An Overview of Schizoid Personality Disorder

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ABSTRACT
Schizoid personality disorder (ScPD) is a rare mental disorder, the field is young, and related research is not well-developed. This review used a systematic search on Google Scholar about researches on ScPD and fundamental information. The main purpose of this paper is to grow knowledge of ScPD and improve understanding of this personality disorder by providing an overview of its characteristics, symptoms, etiology, impacts, and treatments. Psychologists proposed several treatments that may alleviate ScPD symptoms. Related treatments include socialization group which may partially help with their social activity, medications specific for schizophrenia and only use on ScPD as they share similar negative symptoms, and psychodynamic psychotherapy, which lack qualitative and quantitative research in this area. Although treatments suggested are supported by researchers, the field has not developed a targeted one. The difficulty in treatments and developing treatments may be due to patients' special symptom, which is lack of motivation. Anyhow, future research should target effective treatments especially, and provide more case studies. More experiments about etiology are also important, which may help identify the complex etiology of ScPD or develop targeted medications. The future directions of developing the field of ScPD are suggested.

Keywords: Schizoid personality disorder, Etiology, Impact, Treatment.

1. INTRODUCTION
Schizoid personality disorder, also known as ScPD, is a cluster A personality disorder that identifies as ‘odd and eccentric’ [1]. According to DSM-5, ScPD is ‘a pervasive pattern of detachment from social relationships and a restricted range of expression of emotions in interpersonal setting’ [2]. Individuals with ScPD have several significant characteristics. For example, they show a lack of interest in social activities and interpersonal relationships, a preference for a lonely lifestyle, secrecy, emotional indifference, and ‘not go out of their way for gaining social validation’ [3]. Further, they cannot feel pleasure in any social activities, and they also perform poorly in cognitive tasks (especially those with a special type of ScPD which is Schizotypal-Schizoid personality disorder) [4]. Meanwhile, however, they may demonstrate an elaborate internal fantasy world [5].

According to DSM-5, ScPD may appear in various environments (situations) from early adulthood. It may happen during schizophrenia or any other mental disorder, including autism spectrum disorder and depressive disorder with psychotic characteristics. ScPD not only occurs during this period but also ‘cannot be attributed to other physiological effects of various medical conditions’ [1]. Researchers have put forward some possible etiology for ScPD, including psychological and social factors, at the same time, because it belongs to cluster A personality disorder, the etiology may be partially determined by genetics, and the family environment of parenting style may also have an impact [6]. In addition, although the main characteristics start in early adulthood, some symptoms typically, such as loneliness or poor school peer relationships, may first appear in youth (late childhood) and/or adolescence [5, 7]. This indicates individuals' difference, so they are extremely vulnerable to discrimination (negative) and isolation [1], even to be a provocative target. However, it is difficult to figure out whether the individuals had suffered from ScPD when they experienced these unpleasant events or not in the past.

ScPD is an extremely rare personality disorder. Prevalence of it is only 4.9% estimated to be based upon ‘a probability subsample from Part II of the National Comorbidity Survey Replication’ [1], the community prevalence is about 3.1% in the United States [8], and less than 1% of prevalence in the general population is reported by The American Psychiatric Association (APA, 2000). Because of the low prevalence of ScPD, it is...
suggested by some people that it can be removed from DSM-5, which however was unsuccessful at the end [6]. In addition, ScPD is also rare in clinical settings, which are only about 2.2% and have a gender difference that appears 'more common in males than in females [9].

‘Almost always choose a separate activity’ and ‘like few activities’ are two synonyms for ScPD [1]. Since some of these main characteristics are shared between individuals with ScPD and those with autism, there is controversy about the fuzzy boundaries between them as ScPD is diagnosed by clinical observation, and it may sometimes overlap [10]. But on the contrary, ScPD is very different from autism. A study focuses on the different manifestations of ScPD, normal and autistic children. The results suggest that children with ScPD are distinct from both normal and autistic children in the test of cognitive, language, memory, and perseverative, affect respectively [11].

With the development and update of technology and news channels, the etiology, impacts, and treatments of ScPD are constantly updated. However, there are only some detailed reviews on ScPD. Therefore, this article reviews the main research in ScPD, aiming to form the latest review of the main etiology, effects, and treatments of ScPD.

In short, this article retrieves the literature from the database, aims to summarize the etiology, impact, and treatment of ScPD from different aspects. It provides a comprehensive literature review with a high reference value for this field and discusses the direction of its future development, raising awareness and increasing understanding of ScPD.

2. METHODOLOGY

This review was based on studies in ScPD (Schizoid Personality Disorder) and was developed by using a systematic search on Google Scholar with several terms such as ‘ScPD’ or ‘Schizoid Personality Disorder’ or ‘Schizoid’. In total, 37 articles were included in this paper.

Fundamental information about ScPD is obtained from the Diagnostic and Statistical Manual of Mental Disorders: 5th edition, including several aspects such as definition, description, symptoms, and treatments [1].

3. RESULTS

In recent years, researchers have done a lot of work to uncover the causes of ScPD. Psychologists believe that the etiology of ScPD is ‘a combination of intrapsychic, psychosocial, cultural, ethnic, religious, and/or neurobiological factors determine loneliness and associated schizoid etiology’ [12]. This review mainly focused on psychological and social perspectives. Also, other possible factors were discussed.

3.1. Etiology

In recent years, researchers have done a lot of work to uncover the causes of ScPD. Although psychologists believe that the etiology of ScPD is a combination of several risk factors [12], this review will only focus on the main ones, such as psychological, social, and biological related perspectives.

3.1.1. Psychological etiology

Firstly, psychological factors are highly influencing individuals who cause them easier to get ScPD. Martens searched literature published between 1970 to 2009 based on computers and concluded that loneliness appears as a crucial psychological factor of the etiology of ScPD [12]. Researchers found that under the influence of numerous factors from culture, social psychology, etc., the development of individual social emotion and personality may be disturbed, leading to underdevelopment of their abilities, and leading to misunderstandings in society as well as isolation, individuals are therefore accustomed to living in isolation, ‘lack of social-emotional interaction’ and lack of training or practising in key social communication skills, resulting in ‘difficulty in awareness and response to subtle social-emotional signals’ (including verbal and non-verbal signals, such as body language and expressions) [12]. For the above reasons, ScPD individuals cannot accurately understand and respond to social interactions and avoid misunderstandings, leading to avoidance of social interactions to avoid rejection. This also leads them to have a false belief that their world is safer and more comfortable and acquire social indifference [13]. Although the above research claims that ScPD individuals will feel frustrated and ashamed due to their failure to successful interactions, socialization, etc. [12], there are also studies showing that they are insensitive to negative comments from others as they do not try their utmost for social validation [3]. But undoubtedly, loneliness does have an inseparable relationship with ScPD.

Kernberg suggested that ScPD individuals have difficulty understanding themselves due to internal personality conflicts [14]. In his proposal, individuals have ‘contradictory self-images’ due to ScPD, and can be divided into 2 groups, which is ‘composed of idealized or frightening aspects that internalize others’ and ‘both shameful and exalted self-images’. Therefore, the persistence of ‘subjective unreality’ and ‘identity diffusion’ can lead to a long-term sense of emptiness [12]. Martens suggests that the terrible aspects of the inner others will be projected onto the outside world and may lead to fear, paranoid attitudes, and related social withdrawal and loneliness [12].
3.1.2. Social etiology

Social impact and connection have been suggested as other main factors that cause ScPD. A new theory suggested by Álvarez in 2003 that ScPD is considered to be the basic structure of modern cultural personality [15]. According to this theory, ScPD is a typical crazy way in modern culture, able to exist in a relatively different way from the basic way of being in the referenced culture. Álvarez believed that the alienation, indifference to emotions, and special closure of these individuals due to different ways of living are understandable, and they not only just point out the reason for the disconnect between the world and the inner self or outer self, but also shows that this is a type of modernity which frequently happens in modern society [15]. This research concludes that ScPD is caused by a variety of different disconnections and establishes a basic connection between modern culture and ScPD. The disconnection is caused by excessive reflection and solipsism, with different manifestations and different degrees in various cultures and societies. Meanwhile, the theory claims that the ultimate cause of this disease lies in human adaptation efforts, but many experiments have not supported this. In short, according to this theory, the factors that cause ScPD are also likely to be the maladjustment of the individuals to society and the disconnection in various aspects.

3.1.3. Psychosocial etiology

There are some researches about the relationship between poor parenting and ScPD. In a sample of teenagers who experienced childhood verbal abuse, researchers believed that they had increased ScPD symptom levels during puberty and early adulthood [16]. Other historical researchers hypothesized that over-perfectionists, parenting styles that do not love or neglect may also increase the chance for ScPD [17].

3.1.4. Biological etiology

Some evidence indicates that cluster A personality disorder has common risk factors especially genetically, where the prevalence of ScPD elevated among relatives of ‘patients with schizophrenia and schizotypal personality disorder’ [9]. ScPD (such as low sociality and low enthusiasm) indicates that these are inherited, supported by twin studies. Additionally, the direct heritability of ScPD is estimated at about 50% to 59%. [18]. The link between ScPD and underweight may also support the importance of biological factors [19], and according to Sula Wolff, ScPD probably has genetic basis [20].

3.1.5. Neurobiological etiology

In general, ‘prenatal caloric malnutrition’, ‘premature birth’ and ‘low birth weight’ (and related neurodevelopmental adversity) may increase the risk of mental disorders and may develop to ScPD [21]. Traumatic brain injury those individuals experienced may also lead them to be at risk of developing personality disorders that reflect ScPD [22].

The evaluation Koponen et al. done about ‘the occurrence of mental disorders’ in patients who have experienced brain trauma in the past 30 years found that 6.7% (4 out of 60 people) suffer from ScPD [23]. Koponen et al. did not discuss ‘which lesions are related to ScPD development’, but it is suggested that area of the frontal lobe (which is in charge of sufficient social function) [24], the limbic system (which participating in emotional processing and perception) [24], and parietal lobe lesions are related to persistent socio-emotional inability, problems of social interaction, loneliness, and subsequent development of ScPD.

3.1.6. Summary of etiology

In total, the connection and relationship with society have a paramount role in the etiology of ScPD, while loneliness being the main cause of ScPD and its development. A good social situation and a good parenting style can both be protective factors for individuals. Biological and neurobiological factors such as genetics, the problem with birth and brain injury, etc., can also increase the risk of having ScPD, leading to further consequences.

3.2. Impacts

ScPD, as one of the personality disorders, has caused serious impacts on individuals who have it. According to the researches done by psychologists in this area, it may cause impact both individually and socially. This review will introduce 2 main individual impacts with a case study on ScPD patients and 1 social impact related to the Theory of Mind (ToM) of ScPD individuals.

3.2.1. Individual impacts

Individual impact plays an important role in the influence ScPD may cause to individuals, including disconnection, isolation, difficulty in joining or participating in treatment continually, etc. This paper will introduce 3 of the individual impact listed above and the most significant ones, with a case study that summarizes the individual impact the patient has received.

3.2.1.1. Disconnection & isolation

One of the most significant effects on individuals with ScPD is isolation. As has been discussed in the Etiology part of this paper, ScPD individuals are prone to be unaccepted by the mainstream of society due to their different ways of living and communicating. Because of
the ‘pervasive pattern of detachment from social relationship’ and indifferent emotions, individuals with ScPD are extremely vulnerable to discrimination (negative) and isolation [1], which may strengthen and reinforce their avoidance of socialized. They may also be misunderstood as inherently anti-social and easily labelled as ‘sociopath’ (usually by people who with stereotypes and preconception), or ‘unpredictable or dangerous’ which cause them being alienated and even be bullied by others. Furthermore, individuals with ScPD ‘believe that their feelings of love will destroy each other and/or lead to their destruction’ [25], so they are harder to get into close relationships with others, especially romantic relationships.

3.2.1.2. Difficulty in treatment

More importantly, patients with ScPD often lack the motivation to continue the treatment (or even to receive one) and make changes because of restricted emotional behaviors [26], it is difficult for them to be touched by praise or criticism, let alone be motivated by that. ScPD patients appear unaffected by criticism and praise [1, 13], thus have lost an important source of motivation, which also causes their low desire in life. In the paper, Bleuler pointed out the inner dynamics of ambivalence in ScPD that ambivalence in ScPD refers to the contrasting feelings of patients under the appearance of seemingly emotionally detached, which may conceal the inner and highly sensitive and the desire for intimacy [27]. In any case, the characteristics of ScPD patients will cause problems for treatment. When the patient is unable to correctly express their problems, they may be misunderstood as lack of motivation, and the degree of participation in treatment may be underestimated because of the severity of the disease and the resulting serious symptoms, which will then lead to a gradual decline in professional participation [26]. This has a serious negative impact on patients: the feeling of failure on treatments, leading to discouragement about therapy and the possibility of obtaining life changes.

3.2.1.3. Case study of individual impacts

There is also a complex case about ScPD [28] that supports the view that social distancing can have a significant impact. It is the case study of a 41-year-old male who was diagnosed with ScPD and experienced depressive feelings for 6 months. In this case, the patient expressed ‘the subjective states of wellbeing, the interpersonal relationships and the level of self-accomplishment have progressively deteriorated’ [28]. According to research, the frustration, depersonalization, and obsessiveness centred on the failure of interpersonal relationships that the patient experienced all due to isolation, lack of emotion, and lack of pleasure, exacerbated by limited social contact.

3.2.2. Social impacts

Social impact is another serious side effect caused by ScPD that influenced the social life of individuals seriously. There are several aspects to identify the social impact, but this paper will focus on the Theory of Mind (ToM) aspect to show how the ScPD affects individuals socially. Theory of Mind is the ability to explain other people’s behaviors based on their minds naturally and understand that belief will determine their behaviors when there is a conflict between belief and reality [29]. In a study on ToM, researchers believe that emotional ToM is less susceptible to neurodegeneration or brain damage than cognitive ToM [29, 30, 31]. Therefore, ToM appearing in older individuals with schizotypal-schizoid personality disorder (SSPD, which is a special type of ScPD) defects may suffer greater impairment in cognitive tasks rather than emotion recognition. When evaluating the possible separation between the social cognition and social perception components of ToM, the cognitive scores of SSPD participants were significantly lower than the emotional ToM [4]. This means that the characteristics of social maladjustment and social communication barriers are more obvious in the later years of those individuals (when they already have to live independently in society), and make them being less acceptable by the mainstream society, causing further consequences, such as alienation [32].

3.2.3. Summary of impacts

ScPD individuals may experience the individual and social impact of loneliness, lack of motivation, ambivalence construct, difficulty on cognitive tasks, and poor social relationships [1]. And it is no doubt that they are also experiencing the violation of social norms and anhedonia [33], which may easily strengthen their disconnection with society and avoidance with others. Hence, it is even harder for them to adapt to society, let alone integrate into it. Due to the negative impacts of ScPD, researchers are committed to developing effective treatments to improve the quality of life for patients.

3.3. Treatments

Due to the serious impacts, ScPD may cause on individuals. Psychologists are working hard on developing treatments for that. However, the field is still young [34] and the researches are not strongly supported by data or evidence. As a result, this paper will only identify some main treatments which may alleviate the symptoms to some extent.

3.3.1. Medications

There is no medication suitable for the direct treatment of ScPD, but certain medications may alleviate the symptoms of ScPD and treat concurrent mental
disorders. As ScPD has similar negative symptoms with schizophrenia, and ScPD is considered as one of the schizophrenic spectrum disorders, it may ‘benefit from the medications indicated for schizophrenia such as modafinil’ [34, 35]. Medication such as amphetamine bupropion may alleviate the negative symptom of anhedonia for ScPD [36].

3.3.2. Socialization group

From the social perspective, it is suggested that socialization groups may also be good for the patients [1]. This may alleviate the symptoms, which is avoiding social connections, as ScPD individuals are hard to cope with subtle emotions or signals. The group may help them to understand and prevent them from avoiding because of the difficulty in communication.

3.3.3. Psychodynamic psychotherapy

Another possible treatment for ScPD is Psychodynamic psychotherapy, which is supported by a range of researches. During the study period, the diagnosis of ScPD in the subject has been confirmed and used any type of psychodynamic method, then the results have been measured [37]. Although this book has also conducted data retrieval in addition to collating a large amount of literature and proposed a researchable, evidence-based disease development model, it is a pity that the results it shows are not optimistic that the existing literature is inadequate to conclude the treatability of this condition with psychotherapy.

3.3.4. Summary of treatments

Taken together, the difficulty of providing treatment for ScPD patients has also been shown in DSM-5 and APA [1]. Individuals with ScPD are often indifferent to the need for change, which can lead to contempt for any treatment. In addition to the fewest hospitalizations, ScPD also has the lowest diagnosis rate due to similarities with other Cluster A personality disorders [28]. During the study of a specific case, the researchers also found that ‘The dominance of certain pathological attributes, as well as the refuge the patient found in his imagination, the lack of pragmatism, the hypersensitivity, the bizarre originality and the detachment of the patient, made the therapy very difficult.’ [28].

Therefore, medications and therapy may help alleviate the symptoms but still lack effective treatment for ScPD due to their special characteristics.

4. DISCUSSION

This paper mainly summarizes the main etiology, impact, and treatment findings of ScPD. This article obtains the main causes of ScPD from the psychological and social perspectives, sums up the negative impacts both individually and socially caused by ScPD in combination with a case study, and lists the main treatments that may be effective. The importance of keep developing the field and its future direction are also suggested in this paper.

4.1. Researches on etiology

Regarding the etiology of ScPD, although the field is still young [34], there are many authoritative studies, including psychological, social, psychosocial, neurobiological, and biological aspects. Loneliness [12], difficulty on understanding self [14], the disconnection with society [15], poor parenting [16], genetic [9, 18], underweight [19, 20], birth-related problem [21] and brain injury [22, 21] are etiology mainly suggested.

However, the proposed etiology and risk factors may be incomplete, although there are many aspects listed. Other aspects such as physical illness (social isolation caused by long-term and serious illness) and socioeconomic status (social isolation caused by low social status) also contribute to the cause of ScPD [12].

More studies are needed on the etiology of ScPD as the risk factors in some aspects lack evidence. The genetic links between ScPD with other individuals, such as schizophrenia individuals, also need more experiments to prove. In addition, on the psychological etiology, research results are inconsistent, especially on how ScPD patients view their social deficits. More samples are needed to compare with the research.

As the study in etiology may help understand more about ScPD, lower the prevalence, and develop more effective treatments, more research and experiments are needed to gain a deeper understanding of the multidimensional dynamics of ScPD. They should build more adequate evaluation and treatment models and plans.

4.2. Researches on impacts

This review also summarizes the research findings on the impact of ScPD, including personal and social aspects. Disconnection and isolation [25], difficulty with treatments [26], and the deterioration of self-accomplishment level [28] are considered as individual impacts. Significant low cognitive scores in ToM and alienation (the rejection from social mainstream) are considered as social impacts [32].

Knowledge about the impacts ScPD may cause to individuals may help identify some etiology (for example, researchers may try to find out the neurobiological causes through studying the biological impact on them) and develop a treatment specifically to alleviate the significant symptoms. Therefore, more experiments and researches are needed in the field on impact. Case study also needed to find out more details about individuals with ScPD.
4.3. Researches on treatments

There is still much need to learn about the treatment of ScPD, especially when there are few treatments proposed and can only alleviate part of the symptoms. The proposed treatments include medication [34-36], socialization groups, and psychodynamic psychotherapy [37]. Even the effectiveness of those treatments has not been tested through several experiments, which shows the limitation of this field that lack of effective, targeted treatments.

The treatment is important for both the patients and society, as it enables individuals to understand the subtle signs in communication and helps better performance in social activities. Therefore, further research and experiment in this field are necessary. Psychologists and researchers should pay more attention to developing the treatment, provide better treatments and help the ScPD individuals fit in the society.

5. CONCLUSION

In total, psychological, biological risk factors, etc., may all lead to ScPD, but current research is not enough to prove which one of them is the key factor. The negative impact of ScPD on individuals is also reflected in the personal and social aspects, but the most significant one is for individuals. To avoid negative consequences, patients should receive appropriate treatment. Possible treatments are medications and treatments, or perhaps Psychodynamic psychotherapy. However, due to the particularity of ScPD, the treatment is generally difficult to work with APA. To date, effective treatments for patients with ScPD are still in the research and experiment stage and have not yet been well-developed.

Due to the extremely low incidence, society generally misunderstands and prejudices against patients with ScPD. Psychologists need to increase the publicity of this knowledge and try to remove the stereotypes that society has about patients in various ways so that society can treat patients with personality disorders. Be more tolerant and reduce the number of patients who are affected by social factors and cause illness. At the same time, it is also necessary to continually conduct research in effective treatments for ScPD and strive to find effective treatments as soon as possible so that ScPD patients can return to society.

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