Predictors of subjective well-being among individuals with severe psychiatric conditions

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1. Introduction

In recent years, there has been a growing interest in subjective well-being (SWB), the hedonic dimension of psychological well-being that includes both affective (e.g., happiness and life satisfaction) and cognitive components (e.g., personal evaluation about their present, past, and future life) [1]. SWB is very closely connected to subjective quality of life (i.e., satisfaction with life in general) but different to objective quality of life (i.e., patients' life conditions) [2]. Research focusing on SWB in severe psychiatric conditions (SPC) has been neglected for a long time [3], partly because psychiatry and clinical psychology have had a clear bias towards negative emotional states and impaired functioning [4]. Nevertheless, recent studies have shown that it is possible to experience well-being despite suffering serious mental disorders [5–7]; and that SWB has a positive influence on health and can enhance functioning [8–10]. Positive emotions can be very relevant in the recovery process of people with mental disorders, as they help to soothe and compensate the difficult experiences and negative emotions they often encounter [11]. In fact, there is an increasing awareness that the personal recovery of people with SPC can benefit from strategies focused on improving their well-being [4,12]. For instance, positive psychology interventions have shown to increase well-being as well as decrease distress in general population samples [13], in clinical populations [14] and they also seem to be a promising tool for people with SPC [15–17].

Understanding the factors associated with well-being of the SPC population would enable the design of comprehensive interventions tailored to their needs and characteristics. This is pivotal given that SWB can stimulate recovery, improve the prognosis [18], the therapeutic response [19], the objective quality of life (QoL) [20], and even, the medication adherence [21]. In this paper we have studied predictive factors based on the SWB literature to develop a comprehensive model that would include socio-demographic factors, psychosocial functioning, negative and positive emotional variables as well as interpersonal factors (Fig. 1).

First, research evidence on socio-demographic factors as predictors of SWB is in dispute. Some epidemiological data have indicated that *age* and happiness are related in a U-shape, where younger and older populations are more likely to experience it [22]. However in clinical samples, some studies have found that the onset of a mental disorder, usually in early adulthood, is associated with a decrease in SWB in comparison to the general population [23,24]. With regards to *gender* and SWB, some studies indicate that female scores are higher on the positive mental health compared to males [25], while other studies do not find significant gender differences in subjective QoL [26]. Other socio-demographic and clinical factors have been found to be related to SWB in the general population, such as civil status, level of education, employment [27], migrant status [28] or disability [29]. Usually, people affected by SPC, are usually single, unemployed, and with a long course of mental illness, for more than ten years [30].

Second, psychosocial functioning is another potential predictor of SWB. In fact, SWB is related to improved functioning in general population [31], and it is related to personal recovery in SPC samples [32]. Community-based psychosocial interventions have traditionally been aimed at restoring psychosocial functioning in mental disorders [33] and there is some evidence that links good psychosocial functioning with an improved objective QoL [34]. However, psychosocial functioning may not be as paramount to SWB. Some recent meta-analyses have found that interventions aimed at improving functioning in samples of people with schizophrenia appeared to have minimal effects on SWB and subjective QoL, pointing out to the need to address positive outcomes directly [20,35].

Third, there are studies which indicate that an array of negative emotional factors might have a role as predictors of well-being (i.e., stress, distress, negative affect, or depressive symptoms). For instance, the traditional model of vulnerability in schizophrenia identifies *stress* as an important element in explaining the onset and maintenance of the mental disorders [36]. Stress is also a predictor of the degree of distress

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in this population [37]. Moreover, although distress and well-being are considered two separate and somehow independent dimensions [38], they can undermine each other. In fact, it has been shown that the level of distress can also be a predictor of well-being [39]. In schizophrenia samples, it has been found that a high level of subjective stress results in an increase in *negative affect* and a decrease in well-being [40]. Likewise, it has also been shown that *depressive symptoms,* as well as motivational deficits, have a significant independent impact on the level of SWB in people with schizophrenia [23].

Fourth, factors associated with positive psychology (such as promotion of positive emotions, a positive attitude or strength-based practices) and subjective recovery are closely related and could also have a potential role in predicting levels of SWB [19]. Moreover, the personal recovery processes model (CHIME) identifies five essential factors that are linked to the elements of well-being: empowerment; rebuilding positive, personal and social identities; connectedness; hope; and finding meaning and purpose in life [32,41]. In relation to the promotion of positive emotions, the broaden-and-build theory postulates that positive emotions help build resources in people that allow optimizing health and well-being [42]. A particularly relevant concept tied to recovery is hope, which has been associated with multiple psychological benefits such as: improved self-esteem; reduced risk of developing and experiencing anxiety and depressive symptoms; and increased SWB [43]. Hope is related to both optimism and *openness to the future*. This latter construct is conceptualized as a positive affective state that involves illusion of control, acceptance of what the future may entail, high commitment to the vital objectives and the ways to achieve them, optimism and self-efficacy [44]. In relation to the concept of strength, *character strength* is described as a positive and organized pattern of emotions, thoughts, and behaviors' [45] that facilitate the pursuit of goals and values [46]. There are a number of character strength subtypes identified, such as *caring or love for others* which is one of the strengths that has been most closely related to SWB and life satisfaction in the general population [47,48], *inquisitiveness* which is related to curiosity and to cultivating an open attitude [49], and self-control which indicates the character strength that reflects the regulation and adoption ability in achieving values and goals [50]. Some studies have identified that people with SPC have a lower appreciation

of their own strengths [51]. Identifying meaningful strengths could be associated with feelings of empowerment, a key process in recovery and an important predictor of SWB [4], given that it will produce a switch of focus from what you can't do (the deficit), to what you are good at (the strength). In relation to *self-compassion,* a positive and affectionate attitude towards oneself when failing or making a mistake [52]. There is some evidence which indicates that it has a healing effect on the severity of psychotic symptoms, especially in voice-hearing symptomatology [53]. Thus, self-compassion could be assumed that it may be a potential predictor of SWB.

Lastly, there is compelling evidence which indicates that *interpersonal factors* is an important predictor of SWB in the general population [54] and also in people with mental illness [55]. For example, in a large study of people diagnosed with psychotic or bipolar disorder, the most important predictor of SWB was social support [56]. Insufficient social support is associated to more loneliness and more negative beliefs about oneself and others, an increase in anxiety and paranoia, as well as lower self-efficacy in people with psychosis [57,58]. While appropriate social support is an important predictor of positive outcomes [59], it can also be a source of strain when associated to stigmatising attitudes, thus leading to isolation [60]. Finally, a very important source of social support for people with SPC, as they often need long-term supportive therapy, is determined by the quality of the therapeutic relationship and the degree of empathic understanding between the clinician and the patient. Although data in this area is scarce, some research suggests that only the patients with a good therapeutic relationship benefit from psychotherapy for psychosis [61]. A lack of *agreement between therapist and patient* is a significant predictor of suffering and distress, and it is detrimental to the treatment plan adherence [62]. Professionals' lack of understanding of the reasons for the patient's distress has an adverse effect on their bond [63], and therapist and patient discrepancies have detrimental effects on the clinical outcomes [51].

This study aimed to expand the current knowledge about predictors of SWB for people with SPC by examining, in addition to demographic variables, factors such as psychosocial functioning, distress (i.e., levels of stress, negative affect and depression), factors associated to positive psychology, as well as social support and empathic understanding between therapist and patient (as a proxy of therapeutic alliance). We
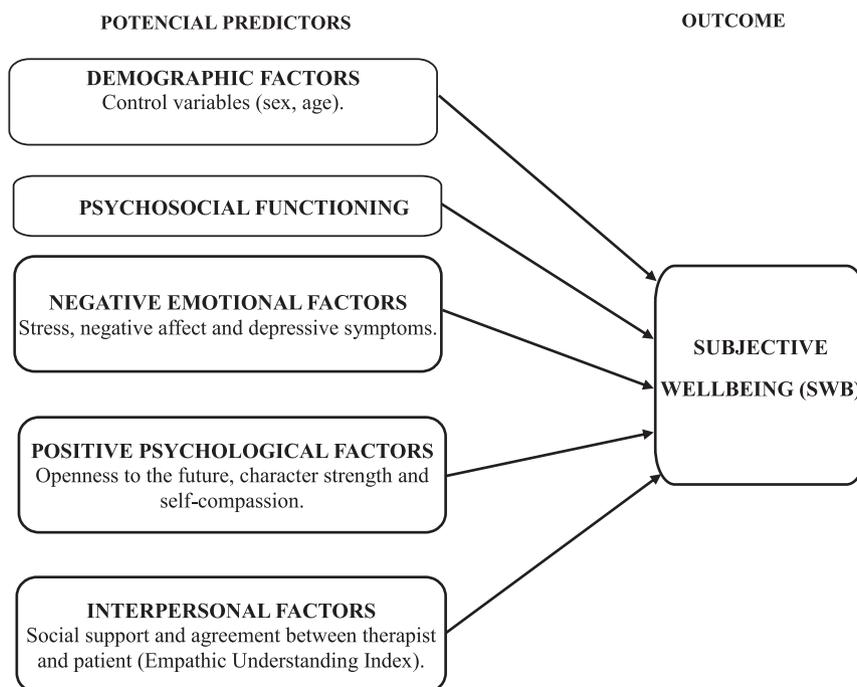

Fig. 1. Comprehensive theoretical model of subjective well-being.

hypothesised that higher scores in global functioning, strengths, and self-compassion, as well as social support and empathic understanding between the therapist, will be associated to a higher level of SWB in SPC. On the contrary, we predicted that low levels of distress would be associated to higher levels of SWB.

2. Methods

2.1. Participants

Participants were current patients receiving services at several non-profit human service organizations within the National Health System Network, which provides comprehensive and specialized care for people with SPC. The study involved 18 psychosocial and vocational/employment rehabilitation centres that provide services to adults with SPC (18–65 years of age). Participants were recruited by their primary therapists from September 2018 to July 2019; however, only if they met the following inclusion criteria: 1. regular attendance and participation in psychosocial treatment at the centre, 2. sufficient psychiatric stability to allow the assessment and, 3. adequate cognitive comprehension skills.

To estimate the sample size, an a priori power analysis was performed using G*power analysis [64]. This analysis revealed that a sample of 109 participants would be necessary to reach a power of 0.80 and α level of 0.05, for a multiple regression analysis with 13 predictors and a small effect of 0.15. In our study, 281 individuals were invited to partake voluntarily. 237 individuals accepted (surpassing the recommended N by G*power analysis) while 44 potential participants declined to participate. Participants did not receive any payment for their participation in the study. All 34 referral staff members who were approached, accepted to participate in our study. Ethical approval was obtained from the Deontological Commission in the Faculty of Psychology and the boards of the Non-Profit Organizations participating in this study gave permission to carry out the study. The research was conducted in compliance with the Declaration of Helsinki.

After participants signed the informed consent, the referring staff member registered the socio-demographic, clinical and functioning characteristics of the participant. Then, participants were given an appointment to fill out the survey with an estimated duration of 45–60 min. In the most severe cases, the survey was completed in two or three sessions to avoid fatigue and to promote understanding of the questions. In addition, the referral staff member completed an additional questionnaire about the patient's well-being that lasted up to 15 min.

2.2. Measures

Evaluation instruments included in the protocol were self-report questionnaires with good psychometric properties to assess distress, positive psychology factors, social support and well-being, and measures of participant's functioning and well-being filled out by the referral staff member.

2.2.1. Dependent variable

The Pemberton Happiness Index (PHI) [65] was used as an integrative measure of well-being. It includes 11 items related to different domains of well-being (i.e., general hedonic, eudaimonic and social well-being) on a 0–10 Likert-type scale from 0 (totally disagree) to 10 (absolutely agree) that provides an overall well-being score. The internal consistency was good ($\alpha = 0.88$).

2.2.2. Predictive variables

Socio-demographic and Clinical Characteristics. Information about gender, age, civil status, highest level of educational attainment, employment situation, type of coexistence, disability, principal diagnosis, years of evolution since 1st diagnosis and substance use were recorded.

The Global Assessment Scale (GAS) [66] is a single scale that was used to evaluate psychosocial functioning on a continuum from 1 (worst possible functioning) to 100 (best possible functioning) rated by the referral staff members and based their evaluations on the psychological, interpersonal, and occupational functioning of the participant during the past year.

The Functional social support questionnaire (DUKE-UNC) [67] was used to assess social support as perceived by the participant. This scale includes 11 items using a 5-point Likert response scale from 1 (much less than I would like) to 5 (as much as I would like). The sum of the 11 items yields an index in which higher scores indicate greater social support. The internal consistency was good ($\alpha = 0.90$).

The Perceived Stress Scale (PSS) [68] was used to assess which situations in one's life are considered as stressful in the last month. The scale includes 14 items rated on a Likert scale from 0 (never) to 4 (very often). By adding up the scores, an overall PSS provides a measure of perceived stress where higher scores indicate greater severity. The internal consistency was good ($\alpha = 0.79$).

The Positive Affect and Negative Affect Schedule (PANAS) [69]. This is a 20-item measure that evaluates 2 dimensions: positive affect (10 items) and negative affect (10 items). The response scale was a 5-point Likert scale, from 1 (nothing) to 5 (very much). Positive and negative affect scores were computed by averaging the items of positive or negative affect scales, respectively. For the purpose of the study, we only used the negative affect scale. The internal consistency was good ($\alpha = 0.87$).

The Eight-Item Centre for Epidemiologic Studies Depression Scale Among Older Adults (CES—D—8) [70] was used to assess depression. The CES—D—8 is an 8-item measure rated on a 4-point Likert scale from 1 (none of the times) to 4 (all of the time). By adding up the scores, an overall CES—D—8 score provides a measure of depression in which higher scores indicate greater severity. The internal consistency was good ($\alpha = 0.71$).

The Openness to the Future Scale (OFS) [44] was used to assess positive affectivity towards the future. This scale is a 10-item self-report questionnaire rated on a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). By adding up the scores, an overall OFS provides a score in which higher ratings indicate greater openness to the future. The internal consistency was good ($\alpha = 0.88$).

The Three-dimensional Inventory of Character Strengths (TICS) [49] was used to assess three dimensions of personal strength: caring, inquisitiveness, and self-control. The TICS is a 15-item self-report questionnaire rated on a 5-point Likert scale from 1 (very much unlike me) to 5 (very much like me). Each dimension provides an independent score of each strength by adding the corresponding items. The internal consistency for the dimensions was good ($\alpha = 0.72$, $\alpha = 0.79$ and $\alpha = 79$ respectively).

The Short–form Self-Compassion Scale (SCS-SF) [71] was used to assess overall self-compassion. The SCS-SF is a 12-item questionnaire and includes three dimensions: self-kindness, common humanity and mindfulness rated on a 5-point Likert scale ranging from 1 (almost never) to 5 (almost always). By adding up the scores, an overall SCS-SF provides a total score in which higher ratings indicate greater self-compassion. The internal consistency was good ($\alpha = 0.79$).

The Empathic Understanding Index (EUI) was used to assess the degree of agreement between the clinician and the participant, as a proxy of the quality of their therapeutic relationship. EUI was calculated by transforming into z-scores equivalent items of the Scale of Quality of life (GENCAT) as rated by referring clinician and of the Scales of Psychological Well-Being (SPWB) as rated by the patient participant. As in a previous study, the average normalised GENCAT score was subtracted to the average normalised SPWB score for each equivalent pair of items (see [7]). A negative score in the EUI indicated that the clinician perceived the patient's well-being better than the participant him/herself. While a positive score indicated that the participant's perception of well-being was better than that of the staff member and a score of 0 indicated congruent responses of the clinician and participant. For the

purpose of the present study and to calculate the EUI, we used;

- 8 items of **the Scales of Psychological Well-Being** (SPWB) [72] which measures eudaimonic well-being as perceived by the patient (see [7]). The SPWB items are rated on a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree).
- 8 items of **the Scale of Quality of life** (GENCAT) [73] which assesses the quality of life in adults as rated by the referring clinician on a 4-point Likert scale ranging from 1 (always) to 4 (never) (see [7]).

2.3. Data analysis

All data were analysed using the Statistical Package for Social Sciences version 25 [74]. Sociodemographic and clinical variables were analysed by central tendency measurements. The relationship between SWB to independent variables in SPC population was calculated using Pearson's correlation.

Stepwise multiple regression forward analysis was used to sequentially identify the independent variables that were most closely associated with the dependent variable (SWB), after controlling for the influence of demographic variables and psychosocial functioning (entered at Step 1). Preliminary analyses were conducted to ensure no violation of the assumptions of normality, multiplecollinearity and homoscedasticity. Predictors related to SWB in the literature were individually and sequentially entered into the regression model. Independent variables significantly associated to SWB, with a p value $<.05$, were subjected to stepwise multiple regression analysis with a stepwise forwards elimination procedure. Negative predictors were entered first, followed by positive and then, interpersonal predictors.

3. Results

3.1. Patient characteristics

The socio-demographic and clinical characteristics of the participants are shown in Table 1. Data show that they were mostly single adult men with diagnoses of schizophrenia according to the DSM-5 [75]. Most of the participants from the sample had at least secondary education,

Table 1
Characteristics of the sample with severe psychiatric conditions (N = 237).

	Participants
Gender [n (%)]	
Male	152 (64.1)
Age [Mean (range)]	41.7 (19–64)
Civil Status [n (%)]	
Single	209 (88.6)
Married / Unmarried Couple	11 (4.7)
Separated / Divorced / widower	16 (6.8)
Emigrant [n (%)]	
Yes	20 (8.4)
Educational level [n (%)]	
Without Studies	8 (3.4)
Primary	78 (32.9)
Secondary	119 (50.2)
University	32 (13.5)
Employment Situation [n (%)]	
Unemployed	200 (84.4)
Living with others [n (%)]	195 (82.3)
Disability granted [n (%)]	
With disability	214 (90.3)
Principal diagnosis [n (%)]	
Psychotic Disorders	149 (62.9)
Personality Disorders	36 (15.2)
Bipolar Disorder	29 (12.2)
Others	23 (9.7)
Years of evolution since 1st diagnosis [Mean (DT)]	16.5 (9)
Substance use [n (%)]	
Yes	46 (19.4)

were unemployed and living with someone else. Moreover, most of them had some degree of disability and at least sixteen years of evolution of a serious mental illness since the first diagnosis.

3.2. Relationship between sociodemographic and psychological variables with subjective wellbeing

As shown in Table 2, results showed that levels of SWB had a positive significant correlation with good global functioning caring strength, inquisitiveness strength, self-control strength, self-compassion, openness to the future, social support and empathic understanding between clinician and patient. Therefore, higher levels on these variables were associated to higher levels of SWB. In contrast, SWB had a negative significant association with age, negative affect, depression and perceived stress. Thus, lower levels on these variables were associated with higher levels of SWB in people with a SPC. Finally, there were no significant relationships between SWB and sex ($p > .05$).

3.3. Predictors of SWB

Only independent variables significantly associated to SWB were introduced in the stepwise multiple regression analysis. To this end, first we controlled socio-demographic variables and later we introduced those factors associated with distress, positive psychology and social variables. Our data met the assumptions for parametric tests, residuals appear to be unrelated (Durbin-Watson = 2.08) and there was no evidence of multicollinearity (VIF ≤ 3.08).

In relation to the specific variables associated with the model, in the first step, age and psychosocial functioning were introduced into the regression as predictors. In the second step, perceived stress, depression and negative affect were introduced. In the third step, strengths, openness to the future and self-compassion. In the fourth step, social support and a degree of empathic understanding between the professional and the patient were introduced as predictors. As shown in Table 3, after including all predictive variables, the program generated 8 models. Age, negative affect, self-control and self-compassion were not significant to predict SWB. In the final model, the rest of the predictors all but psychosocial functioning, were significant, explaining 74% of variance in SWB (F (8, 228) = 5.38, $p = .021$). Openness to the future had the highest beta coefficient compared with other predictors (*see* Table 3).

Table 2
Pearson's r Correlations between the predictive variables and the dependent variable (subjective well-being) (N = 237).

SPC participants	r	p
Age	−0.14	0.029*
Gender	0.00	0.893
GAS - Psychosocial functioning	0.25	0.001**
PANAS - Negative Affect	−0.40	001**
CES-D - Depression	−0.54	0.001**
PSS - Stress	−0.62	0.001**
TICS - Caring strength	0.45	0.001**
TICS - Inquisitiveness strength	0.64	0.001**
TICS - Self-control strength	0.61	0.001**
SCS - Self-Compassion	0.48	0.001**
OFS - Openness to the future	0.80	0.001**
DUKE-UNC - Social Support	0.54	0.001**
Empathic Understanding Index	0.66	0.001**

Note: CES-D-8 = Short version of the Center for Epidemiologic Studies-Depression Scale; DUKE-UNC = Functional social support questionnaire; GAS = Global Assessment Scale; OFS = The openness to the future scale. PSS = Perceived stress scale; TICS = Three-dimensional Inventory of Character Strengths.
*$p < .05$; **$p < .001$.

Table 3
A summary of regression model and variance analysis statistics for subjective well-being as measured by Pemberton Happiness Index (N = 237).

	Predictors	R^2	ΔR^2	b	β	t	p
Model 1		0.06	0.06				
	Psychosocial functioning (GAS)			0.04	0.25	3.95	0.001***
Model 2		0.40	0.34				
	Psychosocial functioning (GAS)			0.02−	0.13−	2.59	0.010**0
	Stress (PSS)			0.15	0.60	−11.7	.001***
Model 3		0.45	0.05				
	Psychosocial functioning (GAS)			0.01	0.10	2.12	0.035*
	Stress (PSS)			−0.12	−0.45	−7.73	0.001***
	Depression (CES-─D-─8)			−0.09	−0.27	−4.58	0.001**
Model 4		0.68	0.22				
	Psychosocial functioning (GAS)			0.01	0.05	1.52	0.058
	Stress (PSS)			−0.02	−0.10	−2.00	0.047*
	Depression (CES─D)			−0.05	−0.14	−3.06	0.002**
	Openness to the future (OFS)			0.14	0.65	12.7	0.001***
Model 5		0.71	0.03				
	Psychosocial functioning (GAS)			0.01	0.06	1.68	0.094
	Stress (PSS)			−0.03	−0.12	−2.53	0.012*
	Depression (CES─D─8)			−0.05	−0.15	−3.37	0.001***
	Openness to the future (OFS)			0.12	0.55	10.5	0.001***
	Caring strength (TICS)			0.46	0.18	4.69	0.001***
Model 6		0.72	0.01				
	Psychosocial functioning (GAS)			0.01	0.06	1.71	0.087
	Stress (PSS)			−0.03	−0.12	−2.41	0.017*
	Depression (CES─D─8)			−0.05	−0.15	−3.57	0.001***
	Openness to the future (OFS)			0.10	0.47	8.23	0.001***
	Caring strength (TICS)			0.34	0.13	3.27	0.001***
	Inquisitiveness strength (TICS)			0.31	0.15	3.19	0.002**
Model 7		0.74	0.02				
	Psychosocial functioning (GAS)			0.01	0.05	1.58	0.115
	Stress (PSS)			−0.02	−0.10	−2.21	0.028*
	Depression (CES-─D-─8)			−0.04	−0.12	−2.93	0.004**
	Openness to the future (OFS)			0.09	0.44	7.93	0.001***
	Caring strength (TICS)			0.28	0.11	2.77	*0.006**
	Inquisitiveness strength (TICS)			0.28	0.14	3.06	0.002**
	Social support (DUKE-UNC)			0.03	0.15	4.07	0.001***
Model 8		0.74	0.006				
	Psychosocial functioning (GAS)			0.00	0.03	1.01	0.314
	Stress (PSS)			−0.02	−0.09	−2.05	0.041*
	Depression (CES-─D-─8)			−0.04	−0.11	2.61	0.010**
	Openness to the future (OFS)			0.08	0.4	6.91	0.001***
	Caring strength (TICS)			0.26	0.1	2.57	0.011*
	Inquisitiveness strength (TICS)			0.28	0.14	3	0.003**
	Social support (DUKE-UNC)			0.02	0.14	6.54	0.001***
	Empathic Understanding Index			0.34	0.11	2.32	0.021*

Note: b = Unstandardized beta; β = Standardized beta; CES-D-8 = Short version of the Center for Epidemiologic Studies-Depression Scale; DUKE-UNC = Functional social support questionnaire; EUI - Empathic Understanding Index = degree of empathic understanding between the professional and the patient; GAS = Global Assessment Scale; OFS = The openness to the future scale; PSS = Perceived stress scale; TICS = Three-dimensional Inventory of Character Strengths. *p < .05; **p < .01; ***p < .001.

4. Discussion

Our study explored predictors of SWB including a wide array of psychological and interpersonal factors in individuals affected by SPC and partly corroborated our hypothesis. We found SWB was related with openness to the future, strengths, social support, agreement between therapist and patient, low level of depression and low level of perceived stress. Contrary to our hypothesis, our findings show no relationship between SWB and the absence of negative affect, psychosocial functioning, and self-compassion. These results contrast with previous research with individuals affected by SPC who have associated SWB with the absence of negative affect [70], psychosocial functioning [71], and self-compassion [72]. It is possible that these predictor variables of great clinical relevance have more to do with negative outcomes (i.e., symptoms) than with positive outcomes such as SWB. Nevertheless, these findings should be analysed in future studies in greater depth.

The most significant predictor of SWB in this study was openness to the future. It was expected that this positive attitude could promote a cascade of positive changes as suggested by the broaden-and-build-theory [[8]] and that coping would be worth the effort [76]. In particular, targeting openness to the future has been shown to reduce the

severity of psychotic symptoms such as delusions [77,78], negative thoughts [79] and to improve the effectiveness of psychiatric rehabilitation programmes which therefore, increases the potential for recovery [80]. Our finding is in the line with other studies in which optimism predicted satisfaction with life, even after controlling for gender, age, onset age, employment and perceived stress in a sample of people affected by schizophrenia living in the community [81]. The ability of openness to the future to predict SWB could be associated with the fact that this positive attitude allows the focusing of building goals in the future instead of concentrating on symptoms, distress or trauma in the present or past.

Our study also found that social support was the next most relevant predictor. Social support is related to recovery and to SWB in psychiatric populations [82,83]. Our results are in line with previous studies in hospitalized SPC individuals, in which family support was directly related to SWB and was mediated by the improvement of self-care [83]. Other studies have also emphasised social support as a determinant of the well-being in clinal samples [56].

Moreover, in our study, quality of the therapeutic relationship as measured therapist-patient discrepancies was also a significant predictor of SWB. Very few studies have focused on the impact of the therapeutic

relationship on the patient's SWB [84]. In line with our results, some previous studies have indicated that the agreement between the therapists and the patients has an impact on clinical outcomes [7,85,86]. Approaches such as the Open Dialogue emphasise the importance of the quality of the relationship and point to the benefits it brings to the recovery process of people with SPC [95]. In people affected by schizophrenia, when comparing doctors' and users' assessments of the severity of the illness, the results showed that the discrepancy was due to the doctors basing their assessments on the presence or absence of positive symptoms, while users based their assessments on affect [96]. The presence of agreement between the therapist and the person with SPC is a key determinant in the recovery of people with schizophrenia [85]. It is of crucial importance in the prescription of psychotropic medications, while the psychiatrist's focus on adherence tends to ignore those side effects that create distress in the patient [56]. Therefore, it is crucially important to introduce procedures that allow for better understanding between the practitioner and the person with SPC.

Regarding character strengths, previous studies indicate that identifying and learning to leverage strengths facilitates the achievement of personally meaningful goals [46] and helps discover new ways to cope with symptoms [87]. Strength-use was positively associated with greater life satisfaction in the general population [88], the use of strengths was found to moderate the relationship between paranoid ideation and life satisfaction in the general population also [89]. A systematic review and meta-analysis of the eudaimonic well-being component in first-episode psychosis determined that the character strengths were associated with higher levels of well-being with a small to moderate effect size [90]. Strength-based interventions for people with severe mental problems had high fidelity in clinical settings and relevance to health professionals because there are benefits in hospitalisation rates, employment/education outcomes, and intrapersonal goals such as self-efficacy and a sense of hope [91]. A study conducted with first psychotic episodes found that enhancing strengths contributed to both recovery and well-being [92]. Browne et al. [92] found that first psychotic episode patients frequently identified strengths characteristics such as honesty, authenticity, genuineness, kindness and generosity while humour and playfulness were the least identified. Likewise, in our study we found that caring strength was a significant predictor of SWB. Inquisitiveness was a significant predictor also, and it is empirically associated with positive affect, enjoyment of novelty-seeking and delight in finding out new discoveries [93]. Contrary, self-control strength was not a predictor in this study about well-being. Self-control may be related to parameters other than well-being, such as psychopathology or functioning, as demonstrated by a previous study of people diagnosed with schizophrenia [94].

In relation to the level of distress, depression and stress were associated with SWB in this study. Previous studies found that high levels of depression predicted reductions in happiness and life satisfaction in both patients with schizophrenia and healthy controls [95]. Likewise, other studies with people affected by schizophrenia have concluded that those who had high levels of depression had worse levels of life satisfaction, explained in part by higher levels of loneliness [96]. Depression seems to influence not only the SWB, but also the process of recovery on people with schizophrenic spectrum disorders [97].

These results have some important clinical implications. Without losing track of the therapeutic tools that aim to reduce distress and other negative outcomes [98–100], our results highlight the importance of incorporating factors associated with positive psychology (i.e., openness to the future and strengths) with those traditional factors (i.e., social support, low levels of stress and depression) to enhance the effect on well-being of the users of psychiatric rehabilitation services. In fact, there have been voices that advocate for a more positive psychiatry [11]. Previous studies have already demonstrated the effectiveness of positive psychology protocols [14,15,[101,102]]. It also is necessary to include therapeutic strategies treatment protocols that enhance quality of the therapeutic relationship by enhancing listening and understanding between therapist and patients.

This study has both strengths and limitations, the sample is a large clinical sample with SPC. This study has used validated standardized measures. Also, and although most assessments were self-reporting instruments that may show desirability biases, we have incorporated some clinician-rated measurements. Regarding the limitations of the study, we did not include some negative outcomes that could influence the SWB of people with SPC, such as stigma [103] or negative symptoms [104]. This is a convenience sample and only those who voluntarily wanted to participate did so, which could have led to selection bias the sample and the results. The current study is cross-sectional, and no causality claims can be made that would require longitudinal designs.

5. Conclusion

To conclude, both psychosocial factors and those associated with positive psychology have been shown to be important predictors of the SWB in people affected by a severe psychiatric disorder. The variables that have finally demonstrated to be the best predictors of SWB in this population were opening to the future, strengths, social support, low levels of stress and depression, as well as the degree of empathic understanding between the professional and the patient.

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