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# A cross-cultural, long-term outcome evaluation of the ISTAR Comprehensive Stuttering Program across Dutch and Canadian adults who stutter

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**Abstract**

There is a need to evaluate the effectiveness of stuttering treatment programs delivered in domestic and international contexts and to determine if treatment delivered internationally is culturally sensitive. Evaluation of the effectiveness of the ISTAR Comprehensive Stuttering Program (CSP) within and across client groups from the Netherlands and Canada revealed generally positive results. At 2 years post-treatment both groups were maintaining statistically significant reductions in stuttering frequency and improvements in attitudes, confidence, and perceptions as measured by the Revised Communication Attitude Inventory (S24), Perceptions of Stuttering Inventory (PSI), and the approach scale of the Self-Efficacy Scaling by Adult Stutterers (SESAS). Data pooled across the groups on these measures gave evidence of a global treatment effect with standardized effect sizes ranging from typical to larger than typical in the behavioural sciences. Only two differences between the groups emerged: differences in speech rate and perception of self. Given that these groups represent two distinct cultures, differences were discussed in terms of whether they could be due to cultural, methodological, or other variables. Overall, results suggest that, the CSP appears to be similarly effective in both cultures and thus, sufficiently sensitive to the culture of Dutch adults who stutter.

***Educational objectives:*** The reader will be able to (a) describe a methodology that can be used in a clinical setting to evaluate the long-term effectiveness of stuttering treatment with adults, (b) describe some of the challenges in developing a model of clinically meaningful outcome, (c) explain the rationale for the need

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for cross-cultural investigations of treatment outcome, and (d) summarize speech and self-report results of the cross-cultural evaluation of an integrated stuttering treatment program.


*Keywords:* Stuttering; Treatment outcome; Evidence-based practice; Cross-cultural

In the face of increasing globalization and international sharing of information about stuttering and its treatment (see Pickering & McAllister, 2000; Shapiro et al., 2004), it is becoming ever more important for developers of treatment programs to demonstrate effectiveness, both in domestic and in international practice. In addition, international practice must be culturally sensitive. That is, drawing from Taylor (1986), Pickering and McAllister (2000), and Scollon and Scollon (2001), a treatment program for stuttering must be sensitive to the values and attitudes of those who stutter in the culture or subculture in which the treatment is being delivered and it must establish appropriate therapy goals, use appropriate materials, consider local therapy practices, and consider cultural influences on patterns of communication (*e.g.*, discourse systems, in particular functional uses of language; Scollon & Scollon, 2001).

In the context of this study culture refers to the "socially transmitted and shared influences" (Draguns, 1997, p. 214) on stuttering adults who are separated by geographical and language barriers (see Draguns). In terms of culture and communication disorders, Battle (1993) states that "Culture is about the behavior, beliefs, and values of a group of people who are brought together by their commonality" (p. xvii) and that "since the roots of communication are embedded in culture, it is logical to assume that one cannot study communication or communication disorders without reference to the cultural, historical, or societal basis of the communication style of the language used by members of the culture" (p. xix).[1]

In response to the need to provide empirical evidence of the effectiveness of stuttering treatments in the Netherlands, an outcome evaluation project was undertaken by the second and fourth authors (Huinck & Peters, 2004). As part of that project, developers (the first and third authors) of the ISTAR Comprehensive Stuttering Program[2] (CSP; Boberg & Kully, 1985; Kully & Langevin, 1999; Langevin & Kully, 2003) were invited to participate in the Dutch outcomes project. This provided a unique opportunity for CSP developers to (a) evaluate the effectiveness of the CSP in the Netherlands, (b) compare the results with those obtained in Canada, and (c) consider whether any differences in outcome may be due to cultural differences between the two groups.

There is reason to believe that the CSP should be effective with linguistically and culturally diverse clients. Indeed, the CSP is an integrated treatment program that addresses speech characteristics and attitudinal issues that appear to be common to stuttering across cultures (see Finn & Cordes, 1997). As well, as Finn and Cordes note, similar behavioural treatments that teach ". . . speech fluency skills seem to be effective across a wide range of cultures and languages" (p. 229). Although the CSP has similarities to the Dutch adaptation (Franken, Boves, & Peters, 1997; Franken, Boves, Peters, & Webster, 1992) of the Precision Fluency Shaping Program (PFSP; Webster, 1974), it also has differences. Whereas the PFSP focuses solely on the use of speech restructuring techniques (*e.g.*, fluency skills), the CSP integrates (a) speech restructuring and

[1] Readers are referred to (a) Finn and Cordes (1997) for a discussion of the definition of culture; (b) Isaac (2002) for a discussion of cultural and linguistic diversity in the provision of speech-pathology services; (c) Berry et al. (2002) for a discussion of the conceptions of culture.

[2] The Comprehensive Stuttering Program is not related to the Swedish Comprehensive Stuttering Program (Forne-Wastlund, 2004) and is distinguished by specifying that it is the ISTAR program.