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Principals' perceptions about collective competences in shared leadership contexts

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A R T I C L E   I N F O

A B S T R A C T

This article aims to understand how principals perceive collective competences in their schools' shared leadership contexts. Collective competences are crucial in shared leadership but have not been widely explored within educational leadership studies. This study investigates collective competences through two intersected models: attribute and relational models. The data comprise interviews conducted with 12 Finnish principals in comprehensive and secondary schools who practiced shared modes of leadership. Due to the Finnish school culture emphasising collaboration, the principals were expected to be able to broadly consider the collective side of competences in their schools. The data were analysed using a hybrid thematic analysis. Consequently, nine collective competence themes were found: shared meaning, sharing accounts, collective mindset, knowledge sharing and creation, developing contexts, broad participation, views of relationships, group collaboration and shared goal-oriented beliefs. These themes provide a fresh understanding of how to develop educational leadership considered in plural terms.

1. Introduction

Recently, the issues surrounding educators have become increasingly complex. As principals can no longer tackle diverse organisational problems alone (Leithwood & Mascall, 2008; Wilhelm, 2013), many researchers are claiming that school leadership should be understood as a shared or collective phenomenon that requires collective competences to tackle the problems (Hallinger & Heck, 2010; Harris, 2003; Lahtero et al., 2017; Woods & Roberts, 2019). We call this collective phenomenon shared leadership (Carson et al., 2007), which has also drawn attention towards educational studies that emphasise the plural nature of leadership (Alanezi, 2016; Crawford, 2019; Hammersley-Fletcher & Brundrett, 2008; Kownacki et al., 2020; Wilhelm, 2013).

According to Pearce and Conger (2003, p. 1), shared leadership refers to 'A dynamic, interactive influence process among individuals in groups for which the objective is to lead one another to the achievement of group or organisational goals or both'. To understand shared leadership, the following three issues need to be highlighted in the current research. First, the existing educational research tends to focus on the behavioural aspects of shared leadership, such as delegation of authority, collective decision-making and collaboration (Alanezi, 2016; Kownacki et al., 2020; Lambert, 2002). However, other aspects of competences in shared leadership have been discussed in organisational studies (Snook et al., 2012). For example, collective knowledge, behaviour and attitudes exist besides individual ones in shared leadership (Khasawneh, 2011; Snook et al., 2012). Performing a task involves a combination of knowledge, skills, values, interaction with others and tool usage, rather than just behavioural issues (Fadel et al., 2015; Matsushita, 2016; Rychen & Salganik, 2003). The combination is called competence (Fadel et al., 2015; Matsushita, 2016). Schools include various reciprocal relationships (MacBeath, 2005), and collective competences that form shared leadership should be explored.

Second, although many previous studies have investigated shared leadership from teachers' perception (Aliakbari, 2014; Wan et al., 2020), the perceptions of principals have been rarely investigated. Since research has pointed out that principals' support is crucial in shared leadership (Wang et al., 2017), it is essential to understand how leadership responsibilities are shared and implemented based on collective competences, because educators are unlikely to bring out the full potential without adequate support from principals (Wilhelm, 2013).

Third, there is a lack of empirical studies on shared leadership in horizontal culture where social equality is emphasised (Triandis, 2001). Finnish school contexts are unique because they are mainly based on the idea of shared leadership, which is based on the culture (Risku, 2014; Sahlberg, 2014). For example, researchers have shown how Finnish schools encourage teacher autonomy and participation and utilise school-wide teams as modes of sharing pedagogical and leadership issues (Risku, 2014; Sahlberg, 2014).

Thus, this study aims to understand how principals perceive collective competences in their schools' shared leadership contexts. To reach our aim, we exploited Finnish principals' perceptions where shared leadership was practiced in their schools. Finnish principals with a long experience of shared leadership can be considered appropriate informants to explain how they consider collective competences within their organisations and to validate the study.

To understand collective competences in shared leadership contexts, we adopted two main competence models: attribute and relational models (Matsushita, 2016). Attribute models highlight features of self to be acquired as to knowing, doing and being. Relational models emphasise the aspects that organise resources to meet a demand, such as those in relation to self, objects and others (Gustavsson, 2001; Rychen & Salganik, 2003). However, none of these models can completely explain competence; therefore, as suggested by Matsushita (2016), the intersection of the attribute model of knowing–doing–being with Boreham's (2004) relational model was used in this study.

2. Theoretical background

2.1. Competences and shared leadership

Researchers have claimed a new understanding of leadership competences as a collective learning endeavour (Goddard et al., 2007; Hallinger & Heck, 2010; Hargreaves & Fink, 2008). According to Packer and Goicoechea (2000), learning competences involve being a community member and constructing knowledge in diverse expertise areas as participants. Competences at the group level determine the amount of leadership exhibited and the degree to which it is shared (Kukenberger & D'Innocenzo, 2019). Synergy is required to achieve this. The synergy generated by professional collaborative actions produces more than the sum of individual efforts, as collaborative endeavours require all types of prosocial actions and teacher autonomy (Yada, 2020; Day et al., 2006; Hargreaves et al., 2007; Kownacki et al., 2020; Lahtero et al., 2017). People in educational organisations work more effectively and creatively when they are helping and benefitting others to tackle common problems together (Yada & Jäppinen, 2019; Moolenaar et al., 2012).

Shared leadership develops in contexts in which multiple individuals with distinctive expertise collaborate with each other for shared purposes when they are willing to take charge of leadership and responsibilities (Denis et al., 2012). A common assertion of researchers about competences in shared leadership contexts is that adequate competences should not be possessed only by individuals but also in interactions between actors and cultural artefacts as collaborative efforts to complete complex tasks (Avolio et al., 1996; Spillane et al., 2001; Pearce & Conger, 2003). Thus, to engender competences for shared leadership, productive relationships and interactions are required (Carson et al., 2007), through which organisational members collectively create a common sense of direction (Denis et al., 2012).

Scholars have discussed what the concept 'competence' actually signifies and created models to understand the phenomenon (Fadel et al., 2015; Rychen & Salganik, 2003). According to Matsushita (2016), these models can be categorised into attribute models as competences to acquire them and relational models about how to organise resources in relation to self, objects and others. We treat these two models individually and then intersect them to understand the competences in shared leadership.

2.2. Attribute model

Many scholars have defined competences as attributes, for example, as 'capacity to connect knowledge, skills, attitudes and professional identity' (Krüger, 2009, p. 118). In particular, in shared leadership, Slater (2008) referred to understanding (knowing), skills (doing) and attitudes (being) that might lead to successful collaboration in educational organisations.

The present study utilise the trichotomy of knowing–doing–being presented by Snook et al. (2012) because the trichotomy was supposed to help understand leadership competences. *Knowing* emphasises the cognitive domain, namely what people know or need to know for their endeavours, such as conceptual understanding, cognitive modelling and framing (Snook et al., 2012). The core cognitive skill of leadership is to analyse the context within which organisational members operate. In shared leadership, collective decision-making is performed with the information acquired from the broad participation of educational organisational members (Somech, 2010; Woods & Roberts, 2019).

Doing represents the behavioural domain of leadership. As many researchers have supported the idea that leadership is realised by interaction, interpersonal skills and network-building are highly emphasised (Dinh et al., 2014). Spillane et al. (2001) argued that leadership practices can be considered macro-functions, such as constructing norms and supporting teacher development, as well as micro-tasks, including collaborative actions and discussion. They explained that macro-functions and micro-tasks are linked.

Being refers to the identity of leadership as values, attitudes and beliefs (i.e. who they are as human beings (Snook et al., 2012) in deeply thinking about what leadership means in terms of assumptions and expectations) (Ross & Gray, 2006; Snook et al., 2012). Moreover, the achievement of goals demands members' identification (Cerit, 2010).

2.3. Relational model

White (1959) referred to competences as an organism's capacity to interact effectively with its environment. Consequently, competences in shared leadership must also be developed through dealing with complex processes of ongoing interactions between people and situations, considered in relation to self, objects and others (Woods & Roberts, 2019).

To achieve common goals by generating synergy, Boreham (2004) argued regarding three normative principles of collective competences: making collective sense of events, developing and using a collective knowledge base and developing a sense of interdependency. The present study also utilises Boreham's model because the model deals with collective aspects of competence in educational contexts. Although we applied the model, we changed the category of 'interdependency' to 'relationship' because educational organisations merely involve relationships between people not interdependency (Fullan, 2016).

Boreham's (2004) first principle is *collective sensemaking*. This is a process of social construction through which collective explanations of discrepant events are created, which rationalise what people are doing (Maitlis et al., 2013; Weick et al., 2005). Accordingly, shared leadership requires sensemaking of different situations (Frick et al., 2012; Leithwood & Mascall, 2008) when people actively work to expand their understanding of what is and what ought to be (Woods & Roberts, 2019).

Boreham's second principle is *collective knowledge*. This means that people pool their knowledge to make it available and amplify it in carrying out their work (von Krogh et al., 2012). This is realised with diverse expertise and knowledge that are interdependent in practices (Spillane et al., 2001). In shared leadership, members are recognised as individuals who contribute to the collective knowledge (Edge, 2013). Collective knowledge depends on competences to develop a knowledge structure together, which can be maintained on a more enduring basis than the individual knowledge bases of its members because collective knowledge is related to organisational identity (Lyles & Schwenk, 1992).

The third principle adapted from Boreham's is *relationships*. Relationships form the foundation for educational endeavours (Shields, 2004), since various stakeholders are involved in shared leadership processes (Leithwood & Mascall, 2008). For example, through networks and learning communities, educational professionals collaborate with each other (Vangrieken et al., 2015) due to sub-systems that require relationships
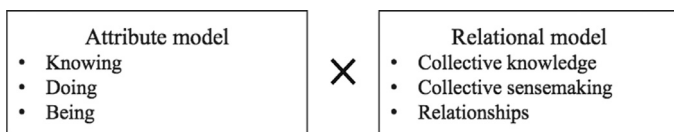
Fig. 1. Intersection of the trichotomy of knowing–doing–being and Boreham's principles

between individuals and groups (Schein, 2010). The sub-systems might not always be congruent with the goals of the organisation. However, the effects are attributed to social identification, which enables staff members to integrate their interests for the common good (Ross & Gray, 2006). Therefore, collective activity and linkages between the sub-systems depend on how the organisation overcomes the dispersing tendencies of varying perspectives within the sub-systems by enhancing the quality of relationships (Boreham, 2004). Here, collective competences play a crucial role as functional and productive relationships (Cunliffe & Eriksen, 2011).

2.4. Intersections of the two models

Neither an attribute nor a relational model can completely explain competence. For example, when people are developing a collective sense of events, they need to know what they are doing and where they are going (knowing), to collectively make sense (doing) and to have attitudes or values towards the school's goals (being). Touching upon the complex phenomenon of competences, Matsushita (2016) maintained that the attribute and relational models can be intersected. Therefore, this study intersected the trichotomy of knowing–doing–being with Boreham's principles of collective knowledge, collective sensemaking and relationships to understand collective competences (Fig. 1). Below, we try to explain what each intersection means in shared leadership contexts.

In *intersecting knowing and collective sensemaking*, organisational members share their experiences in dialogue and apprehend what is happening and what is going to happen (Weick et al., 2005). They exchange provisional visions about collective endeavours and try to define new courses of action (Stigliani & Ravasi, 2012; Weick et al., 2005). Prospective visions in changing situations emerge when the members make sense retrospectively to overcome discrepancies between the current state and an expected future or for organisational goals, strategy or identity issues (Stigliani & Ravasi, 2012; Weick et al., 2005).

In *intersecting doing and collective sensemaking,* people enact or actively construct an environment by noticing and bracketing possible signs and by generating new features in the environment (Stigliani and Ravasi, 2012; Weick et al., 2005). Although the members' initial experiences might be confusing, attaching signs and symbols, such as metaphors, Fig.s, prototypes and drawings, to construct shared meanings is important (Stigliani & Ravasi, 2012). This provides hope, confidence and new ways to take action with a common map of what is going on out there (Weick et al., 2005).

Intersecting being and collective sensemaking means shared mindsets to achieve common goals. Shared mindsets are required to decide what is important and what is not (Thomson & Hall, 2011; Weick et al., 2005). Organisational members need to be sensitive to the tasks at hand while being attentive to how one's actions fit into or affect the group's functioning (Maitlis, 2005; Weick et al., 2005). In addition, plausibility and flexibility deal with the complexities of the current society (Stigliani & Ravasi, 2012) in making things move forward and in reconciling the future-oriented nature of the collective process with the retrospective nature of individual cognitive work (Stigliani & Ravasi, 2012).

In *intersecting knowing and collective knowledge,* a stock of common understanding is constituted by individual knowledge sets (Hecker, 2012). As organisational members can tap extant knowledge resources by knowing who knows what and who is interested in which issue, they

can pass new knowledge on to appropriate persons (Hecker, 2012). Knowledge-sharing facilitates communication by allowing others to adapt to individual actions (Edge, 2013; Schein, 2010). New knowledge is then created by integrating individual knowledge sets (Hecker, 2012; von Krogh et al., 2012). In coordinated social practices, individuals complement, combine, expand and reframe knowledge to synergistically generate new knowledge (Jäppinen, 2017; Tsoukas, 2009).

In understanding the *intersection of doing and collective knowledge*, the concept 'Ba', which means the shared context for knowledge creation in Japanese (Nonaka et al., 2000), is exploited. Ba provides energy, quality and place for the type of interaction that generates knowledge-sharing and creation. Creating Ba contexts encourages people to dialogue and actively take responsibility for common tasks they are engaged in (Tsoukas, 2009).

Intersecting being and collective knowledge, instead of focusing on the forms and processes of collective knowledge (Hecker, 2012; von Krogh et al., 2012), focuses on cultural values in enabling knowledge-creation (Gronn, 2002; von Krogh et al., 2012). For example, creating an open atmosphere where various people can act freely means that sharing can evolve continuously (Nonaka et al., 2000). Thus, open-minded cultural values enable participation in reciprocal exchanges through giving and receiving diverse resources, which can positively result in better ideas and solutions (Spraggon & Bodolica, 2017).

Intersecting knowing and relationships is inherently relational (Komives et al., 2013). First, relationships can be considered an entity, which regards them as social lines enacted by subjects (Uhl-Bien, 2006). In shared leadership, this means mutual influence between the people involved (Uhl-Bien, 2006). Relationships can also reach beyond organisational–member relationships to organisational networks (Cunliffe & Eriksen, 2011). Second, relationships can be examined as a process that emphasises 'relating' and relatedness (Uhl-Bien, 2006). The process perspective assumes that social reality lies in relationships and intersubjective meanings rather than in individuals (Cunliffe & Eriksen, 2011).

In *intersecting doing and relationships*, activity is regarded as a relational practice of collaborative endeavours (Harris, 2003; Slater, 2008). Collaborative practices enhance learners' and organisational outcomes, where autonomy in a relational context facilitates shared leadership (Carson et al., 2007; Vangrieken et al., 2017). To develop relational sensitivity, people have to autonomously get involved in dialogue, including questioning, listening, reflecting and coming to shared meanings, thereby overcoming fragmenting tendencies and different perceptions and creating synergy (Boreham, 2004; Cunliffe & Eriksen, 2011; Shields, 2004).

In *intersecting being and relationships*, Snook et al. (2012) argued that people hold the collective belief that they are creating together as a shared direction, alignment and commitment. Trust and prosociality form the foundation of collective beliefs. Trust is one party's willingness to be vulnerable to another party, based on the confidence that the latter party is benevolent, reliable, competent, honest and open (Hoy & Tarter, 2004). Prosociality means that people are motivated to engage in actions that benefit others (Yada & Jäppinen, 2019). Trust and prosociality indicate a value for overcoming the fragmenting tendency of the group members. Bandura (2000) indicated organisational members' prosocial belief, referring to the fact that the more they have a prosocial orientation, the more they are certain of their collective competences to achieve collective goals.

3. Research question

In shared leadership contexts, principals are presupposed to promote collective competences. Since principals' viewpoint is crucial in building up collective competences in shared leadership contexts, we conducted this study among such Finnish principals who practice shared leadership in their everyday school life. Consequently, the following research question was formulated: *How can principals' perception on collective com-*

Table 1
Information about interview participants

	Gender	Age	Teaching experience (yrs)	Principal experience (yrs)	School	Degree	School size
P1	female	66	15	21	Upper-secondary (grade 10–12)	Master's	201–400
P2	male	56	17	15	Comprehensive (grade 1–9)	Master's	401–700
P3	male	45	6	15	Primary (grade 1–6)	Master's	401–700
P4	male	35	4	3	Comprehensive (grade 1–9)	Master's	201–400
P5	female	53	8	12	Lower-secondary (grade 7–9)	Master's	401–700
P6	male	63	16	16	Comprehensive (grade 1–9)	Ph.D.	701–900
P7	female	56	16	14	Comprehensive (grade 1–9)	Master's	701–900
P8	female	53	15	15	Primary (grade 1–6)	Master's	201–400
P9	female	43	10	10	Comprehensive & upper-secondary (grade 1–12)	Master's	201–400
P10	female	60	20	7	Comprehensive (grade 1–9)	Master's	201–400
P11	female	54	13	16	Comprehensive (grade 1–9)	Master's	401–700
P12	male	40	12	8	Comprehensive & upper-secondary (grade 1–12)	Master's	201–400

petences be described through the intersections of the attribute and relational competence models?

4. Method

4.1. Participants

This study adopted a qualitative research methodology for data collection and analysis. We used semi-structured interviews in which one of the authors interviewed participating principals at their schools. Since a qualitative study aims to understand a phenomenon, a sampling method with adequate criteria to select participants is required to represent information-rich cases (Patton, 2002). Consequently, the national principal association recommended the interviewees who currently work as principals and have at least three years of experience. This selection implied that in-depth interviews would permit capturing the principals' perceptions of collective competences in shared leadership contexts. Before the interview, the aim of the study and assured confidentiality regarding ethical issues were explained. In addition, a consent form was signed by the researcher and the principals. The interviews were conducted in English because of the different mother tongues of the interviewers. However, all participants mastered English well.

The data for this qualitative study were collected by interviewing 12 experienced Finnish principals from primary, comprehensive, lower and upper secondary schools (Table 1). The ages of the principals varied between 35 and 66. The average educational leadership experience was more than 12 years. Six principals worked in small schools, four in medium schools and two in large schools all over the country.

The interview questions (see Appendix) concerned collective competence within three dimensions of shared leadership: shared purpose, social support and voice (Carson et al., 2007).

4.2. Data analysis

We applied a hybrid approach of inductive and deductive thematic coding (Fereday & Muir-Cochrane, 2006). First, we conducted an inductive analysis and found 28 codes of collective competence within shared leadership. The data were coded using the qualitative data analysis software of ATLAS.ti 8.0. Second, we deductively assigned the codes to the nine intersections of the two models. Finally, we connected the codes within the intersections and assigned names in a theory-driven manner that comprehensively indicated the themes at each intersection. The analysis aimed to understand how the principals perceive collective competences in their schools' shared leadership contexts based on the intersection of the trichotomy of knowing–doing–being with Boreham's three principles.

5. Findings: Collective competences in shared school leadership contexts

The principals' self-reported descriptions were divided into the following nine themes of collective competencies: shared meaning, sharing accounts, collective mindset, knowledge sharing and creation, developing contexts, broad participation, views of relationships, group collaboration and shared goal-oriented beliefs (see Table 2 for examples of the analysis processes and the themes that emerged). Regarding the quotes, we used the acronym P and a serial number when referring to a particular principal (see Table 1 for descriptive information of the participants). The quotes illustrated the overarching nature of each theme of collective competence. The number of principals who mentioned each theme is specified in Table 3.

5.1. Shared meaning

The first collective competence was labelled shared meaning. Nine principals perceived that one collective competence is that everyone understands what is happening within the organisation in preparing for the future. Although the future is unclear, the principals emphasised that educators can move forward in a common direction when they understand that it is possible to solve the problem towards the goal. For example, in the following citation, one principal described sharing meaning in this way: '*We discussed the certain problem quite extensively. Then, all of sudden, it came clear, okay, this is what we're gonna do*' (P5). This perception represented the importance of knowing shared meaning, claiming that the educators need to understand that they can give meaning to their collective experience and what to do next, although they have not done so yet.

5.2. Sharing accounts

The second collective competence was labelled sharing accounts, which was highlighted as an action that connects educators to have a common understanding. Six principals perceived that conversational and visual explanations are effective in gaining a common understanding when facing difficulties. The principals expressed that conversation is essential to seek a solution, while visualisation helps the educational professionals make clear future prospects. For example, one principal stated the importance of sharing explanations about where they are and in which direction they are going: '*Nobody knows what happens [...] That's something that we had to have communication and dialogue a lot, so that we also create new level of understanding*' (P9).

5.3. Collective mindset

The third collective competence was collective mindset. Almost all principals perceived that, to strengthen collective effort, the educators

Table 2
Collective competences in shared leadership contexts: Nine intersections of the attribute and relational models

	Knowing Codes and citation examples	Competence	Doing Codes and citation examples	Competence	Being Codes and citation examples	Competence
Collective sensemaking	Co-construction of the unknown *'This morning we had an issue on a table, and we need to find the solution for this certain problem. And we had a discussion and then everybody was able to bring their opinion and we discussed it quite extensively'.* (P5) Prospective vision *'We had lots of questions without answers [...] but, we could solve that problem towards the goal'* (P6)	Shared meaning	Conversational accounts *'[When] there are conflicts or problems, I think the main thing is to respond and [...] you take it seriously and talk about it, 'okay, what's wrong now?', then we try to move on'.* (P4) Symbolic accounts *'We rationalise why we have to do the things based on backgrounds. For example, this comprehensive school, so we have to mix the students and so on. If someone is thinking that it is a stupid idea that mixing students working together between different ages, we have to give the information on why we have to do that'.* (P11)	Sharing accounts	Ultimate goal *'We deal with a mission with a vision and strategies of the school so that we would know why we are there'.* (P2) Flexibility *'You never know what's going to happen in this school. [If a teacher gets flu], we have to find someone who can take his group, and in the worst case, one teacher has to take care of two classes. [But,] it works quite well. Flexibility is really really important'.* (P6)	Collective mindset
Collective knowledge	Knowledge sharing *'When they are sharing, they are able to use the other's knowledge or skills'.* (P11) Knowledge creation *'Sharing and discussing all the time, it gives more'.* (P7)	Knowledge sharing and creation	Physical form *'[...] we have one hour-talk like developmental talk and many of them [visitors] said that the climate is something special'.* (P4) Mental form *'Welfare is something you cannot just create [...] It's something that the community has to create from inside among themselves'.* (P9) Virtual form *'Many times, in [the web-platform], I send, "Thanks for this and this. And I will share this with all teachers"'.* (P7)	Developing contexts	Participative attitude *'Participation is something that we try to put into classrooms. [...] We start to make things together, start to make projects together, and try to get rid of barriers between the subjects and the ages. So, different children, different ages work together. So, participation comes from our values'"* (P9) Openness *'People here like to talk with each other, like to make things together, like to share ideas, and they are not jealous about the other's ideas. They are very interested in teaching together'.* (P9)	Broad participation
Relationships	Network and exchange *'Teachers working together build a relationship in very many ways. We have first class teachers, subject teachers, special education teachers, everyone has their own group. Then, all teachers need to get together. I think that we have to first build up relationships between people here'.* (P12) Intersubjectivity *'We help each other. For example, we try to make sure that children take care of own things, they don't do mess anymore because we want to make it easier for the cleaners' job'.* (P8) Socially constructed relationships *'[There] are new things that rise up and we do not know the answer. So, we can say, 'Let's try to find the answer together.' We keep up the atmosphere that mistake does not mean that you are bad or non-qualified teacher'.* (P10)	Views of relationships	Collaboration *'[Collaboration is] helping other people and helping everybody get through the tasks we have by dividing the work and sharing that way'.* (P5) Discussion *'We are used to debating on issues and disagreeing on the issues because people believe in that they could make change that is significant for them'.* (P2) Upholding autonomy and synergy creation *'When they are active members of the community, they are active in bringing their own strength. To be available to everyone, [...] everybody is working together'.* (P4)	Group collaboration	Shared direction *'We create that whole the organisation is more effective because everybody is working on that direction'.* (P5) Shared commitment *'When you do something, you all the time you think about your companions. "I'm a teacher of 5A, and doing this here. Of course, I share it to 6B and C." If there is a math teacher doing something with a physics teacher, she shares and talks all the times to the group around her'.* (P7) Trust *'We have to respect their knowledge what they know. Then, we trust professional their own field'.* (P6). Prosociality *'The teachers work for others. For instance, when young teachers who have small children have to stay at home for their children, [the other teachers] are ready to help with lessons because it was very difficult to get a new teacher for the days or for a few lessons'.* (P1)	Shared goal-oriented beliefs

Table 3
Number of intersections mentioned

	Knowing - Collective sensemaking	Doing - Collective sensemaking	Being - Collective sensemaking	Knowing - Collective knowledge	Doing - Collective knowledge	Being - Collective knowledge	Knowing - Relationships	Doing - Relationships	Being - Relationships
P1	X		X	X	X	X	X		X
P2	X	X	X	X	X	X	X	X	X
P3	X		X	X	X	X	X		X
P4	X	X	X	X	X	X	X	X	
P5	X	X	X	X	X	X	X	X	X
P6	X	X	X	X	X	X	X	X	X
P7			X	X	X	X	X	X	X
P8	X		X	X	X	X	X	X	X
P9	X	X	X	X	X	X			X
P10	X		X	X	X	X	X	X	X
P11				X	X	X		X	X
P12		X	X			X	X	X	X
Total number	9	6	11	11	11	12	10	9	11

hold an attitude to help or benefit the others or a collective. One principal represented the educators' mindset, as follows: '*Sometimes, if we have some events together and teachers are better to see a big picture and deal with [it], they can see it is not a big problem. [...] If, for example, they have to give [away] their lesson [hours] for the event['s preparation], they can do it*' (P4). In addition, the principals stated that the educators flexibly change their working styles and shifts according to the needs of others, which helps their work for the collective. This flexible mindset for the collective was reported, for example, as follows: '*We are just organising who is going to be outside for the recess, and who is going to take care of the lab class, and people are just working in a flexible way. They believe [to be] flexible*' (P8).

5.4. Knowledge sharing and creation

The fourth collective competence was labelled knowledge sharing and creation, which emphasised that educators possess stock knowledge sets. Eleven principals perceived that a variety of knowledge from different experts, including teachers, psychologists and other professionals from various fields, enriched their educational endeavour towards the school goals. In their responses, sharing a variety of knowledge and creating something new appeared as key factors when they thought about their knowledge as collective. The following examples show that the educators knew the importance of sharing and creating knowledge: '*Getting together and sharing your ideas and skills give you more than you give out*' (P8) and '*The sharing and discussing all the time, it gives more*' (P7).

5.5. Developing contexts

The fifth collective competence was labelled as developing contexts. In the interviews, almost all principals agreed that how to build contexts where the educators can be open to forming collective knowledge leads to how to develop collective knowledge. For example, one principal reported the importance of the contexts as follows: '*[With] mental and physical, emotional safety [...] they do not need to be afraid of saying what they want to say*' (P10). Thus, the principals perceived that developing not only formal but also informal contexts in which the educators form collective knowledge is a collective competence. Formally, developmental training, faculty meetings, coaching and web platforms were considered the contexts. Informal communication (e.g. chatting during breaks and conversation in social events) had a considerable impact on the development of collective knowledge.

5.6. Broad participation

The sixth collective competence was called broad participation, which represents the value of participation from the whole school community. As collective knowledge is realised using knowledge sets, all principals agreed with the participation of all educators, including teachers, assistants, secretaries, leaders, janitors and all other staff in the school. To realise their participation, the principals emphasised being open to others. When educators are open to others, they can utilise various ideas and their communication does not stop. The following example illustrates the importance of broad participation: '*Each teacher and each subject should look at this theme from their own perspective. [...] then we have an open discussion taking into consideration all of these aspects. And there was a big board work, people can keep on adding to it, with their idea we can do. So, sharing these ideas and getting the ideas from the other ideas generates more*' (P5).

5.7. Views of relationships

The seventh collective competence was labelled views of relationships. In the interviews, 10 principals considered in different ways how the educators realised relationships. The first view of relationships included network and exchange, for example, in recruiting 'team players'. In this view, the principals thought that there were people who were good at communication and formed good relationships. One principal stated the following regarding the relationships: '*We look for the person who is a good person in our school, good team player because that's important and this whole collective*' (P6). The second view of relationships included intersubjectivity and socially constructed relationships. According to this view, the educators were perceived to have a given set of shared meanings of the situation. For example, one principal explained a shared meaning of the situation as follows: '*[Moving the school] was very tough. Everybody was tired, but everybody knew everybody is tired. So, we did it together. We stay together*' (P5).

5.8. Group collaboration

The eighth collective competence was called group collaboration. Working together was perceived as a collective competence by nine principals. The intersection point was that the principals underlined upholding teachers' autonomy to tackle various problems when they collaborated. For example, one principal noted, '*Teacher teams [...] can make decisions because the autonomy is quite high. [...] Teachers are able to decide a lot of things, what they do and how they do things in schools. [...] It's more and more like planning your work together and also working together*' (P8). The principals perceived that collaboration requires respecting the autonomy of others, thereby creating synergy. One principal emphasised that collaboration creates synergy through listening to others: '*The idea is that one plus one is more than two. When you bring all your ideas together [...] you have to be able to listen to the others' ideas, how the others understand the topic*' (P8).

5.9. Shared goal-oriented beliefs

The last collective competence was called shared goal-oriented beliefs. In shared leadership contexts, 11 principals perceived that holding a common attitude towards a goal was collective competence. It was represented as shared direction, shared commitment, trust and prosociality. One principal explained its importance as follows: '*The most important thing is how to understand the meaning of the team's main work and main targets and how they value that they are working and developing certain areas in this school, understand, take, and commit it*' (P7). The principals argued that a common attitude towards the goals leads to trust and prosocial orientation, thereby bolstering relationships. For example, one principal noticed that prosocial orientation becomes energy to work together, by stating that '*It's more fun because working just by yourself is no way. I think everybody who wants to be a school staff, they want to be together, want to work together. The feeling of fun is certainly one of benefits*' (P8).

6. Discussion

This study aimed to understand how principals perceive collective competences in their schools' shared leadership contexts. In intersecting the attribute and relational models, nine collective competences were identified: shared meaning, sharing accounts, collective mindset, knowledge sharing and creation, developing contexts, broad participation, views of relationships, group collaboration and shared goal-oriented beliefs. This study revealed that collective competences should be limited to neither attribute nor relational models. Manifestations of collective competences included treats of both models when collective competences appeared in everyday school life. Although collective competences could be more than nine, our analysis revealed the nine competences as the core of the entire collective competence, thereby broadening the previous viewpoints about competences in shared leadership contexts (Boreham, 2004; Snook et al., 2012).

This study contributes to filling the research gap on principals' perceptions about collective competences in shared leadership contexts. First, the results showed that the principals perceived that shared leadership comprises not only behavioural aspects but also the other aspects indicated in the attribute and relational models. Second, the principals' perception about shared leadership was presented through the concept of collective competences. Our study adds an essential aspect to the existing knowledge of shared leadership that is mainly based on teachers' perspectives. Finally, the results showed that the principals highly valued collective competences when they supported shared leadership at a practical level.

There are some additional interesting results that should be noted. First, almost all principals mentioned the knowing–doing–being aspects in collective knowledge. This indicates that they understood the importance of collective knowledge. Similarly to previous research (e.g. Nonaka et al., 2000; von Krogh et al., 2012), the principals in shared leadership contexts perceived that if someone does not know a certain thing, it is important for them to know who has expertise about it. The principals understood that their educators could leverage existing knowledge resources by understanding who knows what and who is interested in which topic, so that they could pass on appropriate information to the right people. The educators develop physical, mental and even virtual places of their own, thereby creating more available access among colleagues and leading to their participation in shared leadership.

Second, fewer principals mentioned the aspects of collective sensemaking. In particular, only six principals spoke about the doing aspect of collective sensemaking. This indicates that educators feel difficulties forming shared purpose at a practical level, although researchers claim the importance of shared purpose (Carson et al., 2007; Kownacki et al., 2020; Wilhelm, 2013). Thus, it is not always easy to share meaning among educators because the surrounding contexts are changing and complex. Even though the educators create a shared meaning, they might be too busy to maintain meta-cognition with daily chores. Thus, in the future, the challenges incurred when creating collective sensemaking should be explored.

Third, the principals generally accepted the importance of relationships in all aspects of knowing–doing–being. Many of them emphasised teacher autonomy in encouraging collaboration. Although the structure of the school organisation comprises many sub-systems (Schein, 2010), the principals might acknowledge the importance of the sub-systems' goals and teacher autonomy in the school organisation. This is inconsistent with Wilhelm's (2013) findings that the process of building shared leadership creates ownership. The principals mentioned the opposite process and perceived that the school members helped their colleagues with their own strength, which is an inception of collaboration in shared leadership. In other words, individual competences within shared leadership form an ensemble, as some previous studies have suggested (Harris, 2003; Shields, 2004).

Fourth, regarding relationships, many principals mentioned that when the situation and goal are clear, the members become prosocial; that is, they can offer help with their own expertise and agree upon a common and shared goal. This is facilitated through collective sensemaking and shared purposes that result in a collective mindset (Maitlis, 2005; Weick et al., 2005). This idea corresponds to what previous studies have suggested: a belief in the shared power to produce successful results promotes a prosocial orientation characterised by co-operativeness and helpfulness (Bandura, 2000).

We also indicate some limitations of our study. Although a shared leadership culture prevails in Finnish schools, this study focused only on a rather small number of selected principals and lacked information from other important organisational members, such as teachers. To better understand the phenomenon of collective competences within shared leadership, further studies should be undertaken with random sampling in considering the whole staff. In addition, this study only asked the principals' perception, which might not be the same as what they are practically doing. Thus, future research should explore the actual practice of collective competences. In addition, to increase the trustworthiness of the study, the exact concept of collective competences was not mentioned or discussed with the participants. Future research should account for a broader view of collective competences. For example, such research should be repeated in other cultural contexts as well.

Our study highlights several practical implications for school leadership. Principals might wish to emphasise shared leadership endeavours through collective competences as a framework. Utilising collective competences, they might wish to assess the strengths and weak points of their competences. Moreover, pre-and in-service training for principals might emphasise understanding collective competences in shared leadership contexts. For example, training programmes could explain how they realise shared leadership through collective competences.

In summary, according to our data, the concept of collective competence creates positive feedback, thereby co-creating a safe and open atmosphere. Collective competences refer to the entire community's willingness and motivation to benefit others and look at complicated situations from a collective perspective. Here, knowledge interacts, multi-professional collaboration flourishes to foster collaborative knowledge construction and productive relationships promote solving challenging problems in collaboration. All this orientates the school towards the future along with a shared vision and strategy: '*We are active members [...] bringing their own strengths to be available to everyone. We create that whole the organisation is more effective because everybody is working on that direction*' (P5).

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Appendix

Shared purpose

1. What types of collective competences do your school staff have in order to achieve your school's shared goals? How would you describe them?
2. Do you remember some experiences that made you and your staff feel that your school had necessary and important collective competences in order to have collective understanding?
3. How does your school aim at building collective competence in order to have the shared understanding and goals?

Social support

1. What types of collective competences do your staff have in order to help or support others? How would you describe them?
2. Do you remember any special occasions when you and your staff felt that your school manifested a will to help and support others to achieve the shared goals?
3. What could be such social characteristics that make your school an agreeable and pleasant place when pursuing your school's shared goals?
4. How does your school aim at building collective competences in order to encourage help and support?

Voice (to speak up and get involved)

1. What types of collective competences do your staff have in order to speak up and get involved in the process of pursuing the shared goals?
2. Do you remember any special occasions when you and your staff felt that your school members speak up and get involved in the process pursuing the shared goals?
3. How does your school aim at building collective competences in order to encourage speaking up and getting involved in the process of pursuing your school's shared goals?

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