

FROM THERAPY TO PROFESSIONAL REALIZATION: DEVELOPMENT OF SOCIAL AND VOCATIONAL SKILLS IN CHILDREN WITH AUTISM SPECTRUM DISORDER

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ABSTRACT— *This study investigates the efficacy of art therapy and creative activities in fostering social, communication, and vocational skills in children and adolescents with autism spectrum disorder. Special emphasis is placed on how creative engagement can enhance independence, social inclusion, and readiness for adult life and career. This paper integrates a review of contemporary research with a qualitative case study analysis of the Bulgarian project “Art and Skok,” conducted within a real community context with 29 individuals with specific educational and social requirements.*

The investigation indicates that creative and art-based activities positively impact emotional expression, social interaction, adaptive behavior, and the acquisition of daily and occupational skills. Involvement in organized creative settings correlated with enhanced engagement, communication, self-assurance, and the development of fundamental work habits. The “Art and Skok” experience illustrates the possibilities of integrating therapeutic and productive activities within a nurturing environment that fosters personal development and social engagement.

The findings underscore the significance of multidisciplinary and practice-oriented methodologies that integrate therapy assistance with avenues for functional skill enhancement and prospective occupational inclusion for individuals with autism spectrum disorder.

Keywords: art therapy, autism spectrum disorder, social skills, vocational skills, social inclusion, adulthood

1. INTRODUCTUON

Autism spectrum disorder (ASD) is increasingly recognised as a lifelong, heterogeneous condition rather than a childhood-limited diagnosis. In Bulgaria, however, health and social policy has historically been focused on children, while adolescents and adults with ASD remain at the periphery of institutional attention. Turning 18 marks a critical threshold at which individuals lose access to the structured support of school education and child-oriented social services, entering a state that can be described as “systemic weightlessness”. The legal framework — the Law on Persons with Disabilities (2019), the Law on Social Services (2020) and the National Strategy for People with Disabilities 2021–2030 (2020) — formally guarantees the right to employment, education and social inclusion, yet in practice individual needs assessment remains strongly tied to a medical rather than a functional model, and access to specialised adult services is fragmented and concentrated mainly in larger cities. The Bulgarian evidence base is limited: the first systematic investigation of the needs and service access of families of children with developmental disorders in the country reported that approximately half of all caregivers experienced delays or difficulties in accessing medical, counselling or educational services (Barokova, Andreeva-Sapundzhieva, Andonova, Markova-Derelieva & Karpur, 2022).

The consequences of this gap are severe. Across the European Union, the ASDEU survey of

autistic adults, carers and professionals — which included Bulgaria among the participating countries — found that only 28% of autistic adults had accessed an employment service in the previous two years, and that fewer than a quarter of those who had one (24.1%) were satisfied with it (Micai et al., 2022). Longitudinal evidence from an eight-year cohort confirms that low and unstable labour-market participation persists well into adulthood (Bury, Hedley, Uljarević, Li, Stokes & Begeer, 2024), and recent syntheses place unemployment among autistic adults at between 50% and 71% internationally (Nishith et al., 2025). In Bulgaria, only around 24% of working-age persons with disabilities participate in the labour force, compared with approximately 73% of the general working-age population, illustrating the substantial barriers to employment experienced by people with disabilities (Posarac et al., 2022). Families consequently remain the primary—and often the only—providers of long-term care, bearing considerable emotional and economic costs (Mircheva, 2021).

Against this backdrop, art therapy and creative, activity-based interventions have been studied as a means of supporting the social, communicative and emotional development of children and adolescents with ASD. A recent systematic review of twelve randomised controlled trials reported significant reductions in overall ASD symptom scores in all three trials measuring them, and significant improvements in social communication and interaction in five of seven trials, alongside gains in motor skills and language ability (Wei, Lai & Ho, 2025). A parallel systematic review of creative arts therapies for autistic children reached broadly convergent conclusions while underlining the continuing methodological heterogeneity of the field (López-Escribano & Orío-Aparicio, 2024). These syntheses extend an earlier generation of reviews built largely on clinical case material (Schweizer, Knorth & Spreen, 2014) and on music-therapy trials (Geretsegger, Elefant, Mössler & Gold, 2014). What remains comparatively under-researched, particularly in the Bulgarian context, is whether and how such creative engagement translates into the more concrete, functional and vocational skills — responsibility, task completion, persistence, adherence to schedule — that underpin later employability.

The Bulgarian initiative “Tvorilnitsa Art i Skok” (“Art and Jump” creative workshop), founded within the Foundation “Pomosht na litsa s problemi v razvitiето” (“Help for Persons with Developmental Difficulties”), offers a practice-based example of bridging development of basic working skills through art practicing. Since its pilot implementation with 29 children and young people with special educational and social needs — including individuals placed in residential care alongside community peers — the programme has combined therapeutic art activities with product-oriented and team-based tasks in a supportive, real-world setting. The present study examines this initiative in order to (i) describe how children and young people with ASD and related developmental needs engage with structured creative and productive activities within “Art and Skok”, (ii) analyse parent- and guardian-reported indicators of responsibility, progress and persistence associated with this engagement, and (iii) relate these findings to the wider evidence base and to the institutional gap that adults with ASD in Bulgaria face after the age of 18.

2. MATERIALS AND METHODS

The study combines a qualitative case-study approach with a descriptive pilot survey, consistent with an exploratory design appropriate for early-stage, practice-based data; findings are positioned as pilot / exploratory rather than confirmatory. Data collection took place within “Tvorilnitsa Art i Skok” and for the purposes of the present survey-based analysis, parents/guardians of six children and young people who regularly attend the programme (aged 7–33 years, $M = 18.7$, $Mdn = 19$; five boys and one girl) completed a structured questionnaire. Reported diagnoses were heterogeneous — autism spectrum disorder with additional impairments, autism spectrum disorder, childhood autism, cerebral palsy, and attention-deficit/hyperactivity disorder — reflecting the inclusive,

mixed-needs profile of the “Art and Skok” group. All six children had participated in the programme for more than one year at the time of data collection.

Data were collected through a parent/guardian-completed questionnaire, “Most kam badeshteto” (“Bridge to the Future”), developed for the purposes of this pilot evaluation. The instrument combined: (a) categorical and Likert-type items (1–5 scale) addressing the child’s demonstrated responsibility toward tasks, completion of started activities, mode of skill acquisition, ability to independently repeat a learned task, observed progress over time, adherence to time and schedule, care for materials and the working space, and persistence; (b) two forced-choice items on perceived future employability and the type of working environment envisaged (independent, supported or sheltered); and (c) open-ended questions inviting parents to describe the most meaningful moment in their child’s participation, the factors they perceived as most supportive of development, and their own vision of their child’s professional future. The questionnaire closed with an informed-consent item for anonymised use of the data for research purposes, which all respondents completed.

Responses were collected online between January and February, 2026. Quantitative items were summarised using descriptive statistics (means, medians and response-category frequencies). Open-ended responses were examined through thematic analysis to identify recurring mechanisms and patterns across cases. Given the small sample size, the analysis is exploratory, and results are interpreted as indicative rather than conclusive.

Participation was voluntary, and all respondents gave informed consent for their anonymised data to be used for research purposes. No directly identifying information is reported in this paper; case references are anonymised (P1–P6).

3. RESULTS AND DISCUSSION

The results are presented in three parts: (3.1) a descriptive profile of the six participating children and young people together with their key indicator scores; (3.2) a summary of the quantitative and qualitative patterns observed across cases; and (3.3) a discussion that situates these findings within the wider evidence base, together with a proposed conceptual model and the limitations of the pilot data.

3.1 Participant profile

Table 1 presents the profile of the six children and young people whose parents/guardians completed the questionnaire, together with their scores on the three Likert-rated indicators (responsibility, observed progress and persistence, each on a 1–5 scale) and the future working environment envisaged for them.

ID	Age	Gender	Diagnosis	Main activities	Perceived nature of activity	Responsibility (1–5)	Completes started activities	Persistence (1–5)	Envisaged future work environment
P1	33	M	ASD + additional impairments	Art activities	As “work”	5	Almost always	4	Supported
P2	18	M	ASD	Art activities	Combination of all	3	Almost always	3	Supported
P3	7	F	Childhood autism	Art activities	As play	3	Sometimes	3	Independent
P4	20	M	Cerebral palsy	Product-making, teamwork	Combination of all	4	Almost always	5	Sheltered
P5	20	M	ASD	Product-making	Combination of all	5	Almost always	5	Supported
P6	14	M	ADHD	Art activities, product-making	As play	4	Almost always	4	Supported

Table 1. Profile of participants (P1–P6) and key parent/guardian-rated indicators

3.2 Quantitative and qualitative results

Mean scores were broadly similar across the three rated indicators: responsibility $M = 4.0$ (range 3–5), persistence $M = 4.0$ (range 3–5) and observed progress $M = 4.5$ (range 3–5); Figure 1 displays the individual scores per participant. In 83.3% of cases (5 of 6) parents rated observed progress at 4 or higher, and in 83.3% of cases the child was reported to “almost always” complete started activities. High task responsibility (rated 4 or 5) and high persistence (rated 4 or 5) were each reported for 66.7% of participants (4 of 6). All six parents/guardians considered that their child could take part in future work in some form, although five of six (83.3%) expected this to require a supported or sheltered environment, and only one respondent envisaged fully independent employment.

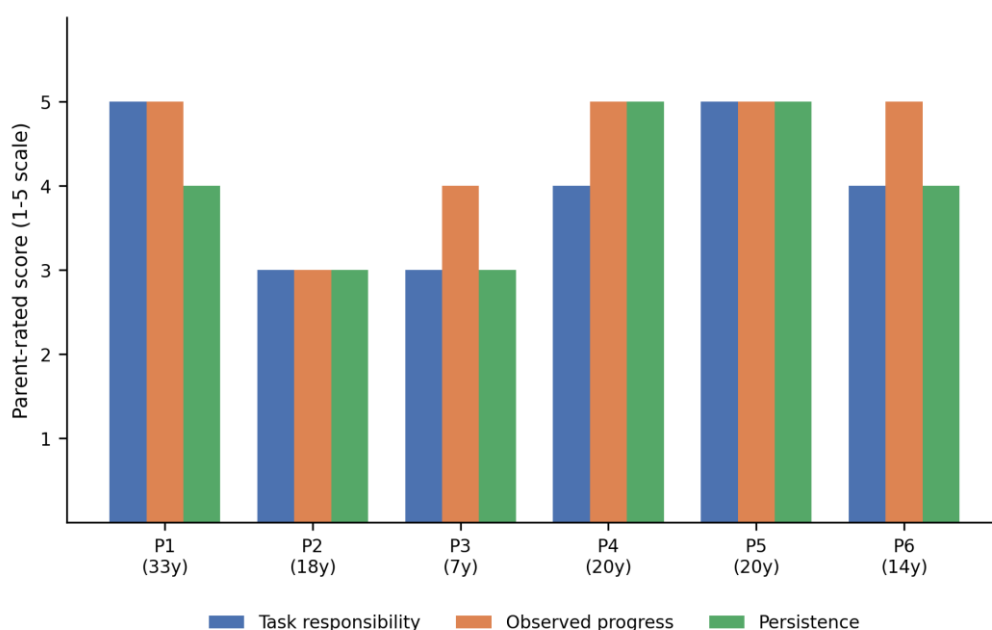


Figure 1. Parent/guardian-rated task responsibility, observed progress and persistence, by participant (1–5 scale)

3.3 Toward a conceptual model, and discussion

Thematic analysis of the open-ended responses converged on a small number of recurring mechanisms. Parents pointed to empowerment and increased self-confidence (“the empowerment motivates through increased self-esteem”); relational and atmospheric factors, such as the atmosphere itself and the “love and dedication” shown by the therapist, or the “wonderful attitude” of staff toward their child; the consistency of practice and regular contact with specialists; and the diversity of hands-on techniques acquired over time, including ceramics, pottery, pyrography and embroidery. Parents’ visions of their children’s professional futures ranged from concrete roles congruent with individual interests and strengths — software testing from home, work involving art or music, a placement in a social enterprise — to open uncertainty (“still wondering”), reflecting both the perceived potential and the persistent unpredictability that characterise the transition to adulthood for this group.

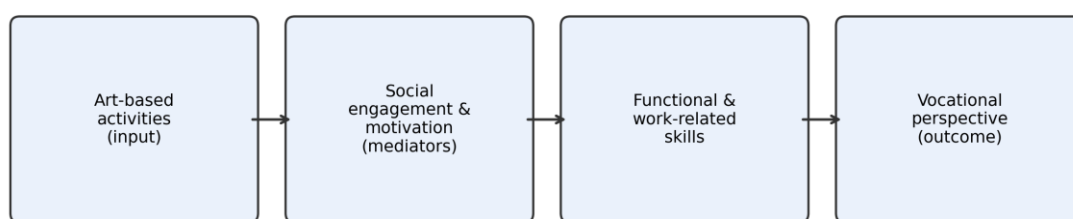


Figure 2. Proposed conceptual model: from art-based engagement to vocational perspective

Building on both the quantitative and qualitative patterns above, we propose a conceptual model — “Art → Social engagement → Functional skills → Vocational perspective” (Figure 2). The model distinguishes an input layer (a protected, supportive environment; regularity; structured tasks; availability of a specialist), intervention components (art activities, product-making, teamwork), mediating mechanisms (motivation and self-efficacy/“empowerment”; emotional security linked to atmosphere and staff attitude; executive functions such as following instructions and planning), short-term outcomes (responsibility, completion of started activities, adherence to schedule, care for materials), medium-term outcomes (more stable social engagement, sustained persistence, group participation) and a long-term outcome — a vocational perspective, ranging from supported and sheltered to independent employment, alongside social inclusion. Age, diagnostic profile, frequency of participation, family support and the degree of task adaptation are treated as moderators of this pathway.

These findings are broadly consistent with the international evidence reviewed in the Introduction. The pattern of high, or improving, task responsibility, completion and persistence mirrors the emotional-regulation and social-communication gains reported in the most recent systematic review of randomised trials of art therapy for children and adolescents with ASD (Wei, Lai & Ho, 2025). The gradual shift in how activities were perceived — from “play” toward “combination” and, for the longest-participating case, toward “work” — echoes the logic of graded, supported-employment models, in which functional readiness is built incrementally before or alongside placement; an umbrella review of 31 systematic reviews and meta-analyses covering 287 primary studies identified supported and customised employment approaches as among the best-evidenced vocational interventions for autistic people (Tincani et al., 2024). At the same time, the fact that five of six parents expect their child to need a supported or sheltered working environment underscores the persistent employment gap documented internationally (Bury et al., 2024; Nishith et al., 2025) and, more acutely, in the European service landscape, where only 28% of autistic adults surveyed across the EU had accessed an employment service in the previous two years and fewer than a quarter of those were satisfied with it (Micai et al., 2022).

4. LIMITATIONS

These results should be interpreted with caution. The sample is small ($n = 6$) and diagnostically heterogeneous; data rest on parent/guardian self-report rather than standardised instruments or direct observation; there was no pre-/post-test comparison; and all six children were recruited from a single programme. The findings are therefore indicative of patterns worth pursuing further rather than generalisable conclusions. A logical next step — consistent with the recommendation to position this line of work as an exploratory/pilot study for peer review — would be a longitudinal, mixed-methods design (e.g., baseline and two follow-up measurements) combining the present questionnaire with standardised measures of adaptive functioning and social skills, structured observation checklists, and triangulation across parent, specialist and, where feasible, self-report, applied to the full “Art and Skok” cohort.

5. CONCLUSION

The present pilot data, gathered within the “Art and Skok” programme, indicate that structured, art-based activities delivered in a supportive setting are associated with parent-reported gains in responsibility, task completion and persistence, and with a generally positive outlook on future employability — predominantly within supported or sheltered arrangements. Read alongside the broader national picture, these observations reinforce the following conclusions.

In Bulgaria, the transition to adulthood for people with ASD is a significant stage: beyond the age of 18, access to structured and specialized services reduces and the support is passed mostly to the family. The transition to adulthood is characterized by a “gap” in available services and programs that is fragmented, with varied levels of specialization, and insufficient focus on measurable functional and employment results. Services and individual practices exist, but systematic Bulgarian data from longitudinal mixed-methods studies evaluating the impact of art-based interventions on social and functional-occupational skills, in individuals with ASD in the transition to adulthood are needed.

In the Bulgarian context there are initiatives, which include art workshops as a tool for social rehabilitation and vocational guidance of the young people on the autism spectrum. This supports the potential of art-based models as bridges between therapy and functional participation.

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