A Brief Cognitive Behavioural Intervention for Maladaptive Perfectionism in Students: A Pilot Study

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Background: Researchers focused on developing therapeutic strategies for perfectionism given its well-established link to the onset and maintenance of several mental disorders. Meta-analytical findings provided support for the efficacy of cognitive behavioural (CB) approaches. However, most studies have focused on the efficacy of interventions, without analysing their efficiency. **Aims:** To explore the feasibility of a brief (five weekly sessions) CB group intervention focused on reducing perfectionistic concerns in Argentine students. We also aimed to identify participants who benefited from the intervention and to explore their differences with non-respondents. A third aim was to explore the potential merits of the intervention in a different cultural context as this is the first attempt to adapt an English-spoken protocol to the Spanish language. **Method:** A quasi-experimental design with two time points was used. Twenty-four out of 84 participants (mean age = 27.75 years, $SD = 8.3$) were classified as maladaptive perfectionists. **Results:** Paired *t*-tests and reliable change index comparisons revealed that most students (75%) statistically and clinically reduced their levels of perfectionistic concerns as well as their perfectionistic strivings. General distress, operationalized as anxious and depressive symptoms, was also decreased. Students who completed and responded to the intervention were more dysfunctional in academic and psychological measures at baseline than non-completers and non-improvers. **Conclusions:** Findings support the feasibility, preliminary efficacy and

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efficiency of this five weekly session intervention when applied to a sample of Argentine university students.

Keywords: Cognitive behavioural intervention, perfectionistic concerns, efficiency, Argentine student

Introduction

Perfectionism has been linked to the onset and maintenance of several mental disorders, so its clinical relevance has been highlighted by many authors (see Egan et al., 2011, for a review). In particular, the academic realm has been the focus of fruitful research, given that students may be a population at risk (Slaney et al., 2001). Perfectionistic students often display high thoroughness, worry about achieving standards, high levels of test anxiety, and a tendency to postpone exams. Given its negative consequences, many authors have developed different treatments for perfectionism. Meta-analytical work supports the notion that cognitive behavioural (CB) interventions are one of the primary treatments for perfectionism (Lloyd et al., 2015). Several CB-oriented trials aimed at perfectionistic concerns showed a decrease in the level of this trait (e.g. Lloyd et al., 2014). Hence, given that CB interventions have proved their effectiveness, the next step for researchers is to develop more cost-effective treatment protocols. Indeed, research has almost exclusively relied on testing CB interventions with different formats and neglected efficiency (defined as the average amount of time required to treat each patient). A review of the literature indicates that clinical interventions for perfectionism generally involve eight to ten weekly sessions, six weeks being the duration of the shortest intervention and 12 weeks the longest. Fairweather-Schmidt and Wade (2015) provided an exception including a two-session preventive intervention in pre-adolescents.

The present study therefore aimed to explore the feasibility of a brief CB group intervention in reducing perfectionistic concerns as well as psychological distress in students. In particular, we tested if five sessions would be sufficient to include the necessary elements of an intervention focused on perfectionism. The contents of the present five-week intervention are based on Antony and Swinson's classic self-help book, Shafran and colleagues' model of clinical perfectionism (see Egan et al., 2011) and the empirical findings of the effects of perfectionism in students (Slaney et al., 2001). A second goal was to explore differences between the potential improvers and non-improvers, with the aim of identifying individuals more likely to benefit from the intervention.

In addition, given that the planned intervention included components of evidence-supported treatments for perfectionism, and considering this to be the first study applying an English-spoken protocol in Spanish to a Latin American population, the third aim of this study was to explore the potential merits of this intervention in Argentine students.

Method

Design

A pre–post quasi-experimental design was used. Participants completed measures of perfectionism and distress (operationalized as anxiety and depression symptomatology) at each time point. The Almost Perfect Scale-Revised (APS-R; Slaney et al., 2001) was selected as a measure of perfectionism, and the subscale of Discrepancy (e.g. the gap between actual and

ideal standards) as an indicator of perfectionistic concerns. The APS-R was chosen because of its strong psychometric properties as well as its focus on student populations.

Participants

Perfectionism profiles were defined through cut-off points established in previous studies measuring perfectionism in Argentina (Arana and Furlan, 2016). Forty-eight (57%) out of the 84 initially screened participants were classed as perfectionists (i.e. high in perfectionistic strivings), with half of this subsample meeting the criterion for maladaptive perfectionism (i.e. high perfectionistic strivings and high perfectionistic concerns). The final sample consisted of 24 participants (22 women) who were studying Psychology at a national university in Argentina. Mean age was 27.75 years ($SD = 8.3$). Twelve participants (52%) reported withdrawn or dropped at least one course, an average of two pending exams, and a mean of almost two failed exams.

Intervention

The face-to-face group intervention involved five two-hour long sessions held weekly. Two cognitive behavioural therapy (CBT)-trained clinicians conducted the intervention. Session 1 was dedicated to the understanding of causes of perfectionism and its adaptive/maladaptive nature. Sessions 2 and 3 were devoted to working with perfectionistic beliefs. The goal of session 4 was explaining the role of and changing perfectionistic behaviours to prevent the maintaining effect of these behaviours in perfectionistic thinking. Session 5 was dedicated to understanding the impact of perfectionism in social settings, as well as to rehearse self-compassion exercises. The overall purpose of the intervention was to help participants understand their perfectionism as a process that can shift from dysfunctional to functional. Instead of working with the idea of lowering their high standards, the intervention encouraged participants to broaden their schemes for self-evaluation.

As the intervention was based upon on previous work for a culturally different sample, contents were discussed by our team regarding conceptual issues, appropriateness to Latin Americans/Argentines and, specifically, to a student population.

Instruments

A socio-demographic questionnaire to characterize the sample about general and academic outcomes was used, as well as measures of perfectionism, anxiety and depression. As described above, the APS-R was selected to measure perfectionism, with the Discrepancy subscale (12 items, $\alpha = .93$) being the specific choice to assess perfectionistic concerns. Perfectionistic strivings were evaluated with the subscales of Standards ($\alpha = .70$) and Order ($\alpha = .74$) from the APS-R. To measure depression, we used the Argentine version of the second edition of the Beck Depression Inventory (BDI-II, $\alpha = .88$). Similarly, to measure anxiety, we used the Argentine version of the State-Trait Anxiety Inventory (STAI-state, $\alpha = .93$, STAI-trait, $\alpha = .94$). The extended report includes further details of the instruments.

Procedure

Approval was obtained from authorities of the University. Participants were recruited through different channels (institution's house organ and website, and social networks). Those willing

Table 1. Mean and standard deviation differences and effect sizes for the outcome variables at pre-intervention and post-intervention

	Pre Mean (SD)	Post Mean (SD)	t	p value	Cohen's d	95% CI
Perfectionism						
Standards	41.82 (2.79)	36.68 (7.03)	3.57	.002	0.90	2.14–8.13
Order	20.73 (4.95)	18.95 (5.22)	2.40	.026	0.35	0.23–3.31
Discrepancy	62.14 (12.82)	46.41 (10.24)	6.50	<.001	1.34	10.69–20.76
Psychological distress						
Depressive symptoms	17.36 (9.34)	7.95 (6.32)	5.43	<.001	1.13	5.81–13.01
State-anxiety	47.86 (12.57)	36.77 (9.04)	3.72	<.001	1.01	4.89–17.29
Trait-anxiety	54.18 (11.17)	46.45 (10.09)	3.69	<.001	0.72	3.38–12.08

to enrol were informed about the study and confidentiality and were asked to sign an informed consent document. Two CB-trained clinicians coordinated the intervention. Outcome measures were taken at the first and fifth meetings respectively. The socio-demographic questionnaire was administered along with the APS-R (to classify perfectionists) at the general meeting before initiating the intervention. The participants also received hand-outs designed by the research team.

Statistical analyses

Paired *t*-tests were used to ascertain changes in the outcome measures between pre-intervention and post-intervention. A modification of the Mee–Chua algorithm was implemented to control for regression to the mean. Cohen's *d* statistic served as effect size. Independent *t*-tests were used to assess differences between completers and non-completers. Individual clinical change was evaluated through calculation of the reliable change index (RCI).

Results

Baseline means of depression were consistent with those of clinical populations, being depression rates in the range of mild symptoms. Similarly, state-anxiety and trait-anxiety mean scores surpass the 85th percentile, being both consistently higher than the 75th percentile of reference. The proportion of participants who completed the intervention was high (20 out of 24, 83%). The median number of attended sessions was five; two participants left at session 3, and one at sessions 1 and 4, respectively. Surface comparison between completers and non-completers indicated differences regarding academic variables, with non-completers being less dysfunctional (more hours studying, less pending and/or failed exams, desired a more realistic grade point average) than their completer counterparts.

Regarding pre-test to post-tests mean differences, significant changes were observed in all variables ($p < .026$) (see Table 1). Changes remained significant even when controlled for the regression towards the mean. Effect size for Discrepancy was large ($d = 1.34$), as well as encountered for psychological distress measures ($d > 0.72$), implying that there were significant decreases in levels of depressive and anxious symptomatology. From a within-subject point of

view, *post-hoc* analyses revealed that 15 out of 20 (75%) of the completers achieved a reliable change, thus clinically improving their levels of perfectionistic concerns.

Furthermore, differences between the improvers and non-improvers were explored to investigate characteristics of participants more likely to benefit from intervention. Our results showed that differences are only noticeable regarding a more obvious dysfunctionality in negative variables (discrepancy, state-anxiety and trait-anxiety, and depression) and slightly older age in those who benefited from the intervention.

Discussion

This pilot study aimed to explore whether a brief CB intervention is feasible in reducing perfectionistic concerns and psychological distress in Argentine students. Our findings support the feasibility and preliminary efficacy of this intervention, and its length also showed that it would be possible to run more efficient interventions without sacrificing their efficacy. Overall, 75% of participants statistically and clinically changed their levels of perfectionistic concerns and also improved their anxiety and depression symptoms across a 10-hour group intervention. These changes at post-treatment, which were large regarding effect size, add support to meta-analytic findings. This study was also in line with Lloyd and colleagues' (2015) call for identifying effective format of interventions, this being one of the first attempts to reduce the number of sessions in a group intervention of perfectionism. Seemingly, an intervention involving the topics of our five sessions (explained above) would work at least as minimum requirements to ensure a reliable change in perfectionists.

Another interesting finding is that besides the expected shifts in the discrepancy subscale, the levels of the standards subscale also decreased, in line with other studies which showed that standards lowered through CBT for perfectionism (e.g. Fairweather-Schmidt and Wade, 2015). This finding can be explained by the fact that perfectionistic strivings only became dysfunctional when perfectionistic concerns were high. Surprisingly, the fact that participants who improved reduced their levels of perfectionistic strivings appeared to be a paradoxical effect of the intervention. As Lloyd and colleagues (2014) have argued, 'the aim ... was not to encourage participants to completely abandon their standards but rather facilitate a shift from the pursuit of perfection to the pursuit of achievable excellence' (p. 370). Thus it seems that when this shift is produced, people naturally tend to reduce their standards to a more realistic self-view. Slaney and colleagues (2001) noted the importance of focusing on perfectionistic self-evaluation rather than in perfectionistic strivings.

As for the second goal, non-completers tended to be less dysfunctional in academic settings, and non-improvers also tended to be less dysfunctional, but about psychological measures (less discrepancy, less anxiety/depression). Thus the common element of those who benefited from the intervention was their global level of dysfunctionality. Given that our sample reached clinically related scores at baseline, future research will need to consider whether mild (i.e. non-clinical) levels of perfectionistic concerns can also be treated in a prevention environment as well.

With respect to our third goal, the fact that an English language protocol remains efficacious in Argentine students suggests that adaptation of the protocol was accurate. Furthermore, our pilot study could serve as a start to investigation of clinical perfectionism in Spanish-speaking samples.

Finally, although this is a pilot study with no control group, there are limitations to mention, such as the use of self-report, the lack of follow-up, the lack of assessment of the hand-outs as well as the fidelity of therapists. Despite limitations, results regarding the preliminary efficacy and efficiency of the intervention are promising. Detecting and treating perfectionism in students implies an improvement in health and a reduction in educational costs.

Supplementary material

To view supplementary material for this article, please visit https://doi.org/10.1017/S1352465817000406

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