

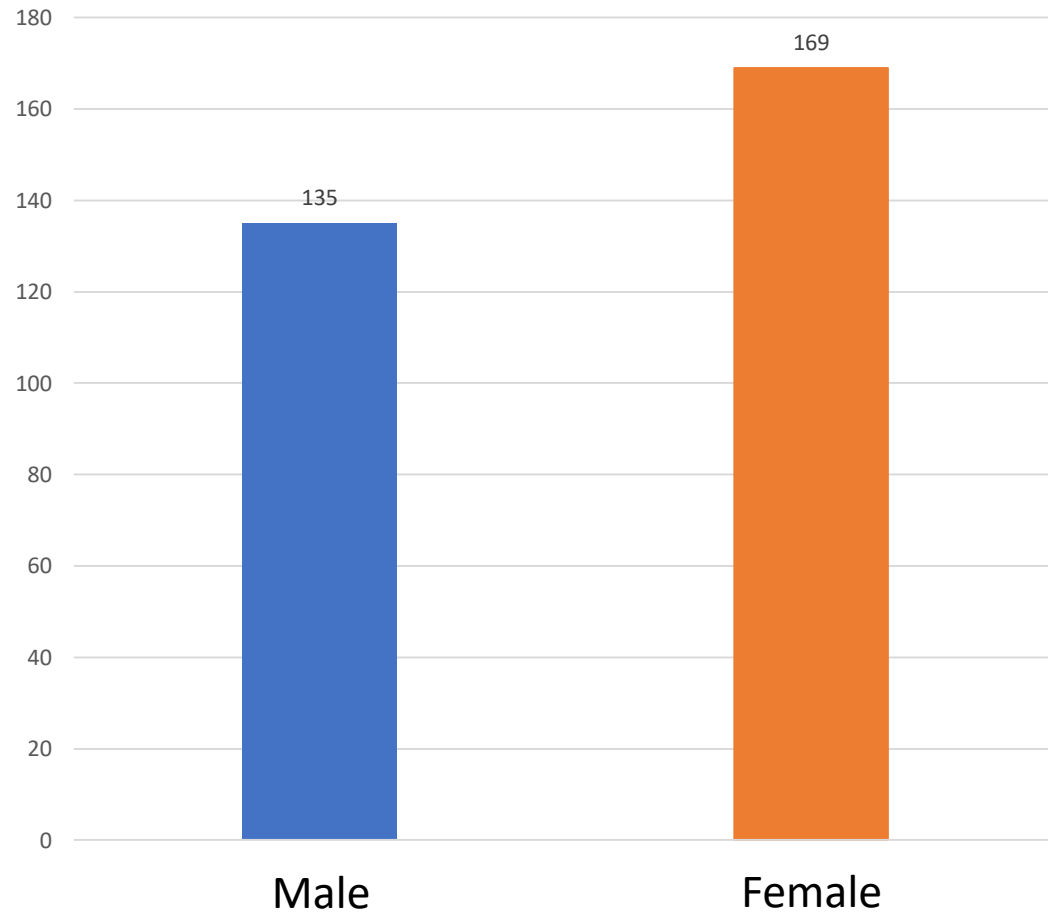
Lumodi

Arabiac-, Russian- and Somali-speaking groups

Please notice:

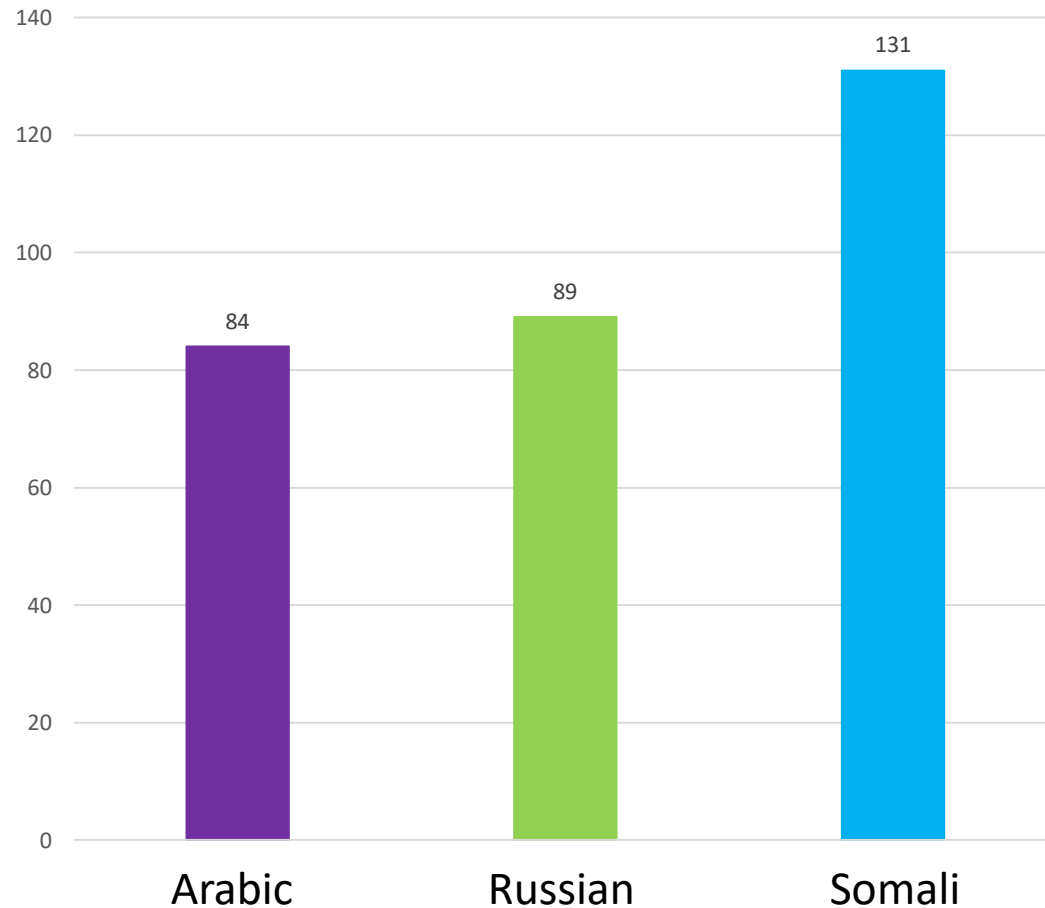
- *These results are only about those whose first language was either somali, arabic or russian (+ ukrainian). Thus the total population is **304** people.*

Gender



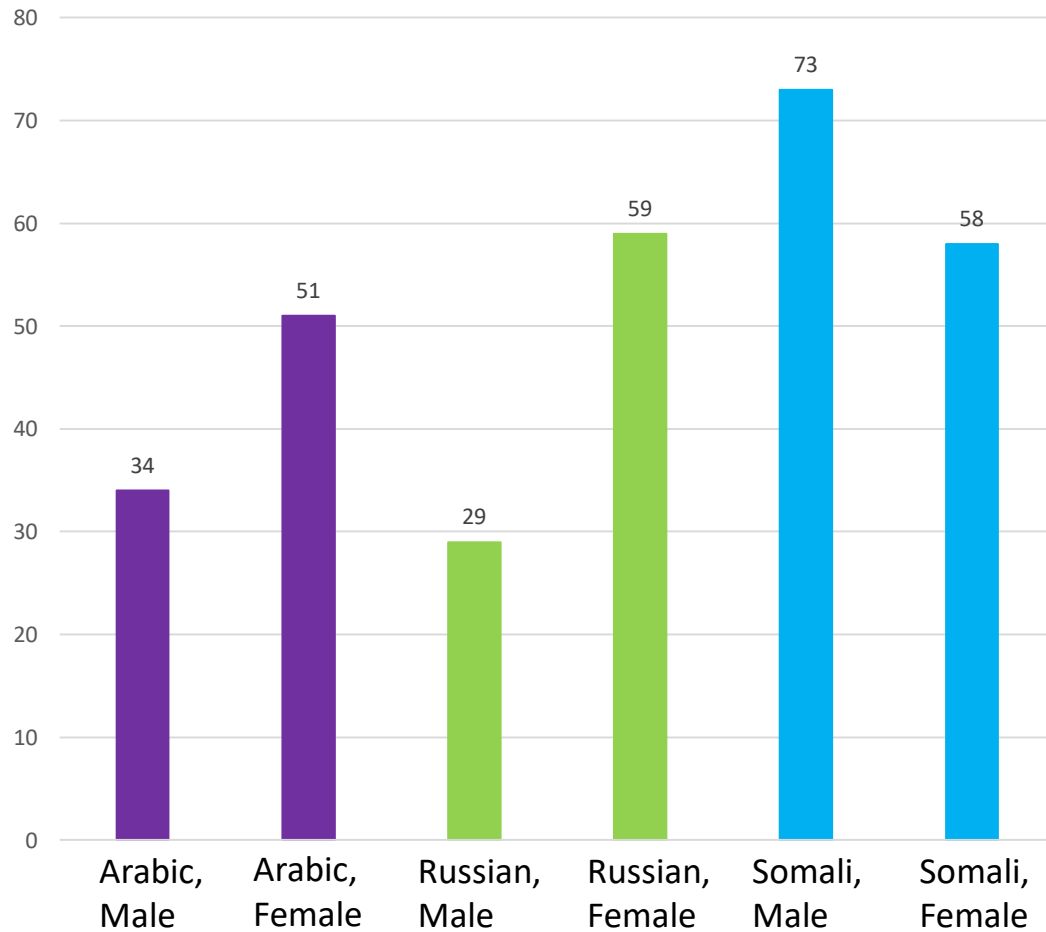
- Male: 135 (44,4 %)
- Female: 169 (55,6 %)

First language



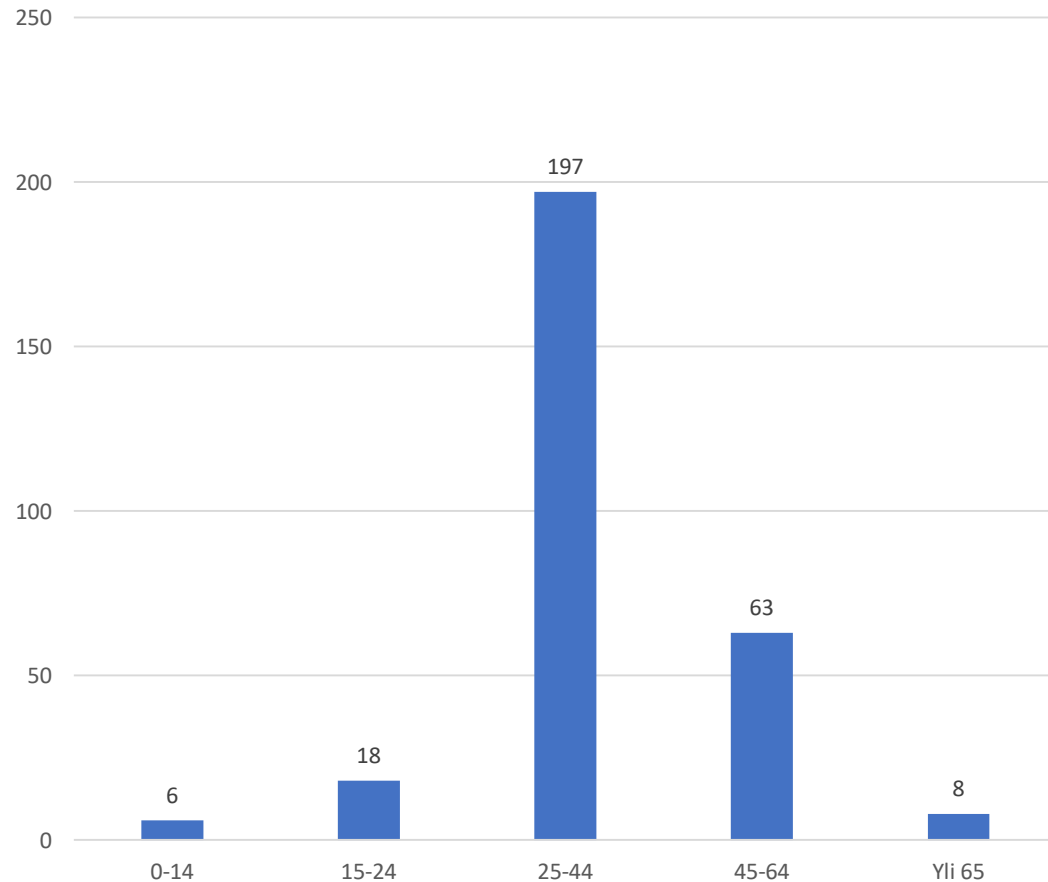
- Arabic: 84 (27,6 %)
- Russian: 89 (29,3 %)
- Somali: 131 (43,1 %)

First language and gender



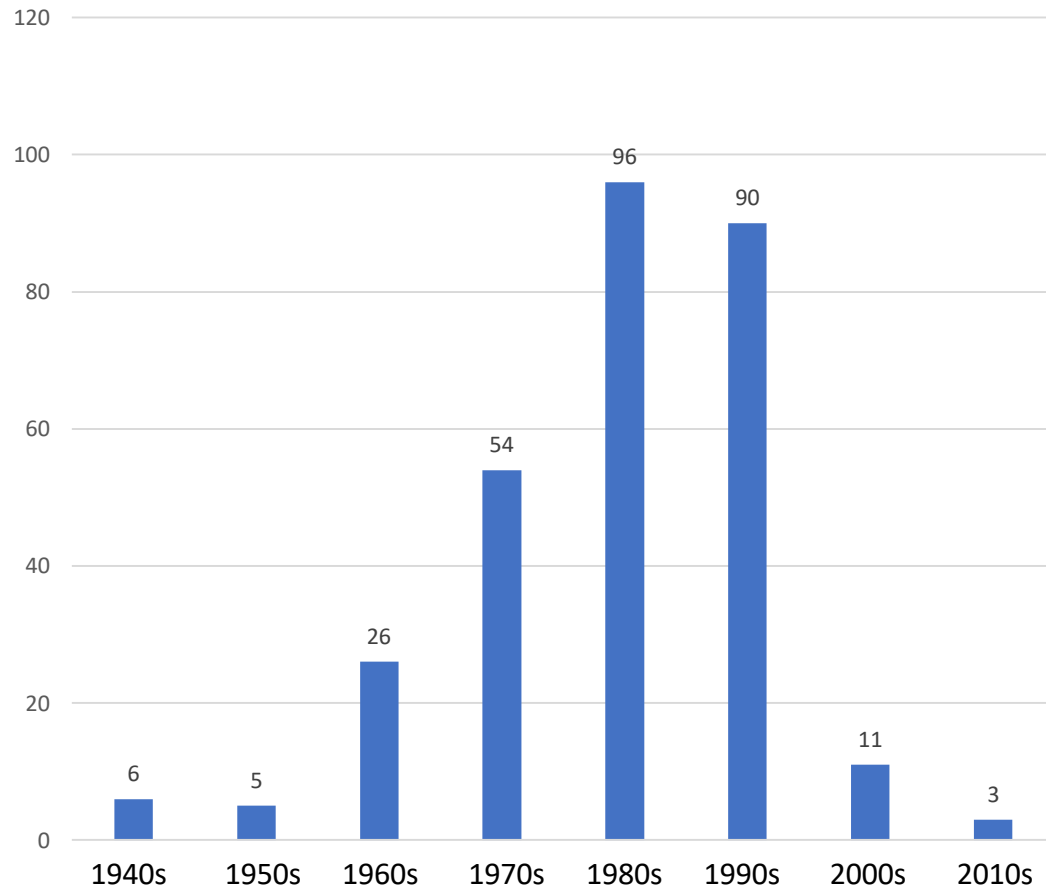
- Arabic
 - Male: 34 (11,2 %)
 - Female: 51 (16,8 %)
- Russian
 - Male: 29 (9,5 %)
 - Female: 59 (19,4 %)
- Somali
 - Male: 73 (24,0 %)
 - Female: 58 (19,1 %)

Age distribution



- 0-14: 6 (2,1 %)
- 15-24: 18 (6,2 %)
- 25-44: 197 (67,5 %)
- 45-64: 63 (21,6 %)
- Over 65: 8 (2,7 %)
- Missing: 12

Decade of birth



- 1940s: 6 (2,1 %)
- 1950s: 5 (1,7 %)
- 1960s: 26 (8,9 %)
- 1970s: 54 (18,6 %)
- 1980s: 96 (33,0 %)
- 1990s: 90 (30,9 %)
- 2000s: 11 (3,8 %)
- 2010s: 3 (1,0 %)
- Missing: 13

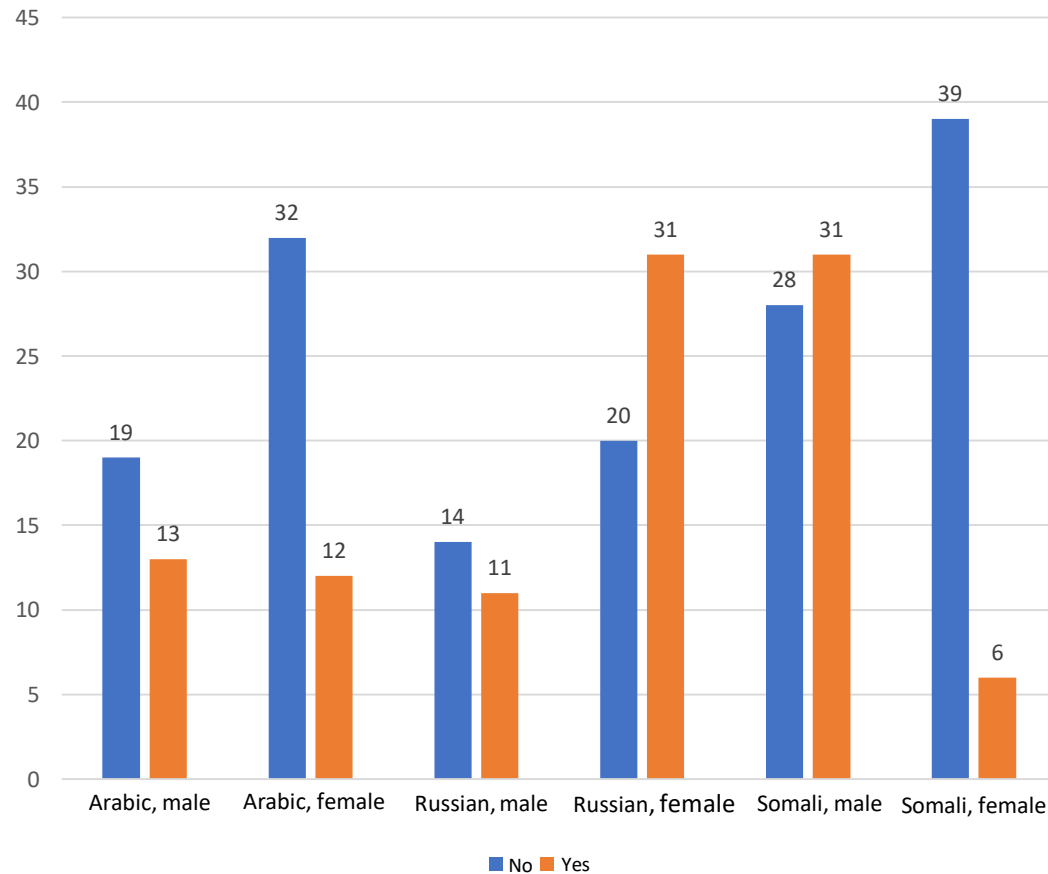
About the chi tests

- *Here the chi test aims to answer the question "Can we assume the groups are similar?" and if the test is statistically significant ($p < .05$) we can say that the groups are different from each other. However, the test does not say how the groups are different. Here I have looked at the diagrams to say word about the groups and what might be different between them, if possible. Also the group size might be too small.*

With whom you go out in the
natural environment?

Note! Bonferroni-correction: $0,05 / 6 = 0,0083$

Alone



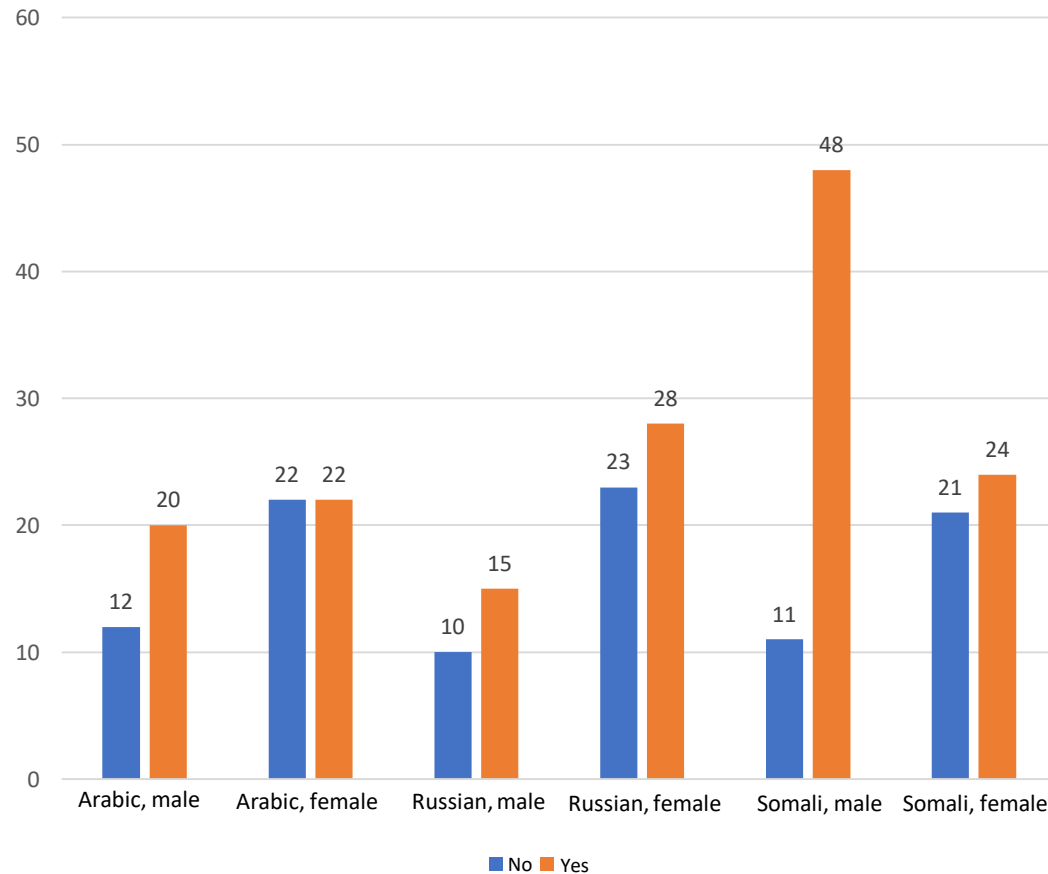
- There is a difference between the groups ($p < .001$), at least Arabic and Somali females do not go to nature alone as often as other.

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	29,332 ^a	5	<,001
Likelihood Ratio	31,459	5	<,001
Linear-by-Linear Association	,254	1	,614
N of Valid Cases	256		

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 10,16.

With friends



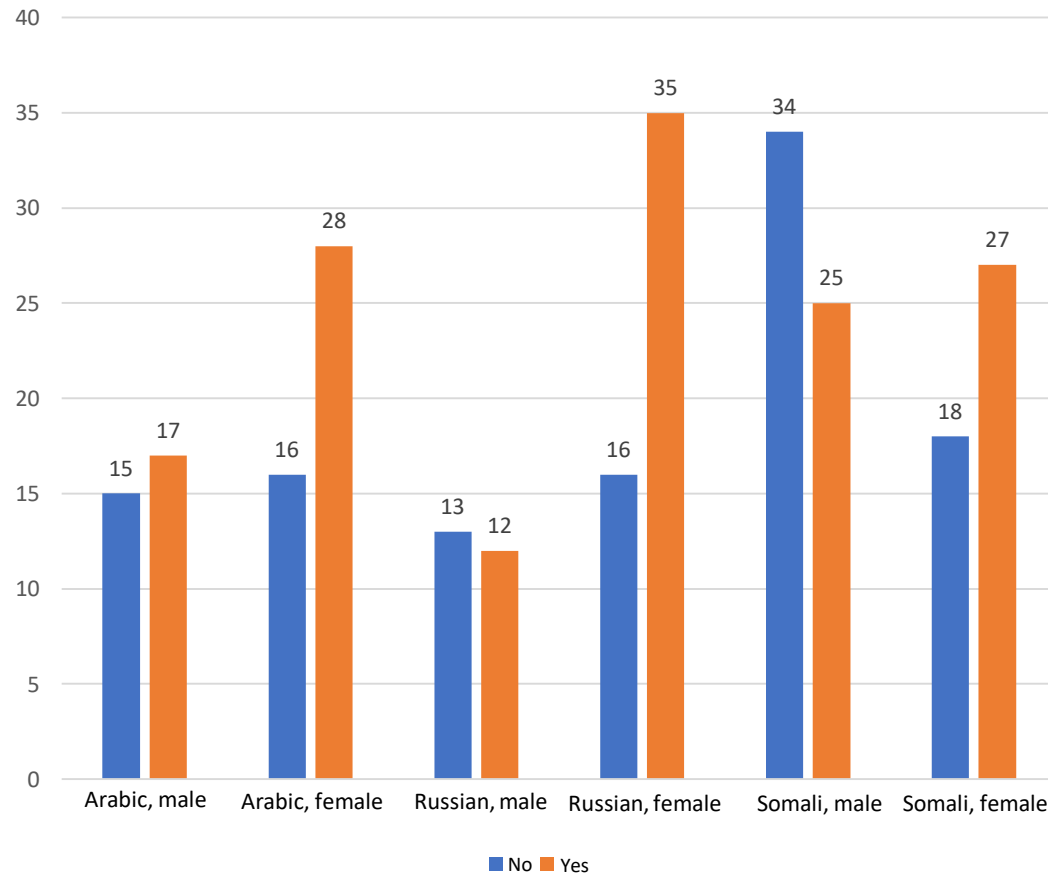
- No difference between groups after Bonferroni correction ($p = .013$)

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	14,497 ^a	5	,013
Likelihood Ratio	15,495	5	,008
Linear-by-Linear Association	1,120	1	,290
N of Valid Cases	256		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 9,67.

With children



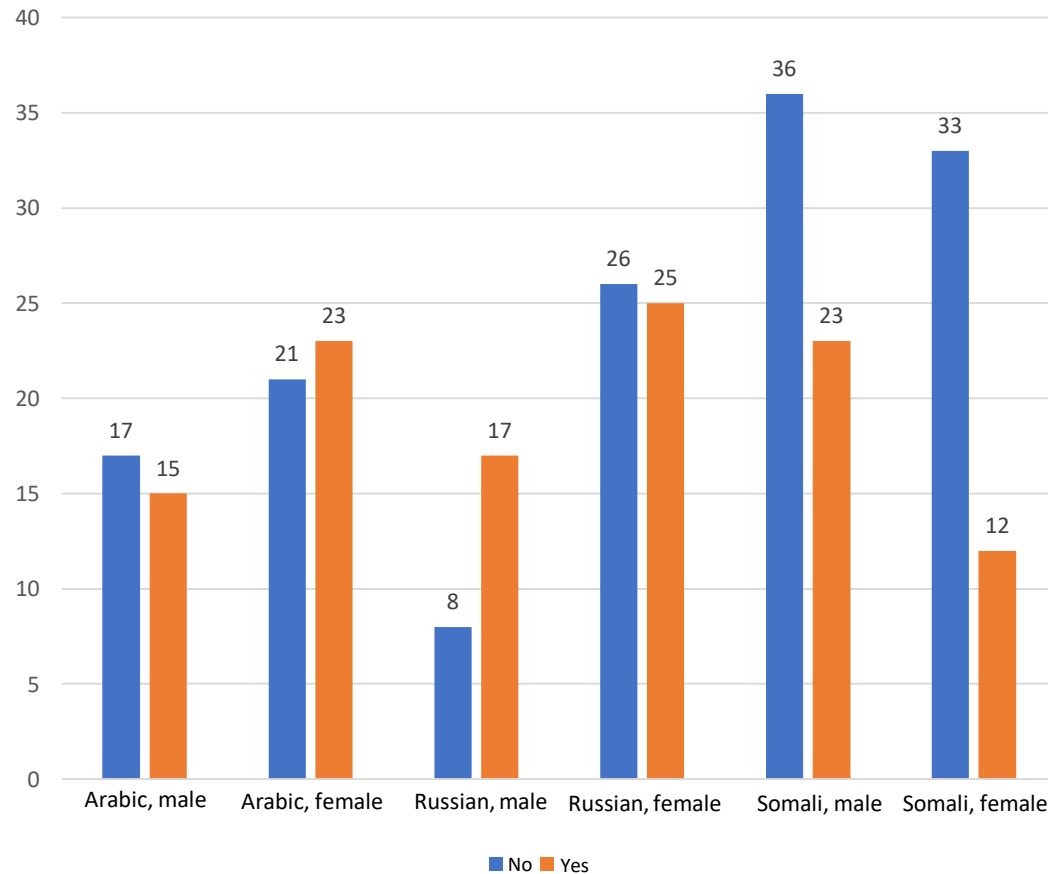
- There is no statistically significant difference between the groups ($p = .080$)

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	9,843 ^a	5	,080
Likelihood Ratio	9,912	5	,078
Linear-by-Linear Association	,221	1	,638
N of Valid Cases	256		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 10,94.

With spouse



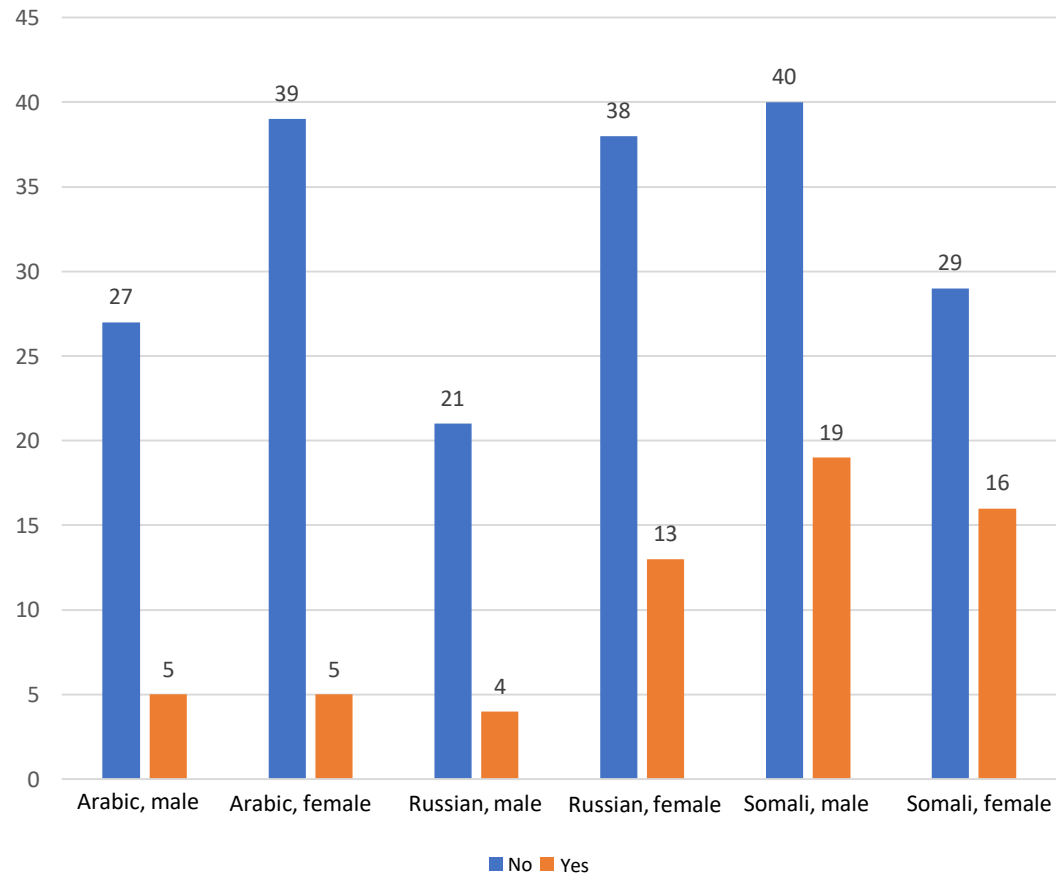
- There is no statistically significant difference between groups after Bonferroni correction ($p = .018$)

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	13,640 ^a	5	,018
Likelihood Ratio	13,983	5	,016
Linear-by-Linear Association	6,537	1	,011
N of Valid Cases	256		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 11,23.

With other familymembers



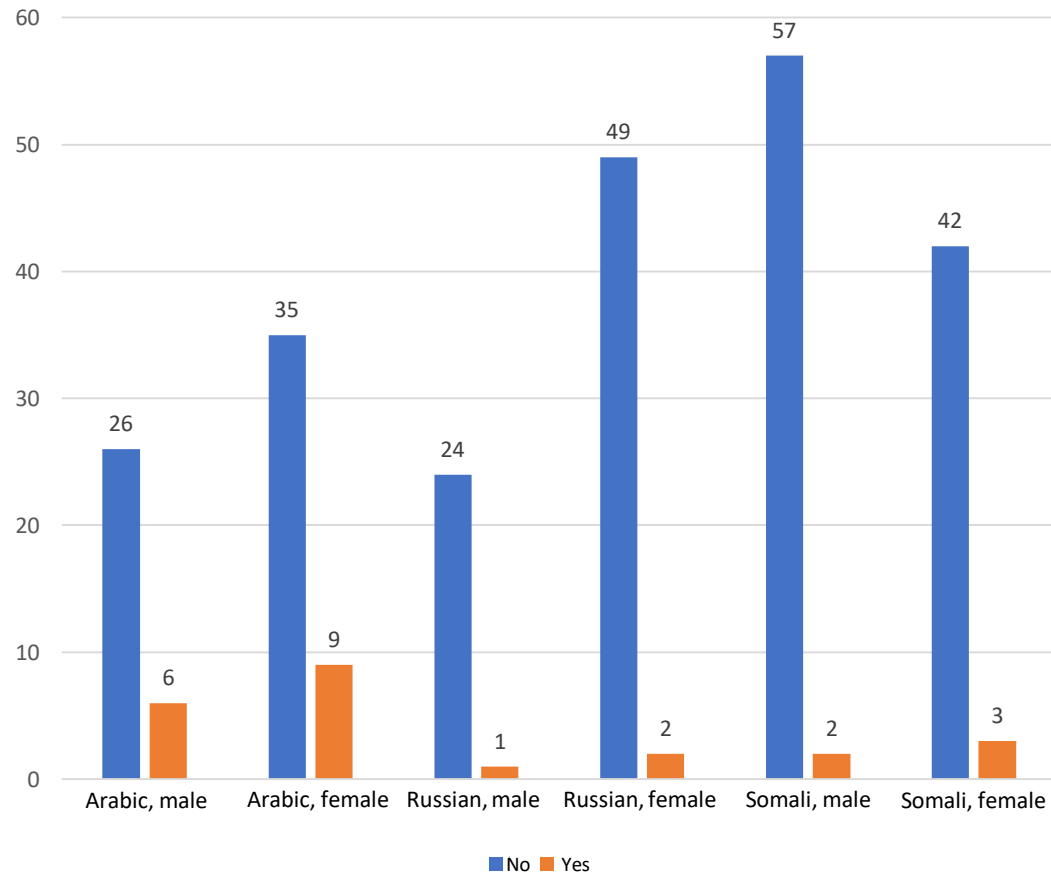
- There is no difference between groups after Bonferroni correction ($p = .044$)

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	11,415 ^a	5	,044
Likelihood Ratio	11,935	5	,036
Linear-by-Linear Association	10,145	1	,001
N of Valid Cases	256		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6,05.

With travel group or similar events



- There is a difference between the groups ($p = .008$), according to which Arabic speakers would be more in nature with travel groups (although the p-value is very close to the Bonferroni correction(0,0083))

Chi-Square Tests

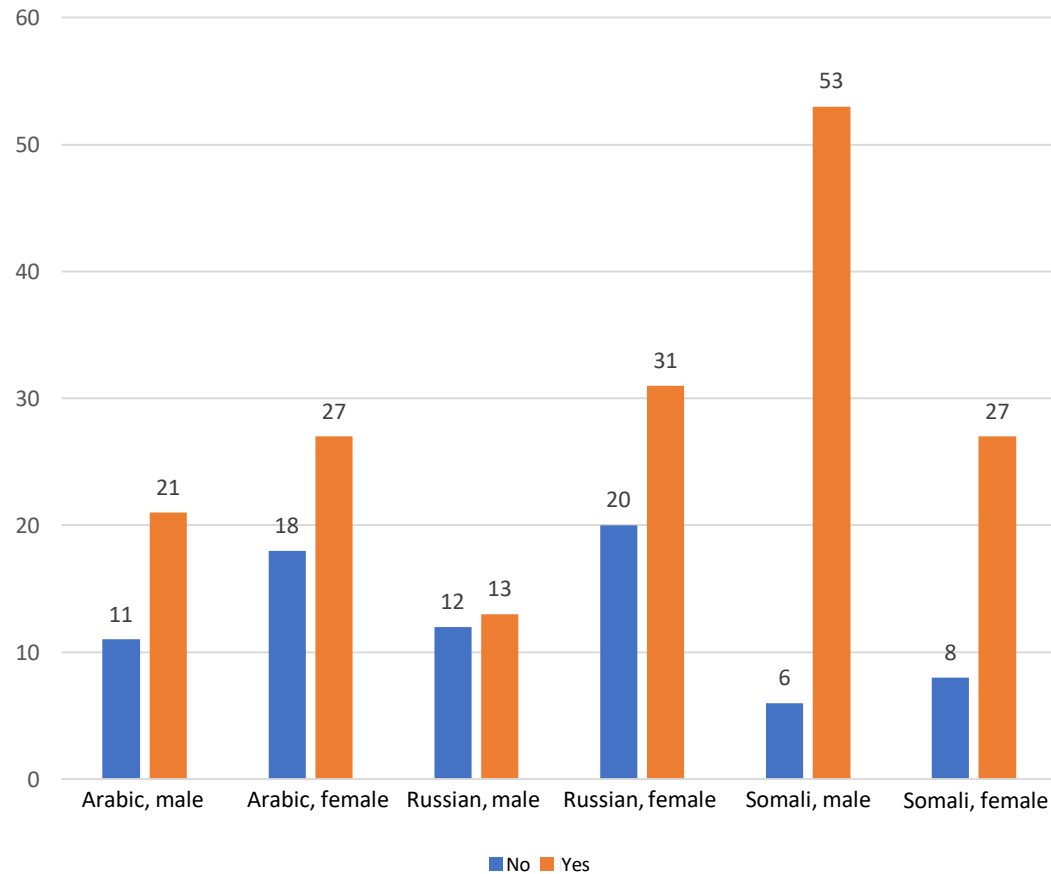
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	15,723 ^a	5	,008
Likelihood Ratio	14,460	5	,013
Linear-by-Linear Association	9,511	1	,002
N of Valid Cases	256		

a. 5 cells (41,7%) have expected count less than 5. The minimum expected count is 2,25.

Where do you get the
information about nature places
of Turku?

Note! Bonferroni-correction $0,05 / 6 = 0,0083$

Friends



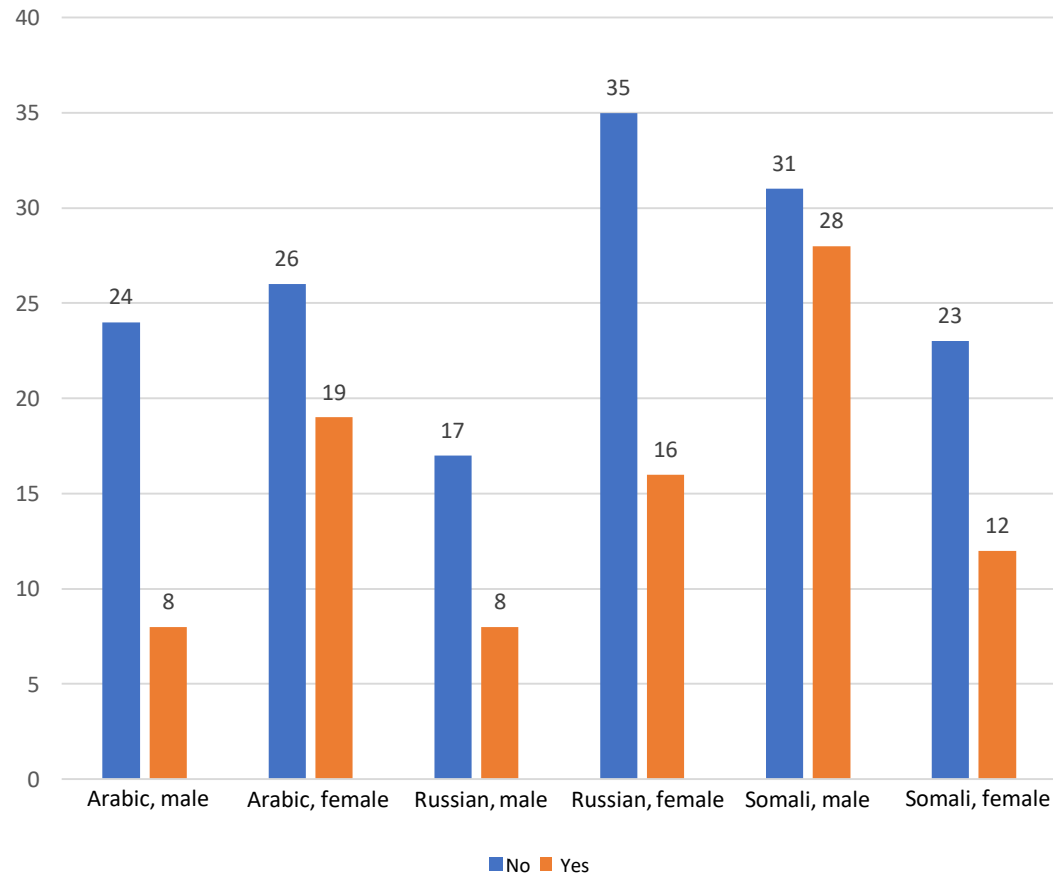
- There is a difference between the groups ($p = .001$), especially Somali-speaking male seem to get information from their friends.

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	20,099 ^a	5	,001
Likelihood Ratio	22,169	5	<,001
Linear-by-Linear Association	8,240	1	,004
N of Valid Cases	247		

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 7,59.

Family members



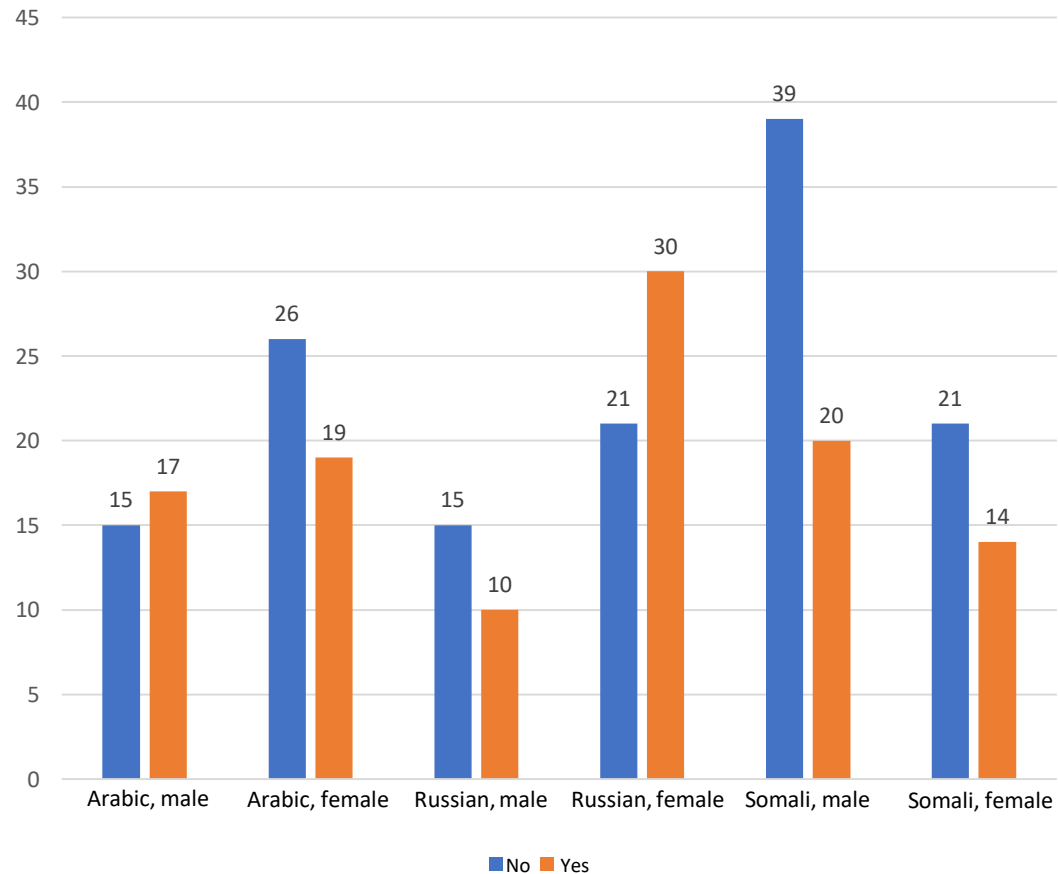
- There is no difference between the groups ($p = .273$), no group receives especially much or little information from their family members.

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	6,352 ^a	5	,273
Likelihood Ratio	6,392	5	,270
Linear-by-Linear Association	,960	1	,327
N of Valid Cases	247		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 9,21.

Social media



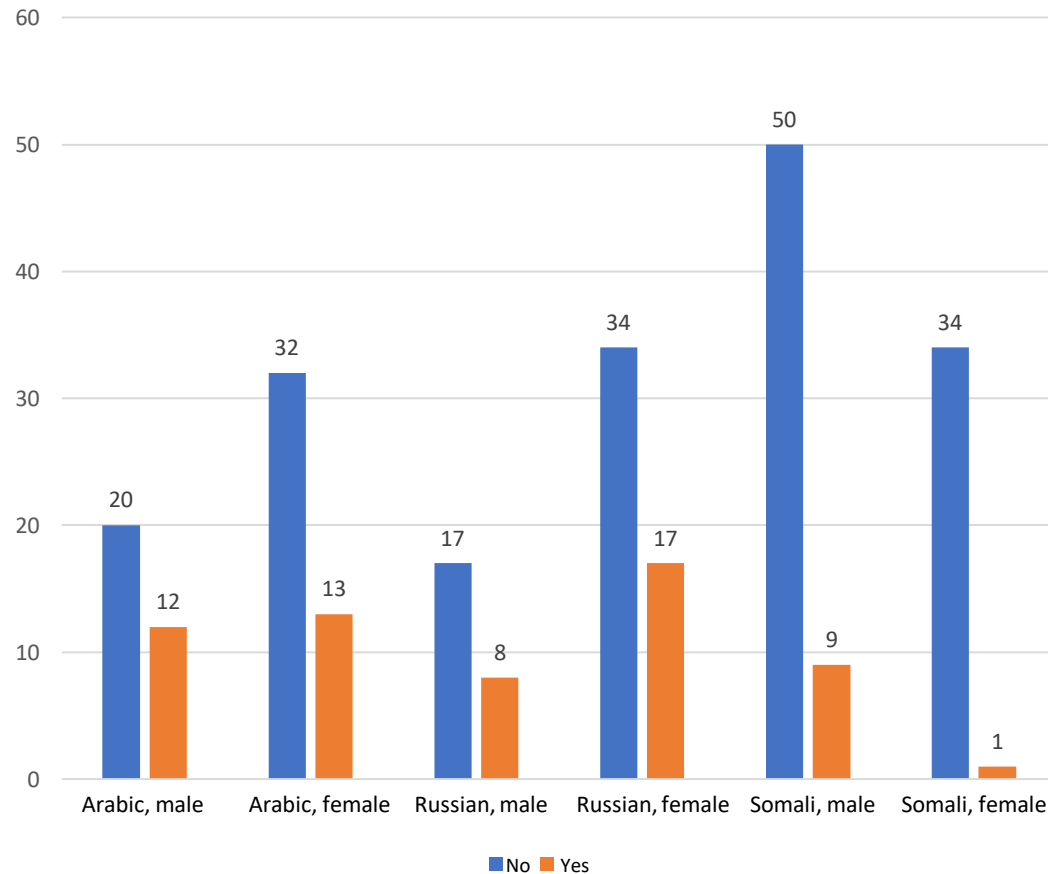
- There is no difference between the groups ($p = .132$), no group receives especially much or little information from social media.

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	8,471 ^a	5	,132
Likelihood Ratio	8,503	5	,131
Linear-by-Linear Association	1,272	1	,259
N of Valid Cases	247		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 11,13.

City of Turku- webpages



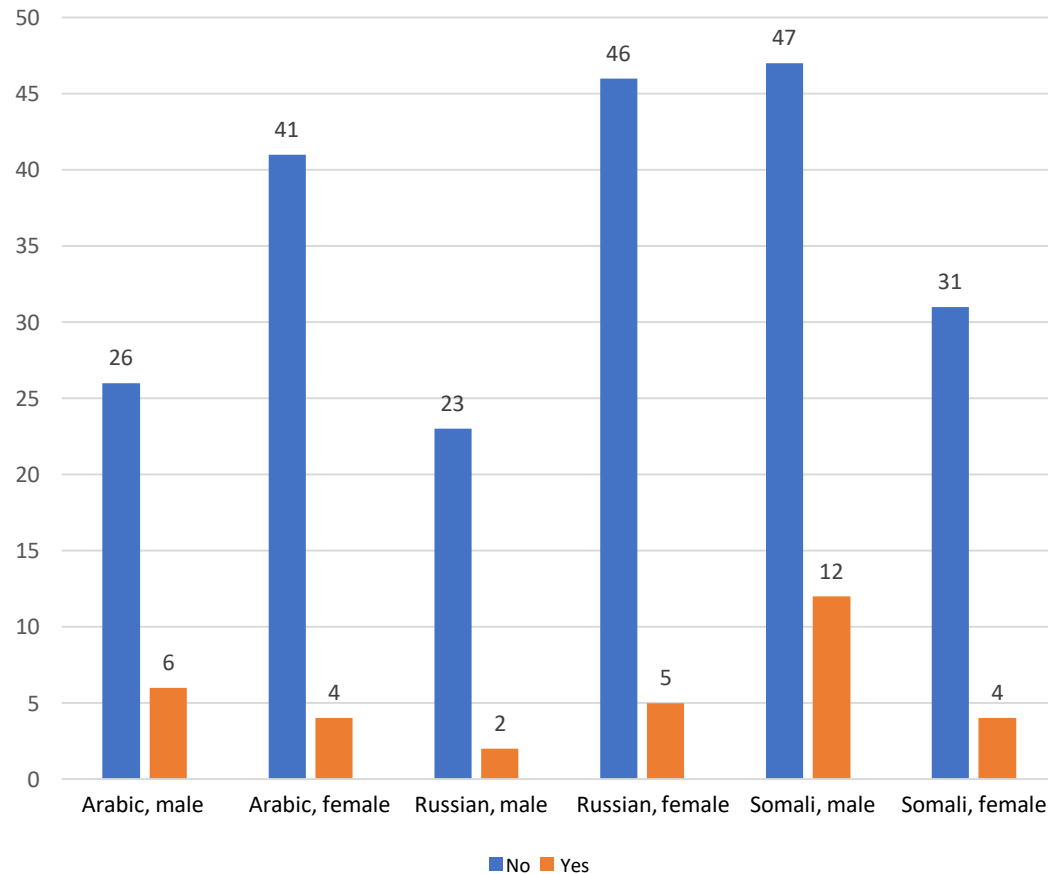
- There is a difference between the groups ($p = .003$), Somali group seem to get less information from the City of Turku website (although the p -value is very close to the Bonferroni-corrected limit value ($,0083$))

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	17,992 ^a	5	,003
Likelihood Ratio	21,691	5	<,001
Linear-by-Linear Association	12,442	1	<,001
N of Valid Cases	247		

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 6,07.

Organised events



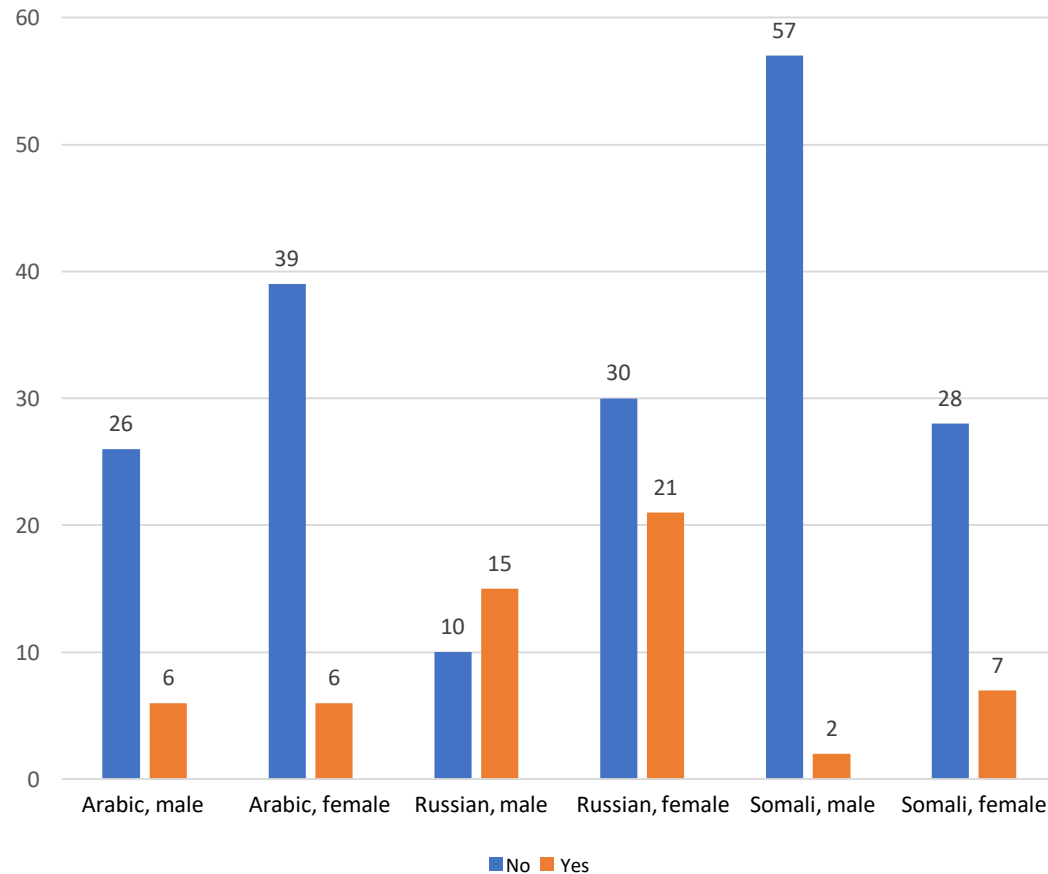
- There is no significant difference between the groups ($p = .374$)

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	5,353 ^a	5	,374
Likelihood Ratio	5,219	5	,390
Linear-by-Linear Association	,113	1	,737
N of Valid Cases	247		

a. 3 cells (25,0%) have expected count less than 5. The minimum expected count is 3,34.

Internet



- There is a difference between the groups ($p < .001$), Russian-speaking group seem to search for information on the Internet more than others

Chi-Square Tests

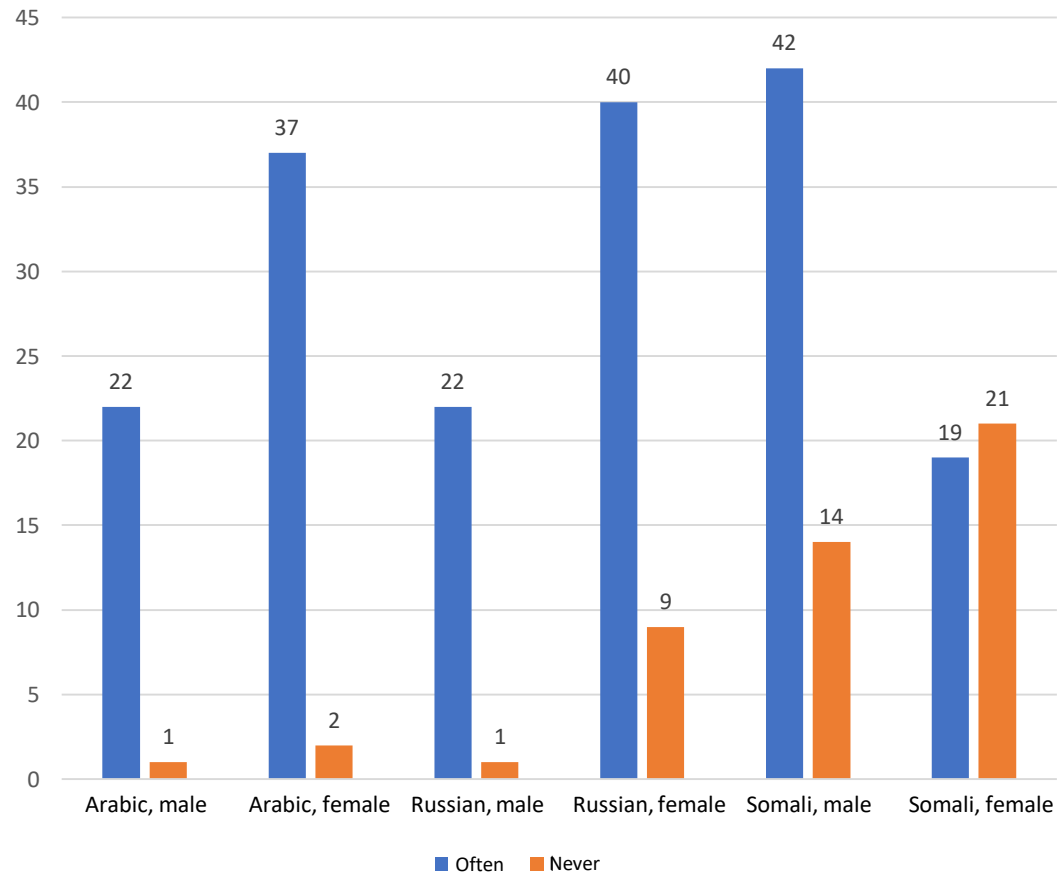
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	44,425 ^a	5	<,001
Likelihood Ratio	45,383	5	<,001
Linear-by-Linear Association	,857	1	,355
N of Valid Cases	247		

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 5,77.

What do you do outdoors in Turku?

Note! Bonferroni-correction: $0,05 / 10 = 0,005$

”Having a picnic”



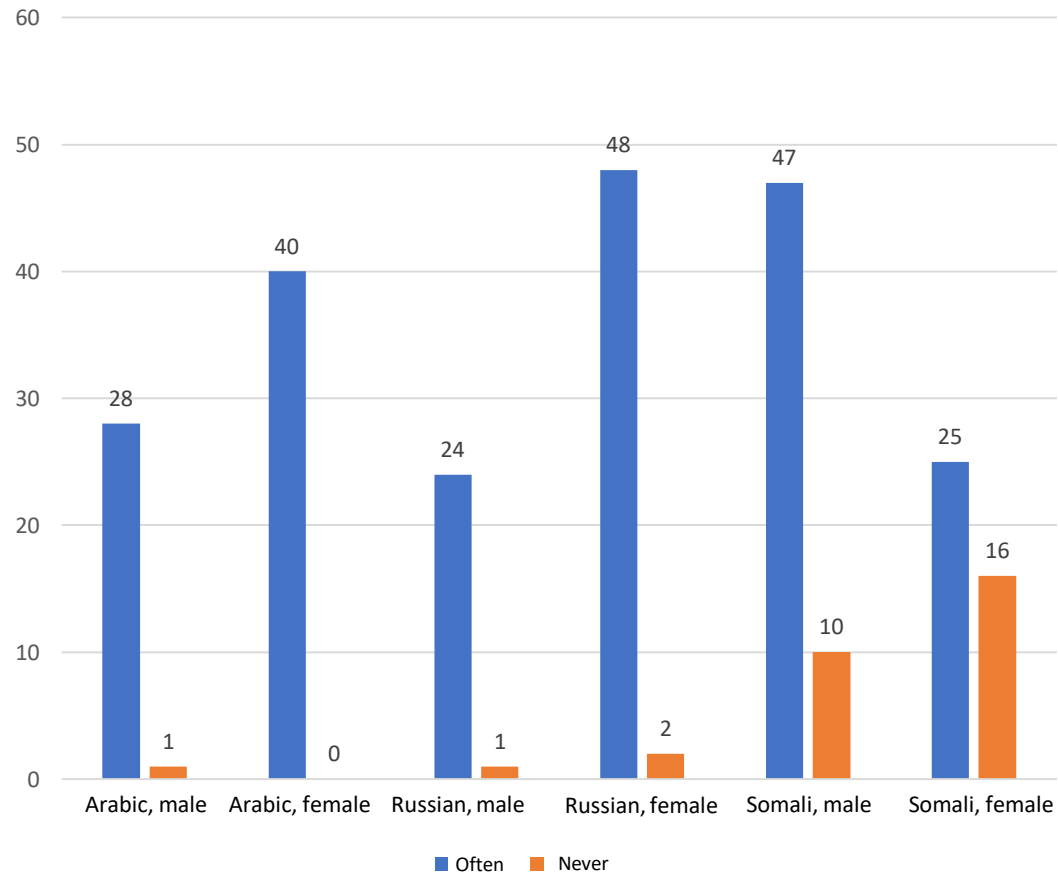
- There is a difference between the groups ($p < .001$), Somali speaking group seem more divided in terms of picnic attendance

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	38,453 ^a	5	<,001
Likelihood Ratio	38,320	5	<,001
Linear-by-Linear Association	30,657	1	<,001
N of Valid Cases	230		

a. 2 cells (16,7%) have expected count less than 5. The minimum expected count is 4,80.

”Taking a walk in a nearby forest”



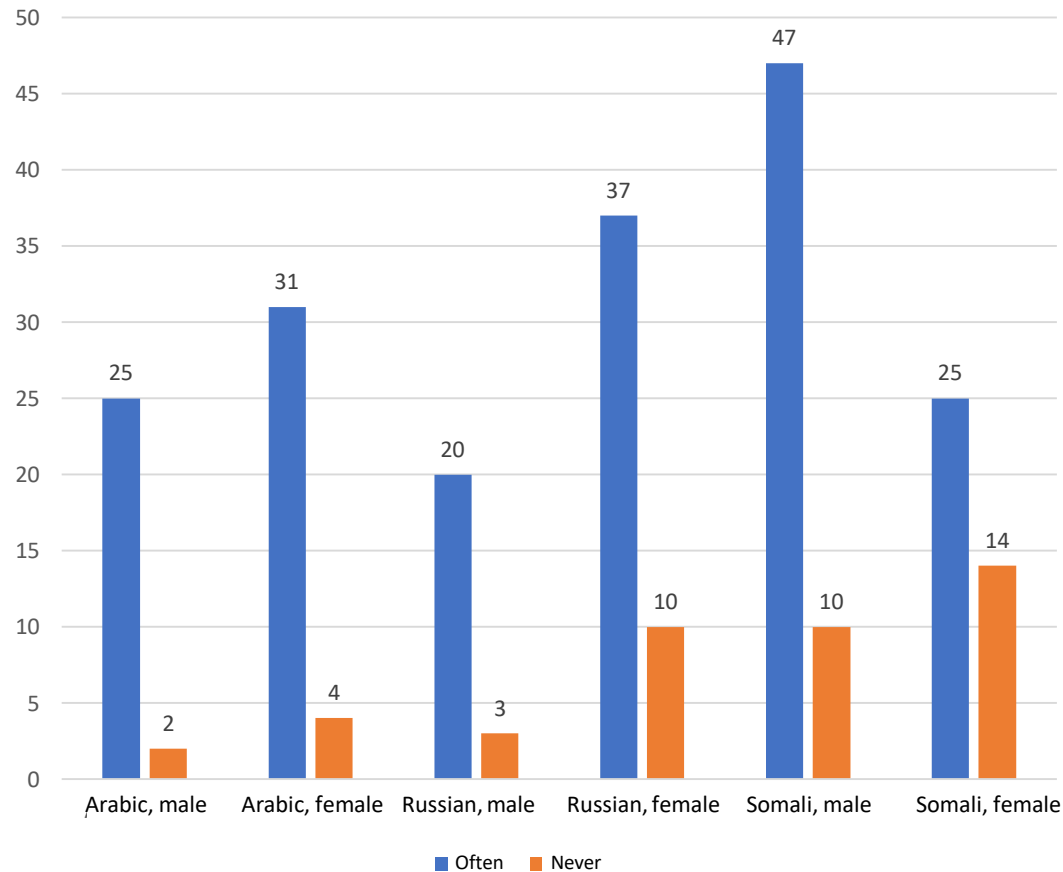
- There is a difference between the groups ($p < .001$), Somali speaking group seem to walk less in the nearby forest.

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	40,827 ^a	5	<,001
Likelihood Ratio	39,702	5	<,001
Linear-by-Linear Association	27,795	1	<,001
N of Valid Cases	242		

a. 3 cells (25,0%) have expected count less than 5. The minimum expected count is 3,10.

“Taking a walk along a guided path”



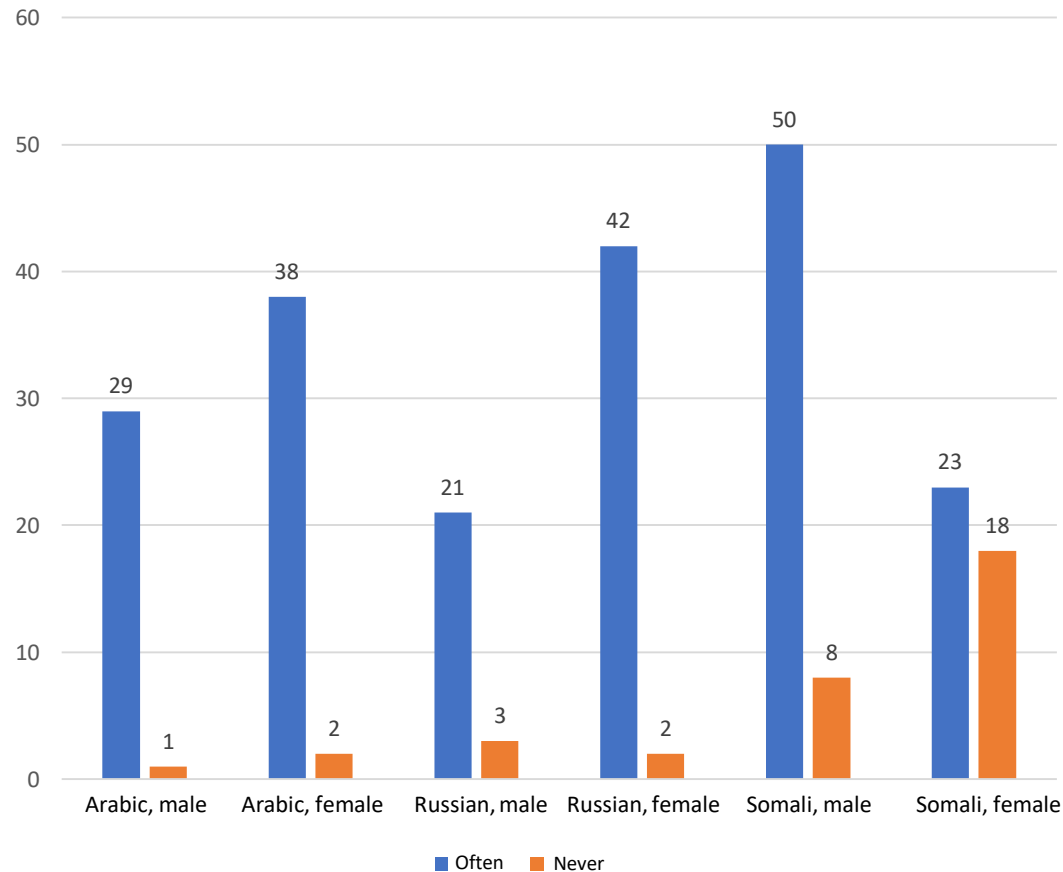
- There is no significant difference between groups after Bonferroni correction ($p < .039$)

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	11,727 ^a	5	,039
Likelihood Ratio	11,322	5	,045
Linear-by-Linear Association	8,543	1	,003
N of Valid Cases	228		

a. 1 cells (8,3%) have expected count less than 5. The minimum expected count is 4,34.

”Go to a city park or playground”



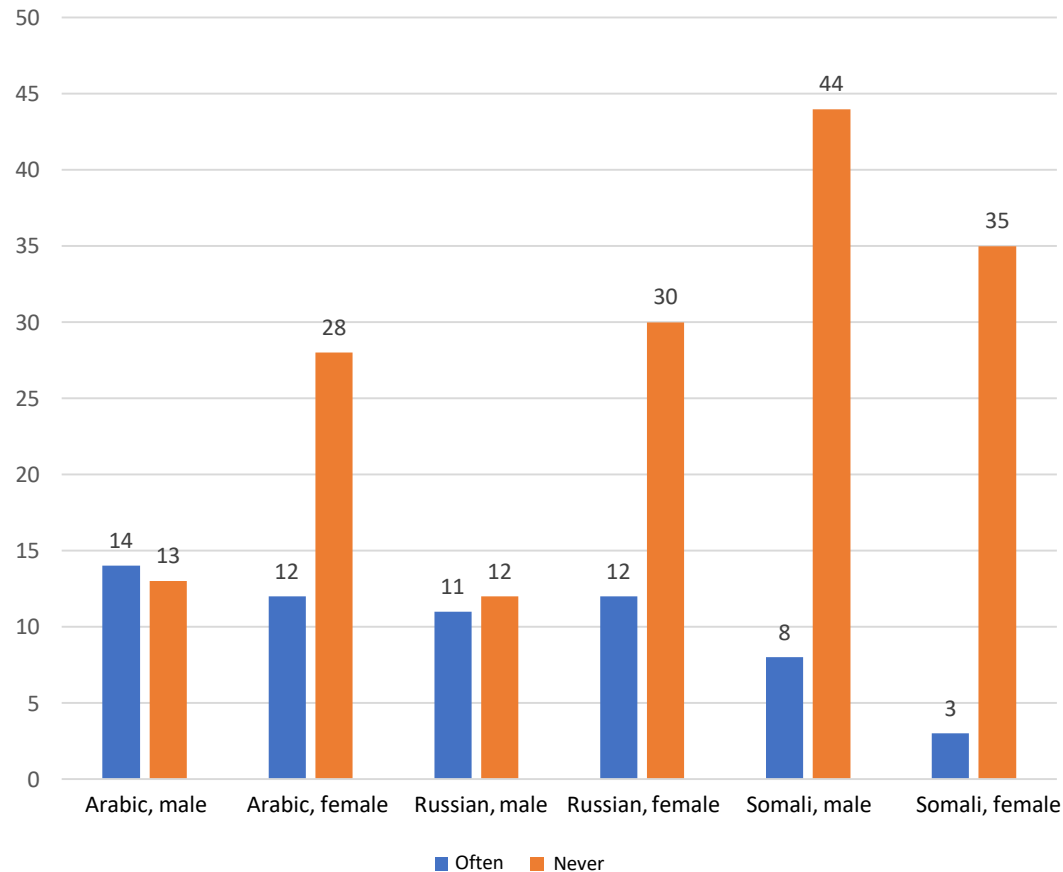
- There is a difference between the groups ($p < .001$), Somali females seem to go less to the park or playground

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	38,473 ^a	5	<,001
Likelihood Ratio	33,135	5	<,001
Linear-by-Linear Association	21,280	1	<,001
N of Valid Cases	237		

a. 2 cells (16,7%) have expected count less than 5. The minimum expected count is 3,44.

"Fishing"



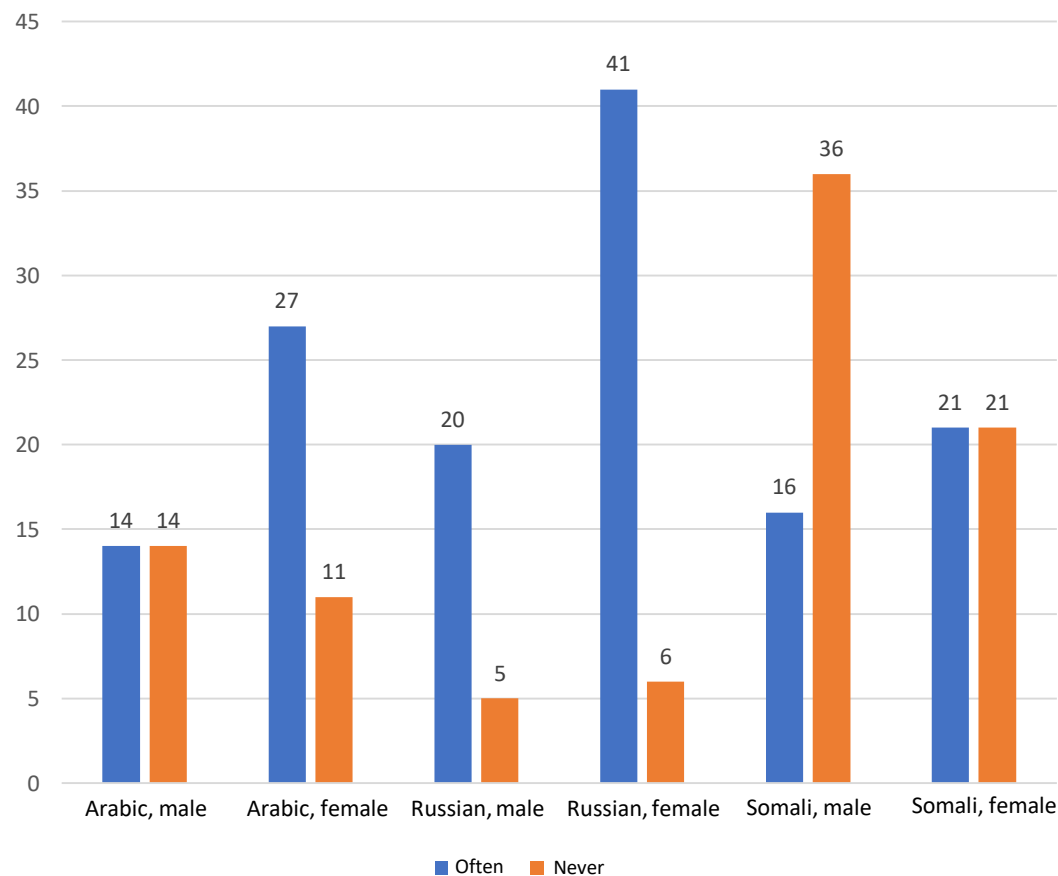
- There is a difference between the groups ($p < .001$), it seems that females and Somali-speaking group do not fish as much as Arabic and Russian-speaking males.

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	24,338 ^a	5	<,001
Likelihood Ratio	25,088	5	<,001
Linear-by-Linear Association	18,777	1	<,001
N of Valid Cases	222		

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 6,22.

”Picking berries/mushrooms/other plants”



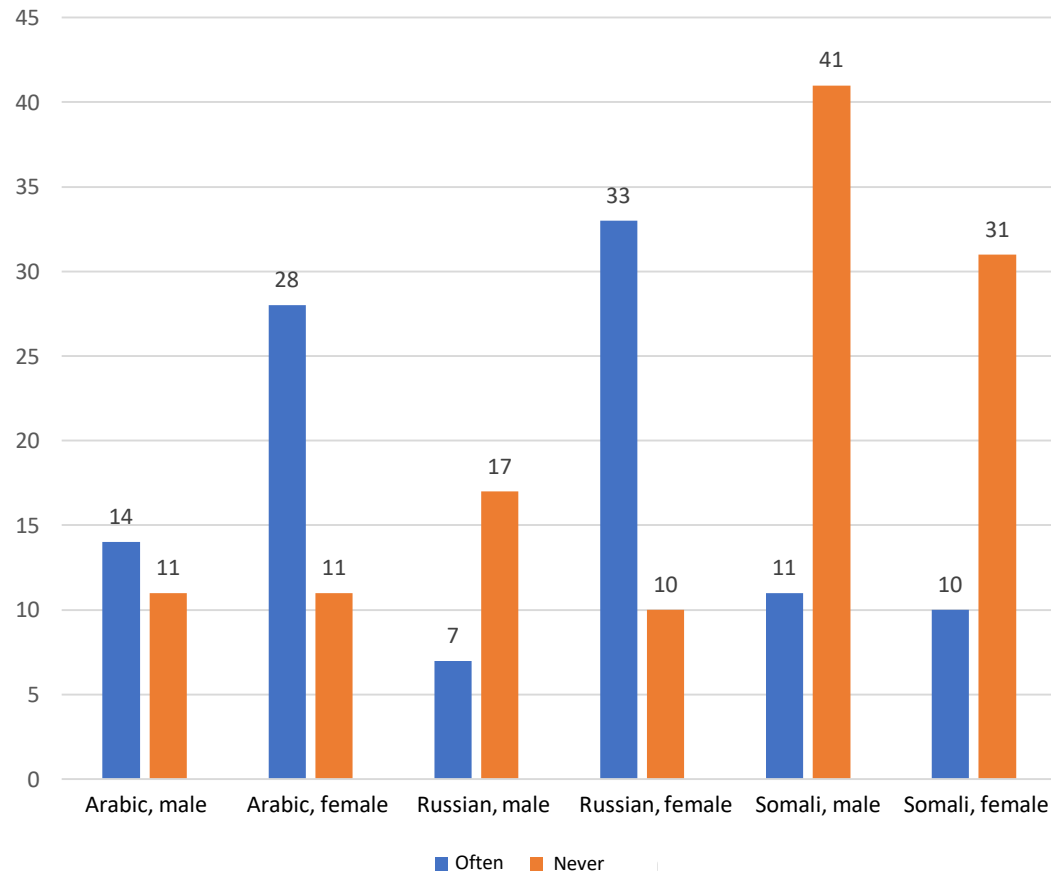
- There is a difference between the groups ($p < .001$): Russian-speaking group seem to fish the most.

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	42,024 ^a	5	<,001
Likelihood Ratio	44,557	5	<,001
Linear-by-Linear Association	5,325	1	,021
N of Valid Cases	232		

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 10,02.

”Cultivating food/flowers”



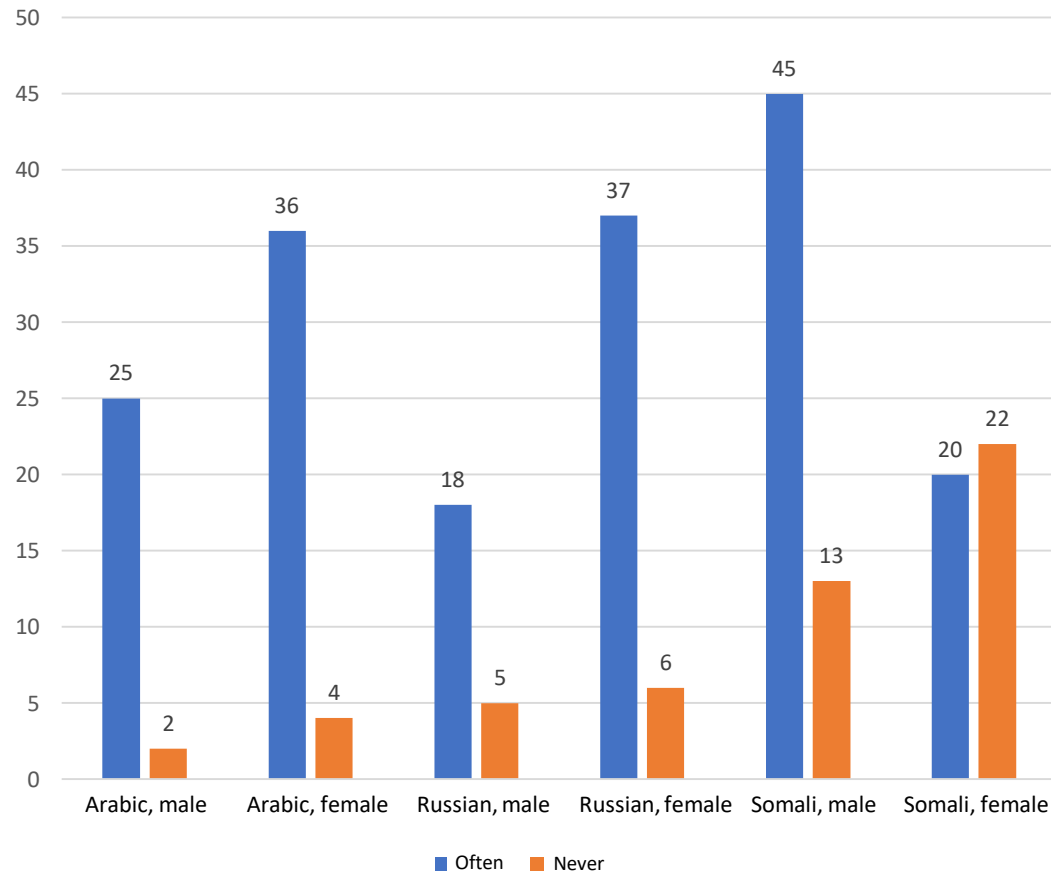
- There is a difference between the groups ($p < 0.001$), Somali speaking group seem to grow plants less often than others, while Arabic and Russian females do so more often.

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	51,187 ^a	5	<,001
Likelihood Ratio	53,551	5	<,001
Linear-by-Linear Association	19,235	1	<,001
N of Valid Cases	224		

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 11,04.

”Doing sport”



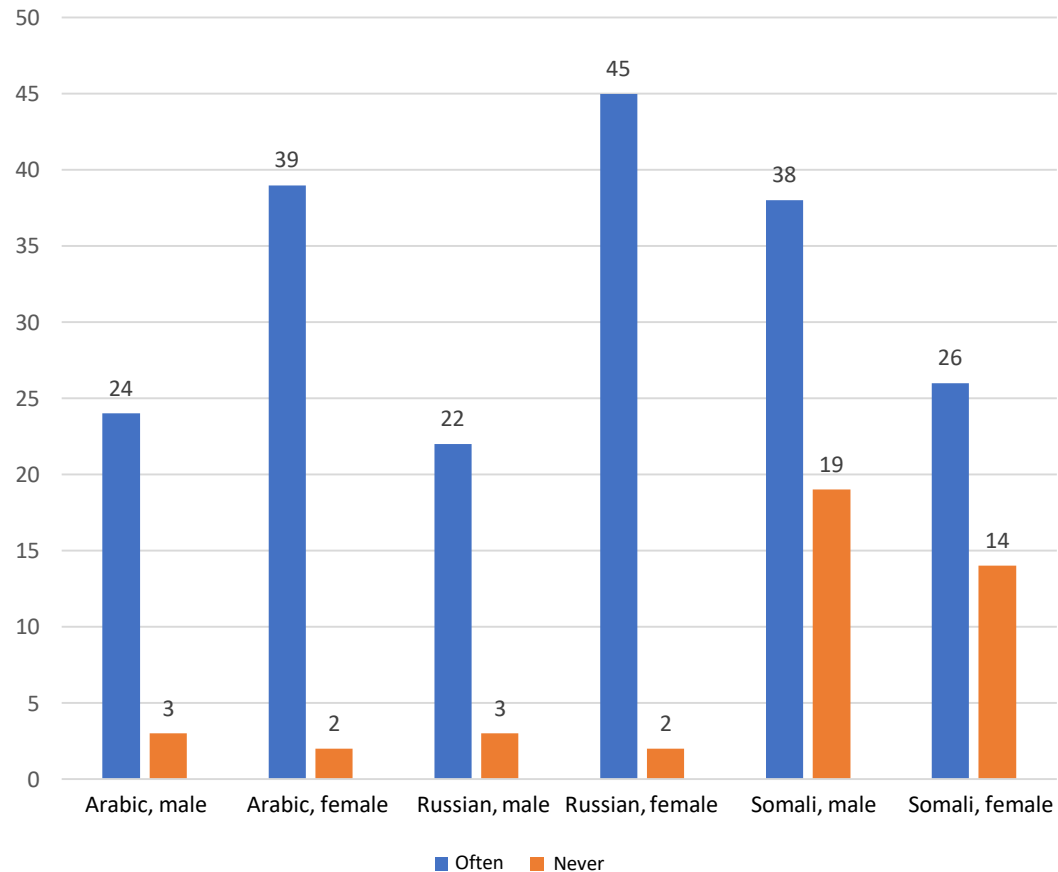
- There is a difference between the groups ($p < .001$), Somali women seem to play less sport than others.

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	30,598 ^a	5	<,001
Likelihood Ratio	28,442	5	<,001
Linear-by-Linear Association	20,001	1	<,001
N of Valid Cases	233		

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 5,13.

”Sitting outside and watching the environment”



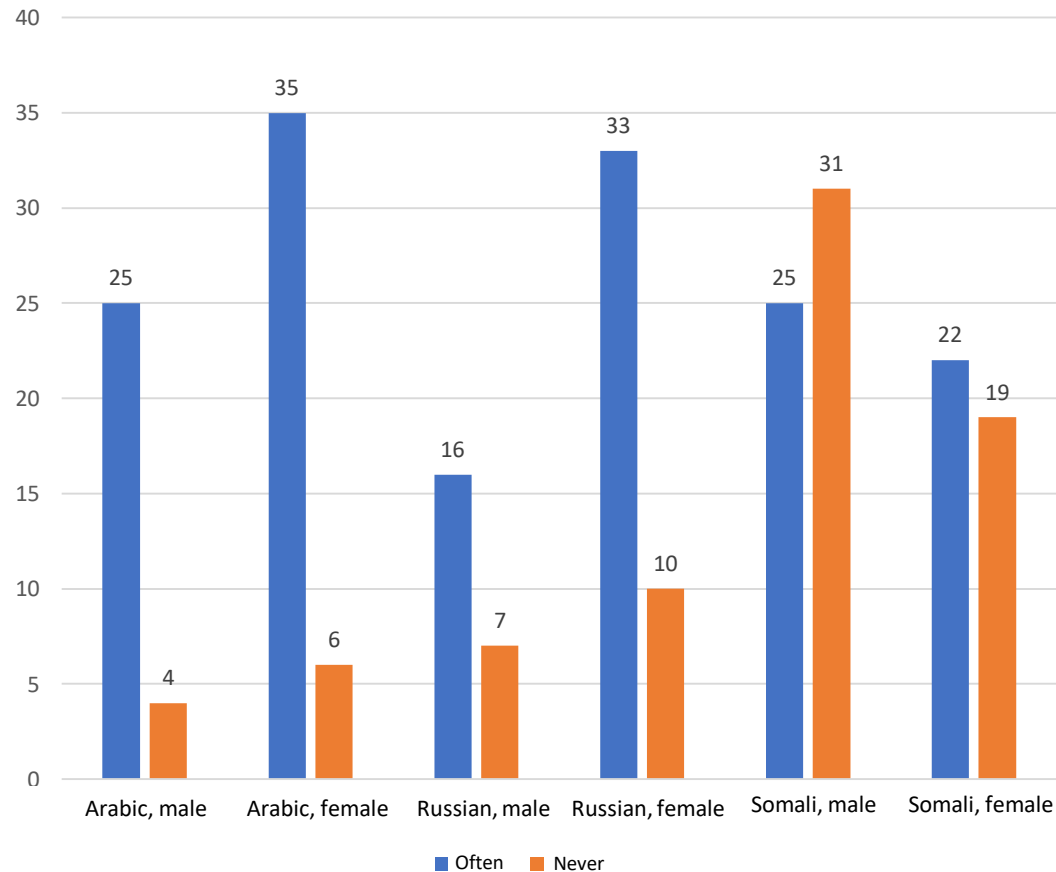
- There is a difference between the groups ($p < .001$), Somali speakers seem to sit less in the nature than others

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	29,005 ^a	5	<,001
Likelihood Ratio	30,403	5	<,001
Linear-by-Linear Association	17,028	1	<,001
N of Valid Cases	237		

a. 2 cells (16,7%) have expected count less than 5. The minimum expected count is 4,54.

”Going out with children (playing/doing activities in the natural environment)



- There is a difference between the groups ($p < .001$), Somali speaking group seem to be less in nearby nature with children.

Chi-Square Tests

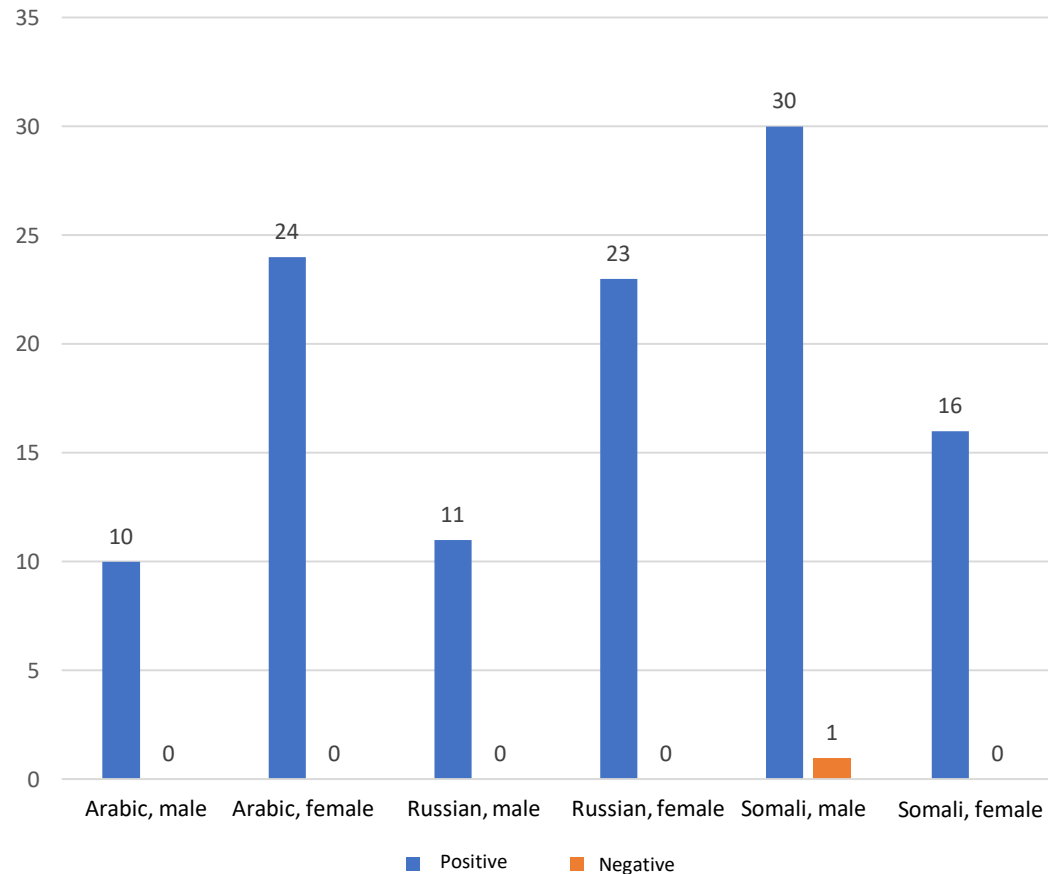
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	28,948 ^a	5	<,001
Likelihood Ratio	29,760	5	<,001
Linear-by-Linear Association	21,411	1	<,001
N of Valid Cases	233		

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 7,60.

Natural environment in Turku

Note! Bonferroni-correction: $0,05 / 3 = 0,017$

Natural environment of Turku is positive/negative



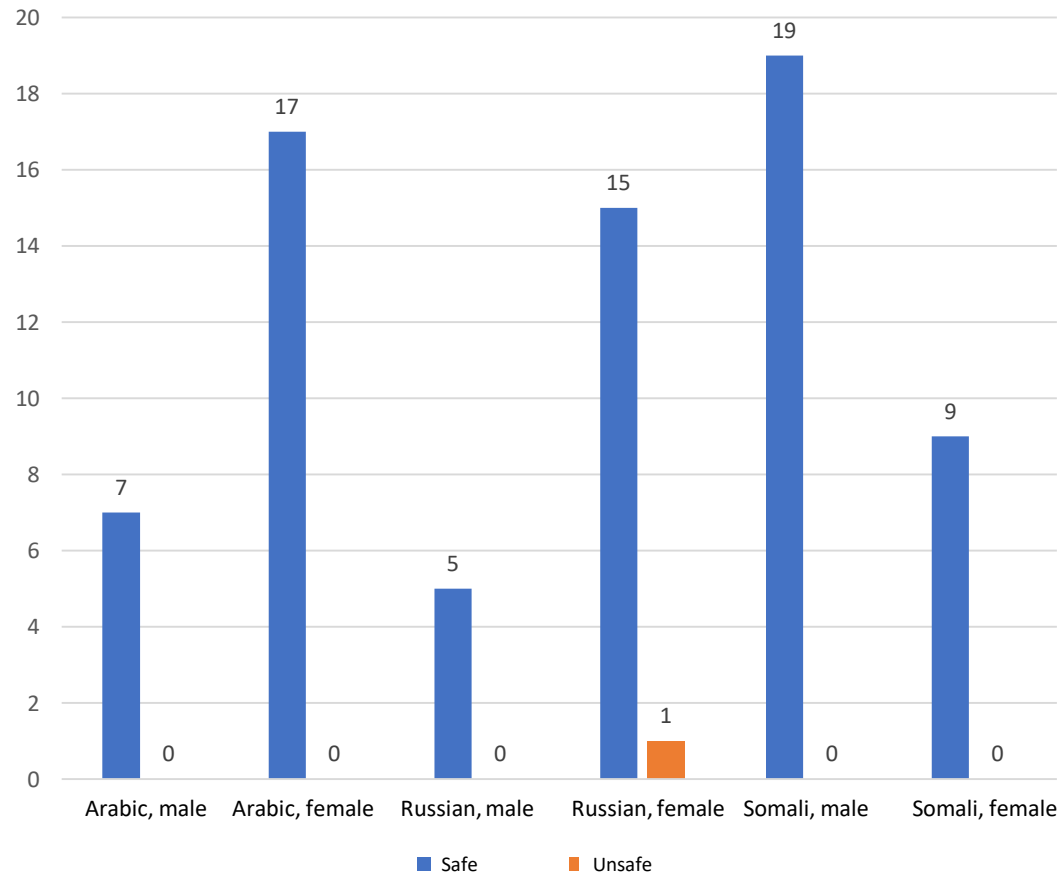
- There is no significant difference between the groups ($p = .741$), the most considers Turku's natural environment to be positive.

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2,733 ^a	5	,741
Likelihood Ratio	2,646	5	,754
Linear-by-Linear Association	,604	1	,437
N of Valid Cases	115		

a. 6 cells (50,0%) have expected count less than 5. The minimum expected count is ,09.

Natural environment of Turku is safe/unsafe



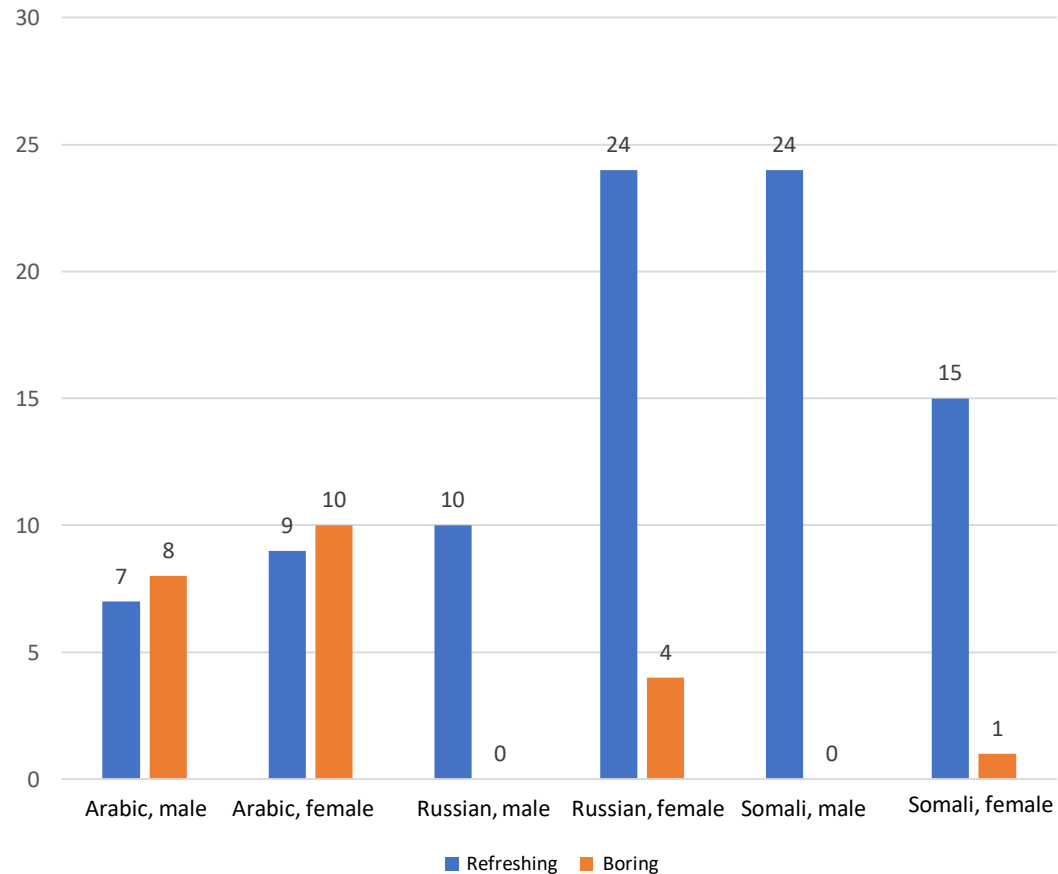
- There is no significant difference between the groups ($p = .607$), the most considers Turku's natural environment safe.

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	3,612 ^a	5	,607
Likelihood Ratio	3,086	5	,687
Linear-by-Linear Association	,039	1	,843
N of Valid Cases	73		

a. 7 cells (58,3%) have expected count less than 5. The minimum expected count is ,07.

Natural environment in Turku is refreshing/boring



- There is a difference between the groups ($p < .001$), both Arabic-speaking male and female found Turku's natural environment more boring than others.

Chi-Square Tests

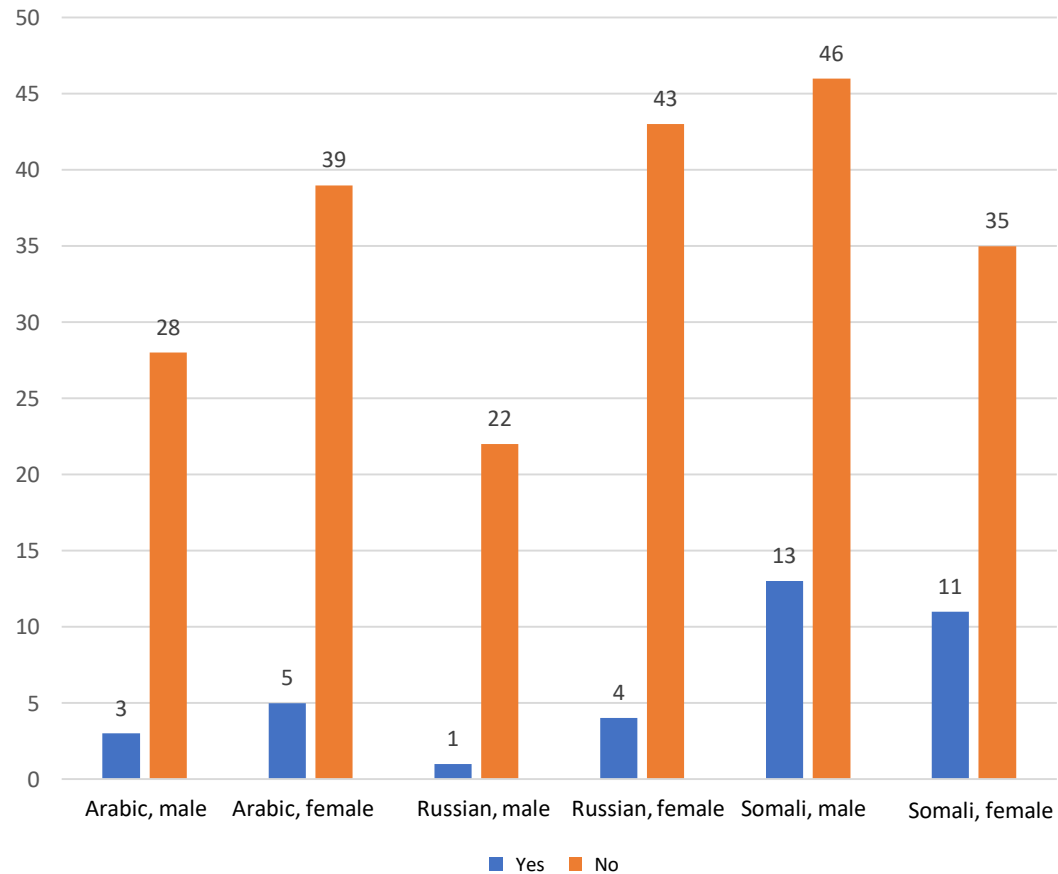
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	33,340 ^a	5	<,001
Likelihood Ratio	36,271	5	<,001
Linear-by-Linear Association	24,219	1	<,001
N of Valid Cases	112		

a. 5 cells (41,7%) have expected count less than 5. The minimum expected count is 2,05.

Everyman's rights, do you know
what permits (if any) in Turku
you need to:

Note! Bonferroni-correction: $0,05 / 6 = 0,0083$

Walk in the forest



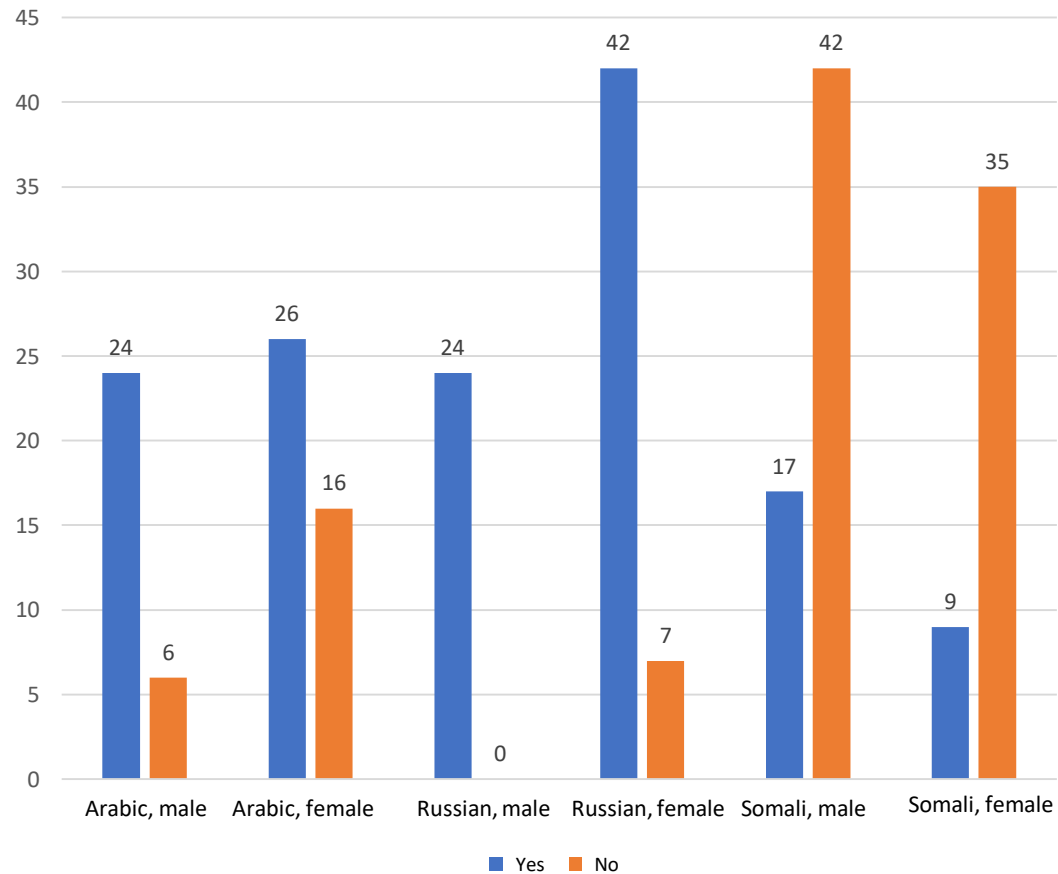
- There does not appear to be a difference between the groups ($p = .075$)

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	10,002 ^a	5	,075
Likelihood Ratio	10,324	5	,067
Linear-by-Linear Association	5,807	1	,016
N of Valid Cases	250		

a. 2 cells (16,7%) have expected count less than 5. The minimum expected count is 3,40.

Fish



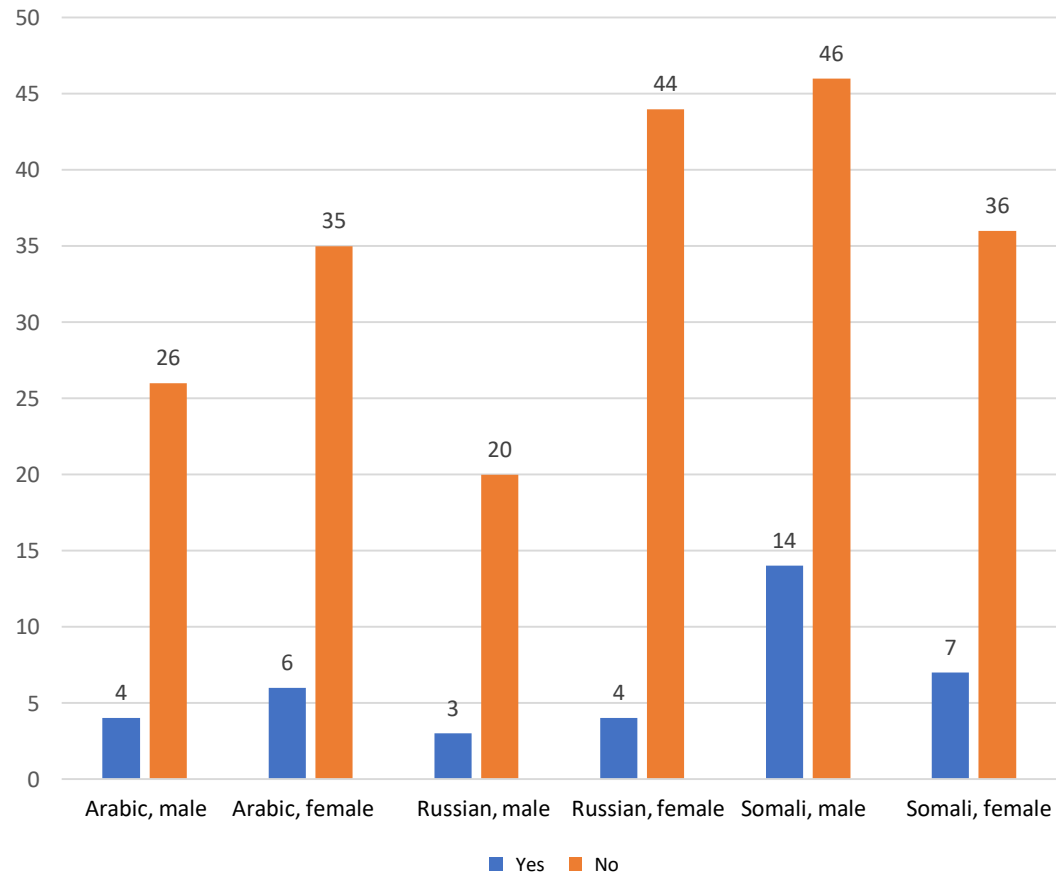
- There is a difference between the groups ($p < .001$), the response of Somali speakers differs from the others.

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	84,697 ^a	5	<,001
Likelihood Ratio	97,081	5	<,001
Linear-by-Linear Association	41,627	1	<,001
N of Valid Cases	248		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 10,26.

Picking berries or mushrooms



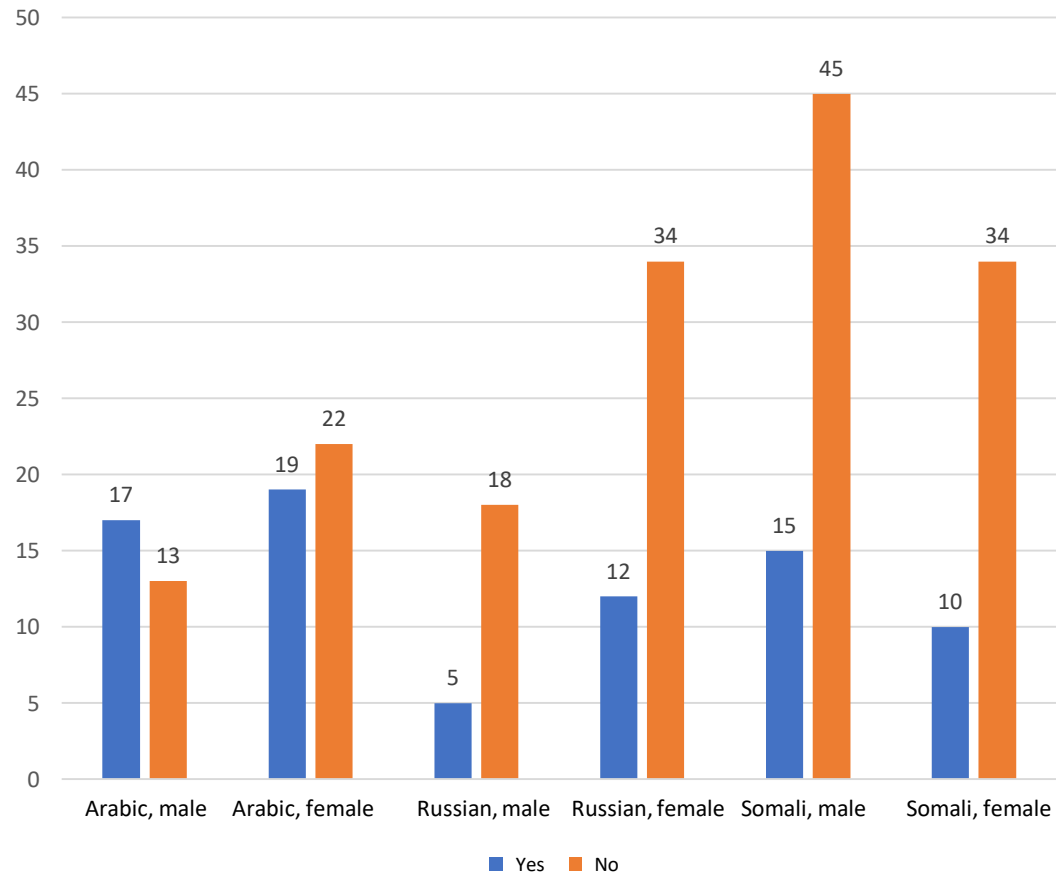
- There is no significant difference between the groups ($p = .422$)

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	4,947 ^a	5	,422
Likelihood Ratio	4,969	5	,420
Linear-by-Linear Association	,828	1	,363
N of Valid Cases	245		

a. 2 cells (16,7%) have expected count less than 5. The minimum expected count is 3,57.

Camp overnight



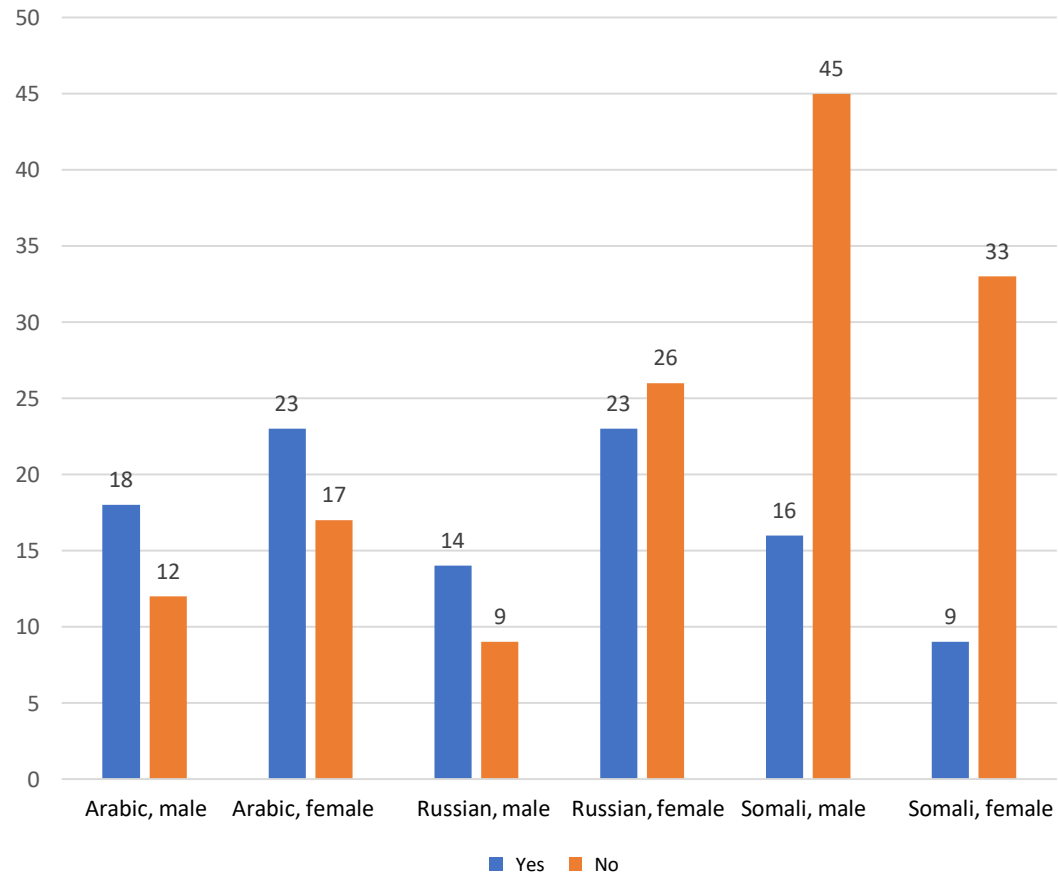
- There is a difference between the groups ($p = .004$), the answers of Arabic-speaking group differ from the other groups.

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	17,215 ^a	5	,004
Likelihood Ratio	16,585	5	,005
Linear-by-Linear Association	12,948	1	<,001
N of Valid Cases	244		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 7,35.

Making open fire



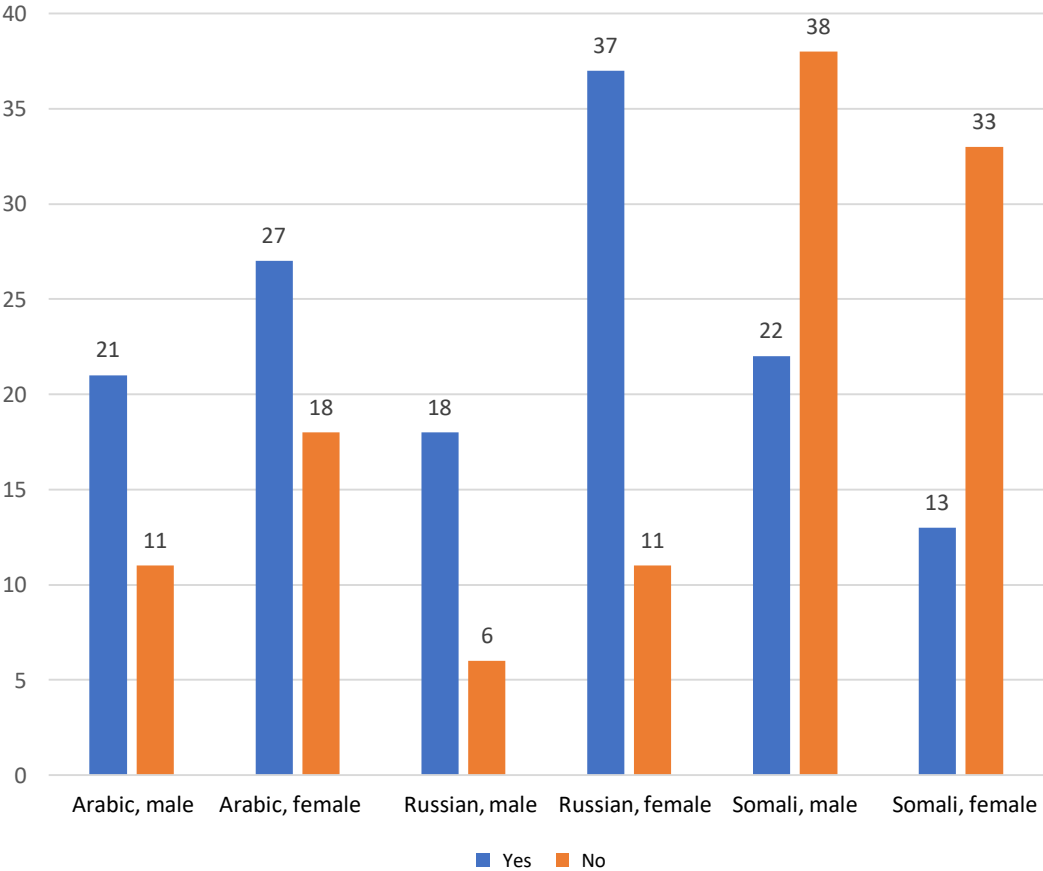
- There is a difference between the groups ($p < .001$), the answers of Somali-speaking group seem to differ from the answers of other groups

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	25,305 ^a	5	<,001
Likelihood Ratio	26,096	5	<,001
Linear-by-Linear Association	21,746	1	<,001
N of Valid Cases	245		

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 9,67.

In Finland there are Everyman's rights that give everyone certain rights to one can and cannot do in natural environment. Do you know any of these rights?



- There is a difference between the groups ($p < .001$), the answers of Somali-speaking group seem to differ from the answers of other groups.

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	36,489 ^a	5	<,001
Likelihood Ratio	37,718	5	<,001
Linear-by-Linear Association	17,164	1	<,001
N of Valid Cases	255		

a. 0 cells (,0%) have expected count less than 5. The minimum expected count is 11,01.