

Supplementary Material

1. The effects of illness duration on illness perception in BD patients

Separate analyses of variance were performed to test the effect of illness duration on cognitive and emotional aspects of illness perception. Participants were divided into 4 groups based on the duration of BD (after medical diagnosis): up to 5 years (N=), from 6-10 years (), from 11-15 years () and over 15 years (). The average scores of illness perception in each group are displayed in Figure 2S1

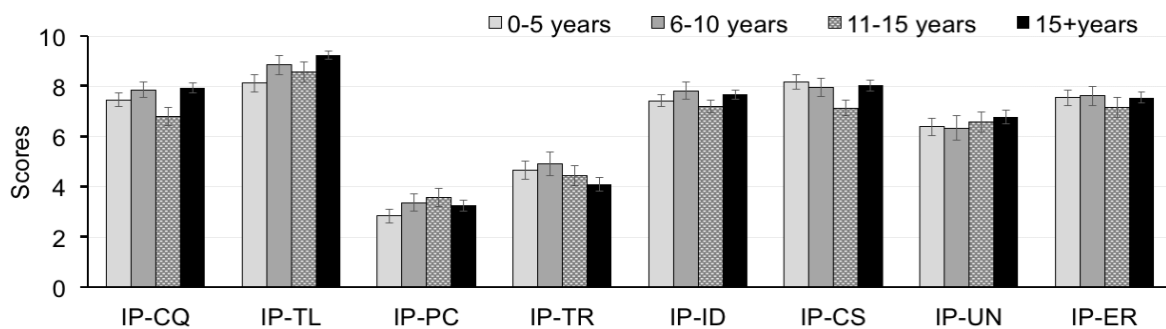


Figure S1. Average scores of illness perception in four groups BD participants. Error bars represent +/- SEM

The results of eight between-subject ANOVAs are summarized in Table S1.

Post Hoc tests using Bonferroni adjustment for multiple comparisons revealed that there was a significant difference between 11-15 years duration and 15+ years ($p=.005$) for consequence (CQ) and between 0-5 years and 15+ years ($p=.009$) for timeline (TL). No other significant terms were found here.

Table S1. The results of between-subject ANOVAs comparing the difference in eight dimensions of illness perception between four groups of participants (with 0-5 years of BD disease, 6-10 years, 11-15 years and over 15 years)

	Sum of Squares	df	Mean Square	F	Sig	*Post Hoc analysis
IP_CQ	38.37	3	12.79	2.81	0.04	11-15 vs 15+ years, $p=.005$
IP_TL	53.01	3	17.67	3.61	0.014	0-5 vs 15+ years, $p=.009$
IP_PC	15.03	3	5.01	1.02	0.39	n.s

IP_TR	25.33	3	8.44	1.09	0.35	n.s
IP_ID	10.39	3	3.47	0.95	0.42	n.s
IP_CS	27.63	3	9.21	2.0	0.11	n.s
IP_UN	8.82	3	2.94	0.36	0.78	n.s
IP_ER	5.16	3	1.72	0.3	0.82	n.s

*p-values are adjusted using Bonferroni correction

2. The effects of illness duration on perceived health status (measured by the NHP) in BD patients

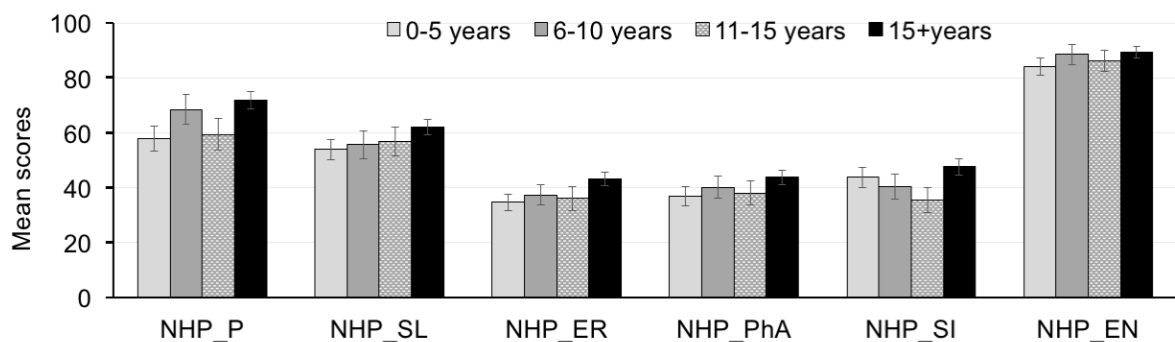


Figure S2. Average scores of perceived health status in four groups BD participants with different length of BD duration. Error bars represent +/- SEM

Separate ANOVAs were carried out to test the effect of the disease duration on the NHP dimensions. These analyses are summarized in Table S2.

Table S2. The results of between-subject ANOVAs comparing the difference in six subscales of perceived health status in BD patients (with 0-5 years of BD disease, 6-10 years, 11-15 years and over 15 years)

	Sum of Squares	df	Mean Square	F	Sig
NHP_P	9833.63	3	3277.86	2.79	0.041
NHP_SL	3046.84	3	1015.61	1.1	0.35
NHP_ER	3530.55	3	1176.85	1.85	0.139
NHP_PhA	2212.55	3	737.52	0.982	0.402
NHP_SI	4701.65	3	1567.22	1.73	0.162
NHP_EN	1202.37	3	400.79	0.757	0.519

Post Hoc test with Bonferroni correction for multiple comparisons showed no significant difference across the disease duration for each NHP subscales.

3. Assessing the assumption of multivariate normality for mediation analyses

Assessing the assumption of multivariate normality was performed using the MVN package in R (version 4.0.2) (Korkmaz, Goksuluk & Zararsiz, 2016). We report here Mardia's test to compute multivariate skewness and kurtosis coefficients as well as their corresponding statistical significance.

Table S3. Summary of multivariate normality test MVN

g1p	: 34.42962
chi.skew	: 1434.568
p.value.skew	: 4.651011e-56
g2p	: 271.1246
z.kurtosis	: 5.644752
p.value.kurt	: 1.654193e-08
chi.small.skew	: 1453.955
p.value.small	: 2.684789e-58

Table S3 indicates that the skewness (denoted as g1p) and kurtosis (denoted as z.kurtosis) do not indicate multivariate normality. To inspect the data, we created Chi-Square Q-Q plot (Figure S3).

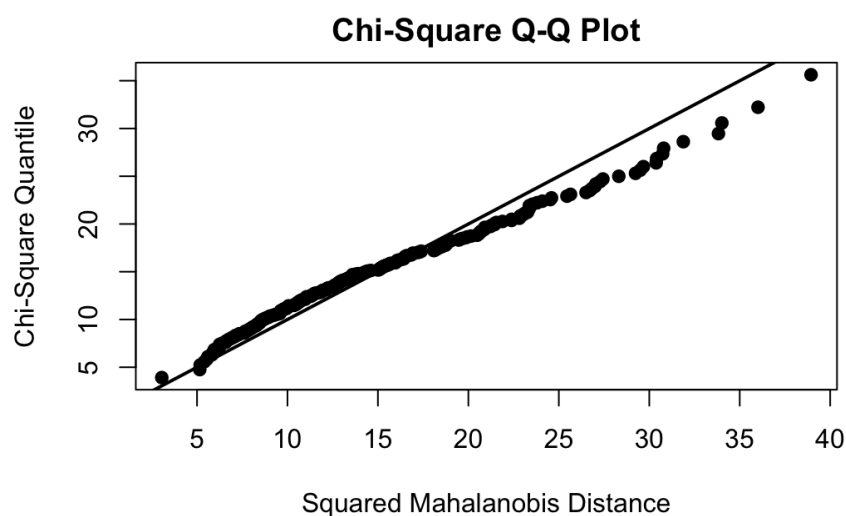


Figure S3. Chi-Square Q-Q plot for mediation data set.

Figure S3 indicates some deviations from the straight line suggesting possible departures from a multivariate normal distribution. Taken together, we can conclude that our data do not satisfy MVN assumption of multivariate normality.