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Impact of Employment on the Quality of Life and Job Satisfaction of Autistic Workers

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The current research sought to understand the relationship between job satisfaction and quality of life in employed individuals with Autism Spectrum Disorder (ASD). The research focuses on participants involved in a supported employment program for individuals with ASD, the DXC Technology Dandelion Program. We examined the sustained impact of participating in the supported employment program on quality of life and job satisfaction, via a longitudinal survey of the employees with ASD. Quality of life was assessed with the World Health Organization Quality of Life Brief, and intrinsic and extrinsic job satisfaction were assessed with the Minnesota Satisfaction Questionnaire (Short Form). Results indicated small but statistically non-significant (using an adjusted significance level of .001) changes in both quality of life and job satisfaction across a 12-month period. Results are discussed in terms of how to further improve the employment program and support employees with ASD.

Keywords: autism spectrum disorder, disability, job satisfaction, quality of life, supported employment, adults, vocation.

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Влияние трудоустройства на качество жизни и удовлетворенность работой у людей с РАС

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В представленном исследовании рассматривалась взаимосвязь между удовлетворенностью работой и качеством жизни трудоустроенных людей с расстройствами аутистического спектра (PAC). Участники исследования — люди с PAC, задействованные в программе трудоустройства людей с ограниченными возможностями Dandelion DXC Technology. В рамках лонгитюдного исследования авторы оценивали, как участие в программе трудоустройства людей с ограниченными возможностями влияет на качество жизни и удовлетворенность работой сотрудников с PAC. Качество жизни оценивалось в соответствии с Кратким опросником ВОЗ для оценки качества жизни (World Health Organisation Quality of Life Brief), а внутренняя и внешняя удовлетворенность работой оценивалась по сокращенной версии Миннесотского опросника удовлетворенности (Minnesota Satisfaction Questionnaire (Short Form)). Результаты показали статистически незначимое (уровень значимости р = 0,01) изменение качества жизни и удовлетворенности работой в течение 12 месяцев. Данные результаты в дальнейшем используются для улучшения программы по трудоустройству и поддержке сотрудников с РАС.

Ключевые слова: расстройства аутистического спектра, инвалидность, удовлетворенность работой, качество жизни, трудоустройство людей с ограниченными возможностями, взрослые, призвание.

Финансирование. Исследования, на которые ссылается настоящая работа, были проведены при поддержке DXC Technology и Департамента социального обеспечения при правительстве Австралии. Содержание настоящей работы является исключительно ответственностью авторов и не было утверждено или одобрено компанией DXC Technology или Департаментом социального обеспечения при правительстве Австралии.

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The Organisation for Co-operation and Development (OECD, 2010) [37], revealed that the average employment rate for persons with a disability is approximately 40%, compared to 75% for persons without a disability. People with Autism Spectrum Disorder (ASD) face some of the highest rates of underemployment and unemployment of all disability groups, with employment rates ranging from 14% in Canada to 32% in the United Kingdom [31; 35; 41]. In Australia, the estimated employment rate of people with ASD is 28% [11], although the requirements for being included in this statistic are low, and can include as little as working a few hours a week. This study explored the sustained impact of participating in a supported employment program within the Information and Communications Technology (ICT) sector, through an examination of the relationship between well-being and quality of life on employees with ASD.

ASD is a neurodevelopmental disorder characterized by persistent deficits in social communication and social interaction, restricted and repetitive patterns of behaviors, and hyper- or

hyporeactivity to sensory input [9]. Symptoms typically appear in early childhood with much of the extant research focused on early detection and treatment. However, ASD is a lifelong disorder and individuals with ASD are a growing segment of the workforce; in the United States each vear 50,000 individuals with ASD transition into adulthood [35]. Challenges and barriers that underlie poor employment outcomes in ASD include difficulty navigating traditional recruitment and selection practices that often favor individuals with strong social skills [30; 33], and features of contemporary organizations including open-plan work environments, expectations that employees be effective in teams, and are flexible and adapt to change [12]. Individuals with ASD therefore often require specific supports to be successful at work [33; 35]. Without these supports, negative work experiences can lead to lower job satisfaction [25] and shorter job tenure and uneven work history, further undermining job prospects and quality of life [6].

The World Health Organization [46] defines quality of life as "individuals' perceptions of their

position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns" [46, p. 6]. Thus, quality of life is a subjective evaluation of well-being across several domains that is calibrated against the individual's personal, cultural and situational expectations. To the extent that employment is important to an individual, it should contribute to higher quality of life. Indeed, there is ample evidence to indicate that employment does improve well-being in myriad ways [44]. Individuals with ASD often report a strong desire to work [8], but as noted above they often face challenges to finding and maintaining employment, which may contribute to the lower quality of life reported in this population [43].

One job-specific indicator of well-being is job satisfaction [44], which refers to a positive evaluation of a job or its characteristics [28]. Job satisfaction predicts a range of positive outcomes including improved work performance, lower absenteeism, and lower turnover [25]. Prior research on job satisfaction among individuals with disabilities is relatively sparse. Employees with disabilities may report high job satisfaction when the organizational culture is responsive and fair [36], and when employees with disabilities have workplace support and flexibility [2]. The limited research on job satisfaction among individuals with ASD suggests that job satisfaction may be high when starting work, but may decline over time if jobs are not stimulating [22]. Given the relative paucity of research examining employment among individuals with ASD, and employment's relationship to quality of life and job satisfaction for these individuals, the purpose of this research is to examine the relationship between job satisfaction and quality of life of individuals with ASD employed in a supported work program.

Supporting meaningful employment

Supported employment programs can help to ensure individuals with intellectual disabilities or other conditions, such as mental illness or ASD, participate fully in the work environment [7]. Support can ensure that the nature of the job does not disadvantage the person with a disability [39]. Although individuals with ASD present with specific deficits associated with their diagnosis, at the same time, many individuals also exhibit atypical or high intellectual ability [16],

or specific skills and interests that make them well suited to certain occupations and roles [12]. Individuals with ASD also tend to be reliable, trustworthy and conscientious employees, often completing work to a high standard [15; 22; 26]. Thus, both organizations and individuals with ASD would benefit from employing and supporting individuals with ASD [5]. However, there is a lack of empirical research regarding employment supports for adults with ASD [19].

The present research included people with ASD employed within the DXC Technology Dandelion Program, which is a supported employment program for individuals with ASD within Australia. The Dandelion Program is intended to fill a skills gap—there is a significant worldwide skills gap within the ICT field [10] — while simultaneously providing individuals with ASD a pathway to meaningful employment. Some individuals with ASD have skills and interests, such as extraordinary memory, concentration and pattern recognition, which are ideal for certain ICT roles [12]. Thus, the program seeks to leverage the skill and interest profile of individuals with ASD to meet this business need, provides significant workplace supports to accommodate the diverse needs of individuals with ASD, and aims to prepare them for longer-term employment.

In the Dandelion Program trainees with ASD are employed in areas including software testing, data analytics, cybersecurity, and records management. DXC Technology have made significant changes to the organizational context [39] to support employees with ASD, such as revising human resource protocols. For example, the recruitment and selection process has a reduced focus on candidates' past experience and interpersonal skills and instead focuses on the candidates' ability to demonstrate specific skills and to work together. Individuals work in teams of 10 to 14; each team is supported by specially trained staff and work alongside other ICT professionals.

The lack of suitable employment is a likely barrier to quality of life among adults with ASD [21; 34]. The little research that has directly addressed this issue suggests that supported employment may improve quality of life. Garcia-Villamisar, Wehman, Wehman and Navarra [13] found that individuals with ASD in supported employment showed an increase in quality of life over a 5-year period. However, this study has been critiqued elsewhere due to methodological limitations [18]. Renty and

Roeyers [32] focused on the impact of ASD support and disability characteristics on quality of life, but they also noted that adults with ASD who participated in daytime activities, including employment, reported a significantly higher quality of life than those without such engagement.

Job satisfaction is a context-specific indicator of well-being and quality of life [44], and research on job satisfaction among individuals with disabilities, or ASD, is also generally sparse. However, as highlighted, organizational factors such as a fair organizational culture [36] and workplace support and flexibility [2] may be related to greater job satisfaction for individuals with disabilities. Research on temporal patterns of job satisfaction has demonstrated that newcomer job satisfaction fluctuates over time, peaking in the 'honeymoon' phase shortly after starting the job and declining thereafter in a 'hangover' phase [4]. Consistent with this 'hangover' effect, some research on employees with ASD suggests that their job satisfaction tends to decrease over time, partly due to boredom [22]. However, it is unclear whether a similar pattern of decreasing job satisfaction would emerge for employees with ASD who work on challenging tasks with ongoing support and flexibility.

The present study explored the impact of participation in the DXC Technology Dandelion Program through an examination of the relationship between quality of life and job satisfaction of the trainees with ASD engaged in the program. Based on prior literature and our own qualitative research [17], we predicted that participants would report relatively high job satisfaction at the onset of the program, and that job satisfaction and quality of life would be associated. Though prior research suggests that quality of life improves over the course of employment [13; 32], research on job satisfaction suggests that it declines over time [4; 22]. Variables were measured over a 12-month period to examine whether the trajectory is more consistent with employment increasing quality of life or more consistent with it decreasing job satisfaction and thus, quality of life.

Method

Participants

Twenty trainees (19 male, Mage = 23.85, SD = 5.61, Range = 18-44 years) participated in the study. Two additional trainees did not

consent to participate in the study, and one individual withdrew following the first data collection point after he was informed that he had not passed a 6-month probation period and his contract was discontinued. Participants' education level varied and included Bachelor's degree (30%), Diploma (30%), completed secondary school (30%), and did not complete secondary school (10%). The majority of participants lived with one or more parent (80%), 15% lived alone, and one individual lived with a spouse. Prior to starting in the program 5% were employed fulltime, 50% had part time jobs (M = 9.75, SD = 6.43, Range = 4-25 hrs/week), and 45% were unemployed. Evidence of ASD diagnosis was provided when individuals applied for the program, and none reported an intellectual disability.

Procedure

The research was approved by the La Trobe University Human Research Ethics Committee and participants provided informed consent. We report results from three administrations at 6-month intervals (Baseline, 6-months, 12-months). Demographic information and employment history were collected at baseline.

Measures

WHO Quality of Life-Brief [46] is a 26-item self-assessment of quality of life across four domains: Physical health (7 items related to activities of daily living, dependence on medicinal substances and medical aids, energy and fatigue, mobility, pain and discomfort, sleep and rest, work capacity); Psychological (6 items related to bodily image and appearance, negative feelings, positive feelings, self-esteem, spirituality/religion/personal beliefs, thinking/learning/memory and concentration); Social relationships (3 items related to personal relationships, social support, sexual activity); and Environment (8 items related to financial resources, freedom/physical safety and security, health and social care: accessibility and quality, home environment, opportunities for acquiring new information and skills, participation in and opportunities for recreation/leisure activities, physical environment, transport); as well as two additional items assessing overall quality of life and general health. Responses are given on 5-point scales and raw scores are transformed to a 0-100 scale, with higher scores indicating a higher perception of quality of life. The WHOOOL-BREF

is widely used in samples with ASD [43] and has been found to be both a valid and reliable measure of quality of life with Cronbach's alphas ranging from .55 to .87 [38].

Minnesota Satisfaction Questionnaire Short Form (MSQ-SF) is a 20-item self-report measure of job satisfaction [45]. Respondents indicate how satisfied they are with particular aspects of their job, such as "being able to keep busy all the time" and "the freedom to use my own judgement". Items are rated on a 5-point Likert-type scale (1 "very dissatisfied with this aspect of my job", 2 "dissatisfied with this aspect of my job", 3 "can't decide if I'm satisfied or dissatisfied with this aspect of my job", 4 "satisfied with this aspect of my job" and 5 "very satisfied with this aspect of my job"). The MSQ-SF provides two factor scales consisting of Intrinsic Satisfaction (score range 12-60) and Extrinsic Satisfaction (score range 6–30), with lower scores indicating a lower level of satisfaction. The MSQ-SF is widely reported in the literature, including with samples of employees with disabilities [45], with reliability coefficients ranging from 0.77 to 0.92 [23].

Results

Initial screening showed no missing data, no presence of outliers for any of the scales, and that data were normally distributed. Significance levels for multiple comparisons were adjusted to .01 to minimize the chance of a Type I error [40]. Pearson's correlations were used to explore the relationships between intrinsic and extrinsic job satisfaction and quality of life (QOL) over a 12-month

period (*table*). Potential relationships between age and the study variables were examined first. Participant age was generally not found to correlate significantly with QOL or job satisfaction at any time-point (r = .06-.42, all p > .05), with the exception of baseline intrinsic (r = .72, p < .001) and extrinsic (r = .65, p < .001) job satisfaction, which were both positively associated with age. Given lack of significant results at other time-points, or with QOL, this finding was not examined further. While the study scales were mostly significantly correlated between time points, no significant associations were identified between QOL and job satisfaction.

A repeated measures analysis of variance (ANO-VA) applying the Greenhouse-Geisser correction was used to explore change in quality of life, and intrinsic and extrinsic job satisfaction over the study period. As can be seen from table, there was a trend for an increase in quality of life scores from baseline to 6-months, followed by a decrease from 6-12 months, and a trend for a decrease of both intrinsic and extrinsic job satisfaction scores across three time points. However, these trends were not found to be statistically significant: WHOOOL-BREF, F(1.41, 26.70) = .596, p = .501, $\eta p2 = .03$; Intrinsic Job Satisfaction, F(1.94, 36.87) = 2.94, p = .067, $\eta p2 = .134$; Extrinsic Job Satisfaction, $F(1.64, 31.15) = 3.63, p = .046, \eta p = .161$. There were no significant changes on the WHOQOL-BREF domain scores: Physical Health, F(1.67, 31.63) = .183, p = .794, $\eta p2$ = .01, Psychological Health, F(1.82,34.55) = .92, p = .40, $\eta p2 = .046$, Social Relations, F(1.63,30.95) = .109, p = .858, np2 = .006, and Environment, F(1.65, 31.36) = .374, p = .651, $\eta p2 = .019$.

Table

Means, standard deviations, and correlations of study variables over 12-months

Variable	Mean	SD	1.	2.	3.	4.	5.	6.	7.	8.
1. WHOQOL-BREF Baseline	65.62	18.08								
2. WHOQOL-BREF 6-months	69.37	15.43	.509*							
3. WHOQOL-BREF 12-months	66.87	20.39	.519*	.893**						
4. MSQ Intrinsic Time Baseline	48.10	3.94	014	12	267					
5. MSQ Intrinsic Time 6-months	47.85	3.34	.03	.136	.010	.460*				
6. MSQ Intrinsic Time 12-months	46.30	3.81	.32	.265	.177	.554*	.586**			
7. MSQ Extrinsic Time Baseline	25.70	2.47	.037	.074	064	.812**	.484*	.579**		
8. MSQ Extrinsic Time 6-months	24.60	2.98	.143	.118	038	.621**	.859**	.709**	.732**	
9. MSQ Extrinsic Time 12-months	24.25	2.79	.293	.310	.175	.487*	.431	.911*	.548*	.663**

p < .05, p < .01

Discussion

The current research explored the impact of participating in the DXC Technology Dandelion Program, a supported employment program for individuals with ASD, through an examination of the relationship between job satisfaction and quality of life (OOL). Our results suggest participating in the program does not lead to significant or sustained improvements (nor decrements) in QOL over a 12-month period, a finding we have replicated elsewhere with regards to mental health [18]. Trainee job satisfaction tended to be high over time relative to normative samples [45]; however, we did observe a slight, albeit non-significant drop in satisfaction from baseline to 6-months, and this drop was sustained at 12-months. This is consistent with Hillier et al.'s [22] observation that employees with ASD rated their job satisfaction to be relatively high, but job satisfaction ratings tended to decrease over time as employees with ASD also rated their jobs less challenging, as well as the more general 'hangover' effect observed in the literature on job satisfaction [4]. In the current sample, the jobs that the trainees perform do vary (e.g., different software iterations) and may align with tendencies of individuals with ASD (e.g., attention to detail, repetition). However, the overall job may still become less interesting over time. Further, trainees may become more aware of some of the more mundane aspects of working in ICT (e.g., occasional technology failures that limit work periods or 'slower' periods). Anecdotal evidence from conversations with support staff suggest that the trainees with ASD may find these setbacks to be especially frustrating, which may contribute to the slight drop in their job satisfaction [17]. Further research is needed to examine the longer-term trend in job satisfaction for individuals with ASD.

Quality of life remained fairly stable over time, and consistent with levels reported in other samples with ASD [43], though it should be noted that previous research has also found that quality of life tends to be somewhat lower among individuals with ASD compared to the general population [43]. Given that employment has been related to improved quality of life for individuals with ASD in other studies [18], it is somewhat surprising that quality of life did not change over time in the present research. It could be that the sample was too small or that the period of em-

ployment was not long enough to detect changes. It is also possible that the participants with ASD lacked sufficient insight into how their quality of life had changed. However, other researchers have noted a 'disability paradox' such that individuals with disabilities may be unlikely to view their quality of life negatively [1, 47]. This paradox might be understood in terms of a capabilities approach to disability. Mitra [29] explains that 'capabilities' refer to the range of practical opportunities available to a person (i.e., potential disability) whereas 'functionings' refer to the specific capabilities that the person chooses to pursue (i.e., actual disability). An individual's capability set is affected by personal and situational characteristics (e.g., social and political environment), thus employment may alter the capability set of individuals with ASD and, subsequently, the person's functionings and how the individuals adapt and focus their attention. Consistent with this framework, comments from participants [17] suggests that employment changed trainees outlook and perspective, for example, providing them with a sense of purpose.

Turning to the correlation results, there was a significant positive relationship between job satisfaction and age at baseline, suggesting older individuals were more likely to report higher job satisfaction scores than younger employees; however, this effect was not evident in 6- and 12- month data. Age was also not found to be significantly associated with quality of life. We did not identify significant relationships between quality of life and job satisfaction, contrary to our hypothesis [44]. This finding was likely affected by the lack of overall change in scores over time, but was somewhat unexpected nonetheless. This finding suggests a disconnect between quality of life and job satisfaction in the present sample. Specifically, employed people with ASD may discriminate between satisfaction at work and broader aspects of their lives; that is, satisfaction at work may not generalize to broader life improvements, such as those captured by our current measure.

It is also important to consider that employment may not be associated with improved mental health outcomes in people with ASD [18]. For example, previous research has found that greater independence, including employment, in adults with ASD is associated with greater likelihood of experiencing poor mental health outcomes [3]. Our results suggest the relationship between employ-

ment, including satisfaction at work, ASD, and psychological wellbeing, assessed through quality of life, is likely to be complex and non-linear. A more nuanced examination of these constructs is required, utilizing longitudinal designs and broad-based, multiple assessment of the constructs in question. In addition, inclusion and control of external, non-employment related constructs will be required to better identify the nature of the relationship between, and contribution of, employment to health and wellbeing, and quality of life, in people with ASD.

Practical Implications and Limitations

Our findings are limited by our use of measures not specifically designed for use with people with ASD, although recent research supports the use of the WHOQOL-BREF in people with ASD [27]. Nevertheless, it is important to consider whether participants had sufficient understanding of the questions related to quality of life, or sufficient insight to be able to adequately report change in quality of life over time. Our previous research [17] does suggest that participants have sufficient insight into their lives, and are able to report on this in an interview setting, although this may not translate to survey questionnaires as employed here. Future research would benefit from a mixed-method approach, employing both qualitative and quantitative methodology. In employment research specifically, different measures have been used [13], making it difficult to directly compare previous results with the findings reported here. Our previous research suggests that the DXC Technology Dandelion Program has significant strengths and potential benefits for participants [17]. However, these qualitative improvements reported previously are not supported by the present study, which failed to capture significant improvement in quality of life as participants progressed through the program. We suggest there are ways in which the Dandelion Program could be improved. This could be through targeted training and personalization based on the individual abilities and level of experience of the trainees with ASD; e.g., the program mandates a slow and gradual adjustment into the workplace, which may not be necessary for all individuals with ASD. Indeed, advocates for the autistic community often stress their diversity and the 'different, not less' ways that autistic individuals demonstrate achievement [14; 31; 42]. Further research with larger samples and diverse support programs would be useful to explore how such customization could be achieved. In particular, the current study would have benefitted from the inclusion of a comparison or control group, as well as qualitative reports (although see [17] for qualitative findings) to better consider the granularity of the mixed findings related to job satisfaction and quality of life. Our recent research [18] has identified significant mental health concerns amongst employees with ASD, suggestive of additional impacts of stress that may further affect quality of life. Tackling mental health and well-being amongst employees with ASD within the workplace is an important

Another issue to consider in the DXC Technology Dandelion Program, and other supported work programs, is that it requires individuals to disclose their disability. Indeed, a confirmed diagnosis of ASD is the only requirement to apply for the program, and participants' disclosure is not limited to confidential human resource paperwork as the purpose of the program is widely known throughout the organization. As the Dandelion Program and similar autism at work programs become more widely publicized, future disclosure may be implicit on the employee's CV. Individuals with ASD vary in their willingness and enthusiasm to disclose their diagnosis [24], and one participant explicitly noted in other research [17] that he had been unwilling to disclose to previous employers. Future research should examine the consequences of such disclosure for employees' well-being and future work experiences.

Conclusion

There is a paucity of research on employment among individuals with ASD [19; 31], but it is a growing part of the workforce [20]. Over a period of 12-months we found relative stability over time in both quality of life as well as intrinsic and extrinsic job satisfaction, with no significant change over time identified. In contrast to our hypothesis, we failed to identify statistically significant relationships between quality of life and job satisfaction suggesting a disconnect between these two constructs in the present sample. Our findings challenge the

assumption that employment is a desirable outcome in and of itself, without giving consideration to potential risks, pitfalls, and layers of employment in ASD that are not yet well-understood or articulated in the literature. By locating employment in the context of one's overall well-being, these concepts, along with finding ways to nurture employment in terms of broader aims of overall quality of life, and

effective means to build job satisfaction in one's employment experience, offer promise for research and practice advancement. Finally, it is imperative to further understand how organizations can support individuals with ASD in the workplace, and how to help them develop long-lasting and meaningful careers that are satisfying and positively affect their quality of life.

References

- Albrecht G.L., Devlieger P.J. The disability paradox: High quality of life against all odds. Social Science & Medicine, 1999, vol. 48, no. 8, pp. 977—988. DOI: 10.1016/S0277-9536(98)00411-0
- 2. Baumgärtner M.K., Dwertmann D.J.G., Boehm S.A., Bruch H. Job satisfaction of employees with disabilities: The role of perceived structural flexibility. Human Resource Management, 2015, vol. 54, no. 2, pp. 323—343. DOI: 10.1002/hrm.21673
- 3. Bishop-Fitzpatrick L., Hong J., Smith L.E., Makuch R.A., Greenberg J S., Mailick M.R. Characterizing objective quality of life and normative outcomes in adults with Autism Spectrum Disorder: An exploratory latent class analysis. Journal of Autism and Developmental Disorders, 2016, vol. 46, no. 8, pp. 2707—2719. DOI: 10.1007/s10803-016-2816-3
- 4. Boswell W.R., Shipp A.J., Payne S.C., Culbertson S.S. Changes in newcomer job satisfaction over time: Examining the pattern of honeymoons and hangovers. Journal of Applied Psychology, 2009, vol. 94, no. 4, pp. 844—858. DOI: 10.1037/a0014975
- 5. Bury S.M., Hedley D., Uljarević M., Gal E. The autism advantage at work: A critical and systematic review of current evidence. Research in Developmental Disabilities, 2020, vol. 105. DOI: 10.1016/j.ridd.2020.103750
- 6. Carr S.E. Quality of life in emerging adults with autism spectrum disorder. Dissertation Abstracts International: Section B: The Sciences and Engineering, 2015, vol. 76.
- 7. Cavanagh J., Bartram T., Meacham H., Bigby C., Oakman J., Fossey E. Supporting workers with disabilities: A scoping review of the role of human resource management in contemporary organisations. Asia Pacific Journal of Human Resources, 2015, vol. 55, no. 1, pp. 6—43. DOI: 10.1111/1744-7941.12111
- 8. Chen J.L., Leader G., Sung C., Leahy M. Trends in employment for individuals with Autism Spectrum Disorder: A review of the research literature. Review Journal of Autism and Developmental Disorders, vol. 2, pp. 115—127. DOI: 10.1007/s40489-014-0041-6
- Diagnostic and statistical manual of mental disorders (5th ed.). Washington: Publ. American Psychiatric Association, 2013. 991 p. ISBN 978-0-89042555-8.
- Digital Skills and Jobs Coalition / European Commission [Web resource]. 2020. URL: https://ec.europa.eu/digital-single-market/en/news/bridging-digital-talent-gap-towards-successful-industry-university-partnerships-workshop (Accessed 03.09.2020).
- 11. Disability, Ageing and Carers, Australia: Summary of Findings, 2018 / Australia Bureau of Statistics [Web resource]. 2019. URL: https://www.abs.gov.au/ausstats/abs@.nsf/mf/4430.0 (Accessed 03.09.2020).
- 12. Donovan S. Entrepreneur Thorkil Sonne on what you can learn from employees with autism. Harvard Business Review, 2008, no. 9, p. 32.
- 13. *Garcia-Villamisar D.*, *Wehman P.*, *Navarra M D*. Changes in the quality of autistic people's life that work in supported and sheltered employment: A 5-year follow-up study. *Journal of Vocational Rehabilitation*, 2003, vol. 17, no. 4, pp. 309—312.
- 14. *Grandin T.* Different... not less: Inspiring stories of achievement and successul employment from adults with autism, Asperger's, and ADHD. Arlington: Publ. Future Horizons, 2012. 407 p. ISBN 978-1-93527460-5.
- 15. Hagner D., Cooney B.F. "I do that for everybody": Supervising employees with Autism. Focus on Autism and Other Developmental Disabilities, 2005, vol. 20, no. 2, pp. 91—97. DOI: 10.1177/10883576050200020501
- 16. Happe F., Frith U. The weak coherence account: detail-focused cognitive style in autism spectrum disorders. Journal of Autism and Developmental Disorders, 2006, vol. 36, no. 1, pp. 5—25. DOI: 10.1007/s10803-005-0039-0
- 17. Hedley D., Cai R., Uljarević M., Wilmot M., Spoor J. R., Richdale A., Dissanayake C. Transition to work: Perspectives from the autism spectrum. Autism, 2018, vol. 22, no. 5, pp. 528—541. DOI: 10.1177/1362361316687697
- 18. Hedley D., Üljarević M., Bury S.M., Dissanayake, C. Predictors of mental health and well-being in employed adults with autism spectrum disorder at 12-month follow-up. Autism Research, 2019, vol. 12, no. 3, pp. 482—494. DOI: 10.1002/aur.2064
- 19. *Hedley D., Uljarević M., Cameron L., Halder S., Richdale A., Dissanayake, C.* Employment programmes and interventions targeting adults with autism spectrum disorder: A systematic review of the literature. *Autism*, 2017, vol. 21, no. 8, pp. 929–941. DOI: 10.1177/1362361316661855
- 20. Hedley D., Uljarević M., Hedley D.F.E. Employment and living with Autism: Personal, social and economic impact. In Halder S., Assaf L.C. (eds.) Inclusion, Disability and Culture: An Ethnographic Perspective Traversing Abilities and Challenges. New York: Publ. Springer, 2017. 390 p. ISBN 978-3-31955223-1. DOI: 10.1007/978-3-319-55224-8_19
- 21. Hendricks D. Employment and adults with autism spectrum disorders: Challenges and strategies for success. Journal of Vocational Rehabilitation, 2010, vol. 32, no. 2, pp. 125—134. DOI: 10.3233/JVR-2010-0502

- 22. Hillier A., Campbell H., Mastriani K., Izzo M.V., Kool-Tucker A.K., Cherry L., Beversdorf D.Q. Two-year evaluation of a vocational support program for adults on the autism spectrum. Career Development for Exceptional Individuals, vol. 30, no. 1, pp. 35—47. DOI: 10.1177/08857288070300010501
- 23. Hirschfeld R.R. Does revising the intrinsic and extrinsic subscales of the Minnesota Satisfaction Questionnaire Short Form make a difference? Educational and Psychological Measurement, 2000, vol. 60, no. 2, pp. 255—270. DOI: 10.1177/00131640021970493
- 24. *Johnson T.D., Joshi A.* Dark clouds or silver linings? A stigma threat perspective on the implications of an autism diagnosis for workplace well-being. *Journal of Applied Psychology*, 2016, vol. 101, no. 3, pp. 430—449. DOI: 10.1037/apl0000058
- 25. Judge T.A., Klinger R. Job satisfaction: Subjective well-being at work. In Eid M., Larsen R.J. (eds.) The science of subjective well-being. New York: Publ. Guilford Press, 2008. Pp. 393—413. ISBN 978-1-59385581-9.
- 26. Krzeminska A., Austin R., Bruyere S., Hedley D. The advantages and challenges of neurodiversity employment in organizations. Journal of Management and Organization, 2019, vol. 25, no. 7, pp. 453—463. DOI: 10.1017/jmo.2019.58
- 27. Lawson L.P., Richdale A.L., Haschek A., Flower R L., Vartuli J., Arnold S.R., Trollor J.N. Cross-sectional and longitudinal predictors of quality of life in autistic individuals from adolescence to adulthood: The role of mental health and sleep quality. Autism, 2020, vol. 24, no. 4, pp. 954—967. DOI: 10.1177/1362361320908107
- 28. Locke E.A. The nature and causes of job satisfaction. In M.D. Dunnette (Ed.) Handbook of industrial and organizational psychology. Chicago: Publ. Rand McNally, 1976. Pp. 1297—1343.
- 29. *Mitra S*. The capability approach and disability. *Journal of Disability Policy Studies*, 2006, vol.16, no. 4, pp. 236—247. DOI: 10.1177/10442073060160040501
- 30. *Muller E., Schuler A., Burton B.A., Yates G.B.* Meeting the vocational support needs of individuals with Asperger Syndrome and other autism spectrum disabilities. *Journal of Vocational Rehabilitation*, 2003, vol. 18, pp. 163–175.
- 31. *Nicholas D.B.*, *Hedley D.*, *Randolph J.K.*, *Raymaker D.M.*, *Robertson S.M.*, *Vincent J.* An expert discussion on employment in autism. *Autism in Adulthood*, 2019, vol. 1, no. 3, pp. 162–169. DOI: 10.1089/aut.2019.29003.djn
- 32. Renty J.O., Roeyers H. Quality of life in high-functioning adults with autism spectrum disorder. Autism, 2006, vol. 10, no. 5, pp. 511–524. DOI: 10.1177/1362361306066604
- 33. Richards J. Examining the exclusion of employees with Asperger Syndrome from the workplace. Personnel Review, 2012, vol. 41, no. 5, pp. 630—646. DOI: 10.1108/00483481211249148
- 34. Robertson S.M. Neurodiversity, quality of life, and autistic adults: Shifting research and professional focuses onto real-life challenges. Disability Studies Quarterly, 2010, vol. e30, no. 1. DOI: 10.18061/dsq.v30i1.1069
- 35. Roux A.M., Shattuck P.T., Cooper B.P., Anderson K.A., Wagner M., Narendorf S.C. Postsecondary employment experiences among young adults with an autism spectrum disorder. Journal of the American Academy of Child and Adolescent Psychiatry, 2013, vol. 52, no. 9, pp. 931–939. DOI: 10.1016/j.jaac.2013.05.019
- 36. Schur L., Kruse D., Blasi J., Blanck P. Is disability disabling in all workplaces? Workplace disparities and corporate culture. Industrial Relations: A Journal of Economy and Society, 2009, vol. 48, no. 3, pp. 381—410. DOI: 10.1111/j.1468-232X.2009.00565.x
- 37. Sickness, disability and work: Breaking the barriers: A synthesis of findings across OECD countries. Paris: Publ. OECD, 2010. 165 p. ISBN 978-9-26408884-9.
- 38. Skevington S.M., Lotfy M., O'Connell K.A. The World Health Organization's WHOQOL-BREF quality of life assessment: Psychometric properties and results of the international field trial: A report from the WHOQOL group. Quality of Life Research, 2004, vol. 13, no. 2, pp. 299–310. DOI: 10.1023/B:QURE.0000018486.91360.00
- 39. Stone D.L., Colella A. A model of factors affecting the treatment of disabled individuals in organizations. Academy of Management Review, 1996, vol. 21, no. 2, pp. 352–401. DOI: 10.2307/258666
- 40. Tabachnick B.G., Fidell L.S. Using multivariate statistics. 5th ed. Needham Heights: Publ. Allyn & Bacon, 2007. 980 p. ISBN 978-0-20545938-4.
- 41. *Taylor J.L.*, *Henninger N.A.*, *Mailick M.R.* Longitudinal patterns of employment and postsecondary education for adults with autism and average-range IO. *Autism*, 2015, vol. 19, no. 7, pp. 785—793, DOI: 10.1177/1362361315585643
- with autism and average-range IQ. Autism, 2015, vol. 19, no. 7, pp. 785—793. DOI: 10.1177/1362361315585643
 42. Urbanowicz A., Nicolaidas C., den Houting J., Shore S.S., Gaudion K., Girdler S., Savarese R.J. An expert discussion on strengths-based approaches in autism. Autism in Adulthood, 2019, vol. 1, no. 2, pp. 82—89. DOI: 10.1089/aut.2019.29002.aju
- 43. Van Heijst B.F., Geurts H.M. Quality of life in autism across the lifespan: a meta-analysis. Autism: The international journal of research and practice, 2015, vol. 19, no. 2, pp. 158–167. DOI: 10.1177/1362361313517053
- 44. *Warr P.* Well-being and the workplace. In *D. Kahneman, E. Diener, N. Schwarz (Eds.)* Well-being: The foundations of hedonic psychology. New York: Publ. Russell Sage Foundation, 1999. Pp. 392—412. ISBN 978-0-87154423-0.
- 45. Weiss D.J., Dawis R.V., England G.W., Lofquist L.H. Manual for the Minnesota Satisfaction Questionnaire / Industrial Relations Center. Minneapolis: Publ. University of Minnesota, 1967. 119 p.
- 46. WHOQOL-BREF: Introduction, administration, scoring, and generic version of the assessment. Geneva: World Health Organization, 1996. 32 p.
- 47. World report on disability / WHO; World Bank. Geneva: World Health Organization, 2011. ISBN 978-92-4-156418-2.

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