Original Paper

Beyond the Visible: The Predictive Power of Parents' Perceptions of the Neighborhood's Impact on Children's Social-Emotional

Development

Katerina Koti^{1*} & Konstantinos Petrogiannis²

¹Postdoctoral Researcher & Adjunct tutor, Department of Early Childhood Education & Care, University of West Attica, Athens, Greece

²Professor, Department of Early Childhood Education & Care, University of West Attica, Athens, Greece

* Katerina Koti, Postdoctoral Researcher & Adjunct tutor, Department of Early Childhood Education & Care, University of West Attica, Athens, Greece

Received: October 2, 2025 Accepted: October 14, 2025 Online Published: October 30, 2025

Abstract

The neighborhood is a fundamental context for the socialization and development of preschool-aged children. The perceptions of parents with young children about the neighborhood, may serve as important predictive mechanisms through which the effects of the neighborhood's socioeconomic environment on children's social-emotional development are captured.

Within the framework of ecosystem theory (Bronfenbrenner, 1979), this study investigated the role of sociodemographic factors and parents' perceived perceptions of their neighborhood on children's social-emotional development in a sample of 736 parents with children aged 2-6 years.

The research tool, entitled "Survey of perceptions of parents with preschool children about the role of the neighborhood and its relationship to children's social-emotional development", was composed of the PKBS-2 (Merrell, 2002), NCQ (Barnes, 1997) and PNSP (Weir et al., 2006).

The analysis of the survey findings revealed that neighborhood participation and sense of belonging are positively related to children's social skills, while perceived insecurity, local pathogenicity and personal experiences of conflict are associated with increased behavioral problems in children.

Overall, the findings highlight the importance of perceived parental perceptions of the neighborhood as predictors and mediators of social-emotional development in preschool children, highlighting critical implications for prevention policies and interventions at the local community level.

Keywords

neighborhood, social skills/behavioral problems, parents' perceptions, Bronfenbrenner

1. Introduction

Every environment in which a child develops and interacts plays a fundamental role in the child's life (Petrogiannis, 2003; van Ham et al., 2012). Specifically, the neighborhood-as a distinct topological and psychosocial context whose key feature within an ecosystemic perspective is the incorporation of other, smaller environments or microsystems, such as the family households it encompasses-constitutes a decisive setting for the socialization and development of young children (Bronfenbrenner, 1979). Such a context-whose spaces and structures children inhabit and traverse from the moment they step outside their front door-is expected, to some extent, to exert influences on their social-emotional development (Bronfenbrenner, 1979; 1986; 1994; Gourgiotou & Koti, 2016; Koti & Gourgiotou, 2022; Koti, 2003; Petrogiannis & Mantziou, 2009).

The interaction of the child-particularly in the preschool and early primary years-with the local community of the neighborhood in which the family resides can potentially shape the relationships the child develops with other children and adults, as well as the behaviors elicited by such interaction. Through this process, the child acquires experiences and forms an understanding of relationships with others. Consequently, these experiences are expected to be linked to the satisfaction of developmental needs (e.g., play, friendships) and expectations; to the quality and evolution of the child's relationships with others; and to psychological facets of development, such as self-perception of capabilities and the capacity to manage relationships and emotions in situations of tension-factors directly connected to the social-emotional development of preschool-aged children (Dupéré et al., 2010; Leventhal & Brooks-Gunn, 2000). It is therefore reasonable to ask whether-and to what extent-the structures and services provided at the neighborhood's local level by municipal authorities, within whose remit the various neighborhoods fall- for example, social services and facilities such as day-care centers, playgrounds, and creative activity centers within different neighborhoods of a municipality-ensure and enhance the appropriate environmental context in which young children can be active, such that these structures are "ready" (Gourgiotou & Gkliaou-Christodoulou, 2016), on the one hand, to respond to the needs and characteristics of all the children they receive and, on the other, to offer them the necessary opportunities for learning and development (Dup & é et al., 2010; Koti, 2022). The neighborhood context can function as a facilitator of how a child interacts with peers, with older children, and with adults; it can contribute to the acquisition of attributes and skills such as autonomy, cooperation, and the understanding and regulation of emotions, as well as the management of difficult or adverse situations that exert strong psychological pressure-resources, in other words, that bolster the child's social-emotional well-being (Koti & Gourgiotou, 2022; Minh et al., 2017). The decisive and effective presence of the neighborhood in the lives of preschool-aged children (2-6 years) may emerge both through the social provisions and

services, mechanisms, and social support it secures for families with young children and through the availability, quality, and financial support of the programs it offers.

According to Bronfenbrenner's ecosystemic model (1979), the developmental trajectory of the young child should be understood as the product of its continuous interaction with every context it comes into contact with. That is, through the interaction of the child's characteristics with the structural characteristics and process characteristics of the most immediate as well as more distant contexts in which the child will gradually participate over time. According to Bronfenbrenner (1979; 1986), and as Petrogiannis (2011) notes, the child participates in multiple contexts (family, day-care center, neighborhood), consequently, the processes of its development are not carried out independently of these contexts, which extend from the closest and most familiar (proximal) "microsystems" to the more distant (distal) "macrosystems". Specifically, the neighborhood context may function as a microsystem when it concerns residents' direct experiences (e.g., participation in activities, interactions with neighbors), or as a mesosystem when it mediates the relationship between the family and the broader social environment. This dual dimension reflects the dynamic character of the neighborhood as a context for the development of preschool-aged children, where the experiences and relationships of residents intersect with the neighborhood's social structures, offered provisions, and opportunities (Koti & Petrogiannis, 2024). The ecosystemic theory also underscores that the interaction among ecosystems is not only structural but experiential. Thus, parents' perceived views regarding features of their neighborhood, such as crime and violence, may operate as a mechanism transmitting environmental stress to the child. Typically, when a parent feels unsafe, they may be more anxious, more overprotective, or restrict the child's opportunities for play, interaction, and socialization, thereby negatively affecting the child's social-emotional development.

Accordingly, parents' perceived views of the neighborhood in which they and their children reside constitute a basic mechanism for registering environmental quality and simultaneously function as a "filter" that transmits to children a sense of safety and stability-or, conversely, of risk. Previous research has shown that parents' perceived sense of neighborhood safety and social cohesion are associated with more positive developmental outcomes for young children, whereas exposure to violence and crime is associated with increased behavior problems in young children (Leventhal & Brooks-Gunn, 2000). Other international studies likewise (Barnes, 1997; Minh et al., 2017), have underscored the negative effect of the neighborhood context on the social-emotional development of young children who live and are active in neighborhoods with high levels of social disorder. More specifically, Barnes (1999) highlights the negative impact of the local community/neighborhood on young children's psychosocial development when it is characterized by so-called "local pathogenicity", as a result of which its residents are forced to witness incidents that intensify feelings of insecurity regarding their family's place of residence. Such incidents may include thefts/robberies, the use of substances/alcohol/weapons or, more generally, activity by delinquent groups within the neighborhood, as well as the pronounced presence of burned

buildings, graffiti, homeless persons, or stray animals-features that heighten residents' sense of local pathogenicity/disorganization.

In the Greek context as well, research has emphasized that parents' positive perceptions of the neighborhood in which they live with their family and their participation in local networks can function protectively for the social-emotional development and emotional well-being of children in early childhood, particularly in environments with socioeconomic difficulties and low Socioeconomic Status (SES) (Koti & Gourgiotou, 2016; Koti&Petrogiannis, 2004). At the same time, the social-emotional development of young children is significantly influenced by key sociodemographic factors. One such factor is the child's gender, which has been identified as a critical moderating factor, with girls exhibiting higher social skills and fewer externalizing problems compared with boys in the family (Koti, 2022; Koti & Petrogiannis, 2024). The age of the young child is also an important indicator of social-emotional development, with older children in early childhood showing increased cooperation, interaction, and autonomy (Barnes, 1997).

Moreover, the educational level of parents with young children-especially mothers-has emerged as a strong protective factor for preschoolers' psychosocial health. According to the Greek and international literature, higher parental education is associated with the provision and assurance of richer cognitive and social stimuli and with fewer behavior problems in preschool-aged children (Koti, 2022; Petrogiannis, 2002). Conversely, financial hardship in families with preschool-aged children constitutes a risk factor for smooth social-emotional trajectories and emotional well-being, as it is associated with reduced social skills and increased behavior problems (Leventhal & Brooks-Gunn, 2000). However, in samples with relative social homogeneity, as in the present study, differences pertain more to parents' perceived financial comfort than to the family's absolute income status. The duration of residence of the family with young children in the same neighborhood also plays an important role in children's smooth social-emotional development, as it relates to a sense of stability, the cultivation of trustful relationships, and the creation of supportive networks among residents. Longer residence can thus strengthen the sense of belonging and offer the family's young children opportunities for more substantive social interactions (Barnes, 1997; Koti & Petrogiannis, 2024).

Overall, examining these sociodemographic factors alongside parents' subjective perceptions of their neighborhood-their place of residence-highlights how the multiple dimensions of the neighborhood ecosystem are linked with the social-emotional development of children aged 2 to 6 years. The present study focuses on this interaction, seeking to illuminate both risk factors and those that may function protectively for preschool-aged children and their smooth psychosocial development.

2. Method

2.1Participants

The study involved 736 parents of preschool-aged children 2 to 6 years old who attended municipal day-care centers and public kindergartens in seven (7) municipalities of the Attica Region: Municipality of Kifisia (17.7%), Amarousion (16.5%), Moschato-Tavros (14.7%), AgiaVarvara (10.4%), Nea Filadelfeia-Chalkidona (10.1%), Aigaleo (10%), and the Municipality of Kallithea (9%). Parents' voluntary participation in the study was organized through the specific preschool education structures where their young children were enrolled, by distributing an anonymous questionnaire.

2.2 Research Tools

To construct the study's anonymous questionnaire, titled "Parents' perceptions with preschool-aged children regarding the role of the neighborhood and its relation to the social-emotional development of children", the following research tools were employed:

- The **Preschool and Kindergarten Behavior Scales Second Edition (PKBS-2)** by Merrell (2002), which assesses social skills (cooperation, interaction, autonomy) and behavior problems in young children (externalizing, internalizing). This scale has high reliability and wide use in international studies.
- The Neighborhood Characteristics Questionnaire (NCQ) by Barnes (1997), which records perceptions of qualitative neighborhood characteristics. The factors in the original NCQ are: (1) Non-family local network, (2) Neighborhood attachment-belonging, (3) Neighborhood participation, (4) Neighborhood quality, (5) Local disorder, (6) Neighborhood crime, (7) Personal feeling, (8) Personal exposure to crime / Personal experiences. However, after new analyses for the NCQ's structural configuration in the Greek context-since it was tested in Greece for the first time-new factors emerged and are presented in the findings.
- The **Parental Neighborhood Safety Perceptions Scale (PNSP)** by Weir et al. (2006), which evaluates parents' perceived sense of neighborhood safety and its impact on shaping behaviors and attitudes toward the neighborhood.

2.3 Research Process

The study was conducted during the 2023-2024 school year using the research tool-an anonymous questionnaire-titled: "Investigating the Effects of Neighborhood Characteristics on the Social-Emotional Development of Preschool-Aged Children (2-6 years)". The sample consisted of parents with young children enrolled in preschool settings in seven (7) municipalities of the Attica Region.

Initially, the researchers carried out the necessary procedures so that the questionnaire would receive the requisite approvals from the competent educational authorities (Ethics and Deontology Committee of the University of West Attica; Regional Directorate of Primary & Secondary Education; General Directorate of Primary & Secondary Education; relevant municipal authorities), ensuring the anonymity and voluntary participation of the sample. Subsequently, they contacted by telephone and, by appointment,

visited the research sites-municipal day-care centers and public kindergartens-to inform the responsible educators/teachers about the purpose and significance of the study. The period for distributing the research tool personally by the researchers to the parents of the young children enrolled in these preschool structures was also decided, while confirming with the responsible authorities that the normal performance of duties and smooth operation of the institutions would be maintained during this process. Finally, the researchers scheduled in-person contact with the participating parents at drop-off or pick-up times in order to distribute the questionnaire and address any questions, thereby ensuring the highest possible participation of the sample.

For the collection of the completed questionnaire, the researchers made additional in-person visits to the day-care centers/kindergartens on dates set in consultation with the institutions' administrators. However, during the interval between questionnaire distribution to parents (after Easter: April 2024) and its return to the preschool structures (late July for day-care centers/mid-June for kindergartens), several additional in-person meetings or telephone communications took place between the researchers and both the institutions' administrators and any parent who expressed the wish, securing the smooth continuation and completion of the research process.

2.4 Data Analysis

Data analysis was conducted in multiple stages using IBM SPSS. First, an Exploratory Factor Analysis (EFA), was performed on the NCQ instrument to adapt it to the Greek context and extract its core dimensions. Next, Pearson correlations were conducted to investigate relationships among factors of the local context-the neighborhood-children's social skills, and behavior problems. Finally, multiple linear regressions were applied to identify predictors of both social skills and behavior problems in young children. The models included demographic variables, neighborhood dimensions, and parents' personal experiences to capture both direct and indirect effects of the neighborhood context on the social-emotional development of preschool-aged children.

3. Results

Based on the perceived views of parents with preschool-aged children, the results showed that the vast majority of the sample had Greek citizenship (95.4%), with only 4.6% being foreign nationals. Mothers comprised 48% of the total sample and fathers 52% of participants. The family status of the sample was predominantly stable, as 82.5% were married. Parents' educational level was higher than that of the general population. More specifically, 24.3% of mothers and 19% of fathers were university (AEI) graduates, while 20.7% of mothers and 13.2% of fathers held postgraduate or doctoral degrees. Smaller proportions held degrees from technological institutes (TEI) (25.7% of mothers, 25% of fathers), while only 5.2% of mothers and 5.7% of fathers had completed secondary education. Overall, the proportion of higher-education graduates (AEI/TEI) exceeded 40% for both parents.

Regarding employment status, 49.3% of mothers and 53.4% of fathers worked as private-sector employees. Public-sector employees accounted for 18.3% of mothers and 15.8% of fathers. A significant proportion of mothers (13.5%) reported being exclusively engaged in household duties, whereas the corresponding figure for fathers was negligible (0.3%). Self-employed individuals constituted 6.9% of mothers and 24.9% of fathers (with or without employees). The unemployment rate was 6.8% for mothers and 2.3% for fathers. Thus, approximately half of participants worked in the private sector, with smaller percentages employed in the public sector, self-employed, or unemployed.

The sample's financial situation was relatively homogeneous. More specifically, 50.3% reported facing difficulties with payments but managing to cover family expenses by month's end, while 55.2% stated that they had money left over at the end of the month. This finding-based on parents' subjective reports-accords with the general observation that the sample came from families with a middle-to-upper socioeconomic profile, a fact that bears on interpretation of the results.

The distribution of participants by municipality was balanced, with greater participation from areas such as Kifisia (17.7%) and Amarousion (16.5%), and lower participation from Kallithea-Moschato (9%). The final questionnaire also included demographic questions on the child's age and gender and the family's years of residence in the neighborhood. Finally, the family's long-term residence in the neighborhood, combined with the sample's high educational level, produced a context of relative socioeconomic homogeneity.

Before presenting regression analyses, an Exploratory Factor Analysis (EFA) was performed for the Neighborhood Characteristics Questionnaire (NCQ, Barnes, 1997), which was applied for the first time to a Greek sample. The analysis used principal components and Varimax rotation. The KMO measure and Bartlett's test of sphericity confirmed the data's suitability for factor analysis. The new factors that emerged from the EFA-based on Greek data and reflecting different aspects of parents' perceptions of their place of residence for children aged 2 to 6-are as follows:

- (1) Non-family local network (quantity of adults and children known to participants) (Cronbach's $\alpha = 0.768$),
- (2) Sense of belonging (perception of the neighborhood as their real home) (Cronbach's $\alpha = 0.725$).
- (3) Neighborhood participation (social interactions with neighbors) (Cronbach's $\alpha = 0.830$),
- (4) Neighborhood quality (parents' sense and view of the neighborhood as a place of residence and a place to raise children) (Cronbach's $\alpha = 0.845$),
- (5) Local pathogenicity_1 (use of substances/alcohol/weapons, delinquent groups) (Cronbach's $\alpha = 0.882$),
- (6) Local pathogenicity_2 (presence of burned buildings, graffiti, homeless persons) (Cronbach's $\alpha = 0.658$),

- (7) **Local pathogenicity_3** (destruction/theft of others' property or presence of strays) (Cronbach's $\alpha = 0.657$),
- (8) Neighborhood safety (safety parents feel when their children are outdoors in the neighborhood) (Cronbach's $\alpha = 0.799$),
- (9) Neighborhood crime_1 (acts aiming at burglary and theft) (Cronbach's $\alpha = 0.821$),
- (10) Neighborhood crime_2 (acts aiming to inflict bodily harm or destroy others' property, drug trafficking) (Cronbach's $\alpha = 0.907$),
- (11) **Personal feeling** (fear parents feel about moving around the neighborhood themselves and with their children) (Cronbach's $\alpha = 0.548$),
- (12) Personal experiences_1 (difficulties living in the neighborhood: observing clashes with the police or clashes involving weapons) (Cronbach's $\alpha = 0.633$), and
- (13) Personal experiences_2 (difficulties living in the neighborhood: observing verbal/physical conflicts in the neighborhood) (Cronbach's $\alpha = 0.651$).

Item loadings exceeded 0.40 and the total variance explained by the model surpassed 60%, indicating satisfactory psychometric validity.

Next, correlations were examined between the neighborhood factors and the core dimensions of social-emotional development (social skills and behavior problems) in early childhood. As shown in Table 1, the existence of networks and relationships in the neighborhood, the sense of belonging, and participation in activities were positively associated with children's social skills, while a sense of belonging functioned protectively against behavior problems. By contrast, higher perceived neighborhood quality-according to participating parents'subjective views-was associated with increased behavior problems in their children, a finding discussed subsequently. Parents' reported personal experiences of conflict were negatively correlated with children's social skills and positively with their behavior problems, while parents' perceived neighborhood safety was negatively associated with behavior problems (see Table 1).

Table 1. Correlations of NCQ Factors with PKBS-2 (Children's Social Skills / Behavior Problems)

Factors	Social Skills	Behavior Problems
Network	0.108**	-0.069
Sense of Belonging	0.123**	-0.125**
Participation	0.179**	-0.070
Quality	-0.089*	0.134**
Pathogenicity_1	-0.017	0.063
Pathogenicity_2	0.098*	-0.029
Pathogenicity_3	-0.032	0.050
Crime_1	-0.020	0.098*

Crime_2	-0.029	0.102**
Personal Feeling	-0.055	0.036
Experiences_1	-0.063	0.081*
Experiences_2	-0.106**	0.084*
Safety	-0.019	-0.143**

^{*}p < 0.05; *p < 0.001

Extending the analysis, correlations were tested between neighborhood factors and the subscales of social skills (cooperation, interaction, autonomy) and behavior problems (externalizing and internalizing) in young children. As presented in Table 2, neighborhood participation showed positive correlations with all dimensions of social skills in preschoolers, whereas a sense of belonging was likewise positively associated with social skills-cooperation, interaction, and autonomy-and negatively with behavior problems. Local pathogenicity (especially its second dimension, Local Pathogenicity_2: presence of burned buildings, graffiti, and homeless persons) was positively associated with children's interaction and autonomy, which may reflect the development of residents' resilient mechanisms within the neighborhood context. Parents' reported personal experiences of conflict during their residence in the neighborhood were negatively associated with children's social skills and positively with behavior problems, while perceived neighborhood safety was strongly negatively associated with both externalizing and internalizing behavior problems (see Table 2).

Table 2. Correlations between NCQ Factors and PKBS Subscales: Social Skills / Behavior Problems-

Factors	Cooperatio	Interactio	Autonom	Externalizin	Internalizin
	n	n	y g		g
Network	0.046	0.118**	0.122**	-0.073	-0.047
Belonging	0.113**	0.077*	0.127**	-0.130**	-0.090*
Participation	0.148**	0.152**	0.158**	-0.082*	-0.032
Quality	-0.090*	-0.064	-0.070	0.133**	0.107**
Pathogenicity_1	-0.064	0.041	-0.017	0.048	0.079*
Pathogenicity_2	0.031	0.126**	0.099*	-0.042	0.002
Pathogenicity_3	-0.045	0.028	-0.074	0.018	0.103**
Crime_1	0.007	-0.024	-0.043	0.067	0.139**
Crime_2	-0.054	0.005	-0.010	0.105*	0.076
Personal	-0.082*	0.003	-0.052	0.031	0.038
Feeling					
Experience_1	-0.057	-0.056	-0.046	0.073	0.082*

Experience_2	-0.087*	-0.078*	-0.109**	0.065	0.103**
Safety	-0.001	-0.045	-0.005	-0.131**	-0.138**

^{*}p < 0.05; *p < 0.001

Regarding the multiple regression conducted for general behavior problems in preschool-aged children residing with their families in the neighborhood, parents' perceived neighborhood quality was positively associated with behavior problems, whereas perceived safety was negatively associated, indicating parents' protective role. In addition, child gender (girls), child age (one year older), higher maternal education, and family financial comfort were associated with fewer behavior problems (see Table 3).

Table 3. Predictors of Children's Behavior Problems

Variable	Coefficient	Std.	t-value	p	Sig.
	(β)	error		value	
Neighborhood quality	0.08	0.423	2.132	0.033	Yes
Sense of safety	-0.07	0.218	-2.124	0.034	Yes
Child gender (girls vs. boys)	-0.88	1.274	-2.393	0.017	Yes
Child age	-0.80	0.555	-2.129	0.034	Yes
Maternal education (TEI)*	0.12	1.594	2.888	0.004	Yes
Maternal education	0.09	1.567	2.163	0.031	Yes
(AEI/Postgraduate/Doctorate)*					
Financial comfort (Good vs. Poor)	-0.96	1.326	-2.559	0.011	Yes

Reference group: Secondary Education

For externalizing behavior problems, higher parent-perceived neighborhood quality predicted more behavior problems, while perceived safety, years of residence, and child age functioned protectively. Girls and children with mothers of higher education showed fewer behavior problems. Table 4 presents the predictors of externalizing problems.

Table 4. Predictors of Children's Externalizing Behavior Problems

Variable	Coefficient	Std.	t-value	p	Sig.
	(β)	error		value	
Neighborhood quality	0.094	0.302	2.391	0.017	Yes
Sense of safety	-0.084	0.156	-2.076	0.038	Yes
Years of residence	-0.088	0.044	-2.376	0.018	Yes
Child age	-0.102	0.398	-2.722	0.007	Yes

Child gender (girls vs. boys)	-0.116	0.913	-3.131	0.002	Yes
Maternal education (TEI)*	-0.132	1.132	3.228	0.001	Yes
Maternal education	-0.087	1.120	2.201	0.028	Yes
(AEI/Postgraduate/Doctorate)*					

Reference group: Secondary Education

Finally, with respect to internalizing behavior problems in preschoolers, neighborhood crime emerged as a strong positive factor, whereas higher maternal education was associated with fewer behavior problems. Table 5 presents the predictors of internalizing problems.

Table 5. Predictors of Children's Internalizing Behavior Problems

Variable	Coefficient	Std.	t-value	p	Sig.
	(β)	error		value	
Crime_1 (burglary & theft)	0.143	0.283	3.609	0.000	Yes
Maternal education (TEI)*	-0.141	0.587	3.320	0.001	Yes
Maternal education	-0.087	0.598	2.040	0.042	Yes
(AEI/Postgraduate/Doctorate)*					

Reference group: Secondary Education

In summary, the results indicate that parents' perceived views of their family's place of residence-the neighborhood-play a significant role not only in children's social skills but also in the emergence and shaping of behavior problems in young children. Parents' perceived sense of neighborhood safety and mothers' education functioned as protective factors in this study, whereas neighborhood crime and higher perceived neighborhood quality were associated with increases in specific dimensions of preschoolers' behavior problems. Sociodemographic factors-such as the child's gender and age (2-6 years) and the mother's educational level-constitute an additional nexus that amplifies or attenuates these relationships.

4. Discussion

The present study highlighted the decisive role of the neighborhood context in the social-emotional development of preschool-aged children, confirming Bronfenbrenner'secosystemic perspective (1979). According to this view, children's development is dynamically influenced by the interaction between the micro- and mesosystems within which the young child lives, grows, and interacts. In particular, parents' perceived views of their place of residence proved to be important predictive and mediating factors, insofar as they influence both social-emotional skills and behavior problems.

According to parents' subjective perceptions, residents' participation in neighborhood activities and their sense of belonging were positively associated with the development of young children's social skills

(cooperation, interaction, autonomy). This finding aligns with international research underscoring the importance of social cohesion and supportive networks in shaping positive developmental outcomes (Leventhal & Brooks-Gunn, 2000; Sampson, Morenoff, & Gannon-Rowley, 2002). It is also consistent with Bronfenbrenner'secosystemic theory (1979), which emphasizes that neighborhood social connections function as micro- and mesosystemic mechanisms that cultivate opportunities for social learning and the development of core social skills in young children. Likewise, long-term residence in a neighborhood appeared to strengthen residents' sense of stability and trust, promoting the psychosocial well-being of children living there with their families, confirming similar findings in the Greek literature (Koti & Petrogiannis, 2024). Subsequently, parents' perceived sense of safety emerged as a crucial protective factor against behavior problems in young children. This finding is consistent with Furstenberg (1993) and Weir et al. (2006), which show that parents' perceived safety regarding their place of residence leads to greater socialization opportunities for their young children. In line with Bronfenbrenner's model (1979), parents' perception of safety mediates the neighborhood's effects on the child's psychosocial development.

Of particular importance is the statistical finding that parents' negative perceptions of neighborhood quality-that is, a negative view of the neighborhood as a place of family residence and of child-rearing-are associated with children's behavior problems even when other factors are controlled. More specifically, parents' perceived insecurity about their place of residence appears to limit their children's experiences of interaction and social contact. Likewise, perceived crime and parents' personal experiences of conflict (verbal/physical) in the neighborhood-based on their responses to the anonymous questionnaire-were associated with increased behavior problems in children. This supports the view that parental stress regarding child-rearing is indirectly transmitted to children, affecting their smooth social-emotional functioning (Bronfenbrenner, 1979; Masten, 2014). The present finding also replicates the pattern described by Leventhal and Brooks-Gunn (2000), which underscores that exposure to neighborhood violence and social disorder increases parental stress, leading parents to restrict their children's developmental opportunities and potential for further interactions. The transmission of parental stress and associated mechanisms—"stress proliferation"—to children may negatively impact young children's social-emotional development (Penteri & Petrogiannis, 2024).

A finding that runs counter to prevailing expectations is that higher perceivedneighborhood quality was linked-according to participating parents' views-to increased behavior problems (e.g., egocentrism, aggressiveness) in young children. This apparent contradiction may reflect heightened expectations and social pressures that characterize more affluent, prosperous neighborhoods with higher SES and a higher level of "quality". From an ecosystemic perspective (Bronfenbrenner, 1979), the interaction of systems-each context individually and in combination-in which the young child lives and develops is critical for healthy social-emotional development. Resilience in addressing behavior problems is not merely an individual trait, but the outcome of dynamic interactions among all systems influencing young

children's social-emotional development. While high perceived neighborhood quality may constitute a protective factor for children's psychosocial development, its relationship with behavior problems may not be linear. In line with notions of parental sensitivity and interpretation, in higher-quality neighborhoods-where parents have elevated expectations for their family environment (e.g., safety, social cohesion)-parents may "overreact" to what they perceive as potential "minor risks" to their children and be more sensitive in their child-rearing assessments, interpreting even normative childhood behavior as "problematic". In such cases, a slightly more extroverted or energetic child may be perceived as problematic by parents who desire a "quieter" social dynamic-an interpretation that could lead to higher scores on behavior-rating scales without necessarily indicating clinically significant issues.

To interpret this paradox, the sample's socioeconomic homogeneity must also be considered seriously. Given that the present sample comes from areas with "high" or "relatively high" socioeconomic standing-where perceived neighborhood quality is by definition higher-the positive association likely does not reflect causality but a spurious correlation due to limited variance in the neighborhood variable. In neighborhoods characterized by socioeconomic homogeneity, differences in children's behavior problems may be explained by other factors not investigated here-such as parental stress, parental performance expectations, or educational pressure-rather than by perceived neighborhood quality (Koti & Petrogiannis, 2024).

Finally, within the framework of Collective Efficacy-that is, communities' capacity to regulate social behavior and promote positive practices through social cohesion and mutual trust-it is known that a neighborhood with strong collective efficacy can be protective for children and adolescents even in the presence of individual or family risks. However, in "favorable" environments, some parents may adopt overprotective practices, limiting free exploration, autonomous conflict resolution, and boundary testing in young children (Sampson et al., 2002). Reduced exposure to demanding social situations may entail fewer opportunities to practice self-regulation and core social skills, resulting in higher reported problems when children face challenges. Similar observations have been reported internationally, highlighting the complexity of "neighborhood effects" and the selection/differentiation of contexts depending on social and cultural settings (Sampson et al., 2002; van Ham & Manley, 2012), which advises caution in generalizing this specific finding.

In conclusion, while the findings may appear to contradict the dominant literature, the positive association between perceived neighborhood quality and children's behavior problems can be interpreted through the ecosystemic model and the sample's specific characteristics. Parental expectations, socioeconomic homogeneity, and overprotective behaviors are plausible explanatory factors warranting further investigation in future studies (Penteri & Petrogiannis, 2024).

Regarding sociodemographic factors, the study showed that girls and older children presented fewer behavior problems and higher social skills compared with boys and younger children, confirming previous studies (Denham et al., 2003; Koti & Petrogiannis, 2024). At the same time, higher maternal

education appeared to function as a strong protective factor, enhancing children's psychosocial health and reducing behavior problems. This finding accords with Greek and international literature linking higher parental education with the provision of richer cognitive and social stimuli for young children (Petrogiannis, 2002; Koti, 2022). Finally, family financial comfort was associated with fewer behavior problems, suggesting that reducing parents' financial stress improves the family climate and offers children conditions of emotional stability (Leventhal & Brooks-Gunn, 2000).

Overall, the findings-according to the perceived views of participating parents with young children-confirm that the neighborhood is a dynamic ecosystem that can function either protectively or adversely for the social-emotional development and emotional well-being of the young child. More specifically, as reflected in parents' perceptions, social cohesion, a sense of safety and neighborhood stability foster healthy social-emotional development, whereas crime, insecurity, and conflict where the family resides increase the likelihood of behavior problems in young children. This interpretation is consistent with Bronfenbrenner's ecosystemic theory (1979) and the view of the National Research Council and Institute of Medicine (2000), which emphasize that child development is the product of continuous interaction among the individual, the family, and the social context.

5. Conclusion

The present study demonstrated that parents' perceptions of their neighborhood constitute important predictive indicators of young children's social-emotional development. Social cohesion, participation in activities, and a sense of belonging emerged as key protective factors that enhance children's social skills by promoting cooperation, interaction, and autonomy. Conversely, perceived crime, personal experiences of conflict, and the insecurity parents feel about the neighborhood in which the family resides were associated with increased behavior problems in young children, confirming the transmission of parental anxiety and stress to the child. In addition, the sample's sociodemographic factors significantly differentiated the findings: child gender and age, maternal education, and the family's financial comfort were linked with more positive developmental outcomes, underscoring the role of family and social position in shaping children's psychosocial trajectories.

In sum, the findings-based on the perceptions of parents with preschool-aged children-confirm that the neighborhood is not a neutral residential space but a dynamic ecosystem capable of functioning either protectively or adversely in a child's development. They further emphasize that core characteristics such as social cohesion, safety, and neighborhood stability promote healthy social-emotional development, whereas perceived crime and insecurity heighten the risk of behavior problems in young children.

Ultimately, it becomes clear that the majority of relevant research focuses on investigating the impact of various objective characteristics of ecosystems-family and/or neighborhood-on children's psychosocial development. By contrast, the present study highlights the importance of linking parents'subjective experiences-specifically their "negative perceptions" of their neighborhood-with children's behavior

problems, a finding that foregrounds a strong and original facet of the research and constitutes a fertile field for future studies.

6. Recommendations

Based on the findings, it is necessary to adopt policies and interventions that strengthen the neighborhood's positive role in the socio-emotional development of preschool-aged children.

At the level of local government and the state, we propose developing community actions that cultivate social cohesion-such as cultural and sports programs and parent support groups. In parallel, creating and maintaining safe public spaces (parks, libraries, sports facilities, recreation areas, and playgrounds) where young children can interact and be engaged safely will enhance opportunities for play and socialization. Further interventions-adequate neighborhood lighting, "safe routes" to school, micro-redevelopments in courtyards and parks, and the regular "activation" of public/municipal spaces through playful and cultural activities-reinforce residents' and children's sense of safety and belonging. It is also important to implement strategies to prevent crime and local pathogenicity/social disorganization in order to strengthen the sense of safety-identified here as a decisive protective factor for preschoolers'social-emotional development.

At the family level, parents should be encouraged to participate actively in neighborhood activities, offering children rich experiences of social learning. Strengthening parent education-with particular emphasis on the mother's role-can be decisive for healthy socio-emotional development, since higher maternal education in this study was linked to more positive child outcomes. Equally important is supporting families with preschool-aged children who experience socioeconomic difficulties or reduced neighborhood safety through community-provided counseling and psychosocial services.

At the educational level, collaboration is advisable between preschool institutions and community agencies to strengthen the school-neighborhood bond, as is the integration of social-emotional learning programs from the preschool years that cultivate basic skills such as cooperation, interaction, and conflict management.

Finally, we recommend further investigation of the study's paradoxical finding linking high perceived neighborhood quality with increased child behavior problems. Future research should also examine more socioeconomically heterogeneous samples, conduct similar studies in additional and diverse regions beyond Attica, and undertake longitudinal follow-ups to capture the long-term effects of parents' neighborhood perceptions into adolescence and adulthood.

In conclusion, the study's stance-highlighting the neighborhood's dual dimension as a microsystem (when it concerns residents' immediate experiences, e.g., participation in activities, interactions with neighbors) or as a mesosystem (when it mediates the family's relationship with the broader social environment)-captures the neighborhood's dynamic character as a context for preschool children's development, where residents' experiences and relationships intersect with social structures and the

neighborhood's provisions and opportunities. This constitutes a promising topic for future research.

References

- Barnes, J. (1997). Neighbourhood characteristics questionnaire. National Children's Bureau.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.
- Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology*, 22(6), 723-742. https://doi.org/10.1037/0012-1649.22.6.723
- Bronfenbrenner, U. (1994). Ecological models of human development. In T. Husén, & T. N. Postlethwaite (Eds.), *International Encyclopedia of Education* (2nd ed., Vol. 3, pp. 1643-1647). Pergamon Press.
- Denham, S. A., Blair, K. A., DeMulder, E., Levitas, J., Sawyer, K., Auerbach-Major, S., & Queenan, P. (2003). Preschool emotional competence: Pathway to social competence? *Child Development*, 74(1), 238-256. https://doi.org/10.1111/1467-8624.00533
- Dup ér é, V., Leventhal, T., &Vitaro, F. (2010). Neighborhood processes, self-efficacy, and adolescent mental health. *Journal of Health and Social Behavior*, 51(1), 39-54. https://doi.org/10.1177/0022146509361199
- Furstenberg, F. F. (1993). How families manage risk and opportunity in dangerous neighborhoods. In W. J. Wilson (Ed.), *Sociology and the public agenda* (pp. 231-258). Sage.
- Gourgiotou, E., &Gkliaou-Christodoulou, N. (2016). School transition at the crossroads of teachers' and parents' social representations: Findings from a national study. Disigma.
- Koti, K. (2022). The effects of the family environment, the neighborhood, and day-care centers on children's school readiness [Doctoral dissertation, University of Crete].
- Koti, K., & Gourgiotou, E. (2022). The impact of neighborhood on children's school readiness in Greece—The case of AgioiAnargiroi, Greece. *European Journal of Education Studies*, 9(1), 136-156, 9(12), 18-37. https://doi.org/10.46827/ejes.v9i1.4006
- Koti, K., & Petrogiannis, K. (2024, October 17-20). Neighborhood characteristics and socio-emotional development of children aged 2-6 years: A correlational study based on parents' perceptions [Conference presentation]. Panhellenic Conference of Developmental Psychology: "From the first small to the big steps of life, society, and culture", Hellenic Psychological Society (HPS), University Campus of Ancient Elaionas, University of West Attica, Aigaleo, Athens, Greece.
- Masten, A. S. (2014). Ordinary magic: Resilience in development. The Guilford Press.
- Mantziou, S., & Petrogiannis, K. (2009). The quality of preschool education centers and children's questioning behavior. Contemporary Society, Education and Mental Health, 2, 101-128.
- Merrell, K. W. (2002). Preschool and kindergarten behavior scales (2nd ed.). PRO-ED.

- National Research Council and Institute of Medicine. (2000). From neurons to neighborhoods: The science of early childhood development (J. P. Shonkoff& D. A. Phillips, Eds.). National Academy Press.
- Penteri, E., & Petrogiannis, K. (2024). The relationship between school, family, and community: Socio-pedagogical and developmental dimensions of parental involvement in preschool and early school age. Gutenberg.
- Petrogiannis, K. (2003). The study of human development: The ecosystemic approach. Kastaniotis.
- Sampson, R. J., Morenoff, J. D., & Gannon-Rowley, T. (2002). Assessing "neighborhood effects": Social processes and new directions in research. *Annual Review of Sociology*, 28, 443-478.
- van Ham, M., & Manley, D. (2012). Neighborhood effects research at a crossroads: Ten challenges for future research. *Environment and Planning A*, 44(12), 2787-2793. https://doi.org/10.1068/a45439
- Weir, L. A., Etelson, D., & Brand, D. A. (2006).Parents' perceptions of neighborhood safety and children's physical activity. *Preventive Medicine*, 43(3), 212-217. https://doi.org/10.1016/j.ypmed.2006.03.024

Notes

Note 1. This publication was funded by the Special Account for Research Fund of the University of West Attica