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Subjective distress associated with chronic stuttering

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Abstract

Stuttering is a chronic condition involving involuntary disruption to speech fluency. While elevated social anxiety has been found to be a risk factor for adults who have stuttered all their lives, it is unclear how stuttering influences other negative mood states such as interpersonal sensitivity and depressive mood. Consequently, controlled research was conducted that investigated negative affectivity across a number of domains in adults who stutter. Participants included 200 adults who have stuttered since childhood, with comparisons made to 200 non-stuttering controls of similar age and sex. The adults who stuttered were found to have significantly elevated levels of distress and negative mood states compared to the controls. As expected, significant differences were found for anxiety, however, significant and substantial differences were also found across a broad range of negative affect, including dimensions such as somatization, interpersonal sensitivity, depressive mood, hostility and paranoia. The implications of these findings for the better management of stuttering are discussed.

Educational objectives: The reader will be able to describe: (a) the negative impact of a chronic disorder like stuttering on people who have stuttered all their life; (b) the factor structure of the SCL-90-R; (c) the negative affectivity construct, and (d) the difference between psychogenic theories of stuttering and neurological theories of stuttering.

Keywords: Stuttering; Negative affectivity; Fluency disorder; Mood states; Chronic disorder

1. Introduction

Early theories concerning the etiology of stuttering assumed it was a psychogenic disorder, caused by unconscious neurotic and psychosexual processes (Bloodstein & Bernstein Ratner, 2008). For instance, Glauber (1958) believed stuttering was a neurosis caused by repressed needs in childhood or by suppressed hostility. Later theorists suggested stuttering was a result of high levels of anxiety, as hypothesized by the approach avoidance conflict or anticipatory struggle theories where it was believed the drive to avoid speaking originated from learned anxieties about speech or from subconscious personality factors (Sheehan, 1958). However, there is no convincing evidence available to support these theories (Bloodstein & Bernstein Ratner, 2008). In contrast to a psychogenic origin of stuttering, most contemporary theories propose that stuttering occurs as a result of disorder in the speech sensory-motor control neural system related to an inherited predisposition (Ludlow & Loucks, 2003). These neurophysiological abnormality theories presuppose that any elevated psychopathology present in a person who stutters (such as elevated trait or social anxiety)

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is more likely to be a result of the negative and adverse impact of living with the impairment imposed by a chronic speech disorder (Craig & Tran, 2006).

There is now substantial evidence that stuttering does present a negative challenge as a person attempts to cope with their speech disorder. Examples of negative challenges include children and adolescents who stutter having higher risks of negative peer reactions, as well as having higher risks of bullying (Blood, Boyle, Blood, & Nalesnik, 2010; Davis, Howell, & Cooke, 2002; Langevin, Packman, & Onslow, 2009). Additionally, fears about verbal communication have been shown to be significantly elevated in children who stutter (aged about 9 years) compared to children who do not stutter, and these fears have been shown to continue to be elevated into adolescence (DeNil & Brutten, 1991). By early to late adulthood, stuttering was found to have a significant negative impact on quality of life in psychosocial domains such as vitality, emotional, social and mental health functioning, while predictably no differences were found for general health, physical role or physical function quality of life domains (Craig, Blumgart, & Tran, 2009; Cummins, 2010). The extent of the negative impact of stuttering was found to be comparable to the impact of a neurological disorder such as traumatic spinal cord injury, or diseases such as diabetes and coronary heart disease (Craig et al., 2009; Middleton, Tran, & Craig, 2007). Negative stereotypes are also a problem for many people who stutter (Boyle, Blood, & Blood, 2009).

Psychopathology has been found to have its initial emergence in early developmental years and develops as a person ages (Rutter, 1985), and this developmental period overlaps the time in which stuttering also typically emerges (Treon, Dempster, & Blaesing, 2006). However, as argued above, a negative mood state such as neurosis is not thought to be a causal factor in the development of stuttering (Craig & Tran, 2006), therefore if elevated negative mood states exist, then this is presumed to be a result of struggling with the adversity associated with an involuntary speech disorder (Craig & Tran, 2006). For instance, research using the Minnesota Multiphasic Personality Inventory (MMPI – Butcher, Dahlstrom, Graham, Tellegen, & Kaemmer, 1989) suggested that adults who stutter had significantly elevated psychopathology scores compared with non-stuttering controls, but that scores fell well within the normal range (Sermas & Cox, 1982; Treon et al., 2006). Iverach et al. (2010) came to a similar conclusion using the NEO Five Factor Inventory (Costa & McCrae, 1992). Iverach et al. (2010) found that while their adult stuttering sample had personality scores that fell within the normative range, they had significantly higher Neuroticism scores, as well as significantly lower Agreeableness and Conscientiousness scores compared with normative samples. Adults who stutter have also been found to have significantly elevated levels of distress such as trait and social anxiety (Craig & Tran, 2006; Craig, Hancock, Tran, Craig, & Peters, 2003; Ezrati-Vinacour & Levin, 2004; Iverach et al., 2009a; Kraaimaat, Vanryckeghem, & Van Dam-Baggen, 2002; Mulcahy, Hennessey, Beilby, & Byrnes, 2008). Adults who stutter have increased risks of fearing the scrutiny by others in social contexts and around 4 in 10 have been found to have an elevated risk of social phobia (Blumgart, Tran, & Craig, 2010b; Schneier, Wexler, & Liebowitz, 1997; Stein, Baird, & Walker, 1996). Stein et al. (1996) found a social phobia prevalence of 44% in a small group of adults who stutter, while Blumgart et al. (2010b) found a social phobia prevalence of 40% in a large sample of adults who stutter, compared to a prevalence of 4% in a non-stuttering control group similar for age and sex ratio.

This research was conducted to clarify this issue of whether or not adults who stutter have elevated negative mood states. While it is becoming clear that elevated trait and social anxiety is a significant risk of chronic stuttering, it is still unclear whether stuttering has associated risks of distress across a range of negative mood states. Therefore, the major aim of this research was to conduct a comprehensive assessment of a range of negative mood states in a large group of adults who stutter and non-stuttering adults.

2. Method

2.1. Participants

The methodology, design and definition of stuttering have been discussed in some detail in a recent paper (Blumgart, Tran, & Craig, 2010a). The study involved a group of 200 adults who stutter and a control group of 200 adults who do not stutter. Table 1 shows mean age, mean age diagnosed with stuttering, mean severity of stuttering and mean general health risks for the two groups by sex. The adults who stutter were invited into the study by approaching stuttering self-help groups in New South Wales (NSW) Australia, as well as private speech clinics, general medical practitioners, speech pathology departments of public hospitals and community health centers (87% were recruited from self-help groups). Recruitment continued till 200 who met inclusion criteria had agreed to participate. The 200 participants