







**Table 1: The number of adherent and non-adherent patients with depression and their mean scores and standard deviations on the BDI-II and the PSQI**

Adherence	Instrument	Number	Mean	SD
Non-adherent	BDI-II	21	20.81	12.21
	PSQI	21	9.05	4.28
Adherent	BDI-II	37	19.24	11.28
	PSQI	37	9.51	4.17
Total	BDI-II	58	19.81	11.54
	PSQI	58	9.34	4.18

All  $P > 0.05$ ; PSQI: pittsburgh sleep quality index; BDI-II: beck depression inventory-II

**Table 2: The number of adherent and non-adherent patients with schizophrenia and their mean scores and standard deviations on the PANSS and the PSQI**

Adherence	Instrument	Number	Mean	SD
Non-adherent	PANSS-total	16	67.81	19.56
	PANSS-negative	16	16.81*	6.76
	PANSS-positive	16	14.13	7.37
	PANSS-psychopathology	16	36.88	11.62
	PSQI	16	6.31	3.32
Adherent	PANSS-total	14	81.86	26.74
	PANSS-negative	14	23.43*	10.42
	PANSS-positive	14	20.71	26.44
	PANSS-psychopathology	14	44.86	14.36
	PSQI	14	8.57	4.50
Total	PANSS-total	30	74.37	23.86
	PANSS-negative	30	19.90*	9.14
	PANSS-positive	30	17.20	18.78
	PANSS-psychopathology	30	40.60	13.37
	PSQI	30	7.37	4.01

\* $P < 0.05$ ; PANSS: positive and negative syndrome scale

interventions; neither did we use the sleep variables recorded in the sleep log to predict adherence. The scores on the BDI-II, the PANSS, and the PSQI served as “predictor” variables.

With SPSS version 22.0<sup>[34]</sup> a discriminant function analysis<sup>[35]</sup> was conducted with “Absolute Treatment Adherence” as a categorical dependent variable and the scores on the BDI-II and PSQI as predictor variables for the group of patients with depression. For the group of patients with schizophrenia, a discriminant function analysis was performed with “Absolute Treatment Adherence” as a categorical dependent variable and the scores on the PANSS and PSQI as predictor variables. Furthermore, two multiple regression analyses<sup>[36]</sup> were conducted with one analysis containing “Degree of Treatment Adherence” as the dependent variable and the score on the BDI-II, as well as the score on the PSQI, as independent variables for the group of patients with depression. In the second analysis, “Degree of Treatment Adherence” was used as the dependent variable, and the score on the PANSS, as well as the score on the PSQI, were used as independent variables for the group of patients with schizophrenia.

## RESULTS

### Absolute treatment adherence in the depression group

For the group of patients with depression, a

**Table 3: Results of the multiple regression analysis for variables predicting degree of treatment adherence**

Predictor	B	SEB	$\beta$
Constant	8.95	2.48	-
BDI-II	-0.03	0.07	-0.05
PSQI	0.13	0.21	0.08

$R^2 = 0.01$ ; B: unstandardized multiple regression coefficient; SEB: standard error of multiple regression coefficient;  $\beta$ : standardized multiple regression coefficient

**Table 4: Results of the multiple regression analysis for variables predicting degree of treatment adherence**

Predictor	B	SEB	$\beta$
Constant	-2.14	4.13	-
PANSS-positive	0.08	0.07	0.21
PANSS-negative	0.21	0.25	0.29
PANSS-psychopathology	0.01	0.32	0.02
PANSS-total	-0.02	0.22	-0.06
PSQI	0.65	0.31	0.39*

$R^2 = 0.27$   $P < 0.05$ ; B: unstandardized multiple regression coefficient; SEB: standard error of multiple regression coefficient;  $\beta$ : standardized multiple regression coefficient

discriminant function analysis was conducted in order to identify patients who were adherent to treatment vs. those who were not; this was done using the patient’s scores on the BDI-II and the PSQI as predictors. The discriminant function analysis explained 100% of the variance, canonical  $R^2 = 0.01$  (Note that this does not mean that the discriminant function accounts for 100% of the variance in the response variable; rather, this means that it is the only discriminant function extracted for the analysis).<sup>[37]</sup> The discriminant function analysis did not significantly differentiate the patients who were treatment-adherent from the ones who were not [ $\Lambda = 0.99$ ,  $\chi^2 (2) = 0.43$ ,  $P > 0.05$ ]. Table 1 summarizes the descriptive statistics of the group of patients with depression.

### Absolute treatment adherence in the schizophrenia group

In addition, a discriminant function analysis was conducted for the group of patients with schizophrenia. The discriminant model was used to identify patients who were adherent to treatment versus those who were not treatment-adherent by using the patient’s scores on the PANSS (also divided into positive symptoms, negative symptoms, and general psychopathology) and on the PSQI as predictors. The discriminant function analysis explained 100% of the variance, canonical  $R^2 = 0.26$ . The discriminant function analysis did not significantly differentiate the patients who were treatment-adherent from the ones who were not [ $\Lambda = 0.74$ ,  $\chi^2 (5) = 7.67$ ,  $P > 0.05$ ]. The correlations between outcomes and the discriminant function revealed that the score on the PANSS-negative loaded highly onto the function ( $r = 0.67$ ), followed by the score on the PSQI ( $r = 0.50$ ). Table 2 summarizes the descriptive statistics of the group of patients







