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Social anxiety disorder and stuttering: Current status and future directions

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ABSTRACT

Anxiety is one of the most widely observed and extensively studied psychological concomitants of stuttering. Research conducted prior to the turn of the century produced evidence of heightened anxiety in people who stutter, yet findings were inconsistent and ambiguous. Failure to detect a clear and systematic relationship between anxiety and stuttering was attributed to methodological flaws, including use of small sample sizes and unidimensional measures of anxiety. More recent research, however, has generated far less equivocal findings when using social anxiety questionnaires and psychiatric diagnostic assessments in larger samples of people who stutter. In particular, a growing body of research has demonstrated an alarmingly high rate of social anxiety disorder among adults who stutter. Social anxiety disorder is a prevalent and chronic anxiety disorder characterised by significant fear of humiliation, embarrassment, and negative evaluation in social or performance-based situations. In light of the debilitating nature of social anxiety disorder, and the impact of stuttering on quality of life and personal functioning, collaboration between speech pathologists and psychologists is required to develop and implement comprehensive assessment and treatment programmes for social anxiety among people who stutter. This comprehensive approach has the potential to improve quality of life and engagement in everyday activities for people who stutter. Determining the prevalence of social anxiety disorder among children and adolescents who stutter is a critical line of future research. Further studies are also required to confirm the efficacy of Cognitive Behaviour Therapy in treating social anxiety disorder in stuttering.

Educational Objectives: The reader will be able to: (a) describe the nature and course of social anxiety disorder; (b) outline previous research regarding anxiety and stuttering, including features of social anxiety disorder; (c) summarise research findings regarding the diagnostic assessment of social anxiety disorder among people who stutter; (d) describe approaches for the assessment and treatment of social anxiety in stuttering, including the efficacy of Cognitive Behaviour Therapy; and (e) outline clinical implications and future directions associated with heightened social anxiety in stuttering.

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1. Introduction

Social anxiety disorder (also known as social phobia) is a highly prevalent anxiety disorder (Ruscio et al., 2008; Slade et al., 2009). According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5; American Psychiatric Association, 2013a), social anxiety disorder is characterised by marked or intense fear of social or performance-based situations where scrutiny or evaluation by others may occur. Feared situations often include speaking in public, meeting new people, and talking with authority figures, to name a few (Ballenger et al., 1998). Physical and motor symptoms associated with the disorder include blushing, trembling, sweating, and speech block, and many individuals with social anxiety disorder fear these symptoms being observable to others (Bogels et al., 2010). As a result, exposure to feared situations is typically accompanied by anxious anticipation, distress, and avoidance.

Social anxiety disorder affects a significant proportion of the general community, with a lifetime prevalence of approximately 8–13% (Kessler et al., 2005; Ruscio et al., 2008; Somers, Goldner, Waraich, & Hsu, 2006). The disorder typically develops in childhood or adolescence, with a mean age of onset between 14 and 16 years (Kessler et al., 2005; Schneier, Johnson, Hornig, Liebowitz, & Weissman, 1992). This corresponds with the increased importance of social and peer relationships, and heightened vulnerability to social embarrassment, as children transition through childhood and adolescence (Ollendick & Hirshfeld-Becker, 2002). Development of social anxiety disorder is influenced by a host of factors, including biological and psychological vulnerabilities, genetics, temperament, cognitive styles, and parental and peer influences (Ollendick & Hirshfeld-Becker, 2002; Rapee & Spence, 2004). Hence, multiple pathways to the acquisition of social anxiety disorder exist.

Social anxiety disorder impedes normal social development, and is associated with significant functional impairment (Lipsitz & Schneier, 2000; Schneier, Heckelman, & Garfinkel, 1994). Individuals with social anxiety disorder typically avoid social, educational, and occupational situations that are perceived as threatening (Cuthbert, 2002). This avoidance can severely hamper educational achievement, occupational performance, social interaction, relationships, and quality of life (Stein & Kean, 2000). Not surprisingly, social anxiety disorder is associated with low self-esteem, suicidal ideation, lower education and socioeconomic status, unemployment, financial dependency, and being single (Stein & Kean, 2000). The disorder is also highly comorbid with other mental disorders, especially the anxiety disorders and major depression, which may increase symptom severity and impairment (Ballenger et al., 1998). However, even without the presence of comorbid disorders, social anxiety disorder remains a serious and disabling condition (Stein & Kean, 2000).

1.1. Stuttering and social anxiety

Stuttering is a speech disorder characterised by involuntary disruptions to speech which impede the capacity to communicate effectively. The lifetime incidence of stuttering is estimated at approximately 4–5%, with a 1% point prevalence (Bloodstein & Bernstein Ratner, 2008). Onset typically occurs between 2 and 5 years of age when children are developing speech and language skills (Yairi, Ambrose, & Cox, 1996). Stuttering is most amenable to treatment during the preschool years when neuronal plasticity is greatest. The disorder typically becomes less tractable and far less responsive to treatment during the school years, and by adulthood stuttering is often a long-term problem.

There are several reasons to expect that stuttering may be associated with social anxiety disorder. To begin with, stuttering is accompanied by numerous negative consequences across the lifespan which may increase vulnerability to social and psychological difficulties (Schneier, Wexler, & Liebowitz, 1997). These negative consequences can begin early, with evidence of preschool children who stutter experiencing bullying, teasing, exclusion, and negative peer reactions (Langevin, Packman, & Onslow, 2009; Packman, Onslow, & Attanasio, 2003). These consequences are intensified during the school years when children become more involved in social and speaking situations. As a result, children and adolescents who stutter frequently experience peer victimisation, social isolation and rejection, and they may also be less popular than their non-stuttering peers (Blood et al., 2011; Davis, Howell, & Cooke, 2002; Hearne, Packman, Onslow, & Quine, 2008). These negative consequences have the potential to result in shame and embarrassment, low self-esteem, withdrawal, and lowered school performance (Langevin & Prasad, 2012). Similar factors have been associated with social anxiety (Hudson & Rapee, 2009).

Not surprisingly, adults who stutter have retrospectively reported that stuttering had extremely detrimental effects on school life and long-term effects on social and emotional functioning (Hayhow, Cray, & Enderby, 2002; Hugh-Jones & Smith, 1999). Stuttering in adulthood is also associated with adverse listener reactions, negative stereotypes, and significant occupational and educational disadvantages (Blumgart, Tran, & Craig, 2010a; Klein & Hood, 2004). Consequently, the disorder can affect quality of life as adversely as life threatening conditions such as neurotrauma and coronary heart disease (Craig, Blumgart, & Tran, 2009), and suicidal thoughts and suicides have been documented with adult stuttering patients (Corcoran & Stewart, 1998).

The numerous negative consequences associated with stuttering are thought to give rise to the development of anxiety (Blood & Blood, 2007; Ollendick & Hirshfeld-Becker, 2002). Prior to the turn of the century, however, findings regarding the relationship between stuttering and anxiety were inconsistent, ambiguous, and difficult to interpret (Ingham, 1984; Menzies, Onslow, & Packman, 1999). The equivocal nature of these findings was attributed to a number of methodological flaws, including small sample sizes, insufficient power to detect differences between groups, recruitment of adults seeking treatment for stuttering rather than adults who stutter from the general community, and application of physiological and