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Original Article

A SWOT Analysis of the Early Assessment and Intervention Program for Preschool Children in Iran: A Qualitative Research

Seyed Ali Khaleghinezhad[1]*, PhD; Najmeh Soltaninejad[2], PhD; Seyedeh Elham Elhambakhsh[3], PhD

[1]Department of Education, Faculty of Psychology and Education, Yazd University, Yazd, Iran
[2]Curriculum Studies, Department of Educational Sciences, Farhangian University, Tehran, Iran
[3]Department of English Language and Literature, Faculty of Language and Literature, Yazd University, Yazd, Iran

Corresponding author:* Seyed Ali, Khaleghinezhd, PhD; University Blvd., Safayieh, Postal code: 89158-18411, Yazd, Iran. **Tel: +98-35-31234055; **Fax:** +98-35-38200149; **Email:** khaleghinezhad@yazd.ac.ir

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Abstract

Background: Early assessment and intervention program for preschool children (EAIPPC) is a critical undertaking in developing countries. The present study aimed to analyze the strengths, weaknesses, opportunities, and threats of EAIPPC in Iran.
Methods: In this thematic analysis, data were collected through three in-person interviews and seven focus group discussions (FGDs) with experts involved in implementing EAIPPC from five provinces in Iran. Qualitative data were analyzed using Stirling's thematic network framework. Trustworthiness was insured through data triangulation, thick description, prolonged engagement, member checking, and peer review.
Results: Data analysis led to the extraction of main themes as follows: strengths (accessing supportive services, increasing awareness and sensitivity towards slow learning, improving school readiness for at-risk children), weaknesses (limited coverage, lack of coherent management, lack of sufficient space and equipment, lack of provision of necessary resources for empowerment of the beneficiaries, small number of assessment teams), opportunities (cooperation with other governmental and nongovernmental agencies, creation of protective laws), and threats (lack of technological investment and shortage of financial resources, noninvolvement of deprived families in EAIPPC).
Conclusions: Analyzing the strengths, weaknesses, opportunities, and threats of EAIPPC can provide policymakers and educational managers effective insights into the important features, such as design and implementation of intervention programs in developing countries, including Iran.

Keywords: Early Interventions, Child, Preschool, Program Development, Qualitative Research

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1. Introduction

Early intervention programmes provide critical opportunities for children's holistic development during their early years (1). Such programmes are highly diverse, reflecting different care priorities and educational objectives. As a result, various initiatives have been implemented at both international and national levels in order to identify and support children, particularly those with special educational or health needs. At the international level, one prominent framework is the nurturing care framework (NCF) developed by the United Nations International Children's Emergency Fund (UNICEF), World Health Organization (WHO), and World Bank Group. In collaboration with the Early Childhood Development Action Network, Partnership for Maternal, Newborn, and Child Health in 2018, this program emphasizes five principles: good health, adequate nutrition, responsive caregiving, opportunities for early learning, and safety and security (2).

At the national level, many countries have implemented health screening and educational programmes to identify children with developmental concerns at an early stage. In Singapore, for example, trained nurses or physicians conduct six scheduled developmental screenings up to six years of age (3). In Australia, national initiatives place particular emphasis on health education for children from aboriginal or socioeconomically disadvantaged families, focusing on physical activity, nutrition, and hygiene (4). South Africa also implemented a screening program for sensory impairments in preschool children, using mobile technology and involving community health workers. Results indicated a prevalence of at least 22 per 1,000 for hearing loss and 23 per 1,000 for vision loss (5).

In line with global trends, the Exceptional Education Organization of Iran's Ministry of Education has implemented early assessment and intervention program for preschool children (EAIPPC), which targets children at five years of age (6). The EAIPPC is conducted in two sequential stages. In the first stage, a screening test is administered to create a general profile of the children's situation. Children who score 84 or above will not proceed to the next stage. If a child does not achieve the appropriate score, he will take three additional tests: Goodenough-Harris Drawing Test (GHDT), Wechsler intelligence scale for children (WISC-IV), and Leiter tests. Ultimately, if confirmed in the second stage, children with an IQ between 71 and 84 are classified as slow learners and are deemed to require targeted intervention. The Special Needs Education Organization (SNEO) is responsible for assessing these children, while the Deputy Minister for Primary Education (DMPE) oversees the educational interventions. It is assumed that the program helps productivity in early childhood education as Kazemian and colleages (7) also asserted, from an economic perspective, the expense of compensatory classes for slow learners was considerably lower than the costs associated with grade retention and school dropout among these students. They highlighted the alarming dropout rate of slow learners in Iran, noting that the highest rates of retention occur in the first and second grades of elementary school. Therefore, the assessment was implemented a few months before the opening of kindergartens and schools. Interventions were carried out annually after the start of the new academic year in September. A key objective of EAIPPC is to enable the early diagnosis and identification of children's physical and mental developmental concerns before they enter kindergarten or formal schooling.

This program has been implemented nationwide in Iran on a free and pilot basis since 2015. Despite its multi-year implementation, there is a lack of clear empirical evidence regarding its overall effectiveness and success. To address this gap in the literature, the present study adopted a diagnostic perspective to systematically analyze the internal and external factors. Therefore, the main aim of this study was to identify and describe the strengths, weaknesses, opportunities, and threats (SWOT) associated with EAIPPC by addressing the following questions:

What are the main strengths of EAIPPC?

What are the key weaknesses of EAIPPC?

What opportunities exist to enhance the quality and effectiveness of EAIPPC?

What threats could hinder further development and success of EAIPPC?

2. Methods

2.1. Design

Thematic analysis, a well-established qualitative research method, was employed in this study to examine stakeholders' experiences and perspectives regarding EAIPPC (8). This method facilitates the systematic investigation of data from various sources to detect, explain, organize, and report recurring themes within a data set (9). Also, SWOT framework was used to classify the identified ideas about the strengths, weaknesses, opportunities, and threats of EAIPPC. This framework is widely used to identify the internal and external resources to analyze the existing trends and patterns (10).

2.2. Selection and Description of Participants

The study participants were experts from the Special Needs Education Organization (SNEO) and provincial Education Departments. Using a purposeful stratified sampling technique, experts were selected from five provinces of Iran representing diverse economic conditions according to human development and capital indices (11).

2.3. Sample Size Determination

The study sample were 29 participants (9 female, 20 male) who shared their experiences and perspectives through 3 individual interviews and 7 focus group discussions (FGDs). Participants held academic qualifications ranging from undergraduate to doctoral degrees in disciplines including child psychology, counselling, educational sciences, educational management, theology, sociology, and psychology. Their professional experience in relevant fields ranged from 4 to 30 years. Individual interviews lasted between 30 and 70 minutes, while each FGD lasted 120 to 180 minutes, including scheduled breaks.

All interviews and FGDs were audio-recorded with prior informed consent. Each session was transcribed verbatim and reviewed immediately afterward, prior to conducting the next session. This process facilitated the early identification of emerging concepts relevant to the research questions. To ensure data saturation, the extracted themes and subthemes were iteratively reviewed and refined following each interview and FGD. This cyclical analysis continued until comprehensive insights were achieved regarding the strengths, weaknesses, opportunities, and threats (SWOT) of EAIPPC (12).

2.4. Data Collection and Measurements

Focus group discussions (FGDs) and semi-structured interview were employed as the primary data collection methods to gain a comprehensive understanding of the studied phenomena (13). The core guiding questions for both the interviews and FGDs were:

1. What, in your view, are the main strengths of EAIPPC?

2. What, in your view, are the key weaknesses of EAIPPC?

3. What opportunities do you perceive for enhancing the quality of EAIPPC?

4. What threats, in your opinion, could hinder further improvement or success of EAIPPC?

2.4.1. Procedure

Reflecting the two-stage structure of EAIPPC (assessment and intervention), participants were selected from both the Special Needs Education Organization (SNEO) and the Deputy Ministry for Primary Education (DMPE). Moreover, data collection was conducted across the following two phases:

Assessment Phase: Data collection involved three semi-structured, in-person interviews with individual experts (two female and one male) from the provinces of Sistan and Baluchistan, West Azerbaijan, and Tehran, Iran.

Intervention Phase: Data were collected through five focus group discussions (FGDs) conducted in the following provinces: West Azerbaijan (three male and one female), Sistan and Baluchistan (four female), Tehran, Qazvin, and Fars, Iran (one FGD in each province, with four male and one female per group).

2.5. Data Analysis

The thematic network analysis method developed by Stirling (14) was employed to analyze the data, resulting in the extraction of basic, organizing, and main themes. To ensure the trustworthiness of findings, several established criteria for qualitative rigor were applied:

- Triangulation: Data were collected from various groups across different provinces and fields of study. Additionally, ongoing discussions between the two researchers (AK and NS) were conducted until they reached complete agreement on the identified themes and related concepts.

- Member checking: To ensure the credibility of the findings, participants were given a detailed description of the study and were asked to confirm the analysis and results after in-person interviews.

- Thick description: The researcher documented the entire research process to enhance the auditability of the study.

Prolonged Engagement: The data collection process spanned nine months, allowing for a comprehensive understanding of diverse perspectives. This extended timeframe facilitated the suspension of the researchers' preconceived notions, enabling them to uncover new meanings within the data and raise new questions.

2.6. Ethical Considerations

The rights of all participants were respected throughout this study. Only individuals who provided informed consent were interviwed. The participants received complete information about the objectives of the study and sponsoring organization, including an official letter with the ethical approval code. They were obviously informed of their right to withdraw at any time without consequence. To protect confidentiality, personal data were secured, and the participants were offered the choice of suggesting a pseudonym.

Table 1: Extracted themes of early assessment and intervention program for preschool children (EAIPPC)

Main Theme	Organizing Theme	Basic Theme
Strengths of EAIPPC	Accessing to supportive services	Creating opportunities to identify children with underlying diseases; Providing support services to children with underlying diseases; Gainig support from the State Welfare Organization (SWO) in providing hearing aids; Accessing support services offered by SNEO for wheelchairs, glasses, dental surgery, and heart surgery
	Increasing awareness and sensitivity towards slow learning	Familiarizing the educators and the school environment with the phenomenon of slow learning and early intervention strategies; Engaging managers in addressing the issue of slow learning; Encouraging dialogue between teachers and parents about slow learning
	Improving school readiness of at-risk children	Reducing the overload of formal school readiness assessment program; Avoiding early withdrawal from education; Examining case effectiveness of some early interventions on slow learning children
Weaknesses of EAIPPC	Limited coverage	Ignoring foreign nationals in the evaluation and timely intervention program; Not covering preschoolers in the rural and nomadic areas and small cities in the program
	Lack of coherent management	Existing ambiguity in the custodianship of the program; Existing passivity of primary education managers in training the necessary human resources for timely educational intervention; Not paying attention to local requirements while planning for the implementation time of the project
	Lack of sufficient space and equipment	Lacking inadequate equipment in assessment centers; Neglecting the need for specialized facilities for slow-learning preschoolers; Establishing a limited number of assessment centers in deprived areas.
	Insufficient resources for stakeholder empowerment	Incomplete training of preschool teachers and staff; Lacking of educational content for the novice teachers of slow-learners; Neglecting to create educational content for parents of slow learners; Providing no special educational program after diagnosing a slow learning child
	A significant shortage of specialized personnel in assessment and intervention teams	Insufficient familiarizing of the experimenter with the local language in bilingual areas; Providing insufficient rehabilitation staff and child psychologists; Not providing a family counselor in the assessment team; Insufficient supplying of power in the fields of audiometry, optometry, and occupational therapy
Opportunities of EAIPPC	Cooperation with other government and nongovernment agencies	Receiving help from university educators to teach and inform preschool teachers about the phenomenon of slow learning; Engaging junior and senior students of medical sciences majoring in audiometry, optometry and occupational therapy; Promoting collaboration among local government leaders to inform people about EAIPPC and its benefits; Interacting with donors to pay the costs of assessment and intervention to poor parents
	Creation of protective laws	Developing and revitalizing the laws that support slow learners; Not stopping EAIPPC at the same time as school reopens
Threats of EAIPPC	Weakness in technological and financial infrastructures	Existing dependence of the implementation of the assessment and intervention program on the Sanad system*; Not using new educational capacities such as virtual education to train teachers and other stakeholders about the phenomenon of slow learning; Existing insufficient financial resources; Not instilling enough motivation for coaches/teachers participating in the intervention program; Not instilling enough motivation for assessment and intervention experts engaged in the intervention program.
	Not accompanying the family institution	Not providing enough motivation and enthusiasm for parents to evaluate their preschooler; Not addressing the problem of the financial inability of families in deprived areas to pay the cost of assessment; Not tackling parents' resistance to accepting their child as a slow learner

SNEO: Special Needs Education Organization; EAIPPC: Early Assessment and Intervention Program for Preschool Children; *An internet portal designed by the Iranian Ministry of Education in order to digitalize school system affairs.

3. Results

Analysis of the data collected from 32 participants (29 in FGDs and 3 in individual interviews) initially generated 202 primary codes. Through iterative data reduction, these concepts were synthesized into 46 basic themes, 13 organizing themes, and 4 main themes (Table 1). The detailed presentation of these results are as follows:

3.1. Main theme 1: Strengths of EAIPPC

3.1.1. Access to supportive Services: EAIPPC creates opportunities for State Welfare Organization (SWO) and SNEO to provide timely assistance for at-risk children by recognizing the underlying diseases of slow learning preschoolers and delivering support services to them. One of the participants reports:

"The support service plan of SNEO has positively impacted the enrollment of young children in early intervention programs. One significant benefit of this initiative is the assistance provided by SNEO in offering wheelchairs, glasses, dental surgery, and heart surgery in Sistan and Baluchistan, a well-known deprived area in Iran, for newly enrolled children. This support is made possible through their participation in this

early assessment and intervention program, which helps identify children with underlying disease."

3.1.2. Increasing awareness and sensitivity towards slow learning: EAIPPC enhances public awareness of the phenomenon of slow learning and fosters a sense of responsibility towards it. One of the participants believed that:

"The program helps educators, schools, and families become accustomed with slow learning at an earlier stage. Given the developmental delays that slow learners experience compared with their peers, addressing these delays can be very beneficial and can enhance the child's academic progress in the years to come. Moreover, it can foster important discussions between the school and the family."

3.1.3. Improving school readiness of at-risk children: Before EAIPPC was implemented, school-readiness tests were conducted only three months before first grade, creating heavy workloads for teachers and experts and causing stress for families and children. EAIPPC changes assessment earlier, allowing quick support and contributing to a decline in dropout rates. one participant said:

"Many first-grade teachers face challenges with slow-learning children in their classrooms, which disrupts the overall educational process. I believe that this early assessment and intervention program has significant potential to prevent current students from dropping out in the coming years."

3.2. Main theme 2: Weaknesses of EAIPPC

3.2.1. Limited coverage: The implementation of EAIPPC faces significant challenges in reaching vulnerable populations. Specifically, the program's coverage is notably inadequate in border regions, urban outskirts, and deprived or nomadic areas nationwide. In several provinces, implementation has been effectively confined to more privileged urban centers. Furthermore, a critical gap in coverage exists for children of foreign nationals, particularly Afghan refugees, as many are not registered in the *Sanad* system—the official electronic portal of the Iranian education ministry—which is a prerequisite for accessing the program. One of the participants said:

"In Qazvin, EAIPPC has been implemented mostly in the privileged areas, but this program has not yet been extended to the outskirts of the city and the villages."

3.2.2. Lack of coherent management: The Management of EAIPPC is devided between SNEO, responsible for assessment, and DMPE, responsible for intervention. This division of responsibility, combined with the inherent need for close coordination between the assessment and intervention phases, creates ambiguity and operational challenges at the provincial level. Additionally, scheduling implementation is further complicated by the diverse circumstances of nomadic, tropical, and subtropical areas. One of the participants said:

"I think it's better we have the authority to manage the time of program implementation, because, for example, in our province (Fars), the allocated time is not appropriate for some nomads."

3.2.3. Lack of Sufficient Space and Equipment: EAIPPC faces significant limitations due to the lack of essential assessment tools and resources, along with an insufficient number of specialized centers for slow learners and comprehensive assessment facilities. One participant declared:

"In some areas, we suffer from lack of the needed facilities for our assessment centers, so we don't have appropriate assessment and intervention".

3.2.4. Insufficient resources for stakeholder empowerment: Key stakeholders in the program—including parents, preschool teachers, and administrative staff—have not received adequate training or practical resources to effectively support children's development. The limited training workshops and the four instructional books provided by SNEO are insufficient in both scope and scale, and have not been distributed effectively or equitably. One participant noted:

"The educational package of the organization of special needs education is not available to the public. Only the employees of SNEO receive the package, and parents are rarely informed about the educational resources for themselves."

3.2.5. A significant shortage of specialized personnel in assessment and intervention teams: A significant shortage of specialized personnel exists across many provinces. This includes a lack of

sufficient consultants and examiners proficient in local languages, as well as a deficit of specialists in key fields such as child psychology, rehabilitation, audiology, optometry, and occupational therapy. One of the participants in Sistan and Baluchistan province, Iran, says:

"We lack enough skilled human resources in the fields of audiometry, optometry, occupational therapy, and speech therapy. To solve this problem, we use junior and senior students of medical sciences in these fields."

3.3. Main theme 3: Opportunities of EAIPPC

3.3.1. Cooperation with other governmental and nongovernmental agencies: EAIPPC has the potential to establish collaborative partnerships with external institutions. These could include Teacher Training University, Faculties of Rehabilitation Sciences operating under the Ministry of Health and Medical Education (MOHME), as well as various charitable organizations. One of the participants noted:

"Donors helped cover the cost of the assessment. About 50 to 60% of the expenses are funded by donors."

3.3.2. Creation of protective laws: The program offers an opportunity to activate cross-sectoral dialogue between educational and health policy bodies aimed at creating or reinstating legal protections for slow learners. One of the participants said:

"The centers of learning disorders do not deal with late learning. They are focused on learning disabilities, and there are no special programs for slow learners when they enter school. The policymakers should set laws that support slow learning children during their school period."

3.4. Main theme 4: Threats to EAIPPC

3.4.1. Lack of technological investment and shortage of financial resources: The program faces two primary threats: inadequate technological infrastructure, which fails to reach children in underserved areas, and insufficient funding for personnel, which contributes to high staff turnover and low motivation. For instance, one informant noted:

"Moving costs, electricity, water, and the costs of malfunctioning of the equipment are the problems that we face in the implementation. Credits for the diagnosis phase are fulfilled to some extent, but there are no credits for the intervention phase."

3.4.2. Non-involvement of deprived families in EAIPPC: The requirement for families to cover 50% of assessment costs precludes participation for most families in deprived areas. Furthermore, caregivers' limited education reduces awareness of the value of diagnosing children's developmental and learning difficulties. One participant said:

"Unfortunately, many families in the outskirts of the city do not feel the need for entering the program, especially when they understand that they should pay for it".

4. Discussion

This study examined the strengths, weaknesses, opportunities, and threats of EAIPPC through semi-structured interviews and FGDs with program designers and implementers, highlighting the economic, social, cultural, managerial, and technological factors that influence its future success. Regarding its strengths, three key themes were identified: timely access to supportive services, increased public awareness, and improved school readiness. The study participants noted that through partnership between SWO and SNEO, EAIPPC enables the early identification of developmental difficulties in slow-learning preschoolers and ensures they receive appropriate support. They also emphasized the program's role in raising societal sensitivity and responsibility toward slow learners, thereby fostering a more inclusive educational environment. Furthermore, by advancing school readiness assessments, EAIPPC reduces the burden on educators and families and contributes to lower dropout rates. These findings align with those of Dietrichson and co-workers (15), who reviewed 26 longitudinal investigations on universal preschool programs for children aged 0–6. The evidence consistently demonstrates positive average effects on educational attainment, school progression, employment, and earnings, with stronger benefits for children from lower socioeconomic backgrounds and no systematic gender differences. Their findings also align with the study of Johnson and colleagues (16), who reported that increasing public awareness of programme costs, benefits,

quality, and registration strengthens confidence in ECEC. Generally, it seems global efforts to promote a culture of early childhood care and education extend beyond the narrower perspective reported by the Iranian participants.

Despite its strengths, EAIPPC suffers from uneven coverage, with weak implementation in border regions, rural areas, and disadvantaged provinces, as well as incomplete inclusion of unregistered foreign national children. Additionally, fragmented management and unclear division of responsibility between SNEO and DMPE created operational conflicts that challenge effective program delivery. Moreover, the implementation process was hindered by an inability to adapt the program's timeframe to accommodate diverse climatic conditions across provinces, combined with an inappropriate timing of the initial assessment. The program's effectiveness is further constrained by resource and capacity limitations. Many regions lack appropriate physical infrastructure and assessment equipment, including specialist centers and testing sites. Furthermore, professional development opportunities and instructional materials for parents, preschool teachers, and support staff are insufficient in both quantity and distribution. Additionally, assessment and intervention teams face a critical shortage of specialized personnel. Consistent with the findings of this study, several studies highlighted the shortcomings of preschool assessment and early intervention programs (17-19). These studies indicated that system-level early childhood screening and intervention programs face challenges such as resource shortages, unequal access, inadequacies in training and workforce, failures in referral, and fragmented services, all of which undermine sustainable and equitable implementation. For instance, studies review of Noyes-Grosser and colleagues (17) on public intervention systems in the United States revealed that publicly funded programs require greater resources, training, and governmental support to deliver evidence-based interventions, and that resource limitations hinder both the intensity and quality of services. Findings of a study done by Atashbahar and co-workers, attributed weak support for early childhood development policy in Iran to limited senior-manager commitment (18). Studies reported that an insufficient number of specialists, large caseloads, and occupational pressures hinder the provision of adequately intensive services and increase the likelihood of burnout and job turnover (17, 19). Research on system-based innovations reported that despite an emphasis on screening, persistent challenges include gaps between identification and access to diagnosis/intervention, as well as the loss of patients to follow-up (20).

Beyond internal factors, participants emphasized that external opportunities for EAIPPC include cooperation with other agencies and the creation or revival of protective laws. Iran's teacher training university in conjunction with with universities affiliated with MOHME have the potential to play a significant role as collaborators in the program. In addition, using resources from various institutions can help promote a culture of early childhood development. Local entities, such as governorships, village councils, aid committees, and community trustees can also enhance participation in assessment and timely intervention programs by broadening awareness and disseminating information. Findings of Peterson-Katz and co-workers (21) on facilitators of developmental screening and early intervention in canadian organizations emphasized strong implementation context, multi-level multi-sectoral collaborative partnerships, adequate and collective awareness, knowledge and confidence, consistent and critical conversations, clear protocols and procedures and accessibility to information, tools and best practice guidelines as main facilitators of this program in Canada. Champine and colleagues (22) emphasized that family-centered, flexible, and relationship-based services are critical facilitators in promoting access to and engagement with early childhood systems of care. Moreover, Nores and Fernandez (23) found that building capacity for early child development explicitly emphasizes coordination across health, education, nongovernmental organizations (NGOs), private sector, communities, and parents to achieve high-quality, sustainable services. In South Africa and Malawi, community-driven recruitment, volunteerism, NGOs, religious bodies, and local leaders are central to running early childhood development (ECD) centers, filling gaps left by weak formal systems (24, 25).

The threats to EAIPPC stem primarilty from insufficient technological and financial investment, along with the exclusion or low participation of disadvantaged families. The allocated funding is

inadequate to cover essential costs, including in-service training, equipment for learning disorder centers, material transportation, utility expenses, and equipment depreciation. Furthermore, the financial support available for rehabilitating students and for motivating assessors and trainers of slow learners is insufficient to foster meaningful engagement in the program. Low salaries have led to a reluctance among testers (professional trainers) to work effectively in these centers, while coaches often lack the motivation to engage with slow learners. An additional threat arises from parental resistance; some families avoid the "slow learner" label due to deep-seated fear, and their participation in assessment programs may primarily aim to prove their child does not belong to this category. Conversely, families in deprived areas face financial challenges that make the cost of assessments burdensome. In line with these findings, Lee (26) emphasized that supporting children with borderline intelligence requires a special focus on environmental factors and effective interventions to enhance their functioning and quality of life. Also, Kim and co-workers (27) stressed that limited funding for prevention specific to child maltreatment and related consequences constrains preventive programming and broad dissemination of effective models. Smythe and colleagues (28) indicated that post-pandemic evaluations in specific national contexts identify gaps between stakeholder expectations and adaptive early intervention responses, indicating service-model strain after health emergencies.

In general, the findings of this study align closely with those of Bendini and colleagues (29), who contend that effective national planning for early childhood education requires a candid appraisal of current challenges, a thorough examination of all available resources (human and financial across the system), and the explicit articulation of objectives to guarantee the efficient and equitable allocation of investments in the short, medium, and long term.

4.1. Limitations

This study had certain limitations. It examined EAIPPC only from the perspectives of policymakers at the Ministry of Education and MOHME, Iran who provided valuable insights into external opportunities and threats. Future research is therefore encouraged to incorporate their viewpoints more deeply and more extensively with a larger sample. Besides, future studies can investigate the perspectives from experts from other charitable organizations which can play a role. This study was limited to the context of Iran as a developing country; however, similar research can be conducted to reveal further insights into the realities of the programs in other developing countries too. Furthermore, comparative cross-cultutal program evaluation studies focusing on EAIPPC can provide insightful suggestions as to how different programs can learn from each other and adopt solutions from the others' successful experiences.

5. Conclusions

Our study provided an overview of EAIPPC in a developing country, where significant deficiencies are evident at both policy-making and implementation levels. Correspondingly, the program's strengths and opportunities wereidentified; maintaining and leveraging strengths and opportunities is crucial for enhancing the quality of the sector. The findings of this study suggested that the successful implementation of this program in this specific context of Iran requires constant systematic cooperation and coordination among various institutions to guarantee reaching the desirable outcomes. These institutions can range from families to the Ministry of Education and the Ministry of Health and Medical Sciences, each of which plays a significant role in achieving the final progress intended in the program. This collaboration is essential for developing technological infrastructures and competent human resources. Furthermore, securing sufficient financial resources can help mitigate many threats that impede effective program implementation.

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Authors' Contribution

Seyed Ali Khaleghinezhad: Contribution to the conception and design of the work; the acquisition

and analysis of data for work; drafting the work and reviewing it critically for important intellectual content; Najmeh Soltaninejad: Contribution to the conception and design of the work; the acquisition, analysis, and interpretation of data for the work; drafting the work; Seyedeh Elham Elhambakhsh: Contribution to the interpretation of data; drafting the work and reviewing it critically for important intellectual content. All authors have read and approved the final manuscript and collectively agree to be accountable for every aspect of the work, ensuring that any questions related to the accuracy or integrity of the study are appropriately addressed.

Conflicts of interest: None declared.

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Ethical Approval

The Ethics Review Board of Yazd University, Yazd, Iran approved the present study with the code of IR.YAZD.REC.1404.011. Also, written informed consent was obtained from all participants.

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