A Hindering and Facilitating Individual-Difference Factors Framework for Predicting Refugees' Workforce Participation

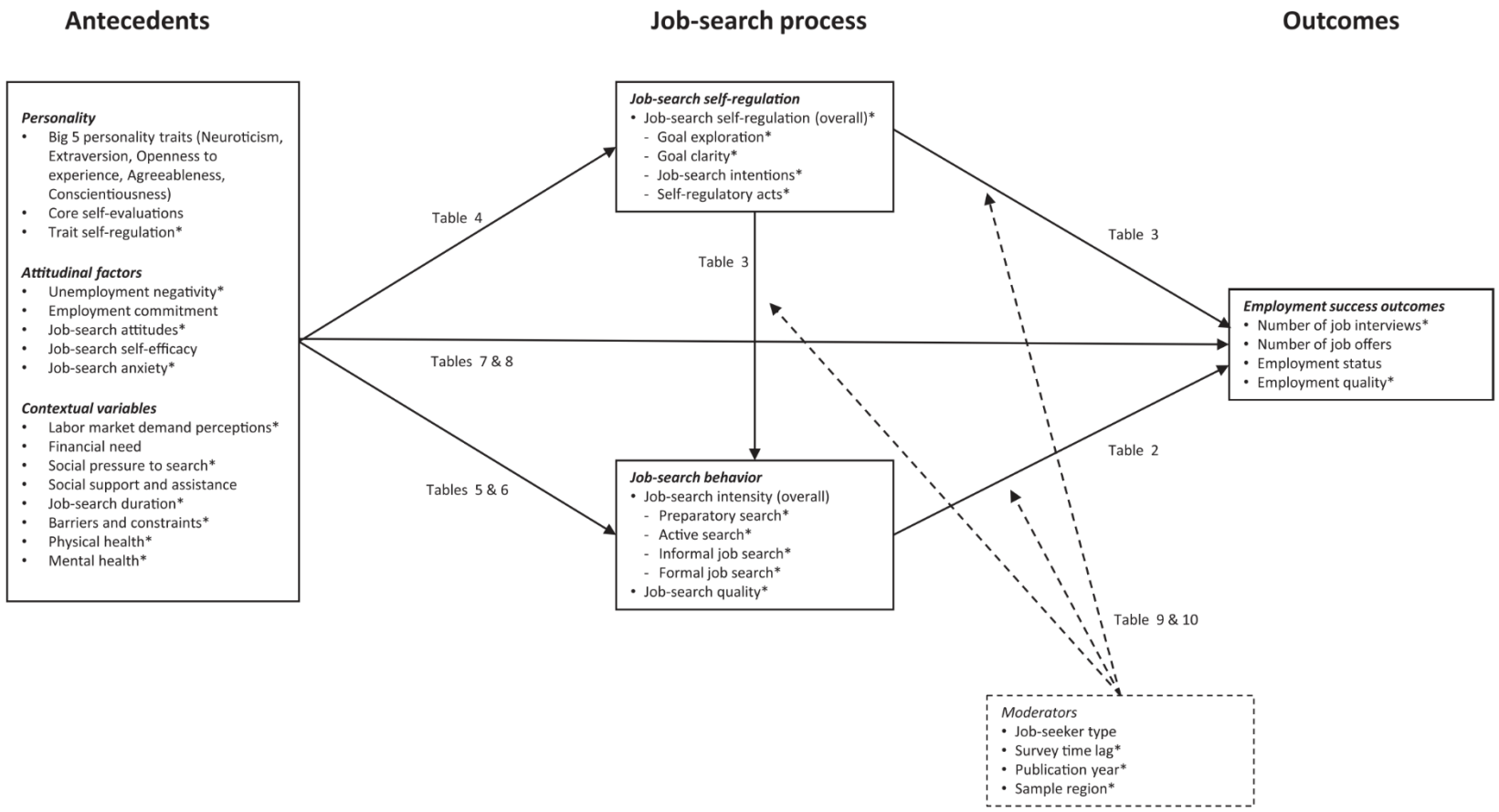
Dan Asfar
Marise Born
Janneke Oostrom
Remko van den Berg

16th Dutch-Flemish Research Meeting
21 October, 2022

Refugees' workforce participation

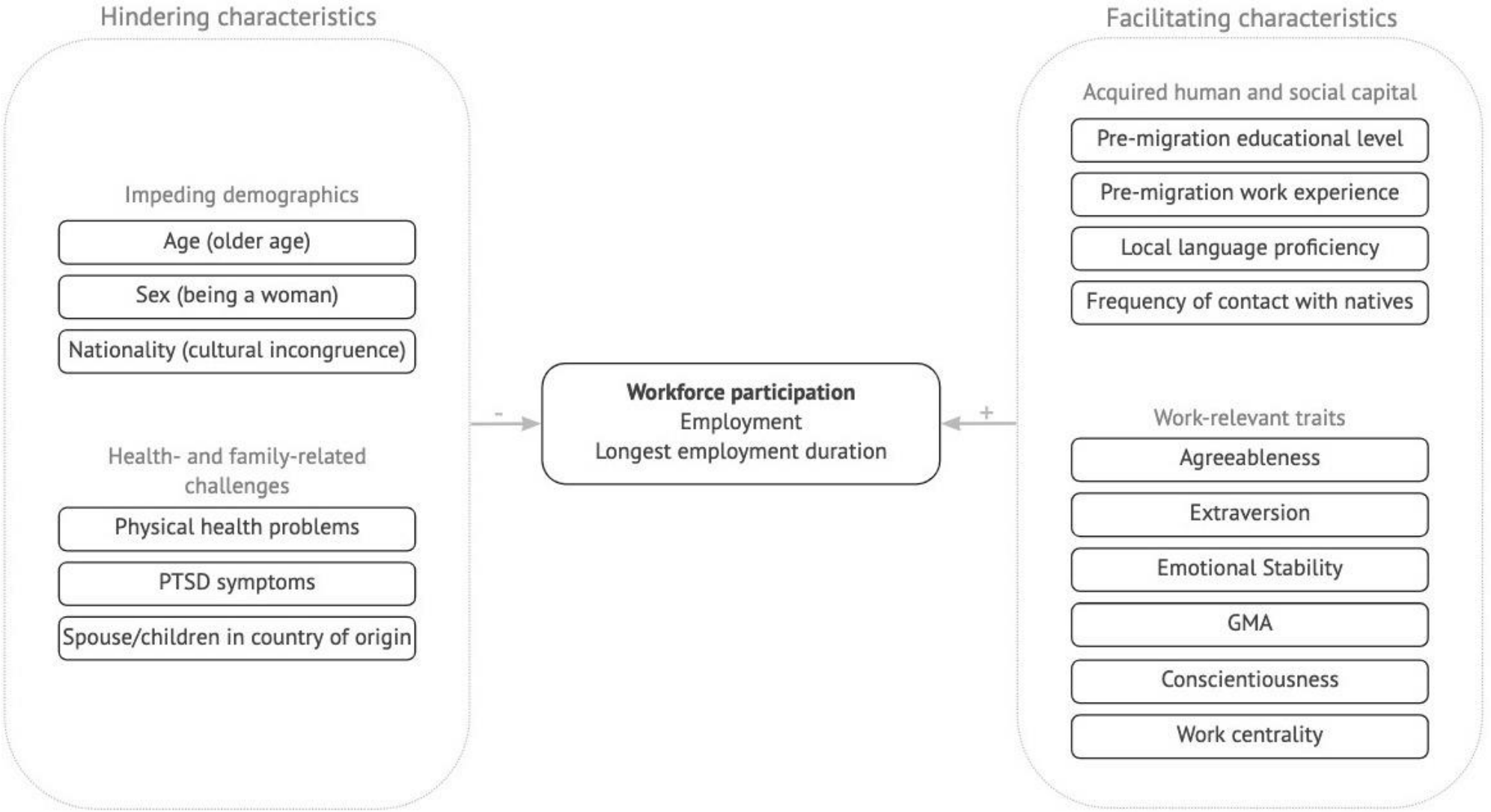
- Importance
  - Unemployment predictor of mental health (-) (Paul & Moser, 2009; McKee-Ryan et al., 2005)
  - High economic costs (e.g., Aiyar et al., 2016)
- Statistics
  - In the Netherlands, only 19% of the refugees who received a residence permit in 2014 found a job within three years (CBS, 2021)
  - Refugees' employment rate after 15 years of residence in the Netherlands: 57%. Comparison: economic migrants (70%) and native Dutch citizens (80%) (Bakker & Dagevos, 2017)

Van Hooft et al. 2021



Previous theoretical frameworks of individual-difference factors for refugees' workforce participation

- Boss et al., 2021 and Lee et al., 2020
- Frameworks not tested
- Lack important predictors such as
  - Demographics (Boss et al.)
  - Acquired human capital in home country (Lee et al.)
  - Family-related challenges (both frameworks)
  - Psychological characteristics (both frameworks)
- Aim: develop and test new framework
- Three contributions
  - Integrating the sociology, economics, and psychology literature
  - Testing framework with data of Syrian and Eritrean refugees in the Netherlands
  - Methodological quality

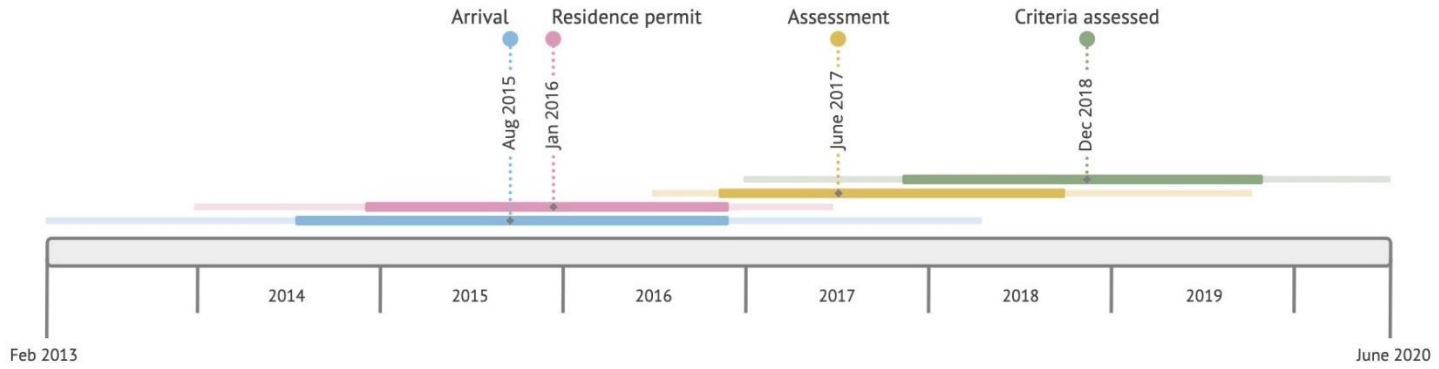

Hindering characteristics
Impeding demographics
Age (older age)
Sex (being a woman)
Nationality (cultural incongruence)
Health- and family-related challenges
Physical health problems
PTSD symptoms
Spouse/children in country of origin
-
Workforce participation
Employment
Longest employment duration
+
Facilitating characteristics
Acquired human and social capital
Pre-migration educational level
Pre-migration work experience
Local language proficiency
Frequency of contact with natives
Work-relevant traits
Agreeableness
Extraversion
Emotional Stability
GMA
Conscientiousness
Work centrality

Dependent variables

- Operationalization workforce participation based on the definition of employability: "the ability to gain and the ability to maintain a job" (Fugate et al., 2004; Hogan et al., 2013)
  - DV 1: employment (i.e., the actual occurrence and speed of finding a job)
  - DV 2: longest employment duration (i.e., the longest consecutive employment duration)
- Exploratory analyses
  - DV 3: Highest hourly wage

Method: Design and data

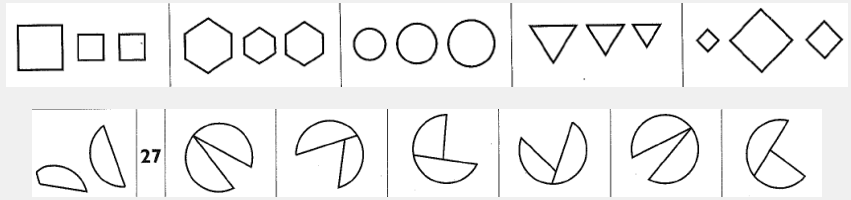
- Refugee assessment (N = 9459)
  - June 2016 – October 2019
- Match assessment data to Central Statistics (CBS) data
  - January 2016 – July 2020
- Apply in-/exclusion criteria
  - Keep Syrian and Eritrean refugees, exclude refugees who passed away, left the Netherlands, have no residence permit, different assessment, assessment after July 2017
- DVs assessed: three years after receiving a residence permit
- Result: longitudinal dataset (N = 2711, n_{Syria} = 1867, $n_{Eritrea}$ = 844)
  - Unique data (psychological traits)
  - Objective
  - No attrition
  - Monthly registered



Method: Analyses

- Employment (DV 1)
  - Cox regression analysis (also called survival or event history analysis)
- Longest employment duration (DV 2) and highest hourly wage (DV 3)
  - Multiple regression analysis
- Hypotheses are tested in statistical models that only include the predictors of their variable group (plus the covariates)

Method: Measures

Predictor	Measure	Reliability	Example item
Local language proficiency	NOA Test	α = .97 (S = .98, E = .96) Test-retest r = .84	Hij lo____ over d___ weg.
GMA	Two non-verbal subtest of the MCT-M	α = .93 (S = .92, E = .89) Test-retest r = .88/.93	
Agreeableness	MPT-BS-QS Basic	α = .72 (S = .69, E = .73)	I try not to offend other people
Extraversion	MPT-BS-QS Basic	α = .66 (S = .70, E = .53)	I like to talk to people who I don't know
Emotional Stability	MPT-BS-QS Basic	α = .73 (S = .75, E = .62)	I get nervous quickly
Conscientiousness	MPT-BS-QS Basic	α = .77 (S = .75, E = .76)	I set high standards for myself
Work centrality	AWV	α = .72 (S = .72, E = .72)	I consider not having paid work …
PTSD symptoms	PCL-5	α = .93 (S = .94, E = .90)	Repeated, disturbing dreams of the stressful experience

General practitioner costs are used as a proxy of physical health problems

Descriptive statistics (1)

Variable	Total	Syrians	Eritreans	Men	Women	d or φ Nationality	d or φ Sex
Age at receiving a RP	29.27 (9.18)	31.04 (9.77)	25.36 (6.14)	29.40 (9.18)	28.92 (9.19)	0.70*	0.05
Physical health problems	34.53 (43.6)	37.87 (48.15)	27.14 (29.83)	28.15 (38.83)	52.20 (50.58)	-0.27*	0.53*
PTSD symptoms (0-80)	14.89 (13.67)	16.40 (14.42)	11.55 (11.17)	15.06 (13.99)	14.41 (12.75)	0.38*	0.05
Spouse/children in country of origin (yes)	818 (30.9%)	503 (27.7%)	315 (37.8%)	611 (31.4%)	207 (29.5%)	.10*	-.02
Pre-migration educational level (0-4)	1.66 (1.21)	1.90 (1.11)	1.13 (1.24)	1.71 (1.22)	1.53 (1.17)	0.65*	0.15*
Pre-migration work experience (yes)	1792 (66.1%)	1341 (71.8%)	451 (53.4%)	1506 (75.6%)	286 (39.8%)	.18*	.33*
Local language proficiency (0-80)	24.31 (18.24)	25.27 (19.47)	22.37 (15.30)	24.39 (17.86)	24.05 (19.39)	0.17*	0.02
Frequency of contact with natives (0-4)	2.22 (1.58)	2.30 (1.56)	2.04 (1.62)	2.31 (1.58)	1.97 (1.57)	0.16*	0.22*

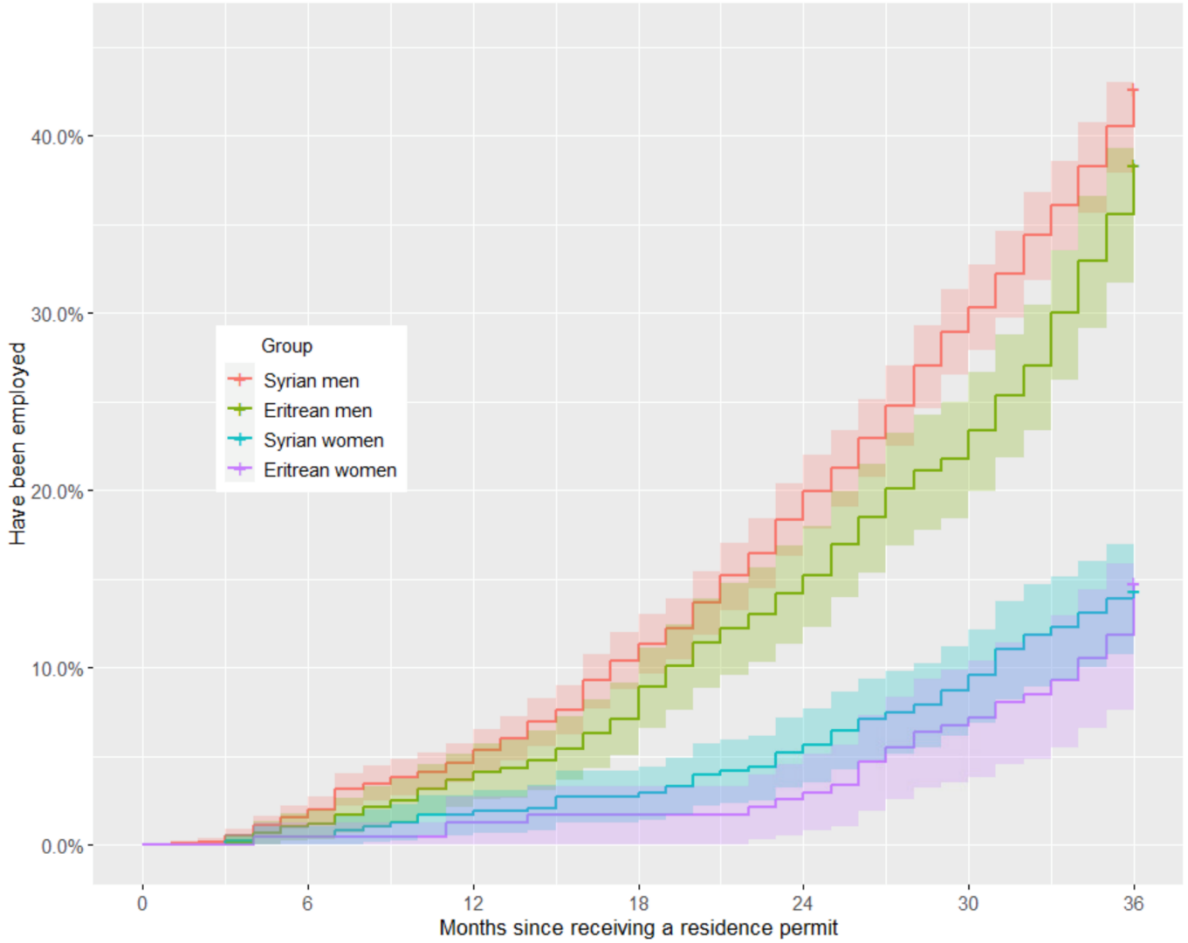
d = Cohen's *d* (for continuous variables) and φ = phi value (for categorical variables). Values of …
d = 0.20 and φ = .10 are considered small,
d = 0.50 and φ = .30 are considered medium, and
d = 0.80 and φ = .50 are considered large (Cohen, 1988).

Descriptive statistics (2)

Variable	Total	Syrians	Eritreans	Men	Women	d or φ Nationality	d or φ Sex
Agreeableness (1-5)	3.98 (0.51)	4.07 (0.45)	3.78 (0.59)	4.00 (0.50)	3.92 (0.53)	0.55*	0.16*
Extraversion (1-5)	3.57 (0.42)	3.60 (0.43)	3.48 (0.40)	3.59 (0.42)	3.51 (0.43)	0.29*	0.19*
Emotional Stability (1-5)	3.44 (0.60)	3.35 (0.61)	3.66 (0.53)	3.50 (0.60)	3.29 (0.59)	-0.54*	0.35*
GMA (0-60)	32.28 (10.99)	35.53 (10.23)	25.07 (9.00)	32.75 (10.90)	30.97 (11.13)	1.09*	0.16*
Conscientiousness (1-5)	3.95 (0.53)	4.05 (0.47)	3.71 (0.57)	3.97 (0.52)	3.89 (0.55)	0.65*	0.15*
Work centrality (1-5)	3.89 (0.70)	3.83 (0.67)	4.02 (0.76)	3.97 (0.66)	3.68 (0.78)	-0.27*	0.40*
Employment (yes)	928 (34.2%)	660 (35.4%)	268 (31.8%)	824 (41.4%)	104 (14.5%)	.04	.25*
Longest employment duration (months)	7.45 (6.27)	7.67 (6.40)	6.91 (5.90)	7.68 (6.35)	5.65 (5.29)	0.12	0.35*
Highest hourly wage (EUR)	12.88 (3.55)	12.93 (3.54)	12.77 (3.59)	12.97 (3.48)	12.20 (4.06)	0.04	0.20*

d = Cohen's *d* (for continuous variables) and φ = phi value (for categorical variables). Values of …
d = 0.20 and φ = .10 are considered small,
d = 0.50 and φ = .30 are considered medium, and
d = 0.80 and φ = .50 are considered large (Cohen, 1988).

Results


Have been employed
40.0%
30.0%
20.0%
10.0%
0.0%
Group
Syrian men
Eritrean men
Syrian women
Eritrean women
0
6
12
18
24
30
36
Months since receiving a residence permit

	Employment	Longest employment duration	Highest hourly wage
Covariates			
Year RP	+	0	+
Duration arrival – RP	+	0	-
Duration RP – assessment	-	-	-
Urbanization	-	-	0
Followed education (yes)	+	0	0
Having social support (yes)	0	0	0
Impeding demographics			
Higher age	-	0	+
Being a woman	-	-	-
Nationality (Eritrea)	0	0	0
Health- and family-related challenges			
Physical health problems[E+]	-	0	0
PTSD symptoms[y]	0	0	0
Spouse/children in country of origin (yes)[S]	0	0	0
Acquired human and social capital			
Pre-migration educational level[E,f]	0	0	+
Pre-migration work experience (yes)	+	0	+
Local language proficiency[f+,o+]	+	+	+
Frequency of contact with natives[f+]	+	0	+
Work-relevant traits			
Agreeableness	0	0	0
Extraversion	+	0	0
Emotional Stability[o]	0	0	0
GMA[f+]	+	0	+
Conscientiousness	0	0	0
Work centrality[S]	+	0	+

Discussion

- Contributions/Implications
  - Integrating multidisciplinary insights into one framework
  - Predictive validity individual-difference factors
  - Differential predictive validities
  - Differences workforce participation outcomes
- Limitations and future directions
  - Assessment context
  - Personality inventory
  - No data on job-search behaviors, the number of job interviews, and job offers
  - Employment outcomes (e.g., need satisfaction, overqualification)

Thank you!

Discussion and questions

Dan Asfar
Marise Born
Janneke Oostrom
Remko van den Berg

Hypotheses and research questions

- One hypothesis for each individual-difference factor
- RQ1: Which individual-difference factors are the strongest predictors of refugees' workforce participation?
- RQ2: Which individual-difference factors are the strongest predictors of refugees' highest hourly wage?
- Exploratory Analyses: moderating effect of nationality, sex, and age