

Spillover Effects of Physical Literacy Implementation on Preschool Educators

**A Cross-Sectional Study of Physical Activity, Psychosocial
Resources, and Organizational Conditions in Two Municipalities
in Western Sweden**

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Gothenburg 2025 06 04

ABSTRACT

Aim

Physical literacy (PL) is increasingly recognized as key to promoting lifelong physical activity (PA). However, its implementation in early childhood settings remains underexplored, particularly regarding potential spillover effects on educators and the role of organizational support such as PA guidelines. This study examined how PL implementation in Swedish preschools influenced educators' self-perceived PA, pedagogical engagement, perceptions of organizational conditions and whether implementation level made a difference.

Methods

A cross-sectional survey was conducted among 148 preschool educators from two municipalities participating in the "Make a Move" PL initiative. Preschools were grouped into three implementation levels: information-only, network, or process-led. The survey included adapted items from validated instruments measuring PA, pedagogical engagement (UWES framework), sense of coherence (SOC), and contextual factors (CFIR framework). Most respondents were women (97%), reflecting the national preschool workforce. Data were analyzed using descriptive statistics, chi-square tests, Mann-Whitney U, and ordinal regression.

Results

Approximately 64% of educators perceived an increase in their own PA following the initiative, with significant correlations to more positive movement attitudes ($\rho = .475, p < .001$). Engagement was most strongly associated with the perceived meaningfulness of the initiative ($\rho = .679, p < .001$). Implementation level did not significantly affect perceived PA change but was linked to stronger attitudes and more consistent engagement. PA guidelines were not directly associated with SOC or engagement, but their absence was linked to a higher likelihood of perceiving PL as a low priority. Leadership support and fewer perceived barriers were associated with more favorable implementation outcomes.

Conclusion

Child-focused PL initiatives may create spillover effects that benefit educators PA and engagement. Supportive leadership and meaningful implementation appear more critical for sustaining engagement than guidelines alone. Future research should use longitudinal, mixed method designs to explore individual and organizational impact over time.

Keywords: Physical Literacy; Implementation; Physical Activity; Preschool Educators; Public Health; Sense of Coherence; CFIR; Pedagogical engagement; Movement Promotion; Sweden

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ABBREVIATIONS

CFIR	Consolidated Framework for Implementation Research
CI	Confidence Interval
EU	European Union
GDPR	General Data Protection Regulation
IQR	Interquartile Range
MaM	Make a Move (project)
NCDs	Non-Communicable Diseases
PA	Physical Activity
PE	Preschool educator
PL	Physical Literacy
PLI	Physical Literacy Implementation
RQ	Research Question
SOC	Sense Of Coherence
SPSS	Statistical Package for the Social Sciences
UWES	The Utrecht Work Engagement Scale
WHO	World Health Organization

1 INTRODUCTION

1.1 WHY PHYSICAL LITERACY MATTERS

Physical literacy (PL) is a holistic concept centered on developing a meaningful and enduring relationship with physical activity (PA), that supports individuals to move with confidence and enjoyment throughout their lives. It emphasizes the personal and lifelong nature of movement, where PA becomes not just something people do, but part of who they are and how they experience the world. According to Whitehead (2010), PL involves the holistic development of physical competence, confidence, motivation, and knowledge that enables individuals to value and take responsibility for engaging in PA across the lifespan. It is a multidimensional construct that integrates physical, cognitive, and affective or psychological dimensions, all of which contribute to supporting an active and healthy lifestyle (Carl et al., 2023)

The concept of PL originates from existential and phenomenological perspectives on human embodiment. From this view, the body is not merely an instrument for movement, but central to how people learn, interact, and make sense of the world. PL is understood as a lifelong and evolving process, not simply a collection of movement skills or measurable outcomes (Whitehead, 2001).

A key outcome of PL is sustained participation in PA that is personally meaningful and aligned with individuals' goals, interests, and abilities. It encourages lifelong engagement in enjoyable movement experiences and fosters a sense of personal responsibility for staying active (Higgs et al., 2019). This broader understanding is also reflected in contemporary PL assessment tools, which aim to capture motivation, confidence, and understanding, not just physical performance, and are philosophically grounded in the existential view of human development (Jean De Dieu & Zhou, 2021).

Although PL has gained international recognition, comprehensive scientific reviews on how to implement and the effects of its implementation are still lacking. Building on this point, despite increased PL-related research, efforts are unevenly distributed, with most of the studies originating from Australia, Canada and Great Britain. There is limited research from regions like Africa, South and Central America, France, Japan, Spain and the United States. This gap is also present in Sweden, where PL research and interventions remain scarce. Researcher highlighted the need to examine its integration into Swedish practice research and policy (Carl et al., 2023).

1.2 PHYSICAL ACTIVITY AND PHYSICAL LITERACY IN PUBLIC HEALTH CONTEXT

PA plays an important role in public health by preventing non-communicable diseases (NCDs), improving mental well-being and reducing the socioeconomic burden on healthcare systems (DHULI

et al., 2022). The WHO defines PA as all bodily movement produced by skeletal muscles that result in energy expenditure, such as occupational tasks, active transportation, and domestic chores to structured and leisure activities, including sports participation and recreational pursuits (WHO, 2020). Despite these established benefits of regular PA, physical inactivity remains alarmingly high globally. Only 27,5% of adults and 19% of adolescents meet the WHO's recommended levels of PA (WHO, 2020). These findings call for urgent actions that promote PA across all age groups and life stages.

Young children are particularly vulnerable to the negative effects of physical inactivity, as early childhood years represent a sensitive period for the development of fundamental movement skills, physical competence, and positive attitudes towards PA to establish lifelong health behaviors. According to Tremblay et al. (2016), young children are dependent on adults and the environment around them when it comes to accessing opportunities for movement and play. Researchers emphasize that insufficient PA during these years has been linked to long-term consequences for physical, emotional, cognitive, and social development. Complementing this, a systematic review and meta-analysis by (Jones et al., 2020) found a small but positive association between motor skills and PA in early childhood, emphasizing their interconnection and the importance of early interventions that support both areas. From a public health perspective, early interventions in preschool settings are therefore very important to drive healthy behaviors throughout life.

One practical way to support early interventions in preschool settings is through the implementation of clear PA guidelines. When guidelines are well integrated, they can serve as a foundation for consistent practice, promote educator confidence, and help establish a shared vision of health promotion. Previous research shows that clearly communicated PA guidelines can increase staff motivation and capacity to work systematically with movement-promoting activities (Naylor et al., 2015).

Moreover, implementation is not only about having guidelines in place, but also about how they are perceived and acted upon. According to the Consolidated Framework for Implementation Research (CFIR), factors such as the strength of evidence, adaptability, and perceived usability influence the likelihood that guidelines will be implemented with fidelity (Damschroder et al., 2009). Recent work in early childhood education and care settings highlights that organizational readiness, including staff commitment, perceived feasibility, and relevance further it is critical to a successful implementation of PA interventions (Wenden et al., 2024). Understanding these organizational factors is essential when aiming to translate policy into meaningful practice.

To address challenges such as physical inactivity and declining motivation for movement, PL can be seen as an important factor, not only promoting participation in PA but also being shaped by it. (Cairney et al., 2019) suggest that PA enhances PL by providing opportunities to develop motor skills, confidence, and motivation through both structured and unstructured activities. At the same time, researchers also describe how higher levels of PL can lead to greater participation in PA as individuals

feel more competent and motivated to engage in movement. This mutual relationship demonstrates how PL and PA reinforce each other throughout life.

Furthermore, according to the Convention on the Rights of the Child, developing positive relationships with PA should be recognized as a fundamental right for all children, regardless of their background or circumstances. (United Nations, 1989). This view is further supported by Press (2022), who emphasizes that children's rights must be embedded in everyday practice, particularly within early childhood education. Embodied experiences through PA should not only be allowed but also actively encouraged, enabling young children to express themselves, form social relationships, and make sense of the world around them.

1.3 THE EDUCATOR'S ROLE IN PROMOTING MOVEMENT

The importance of PL goes beyond childhood development; it serves as a critical factor in shaping the individual engagement in movement and exercise across the lifespan (Edwards et al., 2017). Equally important, previous research has focused on PL's impact on children; there is limited understanding of how its implementation affects educators. According to (*Läroplan För Förskolan*, 2018), the educator's role towards children is important for their holistic development of movement, acting as role models. Research shows that educators' own PA levels and attitudes have significantly impacted children's participation in PA, a central component of PL. Cheung (2020) conducted a study in Hong Kong that demonstrated preschool children were more PA during lessons led by active educators compared to those led by less active educators. These findings suggest that active educators play an important role in modeling movement behaviors and significantly influencing children's PA levels. Although educators play an important role in shaping children's PA, as demonstrated by findings above, there is a limited understanding of how engaging with PL impacts their own PA behaviors and pedagogical practices.

1.4 SWEDISH CONTEXT AND THE MAKE A MOVE PROJECT

The preschool environment is an important setting for supporting children's cognitive, emotional, language, and motor development, playing a foundational role in promoting health and well-being across the lifespan (Şenol & Şenol, 2023). According to a systematic review by Figueroa and An (2017), which examined eleven studies, found that eight of them demonstrated a positive association between motor skill competence and levels of PA in preschool-aged children. These findings suggest that children with higher motor skills tend to engage more in PA compared to peers with lower motor competence. Low motor skill levels are also associated with poorer academic outcomes, highlighting the importance of supporting children's movement and motor development and especially in preschool settings (Hurtado-Almonacid et al., 2024). In addition, preschool children in one study spent an

average of 5.1 hours per day on screen-based activities, and higher screen-time was significantly related to lower manual dexterity skills (for example, finer motor skills such as hand coordination), pointing to a possible negative effect of too much screen exposure on fine motor development (Webster et al., 2019).

The decline in children's PA and rise in sedentary behavior, partly due to increased screen time, underscores the need to utilize preschool as an arena for integration of high-intensity play and movement into daily routines (Sollerhed, n.d.). In response to declining PA levels and increasingly common lack of motor competence among young children, the Make a Move (MaM) project was launched in 2021. It is a quality improvement project conducted in two pilot municipalities, Lidköping and Mölndal, led by RF-SISU Västra Götaland and funded by RF-SISU, the Västra Götaland Region, and other partners. The initiative is a regional strategic effort to promote long-term public health by increasing movement and PA for all in line with the Global Action Plan on PA (GAPPA) 2018-2030 (*Global Action Plan on Physical Activity 2018–2030*, n.d.). This is also in line with the recent published report from the Public Health Agency of Sweden and the identified national strategy (*Ett rörelselyst för hela samhället – En struktur för främjande av fysisk aktivitet*, 2025). Through intersectoral collaboration and knowledge dissemination of the holistic approach of PL, the project aims to develop, together with various stakeholders, new methods for more active communities (J.Hildorzon, personal communication, January 15, 2025). This quality improvement initiative is based on the principles of learning collaboratives, with local teams identifying problems and solutions, testing the new methods, and studying them and further improving practice. Preschools were among others (e.g. sport clubs, schools, parasport) a target setting for improving practice towards more movement and PA. The application of PL in the MaM project is based on the theoretical foundations and aims to integrate PL into preschool environments through structured, educator-focused interventions. The project emphasizes the development of PL's three elements towards children through educators, aiming to create sustainable changes in PA behaviors. Preschool educators (PEs), principals, and interested stakeholders from the pilot municipalities participated in professional training, lectures, and networking. PEs can be seen as central agents in this process. They serve not only as facilitators of movement but also as role models, planning and leading activities that promote enjoyment in movement and build children's confidence (Cheung, 2020).

The MaM project employs a structured approach that consists of three distinct implementation levels of PL:

- Pilot/process preschools: Participate in network collaboration and receive intensive process guidance to support deeper integration and sustained pedagogical change.
- Network Participation preschools: Engage in peer exchanges and periodic workshops aimed at promoting moderate integration of PL practices.

- Information-only preschools: Attend informational sessions and have access to general materials, but do not participate in active training or structured implementation support.

This implementation model allows for a nuanced analysis of how different levels of PL support may influence educators' self-perceived PA and pedagogical approaches. It also provides valuable insights into the structural and organizational factors that can facilitate or hinder the adoption of PL in those diverse preschool environments.

The present thesis is a part of the scientific evaluation of the MaM project. Specifically, it focuses on PE experiences, perceptions, and perceived outcomes related to their own PA and pedagogical approaches. Since MaM has three different PL implementation (PLI) levels, the present study allows for a nuanced analysis of how different PLI levels may influence educators' self-perceived PA and pedagogical approaches. It provides valuable insights into the structural and organizational factors that can facilitate or hinder the adoption of PL in diverse preschool environments. Understanding what works, for whom, under what conditions, and why is essential for developing effective and sustainable implementation strategies.

1.5 THEORETICAL AND ANALYTICAL FRAMEWORKS

This study approaches implementation as a part of an organizationally driven process that occurs within structured preschool environments. To examine how the contextual conditions influence implementation, the Consolidated Framework for Implementation Research CFIR is applied. It is a well-established determinant framework that synthesizes insights from multiple theories of implementation and organizational change. It is designed to identify barriers and facilitators that influence implementation outcomes and consists of five domains: Innovation characteristics, Outer setting, Inner setting, Characteristics of individuals, and Implementation process (Damschroder et al., 2009).

Particular attention is given to factors within the inner setting domain, which highlight the organizational environment in which educators operate. Elements such as professional culture, leadership support, communication networks, and institutional readiness are especially relevant in preschool contexts, where these dynamics can strongly shape how new practices like PL are received and enacted.

To complement this organizational perspective, two additional frameworks are used to understand how individuals respond to implementation within their professional roles. First to examine how educators engage with PL practices, this study draws on the Utrecht Work Engagement Scale (UWES) engagement model Schaufeli et al. (2006) which defines engagement through the dimensions of vigor, dedication, and absorption. These constructs reflect the emotional and cognitive investment individuals

bring to their work. They are particularly useful for understanding how educators respond to the challenges and opportunities presented by implementation efforts. Second, Antonovsky (2005) SOC model is applied to explore how individuals draw on internal resources, comprehensibility, manageability, and meaningfulness to navigate and adapt to change in their professional context.

Together, these frameworks offer a comprehensive lens for understanding implementation, acknowledging both the organizational structures in which change occurs and the individual-level responses that shape how change is experienced and sustained, including shifts in professional attitudes, engagement, and health-related behaviors such as PA.

1.6 RESEARCH GAP

While much of the existing literature appears to focus on how PL focuses on its benefits for children's development and lifelong engagement in PA (Cairney et al., 2019; Whitehead, 2010), relatively little attention has been focused on those tasked with implementing the PL. They are often positioned as the facilitators of the children's movement. The Swedish National Agency for Education emphasizes that educators are expected to support students in developing an understanding of the importance of PA and a healthy lifestyle ((*Läroplan För Grundskolan, Förskoleklassen Och Fritidshemmet* 2022, 2024). Recent research on how individual professional behaviors can extend beyond the person performing them, influencing colleagues within the same organizational environment. In a study of healthcare professionals, (Zhang & Zhang, 2025) demonstrated that prosocial actions, as openly sharing knowledge, not only benefited the individual but also positively impacted the practices of peers within the same workplace. This illustrates a spillover effect, where engagement by one professional can contribute to a broader cultural shift among colleagues. In the context of early childhood education, such dynamics may be relevant for understanding how educators' engagement with PL can drive a supportive, health-promoting environment through collegial influence and the implementation itself.

It is reasonable to assume that professionals who work with PA in their pedagogical practice may themselves be influenced by the knowledge and values they promote. For example, Chen et al. (2023) found that adults with greater awareness of PA guidelines were more likely to meet recommended activity levels. In addition, research has shown that education plays a key role in shaping health behavior: Kari et al. (2020) demonstrated a causal link between higher educational attainment and increased PA levels, although (Sørensen et al., 2012) emphasize how health literacy that is closely tied to education, supports more active and health-promoting lifestyles.

While many PL interventions are led by experts within that field, less is known about the learning and change experienced by those implementing PL without expert training. In early childhood education, educators play a central role in translating PL into daily practice, often adapting new approaches within their local context. Their involvement in such initiatives may contribute to professional development

and evolving understandings of movement and PA, an area still underexplored in current research. Particularly considering the foundational idea in PL theory that learning is not only cognitive but deeply embodied. According to (Whitehead, 2010), PL involves integrating body and mind, where meaningful engagement in PA is grounded in lived bodily experience. As the educators operate within a context where PL is implemented as part of their pedagogical approach and used to promote PA among preschool children. Through teaching PL, they simultaneously develop knowledge and awareness about the value of movement, which becomes an embodied and lived experience. This enriched understanding of PL may contribute to a shift in the educator's movement habits, as it offers a new lens through which they perceive and engage with PA-integrating awareness into both thought and action.

This study addresses this gap by exploring whether and how the implementation of PL in preschool settings influences educators' self-perceived PA levels and their pedagogical engagement with movement.

2 AIM

The overall aim of this study is to examine how the implementation of PL in Swedish preschool settings influences educators' self-perceived PA and their pedagogical engagement with movement. The study explores how different levels of PLI relate to these outcomes, based on the understanding that educators, through their behaviors and attitudes, shape how PA is valued and practiced in early childhood education. In addition, the study seeks to identify both organizational and individual factors, including educators' sense of coherence (SOC) and the presence of PA guidelines, and what may facilitate or hinder the effective implementation of PL in the preschool context.

2.1 RESEARCH QUESTIONS

Main research question:

How do preschool educators perceive changes in their physical activity and pedagogical engagement in relation to physical literacy implementation, and how are these experiences influenced by individual and organizational factors?

Sub questions:

1. Educator Physical Activity

1a) How do preschool educators perceive changes in their physical activity after the implementation of physical literacy?

1b) Do these perceived changes differ between educators working in preschools with different levels of PL implementation (pilot, network, information-only)?

2. Perceived meaningfulness of PLI influences Pedagogical engagement (UWES framework)

How does the perceived meaningfulness of physical literacy implementation influence preschool educators' engagement, and how is the relationship shaped by the level of implementation?

3. Implementation context (CFIR framework)

What organizational and contextual factors, such as the presence of physical activity guidelines and perceived barriers, facilitate or hinder the implementation of PL in preschool environments?

3 METHODS

3.1 Research design

The primary data for this study were collected through a structured online survey (see Appendix Survey Instrument) created using Microsoft Forms. This platform allowed for secure and direct data collection from participants, ensuring firsthand insights relevant to the study's aims.

The full survey was developed as part of the broader evaluation of the MaM project and covered four key areas: background information, support from RF-SISU Västra Götaland, implementation of PL within preschool settings, and perceived effects of the initiative. This sub-study focuses on a selected set of approximately 35 items embedded within the broader questionnaire, specifically addressing preschool educators' experiences and perceptions relevant to the study's research questions.

The survey was pilot tested by four members of the MaM team during each major revision phase and, at one stage, by two preschool educators. Feedback from these pilots led to improvements in item clarity and structure. The estimated completion time was approximately 15 minutes, as stated in the survey introduction.

Participation was voluntary, and informed consent was obtained at the beginning of the survey. All responses were anonymous and handled confidentially. Results were reported at group level, and participating preschools retained access to their own data for internal development purposes.

3.2 Study population and sampling

The target population for this study consisted of all PEs involved in the MaM project, which aimed to implement PL in preschool settings in the municipalities of Lidköping and Mölndal. A total of 26 preschools in Lidköping and 7 in Mölndal were identified as participating in the project and were included in both the broader municipal evaluation and the present study.

A convenience sampling strategy was used, based on accessibility and time constraints rather than probability sampling. This approach is commonly employed in practice-oriented research where access to the full population is limited (Bryman, 2018; Denscombe, 2010). Educators were included if they were employed at the participating preschools during the implementation period. Those not involved in the MaM project were excluded to maintain alignment with the study's objectives.

The online questionnaire was distributed via internal communication channels in each municipality. In Lidköping, the survey link was initially sent to the municipality's communication officer, who then forwarded it to all preschool staff through the digital platform Vklass. In Mölndal, the survey was first sent to preschool principals, who subsequently distributed it to staff members at their respective

preschools. This same procedure was followed for each of the three reminders, which were sent throughout the data collection period (21 March to 6 April 2025) to encourage participation.

In total, 148 preschool educators completed the survey. However, due to the indirect distribution method where the survey was further forwarded by communication officers and preschool principals it was not possible to determine how many educators received it. Consequently, no accurate response rate could be calculated. This limits the ability to assess sample representativeness, which should be considered when interpreting the results.

3.3 Data collection

The primary data for this study were collected through a structured online survey (see Appendix A Survey Instrument) created using Microsoft Forms. This platform allowed for secure and direct data collection from participants, ensuring firsthand insights relevant to the study's aims.

The survey instrument was developed as part of the broader evaluation of the MaM project, which aims to implement PL in preschool settings. Approximately 35 items from the full MaM questionnaire were included in this sub-study. These items were adapted from validated instruments such as the SOC scale, CFIR, UWES, and Swedish public health indicators of physical activity. The questions covered areas aligned with the research focus, including demographic background, self-assessed physical activity, pedagogical engagement, sense of coherence, and contextual implementation factors.

The questionnaire was pilot-tested by four members of the MaM team during each major revision phase and, at one stage, by two preschool educators. Feedback from these pilots led to improvements in item clarity and structure. The estimated completion time was approximately 15 minutes, as stated in the survey introduction.

Participation was voluntary, and informed consent was obtained at the beginning of the survey. All responses were anonymous and handled confidentially. Results were reported at group level, and participating preschools retained access to their own data for internal development purposes.

3.4 Variables and measurement

This section outlines the variables used in the study, how they were derived, and how they were categorized and coded for analysis.

Table 1*Overview of study variables, measurement, and coding.*

RQ related construct	Measured by	Taken/inspired by	Scaling
RQ1a: Perceived PA change	DV: Own PA since implementation (self-reported)	Constructed for this study	3-point ordinal, later dichotomized (no increase / some increase)
RQ1b: Perceived PA change by implementation level	IV: Implementation group (network vs. process-led); DV: Perceived PA change	Defined in project design	Categorical (implementation group) × Binary outcome
RQ1b (supplementary): Self-reported PA level	DV: Vigorous PA (0=None, 1=<60, 2=≥60 min); Moderate PA (0=<150, 1=≥150 min)	Based on validated screening questions; constructed for this study	Ordinal (vigorous); Binary (moderate)
RQ2: Perceived meaningfulness and pedagogical engagement	IV: SOC dimensions; DV: UWES indicators; grouped by implementation level	SOC (adapted); UWES (adapted)	4-point Likert (0–3); group comparison by implementation level
RQ3: Structural support and perceived barriers	IV: Presence of PA guidelines; DV: Reported barriers	Custom items based on CFIR framework	Binary (guidelines); Categorical (barriers); Barrier count (continuous)
RQ3: Barriers and pedagogical engagement	IV: Total number of perceived barriers; DV: Engagement total score	Barriers: custom; Engagement: adapted UWES	Barrier count (continuous); Engagement (0–9 composite score)

Note. IV = Independent Variable (predictor); DV = Dependent Variable (outcome). Labels indicate the analytic role of each variable in relation to the respective research questions.

Table 1 presents an overview of the main study variables in relation to each research question (RQ1a–RQ3). For each construct, the table outlines how it was measured, the source or theoretical inspiration behind its design, how it was coded, and its analytical role as either an independent (IV) or dependent variable (DV).

The variables were grouped into five categories: demographics, self-perceived PA, UWES, SOC, and organizational/contextual factors. All were measured using self-reported survey items developed or adapted to reflect the aims of the MaM project and the preschool context.

Most items followed a 4-point Likert scale (0 = “Not at all” to 3 = “High”). To enable group comparisons, several variables were recoded into ordinal or binary formats. The construction and coding of the variables were informed by validated frameworks, including the SOC scale, the CFIR, the UWES indicators, and national PA indicators issued by the Swedish National Board of Health and Welfare.

Together, these variables reflect the study's intention to explore how individual, pedagogical, and organizational conditions interact in the implementation of physical literacy in preschool settings.

3.5 Data Analysis

All analyses were conducted using IBM SPSS Statistics (version 29.0.1.1) and structured around the study's three research questions. Given the ordinal nature of most items and the presence of non-normal distributions, non-parametric methods were applied throughout. Descriptive statistics (frequencies, percentages, medians, and interquartile ranges) were used to summarize participant characteristics and key study variables.

Inferential analyses: including correlations, group comparisons, and regression were selected based on variable type and distribution and are described in detail under each research question below.

RQ1: Educators' Perceived PA and Changes Following PLI

To address RQ1 a, descriptive statistics were used to summarize educators' self-reported changes in PA following the implementation of PL. The main outcome variable was dichotomized from a three-point ordinal scale into "no increase" versus "some increase" in PA, and proportions were calculated accordingly. To further explore the construct validity of this outcome, Spearman's rank-order correlations were conducted between self-reported PA change and two related variables: perceived change in general movement and attitude toward the PL initiative.

RQ1 b further explored whether educators perceived change in physical activity differed by level of implementation, group comparisons were conducted using non-parametric methods due to the ordinal nature and non-normal distribution of the data.

The main outcome variable was again perceived change in PA. Two types of group comparisons were conducted:

1. A chi-square test was used to compare the dichotomized PA change variable ("no increase" vs. "some increase") across implementation groups (process-led vs. network-based), to assess differences in the proportion of educators reporting increased PA.
2. A Mann–Whitney U test was then applied to the original three-point ordinal scale (no change, low impact, moderate–high impact) to determine whether the intensity of perceived change differed between the two groups.

These analyses aimed to evaluate whether implementation context influenced educators' perceptions of personal change in physical activity following the PL initiative.

RQ2: Relationship Between SOC and Pedagogical Engagement

To examine whether educators SOC was associated with their pedagogical engagement in the PL initiative, Spearman's rank-order correlation was used. Pedagogical engagement indicators (vigor, dedication, and absorption) served as outcome variables, while the three SOC dimensions (comprehensibility, manageability, and meaningfulness) were used as predictors.

As a preliminary step, descriptive statistics (medians and interquartile ranges, IQR) were calculated for all SOC and engagement variables to provide an overview of central tendencies and variability within each implementation group.

Given the ordinal nature of the items and non-normal distribution of several variables, non-parametric correlation analyses were applied. Correlations were first calculated for the overall sample to identify general patterns of association between SOC and engagement.

To explore whether the strength or direction of these associations varied by implementation level, correlation analyses were then stratified by implementation context. This involved conducting separate Spearman's correlations for educators in the network-based and process-led groups. The implementation level was thus treated as a grouping variable, enabling a comparison of correlation patterns between these two distinct contexts.

No additional covariates were included in these analyses, as the aim was to assess direct associations between educators' perceptions of coherence and their reported engagement in pedagogical activities related to PL.

RQ3: Organizational and Contextual Factors Influencing PL Implementation

To investigate organizational and contextual factors influencing the implementation of PL, analyses were guided by selected constructs from the CFIR framework, such as perceived barriers, leadership support, and organizational policies.

Key outcome variables included: (1) total perceived implementation barriers (barrier_total_count); (2) pedagogical engagement (uwa_total), calculated as the sum of Likert scores for vigor, dedication, and absorption; and (3) perceived child PA impact, reflecting educators' views on how their own PL engagement influenced children's physical activity. This last variable was considered an indirect measure of implementation success. Key predictors included the presence of PA guidelines (yes/no), perceived leadership support (ordinal), and SOC dimensions (comprehensibility, manageability, meaningfulness).

Group comparisons (e.g., perceived barriers by guideline presence) were analyzed using chi-square tests. Differences in SOC and leadership support by guideline status were examined using Mann–Whitney U tests. The association between barrier load and pedagogical engagement was assessed using Spearman’s rank-order correlation. An ordinal logistic regression was used to explore predictors of PEs attitude towards PL contributed to child PA outcome, with SOC, leadership support, and perceived barriers entered as predictors. The presence of guidelines was excluded from the final model due to lack of significance in preliminary analysis.

Missing data were handled according to standard procedures, with non-responses (“Vet ej,” “Ej deltagit,” or blanks) excluded listwise from each analysis. However, it is important to note that several preschools categorized under the lowest level of PL implementation, those that only received information about PL, did not respond to the survey at all. As a result, this implementation level is underrepresented or entirely absent in parts of the analysis. Therefore, comparisons between implementation levels were limited to network-based and process-led preschools. This pattern of missing data appears non-random and may reflect systematic differences in engagement or perceived relevance, which limits the ability to draw conclusions across all implementation levels and may affect the generalizability of the findings.

3.6 Ethical Consideration

Educators are the primary aim of the study and not the vulnerable population, as children focus will be on detailed information towards participants about the purpose, procedures, and potential implications of the research before providing their consent. To prevail, their autonomy participation will be entirely voluntary and with the option to withdraw at any stage without facing any consequences.

To ensure participants’ anonymity, no personal or identifiable information, such as names, specific school affiliations, or other traceable details, will be collected. This means responses cannot be linked back to individual participants. The survey will be conducted using Microsoft Forms, and data will be analyzed in SPSS. All data will be stored securely in compliance with the General Data Protection Regulation (GDPR, EU 2016/679) and by institutional data management policies. Access to the data will be restricted to the research team.

Ethical research practices will be upheld through an informal consent process, whereby participants voluntarily agree to take part after being provided with clear and accessible information about the study’s purpose and procedures.

The selection criteria will include all educators who have been part of the MaM project and will be equally eligible to participate in the study but will only exclude schools and educators who have not participated in the project in the project as their experiences would not be relevant to the study objectives.

The study aims to generate valuable insights into PLI, pedagogical approaches, and educators' PA levels. By analyzing these factors, the research will contribute to improving teaching strategies and professional development. Additionally, participants may benefit personally by reflecting on their own PA levels and how PL has influenced their teaching practices.

3.7 DECLARATION OF AI TOOL USAGE

During the preparation of this thesis, AI-supported tools were used to enhance the clarity and quality of the written language. ChatGPT was utilized to suggest improvements to sentence fluency, word choice, and structure in selected parts of the text. Some translation support was also provided using ChatGPT, primarily for phrasing adjustments between Swedish and English.

In addition, Grammarly, an AI-based writing assistant, was used to review grammar, spelling, and phrasing throughout the thesis. All AI-generated suggestions were critically evaluated and edited by the author, who maintains full responsibility for the final content and its academic integrity.

4 RESULTS

4.1 PARTICIPANTS CHARACTERISTICS

The following Table 2 presents the demographic and background characteristics of participating in preschool educators, categorized by implementation level (network and process-led). Due to insufficient responses from the information-only group, this category was excluded from subgroup comparisons.

Table 2

Demographic and Background Characteristics of Participating PEs by Implementation Level

Variable	Network (n = 92)	Process (n = 56)	Total (n = 148)	χ^2	df	p
Gender, n (%)				5.123	2	.077
Women	92 (100%)	52 (95%)	144 (98%)			
Men	0 (0%)	2 (3.6%)	2 (1.4%)			
Prefer not to say	0 (0%)	1 (1.8%)	1 (0.7%)			
Age, n (%)				.444	2	.801
< 39 years	35 (39%)	23 (42%)	58 (40.3%)			
40–59 years	45 (51%)	25 (46%)	70 (48.6%)			
≥ 60 years	9 (10.1%)	7 (12.7%)	16 (11.1%)			
Education level, n (%)				.255	1	.614
Primary/Secondary	23 (25%)	16 (29%)	39 (26.7%)			
Bachelor's or higher	68 (75%)	39 (71%)	107 (73.3%)			
Professional experience, n (%)				1.632	2	.442
1–10 years	42 (46%)	22 (41%)	64 (44%)			
11–20 years	17 (19%)	15 (28%)	32 (22%)			
≥ 21 years	32 (35%)	17 (32%)	49 (34%)			
Movement coordinator, n (%)				8.818	1	.003**
Yes	25 (28%)	29 (52%)	54 (36.7%)			
No	66 (73%)	27 (48%)	93 (63.3%)			
Vigorous PA, n (%)				.903	2	.637
0 minutes	9 (10%)	5 (9%)	14 (9.9%)			
< 60 minutes	28 (32%)	22 (40%)	50 (35.2%)			
≥ 60 minutes	50 (58%)	28 (51%)	78 (54.9%)			
Moderate PA, n (%)				1.813	1	.178
< 150 minutes	46 (51%)	35 (63%)	81 (55.5%)			
≥ 150 minutes	44 (49%)	21 (38%)	65 (44.5%)			
Increased perceived PA				.195	2	.907
Not at all	30 (37%)	17 (33%)	47 (36%)			
Low impact	22 (27%)	15 (29%)	37 (28%)			
Moderate–high	29 (36%)	19 (37%)	48 (36%)			

Note. $p^* < .05$. $p^{**} < .01$. Asterisks indicate levels of statistical significance.

As shown in Table 2, a total of 148 preschool educators participated in the study, of whom 98% identified as women. Most were younger than 59 years, held a university degree or higher (73.3%), and had over 10 years of professional experience. The two implementation groups (network and process-led) were comparable in terms of gender, age, education, and work experience. However, significantly more educators in the process-led group held the role of movement coordinator ($p = .003$).

In terms of physical activity, most participants met the higher thresholds for both vigorous and moderate PA. A small proportion reported no vigorous activity, and fewer than half met the moderate PA recommendation.

4.2 EDUCATORS PERCEIVED CHANGE IN PA AND ITS RELATION TO IMPLEMENTATION LEVEL

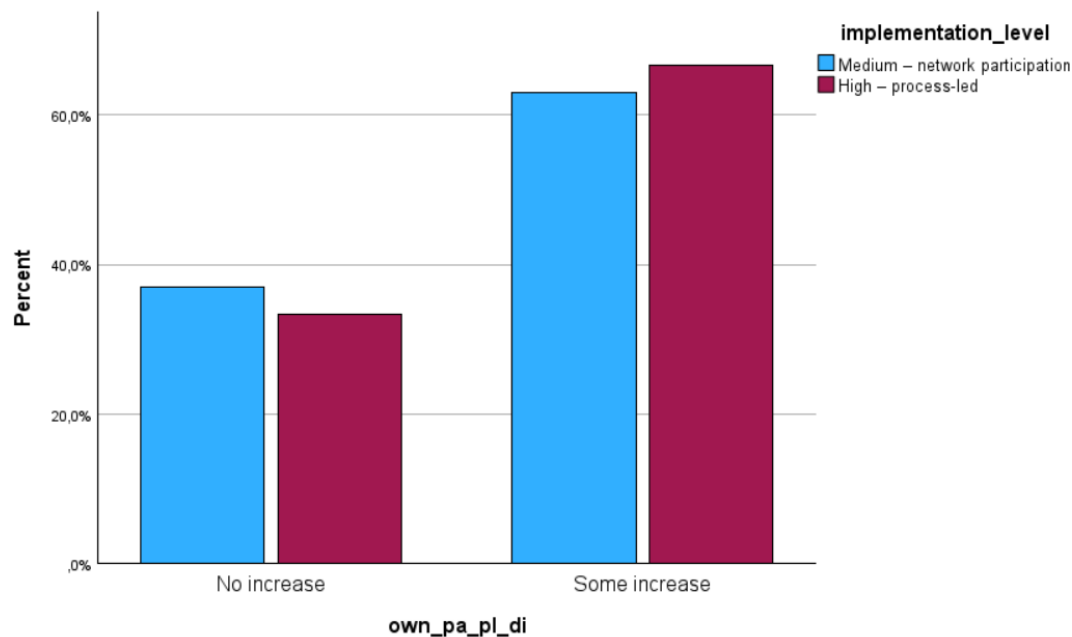
Educators perceived changes in physical activity following PL implementation are shown in Table 2. In total, 36% reported no increase, while 28% indicated a low impact and another 36% reported a moderate to high increase. For clarity in the analysis, these responses were grouped into a binary outcome, where 64.4% of participants were categorized as experiencing “some increase.”

Spearman rho correlation between self-reported changes in PA and change in increase of movement was $\rho = .668$ ($p < .001$), as an indicator for data quality and internal validity. A moderately significant correlation $\rho = .475$ ($< .001$) was found between perceived PA change and the respondent’s attitude toward the PL initiative. Based on these findings, respondents who felt they moved more and developed a more positive attitude towards the project were also more likely to perceive an increase in their own PA, but their underlying beliefs about movement remained relatively unchanged.

Before addressing the main research question (RQ1 b), whether educators perceived change in PA differed between groups with different levels of PLI. A series of chi-square tests were conducted to examine whether the background characteristics of educators differed across the implementation groups. No significant differences regarding age group, education level, and years of professional experience were found (see table 2). Significant more educators with the specific role of movement coordinator were found in the process-led implementation group (52% versus 28%).

Figure 1

Distribution of Educators' Perceived Change in PA by Implementation Level (Dichotomized Format)



PA change differentiated by implementation level

To examine whether perceived PA change differed by implementation level, a chi-square test was conducted. The three-level PA change was dichotomized from three to two categories (“No increase” vs “Some increase”), as shown in Figure 1; 66.7% of educators in the process-led group and 63.0% in the network group reported some increase in their PA. While a slightly higher proportion of respondents in the process-led group reported change, a chi-square test revealed that this difference was not statistically significant, $\chi^2(1) = 0.187$, $p = .665$. These results suggest that the implementation level was not significantly associated with whether educators perceived an increase in their own PA following the PLI.

Intensity of Perceived PA Change

A Mann-Whitney U test was conducted to further examine whether the perceived change differs between the two groups by using the original ordinal scale for the variable. The results showed no statistically significant difference between the groups, $U = 1997.50$, $p = .735$. Median values were identical for both groups ($Mdn = 1.00$), indicating that “low impact” was the most typical response regardless of implementation level.

These findings indicate that while the dichotomized comparison showed a significant association, the overall intensity of perceived change did not differ substantially between the two groups. While the chi-square test indicated that educators in the process-led group were more likely to report some increase in PA compared to those in the network group, the Mann-Whitney U test showed that the degree of perceived change did not differ significantly. This suggests that although a greater share of

educators in the process-led group perceived a change, the intensity of that change was similar across groups.

Attitudinal and Behavioral Engagement

Finally, two Mann–Whitney U tests were conducted to examine whether educators' engagement with movement and their attitudes toward movement differed across implementation groups.

- No statistically significant difference was found for self-reported movement since implementation of PL ($U = 2063.00$, $p = .532$), indicating similar experiences across groups
- However, a significant difference was found for attitude change toward movement ($U = 1800.50$, $p = .006$), with educators in the process-led group reporting greater attitudinal change compared to those in the network-based group.

These findings suggest that while educators in both groups experienced similar personal movement shifts, those in process-led settings were more likely to report a meaningful change in their overall attitude toward movement.

4.3 Relationship Between SOC and Pedagogical Engagement

The second research question (RQ2) examined whether PEs' SOC was associated with their pedagogical engagement in the PL initiative. Although the initiative PL primarily targets children's development, educators' engagement is important for its successful implementation. This question also explored whether the relationship between SOC and engagement varies depending on the level of implementation of PL, educators in Network Participation versus Pilot/Process-led preschools.

Table 3

Median and IQR for SOC and UWES Variables by Implementation Level

Variable	Median Network	IQR Network	Median Process	IQR Process
Comprehensibility	2.0	1.0	2.0	0.0
Manageability	1.0	1.0	2.0	1.0
Meaningfulness	2.0	1.0	2.0	0.0
Dedication	2.0	1.0	2.0	1.0
Vigor	2.0	1.0	2.0	0.0
Absorption	2.0	1.0	2.0	1.0

Note. "Network" refers to network-based and "Process" refers to process-led PLI

Across both implementation levels, educators generally reported moderate to high agreement with the

items. The use of a 4-point Likert scale (0 = Not at all, 1 = A little, 2 = Moderate, 3 = High) allows for nuanced interpretation of perceived levels of engagement and coherence. As shown in Table 3, for comprehensibility and meaningfulness, both groups showed a median of 2.0. This suggests that educators broadly understood the PL initiative and perceived it as purposeful. Notably, the process-led group demonstrated narrower IQRs, indicating more consistent experiences.

Manageability revealed a distinction between groups. In the network-based group, the median was 1.0 (IQR = 1.0), while the process-led group had a median of 2.0 (IQR = 1.0). This suggests that educators in more structured environments found it easier to integrate PL into their pedagogical routines, whereas those in network-based settings reported greater variability and potentially more challenges.

Regarding pedagogical engagement, all three indicators; dedication, vigor, and absorption had a median of 2.0 across both groups. This reflects a shared experience of emotional and cognitive involvement in PL-related activities. However, the process-led group exhibited slightly narrower IQRs for vigor and dedication, suggesting more uniform engagement levels within that group.

These findings indicate generally positive perceptions of PL implementation, with evidence that more structured approaches may support greater manageability and consistency in educators' experiences.

However, as shown in Table 3, the median engagement scores (vigor, dedication, and absorption) were consistently 2.0 in both groups. The IQRs, on other hand, suggest slightly less variation among educators in the process-led group, especially for vigor (IQR = 0.0) compared to the network group (IQR = 1.0). While these differences were not statistically significant, they may indicate a trend toward more consistent engagement where implementation was deeper.

A Mann-Whitney U test was conducted to explore whether engagement differed by implementation level. No statistically significant differences were found between network and process-led groups for any engagement dimension.

Correlations Between SOC and Pedagogical Engagement: Overall and by Implementation Level

Spearman's rho correlations were calculated for each SOC dimension and engagement indicator, across the full sample and by implementation level.

Table 4*Spearman's Correlations Between SOC Dimensions and Pedagogical Engagement, by Implementation Level*

	Implementation level	Comprehensibility	Manageability	Meaningfulness	Vigor	Dedication	Absorption
Comprehensibility	network, n=92	—	-.125	.379**	.322**	.371**	.217
	process, n=56	—	-.290	.325*	.411**	.516**	.315*
	total N=138	—	-.192	.355**	.358**	.429**	.256**
Manageability	network, n=92		—	-.105	.063	-.020	.134
	process, n=56		—	-.174	-.272	-.213	-.130
	total N=98		—	-.145	-.085	-.103	-.002
Meaningfulness	network, n=92			—	.494**	.351**	.432**
	process, n=56			—	.397**	.504**	.122
	total N=120			—	.463**	.408**	.298**
Vigor	network, n=92				—	.638**	.503**
	process, n=56				—	.771**	.591**
	total N=136				—	.686**	.534**
Dedication	network, n=92					—	.551**
	process, n=56					—	.503**
	total N=137					—	.533**
Absorption	network, n=92						—
	process, n=56						—
	total N=132						—

Note. Spearman's rho correlations. $p < .05$ *; $p < .01$ **. N varies slightly due to missing values.

The three SOC dimensions were examined as a predictor variable, while the UWES indicators, served as outcome indicators of pedagogical engagement as shown in Table 4. In the full sample, meaningfulness was moderately and significantly correlated with all three engagement outcomes, suggesting that educators who found the PL initiative meaningful were more likely to experience higher levels of energy, commitment, and immersion in their pedagogical work. The association was strongest for dedication, followed by vigor and absorption, indicating that meaningfulness may particularly foster a sense of purpose and investment in one's professional role.

When examined across implementation settings, the strength of these associations differed. In structured, process-led settings, correlations were stronger overall, with the most notable effects observed for dedication ($\rho = .504$) and vigor ($\rho = .397$). This implies that when implementation is guided and coordinated, the perceived meaningfulness of the initiative plays a more powerful role in supporting engagement.

In contrast, in network-based settings, where implementation may be more informal or decentralized, the associations remained significant but were slightly attenuated. Interestingly, the strongest correlation in this group was observed between meaningfulness and absorption ($\rho = .432$), possibly reflecting that in less structured environments, internal motivation and personal meaning may be particularly important for deep involvement in practice.

Taken together, these findings suggest that while perceived meaningfulness consistently predicts engagement, its influence is amplified in more formally supported implementation contexts, particularly in relation to educators' sense of dedication and energy.

4.4 Organizational and Contextual Factors Affecting PLI

Structural Support and Perceived Barriers

This analysis examined whether the presence of PA guidelines in the preschool setting was associated with educators' perceptions of specific barriers to implementing PL. Educators responded to a multiple-choice item regarding implementation challenges and responses were compared between preschools with and without guidelines.

Table 5

Association Between PA Guidelines and Educators' Perceived Barriers to PLI

Barrier	% No Guidelines (n = 40)	% Guidelines Present (n = 81)	χ^2	p-value
Time (Barrier_time)	35.0%	38.3%	0.123	.726
Support (Barrier_support)	10.0%	3.7%	1.948	.163
Resources (Barrier_resources)	17.5%	29.6%	2.067	.150
Priority (Barrier_priority)	12.5%	2.5%	.943	.026
Uncertainty (Barrier_uncertainty)	0.0%	6.2%	2.576	.109
Motivation (Barrier_motivation)	2.5%	1.2%	0.264	.608
No barriers	47.5%	55.6%	0.697	.404

Note. Percentages reflect the proportion of educators within each group (with vs. without guidelines) reporting each barrier. Bold indicates statistically significant difference ($p < .05$). Marginal trend for "Uncertainty" based on Likelihood Ratio ($p = .042$).

A chi-square test of independence was performed to assess whether barrier endorsement differed between the two groups. The only statistically significant difference was observed for the barrier *priority*, as shown in Table 5, $\chi^2(1, N = 121) = 4.94, p = .026$. Among educators in preschools

without guidelines, 12.5% reported that PL was not prioritized, compared to only 2.5% in those with guidelines. These percentages are based on the cross-tabulation conducted before the chi-square test.

A marginal trend was also noted for the barrier *uncertainty*, based on the likelihood ratio ($p = .042$), it was reported by only a small number of educators in guideline-supported settings ($n = 5$). Due to low cell counts in the crosstab, this result should be interpreted with caution.

These findings indicate that the absence of formal PA guidelines may contribute to greater perceived difficulty in prioritizing PL in preschool settings. Other reported barriers appeared unrelated to guideline status.

SOC and PL Understanding by Guideline Status

To examine whether educators' SOC related to PL differed based on the presence of formal PA guidelines in their preschool, Mann-Whitney U tests were conducted. The analysis included both a total SOC score and three adapted SOC dimensions—comprehensibility, manageability, and meaningfulness, each formulated in relation to PL.

None of the comparisons revealed statistically significant differences:

- Total SOC: $U = 1401.5, p = .987$
- Comprehensibility: $U = 1577.0, p = .359$
- Manageability: $U = 1532.0, p = .602$
- Meaningfulness: $U = 1461.0, p = .688$

The presence of PA guidelines was therefore not associated with educators' overall SOC or their experiences of understanding, balance, or meaning in their work with PL. In this sample, structural support in the form of guidelines did not appear to influence internal readiness.

Barrier Load and Pedagogical Engagement

This analysis explored whether the number of reported implementation barriers was associated with educators' level of engagement in PL-related activities. A Spearman's rank correlation was conducted between the total number of perceived barriers (*barrier_total_count*) and overall engagement (*uwa_total*) that combined the indicators, vigor, dedication, and absorption. The analysis revealed a statistically significant negative correlation: $\rho = -.168, p = .050$

This indicates that educators who reported a higher number of barriers tended to report slightly lower levels of pedagogical engagement in PL-related activities. Although the correlation was weak, it suggests that contextual challenges may influence educators' engagement in applying PL in practice.

Implementation Factors and Educators' Perceived Outcomes of PL

An ordinal logistic regression was conducted to examine factors associated with educators' perceptions of increased child PA. Included predictors were leadership support, SOC, and the number of reported implementation barriers. The presence of local PA guidelines was excluded from the final model due to a lack of statistical significance ($p = .118$).

Before regression, Spearman's rank-order correlations were conducted between the predictor variables; leadership support, SOC, number of perceived barriers, and guideline presence to evaluate potential multicollinearity. No strong associations were found (all $\rho < .40$), indicating that the variables were sufficiently independent and could be included together in the ordinal logistic regression model. The final model showed an acceptable fit $\chi^2(3) = 13.56, p = .004$, indicating that the included predictors significantly improved model performance compared to a null model. The following variables were examined in the ordinal logistic regression

- SOC was a statistically significant predictor of perceived child PA outcomes ($B = 1.96, SE = 0.76, Wald = 6.69, p = .010$). A one-unit increase in SOC was associated with a significant increase in the odds of reporting a higher level of perceived child PA, suggesting that educators who felt more coherent in their work were more likely to perceive positive changes in children's PA
- Leadership support was positively associated with perceived child PA outcomes ($B = 0.95, SE = 0.65, Wald = 2.14, p = .144$). This indicates that a one-unit increase in perceived leadership support tended to increase the odds of reporting higher child PA, however, the association was not statistically significant and should be interpreted with caution.
- Perceived barriers were negatively related to perceived child PA outcomes ($B = -0.32, SE = 0.28, Wald = 1.29, p = .256$), but this was a non-significant result.

These findings suggest that internal factors such as a strong SOC may shape educators' perceptions of success in promoting PA through PL. While leadership support and structural barriers were not significant in this model.

5 DISCUSSION

This study aimed to explore the spillover effects of PL implementation on PEs in two Swedish municipalities. Specifically, it examined whether and how the implementation of PL into preschool settings influenced educators' own PA behaviors and pedagogical engagement, and how these outcomes were shaped by individual, organizational, and contextual factors. The discussion follows the structure of the three research questions (RQ1–RQ3), each addressing a different but interrelated aspect of the implementation process: educators' PA, pedagogical engagement, and organizational influences. This is followed by a methodological reflection on the study's strengths and limitations.

5.1 RESULT DISCUSSION

RQ1 a: Most educators (64,4%) perceived some increase in their physical activity following the implementation of PL.

RQ1 b: No significant differences in perceived PA change were found between implementation levels, suggesting implementation intensity was not a determining factor.

RQ2: A strong sense of meaningfulness in relation to PL was positively associated with higher levels of pedagogical engagement (vigor, dedication, absorption). Engagement did not differ significantly between groups, but the process-led group showed more consistency.

RQ3: The presence of formal PA guidelines was not significantly associated with educators' SOC or perceived PA change, but educators without guidelines more often reported that PL was not prioritized. More reported barriers were weak but significantly linked to lower pedagogical engagement.

In relation to RQ1 a, one of the key findings was that nearly two-thirds of the educators perceived an increase in their PA following the implementation of PL. This is notable, considering that the MaM project's implementation of PL primarily focused on the children by enhancing educators' knowledge base about the dimensions of PL; "competence, confidence and motivation". It suggests possible spillover effects, where those implementing PL, educators in this case, may also be personally influenced. Similar patterns have been observed in other contexts; for instance, (Ruiz-Frutos et al., 2021) found that employees involved in work environments emphasizing psychological well-being and coherence also experienced personal improvements in engagement and health-related behaviors.

From a public health perspective, these dual benefits are valuable. Educators who feel more physically active may bring increased energy, authenticity, and presence to movement-based activities, enhancing their impact as facilitators and role models (Cheung, 2020). Interestingly, this perceived increase was not linked to actual reported activity levels during a typical week. According to Sheeran and Webb (2016) this kind of gap between intention and behavior is common; people may feel more engaged with behavior without yet changing how they act. In this case, educators may have become more aware

of movement or started thinking differently about everyday activities, even if their habits hadn't changed.

This interpretation is supported by the observed association between perceived increases in PA and positive shifts in educators' attitudes toward movement. This suggests that the PL initiative may have encouraged educators to reflect more deeply on the meaning of movement in their professional lives. Such a perspective resonates with Whitehead (2001) conceptualization of PL, not only as physical competence, but also as an embodied and meaningful experience. From a behavioral change, this attitudinal shift may represent an important early stage. According to the Transtheoretical Model, (Prochaska & Velicer, 1997), meaningful reflection is often a precursor to action. Although concrete behavioral change may not yet have occurred, the emergence of psychological readiness points to a promising foundation for sustained change.

RQ1 b focused on whether perceived changes in PA differ across implementation levels. No significant differences were found, suggesting that the presence of PL itself, regardless of implementation intensity, may be enough to raise awareness among educators. This aligns with findings by Carl et al. (2022), who observed that even less structured PL interventions can still influence understanding and attitudes. In this study, simply being part of a PL-focused environment may have influenced educators to reflect more on their movement.

However, one significant difference did occur: educators in process-led preschools reported a greater attitudinal shift toward being more active. This highlights the importance of organizational support in strengthening educators' emotional and cognitive commitment to the implementation process. According to the CFIR model, "inner setting" components like leadership, communication, and workplace culture influence how new practices are received and adopted (Damschroder et al., 2009). One possible explanation is the significantly higher proportion of movement coordinators in these settings, which may signal a stronger institutional commitment to PA. These roles are likely to act as local promoters to be active, contributing to a supportive environment that promotes staff engagement and facilitates attitudinal change.

To assess the potential influence of background characteristics on group comparisons, chi-square tests were conducted for key demographic variables. No statistically significant differences were found between implementation groups with regard to age, educational level, or years of professional experience. These results suggest that the groups were relatively balanced in terms of these variables, reducing the likelihood of systematic bias due to background differences.

Although professional experience did not differ significantly across groups, previous research suggests that more experienced employees may demonstrate higher levels of engagement due to greater familiarity with their organizational context and professional roles. According to Bakker and

Demerouti (2008), experienced staff may draw on psychological resources gained through professional experience, such as confidence, role clarity, and a sense of control, to remain engaged. These findings highlight the value of retaining and supporting experienced staff in implementation efforts.

In the context of this study, the relative balance across demographic variables allows for a clearer interpretation of the findings, suggesting that variations in educator engagement and perceptions of physical literacy implementation are more likely to reflect meaningful differences in contextual and psychological factors, rather than underlying differences in background characteristics.

Continuing to RQ2, the findings showed that educators who experienced the PL implementation as meaningful, i.e., valuable and important to their work and were more engaged in their pedagogical practice. This perception of meaning relates to the concept of “meaningfulness” in Antonovsky (2005), which refers to the extent to which individuals feel that their efforts are worthwhile and emotionally significant. Meaningfulness was strongly associated with all three aspects of engagement, vigor, dedication, and absorption as outlined in the UWES engagement model (Schaufeli et al., 2006). When educators found purpose in the initiative, they were more likely to invest both energy and attention into their work with PL. Further, the relationship between meaningfulness and engagement was even stronger in process-led preschools, suggesting that structured support can enhance educators’ internal motivation. These findings are that perceived meaningfulness is a driver of engagement, also supported by (Ruiz-Frutos et al., 2021), showing in their study that workers with high levels of meaningfulness reported lower psychological distress and higher engagement, even under high-stress conditions such as the COVID-19 pandemic. This supports the interpretation that meaningfulness is not only protective against stress, but also actively promotes deeper involvement in one’s work.

RQ3 focused on the organizational conditions that may support or hinder the implementation of PL in preschool settings. Previous research has highlighted the presence of PA guidelines as a potential driver of positive change. This study examined how such organizational factors, including the presence of PA guidelines, relate to the implementation of PL. While guidelines are often considered important tools for shaping practice, our findings suggest that their existence alone is not enough to bring about meaningful change.

In line with the CFIR framework (Damschroder et al., 2009) written guidelines are part of an organization’s internal structure and can offer support by clarifying expectations, providing direction, and signaling that a certain topic, such as PL, is a priority. Our data support this to some extent: educators in preschools without PA guidelines were significantly more likely to report that PL was seen as a low priority ($p = .026$), suggesting that guidelines can play a role in setting the agenda.

However, the presence of guidelines did not show a significant link to educators’ pedagogical engagement or their SOC. This aligns with previous research suggesting that simply knowing about or having access to guidelines is not enough to influence behavior, especially if the guidelines feel vague,

unrealistic, or disconnected from the realities of everyday work (de Visser et al., 2021; Wenden et al., 2024).

(Wenden et al., 2024) emphasize that for guidelines to be effective, they must be part of a broader picture. Educators are more likely to implement initiatives when they find them acceptable, relevant, and feasible within their context. Our findings support this idea: in settings where guidelines existed but lacked follow-up or practical support, they did not seem to influence educator engagement.

A small but significant negative relationship between perceived barriers and pedagogical engagement ($\rho = -.168$, $p = .050$), highlighting that those everyday challenges, like time pressure, lack of training, or unclear expectations, can stand in the way of good intentions. This aligns with Wenden et al. (2024) who found that without adequate support structures, even well-designed guidelines may fail to influence practice meaningfully.

PA guidelines can serve an important function by reinforcing organizational priorities and offering structure, but they are unlikely to lead to lasting change unless they are supported by leadership, aligned with everyday routines, and backed by resources that make implementation possible.

The analysis of educators perceived child outcomes, a secondary measure reflecting the goal of PL implementation. Showed that SOC was the only significant predictor of educators' perception of increased child PA. Neither leadership support nor perceived barriers were significant. Research by Matić et al. (2025) showed that SOC plays a key role in how educators interpret their work environment and its outcomes. Applied here, this suggests that educators with strong SOC are more likely to perceive PL implementation as effective, both in terms of their role and in observed child activity.

While the primary aim of the *MaM* project was to strengthen children's PL through educator-led strategies, the findings suggest that educators themselves may have experienced positive side effects. Reports of increased movement, attitudinal shifts, and a strong sense of meaningfulness in relation to PL point toward a possible spillover effect. Although not the study's central focus, this unintended influence on staff aligns with previous findings showing how professional engagement in development initiatives can affect individuals' own behaviors and motivation (Zhang & Zhang, 2025). These results highlight the importance of viewing educators not only as implementers but as active participants whose experiences are shaped through the very process of delivering interventions. While further research is needed, this perspective may offer valuable insight into how implementation efforts can yield broader benefits within educational settings.

5.2 METHOD DISCUSSION: STRENGTHS AND LIMITATIONS

This study used a cross-sectional survey design to collect standardized self-reported data from a substantial portion of PEs within a limited time frame. This design aligned well with the study's aim to explore perceived changes in PA and pedagogical engagement in relation to different levels of PLI and made it possible to identify meaningful associations between variables. However, as (Denscombe, 2010) points out, while cross-sectional studies are useful for identifying patterns, they are limited in their ability to explain how or why such patterns occur. Since the data are retrospective and self-reported, findings may also be affected by recall bias or momentary perceptions which may impact the internal validity of the study.

One of the main advantages of the cross-sectional survey method is its cost-effectiveness and ability to capture a broad range of variables from a large number of participants within a defined time period (Goodfellow, 2023). In the context of this study, this design allowed for comparisons across different implementation levels and provided a practical means to gather insights from a geographically dispersed group of educators. The use of standardized, self-administered questionnaires also enhanced the consistency of data collection and facilitated statistical analysis (Creswell & Creswell, 2018).

However, as with many survey-based studies, there are challenges related to representativeness. The reliance on voluntary participation may have introduced self-selection bias, where more motivated or physically active educators were more likely to respond. This could limit the generalizability of the findings. Moreover, the absence of follow-up measurements prevents any conclusions about changes over time, which would have required a longitudinal or mixed-method design. Despite these limitations, the design remains appropriate for an initial exploration of patterns and associations in the early stages of implementation.

A mixed methods approach could potentially have offered a deeper understanding of educators' experiences, particularly in terms of context and meaning making. However, given time constraints and the intention to minimize disruption to participants' work, a quantitative approach embedded within the broader municipal evaluation was deemed most appropriate. As (Faber & Fonseca, 2014) note, even studies with limited scope can contribute with valuable insights when the sample and design are well aligned with the research objectives.

This study used a non-probability sampling method (convenience sampling), selecting preschools already involved in the MaM initiative. While this was a practical choice given time and resource constraints, it limits the generalizability of the results beyond the participating municipalities. The complete non-response from Level 1 (information-only) schools also meant that comparisons across all planned implementation levels were not possible.

There are signs that more structured and engaged preschools, particularly those in Level 3, were overrepresented. This reflects the influence of internal organizational factors such as leadership and readiness for change (Damschroder et al., 2009); it may also introduce participation bias, where more committed staff are more likely to respond. In this study, it's not only the overall non-response that is relevant, more importantly the fact that an entire implementation level, the information- only group, was excluded due to lack of participation. As Groves and Peytcheva (2008) emphasize that the real issue is whether there are systematic differences between those who respond and those who do not. In this context, reporting response patterns at both the school and individual levels add important transparency and helps the reader interpret the findings more carefully. While the use of a convenience sample limits the extent to which the findings can be generalized beyond the study context, providing detailed information about sampling and contextual conditions supports the reader in assessing the potential relevance of the results to similar settings (Schloemer & Schröder-Bäck, 2018).

The survey was distributed digitally via the preschool communication system and municipal email channels. In Lidköping, the communication officer responsible for the Vklass platform forwarded the survey to all preschool staff, while in Mölndal, preschool principals handled the distribution within their respective preschools. According to Creswell and Creswell (2018), primary data collection through structured surveys enhances the validity of quantitative findings by allowing direct measurement of key variables. To encourage participation, three follow-up reminders were sent at regular intervals during the data collection period.

Although the digital format enabled efficient and wide-reaching distribution, especially across geographically spread preschool settings. It may also have introduced unintentional exclusion. Educators with limited digital proficiency, or those facing time constraints and high workloads, may have been less likely to participate. These practical barriers could have contributed to unit non-response and should be considered when interpreting the findings, particularly given the time-sensitive and demanding nature of preschool work environments.

A strength of the study is that the survey was pilot tested with relevant stakeholders, including members of the MaM team and preschool educators. This process helped improve item clarity and contextual relevance. However, because the piloting was informal and not systematically documented, it did not allow for formal reliability assessment (e.g., test-retest or internal consistency), which should be considered a limitation.

Still, the study benefitted from using primary data collected directly from the target population. As Creswell and Creswell (2018) note, such data allows for the direct measurement of key variables, thereby enhancing both the validity and reliability of quantitative research findings. This strengthens the study's methodological foundation despite the lack of more formal psychometric validation.

Since all data were collected through self-report measures, there is a risk of response bias and subjective interpretation, which should be considered when interpreting the findings (Podsakoff et al., 2003). This is particularly relevant for questions concerning PA, where respondents may either overestimate their activity or underestimate everyday movement, such as physical engagement with children, that they may not consider to be “valid” PA.

Additionally, previous research has shown that questions related to health or lifestyle may be perceived as sensitive, which can affect both participation rates and the honesty of responses. If such questions are perceived as judgmental or intrusive, especially when anonymity is in doubt, this may lead to partial non-response or cautious answering (Tourangeau & Yan, 2007). These dynamics may help explain both the selective participation and variations in response patterns observed in this study.

Furthermore, PEs typically work under tightly structured schedules, with limited flexibility and high child-to-teacher ratios. This often leaves little time during the workday to complete surveys. One educator informally noted that participation might have increased had the survey been administered during scheduled staff meetings (APT), where time is more often allocated to administrative tasks. This highlights how organizational routines, and practical constraints can significantly influence both the feasibility and quality of data collection.

The study used a combination of adapted and validated instruments. Pedagogical engagement was measured using a shortened version of the UWES-9 scale, and selected items from the SOC and CFIR frameworks were included for their relevance. These tools were modified to minimize respondent burden and enhance response quality, but the adapted versions were not fully validated in this study. This should be considered when interpreting the findings.

PA was assessed using two items inspired by the indicator questions recommended by the Swedish National Board of Health and Welfare Socialstyrelsen (2019) which are among the most reliable self-report measures used in Sweden. But the full clinical classification model was not used, which makes it difficult to compare with national standards or guidelines. Although research on the relationship between questionnaire length and response rates is mixed, some studies suggest that shorter surveys may help reduce perceived burden and increase participation (Rolstad et al., 2011). Still, this trade-off may reduce the ability to fully capture complex constructs, which should be considered when interpreting the study’s results.

To improve analytical clarity and address low cell frequencies, responses on four-point Likert scales were recoded into three categories by merging “moderate” and “high.” This allowed for a clearer interpretation of directional change while maintaining sufficient variation for analysis. The potential reduction in nuance was considered acceptable given the study’s scope and sample size (Bryman, 2018).

Although participation was voluntary and anonymous, the survey was distributed in a work-related context where managers or colleagues may have acted as intermediaries. This could introduce a sense of implicit pressure to participate. Research suggests that perceived power imbalances in workplace settings can influence how freely individuals choose to respond (Nielsen et al., 2022). However, informal feedback from several educators indicated that they viewed the evaluation as important for the future development of their work, which may have increased their willingness to participate sincerely.

The use of established theoretical frameworks, such as CFIR, SOC, and UWES, supported the structure and focus of the study by anchoring the research in existing theory and evidence. This approach enhances clarity in both design and interpretation and is commonly recommended in implementation research to increase coherence and relevance across settings (Damschroder et al., 2009). In addition, applying conceptual models is often considered to strengthen the overall credibility of a study by making its theoretical foundations more transparent (Bryman, 2018).

6 CONCLUSION

This study explored how PL implementation in Swedish preschools influenced preschool PEs perceived PA, pedagogical engagement, and experiences of organizational factors. Although the initiative primarily targeted children's movement development, the findings indicate that educators themselves reported attitudinal and perceived behavioral changes, suggesting a possible spillover effect. However, while some educators perceived an increase in their own PA, no statistically significant differences were found between implementation levels in either the likelihood or intensity of this change.

Educators in process-led preschools were more likely to report attitudinal shifts and perceived PL as more meaningful. Their engagement also appeared slightly more consistent, although not significantly higher in magnitude. These findings align with earlier research highlighting the importance of intrinsic motivation and SOC in sustaining professional commitment.

From a public health perspective, preschools operate at the midstream level, where broader strategies translate into daily behaviors. Educators play a dual role: they facilitate children's PA and act as health agents themselves. Supporting their engagement and work environment is therefore crucial. The results suggest that leadership support and organizational culture may play a more influential role than guidelines alone. For instance, while the presence of PA guidelines was not associated with educators SOC or engagement levels, their absence was linked to a greater perception that PL was not prioritized. This indicates that even if guidelines do not directly influence internal motivation and immediate change, they may still function as structural signals that support prioritization in daily practice and their presence could support future readiness by establishing a shared sense of priority.

There is a clear need for future research to explore how PL implementation influences both individual and organizational dynamics. Larger and more varied samples, particularly from low-implementation settings, would allow stronger comparisons. Longitudinal studies including baseline data could better capture actual change. Combining objective PA measures (e.g., step counters) with qualitative methods (e.g., observations, interviews) may offer a deeper understanding of how PL is integrated into everyday practice. Future research could also investigate how collaboration among staff and the physical environment shape implementation processes. To improve participation rates, data collection might be integrated into existing meeting structures (e.g., APT), while ensuring full voluntariness.

Finally, more attention should be given to potential indirect effects. Investigating how educators' own behavior, motivation, or SOC is shaped by their involvement in PL could clarify how child-centered health initiatives may also impact those implementing them.

7 PUBLIC HEALTH PERSPECTIVES / IMPLICATIONS

Preschools represent a practical setting for early health promotion and support of long-term public health by shaping health-related behaviors early in life. Although preschools are not upstream policy arenas, they function at the midstream level, translating broader health strategies into daily practices that influence children's and educators' well-being.

This study indicates that PL initiatives, though primarily aimed at children, can also influence educators' own PA, engagement, and attitudes. These findings point to potential spillover effects that may extend the reach of child-focused interventions by supporting health-promoting environments for staff as well.

Rather than relying solely on top-down guidelines, implementation benefits from leadership support, professional ownership, and cultural alignment. When PA is embedded into the everyday practices and values of preschool settings, it can contribute to both individual well-being and broader public health outcomes by influencing key social determinants of health, such as education, behavior, and working conditions.

The present study also provides several suggestions for future research; future studies should aim to include all levels of implementation, particularly information-only preschools, to better capture variation in engagement and outcomes. Larger sample sizes across different municipalities would enhance generalizability. A pre–post intervention design with baseline measurements is recommended to assess change more clearly. Using objective tools, such as step counters, could strengthen the accuracy of PA data.

Future research could benefit from observational or qualitative approaches, including interviews or ethnographic methods, to better understand how educators experience and interpret PL in practice. Exploring environmental aspects, such as playground architecture and spatial layout, may also offer valuable insights into how physical spaces enable or constrain movement. To increase participation and data quality, surveys could be scheduled during structured staff meetings (APT), providing educators with dedicated time to respond, and an improvement suggested by participants themselves.

Overall, future research should continue to investigate how PL-related interventions impact both children and adults within preschool settings, and how these effects interact with the wider social and organizational environment.

ACKNOWLEDGEMENT

First and foremost, I want to express my gratitude to my supervisor, Beatrix Algurén, for her invaluable guidance, support, and encouragement throughout the research process. Her expertise and insightful feedback have been essential to the development and successful completion of this thesis.

I would also like to sincerely thank the PEs who generously took time away from their valuable work to participate in the study. Their dedication to supporting children the future of our society is truly inspiring.

Special thanks to the principals and municipal representatives in Lidköping and Mölndal who facilitated the distribution of the survey and supported the data collection process. Your assistance was so crucial for reaching the participants and ensuring the success of this study.

Further, I am so grateful to the Make a Move project, of which this study forms part of the broader evaluation. I would like to thank all members of the MaM network for their moral support and for believing in me, for collaboration, and for shared commitment to promoting PL in preschool education. Keep up your good work.

Finally, I want to extend my deepest appreciation to my partner, whose patience, understanding, and encouragement provided me with the time and space necessary to fully dedicate myself to this work.

Thank you all for your invaluable contributions and support throughout this journey.

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APPENDIX

Survey instrument

This is the full survey used in the Make a Move project evaluation, distributed to all participating preschool educators.

Rörelseförståelse (Physical Literacy) för att öka rörelse och fysisk aktivitet i samhället

Enkäten beräknas ta cirka 15 minuter att genomföra och består av följande fyra avsnitt:

Avsnitt 1: Bakgrundsinformation

Avsnitt 2: Satsningen Make a Move och stödet från RF-SISU Västra Götaland

Avsnitt 3: Implementering av rörelseförståelse - utvecklingsarbeten i verksamheten

Avsnitt 4: Upplevda effekter av satsningen

Kort information

Projektet

Denna enkät skickas till verksamheter/pedagoger/lärare som deltar eller har deltagit i den tvärsektoriella satsningen *Make a Move*, där RF-SISU Västra Götaland är huvudansvarig och ledande aktör, med stöd från Västra Götalandsregionen. Enkäten ingår i utvärderingen och följeforskningen kring implementeringen av *Physical Literacy* för att främja ökad rörelse i samhället.

Physical Literacy är den engelska termen för **rörelseförståelse**, vilket är det begrepp som har använts inom projektet och i denna enkät.

Enkäten är en del av en större studie med **syftet** att öka kunskapen och förståelsen kring implementeringsprocessen av *rörelseförståelse* och dess effekter på tvärsektoriella samarbeten, medarbetares attityder, pedagogiska tillvägagångssätt samt barn och ungas rörelsekvalitet, rörelsemängd och självförtroende i att vara fysiskt aktiva.

Resultaten ska användas för att identifiera både framgångsfaktorer och hinder i implementeringsprocessen, med syftet att sprida insikterna, vidareutveckla processen och stödja andra verksamheter i att genomföra effektiva insatser.

Deltagandet och hantering av data

Ditt deltagande är frivilligt, och du kan när som helst välja att avbryta utan att ange orsak. All insamlad data kommer att behandlas konfidentiellt, vilket innebär att inga obehöriga har tillgång till den. Resultaten kommer att presenteras anonymt och på grupp-nivå, vilket säkerställer att enskilda personer eller verksamheter inte kan identifieras. Om deltagande verksamheter önskar använda sina egna data för utvecklingsändamål, har ni fri tillgång till er egen information.

Kontaktinformation

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Bakgrund

1. Har du haft en ledande roll i arbete med rörelseförståelse,

t.ex. hälsoinspiratör, kontaktperson som deltagit i nätverksträffar, ingår i rörelsegruppen?

☐ Ja ☐ Nej ☐ Vet ej

2. Har ni i er verksamhet påbörjat ett arbete med att implementera rörelseförståelse?

☐ Ja ☐ Nej ☐ Vet ej

3. Lidköpings kommun: Vilken förskola är din huvudsakliga arbetsplats?

Välj ditt svar:

[.....] ▼

4. Mölndals kommun: Vilken förskola är din huvudsakliga arbetsplats?

Välj ditt svar:

[.....] ▼

5. Vilken är din ålder?

☐ 18–19 år ☐ 20–29 år ☐ 30–39 år ☐ 40–49 år ☐ 50–59 år ☐ 60 år eller äldre ☐ Vill ej uppge

6. Hur identifierar du dig könsmässigt?

☐ Kvinna ☐ Man ☐ Icke-binär ☐ Vill ej uppge

7. Vilken är din högsta avslutade utbildning?

☐ Grundskola eller motsvarande ☐ Gymnasieexamen eller motsvarande
☐ Eftergymnasial utbildning (exempelvis yrkeshögskola eller folkhögskola, ej högskola/universitet)
☐ Examen från högskola/universitet (exempelvis kandidat-, master- eller doktorsexamen) ☐ Vill ej uppge

8. Hur länge har du arbetat som pedagog?

☐ Mindre än 1 år ☐ 1–5 år ☐ 6–10 år ☐ 11–20 år ☐ 21 år eller mer ☐ Vill ej uppge

9. Hur mycket tid ägnar du en vanlig vecka åt fysisk träning som får dig att bli andfådd, till exempel löpning, motionsgymnastik eller bollsport?

☐ 0 minuter / Ingen tid ☐ Mindre än 30 minuter ☐ 30–60 minuter (0,5–1 timme)
☐ 60–90 minuter (1–1,5 timmar) ☐ 90–120 minuter (1,5–2 timmar) ☐ Mer än 120 minuter (2 timmar) ☐ Vill ej uppge

10. Hur mycket tid ägnar du en vanlig vecka åt vardagsmotion och rörelse, till exempel promenader, cykling, trädgårdsarbete eller aktiviteter till och på jobbet? Räkna samman all tid (minst 10 minuter åt gången)

☐ 0 minuter / Ingen tid ☐ Mindre än 30 minuter ☐ 30–60 minuter (0,5–1 timme)
☐ 60–90 minuter (1–1,5 timmar) ☐ 90–150 minuter (1,5–2,5 timmar)
☐ 150–300 minuter (2,5–5 timmar) ☐ Mer än 300 minuter ☐ Vill ej uppge

11. I vilken utsträckning tycker du att ...

Din egen fysiska aktivitet har ökat sedan du började arbeta med rörelseförståelse?

☐ Inte alls ☐ Liten ☐ Måttligt ☐ Stor ☐ Kan ej bedöma

12. Har verksamheten tagit fram mål eller riktlinjer om rörelse och daglig fysisk aktivitet (t.ex. i form av en handlingsplan)?

Du kan välja flera alternativ

☐ Ja, sedan tidigare (innan satsning Make a Move)
☐ Ja, i samband med satsningen
☐ Nej, men har påbörjat
☐ Nej
☐ Vet ej

13. Har satsningen integrerats med annat utvecklingsarbete inom något av följande områden?

Du kan välja flera alternativ

☐ Elevhälsa ☐ Värdegrundsarbete ☐ Trygghet och studiero ☐ Digitalisering ☐ Vet ej

14. Vad innebär rörelseförståelse för dig

Du kan välja flera alternativ

☐ Motivation till att röra sig ☐ Självförtroende vid rörelse ☐ Fysisk kompetens och motoriska färdigheter
☐ Interaktion med olika miljöer (t.ex. vatten, is, snö) ☐ Social interaktion ☐ Rörelseglädje ☐ Vet ej

15. I vilken utsträckning tycker du att följande påståenden stämmer?

Påstående	Inte alls	Liten	Måttligt	Stor	Kan ej bedöma
Är värdefull för barnens välbefinnande och utveckling?	☐	☐	☐	☐	☐
Är viktigt med vardagliga rörelse i ditt eget liv?	☐	☐	☐	☐	☐
Din egen inställning till rörelseförståelse har påverkan på barnen?	☐	☐	☐	☐	☐
Har ökat din egen grad av rörelse sedan projektets början?	☐	☐	☐	☐	☐
Din egen inställning till rörelse har ändrats sedan deltagande i rörelseförståelse satsningen?	☐	☐	☐	☐	☐

16. Ge gärna feedback till om du har någon ytterligare eller annan åsikt

[.....]

Satsningen Make a Move och stödet från RF-SISU Västra Götaland

17. Implementeringsprocessen

I vilken utsträckning tycker du att ...

Påstående	Inte alls	Lite	Måttlig	Stor	Ej deltagit	Kan ej bedöma
Nätverksträffarna är givande?	☐	☐	☐	☐	☐	☐
Utbildningar är relevanta och anpassade till målgruppen?	☐	☐	☐	☐	☐	☐
Processstöd är givande? (pilotförszkolor)	☐	☐	☐	☐	☐	☐

18. Ge gärna feedback till vad som kan utvecklas eller förbättras

[.....]

Implementering av rörelseförståelse - utvecklingsarbeten i verksamheten

19. Implementeringsprocessen – ledarskapsengagemang *I vilken utsträckning tycker du att ...*

Påstående	Inte alls	Lite	Måttlig	Stor	Kan ej bedöma
Ledningen stöder vårt förändringsarbete	☐	☐	☐	☐	☐
Ledningen ser till att vi har tid och möjlighet för att diskutera och planera förändringar för att främja rörelseförståelse på arbetsplatsen	☐	☐	☐	☐	☐

20. Ge gärna feedback till vad som kan utvecklas eller förbättras

[.....]

21. Vilka är de största utmaningarna du upplever med att integrera rörelseförståelse i ditt dagliga arbete? Du kan välja flera alternativ

- ☐ Tidsbrist – svårt att hinna med inom befintligt schema
- ☐ Brist på stöd från ledning och kollegor

- ☐ Brist på resurser och material för att genomföra aktiviteter
☐ Osäkerhet om hur jag ska undervisa och engagera barnen i rörelseförståelse
☐ Upplever att rörelseförståelse inte är prioriterat i vår verksamhet
☐ Saknar personlig motivation eller intresse för rörelseförståelse
☐ Inga hinder – jag tycker det fungerar bra att integrera rörelseförståelse
☐ Vet ej
☐ Annat

22. Hur väl stämmer följande påståenden in på din upplevelse av att arbeta med rörelseförståelse i din pedagogiska verksamhet?

Påstående	Inte alls	Liten	Måttlig	Hög	Kan ej bedöma
Har du en tydlig förståelse för vad rörelseförståelse innebär och hur du kan använda det i din undervisning?	☐	☐	☐	☐	☐
Har du svårt att balansera kraven på att integrera fysisk aktivitet i undervisningen med andra pedagogiska uppgifter?	☐	☐	☐	☐	☐
Känner du att arbetet med rörelseförståelse gör din undervisning mer givande?	☐	☐	☐	☐	☐
Rörelseförståelse är bättre än andra pedagogiska sätt eller nuvarande praxis för att främja rörelse?	☐	☐	☐	☐	☐
Rörelseförståelse som arbetssätt kan anpassas efter verksamhetens specifika behov (åldersgrupper, funktionsnedsättningar, miljö etc.)	☐	☐	☐	☐	☐

23. Ge gärna feedback till om du har någon annan upplevelse av att arbeta med rörelseförståelse i din pedagogiska verksamhet?

[.....]

24. Hur väl stämmer följande påståenden in på din upplevelse av att använda rörelseförståelse i aktiviteter med barnen?

Påstående	Inte alls	Lite	Måttlig	Stor	Kan ej bedöma
Vi i kollegiet avsätter regelbundet tid för att utveckla vår pedagogiska praxis?	☐	☐	☐	☐	☐
Alla medarbetare är öppna till förändring och söker aktivt nya möjligheter till förbättrade arbetssätt?	☐	☐	☐	☐	☐
På vår arbetsplats uppmuntras vi att dela med oss av idéer?	☐	☐	☐	☐	☐
När jag använder rörelseförståelse i aktiviteter med barnen känner jag mig full av energi.	☐	☐	☐	☐	☐
Att använda rörelseförståelse i aktiviteter med barnen känns inspirerande och meningsfullt för mig.	☐	☐	☐	☐	☐
När jag utformar och genomför aktiviteter med rörelseförståelse påverkar det mig så att jag fortsätter att tänka och reflektera över det även efteråt.	☐	☐	☐	☐	☐

25. Ge gärna feedback till om du har någon annan upplevelse av att använda rörelseförståelse i aktiviteter med barnen!

[.....]

Upplevda effekter av satsningen

26. I vilken utsträckning upplever ni att insatserna inom ramen för rörelseförståelseimplementering lett till följande effekter?

Effekt	Inte alls	Lite	Måttlig	Stor	Vet ej	Kan ej bedöma
Flera barn i rörelse	☐	☐	☐	☐	☐	☐
Piggare barn	☐	☐	☐	☐	☐	☐
Ökad trivsel bland barn	☐	☐	☐	☐	☐	☐
Färre konflikter mellan barn	☐	☐	☐	☐	☐	☐
Bättre relationer mellan barn	☐	☐	☐	☐	☐	☐
Bättre relationer mellan barn och pedagoger	☐	☐	☐	☐	☐	☐
Bättre samarbeten mellan pedagoger	☐	☐	☐	☐	☐	☐
Förbättrad koncentrationsförmåga hos barn	☐	☐	☐	☐	☐	☐
Lugnare barngrupp inomhus	☐	☐	☐	☐	☐	☐
Ökad trivsel bland personal	☐	☐	☐	☐	☐	☐
Ökad samsyn bland personalen i frågor om barnens rörelse	☐	☐	☐	☐	☐	☐

27. Upplever ni någon annan effekt av insatserna? Beskriv vilken/vilka.

[.....]

28. Har det synts någon förändring i antalet incidentrapporter sedan satsningen inleddes?

Förskolan har en skyldighet att systematiskt förebygga och förhindra att kränkningar och andra incidenter inträffar. Har ni sett en skillnad i antal sådana ärenden?

- ☐ Ja, det har blivit fler
- ☐ Nej
- ☐ Ja, det har blivit mindre
- ☐ Vet ej

29. Om det har synts en förändring, bedömer ni att denna är kopplad till satsningen?

- ☐ Ja, i stor utsträckning
- ☐ Ja, i viss utsträckning
- ☐ Nej
- ☐ Vet ej

30. I vilken utsträckning har satsningen bidragit till att utveckla verksamhetens systematiska kvalitetsarbete vad gäller

Område	Inte alls	Lite	Måttlig	Stor	Vet ej
Barnens rörelse (fysisk aktivitet) under skoldagen	☐	☐	☐	☐	☐

En god miljö som främjar utveckling och lärande ☐ ☐ ☐ ☐ ☐

Barnens trygghet ☐ ☐ ☐ ☐ ☐

Barnens välbefinnande ☐ ☐ ☐ ☐ ☐

31. Ge gärna feedback till vad som kan utvecklas eller förbättras.

[.....]

Tack för dina svar och för att du delar med dig av dina erfarenheter och åsikter!

För ytterligare frågor är du välkommen att kontakta Beatrix Algurén via e-post: beatrix.alguren@gu.se.
