Avoidant Attachment Style Indicates Job Adaptation of People with High Functional Autism Spectrum Disorders

Kenji Yokotani  
Tohoku University

Abstract: The aim of the present study was to investigate whether or not the avoidant attachment style indicates job adaptation of people with High Functional Autism Spectrum Disorders (HFASD). HFASD are groups of developmental disorders characterized by impairment of social interaction and normal level of intelligence. Twenty-two people with HFASD answered questionnaires, including the Autism Spectrum Quotient, Perceived Emotional Support Network Scales in a family, Avoidant scale of the Internal Working Model Scales, and queries about their employment years. Results revealed that people with HFASD who had obtained better job adaptation had a more avoidant style, regardless of their perceived support and autistic tendencies. The avoidant style might be the optimal coping style for people with HFASD who obtained competitive employment.

Employment of people with disorder(s) is a social problem. Provision of a welfare allowance, rather than a workplace, to people fit for work decreases social productivity. Especially, employment of people with high functional autistic spectrum disorders (HFASD) has had a large impact on social productivity. HFASD comprise a group of developmental disorders characterized by qualitative impairment in social interaction, restricted repetitive patterns of interests, and no intellectual delay (American Psychiatric Association [APA], 2000). The impairment associated with HFASD typically lasts throughout the lifespan. Therefore, people with HFASD fail to develop peer relationships appropriate to developmental level and are not adaptable to the various circumstances (APA). Some with HFASD are susceptible to psychiatric disorders, because of their cognitive deficit (Sprong et al., 2008). Meanwhile, others who can adapt to social life are very productive because of their intensive interest in job tasks (Grandin & Scariano, 1996). Therefore, whether they have adequate employment is important from both the perspective of mental health and social productivity.

Previous studies suggested that major barriers surrounding people with HFASD to obtain competitive employment were their interpersonal difficulties and those who lowered these barriers obtained better job adaptation (Cederlund, Hagberg, Billstedt, Gillberg, & Gillberg, 2008; Howlin, Goode, Hutton, & Rutter, 2004; Keel, Mesibov, & Woods, 1997; Lawer, Brusilovskiy, Salzer, & Mandell, in press). Howlin et al. reported that people with fewer symptoms of abnormal language obtained better adaptation. Cederlund et al. also reported that people with Asperger adopted more readily than those with autism, because those with Asperger have fewer autistic symptoms than those with autism. Furthermore, circumstances which lowered the barriers also fostered their job adaptation. Lawer et al. suggested positive relationships between their perceived support and employment, and Keel et al. underscored the importance of long-term support for job adaptation.

Although informative, previous studies only focused on behaviors and lacked interpersonal cognition of people with HFASD. Com-
mon sense would indicate that interpersonal cognition has effects on their interpersonal relationships. Therefore, research including interpersonal cognition can shed light on job adaptation from another perspective. Furthermore, earlier studies considered adaptation within a broader context, so definition of adaptation caused confusion. The present study, however, defined job adaptation in terms of longer employment within the context of competitive employment. This simple definition can avoid confusion. The duration of employment was the best index of job adaptation of those in a competitive setting, because if they cannot fit into a given job environment, they cannot renew their contracts.

Therefore, the research issue of the present study is what kind of interpersonal cognition helps people with HFASD to work longer, regardless of their autistic tendencies and long-term support. To address this question, I used an adulthood attachment framework (Bartholomew & Horowitz, 1991; Hazan & Shaver, 1990; Kobak & Duemmner, 1994; Simpson & Rholes, 1994) and an avoidance coping framework (Compas, Connor-Smith, Saltzman, Thomsen, & Wadsworth, 2001; Ebata & Moos, 1991). These two frameworks correspond to push and pull factors on their interpersonal cognition, respectively. The adulthood attachment framework (Bartholomew & Horowitz; Kobak & Duemmner; Simpson & Rholes) is based on attachment theory (Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1969). Attachment is an emotional bond typically developed by interaction between children and a mother in early childhood (Bowlby). On the basis of the attachment styles, children form mental representation of the self in relation to others (Bowlby). Ainsworth et al. categorized attachment styles into three types. Children who were nurtured by a responsive mother contact others with a secure feeling; a secure style. Children who were raised by an erratic response mother contact others with anxiety, because they were always anxious about whether others correctly respond or not; an anxious style. Children who were nurtured by a rejective mother avoid contact with others, because they do not want to be rejected by others; an avoidant style. Bartholomew and Horowitz, and Hazan and Shaver applied this theory to adulthood relationships and environment. Simpson and Rholes suggested that people who were under chronic stress were likely to become anxious or behave with an avoidant style. Kobak and Duemmner also suggested that if people were constantly rejected by others, they were likely to behave with an avoidant style. Therefore, people under chronic stress including rejection by others would assume an avoidant style.

An avoidance coping framework (Compas et al., 2001; Ebata & Moos, 1991) is based on coping theory (Lazarus & Folkman, 1984). Coping is defined as ‘constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person’ (Lazarus & Folkman, 1984, p.141). Ebata and Moos divided coping into approach and avoidance coping. Approach coping includes responses that are oriented either toward the source of stress or toward one’s emotions, whereas avoidance coping includes responses that are oriented away from the stressor or one’s emotions. Compas et al. suggested that in stressful circumstances which were uncontrollable, people engaged in avoidance coping achieved better adaptation.

These frameworks can apply to people with HFASD who obtained competitive employment. They have difficulties in developing peer relationships and show inflexibilities in various situations, so they cannot maintain effective communications with coworkers and adapt to sudden changes in circumstances. Therefore, they could be under chronic stress. They also have difficulties in communicating with coworkers effectively, which results in rejection by coworkers. The stresses that must be dealt with exceed their capacities, because the stresses arise from their disorders. It means that the stresses are uncontrollable for them. As a result, they would move to an avoidant style because of sustained stresses including rejection by coworkers, and they would be also drawn to this style because of the uncontrollable stress. The present study hypothesized that people with HFASD who work longer years in a competitive setting had a more avoidant style than those who do not, even though autistic traits and long-term support were controlled.
Method

Participants

Participants were 22 Japanese people with HFASD who commute to day-care facilities for people with HFASD in Sendai, Japan. All participants had at least a Full Intelligence Quotient (IQ) of 69 or a 68 verbal IQ. IQ was measured using the Japanese version of the Wechsler Adult Intelligence Scale (revised edition or third edition) by psychological experts belonging to the Sendai Developmental Counseling and Assistance Center (SDCAC). They were diagnosed with either Asperger syndrome, high functional autism, or pervasive developmental disorders not otherwise specified (APA, 2000) by a psychiatrist or pediatrician affiliated with SDCAC.

Supporting evidence for diagnoses included both participants’ present status as observed by psychological experts and doctors, and objective life histories obtained from their parents, maternal and child health notebooks, and school reports. Some participants, however, were unable to access these histories because of negative relationships with their parents. All participants lacked any psychiatric diagnosis except HFASD.

One participant who replied to no questions was excluded. The mean age of the other twenty-one participants was 26.66 years (8.00 SD), and four were female. The approximate ratio of males to females was 4 to 1, which was not unusual (Williams, MacDermott, Ridley, Glasson, & Wray, 2008).

Procedure

Staff members at their facility selected participants with HFASD and without any psychiatric symptoms. Participants received questionnaires from staff, who explained the aims of the present study. Subjects could choose to participate in the studies or not.

Ethical issues in the present study involved three steps. First, two faculties at Tohoku University approved the studies. Second, two section managers in SDCAC reviewed the studies and advised deleting equivocal queries. Third, directors at all facilities advised emphasizing the benefits to the participants from the studies in a front cover. All responses to the present study were confidential.

Measures

Autistic tendencies. To assess autistic tendencies, the Japanese version (Wakabayashi, Baron-Cohen, Wheelwright, & Tojo, 2006) of the Autism Spectrum Quotient (AQ) was used. This questionnaire has a high level of reliability and validity (Baron-Cohen, Wheelwright, Skinner, Martin, & Clubley, 2001). The AQ consisted of 50 questions and 4 scaled questions. Choices 1 and 2 were scored as zero, and 3 and 4 as 1 point. In the case of opposite questions, choices 1 and 2 were scored as 1, and 3 and 4 as 0. Higher scores meant a higher position in the autism spectrum. The alpha coefficient of AQ was .88.

Long-term support. To assess long-term support, the Perceived Emotional Support Network Scales in a family (Munakata, 1986) were used. Family support was regarded as the most long-term support, because most participants lived with family throughout life. The questionnaire is concrete and responses are simple, which helped participants understand. The questionnaire consisted of 10 questions eliciting whether participants had encountered any of the following kinds of people in their family: someone who makes you feel at ease (Question 1); someone who appreciates and accepts you (Question 3). Answers of yes and no were scored as 1 and 0 point, respectively. The alpha coefficient of family was .84.

Avoidant attachment style. To assess an avoidant attachment style, the avoidant style of the Internal Working Model Scales (Takuma & Toda, 1988) was used. This scale is oriented to score the avoidant style and has only 6 items and 6 scales. The alpha coefficient was .54, which was similar to those of undergraduate students in general (Matsumoto & Osanai, 2000): .60. Although some disorganized attachment behaviors were regarded as neurological deficits rather than attachment ones (Pipp-Siegel, Siegel, & Dean, 1999), this paper only included the observational method section and not the self-report section. Therefore the self-report questionnaires of the present study can be conducted without criticism from previous studies.
Employment Duration

Participants were asked how many jobs lasting under one month they had, and were given a choice of 0, 1, 2, 3, 4, or over 5. Similarly, they were asked about jobs lasting within 1 and 3, 3 and 6, 6 and 12, 12 and 24 months, and over 24-months, and could select 0, 1, 2, 3, 4, or over 5. Thirteen had job experience, and no one worked in the welfare system. Part-time, contract, dispatched, and regular employees numbered 10, 1, 1, and 3, respectively. Their average employment period was 7.49 months. Over half of Japanese fixed-time employees (all employees without regular employees) had work contracts between 6 and 12 months, and over 94% of them renewed their contracts (Statistics and Information Department of Minister’s Secretariat, Ministry of Health, Labour & Welfare, 2005). The mean employment duration showed that most people with HFASD did not renew their contracts or were fired before the expiration date. If someone worked over 12 months, they could renew their contracts. Therefore, the present study defined workers for more than 12 months as longer workers.

Results

Basic Statistics

First, to confirm the group differences of the average of the employment duration, a Mann-Whitney U-test was conducted. Table 1 shows a significant difference between the groups with and without job experience of over one year in the average employment duration ($U = 2.0$, $p < .00$). Even if those who with no job experience were excluded, there was a significant difference ($U = 2.0$, $p < .01$). In light of the employment system of Japan (Statistics and Information Department, Minister’s Secretariat, Ministry of Health, Labour and Welfare, 2005), the grouping of participants was reasonable both statistically and sociologically. Second, to compare the two groups based on other basic variables, a Mann-Whitney U-test was also conducted. Table 1 shows that there was no significant difference between groups in age, commuting months, autistic tendencies, family support, and educational years ($U = 23.5$, $p = .05$, $U = 27.5$, $p = .11$, $U = 43.0$, $p = .68$, $U = 26.5$, $p = .06$, $U = 36.0$, $p = .36$). Although age and family support displayed significant tendencies, they did not reach significance. Therefore, the two groups had a significant difference in the average employment duration; meanwhile, they had no significant difference in basic traits, autistic tendencies, and family support.

Statistics

The Mann-Whitney U-test was used for comparing the two groups. The Japanese version of SPSS 13.0 was used.

TABLE 1

| Similarities and Differences between Group with and without Job Experience of over One Year |
|---|---|---|
| Independent Variables | Job Experience of Over One Year | Significant U (p) |
| | Yes (S.D.) n = 7 | No (S.D.) n = 14 | |
| Average employment* | 10.7 (4.1)** | 1.5 (2.2)** | 2.0 (.00)** |
| Age | 32.5 (10.8) | 23.7 (4.0) | |
| Month of commute | 19.1 (9.0) | 12.7 (8.4) | |
| Family support | 7.9 (1.8) | 5.5 (3.1) | |
| Autism Quotient | 19.6 (7.1) | 21.3 (7.2) | |
| Years of Education | 14.0 (1.1) | 13.0 (2.0) | |
| Avoidant style | 21.5 (3.0)* | 17.3 (4.0)* | 16.0 (.01)* |

**: $p < .01$, *: $p < .05$, -: average employment duration (month)
Examination of Hypothesis

To confirm the group difference of the avoidant attachment style, a Mann-Whitney U-test was conducted. Table 1 showed that those who held a job for over one year had a more avoidant attachment style \((U = 16.00, p = .01)\). Considering that two groups had similar traits, this result suggested that the avoidant attachment style alone impacts the job adaptation of people with HFASD in a competitive setting.

Discussion

Implications of the Present Study

The present study has two clinical and research implications. First, the findings suggested that the avoidant attachment style was an index of the better job adaptation of people with HFASD in a competitive setting. Support persons surrounding them should neither regard their avoidant style as worse adaptation nor encourage them to engage in approach coping with their problems. Surely, adulthood attachment theory (Bartholomew & Horowitz, 1991; Hazan & Shaver, 1990) and coping theory (Lazarus, 1984) imply that the avoidant attachment style represented bad adaptation and the approach coping are the optimal ways to adapt to an environment. Their implications also seem to be a common-sense rule that anyone can follow. Both theories, however, have been developed on the basis of a large sample without people with disorders. Therefore, their implications might be productive especially for people without disorders, but might not necessarily apply simply to people with disorders. The results of the present study showed that their implications might even carry the risks of making things worse. Actually, in stressful circumstances which were uncontrollable, an active approach in the circumstances can make things worse (Compas et al., 2001). Support persons should be aware that they impose their common sense on people with HFASD.

Second, the present findings also implied the importance of interpersonal cognition of people with HFASD. Their avoidant cognition alone impacted their duration of employment. Although previous studies lacked an interpersonal cognition perspective, research in the future should include their cognition with autistic tendencies and perceived support. Furthermore, the narrow scope of adaptation might help provide a more detailed description of people with HFASD. Previous studies defined adaptation in the broadest of terms (Cederlund et al., 2008; Howlin et al., 2004; Keel et al., 1997; Lawer et al., in press). Although their definitions are helpful as a profile, they did not fit in terms of a more detailed description.

Limitations and Future Research

The present study had four limitations. First, it does not consider IQ, even though it was an important job factor. Furthermore, the AQ scores were also low. Thus, participants might not actually have had the autism spectrum disorder with which they were diagnosed. The second limitation was the small sample, so the generalization of the present findings was necessarily limited. Because all participants in the studies commuted to a facility, the studies may exclude ‘both extremes’ i.e., people with HFASD and professional jobs who did not need to commute to a facility, and those who were socially withdrawn and could not commute to a facility. The existence of both extremes was reported in a previous study (Cederlund et al., 2008). Third, the present study did not consider any job environments, such as job support, job types and so on, so the findings of the present study might not be applied to specific job environments. Fourth, the present study was cross-sectional, so the causal relationships between interpersonal cognition and employment status were still unclear. Future research should include IQ scores, with AQ, perceived support and interpersonal cognition. They also should include a large sample, job environmental factors, and longitudinal data. In line with these methods, researchers could elucidate causal relationships among intelligence levels, autistic tendencies, perceived support, and their interpersonal cognition.

References


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