

Original Paper

Autistic Spectrum Disorder Tendencies and Social Adjustment in Japanese Female University Students

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Abstract

This study aimed to examine the causal relationship between Autistic Spectrum Disorder (ASD) tendencies and social adjustment in Japanese female university students from the perspective of a sense of Ibasho, particularly a sense of being accepted by others. Following the data collected from 121 female university students, a model based on the study hypothesis was constructed, and the validity was investigated by employing structural equation modeling. The results of the analysis revealed that while ASD tendencies decreased social adjustment directly, a sense of Ibasho buffered the negative causal effects of these tendencies.

Keywords

Autistic Spectrum Disorder (ASD) tendencies, sense of Ibasho, social adjustment

1. Introduction

Autism Spectrum Disorder (ASD) is characterized by persistent deficits in social communication and interaction across multiple contexts. The primary symptoms of ASD include restricted, repetitive patterns of behavior, interests, and/or activities. The Japan Student Services Organization (2018) reported that 2,879 students out of 3,020,539 had ASD. Although the number with ASD is not considerable, it reflects the number who had a medical diagnosis thereof. Shinoda (2017) noted that there are many university students without a medical diagnosis who exhibit ASD tendencies. Male students suffer more from ASD when compared with female students. The Center for Disease Control and Prevention (2014) revealed that there were 75% fewer female students than their male counterparts with ASD. Although epidemiological studies have shown that the rate of ASD was higher among males, the decisive factors remain unknown. Koenig and Tsatsanus (2005) noted that current assessment tools for ASD are developed based on the data for males, which may explain why diagnosing females is

difficult. In a survey of Japanese females with ASD, Sunagawa (2015) found that their difficulties were not recognized by those around them. Accordingly, it is imperative to explore the difficulties for females with ASD experience and shed light on how to support them.

The Autism Spectrum Quotient (AQ; Baron-Cohen, Wheelwright, Skinner, Martin, & Clubley, 2001) is a major ASD assessment tool. It assesses ASD tendencies from four factors: social skills, attention switching, communication, and imagination. The AQ has been translated into many languages and employed in clinical situations and academic research. Accordingly, we used the AQ to assess ASD tendencies among Japanese female university students.

Interpersonal relationships are an important social adjustment factor, with which students with ASD tendencies may have difficulties. The sense of being accepted by others is a key concept in adolescent psychology and is essential for both communication and the ability to develop appropriate relationships with others (Asai, 2013; Ishimoto, 2010). The Japanese term *Ibasho*, which is used to convey this sense of acceptance, means “whereabouts” or “a place of my own”. Norisada (2008) employed four important factors related to adolescent communication to define *Ibasho*, namely, a sense of authenticity or confidence in one’s own identity, a sense of role or the role one plays in society, a sense of perceived acceptance or the extent to which one feels accepted by others, and a sense of relief or how secure one feels in one’s relationships with others. These factors are crucial when discussing how students with ASD tendencies develop good relationships with others. Accordingly, this study examines the relationship between ASD tendencies and social maladjustment from the perspective of a sense of *Ibasho*. It was hypothesized that although ASD tendencies are a social adjustment risk factor, a sense of *Ibasho* defuses its negative effect.

2. Method

2.1 Participants

The participants, who completed the survey, included 121 Japanese female university students.

2.2 Measurements

AQ (Baron-Cohen et al., 2001)

AQ was employed to multidimensionally assess ASD tendencies. The Japanese 10-item short version (Kurita, Koyama, & Osada, 2005) was employed in this study. The 10 items are evaluated with a 4-point scale. Each of the four factors, noted previously, was assessed: social skills (3 items), attention switching (1 item), communication (2 items), and imagination (4 items). It was difficult to determine the reliability of each factor using Cronbach’s alpha because of the limited number of items. Therefore, Cronbach’s alpha of the 10 items ($\alpha = 0.58$) was calculated to investigate the scale’s reliability. Higher scores indicate higher ASD tendencies; for example, a high social skills score indicates lack of social skills, a high attention switching score means attention deficit, a high communication score means the difficulty of communication, and high imagination means lack of imagination.

Subjective adjustment scale for adolescents (Okubo, 2005)

Three factors of the subjective adjustment scale for adolescents were employed: the sense of comfort ($\alpha = 0.95$), feelings of acceptance and trust ($\alpha = 0.87$), and absence of feelings of inferiority ($\alpha = 0.86$). A 5-point scale was used to evaluate 23 items.

Sense of Ibasho scale among female university students (Asai, 2013)

Although Norisada (2008) developed the original scale, which comprises the four factors of sense of authenticity, role, perceived acceptance, and relief, Asai (2013) modified the scale for female university students. A 5-point scale was employed to assess the 20 items. The sense of Ibasho has one factor and the scale has good reliability ($\alpha = 0.96$).

3. Result

Per the hypothesis that although ASD tendencies are a social adjustment risk factor, a sense of Ibasho defuses its negative effect, a model was constructed and its validity was confirmed using structural equation modeling. The model, which is depicted in Figure 1, was accepted as the most adequate model and its statistical fit indexes were adequate (CFI = 0.98, RMSEA = 0.07). The model portrays that while lack of social skills directly decreases feelings of acceptance and trust, inappropriate attention switching decreases the sense of comfort. The buffering effect of a sense of Ibasho together with lack of imagination and social adjustment was also revealed.

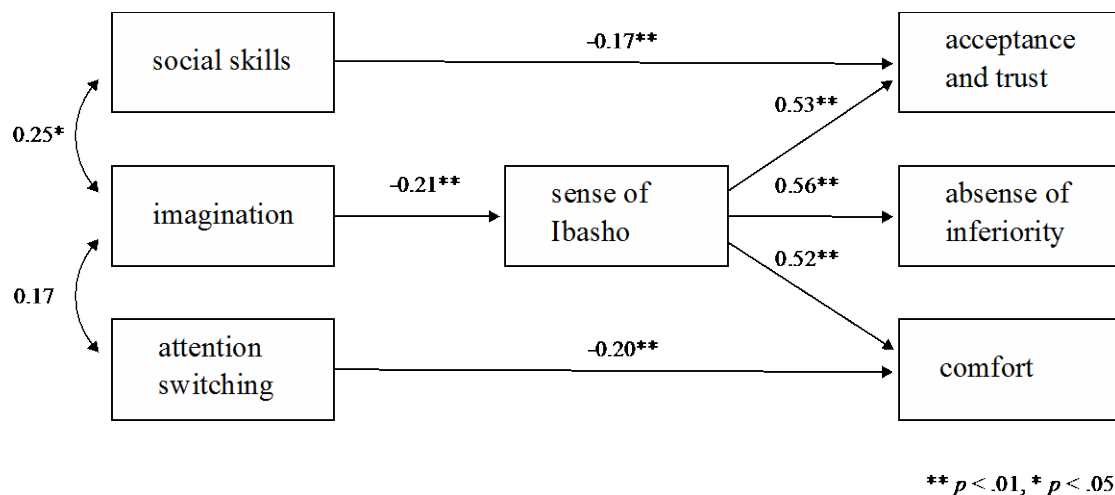


Figure 1. Relationship among Autistic Spectrum Disorder Tendencies, Sense of Ibasho, and Adjustment

4. Discussion

The results revealed that lack of social skills and inappropriate attention switching increased social maladjustment, thus, indicating that individual and group support for students with ASD is important in

university education. Kira, Takaishi, Uchino, Kikuchi, Fukudome, Fukumori, Matsushita, and Tajima (2018) conducted interviews with counselors who worked in student counseling. The results demonstrated that while 44.8% of counselors related that group activities are essential, which facilitate students' social skills in universities, only 22.8% of the counselors had conducted such group activities. One may deduce that social skills training groups are crucial for student support and it is imperative to ensure people understand the importance thereof.

The buffering effect of a sense of Ibasho on the relationship between ASD tendencies and social maladjustment was another primary result of the study. Kato, Asai, and Yoshie (2013) revealed that a sense of Ibasho was increased when students experienced collaborative art expression work with other students. As noted previously, a sense of Ibasho comprises a sense of authenticity, role, perceived acceptance, and relief. Students with ASD experience difficulty imagining other people's intentions and/or feelings. ASD tendencies may increase social anxiety. Furthermore, those with ASD may find it difficult to feel confident with their identity. Activities that facilitate a sense of Ibasho defuse such anxiety and they can relate to other people with ease.

When supporting students with ASD, it is essential to have a broad perspective of their difficulties, facilitate self-understanding, and control the environment around them (Higashionna, Tsukamoto, & Ushijima, 2015). The results of this study afford an understanding of the difficulties students with ASD experience in an endeavor to develop a support program to facilitate their social skills and sense of Ibasho.

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