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# Mindful compassion for perfectionism in personality disorders: A pilot acceptability and feasibility study

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\*\*ABSTRACT.\*\* Il perfezionismo è considerato uno stile di personalità multidimensionale e transdiagnostico che può presentarsi all'interno di forme gravi di disturbi di personalità. Lo scopo di questo studio è quello di esplorare l'accettabilità e la fattibilità di un intervento integrato di gruppo di mindful compassion per pazienti a cui sono stati diagnosticati dei disturbi della personalità e presentano prominenti tratti perfezionistici. Abbiamo testato per la prima volta un intervento di gruppo di 8 settimane in un campione di pazienti (n = 5) che avevano completato una psicoterapia individuale. L'intervento ha integrato pratiche di mindful compassion con il modello di disconnessione sociale del perfezionismo. Gli outcome primari riguardavano l'accessibilità e la fattibilità dell'intervento, valutato con misure quantitative e qualitative. Gli outcome secondari corrispondevano alle differenze tra pre- e post-assessment nei tratti perfezionistici e autrocritici. Non si sono verificati né eventi avversi né drop-out. Tutti i partecipanti hanno evidenziata un'elevata accettabilità dell'intervento e risultati positivi in termini di sviluppo di nuove strategie adattative. Nel post-assessment, le dimensioni perfezionistiche che presentavano i punteggi più alti nel pre-assessment hanno mostrato un cambiamento significativo al *Reliable Change Index*. Lo studio mette in evidenza l'accettabilità e la fattibilità dell'intervento proposto. Sono necessarie ulteriori ricerche per confermare l'efficacia dell'intervento.

s. SUMMARY. Perfectionism is considered a multidimensional and transdiagnostic personality style that can occur in severe forms of personality disorders. The aim of this study is to explore the acceptability and the feasibility of an integrative mindful compassion group intervention for patients who were diagnosed with personality disorders and reported prominent perfectionistic traits. We pilot-tested an 8-week group intervention in a sample of patients (n = 5) who had completed individual psychotherapy. The intervention integrated mindful compassion practices with the perfectionism social disconnection model. Primary outcomes were the accessibility and feasibility of the intervention as evaluated through quantitative and qualitative measures. Secondary outcomes were differences between pre- and post-assessment in perfectionism traits and self-criticism. Neither adverse events nor drop-outs were reported. All the participants confirmed high acceptability and positive outcomes in terms of developing new healthy strategies. At post-assessment, the perfectionist dimensions that had shown the highest scores at the pre-assessment exhibited a reliable change. The study highlights the acceptability and feasibility of the proposed intervention. Further researches are needed in order to confirm the suitability of the intervention.

Keywords: Compassion, Mindfulness, Perfectionism, Personality disorder, Self-criticism

#### INTRODUCTION

Perfectionism is reputed to be a "multifaceted and multilevel personality style" (Hewitt, Flett & Mikail, 2017, p. 25) or personality disposition (Stoeber, 2017) that is characterized by requiring perfection of the self and/or others and by an overly critical stance in evaluating one's or others' behavior characterized by an inner dialogue of selfdisparagement. Different models have been proposed, most of which hypothesize its causal role in the development of diverse forms of severe psychopathology (Bardone-Cone et al., 2007; Egan, Wade & Shafran, 2011; Smith et al., 2018). Theoretical formulations and collected evidence suggest that perfectionism may also play a role in personality disorders (PDs). Several studies have reported how perfectionism is associated with PDs traits in both clinical and non-clinical samples (Dimaggio, Semerari, Carcione, Nicolò & Procacci, 2015; Hewitt & Flett, 1991, 1993; Hewitt, Flett & Turnbull, 1992; Sherry, Hewitt, Flett, Lee-Baggley & Hall, 2007). Such evidences support the need for a multidimensional perspective on perfectionism as a comprehensive style driving core elements of psychopathology, regardless of an inhibited or dysregulated pattern of personality (Ayearst, Flett & Hewitt, 2012). Indeed, perfectionism may represent, for example, a core factor for either obsessive-compulsive personality disorder (Goodwin, Haycraft, Willis & Meyer, 2011) or borderline personality disorder (Chen, Hewitt, Flett & Roxborough, 2019).

Hewitt and colleagues (Hewitt et al., 2017) have proposed a Comprehensive Model of Perfectionistic Behavior (CMPB) that is rooted in the theoretical, clinical and experimental evidence in favor of a multidimensional perspective The CMPB has progressively integrated the accumulating data about perfectionism, and includes three elements: (i) the trait components or trait dimensions (self-oriented, other-oriented, socially prescribed perfectionism); (ii) the interpersonal components or self-presentational facets (perfectionistic self-promotion, nondisplay of imperfections, nondisclosure of imperfections); (iii) the intrapersonal or self-relational components or automatic perfectionistic cognitions. The complex CMPB may be effectively integrated with the foundational assumptions of PD as an enduring pattern of inner experience and behavior that is manifested in different areas such as cognition, affectivity, impulse control and interpersonal functioning (American Psychiatric Association, 2013). Moreover, its focus on a

comprehensive view of self- and interpersonal- functioning is theoretically and experimentally consistent with the emergence of alternative models of personality disorder (Hopwood, 2018; Widiger et al., 2019). Perfectionism turns out to be a transdiagnostic dimension recurring among different categorical or trait-oriented diagnoses of PDs (Ayearst et al., 2012).

From Hewitt and colleagues' perspective, "perfectionism is an interpersonal personality style that develops within a relational context" (Hewitt et al., 2017, p. 99). In outlining a specifically designed clinical conceptualization and treatment, they proposed a model of the development of perfectionism (PSDM; Perfectionism Social Disconnection Model). PSDM extensively describes how persons may construe specific internal working models of others and self, leading to perfectionistic behaviors, traits and cognitions, and diverse forms of psychopathology. And by doing so, perfectionistic persons tend to express, since the early experiences as children, specific affects (shame, aloneness, depressive states, anger, etc.) that seem to relate to a recurring and profound experience of vulnerability. In particular, shame has been comprehensively studied in the literature on perfectionism, highlighting an overwhelming sense of humiliation and mortification (Stolorow, 2010), also expressed by self-criticism and a sort of attack against one's self (Gilbert & Andrews, 1998).

When treating PDs, perfectionism is frequently a maintaining factor and poses a potential risk for relapse (Cheli, MacBeth, Popolo & Dimaggio, 2020; Dimaggio et al., 2018). The overcontrolled and often pro-social characteristics associated with perfectionism may be reinforced by the environment and pursued by the patients themselves as desirable qualities (Lynch, Hempel & Dunkley, 2015). The recurrence of painful cyclical relational patterns (CRPs) that "emerges in response to aversive affective states arising from unmet attachment needs" (Hewitt et al., 2017, p.161) may result in a PD shaped by an overwhelming shame-based self-criticism linked to automatic ruminative self-statements regarding the attainment of perfection. The rationale of the present pilot-study relies upon the hypothesis that an integrated treatment approach (Livesley, 2012) to PDs characterized by a perfectionistic style may benefit from a module aimed at reducing the affective state of shame-based self-criticism. First, shame regulation has been proven to be a significant predictor of personality pathology (Schoenleber & Berenbaum, 2012), and, broadly speaking, of human

suffering (DeYoung, 2015; Gilbert & Andrews, 1998). Second, self-criticism turns out to be a significant mediator between shame and psychopathology, even if when compared with rumination (Cheung, Gilbert & Irons, 2004; Pinto-Gouveia, Castilho, Matos & Xavier, 2013). Third, an integrative treatment such as Compassion Focused Therapy (CFT) has tested interventions aimed at supporting patients in distinguish between a shame-based self-criticism and a selfcompassionate correction in addition to other interventions (Gilbert, 2009; Gilbert & Procter, 2006). Fourth, shamebased criticism has proven to activate a threat system that, in turn, induces a physiological cascade inhibiting the reflective functioning and hyperactivating the defensive responses (Petrocchi & Cheli, 2019). In our clinical experience, we have tested how this vicious cycle may represent for many PDs not only a maintaining factor, but also a trigger for relapse after having concluded the individual intervention.

Hewitt et al. (2017) have conceptualized self-criticism as reflection of the self-relational component of the CMPB. That is, the internal dialogue that has with oneself, in this case a dialogue fraught with perfectionistic and highly self-disparaging themes, reflects the relationship one has with oneself (Hewitt, Mikail, Dang, Kealy & Flett, 2020). In the dynamic relational treatment developed by Hewitt et al., an important focus is on this relationship with self to help the person begin to develop self-compassion for the self and to develop the ability to self-soothe. This focus is addressed within the process and unfolding of the therapy and not structured as a specific intervention.

Thus, we outlined a pilot-study aimed at exploring the acceptability and the feasibility of an intervention aimed at consolidating the achieved changes and preventing relapses in perfectionistic patients diagnosed with and treated for PD. By considering the aforementioned hypotheses and assumptions, we developed an integrative group intervention based on both the conceptualization of perfectionism in CMPB and PSDM (Hewitt et al., 2017), and the CFT practices for promoting a self-compassionate enhancement (Gilbert & Choden, 2014). Diverse evidences may support this attempt. On the one hand, perfectionistic patients can benefit from mindfulness-based intervention, even if they might have problems in implementing these kind of practices (Flett, Nepon, Hewitt & Rose, 2020). On the other hand, the use of mindful compassion practices, as specifically focused on shame-based criticism, has reported significant evidences in favor of their application both on PDs and as integrative

interventions (Kirby et al., 2017). CFT hypothesizes that the soothing system, a mammalian affect regulation system normally triggered by cues of social safeness, is poorly accessible in people whose threat system is hyperactivated by shame-based self-criticism. Therefore, the primary aim of CFT is to increase compassion for one's own distress, as a way to strengthen the ability to generate self-soothing responses to one's own suffering. We outlined a mindful compassion group intervention integrating CMPB and PSDM as core components of both a shared conceptualization of perfectionism with the participants and a few specifically designed practices.

#### **METHODS**

# Sample

Five consecutive patients who were diagnosed with a PD (American Psychiatric Association, 2013) were recruited in the study after having provided informed consent. The ethical approval was given by the Ethical Committee of the Center for Psychology and Health Tages Charity (Ref. No. 01-2017/070120). Patients were eligible if: (i) they were diagnosed with a PD in last 7 months in accordance with the Structured Clinical Interview for DSM-5 Personality Disorders (First, Williams, Benjamin & Spitzer, 2016); (ii) they have concluded in the last month an individual Metacognitive Interpersonal Therapy (TMI; Dimaggio et al., 2007) reporting a remission from PD; (iii) they were reporting significant levels of perfectionism (equal to or higher than the mean of the normative clinical sample) in at least one scale of the Multidimensional Perfectionism Scale (Hewitt & Flett, 2004; Hewitt, Flett, Turnbull-Donovan & Mikail, 1991). The male to female ratio was 3:2, ages ranged between 23 to 37 (see Table 1). At the beginning of the individual psychotherapy one patient had been diagnosed with narcissist personality disorder (NPD), two with borderline personality disorder (BPD), and two with obsessive-compulsive personality disorder (OCPD).

#### Measures

Structured Clinical Interview for DSM-5 Personality
 Disorders (SCID-5-PD; First et al., 2016): the SCID-5-PD
 is a semi-structured diagnostic interview for PDs as

**Table 1** – Descriptives of the sample at pre-assessment

	Patient 1	Patient 2	Patient 3	Patient 4	Patient 5	Sample
Diagnosis	NPD	BPD	BPD	OCPD	OCPD	_
Sex	M	F	M	M	F	_
Education	College	College	Graduation	PhD	Graduation	_
Occupation	Student	Self-employed	Self-employed	Researcher	Self-employed	-
Relationship status	Single	Single	Stable relationship	Single	Married	-
Age	26	35	31	37	32	32.2 (4.2)
MPS-SO	65	60	60	65	61	62.2 (2.6)
MPS-OO	52	56	52	57	56	54.6 (2.4)
MPS-SP	54	50	56	51	50	52.2 (2.7)
FFMQ-O	33	30	26	30	32	30.2 (2.7)
FFMQ-D	32	32	32	32	33	32.2 (.4)
FFMQ-AA	24	22	26	24	30	25.2 (3.0)
FFMQ-NJ	28	30	32	35	29	30.8 (2.8)
FFMQ-NR	24	20	22	24	26	23.2 (2.3)
FSCRS-HS	2	2	1	1	1	1.4 (.5)
FSCRS-IS	13	10	11	12	11	11.4 (1.1)
FSCRS-RS	22	18	23	26	24	22.6 (3.0)

Legenda. MPS-SO = Multidimensional Perfectionism Scale - Self-oriented; MPS-OO = Multidimensional Perfectionism Scale - Other-oriented; MPS-SP = Multidimensional Perfectionism Scale - Socially prescribed; FFMQ-O = Five Facets Mindfulness Questionnaire - Observe; FFMQ-D = Five Facets Mindfulness Questionnaire - Describe; FFMQ-AA = Five Facets Mindfulness Questionnaire - Act with awareness; FFMQ-NJ = Five Facets Mindfulness Questionnaire - Non-judge; FFMQ-NR = Five Facets Mindfulness Questionnaire - Non-react; FSCRS-HS = Forms of Self-criticizing/Attacking and Self-reassuring Scale - Hated-self; FSCRS-IS = Forms of Self-criticizing/Attacking and Self-reassuring Scale - Reassured-self.

*Note.* We report socio-demographic data and quantitative measures at pre-assessment for each patient. In the last column we score the Mean and Standard deviation (between parentheses) for the whole sample. Diagnosis of personality disorder refers to SCID-5-PD interview at the beginning of individual psychotherapy: borderline personality disorder (BPD); narcissistic personality disorder (NPD); obsessive-compulsive personality disorder (OCPD).

defined by the DSM-5. The procedure allows the clinician to capture the construct embodied in the diagnostic criteria of the 10 PDs. The SCID-5-PD reports good interrater reliability at both dimensional and categorical PD diagnoses.

- Multidimensional Perfectionism Scale (MPS; Hewitt et al., 1991): MPS is a 45-item measure on a 1-to-7 Likert scale designed to measure three dimensions of perfectionistic behavior: self-oriented perfectionism (MPS-SO), other-oriented perfectionism (MPS-OO), and socially prescribed perfectionism (MPS-SP). Higher scores indicate a greater level of perfectionism. Cronbach's alpha ranges from .79 to .89 for the three subscales, test-retest reliabilities range from .75 to .80 over 3 months, and subscale intercorrelations range from .25 to .40.
- Five Facets Mindfulness Questionnaire (FFMQ; Baer, Smith, Hopkins, Krietemeyer & Toney, 2006): the FFMQ is a 39-item questionnaire that measures five facets of mindfulness: observe (FFMQ-O), describe (FFMQ-D), act with awareness (FFMQ-AA), non-judge (FFMQ-NJ), and non-react (FFMQ-NR). Items were scored on a five-point Likert scale ranging from 1 to 5 and computed by summing the scores on the individual items, with higher scores indicating greater mindfulness. Cronbach's alpha ranges from .75 to .91 for the three subscales.
- Forms of Self-criticizing/Attacking and Self-reassuring Scale (FSCRS; Gilbert, Clarke, Hempel, Miles & Irons, 2004): the FSCRS is a 22 - item measure, which requires participants to rate a selection of positive and negative statements on a 5-point Likert scale ranging from 0 to 4. The scale measures self-reassurance (reassured-self; FSCRS-RS) and two types of self-criticism: inadequate-self (FSCRS-IS) and hated-self (FSCRS-HS), summing the scores of individual items. Cronbach's alpha ranges from .86 to .90 for the three subscales.
- Written Open Questions (WOQ): two written open questions were included in the assessment. During the initial assessment participants were asked to describe their expectation and desired goals before starting the intervention (WOQ-1), whereas the final assessment includes a question about how they evaluated the intervention and its effectiveness in respect to previously defined goals (WOQ-2).
- Semi-structured Interview (SSI): one month after the end of the intervention all the patients accessed a semi-structured interview. SSI included open questions about: SSI-1, how

they generally evaluated the intervention; SSI-2, how they evaluated its general effectiveness in respect to their own goals; SSI-3, how they evaluated its specific effectiveness in respect to perfectionism; SSI-4, how they perceived the mindful compassion practices; SSI-5, how they perceived the shared conceptualization of perfectionism; SSI-6, how they evaluated the group format in respect to the individual one.

## **Procedures**

Once the patients signed the informant consent form, they accessed the initial assessment  $(t_0)$ , comprising psychometric measures (MPS; FFMQ; FSCRS), clinical interview (SCID-5-PD) and qualitative measures (WOQ-1). After having completed the 8-week intervention  $(t_1)$ , patients completed the final assessment (MPS; FFMQ; FSCRS; WOQ-2). One month after the final assessment  $(t_2)$ all the patients were interviewed (SCID-5-PD; SSI). The primary outcome of the study was the acceptability of the intervention defined on the base of the following criteria: (i) no adverse events (e.g. self-harm behavior, suicidal ideation, etc.); (ii) maintenance of PD remission at  $t_2$ ; (iii) rate of drop-out (≤10%); (iv) rate of attendance to sessions (no more than 1 session skipped for each participant); (v) rate of positive evaluation at the qualitative measures (WOQ; SSI) by participants (≥80%). The secondary outcomes were: (i) an individual reduction  $(t_{0-1})$  of perfectionism and self-criticism (MPS and FSCRS scale with the higher score for each participant); (ii) a group reduction  $(t_{0-1})$  of perfectionism and self-criticism (MPS and FSCRS scales); (iii) an individual increase  $(t_{0-1})$  of mindfulness (FFMQ scales scores for each participant); (iv) a group increase  $(t_{0-1})$  of mindfulness (FFMQ scales scores).

The group intervention involved two therapists, both with 5 years of experience in CFT. The protocol included specific schedules (e.g. psychoeducation; practices; homework; workbook; etc.) for all the sessions, and treatment adherence was evaluated at the end of each session. Moreover, specific slots for each therapist and session were defined, as a way to always have an observer of participants' engagement and therapist's adherence. All the information collected by the therapists were finally integrated with the qualitative measures reported by the patients (WOQ; SSI).

# **Analysis**

We report the descriptives of the clinical measures. Prepost changes in individual scores were evaluated trough the Reliable Change Index (RCI; Jacobson & Truax, 1991). Reliable changes (RCI $\geq$ 1.96) were scored by using the normative data of non-clinical samples, since subjects were recruited after having concluded an individual psychotherapy and reported remission from PD's diagnosis. Pre-post changes in the sample (n=5) were investigated through Student's t test, despite the low sample size (deWinter, 2013). Qualitative measures (i.e. the written answers at WOQ and the transcripts of SSI) were explored through hermeneutic phenomenological methods (Rennie, 2012).

#### Intervention

The intervention was an integrative mindful compassion group therapy (see Table 2). The structure was outlined on the base of standard mindfulness-based interventions (MBIs), comprising eight 2-hour group sessions and one day of silence lasting 4 hours (Didonna, 2009). The contents and the phases of the intervention were rooted in two different frameworks. On the one hand, the sequence of and the types of practices were defined in accordance

with the mindful compassion protocol (Gilbert & Choden, 2014). On the other hand, the shared conceptualization of perfectionism and its role in triggering, maintaining, and inducing relapses in PD was proposed through the CMPB and PSDM (Hewitt et al., 2017). We also included specifically designed mindful compassion practices using Hewitt and colleagues (2017) dynamic relational approach. For example, we co-construed with the participants an individual Cyclical Relational Pattern that was used as the object of a compassionate enquiry practice (see Hewitt, Mikail, Flett & Dang, 2018).

The protocol was organized in four phases, similarly to group psychotherapy of perfectionistic behavior, in order to highlight the specific focuses of each of them and "the fluid yet predictable nature of group development" (Hewitt et al., 2017, p. 259). In Table 2 we report the focuses, the mindful compassion practices and the shared conceptualization of perfectionism we proposed in the four phases. Every single session was organized according to the classic MBIs' format: the therapists ask about previous week and practices and briefly discuss with participants; they introduce the focus of the session and share specific workbooks including shared conceptualization and the proposed practices; participants experiment practices and share feedbacks with therapists; the therapists conclude the session by anticipating next focus session and propose practices as homework.

Table 2 – Structure of the intervention

	Focus of the phase	Practices	Shared conceptualization
1st phase – week 1-2	Awareness	Mindfulness practices	Automatic ruminative cognitions
2 <sup>nd</sup> phase – week 3-4	Acceptance	Working with acceptance	Perfectionism trait dimensions
3 <sup>rd</sup> phase – week 5-6	Fear of compassion	Working with imagery	Perfectionistic self-presentation facets
Day of silence (7 <sup>th</sup> week)	Circle of compassion	Impermanence and widening compassion	Group cohesiveness and termination
4 <sup>th</sup> phase – week 7-8	Compassionate self	Compassion for self and others	Cyclical relational pattern

In proposing the practices and sharing the feedback there was a substantial difference compared to the MBI protocols: therapists never forced the participants to either use specific postures during meditation and or consider the homework a mandatory request. Such an approach was rooted in CFT attempt of helping patients activate the soothing system (Gilbert, 2009) and, at the same time, in defusing the recurring perfectionistic CRPs (Hewitt et al., 2017).

### **RESULTS**

#### Course of the intervention

The course of the intervention was seemingly shaped by the outlined four phases and a few specific critical incidents. All the participants reported a good engagement and curiosity at the beginning of the first session. They took a collaborative approach to the rules and norms proposed by the therapists, despite the first critical incident corresponded to the first attempt to share an explicit conceptualization of perfectionism. Patient 4 let emerge a criticism, by remarking that he considered perfectionism to be a positive factor rather than negative. This incident was elaborated in terms of a hypothesis to be test, and by highlighting the complexity and heterogeneity of the construct of trait. The group cohesiveness and bond with therapists progressively increased allowing the resolution of the second critical incident. Patient 1 reported an extremely disturbing relational event that occurred between the second and the third session. In telling this event (happened external to the group), Patient 1 started crying and reporting how frequently he was self-critical, albeit covertly. The group proactively and emotionally responded, by supporting and reassuring Patient 1. They all stated how they were not considering how painful could have been his selfcriticism, and how sharing this pain was judged an act of trust in the group. The third critical incident was a group one. When discussing about their recurrent CRPs (session 6) everyone agreed on how dysfunctional and painful their patterns were. This event and the proposed practices let emerge a deep shared conceptualization of their perfectionistic personality styles. The fourth event corresponded to the day of silence. On the one hand, they experienced the emotional impact of a long group session where they agreed on an emerging significant bond between each other. On the other hand, they started thinking about the approaching termination of the

intervention. The last incident must be considered the last session, in terms of the final, albeit critical, step in elaborating the end of the group, and the individual and shared meaning of their relational experience.

#### Quantitative outcomes

No patient reported any adverse events or drop-outs during the intervention. Moreover, all the patients maintained the remission of PD at the one-month follow-up  $(t_2)$  and the rate of attendance was as expected (no one skipped a session). In respect to secondary outcomes (see Table 3), all the participants reported a reliable change (RCI ranging between 1.97 and 3.15) at MPS and FSCRS scale with the higher score at pre-assessment, except for Participant 4 at FSRCS. A significant difference (p<.05) was found in two (MPS-SO; MPS-OO) out of three of MPS scales, whereas the remaining scale reported a fringe value (p = .056). No one difference was found in FSRCS scales, except for FSCRS-RS (t = 3.04; p = .016; df = 8). All the patients reported a reliable change (RCI ranging between -2.05 to -3.08) at FFMQ-NR, whereas four out of five at FFMQ-NJ (RCI ranging between -1.97 to -2.75). No reliable change was found in the other FFMQ scales with only one exception (Patient 1 showed a reliable change at FFMQ-O). Similarly, we found no differences in the whole sample between pre-and post- assessment at all the FFMQ scales.

#### Qualitative outcomes

All participants reported positive feedback about the intervention at WOQ-2 and SSI. They also highlighted to have achieved their desired goals at WOQ-1 (mainly expressed in terms of better knowing one's self and learning new healthy strategies), and to have discovered new gains they did not considered at the beginning of the intervention. They especially highlighted the discovery of mindful practices and group experience as powerful tools in pursuing wellbeing. Another unexpected result was their deep understanding of the role of perfectionism in their daily life and how they were able to use compassion as a soothing and effective way to look at themselves. They remarked how the personal experience of practices and the relational experience of a group intervention were accelerators in expanding what they previously learned during the individual therapy.

**Table 3** – Quantitative measures over time

		Student's t					
	Patient 1	Patient 2	Patient 3	Patient 4	Patient 5	t	p
MPS-SO	.38	2.05*	.9	.13	2.05*	3.405	.009*
MPS-OO	2.1	1.23	2.34*	.99	.12	4.178	.003*
MPS-SP	.86	1.64	3.15*	0	1.26	2.227	.056
FFMQ-O	-2.05*	-1.17	58	29	0	1.519	.167
FFMQ-D	.29	86	0	29	86	1.633	.141
FFMQ-AA	.68	86	34	-1.36	68	.662	.526
FFMQ-NJ	-2.36*	-2.75*	-1.97*	39	-1.97*	1.633	.141
FFMQ-NR	-3.08*	-3.08*	-2.05*	-2.05*	-2.05*	.323	.754
FSCRS-HS	1.65	1.65	0	0	0	1.28	.236
FSCRS-IS	2.12*	3.71*	2.12*	.53	2.38*	3.04	.016*
FSCRS-RS	32	64	64	0	64	.675	.518

Legenda. MPS-SO = Multidimensional Perfectionism Scale - Self-oriented; MPS-OO = Multidimensional Perfectionism Scale - Other-oriented; MPS-SP = Multidimensional Perfectionism Scale - Socially prescribed; FFMQ-O = Five Facets Mindfulness Questionnaire - Observe; FFMQ-D = Five Facets Mindfulness Questionnaire - Describe; FFMQ-AA = Five Facets Mindfulness Questionnaire - Act with awareness; FFMQ-NJ = Five Facets Mindfulness Questionnaire - Non-judge; FFMQ-NR = Five Facets Mindfulness Questionnaire - Non-react; FSCRS-HS = Forms of Self-criticizing/Attacking and Self-reassuring Scale - Hated-self; FSCRS-IS = Forms of Self-criticizing/Attacking and Self-reassuring Scale - Reassured-self.

*Note.* We report the reliable change index (RCI) for each patient and the Student's t for the whole sample (last two columns). The reliable changes (RCI $\geq$ 1.96) and the significant differences (p<.01) between pre- and post- assessment are highlighted (\*).

# DISCUSSION

The aim of this study was to pilot-test the acceptability and the feasibility of a mindful compassion group intervention for PD's patient with predominant perfectionistic traits. The proposed protocol was rooted in CFT and integrated CMPB and PSDM as the core components of both a shared conceptualization of perfectionism with participants and a few specifically designed practices. The reported results seem to confirm both the acceptability and the feasibility, also highlighting promising evidences in favor of a potential effectiveness in reducing perfectionism and self-criticism and increasing mindfulness.

All the defined primary outcomes were achieved. Neither adverse event nor drop-out were reported. All the participants maintained at 1-month follow-up the remission of PD gained at the end of the individual psychotherapy. Moreover, no one skipped a session and the rate of positive evaluation was 100%. In respect to secondary outcomes, we report contrasting results. On the one hand, all the participants, with only one exception, reported a reliable change at MPS and FSCRS scale with the higher score at pre-assessment, and two out of three of the MPS scales showed a significant change in the whole group. Of note, the remaining MPS scale highlighted an almost significant value (p = .056), and the Participant 4 not reporting a reliable change at FSCRS highlighted at pre-assessment values at least one SD below the sample means. On the other hand, only one scale of FFMQ (FFMQ-NR) reported reliable changes among all the participants, whereas FFMQ-NJ in four out of five. Again, Patient 4 was the one not reporting a reliable change, and who highlighted an FFMQ-NJ value at pre-assessment one SD above the sample mean.

The results and their biases may be interpreted through four intertwined hypotheses. First, the intervention seems to acceptable and feasible, despite a few relevant limitations. Indeed, the low sample size and the observational methodology urge us not to generalize the results and to

carefully consider the possible implications at both theoretical and clinical level. Second, the inclusion criteria may represent a nuanced bias due to a sample of remitted patients. We might have expected dubious results on clinical efficacy due to the previous therapeutic gains. At the same time, the good acceptability might be overestimated by a previous successful psychotherapy. Third, the limited recurrence of reliable changes, in both the single participants and in the sample as a whole, may be similarly underestimated by the recruitment of remitted patients. Once the intervention will be tested on newly diagnosed patients, its effectiveness may further increase. Finally, the complexity of personality trajectories urges us to consider the differential effect of a group intervention in respect to the phases of such trajectories. Our preliminary results can just support the feasibility of testing our protocol in different populations and phases of a wider treatment program.

All that said, the collected measures seem to support the need for further researches aimed at exploring the effectiveness of a mindful compassion group intervention that may integrate CMPB and PSDM. The intervention was effective in reducing the most problematic dimension of perfectionism in each participant, and of self-criticism in four out of five participants. Moreover, they reported a significant increase in the facets of mindfulness connected to the abilities of nonjudging and nonreacting to experience. We may hypothesize that the intervention was able to promote a different look at personal and relational life, in a non-judgmental and compassionate manner. The use of mindful compassion practices might be extremely useful in "discovering more adaptive and flexible ways of meeting the need for security, connection, and self-regard" (Hewitt et al., 2017, p. 150). Indeed, the perniciousness of perfectionistic traits seem to ask for a complex and integrate treatment approach (Livesley, 2012). An approach that can remind our patients how social disconnection may be the painful illusion that arises from not knowing how to balance compassion for us with compassion for others.

## References

- AMERICAN PSYCHIATRIC ASSOCIATION (2013). DSM-5
  Diagnostic Classification. In *Diagnostic and Statistical Manual of Mental Disorders*. doi.org/10.1176/appi.books.9780890425596. x00diagnosticclassification
- AYEARST, L.E., FLETT, G.L. & HEWITT, P.L. (2012). Where is multidimensional perfectionism in DSM-5? A question posed to the DSM-5 personality and personality disorders work group. *Personality Disorders: Theory, Research, and Treatment, 3* (4), 458-469. doi.org/10.1037/a0026354
- BAER, R.A., SMITH, G.T., HOPKINS, J., KRIETEMEYER, J. & TONEY, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment*, 13 (1), 27-45. doi. org/10.1177/1073191105283504
- BARDONE-CONE, A.M., WONDERLICH, S.A., FROST, R.O., BULIK, C.M., MITCHELL, J.E., UPPALA, S. & SIMONICH, H. (2007). Perfectionism and eating disorders: Current status and future directions. *Clinical Psychology Review*, 27 (3), 384-405. doi.org/10.1016/j.cpr.2006.12.005
- CHELI, S., MacBETH, A., POPOLO, R. & DIMAGGIO, G. (2020). The intertwined path of perfectionism and self-criticism in a client with obsessive-compulsive personality disorder. *J Clin Psychol*, 76, 2055-2066. doi.org/10.1002/jclp.23051
- CHEN, C., HEWITT, P.L., FLETT, G.L. & ROXBOROUGH, H.M. (2019). Multidimensional perfectionism and borderline personality organization in emerging adults: A two-wave longitudinal study. *Personality and Individual Differences*, 146, 143-148. doi.org/10.1016/j.paid.2019.04.011
- CHEUNG, M.S.-P., GILBERT, P. & IRONS, C. (2004). An exploration of shame, social rank and rumination in relation to depression. Personality and Individual Differences, 36 (5), 1143-1153. doi.org/10.1016/S0191-8869(03)00206-X
- De WINTER, J. (2013). Using the Student's t-test with extremely small sample sizes. *Practical Assessment, Research & Evaluation*, 18. doi.org/10.7275/e4r6-dj05
- DeYOUNG, P.A. (2015). Understanding and treating chronic shame. Routledge.
- $DIDONNA,\,F.\,(2009).\,Clinical\,handbook\,of\,mindfulness.\,Springer.$
- DIMAGGIO, G., LYSAKER, P.H., CALARCO, T., PEDONE, R., MARSIGLI, N., RICCARDI, I., SABATELLI, B., CARCIONE, A. & PAVIGLIANITI, A. (2015). Perfectionism and personality disorders as predictors of symptoms and interpersonal problems. *American Journal of Psychotherapy*, 69 (3), 317-330. doi. org/10.1176/appi.psychotherapy.2015.69.3.317
- DIMAGGIO, G., MacBETH, A., POPOLO, R., SALVATORE, G.,

- PERRINI, F., RAOUNA, A., OSAM, C.S., BUONOCORE, L., BANDIERA, A. & MONTANO, A. (2018). The problem of overcontrol: Perfectionism, emotional inhibition, and personality disorders. *Comprehensive Psychiatry*, 83, 71-78. doi. org/10.1016/j.comppsych.2018.03.005
- DIMAGGIO, G., SEMERARI, A., CARCIONE, A., NICOLÒ, G. & PROCACCI, M. (2007). Psychotherapy of personality disorders: Metacognition, states of mind and interpersonal cycles. Routledge.
- EGAN, S.J., WADE, T.D. & SHAFRAN, R. (2011). Perfectionism as a transdiagnostic process: A clinical review. *Clinical Psychology Review*, 31 (2), 3-12. doi.org/10.1016/j.cpr.2010.04.009
- FIRST, M.B., WILLIAMS, J.B., BENJAMIN, L.S. & SPITZER, R.L. (2016). SCID-5-PD: Structured clinical interview for DSM-5 personality disorders. American Psychiatric Association Publishing.
- FLETT, G.L., NEPON, T., HEWITT, P.L. & ROSE, A.L. (2020). Why perfectionism is antithetical to mindfulness: A conceptual and empirical analysis and consideration of treatment implications. *International Journal of Mental Health and Addiction*. doi. org/10.1007/s11469-020-00252-w
- GILBERT, P. (2009). *The compassioate mind*. New Harbinger Publications.
- GILBERT, P. & ANDREWS, B. (1998). Shame: Interpersonal behavior, psychopathology, and culture. Oxford University Press.
- GILBERT, P. & CHODEN, K. (2014). Mindful compassion: How the science of compassion can help you understand your emotions, live in the present, and connect deeply with others. New Harbinger Publications.
- GILBERT, P., CLARKE, M., HEMPEL, S., MILES, J.N.V. & IRONS, C. (2004). Criticizing and reassuring oneself: An exploration of forms, styles and reasons in female students. British Journal of Clinical Psychology, 43 (1), 31-50. doi. org/10.1348/014466504772812959
- GILBERT, P. & PROCTER, S. (2006). Compassionate mind training for people with high shame and self-criticism: Overview and pilot study of a group therapy approach. *Clinical Psychology and Psychotherapy*, 13 (6), 353-379. doi.org/10.1002/cpp.507
- GOODWIN, H., HAYCRAFT, E., WILLIS, A.M. & MEYER, C. (2011).

  Compulsive exercise: The role of personality, psychological morbidity, and disordered eating. *International Journal of Eating Disorders*, 44 (7), 655-660. doi.org/10.1002/eat.20902
- HEWITT, P.L. & FLETT, G.L. (1991). Dimensions of perfectionism in unipolar depression. *Journal of Abnormal Psychology*, *100*, 98-101. psycnet.apa.org/doi/10.1037/0021-843X.100.1.98

- HEWITT, P.L. & FLETT, G.L. (1993). Dimensions of perfectionism, daily stress, and depression: A test of the specific vulnerability hypothesis. *Journal of Abnormal Psychology*, 102, 58-65.
- HEWITT, P.L. & FLETT, G.L. (2004). *Multidimensional Perfectionism Scale (MPS)*: Technical manual. Toronto, Canada: Multi-Health Systems.
- HEWITT, P.L., FLETT, G.L. & MIKAIL, S.F. (2017). Perfectionism:

  A relational approach to conceptualization, assessment, and treatment. New York: The Guilford Press.
- HEWITT, P.L., FLETT, G.L. & TURNBULL, W. (1992). Perfectionism and multiphasic personality inventory (MMPI) indices of personality disorder. *Journal of Psychopathology and Behavioral Assessment*, 14 (4), 323-335. doi.org/10.1007/BF00960777
- 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, 3 (3), 464. doi.org/10.1037/1040-3590.3.3.464
- HEWITT, P.L., MIKAIL, S.F., DANG, S.S., KEALY, D. & FLETT, G.L. (2020). Dynamic-relational treatment of perfectionism: An illustrative case study. *J Clin Psychol*, *76*, 2028-2040. doi. org/10.1002/jclp.23040
- HEWITT, P.L., MIKAIL, S.F., FLETT, G.L. & DANG, S. (2018). Specific formulation feedback in dynamic-relational group psychotherapy of perfectionism. *Psychotherapy*, 55, 179-185. doi. org/10.1556/2006.5.2016.004
- HOPWOOD, C.J. (2018). A framework for treating DSM-5 alternative model for personality disorder features. *Personality and Mental Health*, 12 (2), 107-125. doi.org/10.1002/pmh.1414
- JACOBSON, N.S. & TRUAX, P. (1991). Clinical significance: A statistical approach to defining meaningful change in psychotherapy research. *Journal of Consulting and Clinical Psychology*, 59 (1), 12-19. doi.org/10.1037/0022-006X.59.1.12
- KIRBY, J.N., TELLEGEN, C.L. & STEINDL, S.R. (2017). A metaanalysis of compassion-based interventions: Current state of knowledge and future directions. *Behavior Therapy*, 48 (6), 778-792. doi.org/10.1016/j.beth.2017.06.003
- LIVESLEY, W.J. (2012). Integrated treatment: A conceptual framework for an evidence-based approach to the treatment of personality disorder. *Journal of Personality Disorders*, 26 (1), 17-

- 42. doi.org/10.1521/pedi.2012.26.1.17
- LYNCH, T.R., HEMPEL, R.J. & DUNKLEY, C. (2015). Radically open-dialectical behavior therapy for disorders of over-control: Signaling matters. *American Journal of Psychotherapy*, 69 (2), 141-162. doi.org/10.1176/appi.psychotherapy.2015.69.2.141
- PETROCCHI, N. & CHELI, S. (2019). The social brain and heart rate variability: Implications for psychotherapy. *Psychology and Psychotherapy: Theory, Research and Practice*, 92 (2), 208-223. doi.org/10.1111/papt.12224
- PINTO-GOUVEIA, J., CASTILHO, P., MATOS, M. & XAVIER, A. (2013). Centrality of shame memories and psychopathology: The mediator effect of self-criticism. *Clinical Psychology: Science and Practice*, 20 (3), 323-334. doi.org/10.1111/cpsp.12044
- RENNIE, D.L. (2012). Qualitative research as methodical hermeneutics. *Psychological Methods*, 17 (3), 385-398. doi. org/10.1037/a0029250
- SCHOENLEBER, M. & BERENBAUM, H. (2012). Shame regulation in personality pathology. *Journal of Abnormal Psychology*, 121 (2), 433-446. doi.org/10.1037/a0025281
- SHERRY, S.B., HEWITT, P.L., FLETT, G.L., LEE-BAGGLEY, D.L. & HALL, P.A. (2007). Trait perfectionism and perfectionistic selfpresentation in personality pathology. *Personality and Individual Differences*, 42 (3), 477-490. doi.org/10.1016/j.paid.2006.07.026
- SMITH, M.M., SHERRY, S.B., CHEN, S., SAKLOFSKE, D.H., MUSHQUASH, C., FLETT, G.L. & HEWITT, P.L. (2018). The perniciousness of perfectionism: A meta-analytic review of the perfectionism-suicide relationship. *Journal of Personality*, 86 (3), 522-542. doi.org/10.1111/jopy.12333
- STOEBER, J. (2017). The psychology of perfectionism:

  Theory, research, applications. London: Routledge. doi. org/10.4324/9781315536255
- STOLOROW, R.D. (2010). The shame family: An outline of the phenomenology of patterns of emotional experience that have shame at their core. *International Journal of Psychoanalytic Self Psychology*, *5* (3), 367-368. doi.org/10.1080/15551024.2010.48 5347
- WIDIGER, T.A., BACH, B., CHMIELEWSKI, M., CLARK, L.A., DEYOUNG, C., HOPWOOD, C.J., ... & THOMAS, K.M. (2019). Criterion A of the AMPD in HiTOP. *Journal of Personality Assessment*, 101 (4), 345-355. doi.org/10.1080/00223891.2018.1 465431