Eötvös Loránd Science University Faculty of Education and Psychology

Special Needs Education PhD Programme

PhD Dissertation Summary

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Clinical and psychosocial characteristics of people with autism spectrum disorder.

Investigation of bullying among adolescents.

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1. Introduction, presentation of the research topic

On the international fields of science the investigation of school bullying started in the seventies (Dóczi-Vámos, 2016). In Hungary the phenomenon of bullying started to receive significant attention in the beginning of the millennium (Buda, 2015). Initially, the researches of bullying focused only on the directly affected actors of aggression, the roots of scientific investigation can be found in jurisprudence and health sciences. The differences of school types related to bullying drew the intention of researchers over the phenomenon of bullying. According to the results of Hungarian studies, students of vocational schools („szakiskola") seem to be at significant risk of bullying (Földes & Lannert, 2009; Paksi, 2010).

The common manifestation of physical aggression among pupils with low academic performance and pupils in special education settings was described by Metzig and Schuster. It is noted, that the roles of victims and perpetrators cannot be sharply distinguished, according to the tendency, one can switch from one role to the other. Two cultural profiles can be identified existing in parallel, depending on if the school settings support aggression and maintain the overlap of the roles of victims and perpetrators or discourage the development of violence. The authors emphasize, that special education schools are at high risk of aggressiveness and school bullying (Metzig & Schuster, 2000).

Compared to the rich literature of school bullying among typically developing pupils, we still have significantly less knowledge about the phenomenon of insult against pupils with disabilities, while these children and adolescents tend to be extremely vulnerable (Kloosterman, Kelley, Craig, Parker & Javier, 2013). It might be worthwhile raising the attention to the possible risk of victimization among pupils with autism spectrum disorder, since the likelihood of poor or fewer peer relationships is high (Rowley et al., 2012). Reasonably, the goal of social and educational inclusion is strongly related to the phenomenon of bullying (Ábrahám, Stefanik & Őszi, 2018; Weiss & Fardella, 2018). Because of social communication deficits and difficulties of social interactions, pupils with autism spectrum disorder tend to be vulnerable within the peer group, placing them at high risk for being bullied by others (Kloosterman, et al., 2013). While males are more frequently diagnosed with autism spectrum disorder, studies suggest that in general males are more aggressive than females, which underlines the need of investigation on perpetration and victimization of children and adolescents with autism spectrum disorder (Montes & Halterman, 2007). Although previous studies suggest that students with autism spectrum disorder are primarily affected by being bullied, victimization

itself raises the likelihood of perpetration. Besides, the lack of widely-used intervention practices highlights the importance of further examinations (Montes & Halterman, 2007).

2. Theoretical background

Dan Olweus is known as the pioneer of spreading the term of bullying, the scientific examination of the phenomenon and taking the first steps toward systematic prevention and intervention. Olweus started to study the background of school bullying in the seventies in Norway and other Scandinavian countries and published the first definition of bullying in 1993, which was translated into Hungarian in 1999 (Dóczi-Vámos, 1997). According to his term „*bullying persists if the following criteria are present: a) aggressive behavior or intentional harmdoing b) which could be described by repetitiveness and persistence c) within the context of a disproportionate power relationship*" (Olweus 1999, p. 718). Olweus proposed a distinction between the direct and indirect forms of bullying. Direct bullying refers to face-to-face confrontations, while examples of indirect bullying are social exclusion and isolation (Olweus, 1999).

According to Little's frequently cited result, pupils diagnosed with Asperger-syndrome are four times more likely to be bullied compared to their typically developing peers (Little, 2001). The occurrence of bullying within this group of pupils might be interpreted with regard to the diagnostic features of autism spectrum disorder and its consequences.

Deficits of social skills, difficulties in communication, fewer friendships and poor peer relationships, impaired emotion regulation, co-existing internalizing problems, repetitive and stereotyped patterns of behavior could be identified as risk factors behind victimization. (Kloosterman et al., 2013; Nabuzoka, 2003; Rowley et al., 2012; Schroeder, Cappadocia, Bebko, Pepler & Weiss, 2014; Zeedyk, Rodriguez, Tripton, Baker & Blacer, 2014). Beside difficulties in social interactions, misunderstanding of peers' behavior can raise the risk of victimization (van Roekel, Scholte & Didden 2009). Co-existing ADHD might play a huge role in the involvment of bullying as well (Montes & Haltermann 2007; Sterzing, Shattuck, Narendorf, Wagner & Cooper, 2012). The atypical interest and behavior, the intensity of emotional and behavioral responses given to victimization might reinforce the actions of perpetrators, which increase the risk of bullying. Due to difficulties of social relationships, pupils with autism spectrum disorder might not be protected by supportive peer relationships, which leads to marginalization in peer groups (Cappadocia, Weiss & Pepler, 2011). Jargin emphasizes that there might be a bidirectional relationship between the autistic symptoms and

the risk of being bullied: the symptoms of autism may enhance the likelihood of bullying while school bullying or domestic violence would reinforce unusual behavior patterns.

3. The methodology of the research

The description of the sample: The sample frame is the group of individuals with autism spectrum disorder aged 14-16 (N=47). As comparison groups, we used the representative sample of pupils attending the 9th grade of secondary grammar schools of Budapest (N=944) (Matuszka, 2015) and the subsamples of pupils representing disabilities other than autism spectrum disorder (visual impairment, hearing impairment, physical impairment, learning disability, intellectual disability, bevioral disorders) (N=503) (Egri, 2016).

Applied measuring tools: The set of measuring tools consist internationally applied, validated questionnaires and interviews and was elaborated by the members of the Addictology Research Institute in 2009. The applied measuring methods within the content of the test battery: Attention Deficit Hyperactivity Disorder (ADHD) Rating Scale, Buss-Perry Aggression Questionnaire (BPAQ) Physical Aggression Subscale, Revised Olweus Bullying/Victimization Questionnaire (OBVQ), Strengths and Difficulties Questionnaire (SDQ), Reduced Aggression and Victimization Scale (RAVS), Positive Behaviour Scales, items of school problem and substance use of European Adolescent Assessment Dialogue (EuroADAD).

4. Main findings, answering the hypothesis

1.1. hypothesis: ***Presumably, the involvement in victimization of pupils with autism spectrum disorder is outstanding compared to typically developing pupils and pupils with other disabilities. It may be hypothesized there is a difference between the victimization rate among pupils with autism spectrum disorder, typically developing pupils and pupils with other disabilities.***

OBVQ-Victimization Scale was applied to measure the potential difference of involvement in victimization among the different subsamples. No significant differences were found. (Kruskal-Wallis-test, p=0,141).

According to the results of RAVS-Victimization Scale, significant differences were found among the subgroups (Kruskal-Wallis-test, p=0,020). In order to determine which groups are different from others, post-hoc testing was conducted, significant difference was found only between the scores of typically developing pupils and pupils with behavioral disorders (Kruskal-Wallis post hoc test, p=0,027).

Overall, regarding victimization no significant difference was observed between pupils with autism spectrum disorder and other subgroups. Consequently, the hypothesis cannot be confirmed.

1.2. hypothesis: ***Presumably, the involvement in perpetration of pupils with autism spectrum disorder is slight compared to typically developing pupils and pupils with other disabilities. It may be hypothesized there is a difference between the victimization rate among pupils with autism spectrum disorder, typically developing pupils and pupils with other disabilities.***

OBVQ-Bullying Scale was applied to measure the potential difference of involvement in perpetration among the different subsamples. Significant differences were found among the subgroups (Kruskal-Wallis-test, $p<0,001$). In order to determine which groups are different from others, post-hoc testing was conducted. Only the scores of pupils with behavioral disorders differs significantly from the scores of pupils with autism spectrum disorder (Kruskal-Wallis post hoc test, $p=0,009$).

Applying the RAVS-Aggression Scale, significant differences were found among scores of the subgroups (Kruskal-Wallis-test, $p<0001$,) Post hoc testing was conducted to determine which groups are different from others. Similarly to the first results, only the scores of pupils with behavioral disorders differs significantly from the scores of pupils with autism spectrum disorder (Kruskal-Wallis post hoc test, $p<0,001$).

In conclusion, concerning pupils with autism spectrum disorder significant difference was found only in comparison with students with behavioral disorders but not with other subsamples. It means the hypothesis cannot be confirmed.

2. hypothesis: ***Presumably, within the subsample of pupils with autism spectrum disorder, positive correlation could be found between the severity of ADHD symptoms and the involvement in perpetration.***

Based on the global items of OBVQ subgroups of victims, perpetrators and perpetrator-victims were distinguished within the sample of pupils with autism spectrum disorder. Regarding the scores of ADHD-RS-Attention Deficit Subscale no significant difference was found between the subgroups of perpetrators and non-perpetrators (Mann-Whitney-test, $p=1$). Similarly, applying ADHD-RS-Hyperactivity/Impulsivity Subscale no significant differenc was found between perpetrators and non-perpetrators (Mann-Whitney-test, $p=0,181$).

Beside the global items of OBVQ, the Bullying Scale of the measuring tool was applied to test the hypothesis. Significant correlation was not found either between the scores of ADHD-RS-Attention Deficit Subscale and OBVQ-Bullying Scale (Spearman-correlation, p=0,798, rho=-0,039), or between the scores of ADHD-RS-Hyperactivity/Impulsivity Subscale and OBVQ-Bullying Scale (Spearman correlation, p=0,191, rho=0,198). p=0,906, rho=0,018).

It was also examined, if there is significant correlation between the scores of SDQ-Hyperactivity Subscale and OBVQ-Bullying Scale, but no significant correlation was identified (Spearman-correlation, p=0,906, rho=0,018).

Applying the scores of ADHD-RS-Attention Deficit Subscale and RAVS-Aggression Scale, no significant correlation was found (Spearman-correlation, p=0,993, rho=0,001). However, between the scores of ADHD-RS Hyperactivity/Impulsivity Subscale and RAVS-Aggression Scale tendentious correlation was found (Spearman-correlation, p=0,057, rho=0,289).

Similarly to most of our results, no significant correlation was identified between the scores of SDQ-Hyperactivity Subscale and RAVS-Aggression Scale (Spearman-correlation, p=0,624, rho=0,077).

Since our measurements did not prove the relationship between the severity of ADHD symptoms and the involvement in perpetration, the hypothesis can not be confirmed.

3. hypothesis: ***Presumably, the poor quality of peer relationships is in relationship with higher rates of victimization within the subsample of pupils with autism spectrum disorder.***

Significant positive correlation was found between the scores of SDQ-Peer Relationship Problems Subscale and RAVS-Victimization Scale (Spearman-correlation, p=0,046, rho=0,303).

While tendentious negative correlation was found between receiving positive behavior and the scores of RAVS-Victimization Scale (Spearman-correlation, p=0,085, rho=-0,262), no correlation was identified between presenting positive behavior and the scores RAVS-Victimization Scale (Spearman-correlation, p=0,707, rho=-0,059).

Surprisingly, no significant correlation was detected between the scores of SDQ-Peer Relationship Problems Subscale and OBVQ-Victimization Scale (Spearman-correlation, p=0,183, rho=0,205).

Furthermore the scores of OBVQ-Victimization Scale did not correlate either with receiving positive behavior (Spearman-correlation=0,182, rho=-0,208), or presenting positive behaviour (Spearman-correlation=0,720, rho=-0,057).

While applying RAVS-Victimization Scale there seem to be a link between the severity of peer relationship problems and victimization, measurements based on OBVQ-Victimization Scale show an entirely different picture. Receiving positive, prosocial behavior from peers seem to have a relationship with victimization (tendentious but not significant correlation) according to the results of RAVS-Victimization Scale but not OBVQ-Victimization Scale. Seemingly, how pupils with autism spectrum disorder present positive and prosocial behavior toward their peers does not affect victimization. Accordingly, the hypothesis is partially confirmed

4.1. hypothesis: ***Presumably there is a difference in the frequency of alcohol consumption comparing pupils with autism spectrum disorder to typically developing pupils and pupils with other disabilities. It may be hypothesized that pupils with autism spectrum disorder tend not to consume alcohol frequently and heavily.***

In order to test the hypothesis, the following question of the test battery was used: „How often do you drink alcohol?". Significant difference was found between the subgroups (Kruskal-Wallis-test, $p<0,001$). In order to determine which groups are different from others, post-hoc testing was conducted. From the perspective of pupils with autism spectrum disorder significant difference was found in comparison with typically developing pupils (Kruskal-Wallis post hoc test, $p<0,001$), pupils with behavioral disorders (Kruskal-Wallis post hoc test, $p<0,001$), pupils with learning disabilities (Kruskal-Wallis post hoc test, $p=0,009$) and pupils with physical impairment (Kruskal-Wallis post hoc test, $p=0,026$).

The self-reported frequency of being drunk was tested by the following question: „How many times have you been drunk?" Since in some cases not numerical data was received, we recoded the responses into dichotomous form. Chi-square test was conducted in order to determine the frequency of being drunk within the subsamples. 88,63% of the pupils with autism spectrum disorder (N=39) have never been drunk (N=39) and only 11,36% of the subsample (N=5) have ever got drunk. The proportion of those adolescents who have never been drunk is the highest within the subsample of pupils with intellectual disability, which means that none of them have ever got drunk (N=21). Only this subsample seems to be less at risk of getting drunk compared to pupils with autism spectrum disorder.

Since pupils with autism spectrum disorder differs significantly from most of the subgroups regarding the frequency of alcohol consumption and the self-reported tendency of getting drunk doesn't seem to be severe, the hypothesis is confirmed.

4.2. hypothesis: ***Presumably, there is a difference in the frequency of smoking comparing pupils with autism spectrum disorder to typically developing pupils and pupils with other disabilities. It may be hypothesized that pupils with autism spectrum disorder tend not to smoke frequently.***

In order to test the hypothesis, the following question of the tesbattery was used: „How often do you smoke?". Significant difference was found between the subgroups (Kruskal-Wallis-test, $p<0,001$). In order to determine which groups are different from others, post-hoc testing was conducted. From the perspective of pupils with autism spectrum disorder significant difference was found in comparison with typically developing pupils (Kruskal-Wallis post hoc test, $p<0,001$), pupils with behavioral disorders (Kruskal-Wallis post hoc test, $p<0,001$), pupils with learning disability (Kruskal-Wallis post hoc test, $p<0,001$) and pupils with hearing impairment (Kruskal-Wallis post hoc test, $p=0,041$).

Since pupils with autism spectrum disorder differs significantly from most of the subgroups regarding the frequency of smoking, the hypothesis is partially confirmed.

5. hypothesis: ***Presumably, positive correlation can be found between the trait aggression of pupils with autism spectrum disorder and their involvement in perpetration.***

Significant positive correlation was found between the scores of BPAQ.Physical Aggression Subscale and RAVS-Aggression Scale (Spearman-correlation, $p=0,027$, $rho=0,334$).

Similarly, significant positive correlation was found between the scores of BPAQ-Physical Aggression Subscale and OBVQ-Bullying Scale (Spearman correlation, $p=0,005$, $rho=0,408$).

Consequently, the higher rate of trait-aggression is in relationship with involvement in perpetration. The hypothesis is confirmed.

6. hypothesis: ***Presumably, positive correlation can be found between the severity of internalizing symptoms and involvement in victimization among pupils with autism spectrum disorder.***

No significant correlation was found between the scores of SDQ-Emotional Symptoms Subscale and RAVS-Victimization Scale (Spearman-correlation, $p=0,653$, $rho=-0,070$).

Similarly, no significant correlation was detected between the scores of SDQ-Internalizing Subscale and RAVS-Victimization Scale (Spearman-correlation p=0,397, rho=0,131).

As could be expected, no significant correlation was identified between the scores of SDQ-Emotional Symptoms Subscale and OBVQ-Victimization Scale. (Spearman-correlation, p=0,992, rho=-0,001).

Furthermore, no significant correlation was found between the scores of SDQ-Internalizing Subscale and OBVQ-Victimization Scale (Spearman-correlation, p=0,445, rho=0,118).

All measurements considered, the severity of internalising symptoms seem not relate to the involvement in victimization. The hypothesis is not confirmed.

5. Summary, practical implications of the research

One of the most relevant new element in the current research is the comparison of pupils with autism spectrum disorder with typically developing pupils and pupils with disabilities other than autism spectrum disorder regarding school bullying. Concerning the research design, wider context of bullying was taken into account, different measurement tools were collected to study substance use-related problems, internalizing symptoms and symptoms of ADHD as well. Internationally used, validated measurement tools were selected to the final test battery.

Concerning bullying prevention and intervention it may be expedient to target not only bullies and victims but also the other actors of the complex process following a system approach. The support of social communication skill development is essential, but it is not less important to widen the perspective of typically developing peers about autism. Effective prevention and intervention could be achieved only by well-organized cooperation. In order to design programmes to prevent school bullying and substance abuse, the spectrum approach should be followed, that contributes to take individual differences and heterogeneity of autism into account. The consequences of already existing clinical practices could be applied to lay down the principles of prevention of substance abuse. Nevertheless, the need of efficiency studies of prevention programs is unquestionable.

Bibliographical references in the thesis

Buda M. (2015): *Az iskolai zaklatás*. Debrecen: Debreceni Egyetem Kiadó.

Cappadocia, M. C., Weiss, J. A., & Pepler, D. (2012): Bullying Experiences Among Children with Autism Spectrum Disorders. *Journal of Autism and Developmental Disorders*, *42*(2), 266-277.

Dóczi-Vámos G. (2016): Az iskolai erőszak és zaklatás megelőzésére és visszaszorítására irányuló beavatkozási programok metaelemzése. *Neveléstudomány*, *4*(2), 67-79.

Dóczi-Vámos G. (2017): Az iskolai agresszió fogalmi köre – egy lehetséges rendszerezés. *Neveléstudomány*, *5*(4), 68-80.

Földes P., & Lannert J. (2009): Az iskolai agresszió arcai: tények és teendők. *Új Pedagógiai Szemle*, *59*(11), 3-16.

Egri T. (2016): Agresszió az iskolában. Bullying a fogyatékos tanulók körében (Doctoral (PhD) thesis). Eötvös Loránd Tudományegyetem Pedagógiai és Pszichológiai Kar, Budapest.

Kloosterman, P. H., Kelley, E. A., Craig, W. M., Parker, J. D. A., & Javier, C. (2013): Types and experiences of bullying in adolescents with an autism spectrum disorder. *Research in Autism Spectrum Disorders*, *7*(7), 824-832.

Little, L. (2001): Peer victimization of children with Asperger spectrum disorders. *Journal of the American Academy of Child and Adolescent Psychiatry*, *40*(9), 995-1006.

Matuszka B. (2015): Egyes internalizációs és externalizációs tünetek vizsgálata a szerhasználati problémák kialakulása szempontjából veszélyeztetett serdülők és fiatal felnőttek körében (Doctoral (PhD) thesis). Semmelweis Egyetem, Budapest.

Metzig, K., & Schuster, M. (2010): Agresszió az iskolában. Elméleti háttér, előfordulás, beavatkozás és megelőzés. In: Hárdi I. (szerk.): *Az agresszió világa* (pp. 223-250). Budapest: Medicina Könyvkiadó.

Montes, G., & Halterman, J. S. (2007): Bullying among children with autism and the influence of comorbidity with ADHD: a population-based study. *Ambulatory Pediatrics*, *7*(3), 253-257.

Nabuzoka, D. (2003): Teacher ratings and peer nominations of bullying and other behavior of children with and without learning difficulties. *Educational Psychology*, *23*(3), 307–321.

Olweus, D. (1999): Az iskolai zaklatás. *Educatio*, *8*(4), 717-739.

Paksi B. (2010): Az iskolai agresszió előfordulása és intézményi percepciója. *Új Pedagógiai Szemle*, *60*(1-2), 119-134.

Rowley E., Chandlar S., Baird G., Simonoff E., Pickles A., Loucas T., & Charman T. (2012): The experience of friendship,victimization and bullying in children with an autism spectrum disorder: Associations with child characteristics and school placement. *Research in Autism Spectrum Disoders*, *6*(3), 1126-1134.

Schroeder J. H., Cappadocia M. C., Bebko J. M., Pepler D. J., & Weiss J. A. (2014): Shedding Light on a Pervasive Problem: A Review of Research on Bullying Experiences Among Children with Autism Spectrum Disorders. *Journal of Autism and Developmental Disorders*, *44*(7), 2011-2018.

van Roekel E., Scholte R. H., & Didden R. (2010): Bullying among adolescents with autism spectrum disorders: prevalence and perception. *Journal of Autism and Developmental Disorders*, 40(1), 63-73.

Zeedyk S. M., Rodriguez G., Tripton L. A., Baker B. L., & Blacer J. (2014): Bullying of youth with autism spectrum disorder, intellectuel disability, or typical development: Victim and parent perspectives. *Research in Autism Spectrum Disorders*, *8*(9), 1173-1183.

Publications of the author

I. Conference publications and conference presentation

Bánszky N., Egri T., Sallay M., Matuszka B., Marjai K., & Gerevich J. (2012): Iskolai agresszió és szerhasználat. Magyar Pszichológiai Társaság XXI. Országos Tudományos Nagygyűlése Kivonatkötete p. 119-120.

Egri, T., Bácskai, E., Marjai, K., Matuszka, B., & Gerevich, József (2015): Segítõ szakemberek körében végzett kutatás az iskolai agresszió problémájáról. A Magyar Pszichiátriai Társaság XIX. Vándorgyűlése : A szinapszistól a szintézisig: Absztraktkötet. p. 18.

Egri, T., Bácskai, E., Marjai, K., Matuszka, B., & Gerevich, J. (2016): Agresszió, viktimizáció megnyilvánulásai tipikusan és atipikusan fejlõdõ tanulók szegregált és integrált oktatási intézményében. Magyar Pszichológiai Társaság XXV. Országos Tudományos Nagygyűlése Kivonatkötet p. 47.

Egri, T., Bácskai, E., Marjai, K., Matuszka, B., & Gerevich, J. (2016): Agresszió, viktimizáció megnyilvánulásai tipikusan és atipikusan fejlődő tanulók szegregált és integrált intézményeiben. Magyar Pszichiátriai Társaság XX. Vándorgyűlése. A pszichiátria jövője - utazás térben és időben: Absztraktkötet. p. 31-32.

Egri T., Bácskai E., Matuszka B., Marjai K., Bánszky N., Sallai M., & Gerevich J. (2012): Szerhasználat, viktimizáció és iskolai agresszió fogyatékos és nem fogyatékos tanulók körében. Magyar Pszichológiai Társaság XXI. Országos Tudományos Nagygyűlése Kivonatkötete p. 121-122.

Egri T., Bácskai E., Matuszka B., Marjai K., & Gerevich J. (2012): Kísérleti jellegű komplex prevenciós program tanulásban akadályozott tanulók és szakiskolás diákok körében. Psychiatria Hungarica Supplement, 2012; 26. p. 39.

Egri T., Bácskai E., Matuszka B., Marjai K., & Gerevich J. (2013): Szerhasználattal összefüggő személyiségvonások fogyatékos tanulók körében. Magyar Pszichológiai Társaság XXII. Országos Tudományos Nagygyűlése. Kapcsolataink világa Kivonatkötet. p. 202.

Gerevich J., Egri T., Bácskai E., Matuszka B., & Marjai K. (2013): Szerhasználattal összefüggő személyiségvonások feltérképezése könnyen érthető kérdőívcsomag segítségével intellektuális fogyatékossággal élő tanulók körében. Magyar Pszichológiai Társaság XXII. Országos Tudományos Nagygyűlés. Kapcsolataink világa Kivonatkötet. p. 203.

Marjai K., Bacsák D., & Bittermann É. (2015): Belső alkoholstratégia – egy intézményi szintű koncepció kidolgozásának előzményei, folyamata és eredményei (workshop). Magyar Pszichológiai Társaság XXIV. Országos Tudományos Nagygyűlése. Lélek-net a léleknek: Az ember a változó technikai közegek világában Kivonatkötet. p. 272.

Marjai K., Egri T., & Gerevich J. (2013): Vonás-agresszió és autizmus spektrum zavar. Magyar Pszichiátriai Társaság XIX. Vándorgyűlése. A szinapszistól a szintézisig: Absztraktkötet. p. 42.

Marjai K., Egri T., Matuszka B., & Gerevich J. (2013): Pszichoaktív szerhasználati sajátosságok autizmussal élő személyek körében. Magyar Pszichológiai Társaság XXII. Országos Tudományos Nagygyűlése. Kapcsolataink világa Kivonatkötet. p. 204.

Matuszka B., Bácskai E., Egri T., Marjai K., & Gerevich J. (2013): Az alkohol és a nikotin együttes használatával összefüggő személyiségvonások és pszichiátriai tünetek budapesti serdülők normatív mintáján. Magyar Pszichológiai Társaság XXII. Országos Tudományos Nagygyűlése. Kapcsolataink világa Kivonatkötet. p. 201.

Sallai M., Bánszky N., Egri T., Matuszka B., Marjai K., & Gerevich J. (2012): Fogyatékos serdülők érzelmi- és viselkedési problémáinak vizsgálata az iskolai zaklatás fényében. Magyar Pszichológiai Társaság XXI. Országos Tudományos Nagygyűlése Kivonatkötete p. 120-121.

II. Studies published in journals

Marjai K. (2015): Autism spectrum disorders: phenotypes, mechanisms and treatments. Marion Leboyer, Pauline Chaste (eds.). *Psychiatria Hungarica, 30*(3). 339-343.

Marjai K. (2019): Autizmusban érintett tanulók körében alkalmazható anti-bullying megközelítés egy szakirodalmi áttekintés tükrében. *Acta Medicinae et Sociologica, 10*(28), 95-109.

III. Book chapters

Marjai K. (2020): Antibullying stratégia autizmusban érintett tanulók kapcsán: kommunikációs és tartalmi vonatkozások. In: H., Varga Gy. (eds.) *Személyközi és médiakommunikációs tudatosság az iskolában* (pp. 276-289). Budapest: Hungarovox Kiadó.

Marjai K. (2019): From Theory to Practice: Bullying Prevention and Intervention for Students with Autism Spectrum Disorder. In: Karlovitz, T. J. (eds.) *Theory and Practice: Lifelong Experiences* (pp. 53-64). Grosspetersdorf: Sozial und Wirtschafts Forschungsgruppe.

Marjai K. (2019): Rejtve maradók: Autizmusban érintett tanulók és a bullying. In: Karlovitz J. T. (eds.): *Tanulmányok a tanügy és az oktatástan világából* (pp 15-22). Budapest: Neveléstudományi Egyesület.