STOP Procrastination: development and expert evaluation of a new acceptance and compassion-based group intervention

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Abstract

Backgound: Procrastination has been characterized as a deliberate delay of an intended course of action despite anticipating negative consequences. Literature has found associations between psychopathological symptoms and impaired functioning, particularly in academic contexts.
Goals: The present work aimed to develop and characterize an experts' panel evaluation of a new psychotherapeutic group intervention named "STOP Procrastination: Sensitize, Transform, Organize, Produce" based on the combination of traditional cognitive-behavioral therapy and contextual behavioral approaches.
Methods: STOP is a 10-session group intervention aimed at helping people reduce their levels of procrastination by fostering more adaptive emotional regulation skills.
Results: Results show that experts found STOP highly acceptable, adequate to the target population, and viable for implementation.
Discussion: Qualitative suggestions regarding sessions were considered for STOP improvement. With further study, STOP has the potential to help individuals to better manage their procrastination.

Keywords: Procrastination, Group therapy, Mindfulness, Acceptance and commitment therapy, Self-compassion.

Introduction

Procrastination, a common and prevalent problem (Sirois & Pychyl, 2013), is characterized by a tendency to voluntarily postpone actions and/or engage in an alternative activity to the intended one, even when this leads to negative consequences (Boysan & Kiral, 2016; Schouwenburg, 2004; Steel 2007). Research has shown that procrastination is linked with decreased physical (Kurtovic et al., 2019) and mental health quality (Sirois et al., 2003), poorer academic performance (Steel, 2007) (Visser et al., 2018), and interpersonal problems (Kurtovic et al., 2019).

Although diverse life areas such as family, daily activities, or obligations (Kurtovic et al., 2019) can be affected due to the inherent demand of specific deadlines, work and education have been pointed out as the life areas in which impairment is most frequent (Kurtovic et al., 2019). Specifically, in academic contexts, procrastination has been acknowledged as a generalized behavioral pattern, with a prevalence between 70% and 90% when using samples of university students (Jadidi et al., 2011; Kim & Seo, 2015). These results support the importance of reducing academic procrastination to mitigate its lasting negative effects and outcomes (Zhang et al., 2018).

Although procrastination lacks a homogeneous theoretical and multidimensional explanation of its maintaining factors (Steel, 2007), research has linked it to the experience of anxiety prior to the task or to the perception of the task as being difficult, aversive, or unattractive (Ferrari & Scher, 2000; Hernández et al., 2019). It has been proposed that stress and anxiety arise in the academic context because of factors such as psychological pressure caused by students' expectations or by the discrepancy between students' expectations and social expectations present in the academic community (Qian & Fuqiang, 2018). Studies showed a positive relationship between exam anxiety and procrastination (Krispenz et al., 2019; Eerde, 2003; Steel, 2007).

The key feature of procrastination is the gap between goal and action. Often procrastinators have adequate intentions, but difficulty in implementing these intentions (Dewitte & Lens, 2000). Mainly, procrastination has been comprehended as a time management or a self-regulation problem (Wolters et al., 2017). However, a growing body of research has come to show that procrastination is a complex behavior that associates emotional and cognitive elements (Yan & Zhang, 2022; Visser et al., 2018). Examples are low confidence in one's own abilities to perform (Steel, 2007) and inability to cope with negative emotions that arise in challenging situations, suggesting the importance of psychological flexibility in understanding procrastination (et al., 2019).

Regarding protective factors aiming at breaking the procrastination cycle and ameliorating its consequences, psychological flexibility, and self-compassion might be beneficial processes considering their associations with adaptive coping and reduced emotional symptoms (Ewert et al. 2021; MacBeth & Gumley, 2012) and their associations with procrastination (see Glick et al., 2014; Mullen, 2014; Sirois, 2014).

The term psychological flexibility can be defined as one's ability to be in contact with the present moment, accept the internal experience as it is (i.e., such as difficult thoughts, emotions, and physical sensations), and take committed action towards one's goals and values (Chawla & Ostafin, 2007; Hayes et al., 2006). Some studies (Hayes et al., 1996; Hayes et al., 1999; Hayes et al., 2012) propose that the underlying processes that maintain procrastination cycles are consistent with more generalized models of psychopathological problems, where we see experiential avoidance of internal experiences, and an unwillingness to be in contact with unpleasant internal experiences associated with unproductive attempts to avoid or alter these experiences (Eisenbeck et al., 2019; Glick et al., 2014).

A study conducted by Sirois (2014) has indicated that self-compassion plays a mediating role in the connection between stress and procrastination. Self-compassion can be defined as openness to one's own suffering and entangles acceptance, warmness, and care towards oneself, through an attitude of non-judgmental understanding in moments of failure or pain (Neff, 2003). It is an adaptive quality that can promote self-regulation and reduce the stress associated with guilt (Leary et al., 2007; Terry & Leary, 2011), which can be particularly useful for dealing with procrastination.

Literature has widely shown the efficacy of contextual approaches to emotional difficulties in academic contexts (Worsley et al., 2022; Howell & Passmore, 2019). Processes such as acceptance and psychological flexibility, mindfulness, clarity of academic values (Hailikari et al., 2021), and self-compassion (Egan et al., 2021) are important mechanisms for mitigating the effects of procrastination. Therefore, acceptance and commitment therapy (ACT) and self-compassion (as conceptualized both in ACT and compassion-focused therapy) seems to be a relevant theoretical framework to guide interventions for procrastination.

Considering the aforementioned negative consequences associated with procrastination, particularly work and academic-related, and the promising studies regarding psychological flexibility and self-compassion as protective mechanisms, this study aimed to: (a) develop a group psychotherapeutic intervention based on acceptance and commitment therapy processes and self-compassion designed to reduce procrastination levels and associated distress;

and (b) submit the intervention protocol to an experts' panel evaluation regarding acceptability, adequacy, and viability.

Materials and methods

This study is a part of a larger project, *"Implementing a stepped care model in providing mental health care for a university community",* that was approved by the ethics committee of the Faculty of Medicine of the University of Coimbra, Portugal (CE-106/2020).

STOP Procrastination: rationale and development

The STOP Procrastination program aims to help people reduce their procrastination levels through the understanding and awareness of the reasons that lead to procrastination and the mechanisms that maintain it, as well as the development of emotional regulation skills. STOP was developed by a team that comprised clinical psychologists with experience in: (a) clinical intervention with people with anxiety and mood disorders, and specifically with procrastination related difficulties; and (b) development and validation of intervention programs, mainly within the contextual behavioral framework. A gap in similar intervention programs has been identified in Portugal, further highlighting the relevance of STOP in this context.

Considering the sound body of research on the advantages of cognitive-behavioral therapy in higher education settings, as well as the relevance of contextual behavioral processes (e.g. acceptance, compassion, mindfulness) for emotional regulation, it seemed relevant to combine CBT principles with contextual behavioral approaches. Acceptance and commitment therapy was STOP's main theoretical model, due to its experiential and dynamic nature, recognized acceptability in youth (Gagnon et al., 2019), significant focus on committed action and personal values (highly relevant for the academic context), and commitment with "here and now" strategies to deal with difficult thoughts and feelings.

The triflex model of psychological flexibility (be present, open up, do what matters) (Hayes et al.,

2012) was used as a simple and straightforward way of understanding how procrastination can be managed through: developing a greater awareness of thoughts and emotions related to procrastination; increasing willingness to be in the present moment through mindfulness; promoting the ability to accept negative thoughts and emotions without fusing with them; and stressing the need to act instead of reacting following the impulse to avoid. Finally, doing what matters allows keeping in mind the main motivations for doing what is important (personal values). Additionally, self-compassion was introduced as having a key role in breaking the procrastination cycle, developing the ability to "hold lightly" automatic self-criticism while developing a more compassionate self-talk.

Expert panel evaluation

<u>Participants</u>

A group of 13 professionals with extensive experience in psychology were invited to join an expert panel whose purpose was to critically evaluate the STOP procrastination program: seven experts with research experience in psychotherapeutic intervention, with an average of 11 years of professional experience (three to 15 years); seven with research experience in contextual behavioral approaches, with an average of 10 years of professional experience (six to 17 years); six providing psychological interventions in higher education, with an average of 21 years of professional experience (eight to 25 years); and eight providing psychological interventions based on contextual behavioral approaches, with an average of 11 years of professional experience (five to 16 years).

<u>Procedure</u>

The experts' form included questions regarding each expert's clinical and research experience, and experts were asked to carefully analyze and evaluate the program in terms of different issues about the individual sessions, STOP&ACT sessions, and the STOP program in general. Quantitative assessment was requested on: acceptability (understood as the perception of how interesting they considered each part of the STOP program's implementation); adequacy (the perceived

relevance and compatibility of the program to address each selected issue with the target population); and viability (the extent to which STOP can be used successfully) (Weiner et al., 2017). In terms of qualitative feedback, participants were instructed to write suggestions, comments, and critiques whenever they felt appropriate to each session. Also, a global impression of the STOP program was requested.

Results

STOP procrastination: session outline

The STOP program is a manualized intervention developed for higher education students and researchers who report difficulties in managing procrastination. The program evolves through four phases and comprises 10 modules that were developed to be delivered in 10 consecutive weekly sessions. The duration of each session is 1 hour and 30 minutes. Except for the first session, all STOP sessions follow the same structure: welcome to the session; brief mindfulness or compassion practice; remembering last session; session theme; main session practice and discussion; procrastinating break (practical suggestions). Main practices and exercises used in the STOP program are presented in Table 1. In addition to the weekly group sessions, there are four extra group online sessions ("STOP&ACT" sessions) of 15-30 minutes (one per phase) designed for each participant to accomplish tasks that they have been procrastinating. Furthermore, a follow-up session is held one month after the group ends.

Phase 1: Sensitize

The first phase of the STOP program takes place in the first two sessions, and its main goals are to build a safe space for sharing experiences and to deliver psychoeducation on what procrastination is, allowing a closer approximation to the concept and greater self-knowledge of the difficulties it encompasses among participants. To achieve this goal, the main expectations and fears of belonging and being part of the group are discussed, as well as the main rules for its proper functioning. In this phase, it is expected that participants get familiarized with the structure and main objectives and the different phases and components of the program. This phase is also dedicated to understanding the concept of procrastination, addressing its main pros and cons, analyzing the most common reasons for procrastinating, and the main fears associated with it, and promoting understanding of the procrastination cycle through psychoeducation. Gradually, participants are introduced to experiential exercises and short meditation practices.

Phase 2: Transform

Phase 2 incorporates the next four sessions of the program (3 to 6) and has the specific objective of preparing, building, and promoting change. To do that, psychoeducation on the understanding of the evolutionary nature of anxiety and its role in procrastination (as well as other emotions) is delivered. The ACT triflex model is presented as the main framework for change and the choice-point exercise − an experiential exercise that helps individuals identify critical moments where they can choose actions aligned with their values − is introduced as a way to approach change in the procrastination cycle. Defusion is also introduced and practiced as an important mechanism to lessen the effects of experiential avoidance, characteristic of away moves from the choice-point exercise, and personal values are stressed as key to encouraging "towards moves". Self-compassion is introduced as an important competence, mainly to deal with self-criticism that might be linked to personal values.

Phase 3: Organize

The specific aim of Phase 3 is to bring flexibility to difficult barriers and to promote a more self-compassionate internal dialogue. Phase 3 occurs across sessions 7 and 8 and starts by understanding the concept of compassion and the importance of self-compassion in procrastination. Also, analyzes the qualities of compassion and the impact of fears of compassion on procrastination. Understanding how self-criticism can be an obstacle to productivity and promoting a less self-critical and more self-compassionate internal dialogue is also encompassed. Finally, this phase seeks to demonstrate the positive impact that self-compassion can have on ending or mitigating the cycle of procrastination.

Phase 4: Produce!

The last two sessions constitute Phase 4 and are aimed at preparing for the ending of the program and putting into practice all the skills learned during the program. In session 9 each participant choses a personal example of procrastination and tries to bring into practice defusion, clarification of values and self-compassion in relation to each person's experience. The last session focus on reflection on the qualities of compassion acquired with the group, underlying values, therapeutic gains obtained with the group, and how to continue working on these skills in the future.

After one month, there is a follow-up session in which competencies are reviewed, and practice is encouraged (with sharing of strategies to make practicing easier).

Experts' panel evaluation

Regarding qualitative results from the experts panel, in addition to comments related to the usefulness, pertinence and innovative nature of the program, eight main themes emerged in what concerns suggestions for improvement:

(1) minor changes to the exercises, such as promoting discussion in small groups or the possibility to role play different scenarios (n=3);

(2) organization of sessions and of the program, encompassing suggestions regarding changing the order of some sessions and improving the fluidity of sessions with concepts being explored in subsequent sessions (n=2);

(3) duration of the program, suggesting a shorter duration (n=3);

(4) new exercises (higher emphasis on group dynamics in the first sessions, grounding exercises) or concepts, or changes in the way concepts are presented (self-compassion introduced after self-criticism has been suggested) (n=6);

(5) changes in language (less stigmatizing) (n=3);

(6) higher focus on the body and physical sensations (n=1);

(7) adding direct work on shame and evolutionary advantages of procrastination as a way of de-shaming (n=2); and

(8) emphasis on how the competencies can be used in daily life and importance of practice within session (n=3).

It is important to refer that the STOP&ACT sessions were deemed very useful by some of the experts (n=3). Quantitative results from the expert panel evaluation are presented in Table 2 emphasizing the STOP's acceptability, adequacy, and viability.

Discussion

Group interventions have been recommended in college counseling settings as efficient, effective, and important for university students (Pashak et al., 2022). The STOP program was designed to help people reduce their procrastination levels through the understanding and awareness of the reasons that lead to procrastination and the mechanisms that maintain it, based on available research on classical cognitive therapy and contextual behavioral approaches: acceptance and commitment therapy, mindfulness-based approaches, and compassion focused therapy. Although different, classical and contextual approaches share similarities and can complement each other. Specifically, both approaches acknowledge the close connection between thoughts and emotions and recognize that improving one can benefit the other.

Additionally, both classical and contextual approaches aim to help individuals develop a constructive way of engaging with the world around them by focusing on goal setting, motivation, self-monitoring, and awareness, and promoting a less critical inner dialogue. Applying both approaches in the STOP program amplifies its value as it supports the use of a multifaceted approach to address the complexities of procrastination. Combining different elements of these approaches offers individuals a personalized and effective plan to overcome procrastination, reach their objectives, and live meaningful lives.

Table 1. STOP Procrastination: main intrapersonal and interpersonal practices

Phases	Session	Practice/Exercise	Type	Main aims
Phase 1 Group as a safe base. Psychoeducation about procrastination. Introduction to mindfulness.	1	Presentation	Interpersonal	Connecting the group members.
		Expectations and group goals	Interpersonal	Analyze participants' expectations about the integration into the group. Introducing program contents and presentation of sessions' structure and themes.
		Iceberg metaphor	Interpersonal	Develop understanding of the processes that underlie procrastination (personality traits, core beliefs, self-criticism, rigid rules, difficult emotions, and thoughts). Adjust participants' expectations about the course of the program.
		Fears and rules	Interpersonal	Explore existing fears among participants about being in the group. Promote discussion about the rules of the group.
		Procrastination break	Interpersonal	Explore practical strategies to manage procrastination.
	2	Soft landing[1]	Intrapersonal (meditation)	Practice mindfulness as a way of grounding.
		Being creative with the procrastination concept	Interpersonal	Familiarize participants with the concept of procrastination in a creative and lighthearted way (describing procrastination without "forbidden words" such as postpone or avoid).
		Procrastination gymnastics	Interpersonal	Identify the causes of procrastination and avoidance-based justifications for procrastination.
		Devil's lawyer	Interpersonal (role play)	Discuss the pros and cons of procrastination.
		Procrastination cycle	Interpersonal	Practical case illustrating the cycle of procrastination.
Phase 2 Psychoeducation about anxiety. Motivation for change. Psychoeducation about experiential avoidance. Developing skills of cognitive defusion and clarifying personal values.	3	Video "*The Happiness Trap: Evolution of the Human Mind*" (Russ Harris)	Intrapersonal (reflection) and interpersonal (discussion)	Understand the evolutionary functions of anxiety (and other emotions) and how it applies to procrastination.
		Discussion about the motivation for change	Interpersonal	Identify and prepare the motivation for change (types of motivation, reasons for change).
		Why change?	Interpersonal (reflection)	Understand what makes change difficult.
	4	Human choice point	Interpersonal (role play)	Distinguish between automatic responses/impulses and values-based actions. Introduce towards and away moves.
	5	Willingness box	Intrapersonal (reflection) and interpersonal (discussion)	Promotion of discomfort and uncertainty tolerance. Increase the willingness to face the unknown. Link "away moves" from the choice point to experiential avoidance. Introduce experiential acceptance.
		Fusion and defusion metaphors	Intrapersonal (reflection) and interpersonal (discussion)	Psychoeducation on the concept of cognitive (de)fusion. Cognitive defusion skills training.
		Post-its as thoughts	Interpersonal	Being aware of automatic negative thoughts. Illustrate cognitive fusion.
		Triflex model in procrastination	Interpersonal discussion	Discussion of the triflex model applied to procrastination.
	6	Video "Values vs Goals" (Russ Harris)	Intrapersonal (reflection) and interpersonal (discussion)	Importance of defining personal values. Concept of values versus goals. Explore self-compassion as a personal value (also as a key competency to manage self-criticism).
		Mindreading machine	Intrapersonal	Develop self-compassionate talk. Clarify values.

[1]Soft landing is used at the beginning of each session. Each practice explores the core competency of the week (e.g., defusion, willingness, values, self-compassion, experiential acceptance, among others)

Phases	Session	Practice/Exercise	Type	Main aims
Phase 3 Introduction to self-compassion and self-criticism.	7	Concept of compassion and fears of compassion	Interpersonal	Understand the concept of compassion and the importance of self-compassion in procrastination. Understand the qualities of compassion and the impact of compassion fears on procrastination. Being aware of self-criticism.
		Selfie exercise	Intrapersonal (reflection) and interpersonal (discussion)	Distinction between compassion towards others and self-criticism towards ourselves.
	8	Two teachers' metaphor	Interpersonal	Understand how self-criticism can be an obstacle. Understand the impact of self-compassion on the procrastination cycle.
		Giving compassion to the procrastinator	Interpersonal	Development of compassionate sentences.
		Compassionate PDA	Interpersonal	Promotion of a less self-critical and more self-compassionate internal dialogue (more compassionate internal dialogue before, during, and after procrastination).
Phase 4: Practice previous strategies.	9	Procrastination FM	Interpersonal (role play)	Practice cognitive defusion. Develop self-compassion skills and emotional regulation strategies.
		Values on cards	Intrapersonal	Clarify values. Set goals.
		Compassionate break	Intrapersonal	Promote self-compassion with a compassionate touch.
	10	Super-hero	Intrapersonal (reflection) and Interpersonal (discussion)	Reflection on the qualities of compassion acquired with the group and underlying values.

Table 2. Expert panel evaluation, per session of STOP Procrastination

	Acceptability (Range: 1-5) Mean (*SD*)	Adequacy (Range: 1-5) Mean (*SD*)	Viability (Range: 1-5) Mean (*SD*)
Session 1	4.58 (.52)	4.77 (.60)	
Session 2	4.77 (.44)	4.85 (.38)	
Session 3	4.75 (.63)	4.69 (.63)	
Session 4	4.69 (.48)	4.85 (.38)	
Session 5	4.69 (.63)	4.77 (.44)	
Session 6	4.46 (.65)	4.62 (.78)	
Session 7	4.67 (.65)	4.62 (.65)	
Session 8	4.69 (.63)	4.69 (.48)	
Session 9	4.92 (.29)	4.77 (.44)	
Session 10	4.92 (.28)	4.69 (.63)	
STOP&ACT Sessions	4.75 (.45)	4.69 (.48)	
STOP Program	4.75 (.45)	4.77 (.52)	4.54 (.52)

Regarding experts' panel results, important recommendations emerged. The structure, organization, and sessions content of the STOP intervention was considered adequate, though suggestions were made, aiming at more dynamic and interactive sessions, with competencies practiced through role-play and group dynamics. Experiential practices and promotion of greater awareness and focus on the body and physical sensations was also suggested. Research has suggested that the ability to be aware and return to the body, as well as the capacity to embody learned competencies (Matos et al., 2018), are key to therapeutic change. These suggestions go in line with recommendations for implementing group therapy in college counseling settings (Pashak et al., 2022).

One specific theme that was considered lacking was the evolutionary benefits of shame in procrastination. It was suggested as psychoeducation aiming at de-shaming and inclusion of direct work on shame. In fact, shame-proneness has been previously found linked to procrastination (Martinčeková & Enright, 2020) with authors suggesting procrastination as a behavior to avoid the vulnerability to feelings of shame about the self (Fee & Tangney, 2000).

The experts' panel also emphasized the importance of practicing the learned competencies both within and between sessions. A great deal of interest was expressed in the STOP&ACT sessions, corroborating their value. These sessions brought an innovative character to the program, allowing participants to effectively put into practice the learned strategies in their daily lives, and outside the period of traditional group sessions. Research has stressed that people prefer practices easily integrated into daily life, particularly in high-education settings (Nardi et al., 2022). Also, regular formal and/or informal experiential practice has been widely recommended within contextual approaches.

Regarding quantitative analysis, the expert panel evaluation revealed high scores in terms of acceptability, adequacy, and feasibility (the extent to which STOP can be used successfully; Weiner et al., 2017). This provides useful indicators of the possible use and clinical utility of STOP by professionals working on procrastination in higher education settings using contextual behavioral approaches. The experts' panel results and suggestions motivated a restructuring process of the STOP intervention, including the refinement of session content, adjustment of exercises to better target procrastination behaviors, and enhancement of engagement strategies for university students.

Furthermore, preliminary results show that participants reported the intervention to be acceptable and useful, with perceived benefits, indicating improvements in procrastination and emotional regulation processes (Ferreira et al., 2025).

We hold the belief that people can effectively decrease and manage their procrastination in a healthier manner through: familiarization with the concept of procrastination and comprehending its main causes; practicing being in the present moment; promoting openness to the experience as it is, even if challenging thoughts and emotions; prioritizing what matters according to personal values; and developing compassionate skills,. The group format may also be beneficial in normalizing and validating participants' own struggles through discussing personal experiences among group members (also promoting de-shaming process). This may in turn foster a greater willingness to confront difficulties in a more productive manner.

With further study and continuing improvement, the STOP program has the potential to be implemented as a routine psychological intervention to reduce people's procrastination levels. It can be used as a complement to individual intervention (e.g., for performance anxiety), or as a standalone intervention targeting procrastination in clinical and non-clinical populations.

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