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Applying SCOPE to measure social inclusion among people with mental illness in Poland

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Abstract

Global mental health programs and interventions are increasingly adopting social inclusion as a key outcome measure and this reflects the emerging need for a global measure of social inclusion that was tested in diverse cultural settings (Baumgartner & Burns, 2014). This paper reports the results of adapting the Social and Community Opportunities Profile (SCOPE) developed in UK (Huxley et al., 2012) to Poland. The subjective and objective experience of social inclusion among 180 individuals with mental illness in Poland was measured using SCOPE-P. Participants were recruited through a non-probability sampling method in June-July 2017. Findings illustrated that (1) satisfaction with opportunities and perceived opportunities were positively correlated with overall social inclusion; (2) overall social inclusion was negatively correlated with discrimination, and (3) overall social inclusion was positively correlated with health conditions. This study provides further empirical evidence to support the use of SCOPE in a cross-cultural context.

Keywords: measurement; life domains; discrimination; mental health; quantitative study

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Introduction

Individuals with mental health illness often did not have the capability to participate fully in social, economic, political, and cultural processes. As a result, they often experience the feeling of being excluded as a member of the society (Social Exclusion Task Force, 2006). The health care and the social work professionals took the initiative to help people with mental illness to achieve a desirable level of social functioning (Department of Health, 1999). Global mental health programs and interventions are increasingly adopting social inclusion as a key outcome measure (Baumgartner & Burns, 2014). According to the World Bank definition, social inclusion refers to “promoting equal access to opportunities, enabling everyone to contribute to social and economic programs and share in its rewards” (The World Bank, 2013).

The UK government first introduced the concept of social inclusion in 1998 by establishing the Social Exclusion Unit (1998). The Unit published an influential report in 2004 discussing initiatives to promote social inclusion for people with mental illness. The report proposed various initiatives to provide people with mental health problems with better employment and training opportunities, greater support to the families, and greater assistance to locate permanent accommodation during their recovery (Social Exclusion Unit, 2004).

In Poland, the Institute of Psychiatry and Neurology and the Department of Health Services Organization compiled figures for the incidence and prevalence of mental health disorder. In 2009, inpatient care facilities provided treatment for 208,977 patients. The most frequent diagnoses were schizophrenia (16.4%), organic mental disorder (14.5%), and affective disorder (8.7%). In the same year, about 1.4 million of people received psychiatric treatment in outpatient mental health facilities. The most frequent diagnoses were conduct disorders (63.7%), neurotic disorders (61.8%), alcoholic induced psychosis (49.8%), and

other substance induced psychosis (47.1%) (Samele, Frew & Urquia, 2013). A recent study on lifetime prevalence estimates of common mental disorders in a representative sample of Polish citizens concludes that all forms of neurotic disorders involve about 10 percent of the population (2.5 million). The most common health issues were specific phobia (3.4%) and social phobia (1.4%) (Kiejna et al., 2015).

Most of the 35 Organization for Economic Cooperation and Development (OECD) countries, including Poland, have primary care practitioners in place to diagnose, treat, and manage mental health disorders. The number of psychiatric care beds per 100,000 population of Poland was close to the OECD country average (OECD, 2014).

As social exclusion has been regarded as an important factor impairing the recovery of people with mental disorders, there is a need to understand the profiles and related determinants in Poland. This study reports the establishment of the Polish version of the SCOPE (i.e. SCOPE-P) to measure social inclusion among mental health services users in Poland. This Polish instrument was based on an existing measure which has been validated. No similar studies have been conducted in Poland. The findings will have both theoretical and practical implications. Evidence on effective mental health intervention is limited and there is a need to design initiatives to provide benchmarks for measuring quality of mental health services (McDaid, n.d.).

Literature review

While social inclusion as an outcome of mental health interventions is not new, its measurement has been hindered by a lack of instruments with demonstrated reliability and validity in a cross-cultural setting. A recent review of the measurement of social inclusion identified five scales that demonstrated potential for cross-cultural adaption (Baumgartner & Burns, 2014). Among these five scales, only the Social and Community Opportunities Profile

(SCOPE) developed by Huxley and his team and the Community Integration Measure had been adapted into different cultural settings other than the original scale development population. Following the original process of the development of SCOPE, the Chinese version of SCOPE (SCOPE-C) was developed using concept mapping in the focus-group setting. It was tested in three rounds of survey (base line, retest after 2 weeks, and retest after six months) among a sample of 168 mental health services users in Hong Kong. It demonstrated high test-retest reliability, reasonable internal consistency (0.67 to 0.82), and good construct validity. SCOPE was also considered as the instrument that came the closest to the objective of measuring the core components of subjective and objective items related to choice, opportunity, and participation (Baumgartner & Burns, 2014).

A framework of life domains that are most relevant to the concept of social inclusion has been found in the United Kingdom and earlier in the United States (Huxley et al., 2006). The domains include family activity, social networks, employment, income and financial services, community participation, housing, transport, access to mental and physical health services, education and training, and civil/justice/safety (Huxley et al., 2006). The framework focuses on the perceived opportunities that a person can access to exercise his or her right, the objective measures of opportunities, as well as the person's subjective perception of satisfaction toward the opportunity in various life domains (Huxley et al., 2006). A shorter version of the original questionnaire titled Social and Community Opportunities Profile (SCOPE) was put to test in UK (Huxley et al., 2012). The scale has good construct validity as demonstrated by associations with participation and social capital measures.

The following sections introduce briefly the other four measurements of social inclusion currently developed as at 2013. We are not aware of any new scale developed on social inclusion after 2013. The Social Inclusion Questionnaire User Experience (SInQUE) consisted of 75 items in five domains, including productivity, consumption, access to

services, political participation, and social integration (Mezey et al., 2012). The original scale development population comprised of 66 adults with psychosis. The measurement demonstrated good concurrent and discriminant validity. The convergent validity was less robust. SInQUE has been employed in UK (Killaspy et al., 2013).

The Social Inclusion Scale (SIS) was developed by Secker and her colleagues in UK among adults with mental health problems (Secker et al., 2009). It comprised of 22 items capturing six domains of social capital, social acceptance, neighborhood cohesion, housing, participation in leisure/cultural activities, and citizenship. The measurement had good internal consistency. However, the scale was being criticized to be context specific, based on a specific population of arts project participants, and exclusion of social involvement with other mental health services users (Baumgartner & Burns, 2014).

The Social Integration Survey (SIS) was developed by Kawata and Revicki in UK among 129 individuals with mental illness in US (Kawata & Revicki, 2008). It comprised of 62 items in five domains of social perception, work interactions, social skills, social cognition, and instrumental activities of daily living/self-care. The measurement demonstrated adequate sub-scale internal consistency and test-retest reliability except work interactions. However, the measurement is considered as more a measure of social functioning than a measure of social integration and inclusion (Baumgartner & Burns, 2014).

The fourth measure of social inclusion was Community Integration Measure (CIM) developed in Canada by McColl and colleagues (McColl et al., 2001). The measurement comprised of ten items in two domains, i.e. belonging and independent participation. The scale demonstrated good internal consistency and good discriminant validity, criterion and construct validity. It also had the advantage of brevity and with high potential for cultural adaptation (Baumgartner & Burns, 2014).

There is increasing interest in cross-cultural measurement in the field of social work. Although psychologists have taken the lead, social work researchers have recognized the importance of developing cross-cultural measurements for service improvement, especially for work with minority, people with mental illness, and immigrant groups.

Expanding the SCOPE scale into a new cultural setting can have potential theoretical and social contributions. The advantages of cross-cultural comparison include testing the boundaries of knowledge and the promotion of cross-cultural exchange and understanding (Ember & Ember, 2001). It will also strengthen the evidence about community mental health services and global mental health.

Research questions

This study has three research questions as follows

1. How the experience of social inclusion is related to perceived opportunities and satisfactions with opportunities in various social domains among mental health services users in Poland?
2. Is experience of social inclusion negatively related with experience of discrimination in everyday life?
3. How the experience of social inclusion is related to health conditions?

Method

Participants

This study involved a non-probability cross-sectional sample survey of 180 individuals aged 18 or above. They were users of an outpatient psychiatry clinic of a major hospital that had association with a medical university in a city in Poland. They had been diagnosed as persons with severe mental health issues and had received more than six weeks of mental health treatment. Their clinical conditions had been stabilized, making interviewing possible.

Diagnostic categories of respondents included recurrent depression, bipolar affective disorder, paranoid schizophrenia, anxiety disorder with anxiety attacks, and obsessive-compulsive disorder. These participants were recruited through clinical professional networks. All the respondents were considered as a single sample and there were no further breakdown according to their diagnostic groups. Poland does not have a sampling frame for mental health services users, and as a result, probability sampling is not feasible.

The characteristics of participants are shown in Table 1. There was no racial diversity in the sample. Nearly all participants were Polish born in Poland. There were roughly equal numbers of female and male participants. Their age ranged from 18 to 76 ($M = 41.9$; $SD = 14.9$). The percentages of participants in the age groups 18-34, 35-54, and 55-76 were 38%, 38%, and 24% respectively. The corresponding percentages in the Polish population were 30%, 36%, and 34% respectively (Central Statistics Office, 2017b). The sample therefore had a higher proportion of participants in the age group 18-34 and had a lower proportion of participants in the age group 55-76. Over half of sample had post-secondary or above education. Forty percent of the sample had attained tertiary education, which was much higher than the general Polish population (with 25.2% had tertiary education, Central Statistical Office, 2017a). Most of them have been living 6 (1st quartile) to 30 (3rd quartile) years (median = 17 years; $M = 41.7$; $SD = 15.1$) in their surveyed area. Ninety-one percent of them were living in permanent residential flats or houses. Over half of the sample had owning right to their accommodation. Forty-five percent of them were engaged in the workforce. Another 37 percent were unemployed either because of long-term health issues or other reasons. Nine percent were retired. Only 18 percent of them did not have any source of income.

[Insert Table 1 about here]

Procedure

Ethical approval was obtained from the funding University's Committee on the Use of Human and Animal Subjects in Teaching and Research as well as from the local ethics committee in Poland. A contingency plan was established to assist the participant if he or she experienced strong emotion during the interviews. None of them had such response. A female native medical doctor resident in psychiatry conducted all the face-to-face individual interviews which were conducted in Polish. All interviews were conducted at the premises of an outpatient clinic. Participation was voluntary and participants did not receive any payment. Data was collected in June and July 2017. The interviewing time lasted between 30 to 45 minutes. Prior to the individual interviews, participants signed an informed consent statement. Signing a consent statement with personal identity made some individuals suspicious about the anonymity of the survey. As a result, some people refused to participate in the study.

Development of SCOPE-P

Two of the authors went through the entire English version of the SCOPE questionnaire and identified questions and answers that would require local adaptations. These questions including voting behaviour, types of accommodation, languages proficiency, place of birth, and types of income. These questions were rephrased using the Polish Census questionnaire and its answers. Translation of the English version of the SCOPE with local adaptation into the Polish version of SCOPE (SCOPE-P) was conducted following the MAPI guideline (MAPI Institute, 2012). The steps in this process include forward translation; backward translation; pilot testing; and proofreading of the final version. Two professional translators who were fluent in both languages were employed to carry out the translation.

A pilot test to spot any literal issue was conducted with three persons with mental health problems. All of them did not report any difficulty to understand and answer the questions in SCOPE-P.

Items in SCOPE-P covered eight domains of inclusion and general social inclusion, including (1) leisure and participation, (2) housing and accommodation, (3) work, (4) financial situation, (5) safety, (6) education, (7) health, as well as (8) family and social relationships. Items consisted of both subjective items (satisfaction with opportunities and perceived opportunities) and objective items. Satisfaction with opportunities for each social domain was rated from 1 (extremely restricted opportunities) to 7 (plenty of opportunities). Overall social inclusion was measured by a single item on the extent to which participants feel that they were included in society, on a seven-point scale (1 = terrible, 7 = delighted). All the 11 items on satisfaction with opportunities and one overall inclusion item are shown in Table 2. Perceived opportunities for each domain were rated from 1 (terrible) to 5 (delighted). The five perceived opportunities items are displayed in Table 3. Objective measures in all the social domains are summarized in Table 4.

Other scales. Participants were asked to answer the Everyday Discrimination Scale and the Short Form Health Survey (SF12-v2). The Everyday Discrimination Scale had 9 items ranged from 1 (Never) to 6 (Almost everyday). All items are displayed in Table 5. This scale demonstrated high reliability and validity in a previous study in Boston (Krieger et al., 2005) and in Hong Kong (Chan et al., 2015). We are not aware of any study in Poland that use the Everyday Discrimination Scale.

The SF-12v2 had 12 items that measured physical as well as mental health (Ware, Kosinski, & Keller, 1995; 1996). It consisted of eight health domains including physical functioning, role participation with physical health problems, bodily pain, physical health,

vitality, social functioning, role participation with emotional health problems, and mental health. The two general items (physical health and mental health) were analyzed in the present study. This scale was validated in 22 European countries, including Poland, and found to demonstrate good Cronbach's alpha coefficient as well as good construct validity among a sample of patients in a stable coronary condition (De Smedt et al., 2012).

Results

Satisfaction with opportunities

The means and standard deviations for the eleven items for satisfaction with opportunities in various social domains as well as the average score for the means are summarized in Table 2. Satisfaction with opportunities ranged from 3.93 to 5.63. Participants were most dissatisfied with the perceived opportunities to work. Satisfaction with the perceived opportunities to work among those who were employed was significantly higher than those who were out-of-work (mean of employed participants = 4.28; mean of unemployed participants = 3.66; $t = 2.9, p < 0.01$). Participants were most satisfied with opportunities for contact with family, opportunities to live safely as well as opportunities for leisure activities. The average of the eleven- items was 4.53, indicating a general satisfaction with opportunities in various social domains. The mean of the one-item overall social inclusion was 4.03, indicating that perception of social inclusion among the participants was neither positive nor negative.

[Insert Table 2 about here]

Perceived opportunities

The means and standard deviations for the five items on perceived opportunities in various social domains are summarized in Table 3. Perceived opportunities ranged from 2.86 to 3.63.

Participants perceived that opportunities to increase income were the lowest among all tested social domains. The perceived opportunities for suitable housing were the highest among all the social domains. The average of the five items was 3.32. It indicated that the perceived opportunities in various social domains were quite good.

[Insert Table 3 about here]

Objective measures of opportunities

There are altogether 21 items measuring realizations of opportunities in various social domains. Twelve items were categorical data of zero and one. Seven items were quasi-internal scales and two were interval scale data, including monthly income and number of friends. The percentages of participants who gave yes response to objective measures of opportunities in various social domains are summarized in Table 4. Most of the items were measured in a time frame of the past twelve months, for example, enrolled in a full-time or part-time education course studying for any qualification in the past twelve months.

Participants demonstrated the highest objective measures of opportunities in the social domain, with frequent interaction with parents and friends. Objective measures of opportunities showed positive signs as most of the items (except crime victimization) were above 35 percent. We attempted several ways of compiling the reliability of these items including averaging and counting. None of them reached an acceptable level of 0.60. As a result, a composite measure summarizing the objective items was not compiled.

Psychometric properties of the SCOPE-P

Internal consistency of SCOPE-P was examined using the Cronbach's alpha coefficients. A threshold of 0.7 was considered acceptable (Nunnally & Bernstein, 1994). We also benchmark it with the Cronbach's alpha coefficients obtained from SCOPE in the UK

(Huxley et al., 2012). The Cronbach's alpha for satisfaction with opportunities was 0.80 (compared to 0.77 for the UK) and that for perceived opportunities was 0.6 (compared to 0.62 for the UK). Both of them were similar to that measured in the UK. The perceived opportunities scale did not quite meet the 0.7 acceptability level, probably because of the small number of items included. Nevertheless, the inter-item correlation for these scale items was 0.231, indicating that there was a good relationship between the items.

Discriminative validity of SCOPE-P was examined with the known-group method by assessing perceived opportunities, and satisfaction of opportunities by age group, sex, and education. These two variables did not have significant differences by education or by sex. Satisfaction with opportunities did not differ by age. However, perceived opportunities differed significantly with age [$F(2,177)=7.5, p=0.001$]. Respondents aged 18-34 had a higher perceived opportunities score than those aged 35-54 as well as those aged 55 or above. This result differed from the UK's study that there was no significant difference in perceived opportunities with age (Huxley et al., 2012).

Construct validity was evaluated by examining the correlation between the overall social inclusion, satisfaction with opportunities (SatOpps), and perceived opportunities (POpps). Results found that they were significantly correlated with each other (see Table 5 and Figure 1). Overall social inclusion had a higher correlation with satisfaction with opportunities than with perceived opportunities. Overall social inclusion was positively correlated with satisfaction with opportunity in eight out of eleven items. Overall social inclusion was positively related to only one out of five items for perceived opportunities. Pairwise t-tests and Pearson correlation analysis was conducted to examine if objective measures of opportunities are related to overall social inclusion. Results found that those who currently used leisure activities had a higher social inclusion score than those who were not ($t = 2.76, p$

< 0.01). Also, those who gave unpaid help to someone had a higher social inclusion score than those who did not help ($t = 2.82, p < 0.01$).

Everyday discrimination

The means and standard deviations for the ten items in the Everyday Discrimination Scale are shown in Table 5. Mean scores of frequency of discriminating acts happened to the participants ranged from 1.52 to 2.51 (1 = never; 2 = not more than once a year; 3 = several times a year). Participants did not often encounter discrimination in their daily lives. If discrimination did occur, participants were most likely perceived that they were not threatened or harassed. Relatively speaking, participants seldom experienced others afraid of them, or being suspected of dishonesty. The Cronbach's alpha coefficient was 0.89, indicating high internal consistency.

Among the 180 participants, 116 participants answered "a few times a year" or more frequently to at least one of the ten discrimination items. They were followed up with a question "what do you think is the main reason for these experiences". Twelve reasons such age, religion, or mental disabilities were provided. Participants most often reported mental disability (40%), gender (35%), education or income (26%), some aspect of physical appearance (25%), or age (22%) as the reason of discrimination.

[Insert Table 4 about here]

Health conditions

The SF-12v2 had two sub-scales measuring general physical health and mental health reported by the respondents. The mean score for physical and mental health were 2.34 on 5-point scale and 3.00 on 5-point scale respectively.

Community opportunities, social inclusion, and health

Regarding the health domain, overall social inclusion had significant positive correlation with number of friends ($r = 0.30, p < 0.001$) and frequency of having friends or neighbours visiting their house ($r = 0.24, p < 0.001$).

The three key SCOPE-P variables, including perceived opportunities, satisfaction with opportunities, and overall social inclusion, were significantly correlated with physical health. However, only satisfaction with opportunities and overall social inclusion were significantly correlated with mental health. Perceived opportunities were not correlated with mental health. Social inclusion had significant and positive correlation with both physical as well as mental health. Social inclusion had a significant negative correlation with the Everyday Discrimination Scale.

[Insert Table 5 about here]

[Insert Figure 1 about here]

Discussion

Is SCOPE-P a valid measure for social inclusion?

We argue that SCOPE-P is a reliable and valid measure of social inclusion. This is based on its acceptable level of internal consistency as well as its construct validity. However, the objective measures of opportunities in various social domains did not demonstrate an acceptable level of internal consistency. There are two possible reasons to explain this. First, even the society has provided certain opportunities, respondents may not be able to enjoy them due to the lack of time or resources. Second, the objective measures of opportunities were measured in different formats, including categorical data of yes and no, five-point scales, and seven-point scales, making them less compatible. Further studies are needed to develop a better scale for the objective measures of opportunities.

The study is the third adaptation of SCOPE. The first and the second adaptations were conducted in Hong Kong and Singapore respectively. The findings for the Hong Kong study were published while the findings for the Singapore study are in the pipeline for publication. Above all, to our knowledge, no social inclusion scale has ever been published or tested in Poland so far.

General speaking, the sample showed satisfaction with contacts with families and friends, leisure activities, and mental health care. In terms of living environments, they were satisfied with the opportunities for housing and living safely. As the data was collected in a Polish city with high economic development among people with mental health problems with economic means, home ownership was high. Satisfaction with housing opportunities came with having a permanent place to live. Their greatest discontent was with the opportunities to find jobs in the free labour market and the opportunities to increase income. There is a phenomena that many university graduates from Poland have difficulties in finding good jobs locally. Instead they seek jobs in UK for better salaries (Agcas, 2014). The important emphasis on work for social inclusion and dissatisfaction with lack of means to improve income were similar to the findings among the mental health services users in Hong Kong (Chan et al., 2014). Regarding perceived opportunities, participants considered that there were some good opportunities in housing and community involvement. Again, they perceived the lowest opportunities to increase income. This study demonstrated the importance of jobs and income as a condition of feeling included. Interestingly, even though participants' perceived opportunities were mixed, the objective measures indicated that participants made choices to be involved, such as voting, giving help to someone, and inviting friends to their accommodation.

Among all the social domains measured, contacts with friends and leisure activities occupied a dominant position in determining the experience of social inclusion. This finding is different from the Hong Kong study that employment and financial means occupied a

prominent role in determining the experience of social inclusion. This may have reflected that work-life balance is more valued in the European context, and that life and self-worth is more tied to work and material achievement in the Asian context. The insignificant correlation of perceived opportunities and objective measures of opportunities to certain extent reflected the level of contentment. For example, those who own their accommodation did not perceive that they had better opportunities than those who did not own their accommodation.

Consistent with the literature on stigmatization of people with mental illness, the current study did not report high level of discrimination in participants' daily lives. Furthermore, participants often reported mental disability as the source of discrimination. The other study from Poland suggested that discrimination affected more those who were less educated, being disabled and were living alone (Rasmus et al., 2013). The experience of discrimination was more frequent than that reported among Hong Kong mental health services users living in a sheltered environment. The negative correlation between discrimination and overall social inclusion provided further evidence of predictive validity of SCOPE-P.

Our current study found that overall social inclusion was correlated positively with physical health as well as mental health. The correlation of overall social inclusion with physical health was similar to the study in Hong Kong. However, the correlation of overall social inclusion with mental health was different from the Hong Kong study (Chan et al., 2015). One possible explanation is that the sample subjects in the Hong Kong study were living in a sheltered accommodation and exhibited lower variation in mental health than physical health. The correlation of overall social inclusion with both physical and mental health further supported its value as an outcome measure of mental health programs and interventions.

Limitations

This study was based on a convenience sample recruited from an outpatient clinic that had association with a medical university. Over half of the participants had post-secondary education. Most of them were living in owned houses or flats without mortgage. A majority of them were engaged in employment in the free job market. In other words, the sample was a group of people with mental health problems living in an open environment, with sufficient support in terms of accommodation and financial means. It is not clear whether similar results would be obtained for individuals with less financial support or individuals living in an institutional environment. The sample was also skewed toward younger adults in the age group 18-34. Results of the study indicated that younger participants scored significantly higher in perceived opportunities than older participants. If SCOPE-P is administered to a sample with lower socioeconomic class, we shall expect a lower level of perceived opportunities and satisfaction with opportunities, and hence lower degree of social inclusion. Further studies are needed to testify this.

Conclusion

The successful adaptation of SCOPE into Polish context supports recognition of the scale as method suitable in cross-cultural settings. Results from Poland suggest that the sample of people with mental illness are quite satisfied with their level of social inclusion, especially when they are well economically situated. The dominant role in this perception seems to be having good relationships with friends and access to leisure activities. This may suggest that the direction of future health intervention programs for similar populations, should be to build or support social networks and to promote the management of leisure time, in order to facilitate greater inclusion. The positive correlation between overall social inclusion and satisfaction with opportunities and perceived opportunities showed construct validity of the

SCOPE. More research is needed to compare results between countries as well as between disadvantaged and not disadvantaged groups to assess the differences.

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Table 1.

Characteristics of the Sampled Participants (n = 180)

Variable	n	%
Gender		
Female	96	53.3
Male	84	46.7
Type of accommodation		
Permanent residential flat	115	63.9
Permanent residential house	49	27.2
Permanent non-residential (a school, etc.)	1	0.6
Permanent residential room	6	3.3
Temporary residence (for temporary or seasonal stay)	9	5.0
Owned or rented		
Ownership right to the dwelling or house without mortgage	65	36.3
Ownership right to the dwelling or house with mortgage	30	16.8
Cooperative ownership right to the dwelling	45	25.1
Rental	31	17.3
Other	8	4.5
Employment status		
In paid employment (full or part time)	67	37.4
Self employed	14	7.8
Long term sick or disabled	36	20.1
Unemployed	30	16.8
Retired from paid work altogether	16	8.9
Full time student	16	8.9
Source of Income		
Earned income (employment, investment, property rental)	83	46.1
Pension (family, social, for invalids, etc.)	38	21.1
No source of income	33	18.3
Retirement pay	17	9.4
Other source of income	2	1.1
Unemployment benefits	2	1.1

Prefer not to say	5	2.8
The highest educational qualification		
Tertiary	72	40.0
Post-secondary	21	11.7
General secondary or secondary vocational	55	30.6
Basic vocational	19	10.6
Lower-secondary	7	3.9
Primary	4	2.2
Incomplete primary or no education	2	1.1
Place of birth		
Poland	178	99.4
Other	1	0.6
Language/dialect usually speak at home		
Only Polish	164	92.1
Polish and other	14	7.9
Ethnic group(s)		
Polish	176	97.8
Belarusian	2	1.1
Jewish	2	1.1

Note. Numbers do not add to 180 due to missing data.

Table 2.

Means and Standard Deviations of Satisfaction with Opportunities in various Social Domains as well as Overall Social Inclusion

Variable	M	SD
SatOpps for leisure activities	4.82	1.31
SatOpps to be involved with community groups	4.02	1.34
SatOpps for suitable housing	4.59	1.51
SatOpps to work (both employed and unemployed participants)	3.93	1.46
SatOpps to increase income	4.05	1.34
SatOpps to live safely in area	5.01	1.23
SatOpps for education	4.24	1.25
SatOpps for physical health care	4.12	1.46
SatOpps for mental health care	4.70	1.59
SatOpps for contact with family	5.63	1.39
SatOpps for contact with friends	4.69	1.60
Average of the above items	4.53	0.81
Overall social inclusion	4.03	1.51

Note. 7-point scale. Higher means represent higher satisfaction.

Table 3.

Means and Standard Deviations of Perceived Opportunities in various Social Domains

Variable	M	SD
Perceived Opps for involvement with community groups	3.53	1.07
Perceived Opps for suitable housing	3.63	1.16
Perceived Opps for suitable work	3.14	1.29
Perceived Opps to increase income	2.86	1.20
Perceived Opps for education	3.43	1.23
Average of the above items	3.32	0.74

Note. 5-point scale. Higher means represent higher perceived opportunities.

Table 4.

Objective measures of opportunities in all social domains

Domain	Question	% of yes	Mean	SD
Community	● Leisure facilities in your area	91.9		
	● Currently use any leisure facilities	43.3		
	● Gave unpaid help to someone (not a relative)	75.0		
	● Voted in 2015 parliamentary election	69.4		
Housing/car	● Own house/flat without mortgage	36.3		
	● Own car	41.1		
Work	● In paid employed or self employed	45.3		
Finance	● Had any forms of income	81.5		
	● Knew someone who would be able to lend you a small amount of money	91.1		
	● Total monthly income (in PLN)		2,359	2,411
Safety	● Had been a victim of a crime	7.2		
Education	● Enrolled in full-time or part-time course	37.8		
Health	● Visited GP about physical health *		2.28	0.88
	● Visited GP about mental health *		1.99	0.88
	● Attended a hospital or clinic for a physical health problem *		1.42	0.72
	● Attended a hospital or clinic for a mental health problem *		1.61	0.77
Family and friends	● Parents alive	78.8		
	● Contact parents face-to-face #		4.23	1.05
	● Contact parents face-to-face or other means #		4.65	0.85
	● No. of people you would call a friend		3.48	3.36
	● Invited friends or neighbors to your house at least once a month ^		3.22	1.59

Note.

* measured in 3-point scale (1 = no visit; 2 = one to two visits; 3 = three or more visits)

measured in 5-point scale (1= never / almost never; 2 = once a year or less; 3 = several times a year; 4 = once a month; 5 = once a week or more)

^ measured in 7-point scale (1 = never; 2 = less than once a month; 3 = at least once a month; 4 = at least once a fortnight; 5 = at least once a week; 6 = several times a week; 7 = every day)

Table 5.

Means and Standard Deviations of Everyday Discrimination Scale

Item	M	SD
You are threatened or harassed	2.51	1.47
You are treated with less courtesy than other people are	2.37	1.37
You are treated with less respect than other people are	2.36	1.40
You receive poorer service than other people at restaurants or stores	2.01	1.32
You are called names or insulted	1.95	1.18
People act as if they think you are not smart	1.84	1.12
People act as if they're better than you are	1.68	0.98
People act as if they think you are dishonest	1.68	1.05
People act as if they are afraid of you	1.52	0.99
Average of the above items	1.99	0.89

Note. 6-point scale. Higher means represent higher perceived discrimination.

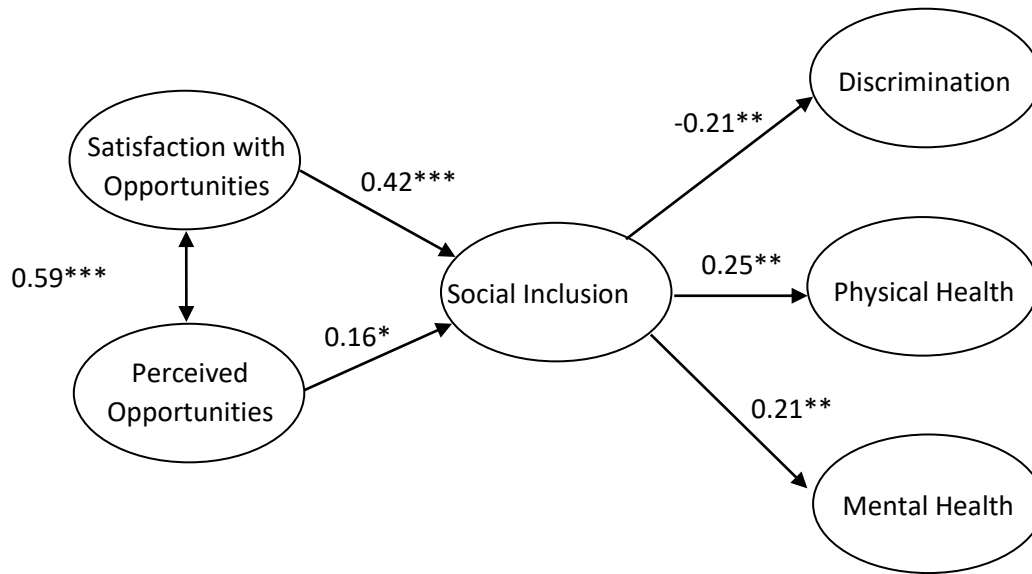
Table 6.

Pearson correlations between SCOPE-P, Everyday Discrimination Scale, Physical Health and Mental Health

Variables	Overall Social Inclusion	Everyday Discrimina- tion Scale	Physical Health	Mental Health
Average of the SatOpps items	0.42 ***	-0.20 **	0.24 **	0.17 *
SatOpps for leisure activities	0.38 ***	-0.27 ***	0.19 **	0.03
SatOpps to be involved with community groups	0.30 ***	-0.10	0.24 **	0.20 **
SatOpps for suitable housing	0.08	-0.21 **	0.12	0.03
SatOpps to work (both employed and unemployed participants)	0.29 ***	-0.10	0.20 **	0.09
SatOpps to increase income	0.25 **	0.03	0.11	-0.01
SatOpps to live safely in area	0.15 *	-0.21 **	0.12	0.13
SatOpps for education	0.20 **	0.07	0.06	0.01
SatOpps for physical health care	0.07	-0.07	0.07	0.18 *
SatOpps for mental health care	0.08	-0.09	0.05	0.13
SatOpps for contact with family	0.22 **	0.02	0.13	0.11
SatOpps for contact with friends	0.63 ***	-0.32 ***	0.22 **	0.18 *
Average of the Perceived Opps items	0.16 *	-0.04	0.18 *	0.03
Perceived Opps for involvement with community groups	0.03	0.10	0.10	-0.02
Perceived Opps for suitable housing	0.07	-0.11	0.07	0.06
Perceived Opps for suitable work	0.08	-0.03	0.18 *	0.03
Perceived Opps to increase income	0.19 *	-0.08	0.02	-0.07
Perceived Opps for education	0.13	0.02	0.19 *	0.08

Note. * $p < .05$; ** $p < .01$; *** $p < .001$

Figure 1.
Pearson correlation between key concepts in SCOPE-P



Note. * $p < .05$; ** $p < .01$; *** $p < .001$