



# Autism Spectrum Disorder and Hikikomori



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## Letter to Editor

Based on the Diagnostic and Statistical Manual of Mental Disorders 5<sup>th</sup> edition (DSM-5) [1], Autism Spectrum Disorder (ASD) is characterized by patterns of delay and deviance in the development of social, communicative, cognitive skills and the presence of repetitive and stereotyped behaviors as well as restricted interests. Recent literature showed that ASD occurs in 1 in 36 children [2]. Numerous psychiatric comorbidities are associated with ASD [3]. Several studies showed overlaps between the clinical characteristics of ASD and mental disorders which deserve to be carefully investigated [4].

Hikikomori is a form of pathological social withdrawal that continues for more than 6 months with significant functional impairment with social isolation [5]. To date, this condition has not yet been classified in the DSM-5-TR [6], where it is described only as a culture-bound syndrome. Since the first description in Japan in the 1990s [7], several cases have been reported in many other countries, making hikikomori an increasingly crucial global mental health issue [8,9]. The onset of Hikikomori, or at least the prodromal signs, occurs usually during adolescence [10]. The prevalence is higher in males [11,12]. A clinical distinction can be made between egodystonic and egosyntonic social withdrawal, even if some individuals may present both egodystonic and egosyntonic characteristics [13].

Kato et al. [14] proposed three key elements for making a diagnosis of hikikomori especially out of Japan: (1) marked social withdrawal, with seclusion in one's own home; (2) continuous social isolation for at least six months; and (3) significant functional impairment or distress associated with social isolation. Past literature has highlighted that hikikomori can be associated with numerous psychiatric comorbidities such as anxiety disorder,

mood depression, personality disorders and Internet Gaming Disorder (IGD) [15-17]. Furthermore, Kato et al. [18] noted a vicious circle between hikikomori and IGD, in which one condition could favor the other and vice versa and proposed the "chicken and egg dilemma".

Although social interaction is common to both ASD and hikikomori, ASD is defined in terms of social difficulties while hikikomori is defined in terms of social withdrawal. On the other hand, the high level of autistic traits and comorbid conditions in people with hikikomori makes the differential diagnosis very difficult. The recent literature has reported a possible association between autism spectrum features and hikikomori [19]. Indeed, hikikomori has been found to co-occur in around a third of people diagnosed with ASD [20]. Over the last few years, a growing literature has shown a high percentage of autistic traits and developmental disorders in people with hikikomori [21-25]. Some authors reported a higher percentage of autistic traits in people with hikikomori than in the general population [26,27]. Moreover, hikikomori people with higher autistic tendencies have much more difficulty in social communication and social interaction.

Some authors have hypothesized that the social restrictions of the lockdown during the COVID-19 pandemic may have favored the risk of hikikomori in populations susceptible to this condition [28-31].

Recently, Yamada et al. [32] evaluated two groups of people with self-rated scales. The first group included people with ASD and hikikomori condition, while the second group included ASD people without hikikomori. The first group of patients was more likely to have higher sensory abnormalities, higher rates of atopic dermatitis, lower serum uric acid, stronger depressive mood, and anxiety tendencies.

In our opinion, clinicians should pay more attention to exploring the psychopathological conditions underlying lack of social participation, lack of social interactions and social isolation, especially in adolescents. Furthermore, considering autistic traits as the basis of trans-nosographic psychic functioning, the autism spectrum could be the basis of the tendency towards withdrawal among hikikomori subjects. This hypothesis should lead to increasingly personalized therapeutic interventions. Finally, clinicians should be better trained in the recognition of common psychopathological bases between hikikomori and ASD, paying greater attention to the condition of subthreshold autism spectrum disorder.

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