Analysis Report

This report is structured as follows.

Contents

Descriptive Statistics

The tables below show descriptive statistics of the variables under study. Perceived Agency was reorganized and calculated based on items Competent, Intelligent and Skilled only. The resulting scale was reliable (λ = .864). Social Evaluation was also constructed based on all the six items and reliability was acceptable (λ = .787).

Descriptive Statistics

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Willingness to Help	219	3.517	.661	-.468	.164	.531	.327
Leadership Potential	219	4.496	.839	-.061	.164	-.047	.327
Perceived Communality	219	4.942	.918	.034	.164	-.337	.327
Respondents likelihood of hiring employee	219	4.910	1.057	-.461	.164	.368	.327
Perceived Agency	219	5.266	.869	-.039	.164	.050	.327
Social Evaluation	219	5.104	.710	.103	.164	-.037	.327
Valid N (listwise)	219						

Skewness and Kurtosis remained between ±1.000 which indicate normal distributions. The following tables show mean scores disaggregated by linguistic accent.

	Linguistic Accent			
	Eastern-European		Dutch	
	Mean	Standard Deviation	Mean	Standard Deviation
Willingness to Help	3.535	.695	3.501	.632
Leadership Potential	4.333	.897	4.641	.758
Perceived Communality	4.968	.907	4.920	.931
Perceived Agency	5.172	.924	5.351	.813
Respondents likelihood of hiring employee	4.786	1.081	5.026	1.025

Independent Samples T-test

To check whether or not the differences presented above are statistically significant, T-tests were performed. Levene's tests indicated the intergroup variances are homogeneous for all scales ($p > 0.05$).

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Willingness to Help	Equal variances assumed	.400	.528	.381	217	.704	.034	.089
	Equal variances not assumed			.378	207.486	.706	.034	.090
Leadership Potential	Equal variances assumed	1.616	.205	-2.756	217	.006	-.308	.111
	Equal variances not assumed			-2.729	200.751	.007	-.308	.113
Perceived Communality	Equal variances assumed	.996	.319	.386	217	.700	.048	.124
	Equal variances not assumed			.387	215.132	.699	.048	.124
Respondents likelihood of hiring employee	Equal variances assumed	3.406	.066	-1.681	217	.094	-.239	.142
	Equal variances not assumed			-1.676	210.736	.095	-.239	.143
Perceived Agency	Equal variances assumed	.605	.438	-1.526	217	.129	-.179	.117
	Equal variances not assumed			-1.514	204.630	.132	-.179	.118
Social Evaluation	Equal variances assumed	.470	.494	-.680	217	.497	-.065	.096
	Equal variances not assumed			-.675	204.630	.500	-.065	.096

Linguistic accent has a significant effect on Leadership Potential (t = -2.756, p = 0.006). Leadership Potential is significantly higher on the Dutch accent group (M = 4.641) compared to the Eastern-European group (M = 4.333). At the 10% significance level, Likelihood to Hire is also affected by accent (t = -1.681, p = 0.094). It is also higher on the Dutch accent group (M = 5.026) compared to the Eastern European (M = 4.786).

Regression and Moderation Analyses

The first model evaluated the effects of Willingness to Help and Perceived Agency on Leadership Potential (Model 1). Model 1 showed good fit ($F = 42.852$, $p < 0.001$, $R^2 = 0.284$). Accent was added on Model 2, with Eastern-European being the reference group. Model 2 also showed good fit ($F = 30.950$, $p < 0.001$, $R^2 = 0.302$). Finally, interaction terms were inserted in the regression equation to evaluate moderation (Table below). This model was also significant ($F = 19.047$, $p < 0.001$, $R^2 = 0.309$). There was no multicollinearity in the model since Variance Inflation Factors for all variables were below 10.000.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	1.564	.373		4.194	.000	.829	2.300
	Willingness to Help	.079	.073	.062	1.069	.286	-.066	.223
	Perceived Agency	.504	.056	.523	9.024	.000	.394	.614
2	(Constant)	1.720	.375		4.583	.000	.980	2.459
	Willingness to Help	.085	.073	.067	1.166	.245	-.059	.228
	Perceived Agency	.491	.056	.508	8.816	.000	.381	.600
	Eastern-European Accent	-.223	.096	-.133	-2.324	.021	-.413	-.034
3	(Constant)	1.230	.582		2.115	.036	.084	2.376
	Willingness to Help	.197	.104	.155	1.893	.060	-.008	.403
	Perceived Agency	.509	.081	.527	6.277	.000	.349	.668
	Eastern-European Accent	.603	.753	.360	.801	.424	-.881	2.086
	Perceived Agency X Eastern-European Accent	-.010	.113	-.033	-.093	.926	-.232	.211
	Willingness to Help X Eastern-European Accent	-.219	.147	-.477	-1.486	.139	-.508	.071

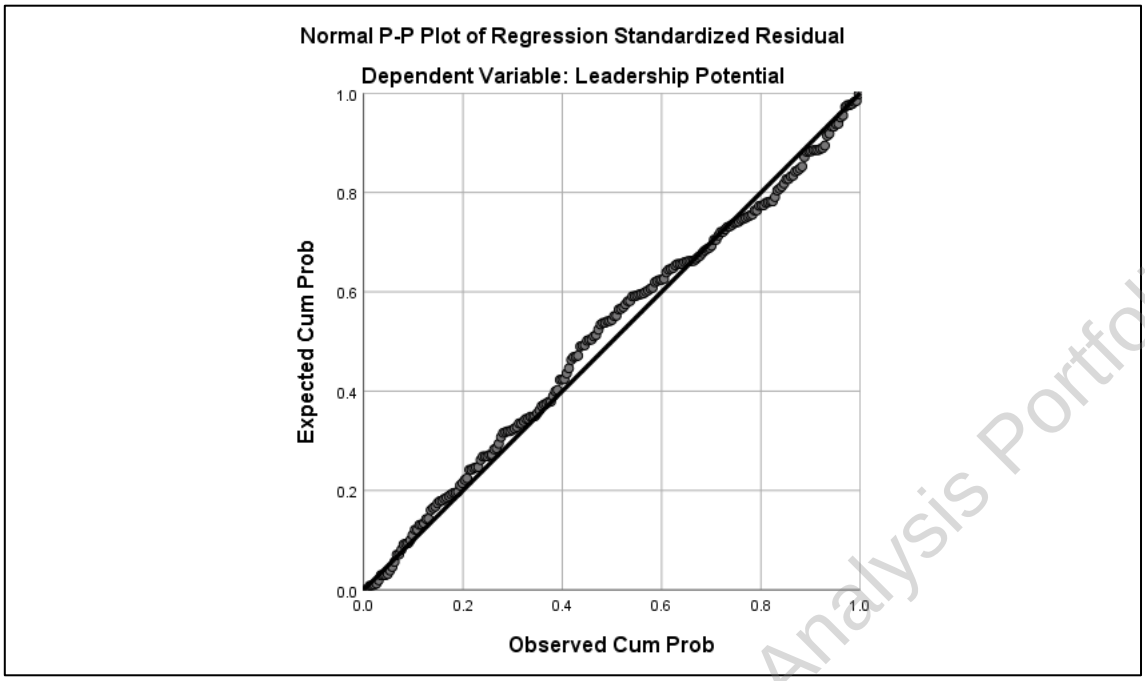
a. Dependent Variable: Leadership Potential

Perceived Agency has a positive effect on Leadership Potential ($\beta = 0.523$, $p < 0.001$) and the effect is also present when controlled for Linguistic Accent on model 2 ($\beta = 0.508$, $p < 0.001$). Willingness to Help (WTH) does not have a significant effect on Leadership Potential (LP) ($p > 0.05$). The Eastern-European accent shows a negative effect on LP ($\beta = -0.223$, $p = 0.021$). Being at the Eastern European group is expected to decrease the level of LP.

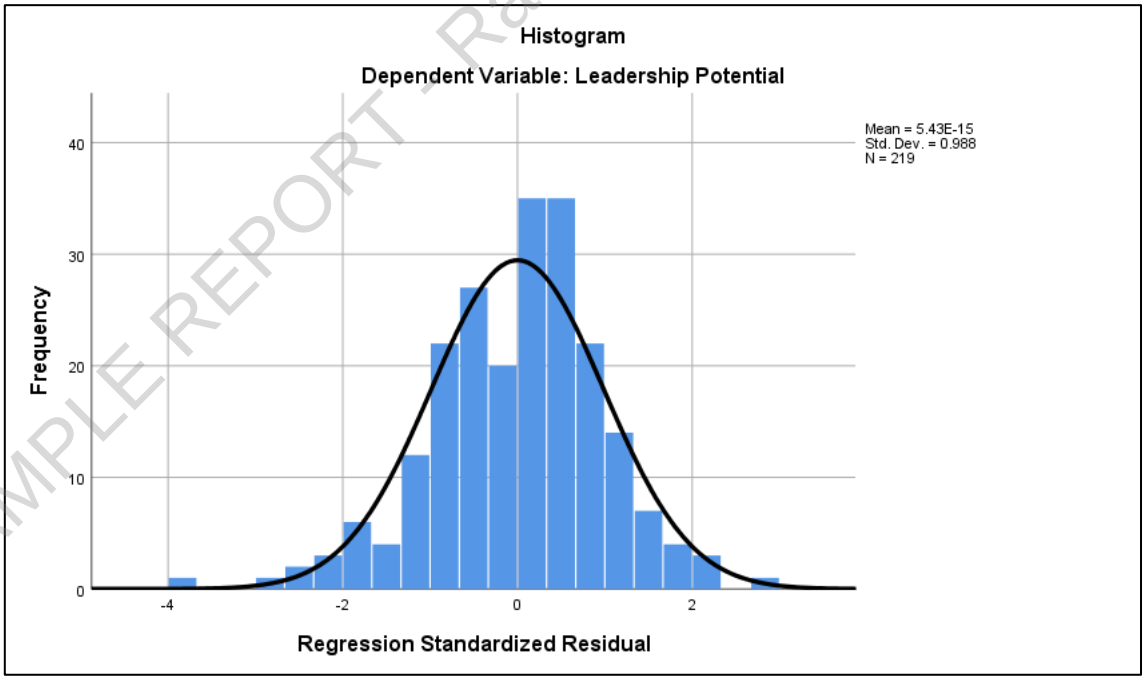
Model 3 indicated that no moderation is present ($p > 0.05$). The effect of Perceived Agency on LP does not depend on Linguistic Accent and is not related to accent whatsoever.

Lastly, violations of the assumptions of normality, linearity and homoscedasticity of residuals (errors) were examined for the regression model. The next figure shows a P-P plot, which is used to assess

the normality of residuals. The observations should follow a diagonal pattern to suggest normality of residuals (Tabachnick & Fidell, 2014).

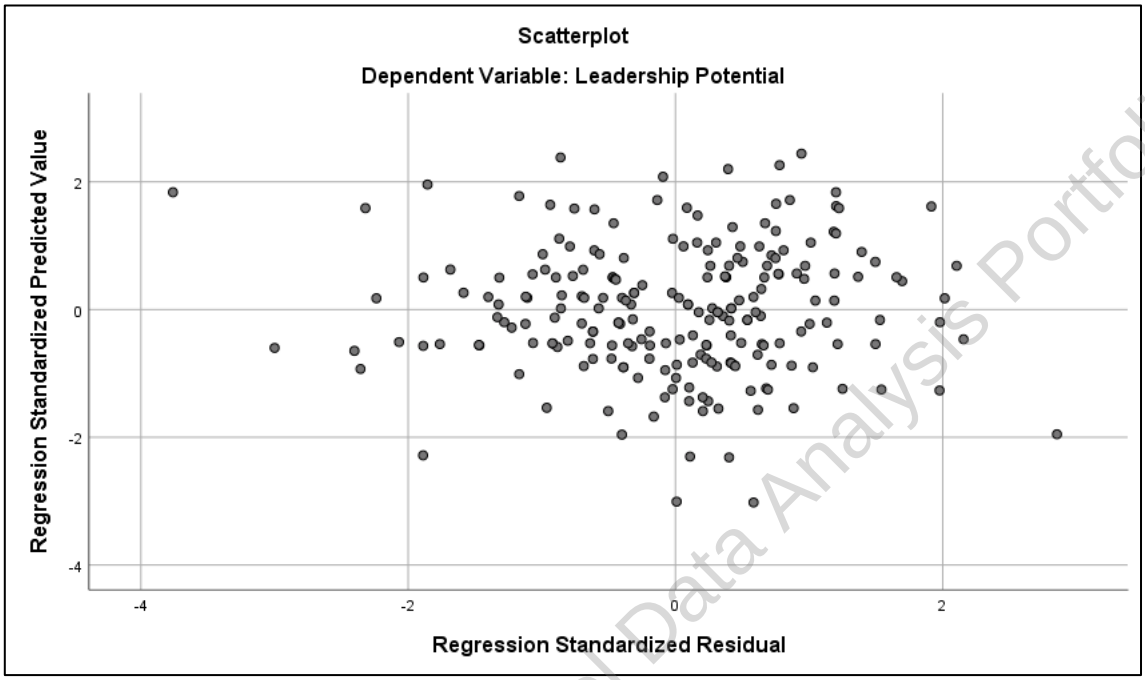


The graph suggests that no substantial violations of normality are present. The histogram below confirms a normal distribution of residuals.



The next figure shows a scatterplot of standardized residuals and standardized predicted values of the dependent variable. If points are well distributed along the X and Y axes, this would suggest

homoscedasticity and linearity. Nonlinearity is indicated when most of the residuals are above the zero line on the plot at some predicted values and below the zero line at other predicted values. Lack of homoscedasticity is indicated if values are more dispersed for a given predicted values than at other values (Tabachnick and Fidell, 2014).



The graph also suggests no violation of assumptions.

The table below shows the results for a second analysis, which replicates the analysis presented above but this time for Likelihood to Hire (LTH).

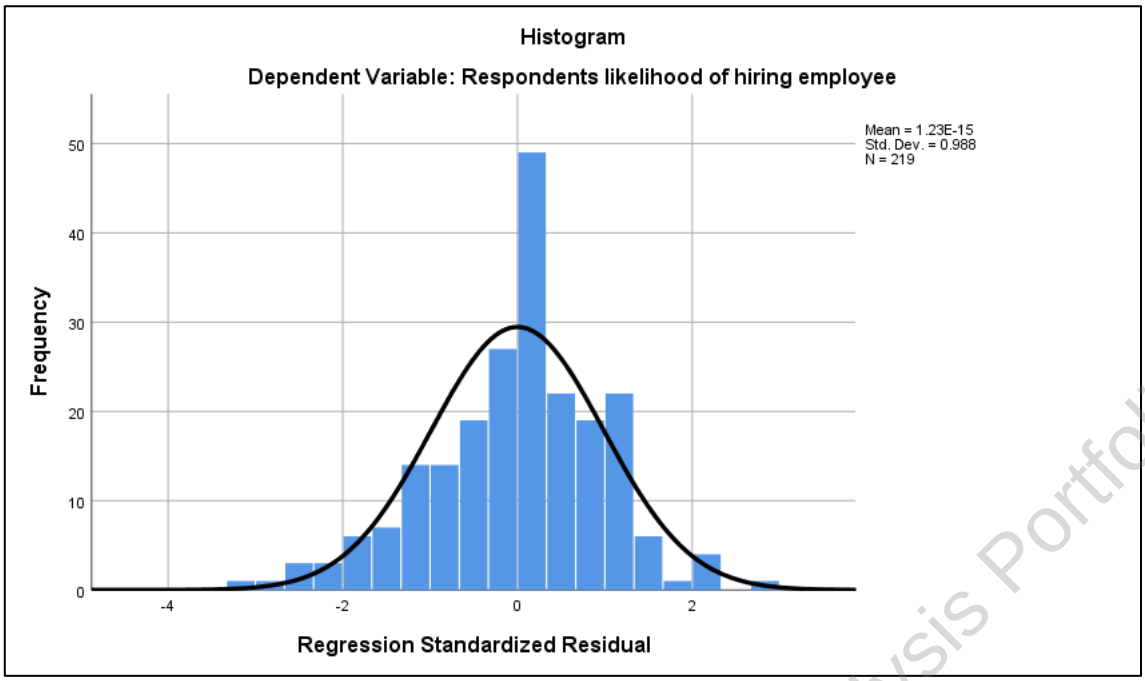
Coefficients[a]

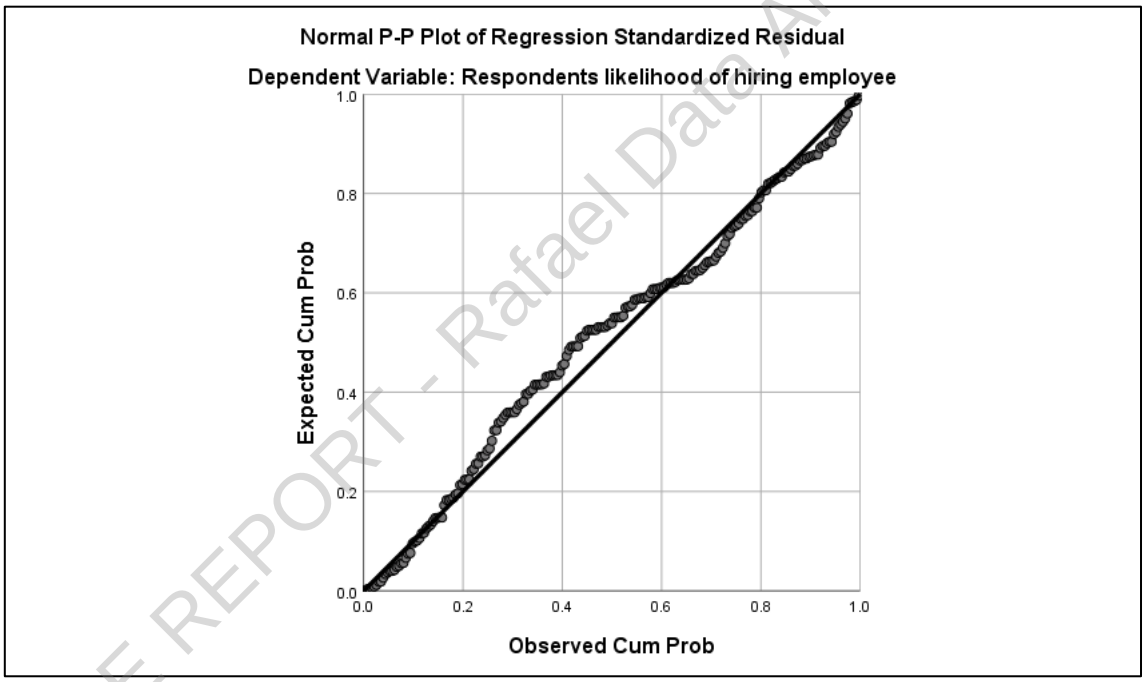
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.979	.485		2.019	.045	.023	1.935
	Willingness to Help	.516	.096	.323	5.401	.000	.328	.704
	Perceived Agency	.403	.073	.331	5.541	.000	.259	.546
2	(Constant)	1.109	.491		2.257	.025	.141	2.078
	Willingness to Help	.521	.095	.326	5.468	.000	.333	.709
	Perceived Agency	.391	.073	.322	5.367	.000	.247	.535
	Eastern-European Accent	-.187	.126	-.089	-1.487	.138	-.435	.061
3	(Constant)	.641	.763		.840	.402	-.864	2.145
	Willingness to Help	.632	.137	.396	4.626	.000	.363	.902
	Perceived Agency	.406	.106	.334	3.816	.000	.196	.615
	Eastern-European Accent	.604	.988	.286	.611	.542	-1.343	2.551
	Perceived Agency X Eastern-European Accent	-.004	.148	-.011	-.029	.977	-.295	.287
	Willingness to Help X Eastern-European Accent	-.218	.193	-.377	-1.128	.261	-.598	.163

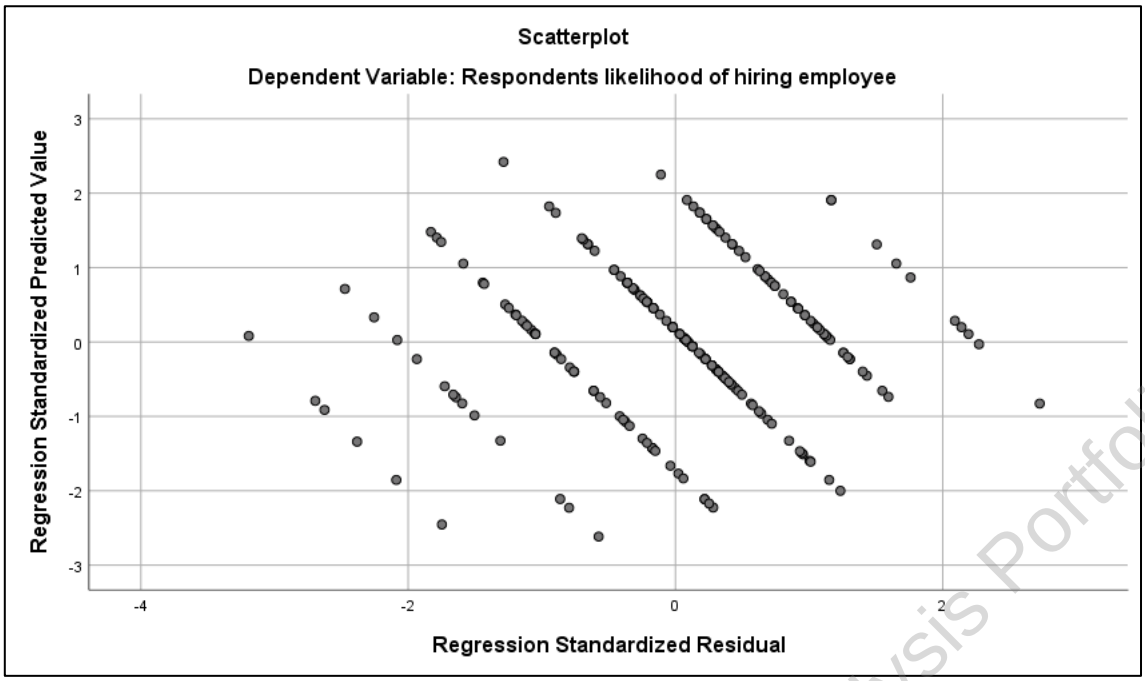
a. Dependent Variable: Respondent's likelihood of hiring employee

Model 1 was significant ($F = 33.606$, $p < 0.001$, $R^2 = 0.237$). WTH ($\beta = 0.323$, $p < 0.001$) and PA ($\beta = 0.331$, $p < 0.001$) showed positive significant effects on LTH. Model 2 was significant ($F = 23.267$, $p < 0.001$, $R^2 = 0.235$) but there was no effect of Accent on LTH. Model 3 was also significant ($F = 14.173$, $p < 0.001$, $R^2 = 0.232$). Moderation was not present on this model either ($p > 0.05$), indicating that all effects are unrelated to linguistic accent.

The figures below indicate no violation of regression assumptions and the models can be considered valid.







Correlation Analysis

The table below shows Pearson's correlation coefficients for the Eastern-European group, along with sample sizes (N) and p-values (Sig.). WTH is not correlated to LP (r = 0.112, p = 0.260). LP is not associated with Communality (r = 0.073, p = 0.462). All other pair of variables are positively or negatively correlated (p < 0.05).

Correlations

		Willingness to Help	Leadership Potential	Perceived Communality	Respondents likelihood of hiring employee	Perceived Agency	Social Evaluation
Willingness to Help	Pearson Correlation	1	.112	.663**	.353**	.251*	.550**
	Sig. (2-tailed)		.260	.000	.000	.011	.000
	N	103	103	103	103	103	103
Leadership Potential	Pearson Correlation	.112	1	.073	.523**	.509**	.354**
	Sig. (2-tailed)	.260		.462	.000	.000	.000
	N	103	103	103	103	103	103
Perceived Communality	Pearson Correlation	.663**	.073	1	.263**	.371**	.824**
	Sig. (2-tailed)	.000	.462		.007	.000	.000
	N	103	103	103	103	103	103
Respondents likelihood of hiring employee	Pearson Correlation	.353**	.523**	.263**	1	.410**	.407**
	Sig. (2-tailed)	.000	.000	.007		.000	.000
	N	103	103	103	103	103	103
Perceived Agency	Pearson Correlation	.251*	.509**	.371**	.410**	1	.831**

	Sig. (2-tailed)	.011	.000	.000	.000		.000
	N	103	103	103	103	103	103
Social Evaluation	Pearson Correlation	.550**	.354**	.824**	.407**	.831**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	103	103	103	103	103	103

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Table below shows the same correlation matrix for the Dutch group. A similar pattern of association is observed. LP is not correlated with WTH either (r = 0.142, p = 0.128), but Perceived Communality is positively associated with LP (r = 0.191, p = 0.040). Perceived Agency is not correlated with WTH for the Dutch group (r = -0.41, p = 0.661) in contrast to the EE group.

Correlations

		Willingness to Help	Leadership Potential	Perceived Communality	Respondents likelihood of hiring employee	Perceived Agency	Social Evaluation
Willingness to Help	Pearson Correlation	1	.142	.510**	.377**	-.041	.331**
	Sig. (2-tailed)		.128	.000	.000	.661	.000
	N	116	116	116	116	116	116
Leadership Potential	Pearson Correlation	.142	1	.191*	.445**	.538**	.462**
	Sig. (2-tailed)	.128		.040	.000	.000	.000
	N	116	116	116	116	116	116
Perceived Communality	Pearson Correlation	.510**	.191*	1	.400**	.165	.799**
	Sig. (2-tailed)	.000	.040		.000	.076	.000
	N	116	116	116	116	116	116
Respondents likelihood of hiring employee	Pearson Correlation	.377**	.445**	.400**	1	.306**	.466**
	Sig. (2-tailed)	.000	.000	.000		.001	.000
	N	116	116	116	116	116	116
Perceived Agency	Pearson Correlation	-.041	.538**	.165	.306**	1	.725**
	Sig. (2-tailed)	.661	.000	.076	.001		.000
	N	116	116	116	116	116	116
Social Evaluation	Pearson Correlation	.331**	.462**	.799**	.466**	.725**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	116	116	116	116	116	116

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

The correlation matrix below shows the associations observed for all groups altogether.

Correlations

		Willingness to Help	Leadership Potential	Perceived Communality	Respondents likelihood of hiring employee	Perceived Agency	Social Evaluation
Willingness to Help	Pearson Correlation	1	.119	.584**	.359**	.109	.444**
	Sig. (2-tailed)		.079	.000	.000	.107	.000
	N	219	219	219	219	219	219
Leadership Potential	Pearson Correlation	.119	1	.124	.494**	.529**	.404**
	Sig. (2-tailed)	.079		.067	.000	.000	.000
	N	219	219	219	219	219	219
Perceived Communality	Pearson Correlation	.584**	.124	1	.329**	.262**	.807**
	Sig. (2-tailed)	.000	.067		.000	.000	.000
	N	219	219	219	219	219	219
Respondents likelihood of hiring employee	Pearson Correlation	.359**	.494**	.329**	1	.366**	.437**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	219	219	219	219	219	219
Perceived Agency	Pearson Correlation	.109	.529**	.262**	.366**	1	.782**
	Sig. (2-tailed)	.107	.000	.000	.000		.000
	N	219	219	219	219	219	219
Social Evaluation	Pearson Correlation	.444**	.404**	.807**	.437**	.782**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	219	219	219	219	219	219

**. Correlation is significant at the 0.01 level (2-tailed).

References

Tabachnick, B. G., & Fidell, L. S. (2014). *Using multivariate statistics / Barbara G. Tabachnick, Linda S. Fidell.*