DOI 10.22630/TIRR.2025.24.22

Michał Roman[1]✉, Marcin Pasek[2], Ewa Szczucka[1], Jolanta Grażyna Zuzda[3]

[1] Warsaw University of Life Sciences

[2] Gdansk University of Physical Education and Sport

[3] Bialystok University of Technology

Agritourism as a form of support for individuals with autism spectrum disorder

Abstract. Rural tourism can support autistic individuals through sensory-friendly settings, animal contact and nature-based activities that promote self-regulation, social interaction and sensory integration. Within health-oriented tourism, animal-assisted services offer flexible, goal-directed engagement tailored to individual needs. This article presents a case study of an inclusive agritourism facility in the Lubuskie region of Poland, illustrating how agritourism can combine therapeutic, educational and ecological functions. The study highlights the role of nature and animal interaction in enhancing emotional balance, communication and wellbeing for individuals on the autism spectrum. Findings indicate the strong therapeutic potential of rural environments and emphasise the shortage of Polish facilities adapted to neurodivergent visitors, pointing to the need for broader implementation of agrotherapeutic tourism practices.

Keywords: autism spectrum disorder, ASD, agritourism, rural tourism, agrotherapeutic tourism, animal-assisted therapy.

Introduction

Autism Spectrum Disorder (ASD) is a neurobiological condition characterised by difficulties in social interaction, communication and repetitive, stereotyped behaviours, such as rocking or hand movements, as well as restricted interests and a pronounced need for sameness. Co-occurring conditions such as anxiety, obsessive-compulsive, learning, eating, sleep and sensory processing disorders are also common (Arnold et al., 2013; Czelej et al., 2023). ASD usually manifests in early childhood and leads to impaired functioning in personal, social, educational and professional life (Diagnostic and Statistical Manual…, 2022).

Over 130 million children are born worldwide each year, about 250 per minute, and one in 160 is diagnosed with autism spectrum disorder. Around 67 million people globally are affected by ASD (Ang and MacDougall, 2022). The growing number of

Michał Roman ORCID: 0000-0003-3596-2587; Marcin Pasek ORCID: 0000-0001-6872-1697; Ewa Szczucka ORCID: 0000-0002-3764-311X; Jolanta Grażyna Zuzda ORCID: 0000-0001-7303-7531

✉ michal_roman@sggw.edu.pl

diagnoses highlights the need to expand services for neurodivergent individuals. Rural tourism, in particular, offers strong potential through its therapeutic and inclusive functions.

Agritourism farms as spaces supporting the activation of individuals on the autism spectrum

Civilisational changes threatening human wellbeing are increasingly analysed through the concepts of *nature-deficit syndrome*, described by Richard Louv (Bobik, 2023; Louv, 2024), *and naturalistic intelligence*, introduced by Gardner (2009). Both authors emphasise the importance of direct nature experiences for cognitive, emotional and social development, especially in childhood.

The therapeutic role of nature has long been recognised. Deangelis (2015) describes the *Second Nature* programme combining psychological methods with outdoor experiences to address trauma, depression and ADHD. Although not focused on autism, its success confirms the healing potential of natural environments, supporting further exploration of nature-based interventions for individuals with ASD.

Table 1. Selected research publications on agritourism farms for individuals with disabilities and special needs

Authors	Research focus	Journal	Year	Methods
Baum	Rural tourism potential	Eastern European Countryside	2011	Period: 1995-2009 Methods: descriptive statistical analysis, spatial visualisation
Pjerotić et al.	Sustainable tourism	Transformations in Business and Economics	2017	Period: 2008-2016 Method: comparative analysis
Sutherland et al.	Small-scale farming networks	Land Use Policy	2017	Period: 2014 Method: case study
Wadle	Domestic tourism & well-being	Journal of Tourism and Cultural Change	2017	Period: 2010-2011 Methods: interview, participant observation
Švagždienė et al.	Service quality in rural tourism	Transformations in Business and Economics	2020	Period: 2016 Methods: SERVQUAL, QUESC model
Roman et al.	Agritourism for people with ASD	Journal of Tourism and Regional Development	2024	Period: 2024 Method: case study

Source: own study based on: Baum (2011); Pjerotić et al. (2017); Sutherland et al. (2017); Wadle (2017); Švagždienė et al. (2020); Roman et al. (2024).

The relationship between humans and nature is most evident in rural areas, where leisure and therapy often overlap. The essence of agritourism lies in the interaction between visitors, the natural environment and farm hosts who live in harmony with it (Poczta, 2011). Natural and cultural landscapes shape tourist experiences through their multidimensional influence on wellbeing (Mikulska, 2008). As a form of agrotherapeutic tourism, agritourism combines recreation with the restorative effects of contact with animals, plants and the rhythm of nature (Roman et al., 2024). Farm stays can thus enhance sensory integration, social interaction and emotional balance in individuals with ASD while providing rest for their families.

The potential of agritourism for supporting people with special needs has been discussed in numerous studies. Table 1 presents selected research publications on agritourism farms dedicated to individuals with disabilities and developmental disorders.

Baum (2011) identified key factors shaping agritourism development, such as socioeconomic conditions, market structure and the balance between supply and demand. His research also showed that clustering benefits small-scale entrepreneurs. Other studies have highlighted complementary perspectives. Pjerotić et al. (2017) examined sustainable development challenges in rural tourism. Švagždienė et al. (2020) explored service-quality determinants across the Baltic states. Roman et al. (2024) demonstrated that Polish agritourism farms can provide therapeutic services for people with ASD. Collectively, these findings confirm that agritourism, through its natural, cultural and social dimensions, offers inclusive spaces integrating therapeutic, educational and recreational functions for neurodivergent individuals.

Types of therapies used in working with individuals with autism

A wide range of therapeutic methods has been developed to support the functioning and development of children with ASD. In addition to behavioural and biomedical interventions, several non-invasive approaches have proven effective, including art therapy, biofeedback, neurofeedback, Brain Gym®, logorhythmic therapy and Montessori methods. Growing attention is also given to therapies involving contact with animals and nature, which offer multidimensional benefits for emotional regulation, communication and sensory processing.

Art therapy uses creative expression to improve communication and self-awareness. Through music, movement, visual arts or theatre, individuals express emotions, reduce anxiety and develop non-verbal communication skills. Evidence shows that art therapy fosters emotional regulation and social engagement in children with ASD (Lipska and Leś, 2023).

Biofeedback and neurofeedback techniques aim to improve self-regulation of physiological processes. They are used in treating neurological, cardiovascular and stress-related disorders (Arnold et al., 2013; Carrobles, 2016) and, when combined with hypnosis, can further enhance relaxation and autonomic control (Sugarman et al., 2013).

Brain Gym® integrates movement and learning through simple exercises designed to stimulate both brain hemispheres. As a result, it enhances concentration, reduces stress and supports overall cognitive performance (Dennison, 2006; Roodbarani et al., 2024).

The therapeutic influence of natural environments on attention and stress regulation is explained by two complementary theories: Attention Restoration Theory (Kaplan and Kaplan, 1989) and Stress Reduction Theory (Ulrich et al., 1991). Both provide a scientific basis for nature-based interventions in therapy for individuals with ASD. Empirical evidence supports these theoretical assumptions, showing that contact with the natural environment significantly benefits individuals with autism. Outdoor activities involving physical and social challenges improve communication, motivation and cognition (Zachor et al., 2017). The psychological benefits of *green exercise* have also been confirmed, even in people with sensory sensitivity (Bishop et al., 2023). Nature-based tasks that stimulate curiosity and reduce anxiety are particularly valuable for child development (Byström et al., 2019). These findings highlight the therapeutic importance of rural environments in supporting emotional regulation, social interaction and overall wellbeing in individuals with ASD.

Mental health benefits of animal interaction in autism

Animals have long been used to support human health, with numerous studies confirming their positive impact on stress reduction and social functioning. Early therapeutic programmes in neurological and psychiatric settings demonstrated that contact with animals promotes relaxation and emotional recovery, with powerful results observed in individuals with ASD (Philippe-Peyroutet and Grandgeorge, 2018). Interactions with horses, dogs, cats, rabbits and other small animals enhance motivation and emotional balance, while hippotherapy additionally improves posture and communication skills (O'Haire, 2013; Czelej et al., 2023; Szczucka and Sokołowski, 2023). Recent Polish research highlights the potential of cow-assisted therapy, expanding the range of effective animal-assisted interventions (Szczucka, 2024). Studies from Western Europe show that care farms integrate such activities into daily routines, offering structured and meaningful participation for people with ASD (Elings, 2012; Ferwerda-van Zonneveld et al., 2012; Stępnik et al., 2020).

Including animals in therapy enhances motivation and emotional engagement, as they act as non-judgemental companions rather than authority figures. Their presence helps build trust, reduce anxiety and stimulate natural learning. Through everyday interaction, children develop communication, coordination and problem-solving skills while strengthening empathy and cooperation. These outcomes make animal-assisted approaches a valuable complement to traditional therapies.

Although these services require proper safety and hygiene management, their benefits clearly outweigh potential risks. Issues such as allergies or minor injuries can be prevented through established protocols and professional supervision (Bert et al., 2016). When responsibly implemented, animal-assisted interventions provide safe,

multisensory stimulation and emotional support. In rural and agritourism settings, they form a key component of agrotherapeutic tourism, promoting wellbeing, inclusion and quality of life for individuals on the autism spectrum.

Research methods

To identify the characteristics of a rural tourism facility offering services for individuals on the autism spectrum and to present an example of good practice in agrotherapeutic tourism, the case study method was applied. This qualitative approach is widely used in the social sciences, particularly in tourism, management and rural development research (Zaborek, 2007), as it allows for an in-depth examination of a single case in its real-life context.

The study focused on the Agroletnica agritourism farm, one of the few facilities in Poland adapted to the needs of individuals with ASD. Two in-depth interviews were conducted with a representative of the farm on 24 and 26 February 2025. The interviews aimed to explore the farm's approach to creating a sensory-friendly environment, identify available activities for people with autism and assess the potential health and wellbeing benefits of such stays.

The analysis also considered the farm's role as a rural therapeutic centre promoting environmental awareness and inclusivity. Combining qualitative data with direct observation enabled the identification of practices linking health promotion with sustainable rural development. The case study therefore provides practical insights into the integration of agrotherapeutic elements within rural tourism facilities.

Case study of a Polish rural tourism facility

Origins and characteristics of the facility

The case study concerns the Agroletnica agritourism farm located in the village of Letnica, in the municipality of Świdnica, Zielona Góra County, Lubuskie Province. The facility, owned by Elena and David James, occupies a property where agritourism has been practised for over two decades. Since July 2022, the owners have offered accommodation, meals and a range of recreational and educational activities. They are fluent in several languages, including English, German, French, Polish and Russian, which makes the place accessible to a broad group of visitors.

The idea to establish Agroletnica originated from the owners' desire to create a space where people on the autism spectrum and their families could relax in a calm, inclusive and sensory-friendly environment. The facility is adapted to guests with diverse needs, including individuals with mobility impairments and wheelchair users. Its offer is tailored primarily to those who value tranquillity, proximity to nature and interaction with animals. However, it may not be appropriate for people allergic to animal dander or insect stings.

Beyond its tourism function, Agroletnica reflects a broader vision of social inclusion and sustainable rural living. The owners plan to create a space where neurodivergent individuals can live and work independently under the supervision of qualified caregivers

and therapists. The aim is to build an environment tailored to residents' abilities and needs, enabling them to live with dignity. The initiative also responds to the concerns of parents seeking secure long-term care for their autistic children. Residents would engage in farm activities such as food production, gardening and handicrafts, gaining social and professional competences. This model fosters empowerment, security and a sense of belonging while reflecting the growing European trend of combining therapeutic and caregiving functions within sustainable rural settings.

The facility is managed in line with the principles of sustainable development, combining health-oriented tourism with ecological responsibility. Environmentally friendly solutions include the use of renewable energy, waste reduction and composting, as well as cooperation with local food suppliers to minimise transport emissions. Farming and animal husbandry follow ethical practices, ensuring respect for the environment and the welfare of animals. The surrounding area supports biodiversity through the maintenance of natural vegetation, the planting of pollinator-friendly species and the preservation of habitats for local wildlife. These activities enhance the ecological value of the site and contribute to regional nature conservation efforts.

Accessibility and elements supporting wellbeing

The health-promoting potential of Agroletnica results from its natural setting, high environmental quality and inclusive infrastructure. The facility is located in the Zielona Góra region at an altitude that ensures good air circulation and minimal pollution. Surrounded by pine forests, it offers clean air enriched with phytoncides, supporting respiratory health and reducing stress. Peaceful forest walks enable guests to experience sylvotherapy, which strengthens the immune system and promotes mental balance.

High water and food quality further contribute to the wellbeing of visitors. The farm uses deep groundwater, which is one of the cleanest in the region. Meals are prepared from organic and locally sourced ingredients, many grown on-site, including fruit, vegetables and honey from the farm's own beehives. Bee products, valued for their antibacterial and immune-boosting properties, form part of the apitherapeutic offer that allows guests to experience the calming atmosphere of beehives in a safe and controlled way.

Guests can spend time actively in contact with nature. Cycling, walking or mushroom picking in the surrounding forests promote physical fitness and relaxation. Interaction with animals – such as feeding or caring for them – has proven therapeutic effects, reducing anxiety and fostering empathy. Nearby facilities, including an alpaca farm and a riding centre offering hippotherapy, complement the health-oriented tourism offer available to Agroletnica's guests.

The facility also supports wellbeing through cultural and spiritual activities. It hosts harmonica workshops several times a year and provides access to a diverse book collection for relaxation and cognitive stimulation. Guests interested in spirituality can explore religious texts available in several languages, while the location offers convenient access to the cultural attractions of Zielona Góra.

Accessibility is one of the farm's defining features. The main building is fully adapted to the needs of people with physical disabilities. It includes step-free access, ramps and wide doorways, as well as ground-floor rooms for wheelchair users. Bathrooms are equipped with handrails and shower seats to ensure independence and safety. In recognition of its inclusive infrastructure, Agroletnica received the Good Practice Certificate from the Polish Tourist Organisation in the Barrier-free Tourism category. As one of the few agritourism facilities in the region adapted to people with disabilities, it plays a significant role in promoting accessible and health-oriented rural tourism.

Support and services for individuals on the autism spectrum

A stay at Agroletnica offers therapeutic and recreational value for people on the autism spectrum and their families. The owners, who are parents of two children with ASD, have a deep understanding of neurodivergent needs and have developed the farm's offer based on personal experience, consultations with specialists and cooperation with support organisations such as the *Nie z tej bajki* Association of Friends of Autistic People (Warsaw) and the *Dalej Razem* Autistic Association (Zielona Góra). This collaboration enables them to apply evidence-based recommendations and to share knowledge with other families and professionals.

The facility provides a sensory-friendly and judgement-free environment, ensuring comfort for families who often struggle to find suitable destinations. The surroundings are quiet, green and low in sensory stimuli, which helps prevent sensory overload and creates conditions for calm relaxation. The absence of typical playgrounds or crowded areas reduces the risk of overstimulation and allows guests to enjoy nature at their own pace.

Interaction with animals is an integral part of the experience. Guests can observe, feed or care for dogs, cats, bees and small farm animals. Such activities have proven benefits for emotional regulation and social engagement. Felinotherapy, in particular, provides calm, predictable contact, while the presence of dogs supports motivation and empathy. As part of agrotherapy, guests may also participate in simple farm tasks, gardening or fruit picking, which develop concentration, coordination and responsibility.

The owners also encourage the discovery and development of new interests in a safe environment. Due to the farm's rural location and low light pollution, guests can observe the night sky, participate in planned astronomy sessions and watch meteor showers. Others engage in wildlife observation, forest walks or exploring local cultural sites such as the Lubuskie Military Museum. For individuals with food selectivity, new flavours are introduced gradually and with respect for sensory sensitivities.

Looking to the future, the owners plan to expand the farm into a care and residential facility for adults with autism. The concept is based on creating a community where residents can live, work and develop according to their abilities. They would participate in daily farm activities, such as animal care, gardening and food processing, gaining both professional and social skills. Handicraft and beekeeping workshops would further support self-expression and independence.

This vision combines therapy, education and work in a way that promotes dignity, security and inclusion. By integrating agrotherapeutic activities with daily life, the planned care farm would not only provide long-term support for individuals with ASD but also enhance their sense of belonging and contribution to the rural community.

Conclusions

Modern therapy for children and adults with ASD requires an interdisciplinary approach involving cooperation between parents, educators, psychologists and physiotherapists. Agritourism, due to its natural and inclusive setting, offers favourable conditions for implementing diverse therapeutic approaches—many of which are only feasible in rural environments.

Animal-assisted therapies play an important role in rehabilitation, enabling support to be adapted to the specific preferences and abilities of individuals with ASD. Interaction with various animal species enhances sensory processing, social skills and motor coordination. At the same time, such activities must be conducted safely and adjusted to the needs of both participants and animals. In Western Europe, animal-assisted programmes are widely implemented on care farms and agritourism holdings, supporting children and adults alike. These initiatives confirm that people on the spectrum can actively engage in farm work, strengthening their social inclusion, self-esteem and vocational competences.

The case of Agroletnica shows that it is possible to create and successfully manage an agritourism farm combining health-oriented services with environmental responsibility. Inclusive design, ethical animal care and sustainable management can effectively support the wellbeing of people with special needs while protecting the natural environment.

The presented example demonstrates that rural tourism can act as a bridge between health promotion, social inclusion and ecological sustainability. By integrating these three dimensions, agrotherapeutic tourism provides a holistic model for rural development that benefits both people and nature, serving as a model for similar initiatives in Poland and abroad. Future research should focus on systematically evaluating the outcomes of agritourism and care farm stays for individuals with ASD and identifying the mechanisms through which these activities influence wellbeing. A deeper understanding of these processes will help optimise interventions and further strengthen the role of agrotherapeutic tourism within health-oriented rural development.

Literature

Ang, C. S., MacDougall, F. A. (2022). An Evaluation of Animal-Assisted Therapy for Autism Spectrum Disorders: Therapist and Parent Perspectives. Psychological Studies, 67(1), pp. 72-81. DOI: https://doi.org/10.1007/s12646-022-00647-w

Arnold, L. E., Lofthouse, N., Hersch, S., Pan, X., Hurt, E., Bates, B., Kassouf, K., Moone, S., Grantier, C. (2013). EEG neurofeedback for ADHD: Double-blind sham-controlled randomized pilot feasibility trial. Journal of Attention Disorders, 17(5), pp. 410-419. DOI: https://doi.org/10.1177/1087054712446173

Baum, S. (2011). The Tourist Potential of Rural Areas in Poland. Eastern European Countryside, 17, pp. 107-135. DOI: https://doi.org/10.2478/v10130-011-0006-z

Bert, F., Gualano, M. R., Camussi, E., Pieve, G., Voglino, G., Siliquini, R. (2016). Animal assisted intervention: A systematic review of benefits and risks. European Journal of Integrative Medicine, 8(5), pp. 695-706. DOI: https://doi.org/10.1016/j.eujim.2016.05.005

Bishop, C. S., Beale, J. T., Bruce-Low, S. (2023). The Autistic Experience of Exercising within Nature-Based Environments: An Interpretive Phenomenological Analysis. Physical Activity and Health, 7(1), pp. 115-131. DOI: https://doi.org/10.5334/paah.243

Bobik, B. (2023). Why is human contact with nature important? About the nature deficit syndrome in the young generation. KULTURA – PRZEMIANY – EDUKACJA, XII-XIII, pp. 160-175. DOI: https://doi.org/10.15584/kpe.2023.12.9

Byström, K., Grahn, P., Hägerhäll, C. (2019). Vitality from Experiences in Nature and Contact with Animals – A Way to Develop Joint Attention and Social Engagement in Children with Autism? International Journal of Environmental Research and Public Health, 16(23), 4673. DOI: https://doi.org/10.3390/ijerph16234673

Carrobles, J. A. (2016). Bio/neurofeedback. Clínica y Salud, 27(3), pp. 125-131. DOI: https://doi.org/10.1016/j.clysa.2016.09.003

Czelej, M., Gładysz, K., Szydłowska, J., Żuchnik, O., Król, O., Kwiatkowski, P., Kuczyńska, B., Kłos, A., Gieroba, K., Szydłowski, M. (2023). Hippotherapy as an accompaniment to therapy in children with autism. Journal of Education, Health and Sport, 13(1), pp. 263-269. DOI: https://doi.org/10.12775/jehs.2023.13.01.039

Deangelis, T. (2015). Moc przyrody. Charaktery, 2 (217), pp. 74-76.

Dennison, P. E. (2006). Brain Gym and Me: Reclaiming the Pleasure of Learning. Ventura, CA: Edu--Kinesthetics.

Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (2022). Washington, DC: American Psychiatric Association. DOI: https://doi.org/10.1176/appi.books.9780890425596

Elings, M. (2012). Effect of Care Farms. Scientific research on the benefits of care farms for clients. Wageningen: Plant Research International, Wageningen UR.

Ferwerda-van Zonneveld, R. T., Oosting, S. J., Kijlstra, A. (2012). Care farms as a short-break service for children with Autism Spectrum Disorders. NJAS – Wageningen Journal of Life Sciences, 59(1–2), pp. 35-40. DOI: https://doi.org/10.1016/J.NJAS.2012.01.001

Gardner, H. (2009). Inteligencje wielorakie. Nowe horyzonty w teorii i praktyce. Warsaw: Laurum.

Kaplan, R., Kaplan, S. (1989). The experience of nature: A psychological perspective. New York: Cambridge University Press.

Lipska, J., Leś, K. K. (2023). Art therapy for children with autism spectrum disorder. Current Neurology, 23(2), pp. 46-51. DOI: https://doi.org/10.15557/an.2023.0008

Louv, R. (2024). Ostatnie dziecko lasu. Jak ocalić nasze dzieci przed zespołem deficytu natury. Warsaw: Mamania.

Mikulska, T. (2008). Korzyści i bariery rozwoju agroturystyki w Polsce ze szczególnym uwzględnieniem województwa małopolskiego. In: I. Sikorska-Wolak (ed.). Ekonomiczne i społeczne aspekty rozwoju turystyki wiejskiej. Warsaw: Wydawnictwo SGGW, pp. 161-173.

O'Haire, M. E. (2013). Animal-Assisted Intervention for Autism Spectrum Disorder: A Systematic Literature Review. Journal of Autism and Developmental Disorders, 43(7), pp. 1606-1622. DOI: https://doi.org/10.1007/s10803-012-1707-5

Philippe-Peyroutet, C., Grandgeorge, M. (2018). Animal-assisted interventions for children with autism spectrum disorders: A survey of French facilities. People and Animals: The International Journal of Research and Practice, 1(1), 8.

Pjerotić, L., Delibasic, M., Joksiene, I., Griesiene, I., Georgeta, C. P. (2017). Sustainable Tourism Development in the Rural Areas. Transformations in Business & Economics, 6(3), pp. 21-30.

Poczta, J. (2011). Significance of touring-natural conditioning for agrifarms functioning. Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu, 157, pp. 883-893.

Roman, M., Kudinova, I., Niedziółka, A., Wojcieszak-Zbierska, M., Kawęcki, N., Szczucka, E. (2024). Agritourism farms as places of providing therapeutic services for people with autism spectrum disorder. Journal of Tourism and Regional Development, (22), pp. 107-120. DOI: https://doi.org/10.22630/tirr.2024.22.22

Roodbarani, M., Tagharrobi, Z., Sharifi, K., Sooki, Z., Zare, M. (2024). Influence of Brain Gym on children's behavioral problems with autism spectrum disorder: A randomized controlled clinical trial. Journal of Bodywork and Movement Therapies, 40, pp. 1248-1254. DOI: https://doi.org/10.1016/J.JBMT.2024.07.048

Stępnik, K., Wnęk, M., Kamińska, M. (2020). Model gospodarstwa opiekuńczego. Krakow: GROWID.

Sugarman, L. I., Garrison, B. L., Williford, K. L. (2013). Symptoms as Solutions: Hypnosis and Biofeedback for Autonomic Regulation in Autism Spectrum Disorders. American Journal of Clinical Hypnosis, 56(2), pp. 152-173. DOI: https://doi.org/10.1080/00029157.2013.768197

Sutherland, L. A., Madureira, L., Dirimanova, V., Bogusz, M., Kania, J., Vinohradnik, K., Creaney, R., Duckett, D., Koehnen, T., Knierim, A. (2017). New knowledge networks of small-scale farmers in Europe's periphery. Land Use Policy, 63, pp. 428-439. DOI: https://doi.org/10.1016/j.landusepol.2017.01.028

Švagždienė, B., Perkumienė, D., Grigienė, J., Bilan, S. (2020). Characteristics of service quality evaluation in rural tourism sector: case of the Baltic states (Lithuania, Latvia, Poland). Transformations in Business and Economics, 19(2A), pp. 495-510.

Szczucka, E. (2024). Providing cow-assisted therapy in the context of Polish realities. Journal of Tourism and Regional Development, (21), pp. 115-126. DOI: https://doi.org/10.22630/TIRR.2024.21.10

Szczucka, E., Sokołowski, M. (2023). Hipoterapia w leczeniu zaburzeń przetwarzania sensorycznego u dzieci. Poznań: Wydawnictwo Naukowe SILVA RERUM.

Ulrich, R. S., Simons, R. F., Losito, B. D., Fiorito, E., Miles, M. A., Zelson, M. (1991). Stress recovery during exposure to natural and urban environments. Journal of Environmental Psychology, 11(3), pp. 201-230. DOI: https://doi.org/10.1016/S0272-4944(05)80184-7

Wadle, H. C. (2017). Domestic tourism encounters in the Masurian lake district: multiple tourism moralities, reversible relationships, and social well-being in contemporary Poland. Journal of Tourism and Cultural Change, 15(2), pp. 136-151. DOI: https://doi.org/10.1080/14766825.2016.1260112

Zaborek, P. (2007). Studium przypadku jako metoda badawcza pracy doktorskiej. In: K. Kuciński (ed.). Doktoranci o metodologii nauk ekonomicznych. Warsaw: Szkoła Główna Handlowa w Warszawie, pp. 265-277.

Zachor, D. A., Vardi, S., Baron-Eitan, S., Brodai-Meir, I., Ginossar, N., Ben-Itzchak, E. (2017). The Effectiveness of an Outdoor Adventure Programme for Young Children with Autism Spectrum Disorder: A Controlled Study. Developmental Medicine & Child Neurology, 59(5), pp. 550-556. DOI: https://doi.org/10.1111/dmcn.13337