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Editorial

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Camouflaging: psychopathological meanings and clinical relevance in autism spectrum conditions

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Abstract

In the last decade, increasing literature focused on camouflaging as a strategy adopted to cope with social environment by patients with autism spectrum disorder (ASD). A better understanding of this phenomenon may shed more light on cognitive mechanisms and coping strategies of patients in the autism continuum, eventually leading to reconsider some previous "dogmas" in this field, such as the gender discrepancy in ASD diagnosis. Moreover, shared features can be observed in the camouflaging strategies adopted among the general population, among patients of the autism spectrum, and among patients with different kinds of psychiatric disorders, further challenging our perspectives. Camouflaging behaviors might be considered as a transdiagnostic element, closely associated with the continuous distribution of the autism spectrum among the general and the clinical population.

Introduction

"Camouflaging" can be seen as the way in which everyone tries to disguise fewer desirable aspects of his personality. In our everyday life, it may help to "camouflage" difficulties during social situations, or hide behaviors considered socially unprofitable.

Ethologically, camouflaging can be considered an adaptation to the perception (and cognitive mechanisms) of another animal, with the aim to remain untargeted while trying to reach individual objectives. Many species have their own typical "camouflaging strategy," adopted to cope with everyday life tasks, from surviving to courtship rituals.[1]

Imitation of gestures and simulated relational performances are common among animals, playing a key role in social learning.[2] Among humans, the ability of telling lies, supported by higher cognitive functions, is of particular importance and could be severely impaired in certain forms of mental retardation.[3] So camouflaging may be considered as a strategy supported by a broad set of individual resources, from cognitively implicit behaviors to the most sophisticated and intellectual expressions "to put on the best."[4]

Common Psychopathological Expressions of Camouflaging

Behaviors linked to camouflaging are detectable in different kinds of psychiatric patients. One of the simplest examples could be found in body dysmorphic disorder: in this case, the efforts focus on masking the supposed body's flaws with several expedients, from clothes to surgical interventions.[5] In other conditions, the experience of a perceived weakness is masked by an overcompensatory, opposite behavior: for example, some patients may cope with social anxiety adopting an arrogant or aggressive style.[6]

Another psychopathological symptom similar to camouflaging may be identified in mannerism, which features an exaggerated, abnormal expression of common gestures and behaviors, to the point of interfering with the purpose.[7] Mannerism is a common symptom in psychotic disorders such as schizophrenia.[7] According to recent studies, a poorer adjustment to community living was associated with higher cognitive disorganization and worse premorbid functioning among psychotic patients.[8,9] It should be noted how mannerism may be the result of a failed attempt of the patient to conform his behavior to that of others.[7] The proportion, the intensity, and the balance of the imitated behavior are inadequate, and it appears as a pantomime, unmasking its imitative nature: mannerism might be considered as an unsuccessful camouflaging attempt.

Camouflaging in Autism Spectrum Continuum

Recent researches suggest that autism spectrum disorder (ASD) could be the iceberg tip of a broader range of conditions, including also subthreshold manifestations.[10] Subthreshold autistic traits (AT), initially highlighted among relatives of patients with ASD, seem to be distributed in a continuum across the general population.[11] Moreover, AT are particularly frequent among

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patients with other psychiatric disorders, and they seem to be associated with a higher vulnerability toward developing mental disorders and suicidal thoughts.[3,10-14] In the last decade, increasing literature focused on camouflaging as a strategy adopted to cope with social environment by patients with ASD or AT.[4] It seems to be particularly common among females, possibly due to a higher awareness toward their own social difficulties.[4,15-17] In this framework, camouflaging may be considered as a spectrum of features associated with different conditions, following the continuous distribution of the autism spectrum.

In some cases, the habit of camouflaging become so deeply rooted that the presence of AT may result impossible to detect, covered by a work of masking and compensation. Among these patients, some of the main goals of camouflaging strategies could be identified in reaching a better integration between verbal and nonverbal behaviors, more reciprocity in conversations and relationships, or minimizing responses toward sensory over stimulations.[4,5,17] In order to reach these objectives, patients of the autism spectrum may use in social relationships learned phrases, jokes, or scripts; they often purposely maintain eye contact and personal contact. They may also imitate their pears' expressions, gestures, and behaviors (or even clothing style and interests). Sometimes personal remarks are accurately avoided, with an over-involvement in maintaining privacy.[4,15,17]

The habit to cope with social difficulties relying on camouflaging implies a continuous cognitive and emotive effort, leading to feelings of social overload and exhaustion, stress responses, and clinical expressions of anxiety and mood symptoms.[4,15–17] Camouflaging may lead to the construction of a full-fledged other identity, a mask, associated with continuous fear and shame toward the possibility to be "discovered".[4,15-17] However, it may also result hyper-adaptive in specific life tasks, depending from environmental factors and from the kind and severity of the patient's vulnerability: for example, spending time preparing topics of conversation before a socially relevant interaction may actually result in a better performance. From this point of view, camouflaging may change a deficit in an efficient tool for competing with others and reaching better, eventually extraordinary, results.[17,18]

How Common is Camouflaging Among the General Population and How Much in Autism-Related Conditions?

Limited literature focused on this topic. Hull et al.[17] developed a questionnaire for investigating camouflaging among clinical and general population. They also reported that, while females with AT show higher camouflaging scores than males, no gender difference is detectable among patients without AT.[19]

Camouflaging is supposed to be represented in a continuum among the general population, following the distribution of AT. Although the quality and quantity of camouflaging seem to be linked to the presence of autistic-like features, in the most severe forms of ASD the ability to camouflage disappears.[17] The breaking point might be the severe impairment of cognitive functions, which would prevent the ability to lie or even to build subjective experiences.

May Some Therapeutic Intervention Promote "Social Camouflaging"?

Although the aim of camouflaging strategies is to alter how other people see us, a common consequence seems to be a distortion of self-representation.[4,15-17] Camouflaging may result hyper-adaptive for reaching specific goals, but it implies nevertheless an altered experience of the self.[15-17] In the last years, the attention toward autistic-like condition progressively increased, and many public health organizations promoted attempts to social support. However, the specific kind of the provided social and rehabilitation support should be considered carefully, avoiding those which may indirectly promote a more complex social camouflaging tendency. This could be the case of some techniques focused on the mnemonic acquisition of performance skills that do not reflect the desires and necessities of the patient, who would still perceive them as "without sense." These strategies may not necessarily lead to an improvement of the subjective experience, but may risk instead increasing the distress.[4,15-17]

Can Camouflaging Explain Missed or Late Diagnosis Among Females With ASD?

The gender ratio for ASD is strikingly high. However, increasing evidence pointed out how females would receive less frequently a diagnosis of ASD with respect to males with comparable levels of symptoms.[17,18] Female presentations seem to be less evident also due to the higher tendency toward camouflaging their social difficulties by imitating others' behaviors.[4,15-18] Some authors reported also a significant link between social anxiety and the autism spectrum, especially in high-functioning or subthreshold presentations, which feature a higher awareness of patient's social difficulties.[11] Social anxiety disorder implies, as ASD, an impairment of the social brain, but it is more prevalent among females,[20] leading to hypothesize that this diagnosis may mask further gender bias in ASD assessment.[17,18] Moreover, the female-typical restricted interests frequently feature more socially acceptable activities such as spending time with animals, enjoying fictions, or focusing on food and diet.[10,21] Globally, several bias may mask the expression of the autism spectrum among females, including the very diagnostic criteria of ASD, which were built without adequate attention to gender-specific manifestations.

Conclusions

Camouflaging should be considered as an important confounding factor for the recognition of the autism spectrum. It may lead to reconsider some previous "dogmas" in this field, such as the gender discrepancy in ASD diagnosis. Shedding light on this phenomenon may improve our ability to understand the cognitive mechanisms and the coping strategies of patients in the autism continuum. More attention should be paid also to factors involved in the balance between risks and benefits for this kind of behavior. Shared features can be detected in camouflaging strategies observed among the general population, among patients with ASD, and among patients with other psychiatric disorders, leading us to further broaden the perspective. Camouflaging behaviors might be considered as a transdiagnostic element, closely associated with the continuous distribution of the autism spectrum.

The frequently reported presence of AT among patients with other mental disorders led some authors to hypothesize that a neurodevelopmental alteration could be considered at the basis of many psychiatric conditions, while the different psychopathological trajectories would be determined by the interactions among the severity (and the timing) of the alteration itself, the specific neurobiological asset of the patient, and the environment.[3,18,22] The link between autism spectrum and camouflaging, together with the

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presence of camouflaging-like behaviors in other psychiatric disorders, further stresses the possibility that AT, and the underlying neurodevelopmental alteration, should be considered the primary source of several kinds of psychopathological expressions among the general and the clinical population.

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