social embedment in peer and KPA groups (Murrell and Onosu, 2022). This seems especially relevant for non-traditional leadership styles and heterogeneous organisations, as well as women and people of colour in leadership roles (Sugiyama *et al.*, 2016). Murrell and Onosu (2022) highlighted that different mentoring forms and the resulting relationships can contribute to developing more diverse leaders.

The data revealed that the participants perceived "mentoring in action" as twofold. On the one hand, they experienced mentoring as a part of their professional and personal development in respect of the different competences they acquired. On the other hand, they applied mentoring in their workplace without a formal mandate. Consequently, they practised mentoring as both mentees and mentors. This can be linked to the high number of "benefits" the participants mentioned which were related to institutional application. Educational institutions should therefore provide inquiry-based learning settings that consider the context in which participants work. This applies especially in part-time courses for professionals, where they can apply the content in their workplaces.

Emotions formed the final outcome of the mentoring experience, ranging from nervousness to satisfaction and eventually relaxation. In the influence diagram, "emotions", as part of the "mentoring in action" feedback loop, reverted to "actions", which formed part of the "community of practice" feedback loop. The cognitive actions summarised were linked to emotions, which illustrates that "emotions" formed an implicit driver as part of "actions" and were an explicit outcome of the mentoring system. Brain-based neuroscience models of emotion have tended to overlook social contexts, which are essential in a community of practice (Schilbach *et al.*, 2013). However, emotions and actions were strongly linked to thriving in the workplace, making this an important area for research in both neuroscience and social sciences (Bieńkiewicz *et al.*, 2021). The relationship between emotions and joint action is still unclear, leading to further questions about how individual emotions affect movement during group action. These questions are relevant for understanding social group processes in professional development programmes.

Our results confirm that for professional development and learning to occur effectively, leaders must feel safe and experience support and well-being (Beausaert *et al.*, 2023). Research into self-regulated learning has promoted the "combination of the self-regulatory ability of the person and the external regulatory features of the context" (de la Fuente-Arias, 2017, p. 6). These implications may indicate that in times of disruption and social distancing through pandemic experiences, educational institutions must ensure that they offer context-related support structures that give participants the opportunity for reflection and engagement. The challenges mentioned about COVID-19, as well as communication and technical issues, back up this claim. Consequently, the fact that emotions impacted actions raises the question of whether social emotional competence poses a necessary competence for development or, rather, a prerequisite for professional programmes. Mendenhall *et al.*'s (2013) competence framework, which we used as a conceptual basis, includes emotional intelligence as an interpersonal competence. Jokinen (2005) described emotional intelligence as a meta-ability. Studies have shown that school leaders with high emotional intelligence focus on and build

"cultures of trust" and support in a school environment (Brinia *et al.*, 2014). Regarding emotional intelligence as well as other necessary competencies for leaders, our research supports Jokinen's (2005) notion of emphasising learning and education to develop leaders who are equipped for an ever-changing work environment, independently of time, space and culture.

Limitations, future research and practicality

Our aim was to shed light on the drivers and outcomes of the mentoring framework. Researchers and practitioners can derive implications for designing context-related learning environments. However, since the mentoring framework is integrated into a development programme, it is challenging to distinguish between the effect of the mentoring and the effect of the modules on participants' competence development. This was visible in the data since participants sometimes referred to the modules and the mentoring experience simultaneously. On the other hand, it speaks of the strong integration of and interaction between programme and support structures.

Taking the current results as a basis, we advise practitioners to integrate support structures such as mentoring in lifelong learning programmes as a central component. However, rather than replicating a one-size-fits-all model, it is necessary to consider contextual and cultural aspects of the target group. This relates to how and why we incorporated the PGM and the KPAM in our programme. Our results indicate that programmes that include the components of reflection and application to the workplace result in improved competence development. Based on our participants' views, lifelong learning programmes should create a safe space for reflection on one's own professional and personal development, and mentoring is a way to achieve this.

Our analysis and findings based on qualitative data provide a diversity and richness of viewpoints captured in the context described, which impact its transferability. Nonetheless, based on underlying psychological mechanisms necessary for learning, we assume that the main findings support further research and interventions in leadership development in VET. Even though we used IQA to limit our bias and influence as researchers during data collection and analysis, we cannot assume that our research is entirely free from bias.

In what Colley (2002) described as "the meteoric rise of mentoring" (p. 258), new mentoring concepts, such as KPA mentoring, require further independent research. Issues of power, control and dependence in mentoring relationships should also be considered, especially in intercultural settings, to ensure the integrity and outcomes of mentoring (Sundli, 2007). Conducting cross-cultural studies and investigating perspectives on status and power will enhance our understanding of mentoring processes. Since emotions formed the final outcome of this study, we suggest to further investigate the role of educational leaders' emotional competencies in the workplace. Additionally, research needs to clarify if and how mentoring can support educational leaders to develop such competencies in formal and informal settings. The IQA data set is a resource for quantifying qualitative data and analysing various themes. Using IQA as a social–constructivist vehicle in mentoring research speaks to the dialogic nature of mentoring. IQA honours the views and feelings of those participating in the mentoring process by drawing conclusions directly from them and not from the researchers' interpretations.

As a whole, our study contributes to understanding participants' perceptions of how a mentoring framework supports development in a professional leadership programme in VET and highlights its relevance. Our findings comprise a stepping stone towards understanding and supporting individuals in professional development programmes and generating practice-based interventions.

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About the authors

Katharina Prummer is a research associate and project coordinator at the Professorship of Technical Education at the Technical University of Munich. Her research interests focus on mentoring, international vocational education and qualitative methods. Katharina Prummer is the corresponding author and can be contacted at: katharina.prummer@tum.de

Prof. Salomé Human-Vogel is a registered educational psychologist and deputy dean of teaching and learning in the Faculty of Education, University of Pretoria, South Africa. Her research interests focus on academic commitment and self-regulation, as well as the application of these ideas to the design of learning experiences that support student success.

Prof. Daniel Pittich is professor for technical education at the Technical University of Munich. His research interests focus on vocational teaching and learning, competence modelling, diagnostics and curricular implementation processes in technical domains, as well as learning in hybrid learning environments.