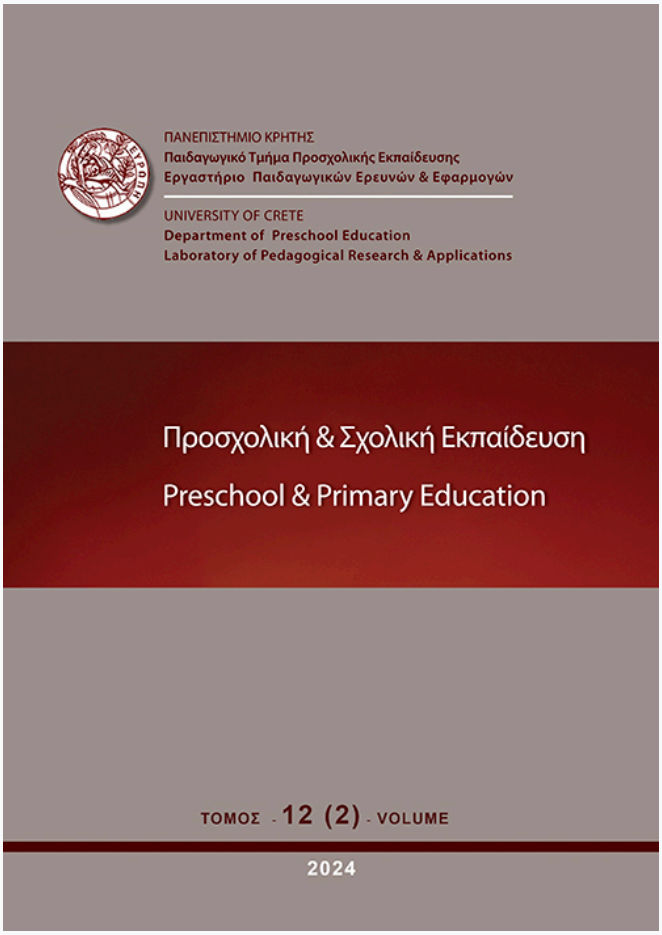
Preschool and Primary Education

Τόμ. 12, Αρ. 2 (2024)

Νοέμβριος 2024



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doi: 10.12681/ppej.37269

Βιβλιογραφική αναφορά:

Vatou, A., Vatou, A., & Tsitiridou-Evangelou, M. (2024). Exploring the relationship between young children's self-concept and prosocial behaviour in the Greek Ear-ly Childhood Education and Care setting: A study on soft skills assessment. *Preschool and Primary Education*, *12*(2), 133–148. https://doi.org/10.12681/ppej.37269

Preschool & Primary Education
2024, Volume 12, Issue 2, pp. 133-148
e-ISSN: 2241-7206

Laboratory of Pedagogical Research & Applications
Department of Preschool Education, University of Crete
doi: https://doi.org//10.12681/ppej.37269

Exploring the relationship between young children's self-concept and prosocial behaviour in the Greek Early Childhood Education and Care setting: A study on soft skills assessment

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Abstract. The aim of this study was to investigate young children's perspectives of their self-concept and to examine its association with their prosocial behaviour. The psychometric properties of the Adaptive Social Behaviour Inventory (ASBI) in the Greek Early Childhood Education and Care (ECEC) context were also investigated. The study guided by the Social-Emotional Learning Framework that highlights the importance of the development of the soft skills in early years. The sample comprised 102 young children (M_{age}= 3.79 years, SD_{age}= .20 years) and their teachers from nine ECEC settings. The measures used were the Adaptive Social Behaviour Inventory (ASBI) and the Pictorial Scale of Perceived Competence and Social Acceptance (PSPCSA). Results from factor analysis supported the four-factor structure of the ASBI and its high reliability: prosocial behaviour, co-operation/conformity, antisocial behaviour, and confidence. Findings showed that young children's self-concept beliefs associated positively with the children's prosocial behaviour. Collectively, the findings highlight the importance of supporting young children's self-concept beliefs and their impact on children's behaviour.

Keywords: young children's perspectives, self-concept beliefs, prosocial behaviour, soft skills, early childhood education

Introduction

Soft skills or 21st century skills are considered one of the most powerful predictors of children's development, learning, and wellbeing (Duncan et al., 2007; National Research Council, 2012; Sylva et al., 2020). Over the past four decades, a large volume of studies explored the mechanisms of children's basic numeracy and literacy skills in Early Childhood Education and Care (ECEC) and their relationship with children's learning development in general (Manolitsis et al., 2017; Ralli et al., 2021; Salminen et al., 2021; Vatou et al., 2023; Vretudaki & Tafa, 2022). The focus of these studies determines the critical role that early education plays in shaping children's future academic and social-emotional outcomes. The recent literature acknowledges the importance of basic numeracy and literacy skills; however, little

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e-publisher: *National Documentation Centre, National Hellenic Research Foundation*
URL: http://ejournals.epublishing.ekt.gr/index.php/education

is known about the importance of developing children's soft skills in early years that go beyond academic achievement and enhance children's lifelong learning, their school readiness and adaptability to challenges, and their success in various aspects of life (Sylva et al., 2020).

Over the last years there has been a growing interest in the development of soft skills in the field of education (Nazaré de Freitas & Assoreira Almendra, 2022). Until recently, the majority of educational systems emphasised mainly cognitive skills which are considered essential for school success. However, a question arises today of whether this approach is sufficient. The current literature reveals the importance of soft skills, or non-technical skills, that are included in the social domain (e.g., communication, problem-solving, decision taking, creativity, teamwork, empathy, self-regulation, etc) and are becoming increasingly necessary in today's globalized and diverse society (Durlak et al., 2011; Lucas & Venckutė, 2020). Soft skills incorporate abilities, behaviours, skills, and attitudes that allow individuals to explore their environment and support them in interactions, cooperation and in achieving personal goals (Lippman et al., 2015). These skills support children in addressing complicated social and emotional situations, and in collaborating effectively with others (Diakiw, 2016; Lippman et al., 2015).

Research on soft skills is rooted in the social-emotional learning framework (SEL) (CASEL, 2015; Elbertson et al., 2010). Within this framework, through teachers' and parents' advice and guidance children enhance their skills and knowledge to develop their identity, recognize and manage their emotions, establish and achieve their personal and collective goals, feel and show empathy for others, and establish and maintain supportive relationships (Jones et al., 2019; Lippman et al., 2015; Payton et al., 2000). The SEL framework provides a foundation for the development of soft skills by focusing on five core competencies: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making (CASEL, 2015). These competencies are interrelated and build upon one another to support the development of social and emotional intelligence (McClelland et al., 2017).

Another theoretical approach that focuses on the motivational process within the development of soft skills is the self-concept theory (Durlak et al., 2011; Lippman et al., 2015). A widely used definition of self-concept is "the perception an individual has of himself or herself, which is formed through the individual's experience and interpretations" (Shavelson et al., 1976, p. 411). In the context of soft skills development, the self-concept theory can be used to support children to develop a positive self-image, which in turn can enhance their social and emotional skills (e.g. self-awareness, self-management) (Shavelson et al., 1976) and impact their long-term well-being (Leflot et al., 2010).

This sense of self acts as a motivating factor on children's behaviour (Gavidia-Pyane et al., 2015). Children's beliefs about themselves are associated with their actions, decisions and interactions with others (Doumen et al., 2011; Gavidia-Pyane et al., 2015; Leflot et al., 2010). For instance, children who hold positive self-concept beliefs may be more willing to try new things at school, engage in daily school activities and successfully face challenging situations (Gavidia-Pyane et al., 2015; Walgermo et al., 2018). On the other hand, children who have negative or low self-concept may be more likely to avoid challenging situations, feel anxious and depressed (Doumen et al., 2011; Krettenauer et al., 2013). Furthermore, research has consistently shown that children with positive self-concept perceive high levels of social competences, such as sharing, cooperating, helping others and engage in prosocial behaviours (see Krettenauer et al., 2013; Svetlova et al., 2010). The positive relationship between self-concept and prosocial behaviour has been attributed to the fact that children with positive self-concept beliefs have confidence in their abilities which in turn allows them to feel more comfortable when interacting with teachers, parents, or peers (Bagán et al., 2019; Önder et al., 2019; Verschueren et al., 2012).

The literature on soft skills research is primarily focused on the social-emotional learning framework which has been recognized and is becoming a core aspect of education in the

21st century (Sylva et al., 2020). The early years are an important period for the development of young children's soft skills. During early childhood, children develop their social-emotional, and cognitive skills, which can be a predictive factor of their future achievements (OECD, 2020). However, very few studies have examined young children's soft-skills and their relations to behavioural outcomes (Alzahrani et al., 2019; Papadopoulou & Gregoriadis, 2017). Given that soft-skills play a crucial role in children's future development, learning, and wellbeing (National Research Council, 2012; Sylva et al., 2020), it is important to understand how soft-skills are associated with children's behaviour and how these manifest in an ECEC setting. By focusing on young children's perspectives (aged 3-4), this study aims to examine how young children's self-concept beliefs are related to their prosocial behaviour in the Greek educational context.

Association between children's self-concept beliefs and prosocial behaviour

Self-concept is an integral characteristic for every person and can contribute to the adaptation and the resilience of individuals (Leflot et al., 2010). Having a positive self-concept, can lead to the improvement of academic performance, positive social skills, healthy relationships, and overall well-being (Diehl & Hay, 2010). Conversely, a negative self-concept can be considered a critical risk factor due to its correlation with socio-emotional development and academic adjustment (Doumen et al., 2011). Prosocial behaviour is expressed through social interactions which play a crucial role at all stages of social development (Carpendale et al., 2013).

A significant number of studies seem to support the existence of a stable and significant relationship between children's self-concept and prosocial behaviour (Wikman et al., 2022). Indeed, children who exhibit prosocial behaviour have positive relationships with their parents and peers, and have high levels of self-concept (Inglés et al., 2012). Additionally, children with positive self-concept tend to have social-emotional resources and skills that help them interact with their social environment, enhance social relationships, and feel accepted by others (Coelho et al., 2015). Young children with high self-concept and peer acceptance display high levels of prosocial behaviour, whereas children who have low levels of self-concept and experience peer rejection tend to show deficits in prosocial behaviour (Inguglia et al., 2013). It is also argued that children with a reduced sense of social self-concept can also display increased difficulties in internalizing behaviours (Spilt et al., 2013).

As children grow, they acquire more behaviour skills (Swit & McMaugh, 2012). During their early years, children's self-concept seems to be relatively unstable. As children grow older, self-concept seems to progressively increase and it stabilizes around middle childhood (Putnick et al., 2019). Prosocial behaviour, although already apparent in toddlers, seems to develop mainly during the preschool age and then seems to fluctuate during adolescence (Malti et al., 2016). Girls seem to outperform boys in prosocial behaviours, exhibiting better social skills and empathetic behaviours (Dávila et al., 2011; Wikman et al., 2022), while boys perform better in academic achievement (Wikman et al., 2022). This difference is eliminated upon children's entry into primary school (Dapp & Roebers, 2018). The observed differences between the two genders are likely attributed to the respective social and cultural context, as well as environmental and genetic factors (Buss & Schmitt, 2019).

Purpose of the study

The aim of this study was twofold. First, this study examined the psychometric properties of the Adaptive Social Behaviour Inventory (ASBI) (Hogan et al., 1992) in the Greek ECEC context which is different from the context that was initially developed. For example, the Greek ECEC context places a strong emphasis on interpersonal dependency which may affect children's social interactions differently compared to the more individualistic settings

where the ASBI was originally developed (Gregoriadis et al., 2021). Cultural and educational context differences can impact the instrument's structure and the relevance of certain items (Triandis, 2018), making it necessary to validate the ASBI within the Greek context.

The second purpose of the study was to examine young children's views of their self-concept and its association with their prosocial behaviour. More specifically, this study investigates whether specific dimensions of young children's self-concept (Competence and Acceptance) are associated with their prosocial and antisocial behaviour, focusing on the percentage of explained variance in these behaviours. This study has the following research questions: (a) What are young children's perceptions of their self-concept in terms of Competence and Acceptance? (b) Is young children's self-concept in terms of Competence and Acceptance associated with their prosocial behaviour? (c) Is young children's self-concept in terms of Competence and Acceptance associated with their antisocial behaviour?

Method

Participants

One hundred and two young children (M_{age} = 3.79, SD_{age} = .20) and their teachers from nine ECEC settings across two prefectures of Northern Greece (Thessaloniki and Halkidiki) were randomly selected to participate in the survey. This study included only typically developing young children. Of the participants, 41.2% were boys and 58.8% were girls and all children were Greek.

Measures

Children's Social Behaviour

The Adaptive Social Behaviour Inventory (ASBI) (Hogan et al., 1992) was used to examine young children's social and behavioural development. The ASBI is completed by the teachers. ASBI consists of 30 items that describe developmentally appropriate social behaviours of young children and is structured around three subscales: Express (e.g., "Understands others' feelings"), Comply (e.g., "Is obedient and compliant"), and Disrupt (e.g., "Teases other children"). The ASBI was validated in England with a large sample of preschool children (Melhuish et al., 2001; Sammons et al., 2003). In these studies, results from principal component analysis revealed five subscales: Co-operation/Conformity (e.g., "Is obedient and compliant"), Prosocial behaviour (e.g., "Understands others' feelings"), Confidence/Independence (e.g., "Enjoys talking with you"), Antisocial (e.g., "Teases other children") and Worried/Upset (e.g., "Gets upset when you don't pay enough attention"). Researchers stated that social competence is multidimensional and distinct from behaviour problems and recognized that a child could exhibit different levels of social skills and behaviour problems at the same time (Sammons et al., 2003). Based on the ambiguous evidence regarding the factor structure of the ASBI, this study examines further its construct validity. Teachers responded on 3-point Likert scale (1 = Rarely/ never, 2 = Sometimes, or 3 = Always). Items were summed to create each subscale score. In this sample, internal consistency reliability ranged from .71 to .86 (Table 1).

The ASBI was translated into Greek, using the back-translation method. The first author translated the scale into Greek, and then, a native speaker conducted a back-translation into English. Then, the two versions were compared, and translation discrepancies were corrected.

Children's Self-Concept

The Pictorial Scale of Perceived Competence and Social Acceptance (PSPCSA) (Harter,1982; Harter & Pike, 1984) was used to measure young children's views of their self-concept. PSPCSA consists of four subscales that comprise six items: "Cognitive Competence",

"Physical Competence", "Peer Acceptance" and "Maternal Acceptance". These subscales are subsumed under two broader scales labelled "Competence" and "Acceptance" (Harter & Pike, 1984; Mantzicopoulos et al., 2004). Responses were given on a 4-point Likert scale anchored by 1 (low competence or acceptance) to 4 (high competence or acceptance). The average score in the questionnaire was calculated for each child. Higher scores indicate higher self-concept. The PSPCSA has two forms including pictures for both boys and girls which minimizes children providing socially desirable responses. In particular, the child is shown 24 pairs of pictures. In these pictures, a child of the same gender is depicted performing successfully in one activity and experiencing a lack of success in the same activity in the other picture. Then, the child is called to choose the picture that they are "most like". After making his/her choice, the child is asked to rate whether the picture chosen is "really true for me" or "sort of true for me". The internal consistency of PSPCSA in the current study was very good (Competence α = .766 and Acceptance α = .802).

Procedure

This study was approved by the authors' department of Ethics Advisory Board. Parents and teachers were informed about the purpose and procedures of the current study and researchers asked them to participate voluntarily. The participating teachers and parents signed informed consent forms before the researchers' first visit to the school. The participants were assured that their responses to the survey would be anonymous and would only be used for academic purposes.

Children whose parents consented to their participation were randomly selected in each classroom to participate in the study. In order to make the children feel comfortable with the researcher, prior to the data collection procedure the researcher (first author) participated in activities and routines with children in their classrooms. Then, upon the child's agreement, the researcher administered the self-concept task individually with each child in a quiet area. Each administration lasted approximately 15-20 minutes. Additionally, during the researcher's visit to each ECEC setting, teachers completed the ASBI questionnaire.

Data analysis

To address the research questions, the following strategy was employed. First, Confirmatory Factor Analysis (CFA) was conducted to verify ASBI's original structure (Hogan et al., 1992). To determine the appropriate structure of ASBI, two models were generated: Model (M1) suggesting a three-factor structure (e.g., Hogan et al., 1992) and Model 2 (M2) proposing a five-factor structure (Sammons et al., 2003). All models were fitted using the Weighted Least Squares Mean and Variance adjusted (WLSMV) estimator which is appropriate for ordinal data.

Upon identification of the appropriate structure of ASBI, the subscales' internal consistency was estimated using the McDonald's omega coefficient. Although reliabilities above .70 are commonly accepted in the literature, values exceeding .80 are preferred (Lance et al., 2006). Comparative Fit Index (CFI), Standardized Root Mean Square Residual (SRMR), and Root Mean Square Error of Approximation (RMSEA) were used as key indicators of the model fit. Generally, a CFI value above .90 is considered acceptable, with values above .95 indicating a good fit. RMSEA values below .08 suggest an acceptable fit, while values below .06 indicate a better fit (Hu & Bentler, 1999). A SRMR value below .08 could be considered acceptable, although a more liberal threshold (e.g., .11) may be regarded in cases of invariant conditions (Rutkowski & Svetina, 2014). To compare the models, we used chi-square difference test and employed the Satorra-Bentler correction (Satorra & Bentler, 2010). The analyses were conducted using the lavaan package in R.

As a second step, descriptive statistics (means and standard deviations) were run to initially obtain teachers' and young children's perceptions about young children's prosocial behaviour and self-concept, respectively. Next, correlational analysis using the Pearson *r* was conducted to initially investigate the association between young children's self-concept and their prosocial behaviour. Finally, hierarchical multiple regression analysis was used to investigate the relations between young children's self-concept and their prosocial behaviour. Hierarchical regression analysis was also used to examine the prediction of prosocial behaviour from the young children's self-concept factors (competence and acceptance). These steps of analysis were performed with the Jamovi.

Results

Factorial structure of the ASBI

The ASBI's original structure was initially tested using a three-factor CFA model (M1) and a five-factor CFA model (M2). The 30 items form the three and five correlated factors respectively, representing the dimensions of the ASBI. The first analysis suggested an ill fit of both models (i.e., M1: $\chi^2(402) = 693.355$, $p < .001$, CFI= .791, RMSEA = .086, SRMR = .152 and M2: $\chi^2(395) = 609.131$, $p < .001$, CFI= .879, RMSEA = .074, SRMR = .134). Inspection of item loadings revealed the sources of poor fit which was consistent in both models. Specifically, three items across model item 5 "Follows rules/games", item 14 "just watches" and item 28 "Worried" had loadings below .40. Also, two out of the five items of the subscale Confidence (item 9 "Open and direct" and item 24 "Prevents routines") yielded low values (<.40). As a result, these items were excluded from the models with the remaining items deemed adequate to represent the intended constructs. CFA results from the revised models reached a good fit (i.e., M1: $\chi^2(272) = 446.673$, CFI= .904, RMSEA = .080, SRMR = .136 and M2: $\chi^2(265) = 401.333$, CFI= .955, RMSEA = .072, SRMR = .120).

To determine the appropriate structure of ASBI, the three-factor model (M1) and the five-factor model (M2) were compared. CFA results indicated that the M2 provided a better fit to the empirical data, as confirmed by a significant $\Delta\chi^2$ test ($\Delta\chi^2 = 45.34$, p <.001) (Table 1). As shown in Table 2, standardized factor loadings were all statistically significant and above .40. The factor correlations ranged from .479 to .906. The subscales' internal consistency was accepted ranging from .673 to .858.

Descriptive statistics and correlational analysis

Table 3 displays descriptive statistics and simple correlations for all variables. The correlations do not consider the hierarchical structure of the data, thus the results should be interpreted with caution.

Table 1 Model fit indices for the three-factor structure and the five-factor structure of the ASBI

	χ^2	*df*	CFI	RMSEA	SRMR
M1	446.67	272	.904	.080	.136
M2	401.33	265	.955	.072	.120

Note: M1= three-factor model, M2 = five-factor model

Table 2 CFA Results of the Greek Version of the ASBI

Items	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Item_18	.781				
Item_10	.754				
Item_15	.731				
Item_8	.647				
Item_20	.619				
Item_3	.588				
Item_12		.906			
Item_2		.717			
Item_7		.692			
Item_17		.598			
Item_13		.569			
Item_1		.566			
Item_11		.491			
Item_19		.479			
Item_22			.699		
Item_27			.667		
Item_30			.582		
Item_29				.756	
Item_21				.697	
Item_23				.619	
Item_26				.438	
Item_4					.604
Item_6					.426
Item_25					-.757
Item_16					-.478
ω coefficient	.858	.868	.683	.768	.673
F2	.549**				
F3	.119	.758**			
F4	-.905*	-.271*	.059		
F5	-.765*	-.563*	-.374*	.820*	-

Note: F1= "Conformity/Compliance", F2= "Pro-social", F3 = "Confidence/Independence", F4 = "Anti-social", F5 = "Worried/upset". Loadings below .40 are not presented. *p< .05, **p< .001.

Table 3 Descriptive statistics and correlations among variables

	M (SD)	*Min.*	*Max.*	1	2	3	4	5	6	7
1. Children's age	3.79 (.22)	3.5	4	-						
2. Self-concept: Competence	3.19 (.45)	1.92	4	.166	-					
3. Self-concept: Acceptance	3.01 (.50)	1.67	3.83	-.082	.662**	-				
4. Conformity/Compliance	15.95 (2.43)	7	18	-.011	.203*	.172	-			
5. Pro-social behaviour	21.11 (3.18)	9	24	-.014	.449*	.294**	.458**	-		
6. Confidence/Independence	7.49 (1.42)	3	9	-.002	.149	.044	.104	.621**	-	
7. Anti-social behaviour	5.25 (1.77)	4	11	-.032	-.194	-.207*	-.726**	.204*	.062	-
8. Worried/upset	8.42 (.96)	5	11	.045	-.034	-.066	.102	.188*	.215*	.102

Note: $^{*}p < .05$, $^{**}p < .001$

The correlations among ASBI and PSPCSA subscales indicated that both "Competence" and "Acceptance" subscales were positively associated with the "Pro-social behaviour" subscale (r = .449 and r = .294, respectively), whereas the "Acceptance" subscale was negatively related with the "Anti-social behaviour" subscale (r = -.207). Furthermore, no statistically significant relations were observed between children's age and the subscales of ASBI and PSPCSA (p >.05).

The relation between young children's self-concept perceptions and their pro-social behaviour

To estimate the predictions, a hierarchical regression analysis was conducted in two steps. The first step included the "Competence" as the predictor, with "Pro-social behaviour" as the dependent variable. In step two, "Acceptance" was also included as the predictor variable with "Pro-social behaviour" as the dependent variable. The results showed that only the variable entered in the first step was significant (F(1, 100) = 25.2, p < .001). "Competence" was significantly associated with the "Pro-social behaviour" (β = .449, t = 5.02 , p < .001) accounted for the 18.5% of the variance. The variable entered in the second step (F(2, 99) = 12.5, p >.05) which included "Acceptance" subscale (β = -.006, t = -.051, p = .960) did not showed significant improvement from the first model (ΔF(1,99) = 12.7, p = .960, ΔR^2= .009).

Similarly, to examine the effect of "Competence" and "Acceptance" on "Anti-social behaviour" subscales the same procedure was followed. The results showed that only the first step was significant (F(1, 100) = 3.90, p < .05). "Competence" was significantly associated with "Anti-social behaviour" (β = -.194 , t = -1.98 , p = .05) accounted for the 2.7% of the variance. The second step (F (2, 99) = 2.53, p =.085), which included "Acceptance" subscale (β = -.006, t = -.051, p = .960), did not show significant improvement from the first step (ΔF(1,99) = 1.16, p = .285, ΔR^2= .011). The results are summarized in Table 4.

Table 4 Regression analysis results predicting Social Behaviour (ASBI) from Self-concept (PSPCSA)

		Pro-social Behaviour (ASBI)				Anti-social Behaviour (ASBI)				
	R^2	ΔR^2	β	t	F	R^2	ΔR^2	β	t	F
Step 1										
Compe-tence	.185**		.449**	5.02	25.2**	.027*		-.194*	-1.98	3.90*
Step 2		.009					.002			
Acceptance	.194		-.006	-.051	12.5	.029		-.141	-1.07	2.53

Note: β = standardized beta coefficient, *p < .05, **p < .001

Discussion

The current study aimed to verify the factorial structure of the ASBI (Hogan et al., 1992) and provided primarily evidence for the reliability and validity of the ASBI in the Greek ECEC context. Furthermore, this study examined the association between young children's self-concept, specifically competence and acceptance beliefs, with their social and behavioural development.

From a methodological perspective, a series of CFAs were conducted on the 30 items of the ASBI, hypothesized to assess a three-factor model and a five-factor model. The results of CFAs supported an adapted version of the ASBI including 25 items that demonstrated the five-dimensional structure of Cooperation/Conformity, Pro-social behaviour, Confidence/Independence, Anti-social behaviour and Worried/Upset, supporting the theoretical framework proposed by Sammons et al. (2003).

The Greek version of the ASBI included fewer items than the original (Hogan et al., 1992). The five excluded items describe a variety of behaviours encompassing a range actions and traits, such as following rules/games, unwillingness to engage in social interactions, and reacting to routines. The exclusion could perhaps be attributed to the slight difference in the age of the children between the Greek and the English sample. The participating teachers in the English sample had older children (3-5 years old) and the content of items of the five subscales could be matched better. Additionally, the exclusion could be explained due to children's ability to consistently demonstrate these behaviours. For example, young children may not reliably follow rules or structured games (Piaget, 2013). Emotional concepts like worry, addressed in item 9 "Worried" can be particularly challenging for young children to understand and express (Thompson & Goodman, 2009).

Another possible explanation for the difference in the number of items between the Greek and English version could be the small sample size, which could influence the final structure of the scale. Despite these adjustments, the findings appeared to support the proposed dimensionality of the ASBI. Furthermore, the internal consistency of all subscales was satisfactory. Future applications of the Greek version of the ASBI with a sample of older children should further test its psychometric properties.

Considering young children's descriptive responses, participants reported moderate to high self-concept beliefs on "Competence" and "Acceptance" subscales, and they also exhibited high levels of social-behavioural development. This suggests that young children had a positive view regarding their own abilities and social acceptance from their peers or parents. Additionally, young children showed high levels of social development, implying that they had well-developed prosocial behaviours and skills at the age of 3-4. This finding is consistent with the results of a previous Greek study (Papadopoulos, 2021), in which children showed a strong sense of competence and confidence.

The study findings support the notion that young children's self-concept beliefs have a dominant relation with the social-behavioural development of children aged 3 to 4 years. This finding suggests that the better the perceived competence and social acceptance, the better the children's prosocial behaviour. The association of young children's self-concept beliefs and their social development could potentially have a positive impact on their overall well-being and success in school (Gavidia-Payne et al., 2015). Furthermore, young children's self-concept beliefs on "Competence", which refers to perceived physical and cognitive competence, was found to be a significant predictor for the prosocial behaviour and a negative predictor for the antisocial behaviour of 3-4-year-old children. This finding suggests that young children's self-perceptions can affect their interactions with others, their ability to develop positive relationships and their overall behaviour. Previous research has highlighted that children who experienced confidence and perceived themselves as competent were more likely to address new situations with confidence and self-esteem which leads to better interpersonal relations with adults or peers (Papadopoulos, 2021; Thompson & Goodman, 2009). However, it seems that acceptance did not contribute additional explanatory power in the context of social behavioural development.

To summarize, by examining young children's perceptions of their self-concept and social behaviour, as well as their teachers' views, this study offers information about how young children's (aged 3-4) self-concept functions. To the best of our knowledge, this is the first attempt to examine young children's views about their self-concept beliefs in Greece. By

exploring young children's perceptions of their self-concept beliefs, the study adds to our understanding of the development of self-concept in early childhood and the outcomes that may be influenced from it in the Greek ECEC context.

Limitations

Several limitations can be considered when interpreting the results of this study. First, the sample consisted of a small size of young children which makes it difficult to generalize the results. The sample was not representative of all children, particularly those from different prefectures of Northern Greece. A large and more representative and diverse sample may allow for more precise conclusions. Although this study collected data from different sources (teachers and young children), it has a cross-sectional design. Consequently, the interpretation of the results cannot imply causality that could be inferred from the teachers' and young children's perspectives about the association between self-concept belief and social behaviour. By implementing longitudinal or experimental designs, future research could further investigate the causality or the direction of this relationship. Overall, this study represents an important step towards advancing knowledge on young children's self-concept beliefs in Greece and highlights the need for further research in this area.

Implications and Conclusions

In conclusion, the results supported an adaption of the version of the five-factor structure of the ASBI in the Greek ECEC. Findings of this study highlight the importance of considering young children's self-concept beliefs and social-behavioural development in ECEC context. The findings of this study have some implications for practice. Firstly, this study highlights the importance of considering young children's self-concept beliefs and social and behavioural development from the early years. This study acknowledges both the importance of the cognitive and the socio-emotional development of children. Teachers' educational and professional development programmes that focus on children's socio-emotional development could further support positive socio and emotional outcomes for children such as prosocial behaviour and their overall wellbeing. Finally, intervention programmes should be designed and implemented in preschools to develop children's positive self-concept beliefs from an early age. It is important for teachers to observe the abilities emerging from children at a particular age and provide individualized support to consolidate these abilities.

Data Availability

The data that support the findings of this study are not publicly available as they contain information that could compromise research participant privacy and consent.

Funding

The author has no funding to disclose.

Compliance with Ethical Standards

All procedures involving human participants in this study were performed following the ethical standards of the authors' department and with the 1964 Helsinki Declaration. Informed consent forms were obtained from participants included in the study.

Conflict of interest

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Received: 26.3.2024, Revised: 22.8.2024, Approved: 27.8.2024