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The impact of perceived leadership quality, moral stress and participation on turnover intentions in ECEC sector

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ABSTRACT: The aim of this study was to investigate how perceived leadership quality, moral stress and participation are related to turnover intentions in early childhood education and care (ECEC). The theoretical framework was based on mentalizing leadership, participation, and moral stress. The data were collected via a survey (N = 332). The results showed that the ECEC staff were on average quite content with the quality of leadership and participation. Their turnover intentions and moral stress were moderate on average. However, the staff groups differed statistically significantly, with the ECEC nurses scoring lower on leadership satisfaction and participation, and higher on moral stress and turnover intentions than the teachers and leaders. This suggests that we need to develop a way of recognizing stressors at earlier stages, as well as handling them in time before they grow too large. For this, a functioning leadership that promotes reflection and participation is crucial.

Keywords: *leadership, moral stress, participation, turnover intentions*

Introduction

The quality of early childhood education and care (ECEC) has long-lasting impacts on outcomes for both children and society (Markowitz et al., 2018). Studies have shown associations between higher quality education and better cognitive and social skills in preschool (Soliday Hong et al., 2019) as well as in later academic achievement and behavioral development (Vandell et al., 2010).

However, the ECEC sector is currently characterized by a turnover rate as high as 30–60% both internationally and in Finland, and there is a shortage of certified early childhood educators (Eskelinen & Hjelt, 2017; Heilala et al., 2022; Grant et al., 2019; Thorpe et al., 2020; Totenhagen et al., 2016). Staff turnover is a concern as it affects the relationships between the teacher, children and families and adds to instability in communication and relationships (McMullen et al., 2020). Turnover disrupts the teacher–child relationship, disturbs continuity, and harms children's learning and wellbeing (Pilarz & Hill, 2014).

High turnover rates and hence the recruitment of unqualified staff have an impact on work climate and work culture. Turnover disrupts the work climate because it requires forming new relationships and common values, norms and goals (Kelchtermans, 2017; Phillips et al., 2016). It also increases the stress and workload of those who stay because the work is team based (Whitebook et al., 2014). However, staff who have a strong sense of community and belonging, development opportunities, and are able to participate in the planning and implementing of curriculum-related aspects have higher job satisfaction and are more likely to stay in ECEC (Heilala et al., 2022; McCormick et al., 2022; Schaack et al., 2022). Previous studies have pinpointed different reasons for turnover intentions. Studies that have applied a job-demands-resources model (Demerouti et al., 2001; Heilala et al., 2022; Heilala et al., 2023) suggest that staff wellbeing is based on a balance between their perceived resources (e.g., collegial support, satisfaction with leadership, participation) and demands (e.g., workload, emotional workload). Many studies have reported similar kinds of demands behind turnover intentions, such as poor working conditions and work climate, low salary, a demanding job description, lack of leadership, and few expectations to improve qualifications (Amin et al., 2003; Eskelinen & Hjelt, 2017; McDonald et al., 2018; McMullen et al., 2020; Phillips et al., 2016; Totenhagen et al., 2016). Retention, in turn, has been associated with collegial support, well-functioning workplaces, supportive leadership, vocational commitment, and love of children (McDonald et al., 2018; McMullen et al., 2020; Thorpe et al., 2020). The effect of well-functioning leadership is a key factor (Kusma et al., 2012) and we hypothesize that it is particularly important for alleviating stressful situations, which arise due to various obstacles, such as lack of time and other structural barriers. Prolonged stressful situations may also cause moral stress, which further emphasizes the meaning of a functioning leadership. Moral stress is a new concept in ECEC, but it is well-known in nursing sciences for when you know what the right thing to do is, but for some reason you are not able to act upon it (e.g., Jameton, 1993). In our previous study (Heilala et al., 2023), one of the findings was that the staff needed more work guidance and more supportive leadership. Hence, we introduce a theoretical framework for leadership based on mentalization and participation. Our aim was to investigate how perceived leadership quality, moral stress and participation are related to turnover intentions in the ECEC sector.

Theoretical frame

In addition to classic work conditions, such as the role of salary (e.g., Eskelinen & Hjelt, 2017; McDonald et al., 2018), this study focused on how the perceived quality of leadership, moral stress and participation relate to turnover intentions. The quality of leadership has been identified as an important contributory factor to job satisfaction among ECEC staff (Kusma et al., 2012). This might partly be because the leader can influence factors such as feedback and social support, participation, and opportunities for growth. Satisfaction with leadership might also impact participation, as educators with a strong sense of community and belonging are more satisfied with their jobs and less prone to turnover intentions (McCormick et al., 2022). Work guidance and support from leaders are important factors that help staff deal with stressful situations. Another study has found that staff felt they could not act as they would like to or according to their own ethics (Heilala et al., 2023): They knew how they should act, but found it impossible in practice. This could be a potential source of feelings of moral stress (Jameton, 1993). In such situations, the leader's support and guidance is of utmost importance.

Mentalizing leadership promoting organizational wellbeing

The theory base for the *quality of leadership* in this study was the mentalizing theory, which in leadership refers to the capacity of being both self-aware and aware of others and taking into consideration the mental states, emotions, thoughts, intentions, and needs behind actions (Heinskou & Beck, 2022). Fonagy and colleagues have described four dimensions of mentalizing, i.e., self-other, internal-external, automatic-controlled, and cognitive-affective (Fonagy et al., 2012). Self-other refers to understanding one's own mind versus those of others and being able to look at oneself from the outside, and at others from the inside. Internal-external refers to understanding others' mental states on the basis of previous knowledge of the other person (internal) or visible signals from the other person (i.e., expressions, voice, posture). Automatic-controlled refers to mentalizing with no effort versus reflective, slow thinking. And cognitive-affective refers to the qualities of the mind that are given attention, i.e., feelings, intentions or thoughts, and knowledge. The theory and practice of mentalization is helpful in understanding the construction of shared meaning in the organization and in enhancing participation and the functioning of the team, as well as stimulating a potential space in the organization for new and non-rigid modes of understanding both children and colleagues in the ECEC context, thus promoting organizational wellbeing. Mentalizing helps the leader (and other professionals) to maintain curiosity, try out new solutions, make decisions in uncertain environments, and have the courage to sometimes fail. On the other hand, the absence of mentalizing in leadership might produce a negative relationship with colleagues and unsustainability of the work experience (Di Stefano et al., 2017), which ultimately reflects

negatively on the wellbeing of the children. Several studies have also linked mentalizing to burnout, and overall, the conclusion is that the ability to mentalize has a beneficial impact on teachers' wellbeing and protects from burnout symptoms (Levante et al., 2023; Safiye al., 2023).

Participation in the immediate team

The staff in Finnish ECEC work in multiprofessional teams, and the law clearly stipulates eligibility conditions such as the degree of education (teachers, social pedagogues, or practical nurse qualifications). However, the multiprofessional team work is not seamless, and previous research has shown that practical nurses in particular feel that their professional role is unclear in terms of planning, implementation, and documentation of educational activities (Repo et al., 2020). Thus, we need to look more closely at participation and leadership that promotes participation. We chose participation rather than team work because of the results of our previous study, which showed that participation mediates turnover intentions (Heilala et al., 2022). While we recognise the team work in general, in the present study we focused on participation in knowledge contribution and decision-making in the immediate team, and not in the organization.

Theories on team work and participation vary slightly depending on the context, but the essential elements seem to be participation, reflection, knowledge-sharing and focusing on community. Reflection has been identified as one key factor in changing pedagogical practices and the atmosphere (Ojala & Venninen, 2011). Reflection is a time-consuming, dynamic process, and team work is helpful for developing deeper understandings, creating an emotional sense of belonging and social interdependence within the team, and enabling joint commitment to achieving common goals (e.g., Brookfield, 2017; Granrusten, 2020; Uhl-Bien, 2011). A culture of participation is created through a shared understanding of the child as an active agent, professional development, a desire for critical reflection on structures and practices, and leadership that promotes participation and reflection (Weckström et al., 2021).

Studies of team work and participation have often focused on co-involvement in decision-making and knowledge contribution. Numerous studies have examined team work in nursing and mental health care (e.g., Alexander et al., 2005; Valentine et al., 2014) but less in ECEC. However, we believe that the challenges for well-functioning team work and knowledge-sharing are similar to those in ECEC in that health care workers also work in multiprofessional teams, even though the work settings differ. Previous research has found that a higher level of participation and engaging together is important for teams to function well, as it leads to team members becoming more synchronized and sharing clearer norms (Alexander et al., 2005). The focus is also on sharing crucial knowledge and information. Team functioning refers to how the team members in multiprofessional

teams are integrated, which leads to better quality decisions, more effective coping with complex tasks, and better coordination (Alexander et al., 2005; Valentine et al., 2014). For this to succeed, the staff members must interact with one another, share knowledge within the team, and create social interdependence.

Moral stressors, moral stress, and moral distress

The increasing scarcity of resources constitutes a major factor of stress in ECEC. A fairly new concept has emerged in educational research—moral stress—which describes the distress that early childhood education staff experience when they cannot act according to their own judgment or do not know how to act. Moral stress has mostly been reported in the nursing literature and has seldom been identified in teaching practice (Colnerud, 2015). However, it appears that both nurses and ECEC staff describe similar prolonged stressful situations in relation to their jobs.

There are two similar concepts describing dilemmas that can occur in stressful situations, namely *moral distress* and *moral stress*. *Moral distress*, as defined by Jameton (1984), is considered to be the main concept in moral decision-making in care (Lützén et al., 2003, p. 313). Jameton (1984) defined moral distress as "when one knows the right thing to do, but institutional constraints makes it nearly impossible to pursue the right course of action." (p.6). Psychological reactions and emotions such as frustration, anger and guilt can also arise in connection with stress (Jameton, 1993). Jameton (1993) also distinguishes between initial stress and reactive stress. Initial stress consists of feelings of frustration, anger, and anxiety that arise during the dilemma, whereas reactive stress is the stress that arises if one does not act as a result of the initial stress. Wilkinson (1987) addresses the effects of reactive stress: feelings of worthlessness, a tendency to cry, diarrhea, headaches, nightmares, and problems in personal relationships. Stress thus has emotional, somatic and psychosomatic effects.

In addition to moral distress, some studies have also used the term *moral stress*. Lützén et al. (2003) define it as stress with moral components that arises in situations in which the person/nurse knows the ethical principles but due to external factors is unable to act in a way that would reduce the conflict. The moral components here are cognitive and emotional abilities (for example, moral sensitivity) that help a person identify moral situations, moral experience, and the moral perception that they produce. The main difference is that in moral distress the emphasis is on the stress reaction, whereas in moral stress the focus is on the ethical components and principles of the stress (Lützén et al., 2003).

In this study, we define moral stress according to the definitions of Jameton (1984) and Wilkinson (1987): stress that arises in situations in which the staff know how they should act but cannot do so due to various obstacles, such as lack of time and other structural

barriers. Moral stress is seen as the psychological reaction to prolonged stressful situations that create feelings of frustration, anger and guilt. The psychological reaction can be emotional, somatic, or psychosomatic. Moral stress occurs when the job is seen as meaningful and important, which explains the observed relations with work engagement and burnout among teachers (Salmela-Aro et al., 2019).

Finnish ECEC

In Finland, ECEC focuses on education, instruction and care, with an emphasis on pedagogy. All children have the right to full-time day care (ages 0–5 years). Pre-primary education (age 6), which is free of charge, is mandatory. The majority of children attend municipal day care. Both ECEC and pre-primary education follow a national core curriculum, and the group sizes and staff-child ratios are regulated on the basis of the number of children and their ages. The 2018 law stipulates that the staff in ECEC work in multiprofessional teams consisting of a) teachers (academic bachelor's or master's degree); b) social pedagogues (polytechnic degree); and c) practical nurses (practical nurse qualifications). However, today, all social pedagogues who have completed their degree before 2023 are qualified ECEC teachers, due to the transition period before the new law comes into full effect. A more detailed description of Finnish ECEC can be found elsewhere (e.g., Heilala et al., 2022).

Aims of the study

The aim of this study was to investigate how perceived leadership quality, moral stress and participation is related to turnover intentions in ECEC.

The specific research questions were:

1. How do the staff perceive the quality of leadership, moral stress, and participation, and do the perceptions of staff groups differ?

2. How are quality of leadership, moral stress, and participation related to turnover intentions?

Our hypothesis, based on our previous studies (Heilala et al., 2022; Heilala et al., 2023), was that participation and leadership predict turnover intentions that may be caused by moral stress.

Methods

Sample and data-collecting procedure

Data were collected from November 2021 to January 2022 and January to February 2022 via an electronic survey. We sent the surveys to ECEC staff in Finnish- and Swedish-speaking municipal day care centers (*n* = 540 centers) in the Southern and Western parts of the country. We received 338 replies. Of these, six surveys were excluded due to too much missing data. The final sample consisted of *n* = 332 informants. Of the staff, 166 (52.5%) were early childhood education teachers with either a university bachelor's degree or polytechnic degree, 101 (32%) were practical nurses, and 49 (15.5%) were leaders or deputy leaders. The average age was 45.1 (*sd* = .67), the youngest staff member was 20 and the oldest 65 years old (table 1). The average years of work experience were 17.7 years (*sd* = 11.7; min = 0.3; max = 45).

TABLE 1 Background of respondents

VARIABLES	*M*	*SD*	*Min - max*
Age	45.1	.67	20 – 65
practical nurse	45.2	11.7	
teacher	42.0	12.0	
leader	53.5	8.58	
Work experience in years	17.7	11.7	0.3 - 45
practical nurse	17.1	11.5	
teacher	15.1	11.2	
leader	26.4	9.4	

Measures

The electronic survey consisted of separate variables, self-created scales and scales that were based on standardized and validated scales but modified to match the context of this study. We measured sociodemographic variables (age, job position), salary satisfaction, and intentions to leave one's job and change profession, moral stress issues, leadership quality, and perception of opportunities to participate in planning and in decision-making.

Sociodemographic variables

Job position was elicited by asking the respondents to choose one of four options a) teachers in ECEC, bachelor's in education or social workers in ECEC or similar qualification; b) practical nurses or similar qualification; c) leader or deputy leader; or d) other. Of the staff, 279 (84.3%) met the qualification criteria for their positions.

Leadership

Leadership was measured using 18 items, which were formulated to reflect mentalizing leadership, especially the following: 1) keeping the mind in mind; 2) the not-knowing stance, including interest in the feelings, thoughts, and intentions of team members, as well as co-producing knowledge with the team; and 3) the ability to understand misunderstandings, including the capacity to apologize for one's own mistakes. These capacities also reflected three of the four dimensions of mentalizing, i.e., self-other, automatic-controlled and cognitive-affective. The scale ranged from 1= *very seldom* to 5 = *very often*. We asked the respondents to think about their closest superior when answering questions regarding the leadership.

To reduce the number of items and investigate the structure of the scale we conducted a factor analysis. For quality of leadership, the communalities ranged from .10 to .81 (maximum likelihood). Principal axis factoring was used and the rotation method was Promax. Two items had low communality and were therefore excluded from further analysis. One variable was excluded because it loaded on two factors, but the factor structure remained the same. The loading was set at ≥.40 and the factor solution explained 53.63% of the variance. The Kaiser-Meyer-Olkin (KMO) measure was .94 and Bartlett's test of sphericity was statistically significant. The final factor solution resulted in three factors, which we called *responsible leadership*, *relational leadership,* and *neglecting leadership*. *Responsible leadership* was measured using seven items (e.g. "My leader can handle difficult situations in a calm and constructive manner", "My leader apologizes for their mistakes", "My leader draws conclusions regarding pedagogical activities too quickly", "My leader takes time to explain and support changes", "I feel that my leader does not want to listen to my views", "I can trust that my leader tries to understand my points of view", "My leader does not take a stand in conflicts"), α = .87, reflecting the capacity to keep the mind in mind and the capacity to apologize for one's own mistakes. *Relational leadership* was measured using six items ("My leader is interested in my pedagogical thinking", "My leader encourages me to develop in my work", "I feel appreciated by my leader", "I feel that my leader has trust in me", "I feel that my leader cares about my occupational health", "I feel competent in my work"), reflecting the capacity of the not-knowing stance and keeping the mind in mind, α = .86. The alpha coefficient (α = .56) for the third factor was fairly low, with only two items ("I feel insecure in my work", "I feel alone in my work"), which reflected *neglecting leadership*, and was thus not further used in the study.

Factors related to moral stress

Stress factors were measured using 20 items on a Likert-type scale on a range from one to five (1 = *never* to 5 = *constantly*). The items were derived from theories related to moral

stress. The dimensions related to moral stress were based on a combination of the definitions of Jameton (1984), Lützen et al. (2003), as described earlier. For stress, the communalities ranged from .10 to .81 (maximum likelihood). Three items had low communality and were therefore excluded from further analysis. One variable was excluded because it did not load at all, but the factor structure remained the same. Principal component analysis was conducted to investigate the structure of the scale and for the sake of dimension reduction. In the final solution, four components emerged. The rotation method used was Promax, loading was set at ≥.40 and the final solution explained 62.55% of the variance. KMO was .84 and Bartlett's test of sphericity was statistically significant. The first component measured positive aspects and was called *meaningfulness.* It was measured using four items (e.g., "I feel that my contribution is significant"), α = .82. The second component was measured using five items (e.g., "I have enough time to give the children in my group the attention they need") and was called *lack of time*, α = .81. The third component was called *moral stress in relation to the children* and was measured using four items (e.g., "I have handled situations with the children in a way that goes against what I believe is right"), α = .76. The fourth component was called *moral stress in relation to colleagues* and was measured using three items (e.g., "I have had to think about what I should do when a colleague has handled a situation with a child badly"), α = .69.

Participation

Participation was measured using 15 items. The items were inspired by a safety climate scale (de Wet et al., 2010) and a team participation scale (Alexander et al., 2005). The scale ranged from 1 = *completely disagree* to 5 = *completely agree*. The respondents were specifically asked to relate their answers to the immediate team.

For participation, the communalities ranged from .22 to .80 (maximum likelihood). We used principal axis factoring to reduce the data by grouping together items that appeared to measure the same factors, and we used Varimax as the rotation method. One variable was excluded because it loaded on two factors, but the factor solution remained the same. The loading was set at ≥.40 and the factor solution explained 57.43% of the variance. KMO was .918 and Bartlett's test of sphericity was statistically significant. The final factor solution resulted in two factors, which we called *emotional participation* and *cognitive participation. Emotional participation* was measured using nine items (e.g., "I feel safe in my team", "I feel supported by my colleagues"), α = .82, and *cognitive participation* was measured using five items ("In general, I suggest alternatives", "I often participate in decision-making"), α = .86.

Salary satisfaction

Satisfaction with salary was measured using one item ("My salary corresponds to the job I do") which was measured on a Likert-type scale ranging from one to five (1= *do not agree at all* to 5= *absolutely agree*).

Turnover intentions

Intentions to quit the ECEC profession and leave the sector altogether were measured using one item ("I plan to change profession in the near future") which was rated on a Likert-type scale ranging from one to five (1= *very seldom* to 5= *very often*).

Ethical considerations

We applied the ethical principles of research issued by the Finnish National Board on Research Integrity (TENK, 2019) in this study. We informed the leaders of the municipalities about the research project and obtained the required research permissions. We emailed the survey to the day care centers. The data collection was electronic and anonymous, and thus the participants could feel confident that their answers could not be identified.

Statistical methods

Data analysis

Data reduction of the scales was conducted using principal axis factoring and principal component analysis and is described in detail in the Measures section. The reliability of the scales was measured using Cronbach's alpha coefficient. Univariate statistics were used to describe the variables. We used ANOVA to calculate the differences between the groups, multiple regression analysis to predict turnover intentions. IBM SPSS Statistics 28 was used to analyze the data. Statistical significance was accepted if $p>.05$.

Results

Perceptions of the quality of leadership, moral stress and participation in different staff groups

Table 2 presents the means, standard deviations, reliability coefficients, and correlations among the variables included in the study. Most of the variables were significantly related, showing moderate strength.

TABLE 2 Means, standard deviations, and correlation coefficients of variables included in model

VARIABLES	*M*	*SD*	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*
1. Emotional participation	4.3	.66	-								
2. Cognitive participation	4.3	.62	.50**	-							
3. Responsible leadership	3.8	.78	.30**	.19**	-						
4. Relational leadership	3.9	.73	.36**	.37**	.76**	-					
5. Meaningfulness	4.2	.60	.46**	.26**	.53**	.60**	-				
6. Lack of time	3.5	.64	-.26**	-.07	-.34**	-.34**	-.52**	-			
7. Moral stress in relation to children	2.9	.75	-.24**	-.11	-.35**	-.37**	-.43**	.52**	-		
8. Moral stress in relation to colleagues	1.9	.70	-.54**	-.09	-.24**	-.16**	-.29**	.31**	.29**	-	
9. Turnover intentions	2.7	1.37	-.33**	-.10	-.36**	-.38**	-.53**	.47**	.48**	.28**	-

Note. *M* and *SD* represent mean and standard deviation, respectively.
** Correlation is significant at the .001 level (2-tailed)
* Correlation is significant at the .01 level (2-tailed)

With regard to quality of leadership, the staff reported fairly high average levels for both responsible and relational leadership satisfaction. However, the perceptions of the forms of leadership satisfaction differed statistically significantly within the different staff groups, with ECEC nurses scoring lowest for both responsible and relational leadership (Responsible leadership: $F(2, 310)= 3.43$, $p <.05$. $\eta^2= .022$; Relational leadership: $F(2, 312) = 11.86$, $p <.001$. $\eta^2= .071$, Table 3.)

The staff seemed to perceive their opportunities to participate as good and reported a high average level for both emotional and cognitive participation. However, the staff groups' perceptions differed statistically significantly, with ECEC nurses scoring lowest (Emotional participation: $F(2, 309) = 5.65$, $p <.01$. $\eta^2= .035$; Cognitive participation: $F(2,309) = 28.76$, $p <.001$. $\eta^2= .157$, Table 3.).

With regard to moral stress and other stress factors, the staff reported a high average level for lack of time and a rather low average level for moral stress in relation to colleagues. The perceptions of the three staff groups did not significantly differ in terms of these two variables. The staff perceived meaningfulness as very high on average, but this differed statistically significantly within the staff groups ($F(2, 307)= 3.92$, $p <.05$. $\eta^2= .025$, Table 3.), with practical nurses scoring lower than the teachers and leaders/deputy leaders. The

staff also reported a moderate, average level of moral stress in relation to children, which differed statistically significantly within the groups, with practical nurses scoring highest ($F(2, 303)= 5.52$, $p <.01$. $\eta^2= .035$, Table 3.).

Turnover intentions were moderately high on average, but turnover intentions differed statistically significantly within the groups ($F(2, 306)= 5.19$, $p <.01$. $\eta^2= .033$), with practical nurses scoring higher than the teachers and leaders.

TABLE 3 Descriptive statistics in different staff groups

VARIABLES	*M*	*SD*	*p*	η^2
Responsible leadership			<.05	.022
practical nurse	3.6	.81		
teacher	3.9	.80		
leader	3.8	.80		
Relational leadership			<.001	.071
practical nurse	3.6	.76		
teacher	4.1	.70		
leader	4.1	.56		
Meaningfulness			<.05	.025
practical nurse	3.8	.76		
teacher	4.0	.70		
leader	4.2	.56		
Moral stress in relation to children			<.01	.035
practical nurse	3.0	.77		
teacher	2.8	.73		
leader	2.5	.70		
Emotional participation			<.01	.035
practical nurse	4.2	.72		
teacher	4.4	.64		
leader	4.5	.47		
Cognitive participation			<.001	.157
practical nurse	3.9	.64		
teacher	4.4	.54		
leader	4.6	.51		
Turnover intentions			<.01	.033
practical nurse	2.9	1.32		
teacher	2.7	1.40		
leader	2.1	1.20		

Moral stress was moderate on average (Table 2), but as children (age 0–6 years) are totally dependent on adult care and attention in early education, we must highlight the distribution of perceived moral stress in relation to children (Table 4). There were statistically significant differences between the staff categories, X^2 (4, 306) = 17.51, $p <.01$, $\eta 2 = .22$. The highest rate of moral stress in relation to the children was found among the practical nurses, who take care of children's basic needs (e.g., feeding, changing diapers) especially those of the youngest children.

TABLE 4 Distribution of moral stress in relation to children* in different staff categories

	LOW n (%)	*MODERATE n (%)*	*HIGH n (%)*
Practical nurses	19 (19.0)	51 (51.0)	30 (30.0)
Teachers	44 (26.7)	87 (52.7)	34 (20.6)
Leaders/deputy leaders	21 (51.2)	15 (36.6)	5 (12.2)

*The scale for the moral stress in relation to children sum variable was transformed into a categorical scale

Relationships between the variables included in the model

Table 2 presents the correlations between the variables in the model. Lack of time and moral stress correlated positively with turnover intentions. Lack of time explained 22.0% of intentions to leave the ECEC profession, whereas moral stress in relation to children explained 22.7%. Emotional participation and responsible leadership correlated negatively with turnover intentions. Emotional participation explained 11.0%, and responsible leadership explained 13.1% of turnover intentions. Cognitive participation did not correlate with the outcome variable turnover intentions, and thus we excluded this from the regression model.

Participation, leadership, and moral stress related to turnover intentions

A multiple linear regression analysis was calculated to predict turnover intentions. The full model was significant, $F(6,300) = 32.36$, $p < .001$, with an R^2 of .393 (Table 5). The variables we entered into the model were *emotional participation, responsible leadership, relational leadership, meaningfulness, lack of time, moral stress in relation to children, moral stress in relation to colleagues,* and *turnover intentions*. However, of the leadership variables only *responsible leadership* was included in the final model due to the multicollinearity (low tolerance coefficient) between *responsible leadership* and *relational leadership*. The *negative collegial atmosphere* variable was not significant in the model and was therefore removed. *Cognitive participation* was not included due to no significant correlations between the variable and the outcome variable. All other variables were significant predictors of turnover intentions. Those with higher turnover intentions had lower emotional participation and salary satisfaction. They also had higher rates of moral stress and lack of time.

TABLE 5 Multiple linear regression analysis with turnover intentions as the dependent variable

VARIABLES IN MODEL	β	*p*	*Zero-order*	*Partial*	*Cohen's f²*
Responsible leadership	-.220	<.05	-.372	-.141	.020
Emotional participation	-.267	<.01	-.326	-.150	.023
Meaningfulness	-.424	<.001	-.440	-.193	.040
Moral stress in relation to children	.412	<.001	.474	.231	.056
Lack of time	.325	<.01	.470	.150	.023
Salary satisfaction	-.323	<.001	-.266	-.206	.054

Discussion

Turnover intentions were moderate on average in the whole sample, but turnover intentions differed statistically significantly between the groups, with practical nurses showing a higher average than the teachers and leaders. Previous studies both internationally and in Finland have shown turnover intention rates of 30–60% (Eskelinen & Hjelt, 2017; Grant et al., 2019; Heilala et al., 2022; Thorpe et al., 2020; Totenhagen et al., 2016). The results show that emotional participation, responsible leadership, meaningfulness in the job, moral stress in relation to children, salary satisfaction, and lack of time were factors that were statistically significantly related to turnover intentions. This means that experiences of being emotionally involved in the work community, perceiving leadership as functioning and responsible, and having enough time to manage one's job, and less moral stress can discourage turnover intentions.

The results show that although ECEC staff seem to be quite content on average, differences between people in different job positions should be taken into account. Closer examination of the different staff groups shows that the practical nurses generally indicated lower values than the teachers and the leaders/deputy leaders. The nurses experienced lower levels of meaningfulness, emotional and cognitive participation, responsible leadership, and participation than the teachers and the leaders/deputy leaders. The nurses had higher turnover intentions and experienced more lack of time and more moral stress in relation to the children than the teachers and leaders.

Previous research has shown that practical nurses in particular feel that their professional role is unclear in terms of planning, implementation and documentation of educational activities (Repo et al., 2020). Previous research has also shown that staff with a strong feeling of belonging to the work community and who are able to participate in the planning and implementing of curriculum-related issues are more likely to stay in ECEC (Heilala et al., 2022; McCormick et al., 2022; Schaack et al., 2022). This further stresses

the important role of the leader in creating a more sustainable work climate for all staff groups.

Quality of leadership has been identified as an important contributory factor to job satisfaction among ECEC staff (Kusma et al. 2012). In our study we used the theory of mentalizing leadership, which refers to the capacity of being both self-aware and aware of others and taking mental states, emotions, thoughts, intentions, and needs behind actions into account (Heinskou & Beck, 2021). The results of our study show that both the responsible and relational aspects of leadership are perceived as rather good on average. They also show that emotional participation is related to turnover intentions, and that being emotionally involved in the work community can discourage turnover intentions. This is an important aspect for the leadership, as it shows that reflection and emotional team work are helpful for developing deeper understandings, and for creating an emotional sense of belonging and social interdependence in the team (e.g., Brookfield, 2017; Granrusten, 2020; Uhl-Bien, 2011*).*

The staff also experienced that their work was very meaningful, although they reported a high level of lack of time. This is in accordance with the findings of previous studies, which have shown that retention is associated with supportive workplaces, well-functioning leadership and management practices, collegial relations, vocational commitment, and love of children (McDonald et al., 2018; McMullen et al., 2020; Thorpe et al., 2020). The results show that the staff are committed to their work with children, despite experiencing a lack of time. However, as previous studies have shown, moral stress occurs when the job is seen as meaningful and important (Salmela-Aro et al., 2019), which may explain why the respondents in our study found their work very meaningful on average even though some also reported experiencing moral stress. In a profession that deals with helpless children, situations that cause moral stress should be avoided. In this study, the participants reported both moral stress in relation to children and moral stress in relation to colleagues, although the levels were low or moderate on average. However, in the different staff groups, as much as 30.0% of the practical nurses and 20.6% of the teachers experienced high moral stress in relation to children. This should be taken seriously, because stress can also cause psychological reactions and emotions such as frustration, anger and guilt (Jameton, 1993). If the staff are not able to react to this stress, it may lead to, for example, feelings of worthlessness, the tendency to cry, diarrhea, headaches, nightmares and problems in personal relationships (Wilkinson, 1987).

Conclusion

We hypothesized that participation and leadership predict turnover intentions that may be caused by moral stress. The results confirm this and indicate that participation, leadership and moral stress are important factors for work wellbeing and need further

attention. It is important to find a way of recognizing moral stress at an earlier stage, and of handling it in time before it grows too large. For this, well-functioning leadership that promotes reflection and participation is crucial. Leaders in early childhood education should receive more awareness of stressful situations that may lead to moral stress already during their studies, but also through in-service training. The leaders need to become aware of the causes and consequences of moral stress. Further research is needed on situations causing moral stress in ECEC for a deeper understanding of the concept.

Limitations

A few limitations should be considered in this study. Firstly, as this was a cross-sectional study, we could not establish causality, which creates a potential for bias due to the lack of follow-up. Secondly, we used only self-reported data, and hence, they may be biased due to the social desirability effect, even though they were collected anonymously. Finally, the response rate was low, and thus the sample may not accurately represent the entire ECEC workforce. Attrition bias and an unequal loss of participants may have occurred. The response rate of the teachers was roughly 50%, which was higher than that of the practical nurses and leaders.

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