Cognition, ethnicity and recovery in early psychosis

Stouten, L.H.

2018

document version
Publisher's PDF, also known as Version of record

English summary

In the first part of this thesis, symptom profiles, cognitive performance and psychosocial functioning in early psychosis patients were examined.

In **chapter 2**, several questions were addressed concerning cognitive deficits in FEP patients, i.e. which neurocognitive and social cognitive factors can be identified that comprehensively reflect cognitive performance in FEP patients? How are these cognitive factors related to (other) psychopathology dimensions in FEP? Do these cognitive factors contribute to understanding current psychosocial problems, in addition to current psychotic- and affective problems? The FEP patients in our sample demonstrated moderate neurocognitive and social cognitive deficits, which were largely independent of (other) domains of psychopathology. Cross-sectional examination showed that negative symptoms, neurocognition and social cognition were moderately associated with psychosocial problems, whereas affective and positive symptoms were not indicative of psychosocial functioning at baseline.

In **chapter 3**, the impact of baseline predictors, i.e. psychotic symptoms, affective problems and deficits in specific neurocognitive- and social cognitive subdomains, on both current and future psychosocial functioning was examined. Psychotic symptoms, cognitive deficits and affective problems all contributed to psychosocial difficulties in the early course of psychosis. The findings also showed that the magnitude of this influence not only varies substantially between different areas of psychosocial functioning, but also changes considerably between baseline and 12-months follow-up. These changes were most notable for psychotic symptoms and cognitive deficits, as impact of baseline psychotic symptoms on psychosocial functioning was initially strong but decreased over time, where the opposite was true for the impact of baseline cognitive deficits. These findings suggest that predictors of general levels of psychosocial functioning are not necessarily predictors of functional changes in that domain (and vice versa), emphasizing the need to differentiate between these interrelated paradigms in the exploration of mechanisms underlying psychosocial problems in the early stages of psychotic disorders.

C**hapter 4** addresses the issue of whether or not is possible to predict which FEP individuals will attain either functional or symptomatic recovery, or both within 12 months based on their baseline characteristics. What symptomatic and cognitive variables distinguish between individuals who showed full recovery from those who did not show any in the first 12 months after baseline? And what factors discriminate between those who keep experiencing symptoms but function well, from those who are largely free of symptoms but function poorly? Our findings showed that overall one third of FEP patients

fully recovered within one year, whereas one third did not recover, and one third recovered partially. Overall, patients experienced significant reductions in positive, negative and general symptoms. Also, they improved in vocational-academic performance, social and general functioning, and had decreased disturbing behaviour. Fully recovered patients exhibit better functioning, lower levels of positive symptoms, negative symptoms and mania symptoms, and better social cognitive functioning at baseline than patients who were not recovered in the first 12 months after baseline. Within the group of patients that showed partial recovery, those who showed improved symptomatic outcome had shorter DUP and more years of education than those who showed improved functional outcome at 12-months follow-up.

In the second part of this thesis, ethnic differences in cognitive performance, illness expressions, and recovery in early psychosis patients were examined.

In **chapter 5** levels of neurocognitive performance were compared between Dutch patients, first-generation immigrant patients and second-generation immigrant patients. All groups showed moderate cognitive impairment on immediate recall, delayed recall and sustained attention. Overall, immigrant patients had larger cognitive deficits compared to Dutch patients, and first-generation immigrant patients had larger cognitive deficits than second-generation immigrant patients (all adjusted for differences in cannabis use and level of education). Overall, the Moroccan, Turkish and other Non-Western subgroups demonstrated the largest cognitive deficits. Post-hoc examination indicates that these differences cannot be accounted for by language effects, i.e. possible differences in test outcome that might have resulted from differences in the level of mastery of the assessment language (i.e. Dutch) between patient groups.

In **Chapter 6** differences in symptom expression, neurocognitive and social cognitive performance were examined between first-episode psychosis patients who are Dutch, first-generation immigrants and second-generation immigrants, and to what extent these factors impacted various domains of psychosocial functioning across these groups in the first 12 months after baseline. Results showed that levels of positive symptoms, negative symptoms, excitement and emotional distress did not differ significantly between Dutch, first-generation immigrants and second-generation immigrants. On neurocognition and social cognition, the Dutch performed better than the second-generation immigrants, who in turn performed better than the first-generation immigrants. The three ethnic groups further overall showed similar levels of functional problems with work-study, building and maintaining relationships, personal care and care

for their personal environment, and engaging in aggressive or otherwise disturbing behaviour. However, they did not show similar functional change within this period. Average psychosocial functioning in Dutch patients did not significantly improve over the follow-up period. In contrast, relationships and self-care improved in first-generation immigrants. Moreover, all functional domains (except self-care) improved in second-generation immigrants.

Table 7.1 Predictors of functional improvement per outcome domain per ethnic subgroup

	Discriminators regarding functional change per outcome domain				
Group	General	Work/study	Relationships	Self-care	Disturbing behaviour
Dutch	NEG	NEG	NEG + SC	NEG	EXC
Second-generation immigrants	SC	SC	YoE	SC	-
First-generation immigrants	POS + NC	NC	NEG + POS	NEG	EXC

POS = positive symptoms; NEG = negative symptoms; SC = social cognition; NC = neurocognition; EXC = excitement; YoE = years of education

Differential predictors of functional change between ethnic groups were examined. These examinations, as presented in Table 7.1, showed that baseline levels of negative symptoms, social cognition and excitement predicted functional improvement in Dutch patients. In second-generation immigrants, social cognition was the only symptom dimension that predicted functional improvement. In contrast, four of six symptoms dimensions (i.e. positive symptoms, negative symptoms, neurocognition, and excitement) predicted functional improvement in first-generation immigrants. These effects all remained significant after adjusting for baseline functioning.