Perfectionism and stuttering: findings of an online survey

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81 Adults Who Stutter (AWS) and 82 normally fluent controls completed the Frost Multidimensional Perfectionism Scale (FMPS: Frost, Marten, Lahert & Rosenblate; 1990). A Logistic regression analysis of the results revealed that higher "Concern over Mistakes" and lower "Personal Standards" FMPS subscale scores predicted stuttering group membership. A subsequent linear regression analysis of the AWS group scores further revealed that higher "Concern over Mistakes" and lower "Personal Standards" FMPS subscale scores also predicted their self-ratings of difficulty speaking fluently in a range of everyday speaking situations.

Introduction

Stuttering-like disfluencies (i.e. word and part-word repetitions, prolongations, and tense pauses) both in stuttered and normal speech have been equated with high levels of speech error-repair activity (Postma & Kolk, 1993) and hyper-vigilant speech-monitoring (Vasić & Wijnen, 2005), both of which may be associated with perfectionistic attitudes towards speech.

A perfectionism survey by Amster (1995) and a clinical study (Amster and Klein, 2006 & 2008) have, however, provided some preliminary evidence suggesting that, in people who stutter, this perfectionistic approach to speech may itself be sustained by underlying, broader perfectionistic beliefs and attitudes towards actions in general; i.e. "domain-general" perfectionistic attitudes and beliefs.

To measure perfectionism, the Amster (1995) and Amster and Klein(2006 & 2008) studies both made use of the Burns (1980) perfectionism scale. This scale, which was originally formulated to explore the relationship between perfectionism and depression, treats perfectionism as a mono-dimensional construct. A number of researchers have argued that perfectionism is better conceptualized as a multi-dimensional construct and, as a consequence, two "multi-dimensional perfectionism scales" have been devised (Frost, Marten, Lahart, & Rosenblate, 1990; Hewitt, Flett, Turnbull-Donovan, & Mikail, 1991) both of which break perfectionism down into a number of underlying factors.

In the present study we attempted to replicate the Amster (1995) findings – using the Frost Multi-dimensional Perfectionism Scale (FMPS: Frost et al.1991). The FMPS breaks perfectionism down into 6 underlying factors: Concern over Mistakes; Personal Standards; Parental Expectations; Parental criticism; Doubts about Actions; and Organization, each of which is considered to reflect a particular dimension of perfectionism. By using regression analyses we were able to determine the unique contributions of each of the above 6 factors as predictors of (1) stuttering vs. control group membership, and (2) AWS respondents' self-ratings of difficulty experienced speaking fluently in a number of everyday speaking situations (henceforth: "Fluency Difficulty" ratings).

Method

Two versions of the online survey were created, both of which included the 35 questions of the FMPS, followed by a series of general biographic questions. The version of the survey for AWS also contained the 10 questions from part 3a of the Overall Assessment of the speaker's Experience of Stuttering (OASES: Yaruss & Quesal, 2006) relating to general

communication difficulty in a number of commonly encountered speaking situations. It also contained 10 parallel questions asking specifically about *difficulty speaking fluently* in those same situations.   Requests for participants who stutter were sent to a number of stuttering self-help groups and organisations. Requests were also made, via the university's psychology department email lists, for normally fluent speakers to complete the controls' version of the online questionnaire. All respondents accessed the questionnaires in their own time, via an online survey website.

Results

81 Respondents who stutter and 82 matched non-stuttering controls completed the online surveys. To make the two groups of respondents better matched to each other in terms of age and gender-distributions a number of respondents' data were excluded from the analysis that involved inter-group comparisons.

Mean self-ratings of the remaining 59 respondents who stutter and 57 non-stuttering controls were found to differ on a number of perfectionism subscales, the most notable being that respondents who stutter rated themselves more highly on statements reflecting "Concern over Mistakes".

A more detailed analysis, using logistic regression, of the responses of the stuttering and control groups, revealed that a combination of high "Concern over Mistakes" and low "Personal Standards" subscale self-ratings provided the best fit for a model to predict stuttering group membership. Model $\chi^2 = 25.13$, $p < .001$; CM $\beta = .159$ $p<.001;$ PS $\beta = -.122$ $p=.013$.

The responses of all 81 respondents who stutter were then subjected to a further analysis (using linear regression) to determine whether the their Fluency Difficulty self-ratings could also be predicted on the basis of their perfectionism self-ratings. This analysis revealed that high "Concern over Mistakes" and low "Personal Standards" subscale self-ratings were predictive of their Fluency Difficulty ratings. Adjusted $R^2 = .101$; $F = 5.489$; $p < .006$; CM $\beta = .383$ $p<.001;$ PS $\beta = -.300$ $p=.016;$

Conclusions

The results of these 2 regression analyses suggest that the presence of stuttering and also the extent to which stuttering respondents experience difficulty speaking fluently are both related to a combination of raised levels of concern over mistakes and lowered (self-perceptions of) personal standards.

Insofar as the Burns (1980) perfectionism scale has been found to be strongly positively correlated with both the Concern over Mistakes and Personal Standards subscales of the FMPS (e.g Frost et al., 1990), the positive correlation between Concern over Mistakes self-ratings and stuttering group membership and fluency-difficulty self-ratings are in line with the findings of Amster (1995) and Amster and Klein (2006 & 2008). However the negative correlation between Personal Standards self ratings and stuttering group membership and fluency difficulty in AWS is not in line with their findings. Whether the stuttering group's FMPS profile can usefully be described as "perfectionistic" is thus debatable, as one would normally expect perfectionism to be related to raised rather than lowered personal standards.

Because people who stutter are often highly conscious of the impact of stuttering on their lives, it is unclear whether the FMPS ratings provided by the stuttering respondents truly reflected their "domain-general" attitudes and beliefs, or whether, perhaps, those respondents had tended to relate their responses specifically to their stuttering.

The finding that respondents who stutter reported high levels of concern over mistakes despite not considering their standards to be high could be interpreted as reflecting a tendency among those respondents to reduce some of their personal standards and expectations to bring

them into line with their impaired communication abilities. Viewed from the perspective of the Covert Repair and Vicious Circle Hypotheses, the stuttering group's FMPS profiles could thus be interpreted as reflecting: (1) their repeated experiences of speech production mechanism are abnormally error prone, and (2) their attempts to adapt to those experiences.

To shed further light on this possibility it would be useful if future surveys contained explicit requests for domain general or domain specific responses.

References

Amster, B. J. (1995). Perfectionism and stuttering. In C. Starkweather, H. Peters, & (Eds.), *Stuttering: proceedings of first world congress on fluency disorders* (pp. 540-543). Nijmegen, Netherlands: Nijmegen University Press.

Amster, B. J., & Klein, E. R. (2008). Perfectionism in people who stutter: Preliminary findings using a modified cognitive-behavioral treatment approach. *Behavioral and Cognitive Psychotherapy, 36* , 35-40.

Amster, B. J., & Klein, E. R. (2006). The role of perfectionism in stuttering: A follow up study. In J. Au-Yeung, & M. M. Leahy, *Proceedings of the Fifth World Congress on Fluency Disorders* (pp. 361-367). Dublin: International Fluency Association.

Burns, D. (1980). The perfectionist's script for self-defeat. *Psychology Today, November* , 34-52.

Frost, R. O., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy and Researach, 14* , 449-468.

Hewitt, P. L., Flett, G. L., Turnbull-Donovan, W., & Mikail, S. F. (1991). The multidimensional perfectionism scale: Reliability, validity, and psychometric properties in psychiatric samples. *Psychological Assessment: A Journal of Consulting and Clinical Psychology* , 464-468.

Postma, A., & Kolk, H. (1993). The covert repair hypothesis: Prearticulatory repair processes in normal and stuttered disfluencies. *Journal of Speech and Hearing Research, 36* , 472-487.

Vasić, N., & Wijnen, F. (2005). Stuttering as a monitoring deficit. In R. J. Hartsuiker, Y. Bastiaanse, A. Postma, & F. Wijnen, *Phonological encoding and monitoring in normal and pathological speech* (pp. 226-247). Hove: UK: Psychology Press.

Yaruss, J. S., & Quesal, R. W. (2006). Overall Assessment of the Speaker's Experience of Stuttering (OASES): Documenting multiple outcomes in stuttering treatment. *Journal of Fluency Disorders, 31* , 90-115.