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# Scales Manual IAB-BAMF- SOEP Survey of Refugees in Germany – revised version

Jannes Jacobsen, Julius Klikar, Jürgen Schupp

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# Scales Manual IAB-BAMF-SOEP Survey of Refugees in Germany

*-revised version*

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## Introduction

This manual presents the scales used in the IAB-BAMF-SOEP Survey of Refugees. It cites sources and best practice results for the individual scales, lists the items used in the sample, and gives the exact wording of the questions and respective scales. By providing each scale in the form of an easy-to-understand table listing variable names and summary statistics, it allows the individual items to be found and aggregated quickly.

It should be noted, however, that the items presented here are always tested jointly. It might therefore make analytical sense to exclude specific variables from estimations under some circumstances. In certain cases, we have added items to known concepts to address the unique situation of refugees. Furthermore, time constraints in questionnaire development for this survey led to the shortening of some scales. When the data from this survey are incorporated into the SOEP-Core data, any divergences will be addressed.

Most scales come from the SOEP questionnaire and some are adapted from the World Value Survey (WVS). For a detailed presentation of the scales, we recommend the Scales Manual by David Richter et al. (2013 & 2017) for the SOEP items and the 2015 WVS documentation (WVS 2015).

The tables in this manual contain mean values, standard deviations (SD), item-test correlations (ITC), and a Cronbach's alpha (internal consistency) for each measured construct for all adult respondents to IAB-BAMF-SOEP Survey of Refugees (M3 and M4). The calculation of a Cronbach's alpha relies on case-wise deletion of missing data. Observed and missing cases on an item level are reported as well. German versions of the instruments are available on the SOEP homepage.<sup>1</sup>

Before comparing those scales to other data sources, please be aware that in some cases, the scales in the SOEP have changed over time or been adapted to the SOEP standard, resulting in deviations from the original source.

The sample consists of 4,527 individuals living in 3,336 households. For further methodological information on the IAB-BAMF-SOEP Survey of Refugees, see Kroh et al. (Kroh et al 2017a & 2017b).

All analyses are based on the revised Data set of the IAB-BAMF-SOEP Survey of Refugees.<sup>2</sup>

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<sup>1</sup> [http://www.diw.de/de/diw\\_02.c.222729.de/instrumente\\_feldarbeit.html](http://www.diw.de/de/diw_02.c.222729.de/instrumente_feldarbeit.html)

<sup>2</sup> Due to the fact that one interviewer did not conduct the interviews properly the sample was revised. See also the press release of the research partners: [http://www.diw.de/sixcms/detail.php?id=diw\\_01.c.574021.de](http://www.diw.de/sixcms/detail.php?id=diw_01.c.574021.de)

## Life Satisfaction

Life satisfaction has been measured annually in the SOEP since 1984 (see Richter et al 2013 & 2017). In the IAB-BAMF-SOEP Survey of Refugees, we use a general measure of life satisfaction encompassing satisfaction with diverse aspects of the respondent's current living situation (health, income, work, and dwelling).

We have also generated an item that reflects the current dwelling situation because many individuals in this target group currently live in public housing or shared accommodations. These questions were developed jointly by the research partners. To achieve comparability, we used the same eleven-point scale as used in other SOEP items.

Additionally, we measured life satisfaction retrospectively, aiming at a time before the crises emerged that led to the respondent leaving their country of origin. Hence, over time, comparisons should be possible.

### Items "Life Satisfaction in General"

How satisfied are you...

- (1) bgpr457: ...currently with your life in general?
- (2) bgpr298: ...with your current health?
- (3) bgpr187: ...currently with your personal income?
- (4) bgpr188: ...with your current work situation?
- (5) bgpr58: ...in general with your current living arrangements?

Scale: 0 (Totally dissatisfied) to 10 (Totally satisfied)

### Items and Scale Statistics

Life Satisfaction in General							
P (Individual Questionnaire)							
Year		Item					Cronbach's Alpha (Missing %)
		1	2	3	4	5	
2016	Label	bgpr457	bgpr298	bgpr187	bgpr188	bgpr58	0.65 (0.0)
	Mean (SD)	7.2 (2.3)	7.8 (2.6)	5.2 (3.0)	6.4 (3.0)	6.7 (2.9)	
	ITC	0.75	0.63	0.71	0.79	0.75	
	N	4484	4508	438	471	4500	
	(Missing %)	(1.0)	(0.4)	(90.3)	(90.0)	(0.6)	

### Items “Life Satisfaction – Dwelling”

In your current living arrangements, how satisfied are you...

- (1) bgpr59: ...with the quality of the food?
- (2) bgpr60: ...with the noise level?
- (3) bgpr61: ...with the privacy that you have?
- (4) bgpr62: ...with the leisure opportunities?
- (5) bgpr63: ...with the public transport connections?
- (6) bgpr64: ...with the safety of your neighborhood?
- (7) bgpr65: ...with the safety in the accommodation itself?
- (8) bgpr66: ...with the opportunities provided to learn German in your accommodation or nearby?

Scale: 0 (Totally dissatisfied) to 10 (Totally satisfied)

### Items and Scale Statistics

Life Satisfaction - Dwelling										
P (Individual Questionnaire)										
Year		Item								Cronbach's Alpha (Missing %)
		1	2	3	4	5	6	7	8	
2016	Label	bgpr59	bgpr60	bgpr61	bgpr62	bgpr63	bgpr64	bgpr65	bgpr66	0.78 (0.18)
	Mean (SD)	8.5 (2.3)	7.4 (3.2)	7.4 (3.2)	5.4 (3.4)	7.4 (3.0)	8.8 (2.2)	8.4 (2.6)	6.0 (3.3)	
	ITC	0.57	0.69	0.72	0.67	0.50	0.64	0.70	0.58	
	N (Missing %)	4311 (4.8)	4497 (0.7)	4452 (1.7)	4122 (9.0)	4471 (1.2)	4465 (1.4)	4477 (1.1)	4372 (3.2)	

### Items “Life Satisfaction – Retrospective”

Regarding the last paid work in the country of origin of the respondent:

- (1) bgpr\_l\_154: How satisfied were you with your personal income at that time?
- (2) bgpr\_l\_155: How satisfied were you with your work situation at that time?

Please think back to the time before the crisis, the war or the conflict in your country of origin.  
How satisfied were you with...

- (3) bgpr\_l\_158: ...your living arrangements at that time?
- (4) bgpr\_l\_159: ...your health at that time?
- (5) bgpr\_l\_160: ...your life in general at that time?

Scale: 0(Totally dissatisfied) to 10 (Totally satisfied)

### Items and Scale Statistics

Life Satisfaction - Retrospective							
P (Individual Questionnaire)							
Year		Item					Cronbach's Alpha (Missing %)
		1	2	3	4	5	
2016	Label	bgpr_l_154	bgpr_l_155	bgpr_l_158	bgpr_l_159	bgpr_l_160	0.84 (1.2)
	Mean (SD)	5.6 (3.2)	6.5 (3.1)	6.8 (3.1)	8.0 (2.7)	6.7 (3.1)	
	ITC	0.77	0.80	0.85	0.72	0.84	
	N (Missing %)	2874 (36.5)	2886 (36.3)	4397 (2.9)	4425 (2.2)	4404 (2.7)	

## Locus of Control

Locus of control is a familiar and widely used concept in psychology, describing the extent to which individuals believe they are able to determine the events in their own lives (internal locus of control) or the extent to which they feel dependent on external factors (external locus of control, see Rotter, 1966). It is measured repeatedly in the SOEP.

### Items “Locus of Control (Internal)”

To what extent do you agree with the individual statements?

- (1) bgpr328: My life’s direction depends on me.
- (2) bgpr331: If you are socially or politically active, you can influence social circumstances.
- (3) bgpr333: You must work hard to achieve success.
- (4) bgpr334: When I encounter difficulties in life, I often doubt my abilities.
- (5) bgpr336: The abilities we have are more important than the efforts we make.

Scale: 1 (I totally disagree) to 7 (I totally agree)

### Items and scale statistics

Locus of Control (Internal)							
P (Individual Questionnaire)							
Year		Item					Cronbach's Alpha (Missing %)
		1	2	3	4	5	
2016	Label	bgpr328	bgpr331	bgpr333	bgpr334	bgpr336	0.18 (4.5)
	Mean (SD)	5.6 (1.7)	5.2 (1.9)	6.5 (1.3)	3.5 (2.1)	5.2 (1.8)	
	ITC	0.5	0.53	0.35	-0.46	0.38	
	N (Missing %)	3979 (12.1)	3719 (17.9)	4264 (5.8)	3959 (12.5)	3893 (14.0)	

### Items “Locus of Control (External)”

To what extent do you agree with the individual statements?

- (1) bgpr329: In comparison with others, I haven't achieved what I deserved to achieve.
- (2) bgpr330: What can be achieved in life is mainly a result of fate or luck.
- (3) bgpr332: I often find that other people dictate my life.
- (4) bgpr335: The options that I have in life are determined by social circumstances.
- (5) bgpr337: I don't have much control over what happens in my life.

Scale: 1 (I totally disagree) to 7 (I totally agree).

### Items and scale statistics

Locus of Control (External)							
P (Individual Questionnaire)							
Year		Item					Cronbach's Alpha (Missing %)
		1	2	3	4	5	
2016	Label	bgpr329	bgpr330	bgpr332	bgpr335	bgpr337	0.45 (5.6)
	Mean (SD)	4.3 (2.1)	4.6 (2.1)	2.7 (2.1)	5.1 (1.8)	3.8 (2.0)	
	ITC	0.57	0.59	0.58	0.50	0.59	
	N (Missing %)	3797 (15.2)	4041 (10.1)	4071 (9.5)	3822 (14.6)	3984 (11.3)	

## Reciprocity

Reciprocity describes the tendency to respond in kind to other people's actions. A distinction is made between "positive" and "negative" reciprocity (Fehr & Schmidt, 2006; Perugini et al., 2003). Positive reciprocity occurs when an action producing a positive affect is returned with an action having a similarly positive effect, whereas negative reciprocity occurs in response to an action producing a negative effect.

### Items "Positive Reciprocity"

To what extent do the following statements apply to you personally?

- (1) bgpr338: If someone does me a favor, I am willing to reciprocate it.
- (2) bgpr341: I make particular effort to help someone who has previously helped me.
- (3) bgpr343: I am prepared to incur costs myself to help someone who has previously helped me.

Scale: 1 (I totally disagree) to 7 (I totally agree).

### Items and Scale Statistics

Positive Reciprocity					
P (Individual Questionnaire)					
Year		Item			Cronbach's Alpha (Missing %)
		1	2	3	
2016	Label	bgpr338	bgpr341	bgpr343	0.56 (3.5)
	Mean (SD)	6.8 (0.8)	6.8 (0.7)	6.5 (1.1)	
	ITC	0.68	0.74	0.81	
	N (Missing %)	4340 (4.1)	4333 (4.3)	4286 (5.3)	

### Items “Negative Reciprocity”

To what extent do the following statements apply to you personally?

- (1) bgpr339: If someone does me a serious wrong, I will get my own back at any price at the next opportunity.
- (2) bgpr340: If someone puts me in a difficult position, I will do the same to them.
- (3) bgpr342: If someone insults me, I will insult them.

Scale: 1 (I totally disagree) to 7 (I totally agree).

### Items and Scale Statistics

Negative Reciprocity					
P (Individual Questionnaire)					
Year		Item			Cronbach's Alpha (Missing %)
		1	2	3	
2016	Label	bgpr339	bgpr340	bgpr342	0.75 (4.3)
	Mean (SD)	1.9 (1.6)	1.6 (1.4)	1.9 (1.7)	
	ITC	0.83	0.83	0.82	
	N (Missing %)	4240 (6.4)	4263 (5.8)	4281 (5.4)	

## Risk Aversion

Risk aversion is a construct that is usually measured with seven items reflecting different domains of life. But for the purposes of the Survey of Refugees we only used a general estimate. For a more detailed explanation of the construct in the SOEP, see Richter and colleagues (2013 & 2017) and Dohmen et al. (2011).

### Items “Risk Aversion”

- (1) bgpr349: How do you rate yourself personally? In general, are you someone who is ready to take risks or do you try to avoid risks?

Scale: 0 (Not prepared to take risks at all) to 10 (Prepared to take risks).

### Items and Scale Statistics

Risk Aversion			
P (Individual Questionnaire)			
Year		Item	N (Missing %)
		1	
2016	Label	bgpr349	4224
	Mean (SD)	4.5 (3.4)	(6.7)

## Self-Esteem

Self-esteem is a central construct in social psychology. It serves both as a predictor and as a dependent variable. As in previous SOEP surveys, “self-esteem” is measured using a single variable (see Richter et al., 2013 & 2017, Robins et al, 2001).

### Item “Self-Esteem”

(1) bgpr344: I have a positive attitude about myself.

Scale: 1 (I totally disagree) to 7 (I totally agree).

### Items and Scale Statistics

Self Esteem			
P (Individual Questionnaire)			
Year		Item	N
		1	(Missing %)
2016	Label	bgpr344	4136
	Mean (SD)	6.3 (1.2)	(8.6)

## Loneliness

The concept of loneliness is derived from the UCLA Loneliness Scale (Russel, 1996), which was translated for SOEP purposes (Hawkley et al., 2015; Richter & Schupp 2015). Luhmann & Hawkley (2016) present results of the first implementation of a three-item loneliness scale in SOEP in survey year 2013. For the purpose of our study, we added a fourth item, reflecting contact to people in the respondent's country of origin.

### Items "Loneliness"

How often do you...

- (1) bgpr321: ...miss the company of others?
- (2) bgpr322: ...feel like an outsider?
- (3) bgpr323: ...feel socially isolated?
- (4) bgpr324: ...miss people from your country of origin?

Scale: 1 (Very often); 2 (Often); 3 (Sometimes); 4 (Occasionally); 5 (Never)

### Items and scale statistics

Loneliness						
P (Individual Questionnaire)						
Year		Item				Cronbach's Alpha (Missing %)
		1	2	3	4	
2016	Label	bgpr321	bgpr322	bgpr323	bgpr324	0.70 (1.6)
	Mean (SD)	3.1 (1.3)	3.6 (1.3)	3.7 (1.3)	2.3 (1.3)	
	ITC	0.80	0.80	0.77	0.56	
	N (Missing %)	4342 (4.1)	4279 (5.5)	4321 (4.6)	4422 (2.3)	

## Political System and Attitudes towards Democracy

The items are derived from the World Value Survey (WVS). Please note that we have changed the scaling to fit the SOEP standard. The original WVS scales can be found online.<sup>3</sup> The questions on political systems utilize three key concepts: totalitarian, technocratic, and democratic systems of government.

In the questions about attitudes towards democracy, respondents are asked to classify different goals in terms of democratic value. With these two constructs, we are able to assess what political system or type of democracy the respondent prefers.

### Items “Political System”

Please tell us the extent to which you agree with the following statements on forms of government.

- (1) bgpr376: You need a strong leader who does not have to be concerned with a Parliament or elections.
- (2) bgpr377: Experts, not the Government, should decide what is best for the country.
- (3) bgpr378: There should be a democratic system.

Scale: 1 (I totally disagree) to 7 (I totally agree)

### Items and Scale Statistics

Political System					
P (Individual Questionnaire)					
Year		Item			Cronbach's Alpha (Missing %)
		1	2	3	
2016	Label	bgpr376	bgpr377	bgpr378	0.31 (10.3)
	Mean (SD)	2.5 (2.2)	4.6 (2.3)	6.7 (0.9)	
	ITC	0.70	0.69	-0.17	
	N (Missing %)	3369 (25.6)	3312 (26.8)	3987 (11.4)	

<sup>3</sup> <http://www.worldvaluessurvey.org/WVSDocumentationWV6.jsp>

### Items “Attitudes towards Democracy”

Do you think that the following things are what should happen in a democracy or not?

- (1) bgpr379: The government taxes the rich and supports the poor.
- (2) bgpr380: Religious leaders ultimately determine the interpretation of laws.
- (3) bgpr381: The people choose their government in free elections.
- (4) bgpr382: Civil rights protect the people from government oppression.
- (5) bgpr383: Minorities are protected.
- (6) bgpr384: Women have the same rights as men.

Scale: 0 (Should definitely not happen in a democracy.) to 10 (Should definitely happen in a democracy.)

### Items and Scale Statistics

Attitudes towards Democracy								
P (Individual Questionnaire)								
Year		Item						Crombach's Alpha (Missing %)
		1	2	3	4	5	6	
2016	Label	bgpr379	bgpr380	bgpr381	bgpr382	bgpr383	bgpr384	0.61 (7.8)
	Mean (SD)	8.2 (2.9)	1.9 (3.2)	9.6 (1.4)	9.3 (1.8)	9.3 (1.7)	9.3 (1.8)	
	ITC	0.57	-0.50	0.57	0.62	0.65	0.61	
	N (Missing %)	3847 (15.0)	3604 (20.4)	3990 (11.9)	3787 (16.3)	3827 (15.5)	4099 (9.5)	

## Gender Equality

The questions regarding gender equality are derived from the World Value Survey and the International Social Survey Programme (ISSP).<sup>4</sup> Many analyses have already been carried out based on these data. However, we have changed the scale into a seven-point scale to fit the SOEP standard. Since the sex of the respondent may be of particular interest in this area, we also provide the scale statistics separately for men and women.

### Items “Gender Equality”

To what extent do you agree with the following statements?

- (1) bgpr385: Having a job is the best way for a woman to be independent.
- (2) bgpr386: Even a married woman should have a paid job so that she can be financially independent.
- (3) bgpr387: If a woman earns more money than her partner, this inevitably leads to problems.
- (4) bgpr388: For parents, vocational training or higher education for their sons should be more important than vocational training or higher education for their daughters.
- (5) bgpr389: At home, the husband should have the final say.

Scale: 1 (I totally disagree) to 7 (I totally agree)

### Items and Scale Statistics - All Gender

Gender Equality							
P (Individual Questionnaire)							
Year		Item					Crombach's Alpha (Missing %)
		1	2	3	4	5	
2016	Label	bgpr385	bgpr386	bgpr387	bgpr388	bgpr389	0.54 (4.4)
	Mean (SD)	6.0 (1.6)	5.9 (1.7)	2.7 (2.2)	2.1 (2.1)	3.1 (2.3)	
	ITC	0.54	0.55	-0.55	-0.54	-0.63	
	N (Missing %)	4165 (8.0)	4157 (8.2)	4042 (10.7)	4176 (7.8)	4225 (6.7)	

<sup>4</sup> <http://www.issp.org/menu-top/home/>

**Items and Scale Statistics - Men**

<b>Gender Equality</b>							
P (Individual Questionnaire)							
<b>Year</b>		<b>Item</b>					<b>Crombach's Alpha (Missing %)</b>
		1	2	3	4	5	
2016	Label	bgpr385	bgpr386	bgpr387	bgpr388	bgpr389	0.54 (4.5)
	Mean (SD)	5.9 (1.6)	5.8 (1.7)	2.7 (2.1)	2.2 (2.2)	3.2 (2.3)	
	ITC	0.53	0.55	-0.56	-0.55	-0.64	
	N (Missing)	2585 (8.0)	2587 (8.0)	2508 (10.8)	2594 (7.7)	2617 (6.9)	

**Items and Scale Statistics - Women**

<b>Gender Equality</b>							
P (Individual Questionnaire)							
<b>Year</b>		<b>Item</b>					<b>Crombach's Alpha (Missing %)</b>
		1	2	3	4	5	
2016	Label	bgpr385	bgpr386	bgpr387	bgpr388	bgpr389	0.51 (4.4)
	Mean (SD)	6.4 (1.6)	6.1 (1.7)	2.7 (2.2)	1.9 (1.9)	2.9 (2.3)	
	ITC	0.55	0.56	-0.53	-0.50	-0.60	
	N (Missing %)	1580 (7.2)	1570 (7.8)	1534 (9.7)	1582 (7.1)	1608 (5.8)	

## Human Rights in Country of Origin

This scale has been developed in the SOEP. It takes macro-indices such as the “Political Terror Scale”<sup>5</sup> or the “Freedom House Index” as its point of orientation.<sup>6</sup> In contrast to these indices, however, ours works on a micro-level, which allows us to better reflect subjective experiences and assessments.

### Items “Human Rights in Country of Origin”

How would you personally assess the current situation in your country of origin regarding the following areas of life?

- (1) bgpr370: How well has political freedom been achieved currently in your country of origin?
- (2) bgpr371: How well has civic freedom been achieved currently in your country of origin, such as the freedom to express opinions, right of assembly, and an independent judiciary?
- (3) bgpr372: How well has the freedom of press and freedom of opinion been achieved currently in your country of origin?
- (4) bgpr373: How well is the right to practice religion or faith achieved currently in your country of origin?
- (5) bgpr374: How well is equal treatment of ethnic minorities achieved currently in your country of origin?
- (6) bgpr375: How well is the equal treatment of men and women achieved currently in your country of origin?

Scale: 0 (Very bad/badly) to 10 (Very well)

### Items and Scale Statistics

Human Rights Country of Origin								
P (Individual Questionnaire)								
Year		Item						Cronbach's Alpha (Missing %)
		1	2	3	4	5	6	
2016	Label	bgpr370	bgpr371	bgpr372	bgpr373	bgpr374	bgpr375	0.82 (7.1)
	Mean (SD)	0.7 (1.7)	0.84 (1.8)	1.0 (2.1)	3.9 (3.4)	1.9 (2.7)	3.2 (3.2)	
	ITC	0.65	0.71	0.70	0.79	0.78	0.70	
	N (Missing %)	4020 (11.2)	4009 (11.4)	3980 (12.1)	4004 (11.6)	3899 (13.9)	4086 (9.7)	

<sup>5</sup> <http://www.politicalterror scale.org/Data/>

<sup>6</sup> <http://www.freedomhouse.org/report-types/freedom-world>

## Political Interest

The question regarding political interest is measured regularly in the SOEP. A comparative analysis between different sub-groups covered in the SOEP is therefore possible.

### Item “Political Interest”

(1) bgpr366: Just a few general points. How seriously are you interested in politics?

Scale: 1 (Very strongly), 2 (Strongly ), 3 (Not that seriously), 4 (Not seriously at all)

### Items and Scale Statistics

Political Interest			
P (Individual Questionnaire)			
Year		Item	N (Missing %)
		1	
2016	Label	bgpr366	4426
	Mean (SD)	3.4 (0.8)	(2.2)

## Anxiety

The variables regarding anxiety are derived from the SOEP. However, we developed a few more questions to take the unique situation of refugees into account. For an overview of the SOEP items, see Dittmann (2009).

### Items “Anxiety”

- (1) bgpr354: Do you worry about your own economic situation?
- (2) bgpr355: Do you worry about your health?
- (3) bgpr356: Do you worry about anti-foreigner sentiment and xenophobia in Germany?
- (4) bgpr357: Are you worried about your asylum application?
- (5) bgpr358: Are you worried that you will be unable to stay in Germany?
- (6) bgpr359: Are you worried that you will be unable to return to your country of origin?
- (7) bgpr360: Do you worry about losing your job?

Scale: 1 (Yes, I worry a lot), 2 (Yes, I worry somewhat), 3 (No, I don't worry at all)

### Items and Scale Statistics

Anxiety									
P (Individual Questionnaire)									
Year		Item							Cronbach's Alpha (Missing %)
		1	2	3	4	5	6	7	
2016	Label	bgpr354	bgpr355	bgpr356	bgpr357	bgpr358	bgpr359	bgpr360	0.67 (1.1)
	Mean (SD)	2.0 (0.7)	2.4 (0.7)	2.7 (0.6)	2.2 (0.9)	2.1 (0.9)	2.4 (0.8)	2.3 (0.7)	
	ITC	0.57	0.53	0.50	0.72	0.74	0.36	0.60	
	N (Missing %)	4410 (2.6)	4450 (1.7)	4369 (3.5)	4367 (3.5)	4389 (3.0)	4321 (4.5)	448 (90.1)	

## Prospects for the future

We asked the respondents how they see their prospects in diverse areas of life to get an idea of their integration plans and perceived possibilities. The scales were developed by the research partners. The questions all used the following scale:

Scale: 0% to 100% (10pp steps)

How likely is it that you will...?

### Item and Scale Statistics

(1) bgpr361: ...have a job in 2 years' time in Germany?

Prospect Employment			
P (Individual Questionnaire)			
Year		Item	N (Missing %)
		1	
2016	Label	bgpr361	4281
	Mean (SD)	6.4 (3.3)	(5.4)

### Item and Scale Statistics

(2) bgpr362: ...be working independently in 2 years' time in Germany?

Prospect Self-Employed			
P (Individual Questionnaire)			
Year		Item	N (Missing %)
		1	
2016	Label	bgpr362	4200
	Mean (SD)	3.4 (3.5)	(7.2)

### Item and Scale Statistics

(3) bgpr363: ...attend a school in 2 years' time in Germany?

Prospect School			
P (Individual Questionnaire)			
Year		Item	N (Missing %)
		1	
2016	Label	bgpr363	4252
	Mean (SD)	4.0 (4.0)	(6.0)

### Item and Scale Statistics

(4) bgpr364: ...be attending training or a continuing professional development course in 2 years' time in Germany?

<b>Prospect Vocational Training</b>			
P (Individual Questionnaire)			
<b>Year</b>		<b>Item</b>	<b>N</b> (Missing %)
		1	
2016	Label	bgpr364	4287
	Mean (SD)	5.5 (3.7)	(5.3)

### Item and Scale Statistics

(5) bgpr365: ...be studying at a higher education establishment in 2 years' time in Germany?

<b>Prospect University</b>			
P (Individual Questionnaire)			
<b>Year</b>		<b>Item</b>	<b>N</b> (Missing %)
		1	
2016	Label	bgpr365	4321
	Mean (SD)	2.0 (3.3)	(4.6)

## Health

Respondents' health is often measured with the Mental and Physical Component Summary Scale (MCS/PCS). Both scales are well-known and have been used repeatedly in the SOEP. The MCS and PCS, also known as SF-36, are implemented as a short version, consisting of twelve different variables (SF-12). It has been used in major surveys all over the world. For a methodological review, see Ellert & Kurth (2004).

For the purpose of the MCS and the PCS, the twelve variables are first condensed into eight distinct variables, centered around their mean, and normed on a scale from 0-100. They are then z-transformed. To build the MCS and PCS, it is suggested doing an exploratory factor analysis and using the factor loadings for each corresponding construct as a factor in the latent construct. The summary statistics for the MCS and the PCS are displayed below, as well as the summary statistics for the SF12 in general. For a detailed explanation, see Nübling et al. (2006). For replications, please note that the exploratory factor analysis was estimated using the whole SOEP sample and not only the refugee data. Nevertheless, the PCS and MCS presented below only display the refugee sample.

### Items "SF-12"

- (1) bgpr299: How would you describe your current state of health?

Scale: 1 (Very well) to 5 (Poor).

- (2) bgpr300: If you have to climb stairs, i.e. walk up several floors: Does your state of health restrict you a lot, a little, or not at all?
- (3) bgpr301: And what about other strenuous activities in everyday life, e.g. when you have to lift something heavy or need to be mobile: Does your state of health restrict you a lot, a little or not at all?

Scale: 1 (A lot), 2 (A little), 3 (Not at all).

How often in the last four weeks...

- (4) bgpr303: ...did you feel in low spirits and melancholy?
- (5) bgpr304: ...did you feel calm and balanced?
- (6) bgpr305: ...did you feel full of energy?
- (7) bgpr306: ...did you suffer from severe physical pain?
- (8) bgpr307: ..., due to health problems of a physical nature, did you achieve less in your work or everyday activities than you actually intended?

- (9) bgpr308: ..., due to health problems of a physical nature, have you been restricted in the type of tasks you can perform in your work or everyday activities?
- (10) bgpr309: ..., due to psychological or emotional problems, did you achieve less in your work or everyday activities than you actually intended?
- (11) bgpr310: ..., due to psychological problems or emotional problems, did you perform your work or everyday activities less carefully than usual?
- (12) bgpr311: ..., due to health or psychological problems, have you been restricted in terms of your social contact to for example friends, acquaintances or relatives?

Scale: 1 (Very often), 2 (Often), 3 (Sometimes), 4 (Almost never), 5 (Never)

**Items and Scale Statistics**

SF12														
P (Individual Questionnaire)														
Year		Item												Cronbach's Alpha (Missing %)
		1	2	3	4	5	6	7	8	9	10	11	12	
2016	Label	bgpr299	bgpr300	bgpr301	bgpr303	bgpr304	bgpr305	bgpr306	bgpr307	bgpr308	bgpr309	bgpr310	bgpr311	0.90 (0.2)
	Mean (SD)	2.1 (1.1)	2.6 (0.6)	2.6 (0.7)	3.3 (1.3)	2.5 (1.1)	2.5 (1.3)	3.8 (1.3)	4.0 (1.2)	4.1 (1.1)	3.9 (1.2)	4.0 (1.2)	4.2 (1.1)	
	ITC	-0.68	0.58	0.60	0.59	-0.49	-0.51	0.73	0.80	0.81	0.80	0.78	0.72	
	N (Missing %)	4512 (0.3)	4472 (1.8)	4469 (1.3)	4403 (2.7)	4407 (2.7)	4399 (2.8)	4459 (1.5)	4349 (3.9)	4337 (4.2)	4312 (4.8)	4306 (4.9)	4326 (4.4)	

**Items and Scale Statistics**

<b>MCS</b>			
P (Individual Questionnaire)			
<b>Year</b>		<b>Item</b>	<b>N</b> (Missing %)
2016	Label	MCS	4108
	Mean (SD)	47.8 (11.8)	(9.3)

**Items and Scale Statistics**

<b>PCS</b>			
P (Individual Questionnaire)			
<b>Year</b>		<b>Item</b>	<b>N</b> (Missing %)
2016	Label	PCS	4108
	Mean (SD)	53.1 (10.0)	(8.7)

## Language Skills

Measuring the language skills of refugees is a crucial part of the survey. By collecting such data, we are able to screen respondents for individuals who might have experienced difficulties answering the questions at hand. Furthermore, language abilities are a key integration indicator. We asked respondents about their skills in German, English, their mother tongue, and the official language of their country of origin. The question regarding the official language was only asked when it did not match the mother tongue.

Scale: 1 (Very well), 2 (Well), 3 (Averagely), 4 (Not very well), 5 (Not at all)

### Items “German Language Skills”

- (1) bgpr87: How well can you speak German?
- (2) bgpr88: How well can you write in German?
- (3) bgpr89: How well can you read in German?

### Items and Scale Statistics

German Language Skills					
P (Individual Questionnaire)					
Year		Item			Cronbach's Alpha (Missing %)
		1	2	3	
2016	Label	bgpr87	bgpr88	bgpr89	0.93 (0.0)
	Mean (SD)	3.4 (0.9)	3.5 (1.1)	3.3 (1.1)	
	ITC	0.90	0.96	0.95	
	N (Missing %)	4525 (0.0)	4524 (0.1)	4524 (0.1)	

### Items “English language skills”

- (1) bgpr\_l\_81: How well can you speak English?
- (2) bgpr\_l\_82: How well can you write in English?
- (3) bgpr\_l\_83: How well can you read in English?

### Items and Scale Statistics

English Language Skills					
P (Individual Questionnaire)					
Year		Item			Cronbach's Alpha (Missing %)
		1	2	3	
2016	Label	bgpr81	bgpr82	bgpr83	0.97 (1.4)
	Mean (SD)	3.9 (1.2)	3.9 (1.3)	3.7 (1.4)	
	ITC	0.96	0.98	0.97	
	N (Missing %)	4462 (1.4)	4462 (1.4)	4461 (1.4)	

### Items “Mother Tongue Skills”

- (1) bgpr73: How well can you speak your native language?
- (2) bgpr74: How well can you write in your native language?
- (3) bgpr75: How well can you read in your native language?

### Items and Scale Statistics

Skills Mother tongue					
P (Individual Questionnaire)					
Year		Item			Cronbach's Alpha (Missing %)
		1	2	3	
2016	Label	bgpr73	bgpr74	bgpr75	0.77 (0.0)
	Mean (SD)	1.1 (0.4)	1.9 (1.4)	1.8 (1.4)	
	ITC	0.4	0.98	0.98	
	N (Missing %)	4524 (0.1)	4520 (0.2)	4522 (0.1)	

### Items “Official Language Skills”

- (1) bgpr78: How well can you speak in this official language?
- (2) bgpr79: How well can you write in this official language?
- (3) bgpr80: How well can you read in this official language?

### Items and Scale Statistics

Skills Mother tongue					
P (Individual Questionnaire)					
Year		Item			Cronbach's Alpha (Missing %)
		1	2	3	
2016	Label	bgpr78	bgpr79	bgpr80	0.92 (0.1)
	Mean (SD)	1.7 (1.2)	2.2 (1.6)	2.2 (1.5)	
	ITC	0.84	0.97	0.97	
	N (Missing %)	1082 (0.1)	1082 (0.1)	1082 (0.1)	

## Resilience

The concept of resilience describes the ability to cope with situations that are stressful. The scales are derived from the BRCS (Brief Resilient Coping Scale). For an overview, see Kocalevent et al. (2013) and Sinclair and Wallston (2004). On their use in the SOEP, see Richter et al (2013).

### Items “Resilience”

- (1) bgpr345: I try to think of how I can change difficult situations.
- (2) bgpr346: No matter what happens to me, I think I have my reactions under control.
- (3) bgpr347: I think I can develop further if I deal with difficult situations.
- (4) bgpr348: I actively seek ways to balance out the losses that have affected my life.

Scale: 1 (Totally disagree) to 7 (Totally agree)

### Items and Scales Statistics

Loneliness						
P (Individual Questionnaire)						
Year		Item				Cronbach's Alpha (Missing %)
		1	2	3	4	
2016	Label	bgpr345	bgpr346	bgpr347	bgpr348	0.67 (5.0)
	Mean (SD)	6.2 (1.2)	5.9 (1.5)	6.2 (1.2)	6.2 (1.2)	
	ITC	0.72	0.68	0.77	0.71	
	N (Missing %)	4167 (8.0)	4173 (7.8)	4065 (10.2)	4048 (10.6)	

## Cognitive Abilities

As in previous SOEP surveys, we included a test of cognitive abilities: the “symbol-digit test,” where respondents have to match numbers to certain arbitrary symbols. It measures how many matches a person can accomplish in 30, 60, and 90 seconds. This ultra-short test is designed to reflect cognitive performance in terms of speed, accuracy, processing capacity, coordination, and inhibition of basic cognitive processes. The test is considered to be culturally neutral, meaning that comparisons between sub-groups are legitimate. For a more detailed overview, see Richter et al. (2013 & 2017) and Pagel et al (2017). For the first implementation of the test in SOEP, see Schupp et al (2008).

### Items and Scale Statistics

<b>Symbol-Digit-Test (90 sec.)</b>			
P (Individual Questionnaire)			
Year		Item	N (Missing %)
		1	
2016	Label	F099richtig90	3301
	Mean (SD)	25.3 (9.6)	(27.1)

### Items and Scale Statistics

<b>Symbol-Digit-Test (60 sec.)</b>			
P (Individual Questionnaire)			
Year		Item	N (Missing %)
		1	
2016	Label	F099richtig60	3301
	Mean (SD)	16.4 (7.0)	(27.1)

### Items and Scale Statistics

<b>Symbol-Digit-Test (30 sec.)</b>			
P (Individual Questionnaire)			
Year		Item	N (Missing %)
		1	
2016	Label	F099richtig30	3301
	Mean (SD)	7.3 (3.8)	(27.1)

## Mental Distress

The items on mental distress come from the PHQ-4 scoring, which was originally developed by Kroenke et al (2009). The reliability and the validity of the PHQ-4 has been demonstrated in several studies (Kroenke et al. 2009, Löwe et al. 2010). Recently, the PHQ-4 were also used in another survey of Arabic-speaking refugees in Germany (Kliem et al., 2016). The PHQ-4 is measured using four items. Whereas the first two measure depression, the second two measure anxiety.

### Items “Mental Distress”

How often have you felt negatively affected by the following complaints in the last two weeks?

- (1) bgpr312: Little interest or pleasure in your activities?
- (2) bgpr313: Low spirits, melancholy or hopelessness?
- (3) bgpr314: Nervousness, anxiety or tension?
- (4) bgpr315: Unable to stop or control worrying?

Scale: 1 (Not at all), 2 (On some days), 3 (On more than half the days), 4 ((Almost) every day)

### Items and Scale Statistics

Mental Distress						
P (Individual Questionnaire)						
Year		Item				Cronbach's Alpha (Missing %)
		1	2	3	4	
2016	Label	bgpr312	bgpr313	bgpr314	bgpr315	0.78 (2.5)
	Mean (SD)	1.8 (0.9)	1.8 (0.9)	1.8 (0.9)	1.8 (1.0)	
	ITC	0.65	0.83	0.83	0.80	
	N (Missing %)	4245 (6.2)	4342 (4.1)	4375 (3.4)	4269 (5.7)	

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