

Effectiveness of Sahmgozari Parenting on Mother's lifestyle and Developmental Expectations Children with ASD: Synthesizing Mother's Experiences and Integrated Development Plan

DOI: 10.22098/jpc.2024.14050.1196

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Abstract

Objective: The objective of this study was to assess the efficacy of an educational model of parenting based on the sahmgozari Approach. The model integrated the experiences of mothers with children diagnosed with symptoms ASD, along with a comprehensive program of integrated transformation. The study aimed to examine the impact of this model on the lifestyle based on sahmgozari approach of mothers and the developmental expectations of the children.

Method: The statistical population consisted of all mothers residing in Isfahan, who had toddlers and infants with symptoms ASD and sought assistance from child counseling centers during the summer quarter of 2023. A purposive sampling method was employed, resulting in a sample size of three mothers in Isfahan City who met the inclusion criteria. Data collection involved the use of early screening questionnaires pertaining to autism characteristics, developmental expectations, and contributory lifestyle. Data analysis was conducted using visual analysis methods, stable change index, and recovery percentage.

Results: The findings indicated that the educational model of parenting based on the sahmgozari approach, which integrates the experiences of mothers with children with symptoms ASD and a comprehensive program of integrated transformation, effectively influenced the lifestyle based on sahmgozari approach of the mothers and the developmental expectations of the children.

Conclusion: Therapists and parents can utilize the results of this research to mitigate the challenges associated with raising children with symptoms ASD.

Keywords: Integrated Development, Autism Disorder, Developmental Expectations, Lifestyle, Sahmgozari Parenting.

Introduction

Autism spectrum disorder (ASD) is a neuro-psychological condition characterized by impairments in social interactions, such as communication difficulties and deficits in mutual social engagement, as well as language and repetitive behaviors including ritualistic actions, heightened or reduced responses to sensory stimuli, and motor stereotypes (Zebhi Zarchi et al., 2023; Wagner et al., 2019).

The term "spectrum" is used to describe this disorder due to its varied levels of severity (Yazidi et al., 2023). Globally, the prevalence of ASD is estimated to be 1 in 68 individuals, while in Iran, it affects approximately 70 out of every 10,000 children (Arjmandnia et al., 2021). This disorder profoundly impacts multiple aspects of a child's life, leading to psychological challenges that impact parental well-being and adaptability, specifically for the mother who typically assumes the primary caregiving role (Shaham et al., 2021).

Parents of children with ASD often experience heightened levels of anxiety, depression, stress, and other psychological difficulties (Nariman et al., 2017). Personality trait assessments have revealed that parents of autistic children commonly display traits such as withdrawal, feelings of inadequacy, passivity, and a sense of irresponsibility more frequently than parents of typically developing children or those with Down syndrome (Bahrami et al., 2014). Parenting these children is a complex undertaking, causing deep concerns and anxieties for parents, particularly mothers, who navigate the delicate balance between their personal lives and the demands of caring for their children (Shaham et al., 2021).

Conversely, developmental delays resulting from autism spectrum disorders can be discerned through reference to typical milestones (Lord et al., 2018; Lord et al., 2020), such as school enrollment at the age of seven, or biologically determined markers like walking (Vernhet et al., 2019). Human development is characterized by distinct domains encompassing physical-motor-cognitive, linguistic-communicative, and emotional-social aspects (Amin Yazdi, 2010). These domains encompass a set of anticipated biologically-driven events known as developmental expectations (Sharma et al., 2018). These expectations encompass various areas, including linguistic-verbal proficiency (comprehension, language production, and communicative exchange), social-emotional competence (self-regulation, confidence, self-esteem, intimacy, and emotional breadth), physical-motor skills (gross and fine motor abilities), and cognitive functioning (attention, imagination, problem-solving), all of which can be affected by this disorder. By understanding their child's developmental expectations across these domains, parents can appropriately tailor their expectations and caregiving strategies (Rogge & Janssen, 2019).

Moreover, an influential factor in the lives of children with symptoms ASD is their parents' style of parenting (Mahmoudi et al., 2019). Parenting styles delineate the nature of the parent-child relationship and, as outlined by Bamrind (Baumrind, 1991), are categorized into four types: authoritarian, permissive, rejecting, and authoritative, based on factors such as discipline, communication, expectations, and expression of emotions. Research has indicated a correlation between permissive parenting style and autism spectrum disorders (Mahmoudi et al., 2019). Conversely, parental engagement in programs aimed at enhancing communication skills has been shown to foster a more positive perception of parental impact on their child's development (Sanz-Cervera et al., 2018). Thus, teaching parents effective parenting techniques and appropriate interaction strategies with children on the autism spectrum can yield positive outcomes for both parents and children.

One of the parental patterns that significantly impacts the parent-child relationship, rooted in Islamic ontology, is the sharing pattern (Ismaili et al., 2018). The primary objective of the sharing pattern is to shift the focus of sharing and productivity from worldly matters to sharing in a spiritual sense. The fundamental premise of the sharing pattern is centered around the concept of sharing as inherent in all beings. Emphasizing this entails acknowledging an external focal point—the divine will—that serves as the foundation for aligning actions with God's knowledge and capacity encompassing all things. This alignment is proportionate to the extent of the recipient's share. In essence, God's will permeates all the behaviors, thoughts, and developments undertaken by a mother in the journey of raising her children (Ismaili et al., 2018). The essence of this model revolves around three key elements: role-position responsibility, role-position responsibility subjectivity (where the mother perceives herself as a copartner in her own life, her child's life, and even society, actively implementing the necessary educational program for her child), and role-position responsibility selectivity. These factors bear significant importance as effective means of nurturing children (Ismaili et al., 2018).

The educational program of this model is based on interviews conducted with mothers of children with autism, utilizing a transformative or transformational approach grounded in individual differences based on communication. This model scrutinizes and intervenes in the parent-child relationship (Wetherby et al., 2018). Greenspan and Wieder (Greenspan & Wieder, 2013), as proponents of the evolutionary model—individual differences based on communication (Firnady & Boediman, 2019), present an integrative perspective on human psychological development and offer a comprehensive developmental framework (Amin Yazdi, 2010).

In this particular model, the focus was on studying families at risk and children facing developmental challenges in their early years, specifically during infancy and toddlerhood. Greenspan (Greenspan & Wieder, 2013) posits that children with developmental difficulties, including autism spectrum disorder, possess the potential to

acquire fundamental developmental abilities. However, due to biological obstacles, they have been unable to fully develop these capabilities (Amin Yazdi, 2010). These disabilities not only impact the affected individuals but also have reverberating effects on their caregivers, families, and society as a whole (Factor et al., 2019). Consequently, one of the influential factors in a child's upbringing within the family system is the parenting model adopted by the parents (Crowell et al., 2019). Although these disabilities alone can influence parental caregiving (Vernhet et al., 2019), the parenting model, which encompasses the general communication style, attitudes, and behaviors of parents toward their children, also plays a significant role (Cwik, 2021).

Numerous studies have explored the factors contributing to the onset of autism spectrum disorder and identified appropriate treatments for the condition (Totsika et al., 2011). However, only one study has specifically investigated parental competence in raising these children (Mohammadi et al., 2019). Thus, the involvement of parents of autistic children in child development programs becomes crucial, as it enables them to acquire the necessary skills for managing their child's behavior and benefit from professional support (Mohammadi et al., 2019). Furthermore, the development of the parenting based on the sahmgozari approach educational model can induce ontological shifts in the worldview of parents, particularly mothers, preparing them to navigate the challenges faced by mothers whose expectations of their children's development remain unmet in the context of autism spectrum disorder. Constructing an intervention protocol rooted in a native perspective, alongside its implementation in parental education, serves as a foundation for future research and studies. Addressing this issue from both theoretical and practical standpoints contributes to the accumulation of localized knowledge and scientific advancements while aiding in the planning and execution of a comprehensive integrated transformation program.

On the other hand, for parents whose level of religious beliefs is moderate to high there is a lack of a parenting program based on religious concepts, so that, believing parents can better and more comfortably utilize a program aligned with their values. As a result, formulating an educational parenting model based on the sahmgozari approach can facilitate ontological changes in the parents' worldview, especially mothers, which provides them with the necessary readiness to face the challenges of children with unmet developmental expectations displaying signs of autism spectrum disorder in their growth and development. Besides, constructing an intervention protocol based on a native perspective in addition to its application in parental education will form the basis for future research and studies. Addressing this matter, theoretically contributes to the accumulation of indigenous knowledge and scientific productions and practically aids significantly in the planning and implementation of a comprehensive unified transformation program. Hence, the main issue of the present research is to develop and validate a sahmgozari parenting educational model based on the synthesis of experiences

of mothers of children with autism spectrum disorder and a comprehensive unified program. The study also aims to investigate its effectiveness on the shareholding mother's lifestyle and the child's transformative expectations.

Hence, the current research question is whether a parenting program based on a shareholding approach and a comprehensive transformative program affects the shareholding lifestyle of mothers and the developmental expectations of their children.

Methods

Participant: In this study, a single-subject experimental design of type A-B was implemented. The target population included all mothers residing in Isfahan city, who had toddlers and infants diagnosed with autism spectrum disorder and sought assistance from child counseling centers during the summer quarter of 2023. The sampling method employed was purposeful at this stage of the research. The sample size consisted of three mothers with toddlers and infants diagnosed with an autism spectrum disorder in Isfahan City in 2023. The inclusion criteria for participation were as follows: willingness to cooperate and engage in the research, age between 18 and 38 years, scoring 5 or above on the Early Screening Questionnaire for Autism Characteristics (PV-ESAT) indicating the presence of autism spectrum symptoms in the child, having a child aged between 15 and 36 months, and absence of mental disorders or psychiatric medication. The exclusion criteria for the study were as follows: completion of another parenting course simultaneously with this treatment, missing more than two sessions, and reluctance to participate in meetings and complete assigned tasks. It should also be noted that, based on the researcher's assessment and diagnostic interview, any participant (mothers) showing indications of clinical or personality disorders will be excluded from the study.

The Early Autism Characteristics Screening Questionnaire (PV-ESAT): This tool is a recently developed and highly reliable screening tool for autism spectrum disorders in toddlers. Swinkels et al. (2006) designed this scale after reviewing available autism screening tools for toddlers (aged birth to 36 months) and studying autism symptoms through home videos. The PV-ESAT consists of 14 questions that are answered as either "yes" for normal behavior or "no" for abnormal behavior. The questionnaire focuses on behavioral symptoms, including areas such as pretend play, joint attention, interest in others, eye contact, verbal and non-verbal communication, stereotyped behavior, preoccupations, response to sensory stimuli, emotional response, and social interaction. The test-retest reliability coefficient of this scale is 0.81, indicating its consistency over time. The Persian version of the early screening questionnaire for autism characteristics in toddlers has also demonstrated a reliability of 0.81 in the retest method. Furthermore, the Persian version has shown acceptable validity and reliability for screening autism characteristics in toddlers.

The Transformational Expectations Questionnaire: This tool developed by Amin Yazdi, assesses four domains (motor, cognitive, linguistic, and emotional) across four age periods (first infancy, second infancy, first toddlerhood, and second toddlerhood). The questionnaire consists of age-specific questions that evaluate the desired developmental milestones in each domain. Responses are classified as "yes" for observed skills, "sometimes" for occasional demonstration, or "no" for the absence of the characteristic. Scoring assigns a value of 2 for "yes" responses, 1 for "sometimes" responses, and 0 for "no" responses. Raw scores can be converted into normalized scores using the provided tables. Subscales of the questionnaire include big movement, small movement, attention, memory, exploration, language comprehension, language production, exchange, self-regulation, trust, intimacy, and range of emotions. A standardized score of 10 indicates the highest expected ability in a specific subscale and developmental area for a child of that age. Scores below 10 suggest performance below age-appropriate expectations. A score of 5 or lower indicates significant problems or delays in that subscale or developmental area, necessitating intervention.

The Contribution Lifestyle Questionnaire: This tool was developed by Esmaeili, Dehdast, and ShadabMehr (2021) to assess the level of contribution in adults' lifestyles. This questionnaire consists of 59 items and utilizes a five-point Likert scale ranging from "completely disagree" to "completely agree" for scoring. Validity was established through exploratory factor analysis, while content validity was confirmed through expert consultation (Ismaili, 2021). Reliability was assessed using Cronbach's alpha method. Statistical analyses were performed using SPSS-25 software. Exploratory factor analysis with principal components revealed that the Contribution Lifestyle Questionnaire consists of 13 components, explaining 57.24% of the variance in contribution lifestyle. The overall questionnaire demonstrated a Cronbach's alpha of 0.93, with specific components such as meaningfulness (0.78), responsibility (0.74), agency (0.73), security orientation (0.71), standardization (0.73), respect orientation (0.71), and orientation orientation (0.73) reporting good reliability. Additionally, components like personal comfort (0.80), effective role-playing (0.72), development relationships (0.67), bonding (0.63), coordination with goals (0.63), and selectivity (0.65) showed satisfactory reliability. The cutoff point for this questionnaire is set at a total score of 189.33 based on the 95% confidence interval. A score below 189.33 indicates a lifestyle based on sahmgozari approach, while a score between 189.33 and 274.39 suggests an average lifestyle based on sahmgozari approach and a score higher than 274.39 indicates a fully lifestyle based on sahmgozari approach (Ismaili, 2021).

The current research commenced after obtaining the necessary permissions from Allameh Tabatabai University. Sampling began in the summer of 1402 by distributing a call to participate in a research project at medical centers and specialized counseling centers for children. Mothers with toddlers and infants displaying symptoms of autism

spectrum disorder were encouraged to refer to the counseling center of Isfahan University of Medical Sciences to evaluate the effectiveness of the parenting based on the sahmgozari approach model. Following the participants' presence, the samples were screened based on inclusion criteria and the Autism Spectrum Early Screening Questionnaire. During the implementation of the parenting based on the sahmgozari approach model, participants (mothers) completed the Evolutionary Expectations Questionnaire in the initial baseline phase (prior to treatment) and subsequently in the two following phases. The intervention phase consisted of nine sessions, conducted once a week for 90 minutes. Questionnaires were completed during the third, sixth, and ninth sessions. Subsequently, a one-month follow-up period involved the completion of ten questionnaires by participants (mothers) in three baseline assessments at intervals. Baseline information was collected to establish the level of the problem before intervention and to serve as a reference point for assessing the effectiveness of the intervention. Table 1 outlines the content of the parenting model sessions.

Table 1. Content of the parenting model sessions

Sessions	Objective	Session Overview
First	Familiarizing oneself with the objectives and protocols of the gatherings, acquainting oneself with the intricacies of autism spectrum disorders and their repercussions on the cognitive, emotional, and behavioral challenges faced by children, as well as identifying their early manifestations. Furthermore, acquiring an understanding of diverse parenting approaches and becoming knowledgeable about the developmental	Furnishing crucial insights into the manifestations of autism spectrum disorders, their precursory indicators, and their progression while employing an initial baseline questionnaire. Task Allocation: Engaging in a question-and-answer discourse, appraising one's parenting approach, scrutinizing the cognitive, linguistic, emotional, and physical developments of the child across diverse domains, and formulating individualized developmental charts for each child. Additionally, delineates pertinent educational exercises and games tailored to the child's age and the outcomes derived from their developmental assessment scale in the realm of physical-motor development expectations.

	milestones pertinent to the child.	
Second	Acknowledging and appreciating maternal encounters, facilitating the process of adaptation, instilling and instructing techniques of emotional regulation, and imparting comprehensive holistic development.	Delineating the distressing emotional journeys of mothers, delving into their burden of guilt, and fostering their cognitive and emotional self-awareness toward addressing this disorder. Ensuring the mothers' familiarity with the subdomains encompassing cognition, language, emotions, and physical facets. Task Allocation: Documenting the poignant experiences of parenthood spanning from pregnancy to the present time, engaging in mindful practices, and responding to inquiries pertaining to integrated development. Assessing the strengths and weaknesses of the maternal endeavors and offering appropriate remedies to elevate the efficacy of activities. Engaging in game-based sports programs tailored to align with the child's developmental expectations assessment. Furnishing appropriate musical accompaniment to motivate the child's engagement in physical activities within their home environment. Offering educational initiatives pertaining to linguistic interchange developmental expectations, utilizing age-appropriate approaches, and aligning with the outcomes derived from the child's developmental expectations assessment.
Third	Enrichment of the environment and empowerment of children	
Fourth	Attain Social Welfare Assistance	Provision of assistance to the family of origin; fostering empathy among family members; comprehension of the family members regarding the circumstances; cultivation of patience in family members and dispensing advice in maintaining composure; demonstration of familial sympathy and solace; heartfelt endeavors by family members to mitigate the mother's solitude. Scrutinizing the merits and demerits of the

		mother's endeavors and presenting fitting resolutions to optimize game levels for enhanced performance. Fostering optimism from the treatment team; endeavoring alongside the treatment team; abstaining from making comparisons between the affected child and peers within the same cohort, and instead approaching the situation with sound rationale; accessing support systems both at the organizational and societal level through non-governmental organizations (NGOs); availing oneself of counseling and psychological services; seeking specialized assistance to facilitate acceptance of the circumstances. Facilitating educational endeavors centered around the child's social-emotional developmental milestones, tailored to their age and informed by the outcomes of their developmental assessment. Facilitating coping mechanisms and affirming the child's rights in light of their behavioral challenges; recalibrating expectations and aspirations for the autistic child (expectation recalibration); refraining from adopting a harsh stance; fostering a positive mindset to equip the child with social competence; fostering a self-reliant and autonomous mindset in caring for an ailing child; comprehending the nature of the disorder; making efforts to comprehend and come to terms with autism on a personal level; deriving strength from the child's gratification; employing cognitive avoidance and diversion techniques; adopting an optimistic outlook; embracing resignations and contentment; accepting the divine will; practicing positive self-talk; cultivating positive thinking; nurturing self-efficacy beliefs. Assessing the merits and limitations of the mother's activities and offering appropriate solutions to enhance gameplay proficiency.
Fifth	Attain Organizational Assistance	
Sixth	Cognitive Approaches	

Seventh Emotional Strategies	Demonstrating contentment regarding the child's advancements; fostering self-motivation; exercising self-discipline and moderation; nurturing optimism; embracing predefined conditions; conveying affection, empathy, and benevolence towards the child; validating the sheer presence of the child; establishing a profound emotional bond with the child; exhibiting unwavering love towards the child; experiencing a sense of financial stability; sympathizing with fellow mothers' challenges. Furnishing educational engagements in the realm of cognitive developmental projections based on the child's age and the outcomes derived from the developmental expectations assessment. Seeking solace in music; demonstrating compassionate care; engaging in playful interactions with the child; procuring essential items for the child and striving to fulfill their needs; highlighting the child's significance; emphasizing dietary modifications as a pivotal and prioritized aspect; fostering self-sufficiency and beginning to address the prevailing circumstances; endeavoring to bring joy to the child's heart; indulging in self-reward through personal acquisitions and self-encouragement; diligently monitoring diagnostic and therapeutic procedures; centering efforts on enhancing the child's condition; effectively navigating the child's environment; refraining from employing physical force; offering encouragement and motivation to the child; empowering their individuality; partaking in enjoyable activities alongside the child; pursuing personal growth and self-development; enhancing morale through professional advancement and fulfillment; maintaining hope for gradual improvement over time; drawing strength from the positive impact of treatment measures; setting personal challenges; incorporating intermittent breaks; seeking refuge
Eighth Behavioral Approaches	

	and stability; endeavoring to fortify psychological resilience; deriving inspiration from the progress of other family members; allocating quality time for other family members; temporarily postponing developmental milestones for a child with autism; engaging in exercise and leisurely walks; displaying maternal selflessness; exerting continuous effort and perseverance; fostering self-reliance; exemplifying patience and resilience. Carefully assessing the efficacy of the mother's undertaken activities, while providing viable solutions to elevate the quality of play and enhance overall performance. Engaging in acts of worship and communing with the divine through prayer and supplication; finding solace and seeking solace in the presence of a higher power; placing unwavering trust in the divine plan; cultivating a sense of hope for divine grace; drawing inspiration from mystical sources; experiencing a profound sense of spiritual closeness to God; seeking guidance from revered spiritual leaders; expressing gratitude and offering
Ninth	Spiritual Approaches thanks; recognizing the child's existence as a miraculous gift; perceiving the challenges posed by the child's disorder as a divine examination; nurturing aspirations for the child's growth and progress in an alternative environment; embracing the responsibility of caring for the child as a sacred mission; cherishing the blessing of parenthood; engaging in the recitation of sacred scripture; embarking on pilgrimages to religious sites; navigating spiritual conflicts in a religious context.

In accordance with the research design employed, the analysis of the research data encompassed visual examination (assessing data stability, changes, and overlaps/non-overlaps), statistical significance (utilizing a stable change index), and clinical significance (evaluating recovery percentages) to effectively report and interpret the obtained results.

Results

The descriptive findings of the research variables are presented in Tables 2-4.

Table 2. Standard Deviation of Participants in Mother's Lifestyle based on sahmgozari approach Variable

Participants	Measurement phase	The Standard Deviation
1 st participant	Baseline	0.57
	Intervention	3.77
	Follow-up	0.57
2 nd participant	Baseline	0.57
	Intervention	3.77
	Follow-up	0.57
3 rd participant	Baseline	0.0
	Intervention	3.77
	Follow-up	0.57

Based on the data presented in Table 2, it is evident that across the initial, second, and third participants, there is a notable enhancement in score variability during the baseline, intervention, and follow-up stages. Specifically, there is a discernible increase in scores during the intervention phase compared to the baseline phase, and this increment is consistently sustained throughout the follow-up phase.

Table 3. The standard deviation of the participants in the variable evolutionary expectations in the motor-physical domain

Participants	Measurement phase	The Standard Deviation
1 st participant	Baseline	0.57
	Intervention	3.91
	Follow-up	1.0
2 nd participant	Baseline	0.57
	Intervention	5.19
	Follow-up	1.73
3 rd participant	Baseline	0.57
	Intervention	5.12
	Follow-up	0.0

Based on the provided data in Table 3, it is evident that across the initial, second, and third participants, there is a demonstrable enhancement in the variability of motor-physical skills scores during the baseline, intervention, and follow-up phases. Specifically, a notable elevation in scores is observed during the intervention phase in comparison to the baseline phase, and this augmentation is consistently sustained throughout the follow-up phase.

Table 4. Description of the mean and standard deviation of the variable of developmental expectations in the cognitive domain.

Participants	Measurement phase	Standard Deviation
1st participant	Baseline	0.57
	Intervention	4.24
	Follow-up	0.0
2nd participant	Baseline	0.0
	Intervention	5.47
	Follow-up	0.57
3rd participant	Baseline	0.57
	Intervention	5.47
	Follow-up	0.57

Based on the data depicted in Table 4, discernible through the assessment of the first, second, and third participants, it becomes apparent that the standard deviation within the baseline stage, intervention stage, and follow-up stage signifies enhancement in the cognitive domain scores pertaining to developmental expectations. Consequently, an upsurge in scores is observable during the intervention phase in contrast to the baseline phase, and this heightened level of achievement is consistently sustained throughout the follow-up stage.

Table 5. Description of mean and standard deviation of developmental expectations in the linguistic interchange domain

Participants	Measurement phase	The Standard Deviation
1st participant	Baseline	0.0
	Intervention	3.87
	Follow-up	1.0
2nd participant	Baseline	0.57
	Intervention	1.41
	Follow-up	1.0
3rd participant	Baseline	0.57
	Intervention	1.82
	Follow-up	0.57

Upon examination of Table 5, it becomes apparent that the standard deviation within the baseline phase, intervention phase, and follow-up phase, as observed across the first, second, and third participants, signifies an enhancement in the scores related to exchange language skills. Evidently, there exists an upward trajectory in scores during the intervention phase when compared to the baseline phase, with such improvements being consistently sustained throughout the follow-up phase.

Table 6. Description of the mean and standard deviation of the variable expectations of transformation in the social-emotional domain

Participants	Measurement phase	The Standard Deviation
1st participant	Baseline	0.57
	Intervention	3.2
	Follow-up	0.0
2nd participant	Baseline	1.0
	Intervention	5.47
	Follow-up	0.54
3rd participant	Baseline	0.52
	Intervention	5.1
	Follow-up	0.51

Upon examination of Table 6, it is evident that the standard deviation within the baseline stage, intervention stage, and follow-up stage, as observed across the first, second, and third participants, reveals a marked improvement in the scores pertaining to developmental expectations within cognitive domains. Notably, there is a discernible increase in scores during the intervention phase when compared to the baseline phase, and this positive trend persists throughout the follow-up phase.

In Table 7, the progression of participants' scores in the variable of the mother's contribution lifestyle and the child's developmental expectations is presented, spanning from the baseline stage to the follow-up stage. Additionally, this table provides an overview of the stable change index, recovery percentage, and total recovery percentage during both the intervention and follow-up phases.

Table 7. The trend of the change of 3 participants in the variable of lifestyle based on sahmgozari approach of the child's mother

Intervention: Parenting based on the sahmgozari approach Educational Model				
	Participants	1st participant	2nd participant	3rd participant
Point A (Baseline)	1 st	77	135	176
	2 nd	89	120	142
	3 rd	81	140	166
Point B (Intervention)	1 st Point	90	156	184
	2 nd Point	115	173	196
	3 rd Point	137	184	115
	4 th Point	155	199	199
Indexes	Stable variation index	28.07	25.73	29.9
	Recovery rate	0.70	0.52	0.61
	Total recovery rate		0.57	
Follow up Phase	Follow-up 1 st	160	205	204
	2 nd	150	194	212
	3 rd	165	211	190
Indexes	Stable variation index	43.47	38.23	51.62
	Recovery rate	1.08	0.78	1.04
	Total recovery rate		0.93	

The statistical findings depicted in Table 7 indicate that the obtained indices surpass the threshold of 1.96, thereby substantiating a significant and statistically meaningful change in scores from the baseline phase to the intervention phase. Furthermore, the overall

improvement percentage for the mother's contribution variable is 0.57, which aligns with Blanchard's notion that educational success is achieved when there is a 50% enhancement. Hence, it can be argued that the results pertaining to the psychological capital variable hold substantial clinical significance.

Regarding the follow-up stage, the stable change index for the first, second, and third participants stands at 43/47, 38/23, and 5132/62, respectively. Considering that these indices exceed 1.96, it can be asserted that the alteration in contribution variable scores remains stable during the follow-up stage, evincing significant statistical validity. Moreover, the overall recovery percentage for all three participants amounts to 93%, signifying substantial clinical significance. A visual analysis of the contributory lifestyle variable for the aforementioned participants at baseline, intervention, and follow-up stages is presented in Figure 1.

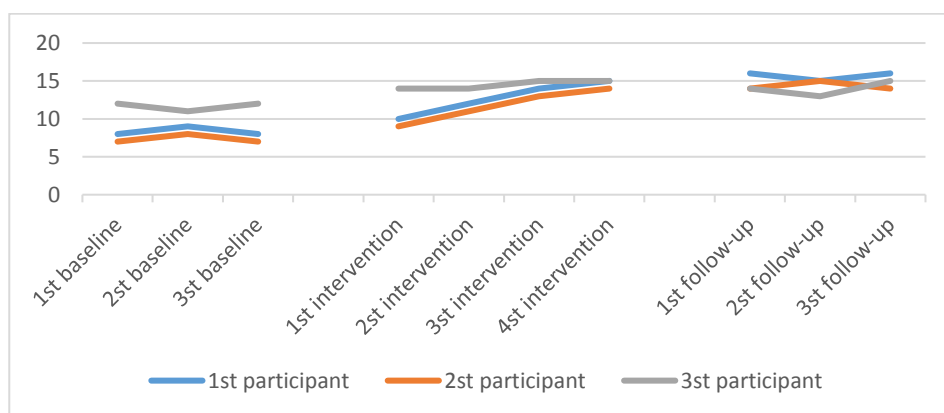


Figure 1. Visual evaluation of parenting based on the sahmgozari approach education based on the integration of mothers' experiences with children with symptoms ASD and a comprehensive program of integrated transformation of expectations in the physical-motor domain.

Figure 1 illustrates the observed elevation in participants' scores regarding the questionnaire that captures the influence of maternal lifestyle and developmental expectations for their children. This increase is observed during the intervention phase when compared to the baseline phase. Table 8 provides an overview of the progression in participants' scores specifically pertaining to developmental expectations within the physical and movement domains, spanning from the baseline stage to the follow-up stage.

Table 8. The process of switching education phases in 3 participants in the variable of developmental expectations in the motor-physical domain

Intervention: Parenting based on the sahmgazari approach Educational Model				
	Participants	1 st participant	2 nd participant	3 rd participant
Point A (Baseline)	1 st	8	7	12
	2 nd	9	8	11
	3 rd	8	7	12
Point B (Intervention)	1 st Point	10	9	14
	2 nd Point	12	11	14
	3 rd Point	14	13	15
	4 th Point	15	14	15
Indexes	Stable variation index	24.07	23.78	19.9
	Recovery rate	0.50	0.57	0.56
Follow up Phase	recovery	052		
		Follow-up		
	1 st	16	14	14
	2 nd	15	15	13
Indexes	3 rd	16	14	15
	Stable variation index	33.47	38.45	45.62
	Recovery rate	0.08	0.68	113
	Total recovery rate	0.53		

According to the data presented in Table 8, the obtained indices exceeding 1.96 indicate a significant and statistically meaningful change in scores from the baseline phase to the intervention phase. Additionally, the transformational expectations variable focusing on

physical motor skills exhibits an overall recovery percentage of 0.52, which aligns with the criteria for educational success as proposed by Blanchard (who considers a 50% improvement as successful in education). Therefore, it can be asserted that the results for the psychological capital variable hold clinical significance. Moreover, considering the obtained indices surpassing 1.96, the stability of the contribution variable scores during the follow-up stage and the statistically significant nature of the results can be claimed. Furthermore, the overall recovery percentage for three participants equalling 52% also holds clinical significance. Visual analysis of the psychological capital variable for these three participants across baseline, intervention, and follow-up stages is depicted in Figure 2.

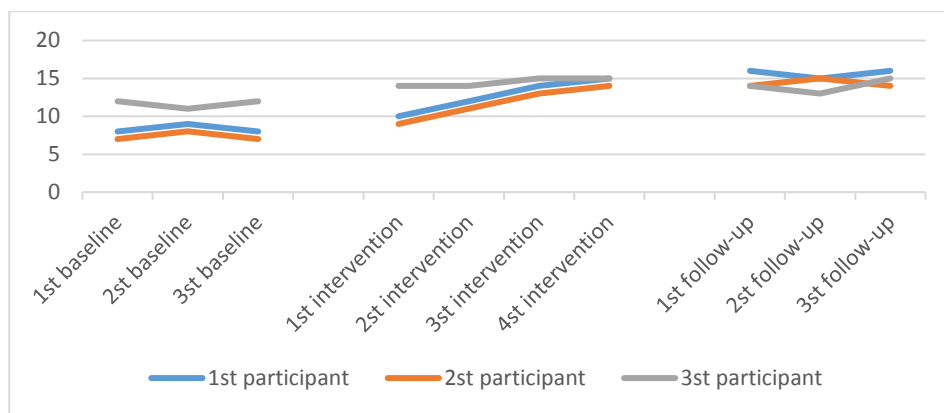


Figure 2. Visual analysis of parenting based on the sahmgozari approach education based on synthesizing the experiences of mothers of children with symptoms ASD and a comprehensive program of integrated transformation on transformational expectations in the physical and motor areas.

Figure 2 illustrates the upward trajectory of participants' scores in the questionnaire measuring the mother's contribution lifestyle and the child's developmental expectations during the intervention phase, compared to the baseline phase. Meanwhile, Table 9 presents the progression of participants' scores in the developmental expectations variable specifically within the cognitive domains, spanning from the baseline stage to the follow-up stage.

Table 9. The process of transition of 3 participants in the variable of evolutionary expectations in the cognitive domain

Intervention: Parenting based on the sahmgazari approach Educational Model				
	Participants	1 st participant	2 nd participant	3 rd participant
Point A (Baseline)	1 st	10	13	13
	2 nd	9	13	11
	3 rd	10	11	12
Point B (Intervention)	1 st Point	11	15	14
	2 nd Point	13	15	15
	3 rd Point	14	18	17
	4 th Point	16	19	16
Indexes	Stable variation index	24.07	23.78	19.9
	Recovery rate	0.50	0.57	0.56
	Total recovery rate	0.51		
Follow-up				
Follow up Phase	1 st	17	20	16
	2 nd	18	21	15
	3 rd	18	22	17
Indexes	Stable variation index	33.47	38.45	45.62
	Recovery rate	0.08	0.68	1.13
	Total recovery rate	0.50		

Upon examination of Table 9, the indices obtained, surpassing the value of 1.96, allow for the assertion that there exists a significant change in scores between the baseline phase and the intervention phase, corroborated by statistically significant results. Furthermore, the transformative expectations variable within cognitive domains demonstrates an overall improvement percentage of 0.51. This outcome meets the criterion for educational success in line with Blanchard's standpoint, as a 50% improvement is deemed indicative of success in education. Hence, it can be posited that the results attained for the psychological capital variable hold clinical significance. Notably, with indices exceeding

1.96, it can be asserted that the change in scores for the contribution variable remains consistent during the follow-up stage, with statistically significant results. Additionally, three participants display an overall recovery rate of 50%, which bears clinical significance. Conveying a visual analysis, Figure 3 depicts the developmental expectations variable within cognitive domains for these three participants across the baseline, intervention, and follow-up stages.

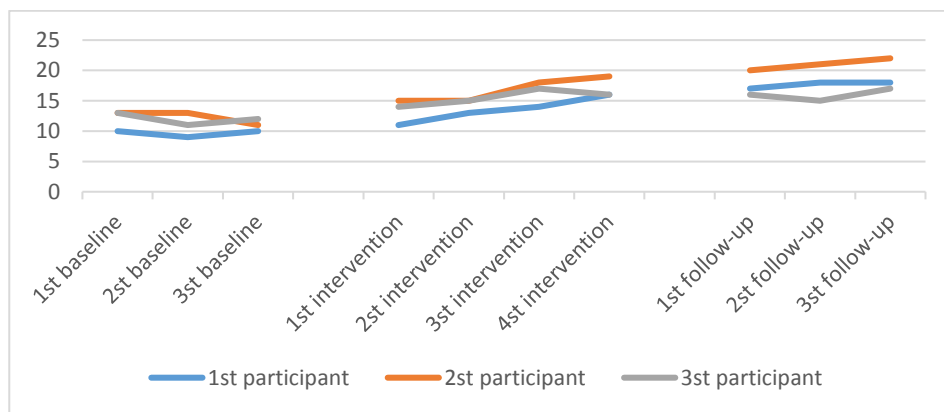


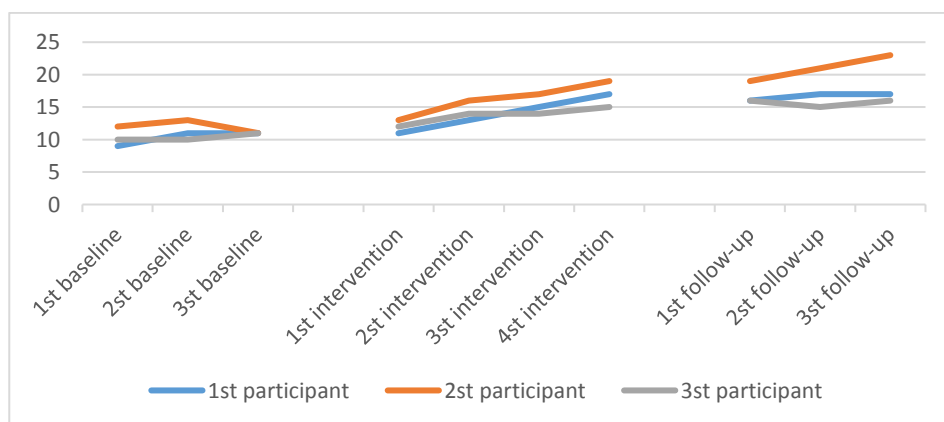
Figure 3 illustrates a notable upward trend in scores among all participants in both the mother's lifestyle based on sahmgozari approach questionnaire and the child's developmental expectations questionnaire during the intervention phase when compared to the baseline phase. This improvement and positive impact continue to persist during the follow-up phase. Additionally, Table 10 provides insight into the progression of participants' scores in the developmental expectations variable specifically within the domain of language acquisition, spanning from the baseline stage to the follow-up stage.

Table 10. The process of transformation of educational stages in 3 participants in the variable of evolutionary expectations in the linguistic-evolutionary domain

Intervention: Parenting based on the sahmgozari approach Educational Model				
	Participants	1 st	2 nd	3 rd
Point A (Baseline)		participant	participant	participant
	1 st	9	12	10
	2 nd	11	13	10
	3 rd	11	11	11
Point B (Intervention)				
	1 st Point	11	13	12
	2 nd Point	13	16	14
	3 rd Point	15	17	14

	4 th Point	17	19	15
	Stable variation index	14.07	20.50	1.9
Indexes				
	Total recovery rate	Δ0.53		
Follow-up				
	1 st	16	19	16
Follow up Phase	2 nd	17	21	15
	3 rd	17	23	16
Indexes	Stable variation index	3.47	38.45	45.62

As evidenced by the values exceeding 1.96 in Table 10, it is evident that the observed shifts in scores from the baseline phase to the intervention phase demonstrate significant and statistically meaningful results. Moreover, the overall improvement rate of 0.51 for the language exchange variable indicates a noteworthy educational achievement, aligning with Blanchard's viewpoint that a 50% enhancement represents educational success. Therefore, the obtained outcomes for the linguistic exchange variable hold clinical significance. Furthermore, considering the indices exceeding 1.96, it can be affirmed that the alterations in contribution variable scores remain stable during the follow-up stage, with statistically significant results. Additionally, the overall recovery rate of 50% for three participants holds clinical significance. Visual analysis of the baseline, intervention, and follow-up phases for the language exchange variable for these three participants is presented in Figure 4.



In Figure 4, it is evident that the participants' scores in both the questionnaire assessing the mother's lifestyle based on sahmgozari approach and the child's developmental expectations show an increase during the intervention phase compared to the baseline phase. Furthermore, Table 11 provides an overview of the progress of participants' scores in the transformational expectations variable within the social-emotional domains, from the initial baseline stage to the subsequent follow-up stage.

Table 11. The process of alteration of educational stages in 3 participants in the variable of developmental expectations in social-emotional domains

Intervention: Parenting based on the sahmgozari approach Educational Model				
	Participants	1 st participant	2 nd participant	3 rd participant
Point A (Baseline)	1 st	12	12	9
	2 nd	10	15	10
	3 rd	10	15	9
Point B (Intervention)	1 st Point	13	16	11
	2 nd Point	13	18	11
	3 rd Point	15	18	13
	4 th Point	16	21	15
Indexes	Stable variation index	13.07	10.50	0.9
	Total recovery rate	0.55		
Follow-up				
Follow up Phase	1 st	17	19	14
	2 nd	15	21	16
	3 rd	16	23	15

Indexes	Stable variation index	32.47	35.45	41.62
	Recovery rate	0.06	0.51	0.10
	Total recovery rate	0.54		

Based on the statistical analysis indicated in Table 11, it is apparent that the obtained indices surpass 1.96, thus allowing us to assert that the observed shift in grades from the baseline phase to the intervention phase holds considerable significance. The statistical significance of the results is further corroborated. Moreover, the overall advancement percentage for the language exchange variable stands at 0.51, a threshold that is deemed educational success according to Blanchard's perspective, whereby a 50% improvement is viewed as indicative of achievement in education. Hence, we can confidently assert that the outcomes obtained for the linguistic exchange variable hold clinical significance. Additionally, since the obtained indices exceed 1.96, it can be posited that the alteration exhibited in the scores of the social-emotional variable remains consistent during the follow-up stage, thereby yielding statistically significant results. Furthermore, the overall recovery percentage for the three participants is recorded at 50%, which can be deemed clinically substantial. To illustrate the visual trajectory of the language exchange variable for these three participants across the baseline, intervention, and follow-up phases, Figure 5 is presented.

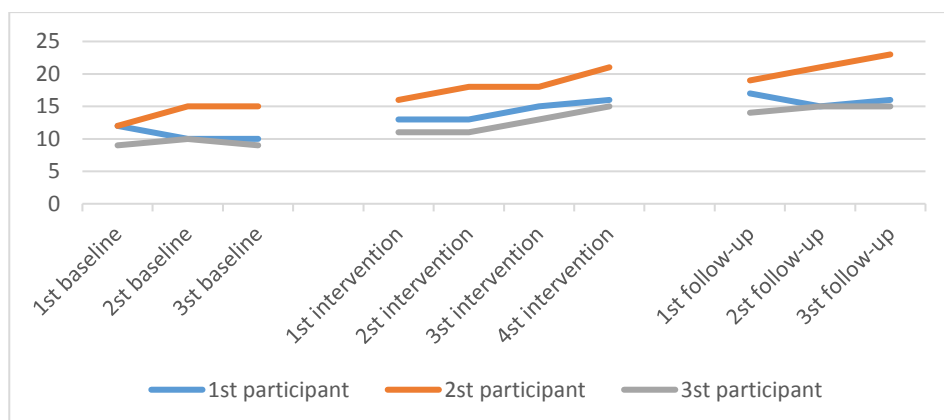


Figure 5. Visual evaluation of the educational model of parenting based on the sahmgozari approach based on the integration of the experiences of mothers with children

with symptoms ASD and the comprehensive program of integrated transformation on transformational expectations in the social-emotional domain.

In Figure 5, it is evident that the participants' scores for both the mother's lifestyle based on sahmgozari approach questionnaire and the child's developmental expectations have exhibited a notable increase during the intervention phase when compared to the baseline phase.

Discussion

The objective of the present study was to examine the efficacy of an educational model centered on parenting based on the sahmgozari approach, which integrates the experiences of mothers of children with symptoms ASD and a comprehensive program of integrated transformation. Specifically, the study aimed to assess the impact of this model on the mothers' lifestyle based on sahmgozari approach and the developmental expectations of their children. The findings indicate that the parenting based on the sahmgozari approach educational program, based on the integration of mothers' experiences and the comprehensive program of integrated transformation, effectively enhances the lifestyle based on sahmgozari approach of the mothers. This outcome supports previous research studies (Shahi et al., 2020; Moradi et al., 2020; Ghafari Humdin & Dehghan, 2018; Rashidzadeh et al., 2017; Nouri Sandiani et al., 2016; Chime, 2015; Abazari et al., 2015; Baghrian Khosrowshahi et al., 2014; Factor et al., 2019) indirectly. The observed result can be attributed to the intervention's incorporation of techniques such as validating mothers' experiences, fostering mindfulness, identifying and addressing emotions, improving emotional regulation, promoting effective coping strategies, and rectifying erroneous beliefs and thoughts regarding their children's condition. Furthermore, the program offers a fresh perspective to mothers, emphasizing the primacy of divine will in their thoughts, behaviors, and developmental processes throughout the journey of raising their children (Ismaili et al., 2018). Additionally, the implementation of new behavioral strategies helps mitigate self-harming behaviors associated with depression. Finally, enhanced communication and social support from individuals in their social circles enable mothers to adapt more effectively.

Moreover, the research findings demonstrate that the parenting based on the sahmgozari approach educational model, integrating the experiences of mothers of children with symptoms ASD and the comprehensive program of integrated transformation, significantly influences transformational expectations in the domains of physical development and motor skills. The educational model aligns with the premise, derived from the comprehensive program of integrated transformation, that young children possess untapped potential within various physical and motor dimensions, which can be facilitated through the creation of a supportive environment. In the context of children with symptoms ASD, a favorable environment implies that, despite the challenges faced by both mother and child, interventions grounded in the parenting based on the

sahmgozari approach program empower mothers to perceive these difficulties from a new perspective, positioning themselves within the realm of divine will. Consequently, mothers are encouraged to foster an environment where their children can enhance their physical-motor capacities through diverse exercises and games, thus meeting evolving developmental expectations in accordance with their growth trajectory (Greenspan & Wieder, 2013).

Additionally, this study demonstrates the effectiveness of the parenting based on the sahmgazari approach educational model, which integrates the experiences of mothers of children with symptoms ASD and the comprehensive program of integrated transformation, in shaping transformational expectations in cognitive domains. This finding indirectly corresponds with the research conducted by Arjmand Nia et al. (2021). Drawing from the comprehensive program of integrated transformation, the educational model aims to cultivate cognitive abilities such as effective expression of thoughts and emotions and logical, realistic, and ethical reasoning (Greenspan & Wieder, 2013). Within the cognitive domain, developmental milestones encompass attention, imagination, creativity, memory, critical thinking, exploration, and problem-solving (Greenspan & Wieder, 2013). Upon birth and throughout infancy, the primary task for the infant is to regulate physiological states and respond to sensory stimuli. As infants have yet to develop mechanisms for regulating touch, light, and sound, sensory stimulation can be overwhelming. Therefore, infants must acquire the capability to tolerate and regulate internal and external stimuli, ensuring positive experiences (Greenspan & Wieder, 2013). Another premise of this approach is that children learn through emotion-driven interactions facilitated by responsive caregiving that aligns with their developmental level and interests. Additionally, by reframing parenting challenges within a spiritual context, the supportive program encourages parents to assume greater responsibility and enhance their capacity for tolerance through acquired knowledge. This empowers them to play a pivotal role in the holistic development of their children, employing strategies such as promoting imaginative play (Prata et al., 2018). Moreover, caregivers can initiate conversations by asking direct questions and seeking the child's opinion and reasoning (Amin Yazdi, 2010).

Furthermore, this research underscores the effectiveness of the parenting based on the sahmgazari approach educational model, which integrates the experiences of mothers of children with symptoms ASD and the comprehensive program of integrated transformation, in shaping transformational expectations in the domain of language and communication. Infants and toddlers exhibit potential across various dimensions of language and exchange (Greenspan & Wieder, 2013). Human relationships significantly influence a child's personality, intelligence, and thinking. Among all factors influencing transformation, the child's relationships with parents and others wield the most significant impact on the child's social, emotional, and cognitive development (Greenspan & Wieder,

2013). As attachment and interest in human relations form, the child gradually realizes their ability to influence others. A child's smile elicits a reciprocal smile or vocal response from the mother. By accepting the challenges associated with their child's disorder and adopting a positive outlook, mothers can effectively fulfill their role before the child, promoting the strengthening and development of the child's communication and linguistic skills.

Conclusion

This study provides evidence that the educational model of parenting based on the sahmgozari approach, which integrates the experiences of mothers of children with symptoms ASD and the comprehensive program of integrated transformation, has a positive impact on transformational expectations within the social-emotional domains. This finding indirectly aligns with previous research (Pajareya & Nopmaneejumruslers, 2011). Infants and toddlers possess potential in various social-emotional dimensions (Greenspan & Wieder, 2013). Parent-child communication plays a crucial role in psychological development, where emotions observed in social interactions and relationships, such as anger and love, hold significant sway (Greenspan & Wieder, 2013). Through emotional functioning and innate abilities, children can effectively integrate their sensory, motor, and cognitive components within social interactions, leading to purposeful and meaningful behavior and communication (Greenspan & Wieder, 2013). Establishing emotional connections with children and engaging in active parenting characterized by love and care contribute to the creation of a safe, violence-free environment that fosters healthy development. Additionally, the spiritual strategies learned by mothers during contribution interventions act as mediators, facilitating the child's growth journey and ensuring that mothers attentively follow each developmental task with patience.

It is important to acknowledge the limitations of this research. Firstly, the study was conducted in the city of Isfahan and focused on a specific age group, necessitating caution when generalizing the findings. Moreover, the sample size consisted of only three individuals, as per the research methodology. While this sample size is suitable for assessing the initial effectiveness of the method, for broader generalizability, it would be preferable to conduct the study using other experimental research methods, encompassing different age groups and varying geographical locations. Finally, therapists specializing in autism and families with children on the autism spectrum can utilize the insights from this research to adapt interventions and enhance the quality of life for individuals affected by autism.

Disclosure Statements

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article. The authors received no financial support for the research, authorship, and/or publication of this article.

ORCID**0009-0006-4463-9262**

References

- Abazari, K., Malekpour, M., Qumrani, A., Abedi, A., Farmarzi, S. (2015). The effect of an intervention therapy program based on individual differences (Flortime) based on mothers' expressed emotion on the social skills of children with high-functioning autism. *Iranian Journal of Psychiatry and Clinical Psychology*, 23(3), 277-260. <https://doi.org/10.29252/nirp.ijpcp.23.3.260>
- Amin Yazdi, A. (2010). The development of a human being: a developmental model - individual differences based on communication. Research paper on the basics of education and training, 2(1), 109-126. Doi: 10.22067/FE.V2I1.10804
- Arjmandnia, A. A., Abbasi, F., Dadvar, E., Jafari, F., & Soleimani, S. (2021). The effect of music-therapy based on rhythmic activities on visual motor perception of children with autism spectrum disorder. *Journal of Pediatric Nursing*, 8(2), 23-31. <http://jpen.ir/article-1-524-fa.html>
- Baghrian Khosrowshahi, S., Pouretamad, H., Fathabadi, J., Fayzi, N., Mohammadi, M. (2014). Compiling the "Autism Integrated with Family" treatment program and comparing its effectiveness with "Little Bird" on reducing the parenting stress of parents of children with autism. *Research in rehabilitation sciences*, 12(1), 10-18. Doi: 10.22122/JRRS.V12I1.2425
- Bahrami, A., Mohagheghi, H., Yaqoubi, A. (2014). The effect of negative emotion management skill training on the anxious thoughts of parents of autistic children. *Quarterly Journal of Clinical Psychology Studies of Allameh Tabatabai University*, 7(26), 147-133. doi.org/10.22054/jcps.2017.7395
- Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. *Journal of Early Adolescence*, 11, 56 -95. <https://doi.org/10.1177/0272431691111004>
- Chime, N. (2015). The role of Iranian religious coping in predicting parenting stress of mothers with autistic children. *Knowledge and research in applied psychology*, 16(4), 61-68. <https://doi.org/10.1177/02724316911110>
- Crowell, J.A., Keluskar, J., Gorecki, A. (2019). Parenting behavior and the development of children with autism spectrum disorder. *Comprehensive Psychiatry*, 90, 21-29. doi: 10.1016/j.comppsy.2018.11.007.
- Cwik, J.C. (2021). Spiritual needs of people with autism spectrum disorder. In *Spiritual needs in research and practice*(pp. 265-280). Palgrave Macmillan, Cham. DOI:10.1007/978-3-030-70139-0_20
- Factor, R.S., Ollendick, T.H., Cooper, L.D., Dunsmore, J.C., Rea, H.M., Scarpa, A. (2019). All in the family: A systematic review of the effect of caregiver-administered autism spectrum disorder interventions on family functioning and relationships. *Clinical child and family psychology review*, 22(4), 433-457. DOI: 10.1007/s10567-019-00297-x

- Firnady, D.A., & Boediman, L.M. (2019). Floortime Approach to Increase Communication Skills for Children with Autism Spectrum Disorder and Intellectual Impairment. In 3rd International Conference on Intervention and Applied Psychology (ICIAP) and the 4th Universitas Indonesia Psychology Symposium for Undergraduate Research (UIPSUR 2019) 2020;(pp. 81-93). Atlantis Press. Doi:10.2991/assehr.k.201125.007
- Ghafari Humdin, F., Dehghan, M. (2018). Feasibility of the effectiveness of monotheistic integrated therapy on emotional regulation and vitality of mothers of mentally disabled children. *Islamic studies of women and family*, 7(13), 99-122. <https://civilica.com/doc/1596130>
- Greenspan, A., Wieder, S. (2013). *Mental health of infants and children*. Translated by Sidamir Amin-Yazdi, Shahrbanou Aali, and Ali Rajaei (published in the original language in 1933).
- Ismaili, M., Dehdest, K., Ghobadi, S., Asgari, M. (2018). A qualitative study of the pattern of participation in counseling with an Islamic approach and its role in the stability of the first, second, and third types of changes in clients. *Applied issues of Islamic education and training*, 5(4), 7-32. Doi: 10.52547/qaiie.5.4.7
- Ismaili, Shadab, Dehdasht K. (2021). Compilation and review of some psychometric features of the contributory lifestyle questionnaire. *Consulting Research Quarterly*; 22(86), 0-0. Doi: 10.18502/qjcr.v22i86.13548
- Lord, C., Brugha, T. S., Charman, T., Cusack, J., Dumas, G., Frazier, T., ... & Veenstra-VanderWeele, J. (2020). Autism spectrum disorder. *Nature reviews Disease primers*, 6(1), 1-23. <https://doi.org/10.1038/s41572-019-0138-4>
- Lord, C., Elsabbagh, M., Baird, G., & Veenstra-Vanderweele, J. (2018). Autism spectrum disorder. *The Lancet*, 392(10146), 508-520. Doi: [https://doi.org/10.1016/S0140-6736\(18\)31129-2](https://doi.org/10.1016/S0140-6736(18)31129-2)
- Mahmoudi, S., Rahmani Fard, F., Babri, F. (2019). Comparison of parenting styles of mothers among children with autism spectrum disorder and normal children. *The 9th National Conference on Sustainable Development in Educational Sciences and Psychology, Social and Cultural Studies*, Tehran. <https://civilica.com/doc/1239548>
- Mohammadi, F., Rakhshan, M., Molazem, Z., Gillespie, M. (2019). Parental competence in parents of children with autism spectrum disorder: A systematic review. *Investigacion y educacion en enfermeria*. Sep;37(3). <https://doi.org/10.17533/udea.iee.v37n3e03>
- Moradi, M., Ismaili, M., Karmighahi, M. (2020). Hope discourse model based on contribution. *Scientific Research Quarterly Journal of Psychological Sciences*, 21 (111), 427-460. Doi: 10.52547/JPS.21.111.437
- Nariman, H., Hassanzadeh, A., Qumrani, A., Omid Mazaheri, M. (2017). Investigating the relationship between depression, anxiety and stress with social support and

- life satisfaction in mothers of children with autism spectrum disorder. *Health System Research Journal*, (3), 199-205. Doi: 10.22122/jhsr.v16i3.3847
- Nouri Sandiani, S., Fallahzadeh, H., Pourabrahim, T., Nazarboland, N. (2016). The effectiveness of group meaning therapy on the meaning of life and family functioning in mothers with children with autism. *Family Research*, 14(1), 135-149. <https://sid.ir/paper/122414/fa>
- Pajareya, K., Nopmaneejumrulers, K. (2011). A pilot randomized controlled trial of DIR/Floortime™ parent training intervention for preschool children with autistic spectrum disorders. *Autism*. Sep, 15(5), 563-77. doi: 10.1177/1362361310386502.
- Prata, J., Lawson, W., & Coelho, R. (2018). Parent training for parents of children on the autism spectrum: A review. *Int J Clin Neurosci Ment Health*, 5, 3. DOI:10.21035/ijcnmh.2018.5.3
- Rahimi, S., Amin Yazdia, A., Afrooz, G. (2019). Investigating the relationship between the developmental function of the family, personality traits, and parenting stress of mothers with the emotional-functional development of boys with autism spectrum disorder. *Journal of Disability Studies*, 11, 200-200. <http://jdisabilstud.org/article-1-2046-fa.html>
- Rashidzadeh, A., Badri Gregari, R., Vahedi, S.H. (2017). The effect of teaching positive thinking skills based on spiritual resources and Islamic religious beliefs on resilience and psychological well-being of mothers with autistic children. *Applied issues of Islamic education and training*, 3(2), 59-86. Doi: 10.29252/qaiie.3.2.59
- Rogge, N., Janssen, J. (2019). The economic costs of autism spectrum disorder: A literature review. *Journal of Autism and Developmental Disorders*, 49(7), 2873-2900. doi: 10.1007/s10803-019-04014-z.
- Sanz-Cervera, P., Fernández-Andrés, I., Pastor-Cerezuela, G., Tárraga-Mínguez, R. (2018). The effectiveness of TEACCH intervention in autism spectrum disorder: a review study. *Papeles Del Psicólogo*, 39(1), 40-50. <https://doi.org/10.23923/pap.psicol2018.2851>
- Shaham, N., Kazemian Moghadam, K., Haroon Rshidi, H. (2021). The Effectiveness of Schema Therapy on Parental Stress and Psychological Hardiness of Mothers of Children with Autism Spectrum Disorder. *J Except Educ*, 3(163), 51-60. <http://exceptionaleducation.ir/article-1-2227-en.html>
- Shahi, Y., Arjamandania, A., Afrooz, G., Qavami, F. (2020). The effectiveness of the transformative relationship therapy program on improving mother-child interaction with autism spectrum disorder. *Psychology of exceptional people*, 12(45). Doi: 10.22054/jpe.2022.61968.2340
- Sharma, S.R., Gonda, X., Tarazi, F.I. (2018). Autism spectrum disorder: classification, diagnosis, and therapy. *Pharmacology & therapeutics*, 190, 91-104. doi: 10.1016/j.pharmthera.2018.05.007.

- Totsika, V., Hastings, R.P., Emerson, E., Berridge, D.M., Lancaster, G.A. (2011). Behavior problems at 5 years of age and maternal mental health in autism and intellectual disability. *Journal of Abnormal Child Psychology*, 39(8), 1137-1147. doi: 10.1007/s10802-011-9534-2.
- Vakilizadeh, N., Abedi, A., Mohseni Ajieh, A. (2017). Checking the validity and reliability of the Persian version of the Early Screening Questionnaire for Autism (ESAT-PV) in toddlers. *Rehabilitation Archive Quarterly*, 10;18(3),182-93. Doi: 10.21859/jrehab-1803182
- Vernhet, C., Dellapiazza, F., Blanc, N., Cousson-Gélie, F., Miot, S., Roeyers, H., & Baghdadli, A. (2019). Coping strategies of parents of children with autism spectrum disorder: A systematic review. *European child & adolescent psychiatry*, 28(6), 747-758. Doi: doi: 10.1007/s00787-018-1183-3.
- Wagner, R. E., Zhang, Y., Gray, T., Abbacchi, A., Cormier, D., Todorov, A., & Constantino, J. N. (2019). Autism-related variation in reciprocal social behavior: A longitudinal study. *Child development*, 90(2), 441-451. doi: 10.1111/cdev.13170
- Wetherby, A.M., Woods, J., Guthrie, W., Delehanty, A., Brown, J.A., Morgan, L ., ..., Lord, C. (2018). Changing developmental trajectories of toddlers with autism spectrum disorder: Strategies for bridging research to community practice. *Journal of Speech, Language, and Hearing Research*, 61(11), 2615-2628. Doi: 10.1044/2018_JSLHR-L-RSAUT-18-0028
- Yazidi, S., Shahrokhi, H., Tagwenejad Namin, S., Hassanzadeh, H., Qolipour, K., Rahimkhani, D., Qiyazi, A. (2023). Evaluation of the quality of services provided to children with symptoms ASD in northwest Iran. *Image of health [Internet]*,14(1), 70-82. doi: 10.34172/doh.2023.06
- Zebhi Zarchi, M. H., Saeidmanesh, M., & Fallah, R. (2023). Investigating the effectiveness of transcranial direct current stimulation on the expressive language of children with autism spectrum disorder. *Shenakht Journal of Psychology and Psychiatry*, 10(4), 96-106. Doi: 10.32598/shenakht.10.4.96