

THE RELATION BETWEEN PARENTAL SUPPORT AND CHILD PROGRESS IN AN INCLUSIVE PRESCHOOL PROGRAM

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Abstract: The aim of this study was to determine how various measures of parental engagement and functioning influence the adaptation and progress of children with developmental disabilities within preschool group settings. The research included 71 mothers of children with diverse developmental challenges who were either following an Individualized Education Plan (IEP) or were involved in individualized instruction in preschool institutions. The findings revealed that mothers demonstrated a high level of engagement in fostering their child's development, while communication with educators and collaborators was rated as accessible. Children's progress in preschool was assessed as very good. Correlation analysis indicated an association between children's progress and the quality of the parental alliance, parental involvement in child development, and collaboration with preschool institutions. Additionally, the study identified interrelationships between variables of parental support, parental alliance, and lower levels of parenting stress.

Key words: parental alliance, parent-teacher communication, parental stress, parental engagement, inclusive program

1. INTRODUCTION

Contemporary concepts, grounded in psychological and pedagogical insights into children's developmental characteristics, have been integrated into the educational practices of preschool institutions in Serbia. Since 2009, an inclusive program has been implemented to support children with developmental disabilities in achieving educational goals. Inclusive education in preschools emphasizes the institution's capacity to provide quality education to all children, regardless of their differences.

To effectively organize support for children with developmental disabilities in ways that address their needs and abilities, active collaboration with parents is essential. Parental decisions on how to support and encourage their child's development are influenced by various factors. This paper explores the role of parental collaboration and the impact of perceived parenting stress on these decisions.

Parental collaboration is identified as one of the key factors influencing the stimulation of a child's development. When developmental difficulties are observed in a child, the entire family often undergoes a period of crisis. This crisis can affect the mental health of all family members [1] and may also disrupt the overall functioning of the family as a unit. Facing a child's diagnosis can pose a significant challenge for parents. If parents experience stress and lack adequate coping mechanisms, the quality of their relationship with their child, as well as the quality of collaboration between parents—specifically how the mother and father share roles and engage in joint caregiving and educational activities—can be severely compromised [2]. Therefore, the resources available for coping with a family crisis are considered crucial for facilitating a child's progress.

However, some studies (i.e., [3], [4]) suggest that the relationship between stress and the quality of family dynamics is not unidirectional. During periods of family crisis, the strength of the relationship between parents can act as a protective factor. When families demonstrate effective collaboration and joint problem-solving, parental cooperation can help alleviate individual stress levels. This reduction in stress may, in turn, lead to greater parental involvement in supporting the child and achieving improved developmental outcomes.

The stress experienced by parents of children with developmental disabilities does not necessarily exceed that of parents of typically developing children. Previous studies have yielded mixed results. While some, i.e., [2], [5], report higher levels of stress, others, i.e., [6], suggest that parental stress is

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not significantly elevated. One possible explanation for these differing findings is the individual capacity of parents to cope with crises, which is a personal trait and may not depend on external circumstances [7]. As a result, the role of stress in supporting children with developmental disabilities is not clearly defined and may be more closely related to the length of the family's adaptation period to new circumstances.

In addition to strong family dynamics, effective collaboration between parents and preschool institutions is essential for the success of inclusive programs. Studies [4], [8] have shown that the quality of cooperation between parents, educators, and professional staff in preschools plays a critical role in achieving positive outcomes and fostering a child's progress. Educators, special education teachers, speech therapists, and psychologists in preschools often receive specialized training to support children with developmental disabilities. Their expertise provides parents with valuable insights that might otherwise be inaccessible without such professional guidance. The active involvement of these professionals, not only in working directly with children but also in supporting parents, creates a strong foundation for addressing specific developmental challenges. When different stakeholders in a child's education and care work together in a coordinated manner, with clear, incremental goals and a consistent approach, the results are most effective in promoting the child's development.

This study explores parental support for children in inclusive preschool programs, collaboration between parents and preschool institutions, the quality of the co-parenting alliance, and the stress parents experience during family crises. The goal was to examine how specific factors are related to the progress children make in an inclusive program.

The first objective was to evaluate the quality of the co-parenting alliance and its relationship with children's progress in the inclusive program. The second objective was to assess the level of stress parents experience while caring for their child and investigate its connection to the child's progress. The third objective was to examine the quality of collaboration between parents and preschool institutions in supporting the child and to analyze how parental support influences the child's success in the inclusive program.

2. PRESENT STUDY

2.1. Method

2.1.1. Participants

The study sample comprised 71 participants, all mothers of children enrolled in preschool programs that implemented either an Individualized Education Plan (IEP) or individualized instruction provided by educators. Eligibility for participation was determined by the child's need for additional support in the preschool setting, whether through an IEP or individualized instruction integrated into regular classroom activities. Recruitment of participants was facilitated by 15 educators, who were first-year master's students at the College of Vocational Studies for Preschool Teachers in Kikinda. The study encompassed 15 educational groups across six different preschool institutions.

The majority of responses in the sample were collected within the territory of the Autonomous Province of Vojvodina (70 participants, 98.6%). The participants' ages ranged from 25 to 48 years, with an average age of 35.52 years ($SD = 5.48$). Most mothers in the sample were employed (60 participants, 84.6%) and had completed secondary education (42 participants, 59.2%). A smaller proportion had attained higher education (27 participants, 38%) or only primary education (2 participants, 2.8%). A total of 64 mothers (90.1%) were married or in a cohabiting partnership at the time of completing the questionnaire.

2.1.2. Instruments

General socio-demographic information about the parents and children was collected through a questionnaire developed specifically for this study. The data gathered included details about the mothers, such as their place of residence, age, educational background, and marital status, as well as

information about the children, including their gender, age, the preschool program they were enrolled in, and the presence of developmental disabilities.

The Parenting Alliance Measure (PAM, [9]) is a scale consisting of 20 items that assess the strength and quality of the parenting alliance. Participants respond using a five-point scale, ranging from 1 to 5. The scale has been translated into Serbian and previously used in several studies conducted in Serbian-speaking regions [10], [11]. Most studies suggest that this scale can be treated as a unidimensional construct, and it was treated as such in this research. Participants could obtain total scores ranging from 20 to 100, with higher scores indicating better quality of cooperation between parents. The reliability of the scale in our sample was $\alpha = 0.97$.

Parental stress was measured in this study using a four-item scale assessing the level of stress parents experience related to caring for their child. Participants responded on a scale from 0 to 3. The total score on the scale could range from 0 to 12, with higher scores indicating higher levels of stress experienced by the parents. The reliability of the entire scale, measured using Cronbach's α coefficient, was 0.69, which can be considered satisfactory for the purposes of this study.

The Parental Support Self-Assessment Questionnaire (Upitnik samoprocene roditeljske podrške-SRP, [12]) was developed to measure parental involvement in their children's education and the quality of collaboration with preschool institutions and other support services. The initial version of the questionnaire consisted of 15 items, where participants rated how often they engaged in specific activities on a five-point scale (1–never to 5–always). Principal component analysis with promax rotation revealed a strong two-factor solution, accounting for 59.27% of the variance in the questionnaire, after eliminating four items with high cross-loadings on both factors. In the final version, the subscale named *Parental Engagement* included 8 items with high loadings on the first factor, which describe parental involvement in their child's education and the use of information obtained from professionals. *The Availability of Professional Support subscale* (3 items) focuses on parents' ability to communicate with and receive information from educators and other professionals within the preschool setting. Both scales demonstrated high reliability in our sample (Parental Engagement: $\alpha = 0.85$ and Availability of Professional Support: $\alpha = 0.82$). The total score for each scale was calculated as the sum of responses to individual items. The theoretical range for the Parental Engagement scale was 8–40 points, and for the Availability of Professional Support scale, it was 3–15 points.

The Child Progress in the Inclusive Program (Napredovanje u inkluzivnom programu - NIP) is a questionnaire developed for this study. It consists of 6 items through which participants evaluate their child's progress in the inclusive program, including social interaction with the group, advancement in learning and understanding, independence, and adaptation to the preschool environment. Participants responded on a five-point scale. Exploratory factor analysis, based on the Guttman–Kaiser criterion (eigenvalue greater than 1), revealed a unidimensional solution explaining 60.89% of the variance. Treated as a single construct, the scale demonstrated strong psychometric properties in our sample ($\alpha = 0.87$). The total score on the questionnaire was calculated as the sum of responses to all 6 items, with a theoretical range from 6 to 30 points.

2.2. Results and discussion

2.2.1. Descriptive statistics

Concerning the general socio-demographic data of the children gathered from the parents, the majority were male (56, 78.9%), while a smaller proportion were female (15, 21.1%). The children's ages ranged from 25 to 84 months. In terms of the age categories used in the study, 5 children (7%) were 3 years old at the time of the study, 15 children (21.1%) were 4 years old, 17 children (23.9%) were 5 years old, 19 children (21.1%) were 6 years old, and 15 children (21.1%) were 7 years old.

According to the data collected from the children's mothers, 28 children (39.4%) are enrolled in an Individualized Educational Plan (IEP), while 20 children (28.2%) are receiving individualized or adapted instruction from preschool teachers. Additionally, 22 children (31%) are following regular education, with parents not indicating that the instruction is individualized, although data from the

teachers suggests that it is. In terms of child development, 13 mothers (18.3%) reported that their child's development is progressing typically, while 58 mothers (81.7%) reported the presence of developmental delays. The most commonly reported issues included speech delays (31, 43.7%), followed by attention difficulties (16.9%), disordered development (9, 12.7%), motor development delays (8, 11.3%), and autism spectrum disorders (7, 9.9%). The smallest number of parents reported socio-emotional (3, 4.2%) and sensory delays (3, 4.2%), as well as cerebral palsy (1, 1.7%).

The strength of the *Parenting alliance* was found to be high in our sample ($M = 84.27$, $S.D. = 15.89$), with the obtained value being comparable to earlier studies conducted in Serbia ($M = 85.68$, [11]). This score can be considered relatively high, suggesting strong cooperation and mutual support between parents in their parenting roles.

The *Parenting Stress* variable in our sample ranged from 0 to 10 points. The average score ($M = 4.35$, $S.D. = 2.37$) suggests that mothers experience a relatively low level of stress related to parenting, indicating that the child's inclusion in the inclusive program has not significantly affected the mothers' mental health. An alternative interpretation could be that mothers have reached a certain level of adaptation and may have developed coping strategies in response to the situation, as previously noted in the literature [2].

For the variable *Parental Engagement* (score range: 21–40), the measures of central tendency and dispersion indicate that the majority of participants achieved high scores ($M = 34.31$, $S.D. = 4.50$), suggesting a strong level of involvement in acquiring information and providing support for the child's development. Similar results were observed for the variable *Availability of Professional Support*, where participants also achieved high scores (ranging from 7 to 15 points) with a high mean value ($M = 12.75$, $S.D. = 2.07$). These findings suggest that participants engage in effective communication with professionals within preschool institutions regarding the child's functioning and potential for developmental progress.

Finally, *The Child Progress in the Inclusive Program* was rated highly in this study. Participants obtained high scores on this scale ($M = 26.13$, $S.D. = 3.96$, observed score range: 10–30), suggesting that parents observe significant progress in their child's development within the preschool setting, encompassing both cognitive and socio-emotional functioning.

Since most of the measured variables show clustering in the higher value ranges (except for Parental Stress), with some skewness and kurtosis in the distribution, further analysis was conducted using non-parametric statistics.

2.2.2. Correlations among variables

To examine the relationships among the variables, a correlation analysis was performed using Spearman's rank correlation coefficient. The results revealed moderate positive correlations between *Child Progress in the Inclusive Program*, on the one hand, and the variables *Parental Alliance* strength ($\rho = .50$, $p < .001$), *Parental Engagement* ($\rho = .53$, $p < .001$), and *Availability of Professional Support* ($\rho = .55$, $p < .001$) on the other hand. A weaker negative correlation was found between *Child Progress in the Inclusive Program* and *Parental Stress* ($\rho = -.29$, $p = .013$). Based on these findings, it can be concluded that a child's progress in an inclusive program within a preschool setting, as well as their overall cognitive and social development, is partially dependent on the quality of the parental alliance, the degree of parental involvement in supporting the child's development, and the quality of the relationship with teachers and other professionals at the preschool. On the other hand, parental stress related to caring for a child who requires additional support appears to have a smaller, negative effect on these outcomes: higher levels of stress in parents may diminish the child's progress. These results align with previous research indicating that these variables significantly influence the child's developmental outcomes.

Since all the measured constructs significantly correlate with the child's progress in the preschool setting, it was essential to explore their interrelationships, specifically to examine whether the quality of parental collaboration, parental engagement in the child's development, communication with the preschool, and parenting stress are interrelated.

The strength of *Parenting Alliance* showed moderate correlations with the *Parenting Stress* ($\rho = -0.59, p < 0.001$) and *Parental Engagement* ($\rho = 0.48, p < 0.001$), as well as a lower correlation with the *Availability of Professional Support* ($\rho = 0.39, p = 0.001$). These results can be interpreted in line with previous studies suggesting that there is a bidirectional relationship between the difficulties faced by parents of children with developmental disorders. The diagnosis and care of the child may lead to higher stress levels and weaken the parenting alliance, while, conversely, a strong parent relationship and collaboration can reduce stress and help parents better adapt to the challenges their child is facing.

Conversely, the *Parenting Stress* variable did not show a significant correlation with the variables measuring *Parental Engagement for the child* ($\rho = -0.16, p = 0.18$) or the *Availability of Professional Support* with the preschool institution ($\rho = -0.16, p = 0.19$). This suggests that the level of stress may not impact the parents' willingness to engage in their child's development within preschool settings. Considering the previously reported results, where stress was found to be correlated with the child's progress, an integrated interpretation of these findings indicates that parents' readiness to further engage is independent of the stress they experience. However, the effects of this engagement may be limited or less effective in fostering the child's development. Earlier studies support these results, suggesting that the quality of caregiving does not necessarily deteriorate in the presence of challenges [7], though the effects may be reduced as parents often provide less optimal interactions with their child when under stress [5].

Moreover, a strong correlation was found between two scales of the SRP questionnaire: *Parental Engagement* and *Availability of Professional Support* ($\rho = 0.85, p < 0.001$). This result aligns with expectations, as both scales partially assess the relationship between parents and professionals in the preschool setting. The first scale refers to parents' involvement with their child, while also encompassing their willingness to participate in activities within the preschool and to apply the advice provided by professionals. The second scale, on the other hand, specifically measures the availability of communication and support from the professionals.

3. CONCLUSION

The results of the study revealed a complex interrelationship between various parenting strategies and capacities that may influence the progress of a child in an inclusive program within a preschool setting. The most significant factors identified were the strength and quality of the parental alliance, maternal engagement in promoting child development, and effective and accessible communication with educators and professional collaborators within the preschool.

The study also revealed the interrelations between variables such as parental support for the child, the parental alliance, and lower levels of parenting stress. These results suggest the importance of considering the mutual influence of these factors, as well as the significance of partner support in the collaborative effort to promote the child's development. Given that this study only examined the correlations among these variables, future research could focus on further investigating their particular influences through a model that could clarify how family dynamics, parental mental health, and readiness to engage in the child's support process may affect the child's development within the preschool setting.

The present study has several limitations. The first concerns the sample size, as the inclusion of 71 participants, or families, may be insufficient for generalizing the results and the statistical power of the tests. Additionally, the study was conducted almost exclusively within the territory of the Autonomous Province of Vojvodina and in only six preschool institutions, meaning that the dynamics of individual institutions could have influenced the results. Another significant limitation is that the study focused solely on mothers of children enrolled in the inclusive program. Including fathers could provide clearer insights into the individual roles of each parent within the family, particularly considering previous findings which suggest differences in the involvement and perceptions of cooperation between fathers and mothers [11]. Lastly, future research could measure the effects of different support programs (e.g., IEP vs. Individualization) or various developmental disorders and problems that children may experience.

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