



“At worst it leads to madness.” A phenomenographic approach on how early childhood education professionals experience emotions in teamwork

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Abstract

Teamwork is a key part of almost any person's working life. At its best, teamwork embodies a good team spirit and increases employee well-being, but at its worst, a team is characterized by mistrust or competition between members where action and development is not possible. In this study we explored what types of emotions early childhood education professionals experience during teamwork. These questions are answered with the help of a phenomenographic approach. As a theoretical frame, in this study, we utilize Warr's (2012) *Affective circumplex model*. According to our results the ECE professional's experienced emotions can be mostly described through the categories of enthusiasm, anxiety, and depression. A worrying result was also identified. The respondents described emotions around the category of comfort only a few times, which are related to job satisfaction.

Keywords: *teamwork; early childhood education; emotions; affective circumplex*

Introduction

There are multiple policy documents that are important for the ECE provision in the Finnish context. The Ministry of Education in Finland designs the acts and the Finnish National Agency of Education develops tools to put them into practice. There are also international, national, and local policy documents governing ECE in Finland. On the international level, the guiding documents come from the European Commission (1996), the United Nations (1989, 2006), and the United Nations Educational, Scientific, and Cultural Organization (UNESCO) (1994). Further, the content of ECE is guided by the national curriculum for ECE (ages 1–5; Finnish National Agency of Education [FNAE], 2018) and the national curriculum for preschool education (age 6; FNAE, 2014). One of the recent changes in the policy documents is the changes in the curriculum (FNAE, 2018) connected to teamwork. In practice the Finnish ECE working teams are multi-professional, consisting of professionals with a varying combination of qualifications. However, the teams consist of at least one teacher with an academic bachelor's degree and two assistant teachers with lower educational degrees.

We know from previous literature that teamwork and interaction skills play a key role in the functionality of early childhood education contexts (e.g., Cumming et al., 2020; Logan et al., 2020; Melasalmi, 2018; Ranta & Uusiautti, 2022). As part of the recent changes in the curriculum (FNAE, 2018), the leadership roles and responsibilities involved in an ECE teacher's profession have increased (Campbell-Evans et al., 2014; Kahila et al., 2020). For example, in Finland, ECE teachers are expected to take responsibility for the pedagogy of their child group and to simultaneously lead their team members to act in a pedagogically meaningful way (Heikka et al., 2016). However, research has shown that teachers often lack sufficient skills and competencies to act as team leaders (Antoneva et al., 2018; Fonsén & Ukkonen-Mikkola, 2019; Halttunen et al., 2019; Sims et al., 2015). Some teachers also experience reluctance to take on leadership roles and find it difficult to perceive themselves as leaders (Antoneva et al., 2018; Heikka et al., 2018; Ho et al., 2019). For instance, Halttunen et al. (2019) found out that all team members were not necessarily included in the pedagogical discussion. Further, ECE teachers rarely justified their plans, activities that were based on their expertise, to other team members.

When the teachers are prepared for the working field, during their studies in a university, their studies do not highlight the team leader role. Studies have shown that teacher education is largely focused on pedagogical content knowledge and teacher performance in relation to children, leaving very little perspective on community work and teamwork (Campbell-Evans et al., 2014; Mistry & Sood, 2012). Therefore, it is considered important to strengthen the development of leadership and teamwork skills as part of studies in order to support the teachers' professional development towards multi-professional teamwork (e.g., Campbell-Evans et al., 2014; Waniganayake, 2014). Further, due to recent changes, it

is also important to provide opportunities for teachers already in working life, to develop their teamwork and leadership skills (e.g., Fonsén & Ukkonen-Mikkola, 2019), and thus to promote their ability to respond to increased leadership responsibilities.

As mentioned before, the ECE teams are multi-professional, and in these teams, workers have a different combination of competencies acquired through formal training (see Forum for Developing Education and Training Provision and Programmes [VKF], 2021; Karila et al., 2017; Ukkonen-Mikkola et al., 2020). The common skills of ECE professionals working in an ECE team are related to the understanding of the ethical principles, operating environment, and the basic tasks of early childhood education, as well as towards collaboration and interaction skills (Karila et al., 2017; VKF, 2021). The skills differ also according to the qualification. The specific skills of for instance nurses working in the ECE context are related to care and health, while the skills of a bachelor of social services focus on networking, community-based pedagogy, family, and social work as well as towards the knowledge of the social sector. The competence of an ECE teacher who graduated from a university, in turn, would be related to the knowledge of children's development and learning, teaching, and pedagogical planning, assessment, and development (Karila et al., 2017; VKF, 2021).

The team with different competencies is intended to work together to support children's well-being and learning in the best possible way. Therefore, from the perspective of multi-professionalism, the knowledge and expertise brought by each professional group member in the team is seen as a valuable and important factor for implementing high-quality and holistic early childhood education (Edwards, 2010). However, in order for this special expertise of each team member to become visible, there must be effective interaction and collaboration between the team members. Due to these challenges, in Finland, a current developmental aim is now to clarify the expertise and competence of ECE professionals within different qualifications and to develop teamwork, which recognizes and harnesses the different competencies of each ECE professional for building high-quality early childhood education (VKF, 2021).

Since working in a team according to the binding guidance of the national curriculum (FNEA, 2018) is a relatively new and little studied phenomenon, we wanted to take a closer look at how ECE professionals experience working in a team in Finland in the changed situation. Further, Ranta (2020) also detected during his data collection phase in the ECE context that emotions were more strongly expressed when the interview questions were connected to teamwork. From these premises, we have formulated two research questions. Firstly, we want to ask: *What type of emotions do early childhood education professionals experience during teamwork?* and further: *How are these emotions divided in the circumplex model?* These questions are answered with the help of a phenomenographic approach. Our data was collected on multiple online discussion sites. On these sites, respondents had an opportunity to comment on their experiences openly,

or then to send researchers a private message. Further, they also had an opportunity to answer a questionnaire privately. Our data consisted of 13 questionnaire responses, 8 private messages, and 17 discussion forum responses answered by different ECE professionals. In this paper, as our theoretical frame, Warr's (2012) *Affective circumplex division*, which is derived from the *Circumplex model of affect* (see also Russell, 1980). This theoretical frame is also guiding our analyses.

Previous literature on emotions in teamwork

Teamwork is a multidimensional structure whose dynamic nature makes its research challenging (Salas et al., 2000). Driskell et al. (2018) have defined teamwork as activities in which the inputs of team members become outcomes of the team. Teamwork is combined with a variety of processes, including goal setting, organizing and monitoring teamwork, helping team members, and internal team communication (e.g., Driskell et al., 2018; Morgenson et al., 2010). Teamwork is a key part of almost any person's working life (Salas et al., 2008; Uusiautti, 2019). At its best, teamwork embodies a good team spirit and increases employee well-being, but at its worst, a team is characterized by mistrust or competition between members where action and development are not possible (Aubé et al., 2014; Quinn, 2015; Uusiautti & Määttä, 2013). Communication plays a key role in effective teamwork. Interaction is more multi-initiative in a team than between two people and effective interaction in the team requires relational expertise (Horila & Valo, 2016; Raappana & Horila, 2019). In multi-professional teams, the aim is to share power, knowledge, and competence with the aim of achieving something that one person alone cannot achieve (Karila & Kupila, 2010). According to The Finnish National Core Curriculum for Early Childhood Education and Care, multi-professionalism is a resource for high-quality early childhood education and care when responsibilities, tasks, and professional roles are clear and everyone's competence is in use (FNAE, 2018). In Finland, multi-professionalism has also been interpreted as too equal, where the competence of different professional groups may not be utilized (Karila & Kupila, 2010). This has also been criticized by Onnismaa et al. (2017), that unclear work roles in the team do not enable multi-professionalism to be realized.

Emotions are always associated with work, which contributes to an employee's mood and the employee's behavior and attitudes at the workplace. The emotions experienced at work are also related to the person's individual well-being (Fisher & Ashkanasy, 2000). Well-being is defined as a subjective experience that leads to optimism, social contribution, and personal growth which influence employee engagement (see Harter et al., 2003). According to some studies, experiencing positive emotions would most likely have a positive effect on an employee's cognitive performance, healthy lifestyle, immune resistance,

social behavior, and job performance (see Diener et al., 2020). Positive emotions have been found to increase an individual's satisfaction and commitment to work. Negative emotions, in turn, can increase the workload by creating a feeling of incompleteness—"I haven't worked enough" (Burić & Macuka, 2018; Grandey, 2008). Negative emotions and suppression of emotions experienced at work can be harmful to an individual's well-being (Fisher & Ashkanasy, 2000). According to Paakkanen et al. (2021), today's work-life requires more cognitive endurance and interpersonal skills. These skills are affected by how employees express and receive their emotions at the workplace. Further, how employees react to the positive emotions of co-workers affects the work atmosphere and is likely to have an impact on an individual's life outside of work (Paakkanen et al., 2021).

In the Finnish ECE, the work is mainly done in multi-professional teams, which can be considered a strength of the Finnish system. However, a multi-professional team may contain tensions that affect the quality of work and the well-being of employees (Heikka et al., 2021; Melasalmi & Husu, 2019; Ranta & Uusiautti, 2022). There is always emotion and tension in the cooperation between employees. An individual's mood can have a significant impact on other employees' behavior and the mood of the workplace, as well as on the employee's own and other employees' well-being (see, e.g., Bell et al., 2018; Dietz et al., 2017). Researchers have also shown that teamwork could be more burdensome than individual work. For example, Kalleberg et al. (2009) found that working in a team causes more stress than individual work.

Some research literature has also focused on teachers' emotions in the school context. According to these findings, teachers experience emotions of urgency, frustration, hopelessness, and joy, satisfaction, and empowerment in particular (e.g., Burić & Macuka, 2018; Pappa et al., 2017). In ECE, on the other hand, it has been observed that teamwork can evoke various negative emotions, such as frustration or a feeling of inadequacy in employees. These emotions can be caused by, among other things, authority positions (Fonsén et al., 2021), the ambiguity of roles (Ukkonen-Mikkola et al., 2020), different views on the implementation of activities (Melasalmi & Husu, 2019), and challenges related to employee interaction (Ranta, 2020; Ranta & Uusiautti, 2022).

In ECE, employee well-being has been found to affect employee behavior and quality of work. Köngäs and Määttä (2020), have reported that employees' high workload is connected with strictness, tension, and inconsistent solutions and has a negative effect on the child group's atmosphere. Further, according to Ranta and Uusiautti (2022), the effectiveness of teamwork had a wide-ranging effect on the activities of early childhood education teachers. According to their research, the functionality of teamwork influenced teachers' attitudes toward children's involvement, relationships, and positive learning experiences. Ukkonen-Mikkola et al. (2020) have pointed out that the feeling of powerlessness in ECE working environment limits the development of the work and the person's experiences of the work's relevance.

Data and method

Data

The research design was conducted so that the professionals could choose to answer the way they felt most comfortable with. This was done in order to maximize the discussions around emotions, which can sometimes be difficult (see, e.g., Ranta & Uusiautti 2022). Further, the research team agreed that the different materials would complement each other and together produce more diverse data than alone, from the studied phenomenon. The data consisted total 38 of open-ended responses in which respondents described their own experiences of teamwork. We received 13 questionnaire responses, 8 private messages, and 17 discussion forum responses answered by ECE professionals. The data was collected between 10.–17. September 2021 on multiple platforms and a discussion forum online.

Discrete emotions at work model as the theoretical frame

In this research, we utilize Warr's (2012) model of *Affective circumplex* (see also Warr et al., 2014). It is derived from the *Circumplex model of affect* (see also Russell, 1980). In this division, the horizontal dimension depicts emotions from joy to dissatisfaction and the vertical level describes emotional activity from sleepy to intense tension (Russell, 2003). The four-dimensional approach of the model suggests that all affective states arise from two neurophysiological systems, one related to valence (horizontal dimension), and the other to arousal (vertical dimension). Each emotion can be understood as a combination of these two dimensions, describing both valence and activation. According to the model, emotions differ in their degree of valence and/or activation. Further, specific emotions arise from the interaction between these two neurophysiological systems, as well as from cognitive interpretations and physiological experiences (Posner et al., 2005). The model represents everyday terms such as emotion and mood and it represents only a component of separate emotional episodes, but not all of them (Warr, 2012; Yik et al., 2011). Figure 1 describes the *Affective circumplex* (Warr, 2012). According to Warr (1999), the words shown in Figure 1, around the axis, describe well-being at work divided into four main categories. The words around the category of enthusiasm are related to workflow, the words around the category comfort are related to job satisfaction, the words around the category of depression are related to work exhaustion and finally, the words around the category of anxiety are related to stress. In this research, we use this division of emotions at work model as our theoretical frame to highlight the different emotions expressed in the textual data. This model functions therefore as the basis for our phenomenographic content analysis.

From phenomenographic approach to the analysis of textual data

The data of this study was collected completely online and it comprised of three different textual data sets as following:

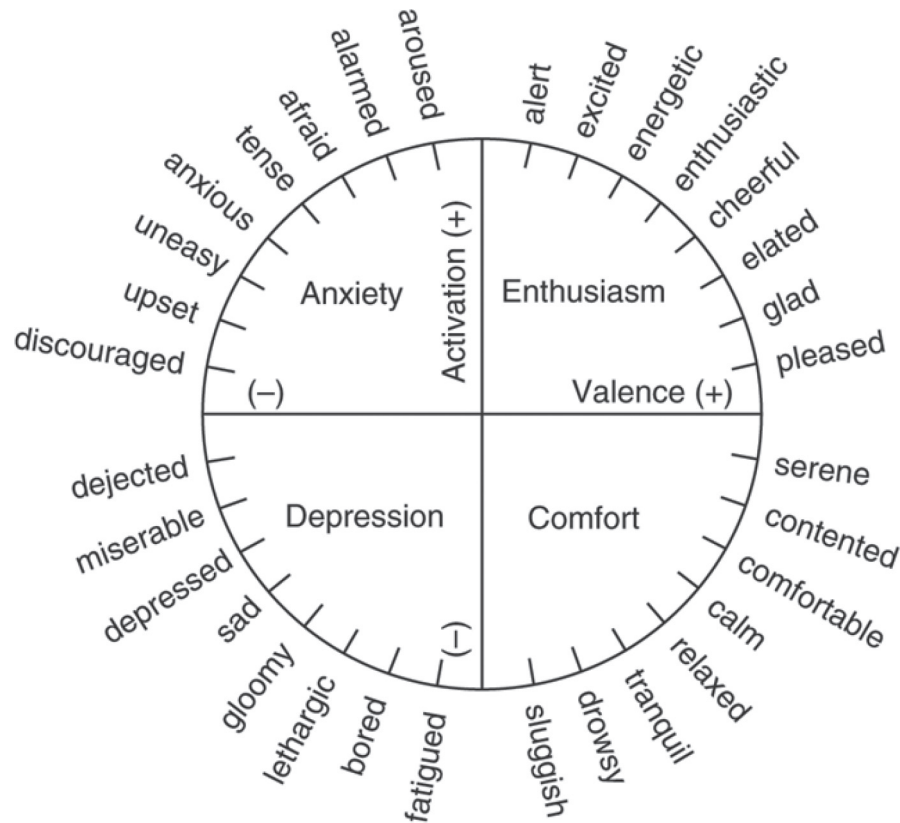


Figure 1. Emotions and their locations within the affective circumplex (Warr, 2012)

- The first dataset was collected from the social media platform Facebook. On its interest groups for ECE professionals in Finland, the research questions were posted and the professionals could answer them openly, in the feed, and discuss the topic with researchers. The second option was to answer the questions on Facebook privately and only for the researcher.
- A questionnaire was also designed and distributed on several online platforms on Facebook and an open online platform discussion forum, where professionals could anonymously answer the research questions.
- The third option was to take part in the conversation on an open online platform but anonymously discuss the topic with others.

In this research we utilized phenomenography. The phenomenographic research approach understands that people experience, process, and think in different ways (Richardson, 1999). Further, phenomenography allows researchers to analyze how people experience and perceive the phenomenon under investigation, in this study our interest was on how early childhood education professionals experience teamwork (see Åkerlind, 2005). Therefore the aim of this research was to allow the ECE professionals to express their own perceptions of their experiences and the meanings they had given to teamwork in the ECE

settings (Gill et al., 2008; Qu & Dumay, 2011). Further, the questions concerning the emotions of the ECE teamwork and the situations where these emotions were related to. As researchers, we understand the risk that data collected from social media may result in the selection of individuals who have experienced teamwork difficulties or have been dissatisfied with teams.

The analysis of our data was conducted as follows. The data obtained from the open-ended questions were analyzed in search of professionals' different and similar experiences of teamwork in ECE and how these different experiences are linked to each other. The phenomenographic analysis in this study resembled vertical categorization, in which the ECE professionals' perceptions were categorized according to the frequency of occurrence of each perception in the data (see also Uljens, 1989). In this study, we first described the number of emotional expressions in each category and the number of emotions in each theme. Further, we also identified the different data gathering methods and the negative vs. positive emotions expressed in them. After that, we moved on to describing the ECE professionals' descriptions of emotions connected to teamwork and how these are related to the *Discrete Emotions at Work model*. The identified material was along the different research conduction phases discussed amongst the researchers to define their meaning under the different thematic categories. Therefore, the different stages of the research as well as the meaning for each word was discussed and debated. According to Leedy and Omrod (2001), this type of approach leads to the highest level of objective analysis as the identification of material can be studied and discussed, allowing the quality examined to be mutually agreed upon. The analysis process has been a typical phenomenographic analysis that includes four levels (see Ranta, 2020).

Results

In this study we explored what type of emotions ECE professionals connect with teamwork. Further, we asked them to describe the situations in which they felt these emotions. As a framework for our analysis, we used the theory developed by Warr (2012), which has been used to describe discrete emotions in working environments (Yang et al., 2020). In this theory the emotions experienced can be divided into four categories: feeling anxiety, enthusiasm, depression, and comfort. In this study, the respondents described 55 positive emotional experiences and 73 negatives. These were then further grouped into themes, of which 9 were related to positive and 12 related to negative emotions (see Table 1). These descriptions of emotions grouped into themes were mostly distributed across three categories (described by Warr, 2012; see also Russell, 1980). These were emotions related to anxiety, enthusiasm, and depression. The experiences included in a category describing comfortable emotions stood out from other groups. In this group, respondents described significantly fewer emotional experiences.

Table 1. The number of categories and number of emotions in each theme

Category of enthusiasm		Category of anxiety		Category of comfort		Category of depression	
13 × Glad		10 × Anxious		8 × Comfortable		14 × Depressed	
10 × Enthusiastic		9 × Upset		1 × Calm		9 × Fatigued	
6 × Excited		8 × Uneasy				5 × Miserable	
6 × Energetic		7 × Discouraged				3 × Gloomy	
6 × Pleased		4 × Afraid				2 × Sad	
4 × Cheerful		2 × Alarmed					
1 × Elated		1 × Pleased					
7 themes	n = 46	7 themes	n = 40	2 themes	n = 9	5 themes	n = 33

It is important to note that the data collection method is chosen clearly influenced what kind of emotions the respondents described. The majority of participants who responded with private messages or to the questionnaire described that they feel both positive and negative experiences during teamwork. In the data collected at a discussion forum anonymously, the respondents described almost only negative emotions. For instance, at the discussion forum, 16 respondents expressed negative emotions regarding teamwork. Further, from these, ten respondents in total associated teamwork only with negative emotions. Only one respondent on the discussion forum described only positive emotions. Table 2 describes closer the positive and negative emotions connected to teamwork collected in different settings.

Table 2. Positive and negative experienced emotions distributed with data collection methods

	Positive experienced emotions	Negative experienced emotions	Positive and negative experienced emotions	n
Private message	0	1	7	8
Questionnaire	2	1	10	13
Discussion forum	1	10	6	17
n	3	12	23	38

ECE professionals' descriptions of emotions connected to teamwork

The descriptions ECE professionals gave on teamwork connected to emotions varied. First, in this section, we will describe the respondents' description of teamwork and further deepen our analysis towards emotions connected to teamwork, using as our frame the model developed by Warr (2012). Respondents often described teamwork as either functional or non-functional. This kind of polarization was found in a total of sixteen different respondents' responses. Respondents described several strengths associated with teamwork, but on the other hand, teamwork was felt to be quite difficult as well. They described their own experiences of teamwork in the following ways, among others.

Teamwork is either a blessing or a curse. At its best, it lightens the workload and helps to find the best solutions for the child group, but at its worst, it makes the work really uncomfortable. (Private message respondent 2)

At best teamwork is rewarding. At worst, it leads to madness. (Forum answer 7)

You can be happy and proud of a good team! A bad team acts inconsistently and there is mistrust in the team. (Questionnaire respondent 3)

At best, when teamwork works, you feel positive emotions of joy. At worst, you're waiting for this to end, and never again do you want to work in this team. (Forum answer 5)

Teamwork was also described on a general level as having a significant effect on one's well-being at work as well as job satisfaction. Participants in our research described that the functionality of teamwork affects the children, parents, as well as employees, and therefore, saw the connections of teamwork in a larger perspective. Respondents described working in functional teams as easy and effortless. In these types of respondents, the job descriptions were seen as clear, and everyone's contribution could be trusted. In a good team, respondents said that they experienced a lot of positive emotions and according to the respondents they were energized by a good working team that had a positive effect regarding their leisure time.

In my experience as a teacher, a well-functioning team has been one in which everyone brings out the skills brought about by their own education. (Forum answer 23)

Responses reported that employee changes could have a significant impact on the functionality of teamwork. One or two people in the team could make a big difference for the teamwork functionality. Further activities of the team can change completely, after changes in the team. This was described as follows.

The team changed in the middle of the year. I still wonder how the difference in the same operating year can be like night and day. Everything crystallized into teamwork. (Private message respondent 4)

Some respondents experienced that in non-functional teams, even small things cause negative emotions and burden the employee. Positive experiences were described as increasing positive emotional experiences, and negative experiences lead to more and more negative emotional experiences. One of the respondents said that she is increasingly sensitive to negative emotions and that she could experience negative emotions in the team very easily. The respondent described those encounters with a person with whom she has had conflicts quickly evoke negative emotions in her. Even receiving an email from that person makes those emotions visible. Several respondents wrote in a rather strong way, what kind of emotions a non-functional team evokes in them. A non-functional team was described as exhausting and from which negative emotions are generated. These then follow one all the

way to the home environment. The non-functional teams led to lower motivation towards work, changes in the team, plans to quit the profession, and fatigue.

When this repeats, it makes a tense working environment, and already when arriving at work I have psyched myself to act and to face people with whom there are conflicts. So definitely after the working day, the emotions are still on the surface, which is pretty exhausting. (Private message respondent 2)

As part of the reasons for teamwork problems, respondents reported continuous rush, staff shortages, staff turnover, lack of competence, problems in staff structure, value conflicts, the chemistry between people, interprofessional appreciation, lack of education in the team, and lack of directorial support. The responses from the nurses indicated that they feel quite alone with the children when the teachers are out of the group. Teachers, on the other hand, sometimes felt guilty and insecure while doing tasks outside the child group. Therefore, it looks like different professional groups, working in a team, have difficulty in recognizing different job descriptions and the purpose of their work. Two respondents reported that their education has not prepared them enough to work in teams. Some respondents also experienced being left alone with different challenges of teamwork. Six respondents reported that they had not got enough support from the director or that the director's actions had been harmful to the function of the team. Examples of these are as follows.

I told the director about the problems, for nothing. (Questionnaire respondent 2)

The director was present at team meetings and inappropriately humiliated and discredited me in the presence of other team members. (Questionnaire respondent 8)

Respondents experience many emotions connected to their work in the team. Next, we will describe the emotions connected to the categories of anxiety, enthusiasm, depression, and comfort (see Warr, 2012).

Emotions connected to anxiety in teamwork

The non-functional team was described to cause emotions of frustration and anxiety. Disagreements between employees caused irritation and even emotions of fear. Frustration and anxiety were connected in particular with the activities and the purpose of the activities of the team. Disagreements were experienced as endless negotiations about the purpose of the action and the solutions to the problem. Such activities were reported to cause inconsistent activities and were seen to be reflected in the quality of ECE. Which in turn might make employees feel sad or even ashamed. ECE professionals also could experience fear if there were distrust between teammates and talking behind their back.

I have noticed that when something in a coworker annoys or feels strange, it is immediately reflected in the work and thus in the collaboration within the team.
(Forum answer 20)

I may feel bad when I can't do my best or I have to act against my own principles. (...) Sometimes I may feel ashamed when things don't work. (Questionnaire respondent 3)

Emotions connected to enthusiasm in teamwork

Some of the emotions were related to enthusiasm. Respondents reported that in a functional team they experienced a lot of emotions connected to success and communality, and that these types of teams were encouraging and solution-oriented. It was seen as meaningful to work in a team where employees could solve different problems together and where employees and children got excited about things together. Several respondents also highlighted the importance of humor as part of a functional team.

Teamwork evokes emotions of joy and success when everyone is allowed to use their strengths, be themselves and enjoy their shared successes. (Private message respondent 7)

Emotions connected to comfort in teamwork

Just a few emotions related to comfort were reported regarding teamwork. Only eight respondents expressed that they felt comfortable or calm in their team. These respondents said that in a good team, they feel calm and safe because they are able to trust the other team members. Respondents described that it makes them feel comfortable when they feel that they are getting help when needed and do not feel left alone with their problems.

It made me feel safe and also professional when I was able to get an answer to my problem whenever needed. (Private message respondent 6)

Emotions connected to depression in teamwork

A non-functional team evokes emotions of depression. Some respondents felt powerless and described themselves as very tired of the current situation. These emotions were described in situations where there was a conflict of values, a lack of appreciation between different professions, unclear job descriptions of employees, or it was felt that the workload was unevenly distributed. Some of the teacher respondents felt that they had to take too much responsibility for planning and implementing the activities. The answers of the nurses, on the other hand, described another reality. According to them they spent more time with the children and had to take responsibility for larger numbers of children at a time.

I took care of the outdoor activities almost alone, I took care of the children resting times almost alone, I took care of most of the dining. The teachers barely spoke to me. (Forum answer 14)

Situations, where the team does not work, are, for example, ambiguities in the job description on a daily or generally, a different view of pedagogy, everything-does-everything-attitude. (Questionnaire respondent 6)

A teacher, among other things, may not be able to give professional or pedagogical insight to caregivers, especially if other team members are not receptive or motivated to constructive discussion. (Forum answer 11)

Teachers' planning time bothers nurses who are tied to children throughout their work-day, with the exception of a daily 10-minute break. The teacher is tired because he should be in the group but should also fulfill the mission of curriculum and law and take care of all the paperwork. (Forum answer 15)

Discussion

Teamwork is a key part of almost any person's working life (Salas et al., 2008; Uusiautti, 2019). At its best, teamwork embodies a good team spirit and increases employee well-being, but at its worst, a team is characterized by mistrust or competition between members where action development is not possible (Aubé et al., 2014; Quinn, 2015; Uusiautti & Määttä, 2013). From these premises formulated two research questions. Firstly we wanted to ask: *What type of emotions do early childhood education professionals experience during teamwork?* and further: *How are these emotions divided in the circumplex model?* These questions were answered with the help of a phenomenographic approach. Our data was collected on online platforms on Facebook as well as on a discussion forum. The respondents could answer the questions online openly, online anonymously, and with a private message or through an anonymous questionnaire. In all of these encounters, we specifically asked what emotions ECE professionals experienced in working in a team. It is important to note that the responses on the discussion forum differed from the rest of the data. On the online discussion forum, the respondents described more negative emotions than positive ones. Further, positive and negative experiences were evenly distributed between the private messages and between the questionnaire respondents.

According to our research, teamwork in ECE can be challenging in many ways. Respondents to our research described teamwork on the highest level as either functional or non-functional. It is important to note that negative emotions also occur in active functional teams, but the emotions were described as short-termed. In non-functional teams, on the other hand, negative emotional experiences prevailed, leaving positive feelings short

term or the employee constantly feared of having to be prepared for conflicts with other employees. Respondents described that a non-functional team causes exhaustion, and they felt more tired also outside of work. These results are similar with the conclusions of the study conducted by Paakkanen et al. (2021).

Further the respondents of our study described that both positive and negative emotions were evoking more similar emotions. Positive experiences increase positive emotions, and negative experiences negative ones. This could mean that functional and non-functional teams evolve in different directions over time. In functioning teams, collaboration strengthens over time, while in non-functioning teams, collaboration can become even more challenging. This is an important consideration because teamwork is important for well-being for the personnel as well as for the children (Fisher & Ashkanasy, 2000; Kalleberg et al., 2009; Ranta & Uusiautti, 2022).

Several different influencing factors were reported to connect with the functionality of the teamwork. According to the respondents, teamwork was influenced by personal chemistry, views of how to act with children (also in Ukkonen-Mikkola et al., 2020), sufficient staff (also in Ranta, 2020), staff structure, education of employees, values (also in Melasalmi & Husu, 2019), and support of the director (also in Ranta, 2020; Ranta & Uusiautti, 2022). Additionally, the appreciation for each team member, profession, and professional expertise was felt to be important for the positive experiences related to teamwork (see Heikka et al., 2021). Some respondents also reported that they do not have enough education to work in teams or that their education does not pay enough attention to working in teams.

As a summary of our results, the ECE professionals experienced emotions can be mostly described through the categories of enthusiasm, anxiety, and depression. It is notable that the respondents described the emotions around the category of comfort only a few times, which are related to job satisfaction (see Warr, 1999). These results are worrying. According to Ukkonen-Mikkola et al. (2020), emotions of powerlessness affect the development of work and experience of the relevance of work. Emotions related to job satisfaction would be an important way to prevent emotions of powerlessness. As a summary of our results, the distribution of respondents' emotional descriptions is presented in figure 2.

Respondents particularly described emotions that can be understood as enthusiasm, anxiety, and depression in Warr's (2012) *Circumplex model*. Respondents described only a few times those emotions that we categorized under the category of comfort. According to Hakanen (2011), these are the emotions that are important from the point of view of coping at work. It would therefore be significant to develop the operational environments through further education (see Harju-Luukkainen & Kangas, 2021), and to actively discuss how the personnel's own work could be strengthened and supported in the different working places. It is not enough to get staff excited about their work, they should feel also safe in their work and teams.

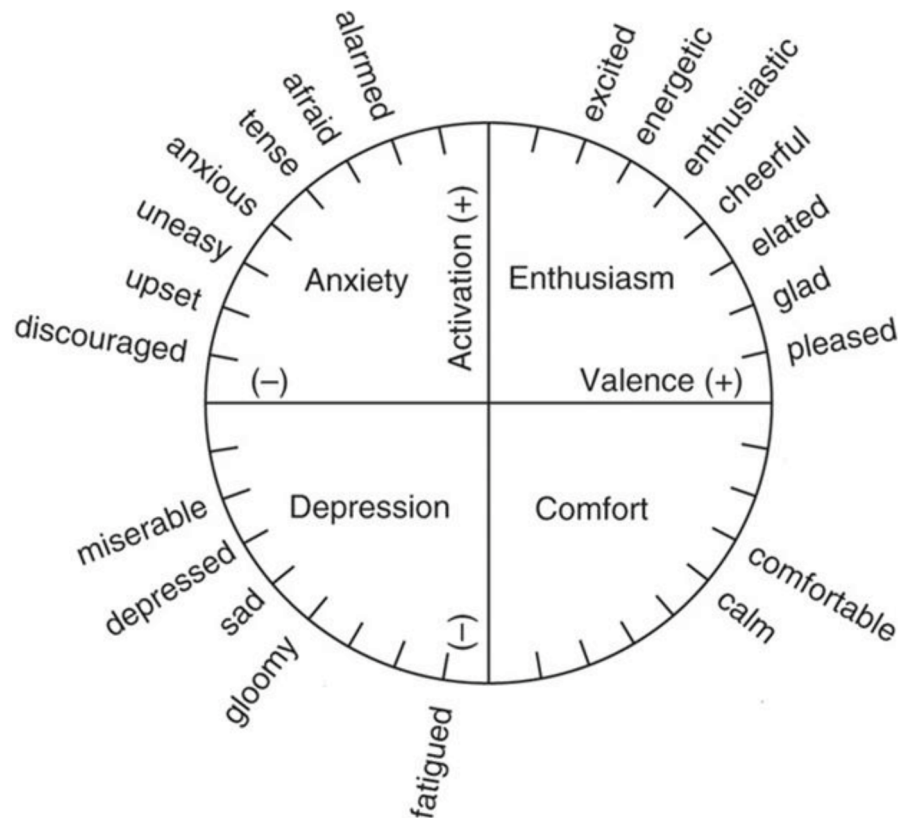


Figure 2. ECE professionals' emotional descriptions about teamwork are divided into emotions and their locations within the affective circumplex (Warr, 2012)

According to literature, it is not clear what successful teamwork is and how it looks like. Teams work individually and they are unique constellations of professionals. However, it is the effectiveness of teamwork that generally affects the quality of the activity. As a conclusion of this study, we suggest that more attention should be directed towards teamwork in the Finnish ECE context. This is due to the fact that the policy documents require well-working teams, but also to the fact that literature points out the importance of well-working teams in the ECE context. Further, our study highlights that the quality of ECE is in danger without well-working teams, affecting both personnel as well as children. Therefore, there is a clear need during ECE teacher education programs to highlight teamwork in both theory as well as in practice. Further, there is a clear need for in-service training for the entire ECE staff. Also, research is needed regarding the factors that affect successful teamwork in the ECE contexts.

Limitations of this study

There are natural limitations to this study. Data collected from the internet and social media is not unproblematic. Even though we used closed Facebook groups that are for the

early childhood education staff, the process of selecting respondents by this data collection method is not under the control of researchers (see Greenacre, 2016; De Vaus, 2002). It is also possible that persons with negative experiences of teamwork in early childhood education are more easily responding to this kind of data collection. As researchers, we are aware of this risk. It should also be noted that there have been many changes in the Finnish ECE in recent years and there is in Finland a nationwide staff shortage about ECE staff. These changes may lead to a weighting of certain categories in the research results. Phenomenographic research understands that respondents build their own understanding by drawing conclusions from what they experience. Past experiences affect how a phenomenon is interpreted and described (see Entwistle, 1997; Richardson, 1999). Phenomenographic research recognizes that the researcher's own prior understanding influences the research analysis process. The researcher forms his or her own relationship with the data being analyzed (Cope, 2004). In the study, the division of emotions into themes has depended on how respondents have described their own emotions (see Sin, 2010), and how researchers have analyzed these answers. During the analysis of the data, we discussed together about the results, and how the different expressions described by the respondents were divided into the themes of the model that we utilized. Further research is needed to better understand the cause-and-effect ECE staff experiences about teamwork and how it influences the quality and actions of ECE and how teamwork as a whole affects the pedagogical activity of ECE.

It should be noted that the definitions of positive, negative, good, happiness, and what are positive emotions or things worth pursuing are not unambiguous (e.g., Miller, 2008; Peterson et al., 2007). In our research, we have divided emotions into negative and positive according to the Warr (2012) classification—how different emotions have been described to affect employee performance. Emotions that are perceived as positive are those that predict an individual's enthusiasm or comfort at work. In our classification, negative emotions instead represent anxiety or depression. However, we understand that there are many different aspects involved in emotions. The emotions we define as negative are also valuable and important, which can include positive emotional experiences.

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