

**LUT School of Business and Management, Business Research Methods** 

# Finland Job Satisfaction Research Analysis

Quantitative data analysis assignment

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# 1 Introduction

In this report we are going to study Finnish values and attitudes based on a dataset "Survey on Finnish Values and Attitudes 2010 (Finnish Business and Policy Forum, EVA)" in order to find answers to our determined research questions. Our research questions in this report are:

- What is the difference in job satisfaction between men and women based on their expectation nowadays compared to the study in 90s in UK?
- How is job satisfaction rated among people in different industries of employment with diverse vocational education background?

We begin by developing our hypotheses based on our research questions and then discuss in detail how the data is used in this analysis, how the data is collected and how well the variables of interest measure the concepts under methodology section. Collection method of data, representativeness of the sample, content validity and reliability will be evaluated.

Then we will move into descriptive statistics to test the hypotheses. This will be illustrated with graphs and charts. After this we will construct a thorough analysis that consists of different methods such as distribution analysis, mean-comparison test, and correlation analysis. Results will be illustrated with graphs and tables as well as verbally. After the analysis is complete, we will finally discuss and conclude the results of the analysis in regard of our hypotheses.

The goal of our study in this report is to get a clearer view on correlation between one's job expectations and job satisfaction, differences on satisfaction between men and women, whether vocational education background or job sector has an impact on these things. The goal is also to conduct the study in a reliable way so that the results found will be reliable.

# 2 Development of hypotheses

Based on the research questions defined in the introduction above, we have conducted a primary literature analysis of prior research conducted in this general field. A study conducted in the UK in the 90's identified that despite women generally facing worse working conditions than men, they reported higher job satisfaction. This has been identified to stem from women having had significantly lower expectations

for the conditions in their job, and thus, they felt happy simply haven gotten any job at all.

A more recent study from 2016, however, indicates that the job satisfaction gap has disappeared, as women now have expectations equal to those of men. Subsequently, we define our first two hypotheses as:

H1: There is a negative correlation between job expectations and job satisfaction.

H2: Men and women are equally satisfied with their job.

Also, it is often assumed that individuals with higher educational background have better opportunities to get or are more likely to get "better" jobs and that might have an impact on the job satisfaction too. In addition, it is commonly spoken that work conditions, salaries, benefits, etc. are highest in the private sector which together with the previous assumption led to our two other hypotheses:

H3: Individuals with higher vocational education background are more satisfied with their job.

H4: Individuals working in the private sector are more satisfied with their job.

# 3 Methodology

This section discusses how the data used in this analysis is collected and analyses how well the variables of interest measure the concepts they are designed to measure.

# 3.1 Sampling and data collection method

The data used in this analysis is from longitudinal repeated cross-section EVA Survey on Finnish Values and Attitudes 2010. This survey samples people who live in Finland (excluding Åland islands) and who are aged between 18 and 70. The dataset contains 114 variables and 3172 cases.

The EVA survey data consists of two separate samples that both received the same questionnaire. The first sample is based on an internet panel (2048 persons) and the second one (1124 persons) is a random sample based on data from Finnish Population Register (excluding Åland islands). The second sample received a traditional postal questionnaire. The main themes of the EVA survey are focused on

occupational life in Finland, employment, national economy, work-life balance, and time use.

The survey questionnaire follows a structure where the participants first get asked if they agree with a set of questions on Finnish society and work-life balance. The second set of questions asks the respondent about their views on the importance of certain work characteristics. The third set of questions which focuses on time use asks the participants whether they would like to spend more or less time on activities such as paid work and family activities.

There are also a number of questions that ask the participants about their perception on paid work and to what extent it was necessary to earn a living, to pay for hobbies and so on. The final set of questions asks the participants to evaluate how likely certain changes such as loss of a permanent job are to take place in Finnish occupational life.

# 3.2 Representativeness of the sample

The EVA survey has a good sample size and based on the information provided in the survey document, the sample of the EVA survey appears to representative:

- The sample includes a wide age range (18-70) which suggest that majority of the working age population is covered.
- The sample captures people living in Finland (excluding Åland island) which suggests that the geographical coverage is satisfactory.
- The postal questionnaire was constructed using a random sample which is the preferred method for sampling as it is meant to be representative of the population and to reduce potential biases.
- Both internet panel and the postal surveys were run by reputable research organisations.

The potential limitations of the sampling method are that some people start to work before the age of 18 and therefore the experiences of the younger workers are not captured. Also, as Åland is excluded, the results from this survey might not be representative of the experiences of people living in Åland.

# 3.3 Content validity

The variables and items used in this analysis are:

## **Demographics**

- 1. The respondent's gender (BV1)
- 2. The respondent's age group (BV2)
- 3. The respondent's vocational education (BV5)
- 4. The respondent's industry of employment (BV7)

Items 1-4 measure the demographics of a person. The items listed above cover the main characteristics of a person required for this research paper. In the dataset other items for demographics are available. One item that could be added to the demographics is an item representing the respondents' ethnicity or nationality to provide further insight.

# Q1 attitudeandsatisfaction

- 1. Being successful at work is to a large extent dependent people themselves and their attitudes (Q1\_25)
- 2. I'm satisfied with my job and my current employer (Q1\_26)

It can be observed that Q1\_25 measures "attitude towards work" and Q1\_26 measures "satisfaction towards work". Together these two items measure Q1\_attitudeandsatisfaction to an extent however, it could be argued that concepts "attitude towards work" and "satisfaction towards work" measure slightly different underlying constructs and therefore might have a low correlation.

#### Q2 work

The variable Q2\_work has seven items in the dataset. All these items are very similar in nature as they ask the participant to rate how important different work characteristics are for them. So, the items should measure this variable well.

#### Q2 rewardsandcareer

The variable Q2\_rewardsandcareer has five items that are related to reward and career. These items measure how important characteristics such as flexible hours and opportunities for advancement are for the respondent. All the items measuring variable Q2\_rewardsandcareer seem quite similar in nature and seem to capture the relevant aspects of rewards and career, so the items should measure the variable well.

## 3.4 Reliability

To assess the reliability of the data, Cronbach's alpha measures for variables Q1\_attitudeandsatisfaction, Q2\_work and Q2\_rewardsandcareer are obtained. The Cronbach's alpha measures the reliability of a scale. The Cronbach's alpha for variable Q1\_attitudeandsatisfaction is 0.49, for variable Q2\_work this value is 0.78 and for variable 2\_rewardsandcareer 0.74. If the threshold for explanatory analysis is 0.60 and 0.70 for theory testing, this suggests that variable Q1\_attitudeandsatisfaction does not meet this criterion. The low Cronbach's alpha could mean that the items in this group do not measure the same underlying phenomena which could lead to less accurate estimates. To improve the Cronbach's alpha for future surveys, items with lower correlation could be removed from the group.

# 4 Descriptive statistics

This section contains descriptive statistics for the variables used to test the hypotheses outlined in section 2. The table below shows how many males and females there are in the dataset and how many observations there are for each of the age categories. There are 134 more women in the dataset but overall, the gender split seems to be fairly even across the age groups. The largest number of observations are in the 46-55 category and the lowest one is the over 65 categories.

Table 1. Males, females, and total observations by category in the dataset.

	BV1		
BV2	Male	Female	Total
18-25	116	198	314
26-35	285	341	626
36-45	303	297	600
46-55	360	391	751
56-65	314	292	606
Over 65	133	126	259
Total	1,511	1,645	3,156

Frequency table is a good way to show how the values of a variable are distributed. The table below shows data for variable for respondent's vocational education. Vocational school and college levels of education have the highest frequency in the data set. 46.3% of the participants have vocational school or lower level of education. 18.6% of the participants have a science university degree.

Table 2. Frequency table of distribution of variables.

BV5	Freq.	Percent	Cum.
No vocational education	378	11.95	11.95
Vocational course	287	9.08	21.03
Vocational school	799	25.27	46.3
College	795	25.14	71.44
Polytechnic or applied science	316	9.99	81.44
Science university	587	18.56	100
Total	3,162	100	

Another variable of interest is BV7 which collects data on the respondent's industry of employment. A bar chart is a useful tool to visualise the proportions of the different industries. The chart below shows that the majority of respondents work in public services while the smallest category is respondents not in paid work.

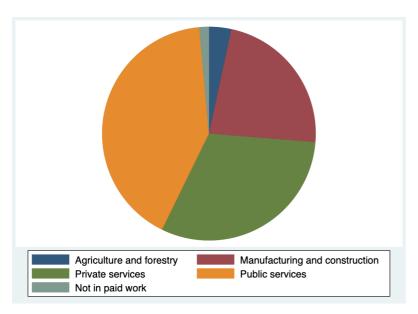


Figure 1. Proportions of different industries.

The chart below shows a bar chart of the variable Q1\_attitudeandsatisfaction broken down by gender. Bar chart is a good way to visualise the values a variable takes, and to compare two cuts of the data against one another. From the charts it can be seen that this variable has right skew for both females and males and that category "2" has the highest frequency for both.

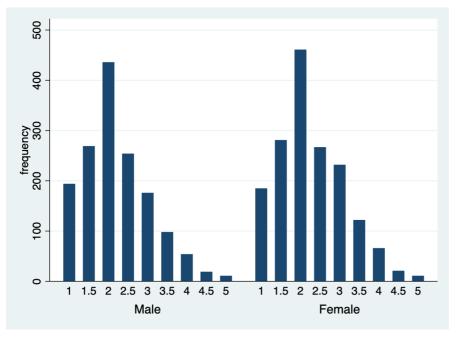


Figure 2. Variable Q1 attitudeandsatisfaction broken down by gender.

The chart below shows a histogram of variable Q2\_rewardsandcareer. This variable can take several different values between 1 and 5. Looking at the chart below, the

categories with highest frequency are around 3, 3 being the category with most observations.

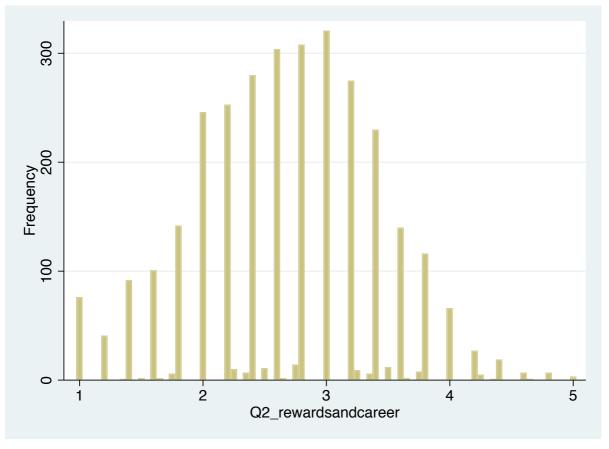


Figure 3. Histogram of variable Q2\_rewardsandcareer's values.

The table 3 shows descriptive statistics for all seven variables. "\*" indicates which correlations are statistically significant. It can be observed that Variables Age has statistically significant low correlation with all the variables in the table other than vocational education. The largest absolute correlation is between variables Q2\_work and Q2 rewardsandcareer.

Many of the variables in this analysis are categorical variables. This means that the mean values should be interpreted with caution as it is calculated based on the category numbers/codes which do not have any mathematical meaning. So for example the average age is not 3 years. The min and max values in the table below show that all the variables take values for category 1 (min) and their respective highest categories (max).

Table 3. Descriptive statistics of all seven variables.

Variable	Obs	Mean	Std. dev.	Min	Max	1	2	3	4	5	6	7
1 Sex	3157	1.521	0.500	1	2	1						_
2 Age	3163	3.475	1.458	1	6	-0.0686*	1					
3 Vocational education	3162	3.678	1.559	1	6	0.0610*	-0.0495*	1				
4 industry of employment	3162	3.145	0.903	1	5	0.2965*	0.001	0.1410*	1			
5 Q1_attitudeandsatisfaction	3172	2.238	0.854	1	5	0.0392*	-0.0513*	-0.029	0.0374*	1		
6 Q2_work	3155	1.872	0.550	1	4	-0.1876*	-0.0563*	-0.0659*	-0.1061*	0.1040*	1	
7 Q2_rewardsandcareer	3153	2.678	0.743	1	5	-0.005	-0.1196*	-0.029	0.0254	0.0654*	0.5299*	1

# 5 Analyses

# Research question

- 1. What is the difference in job satisfaction between men and women based on their expectation nowadays compared to the study in 90s in UK?
- 2. How is job satisfaction rated among people in different industries of employment with diverse vocational education background?

For the first research question, 4 variables in the survey are required. BV1 is variable for gender. 1 represents male and 2 represents female. Q1\_attitudeandsatisfaction is the variable including values rated by respondents. The respondents' rate 1 for agreement with job satisfaction and 5 for disagreement. Q2\_work is values rated by respondents how important work characteristics is. The characteristics include work-life balance, usefulness to society, fairness and encouragement from supervisor, opportunities for self-fulfilment, work interest and healthy working environment. The values range from 1 for very important to 5 for not important at all and 6 for "can't say". Q2\_rewardsandcareer consists of scores the respondents give for how important the rewards and career to them. The rewards include financial reward for good-work performance, the high value of work in society, high income, opportunities for advancement, and flexible working hours with the ability to work from home. Like Q2\_work, the value ranges from 1, very important to 5, not important at all.

For the second research question, two other variables are needed, BV7 and BV5. BV7 is respondents' industry of employment. There are 5 groups in BV7. They include Agriculture and forestry (group 1), Industry, manufacturing, construction (group 2), Private services (group 3), Public services (group 4), Not in paid work (group 5). BV5 is respondents' vocational education including no vocational education (group 1), vocational course and other short vocational training (group 2), vocational school or equivalent (group 3), college level vocational education (group 4), polytechnics or university of applied sciences (group 5) and lastly, science university education (group 6).

#### 5.1 Distribution analysis

In this section, all variables required will be analysed to see whether they are normally distributed or not. The null hypothesis (H0) is that variable is normally distributed. H0: Variable is normally distributed. H1: Variable is not normally distributed.

The Shapiro-Wilk test is used for all variables needed. P-values are presented in the table below.

Table 4. P-va	lue results	of variables	' distribution	analysis.
---------------	-------------	--------------	----------------	-----------

Variable	p-Value
BV1	1.00000
BV5	0.05973
BV7	0.00000
Q1_attitudeandsatisfaction	0.00000
Q2_work	0.00000
Q2_rewardsandcareer	0.00020

Based on table 4, while p-Value of BV1 and BV5 are greater than 0.05, p-value of the rest is less than 0.05. H0 of BV1 and BV5 are accepted. The others are rejected. Therefore, BV1 and BV5 are normally distributed. Others are not normally distributed.

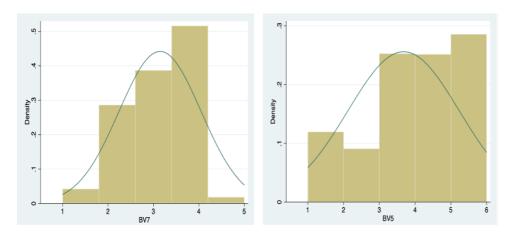


Figure 4. Histogram and density plot of BV7 and BV5.

Based on figure 4, the density plot of BV7 seems to be left-skewed while BV5 has normal distribution graphically.

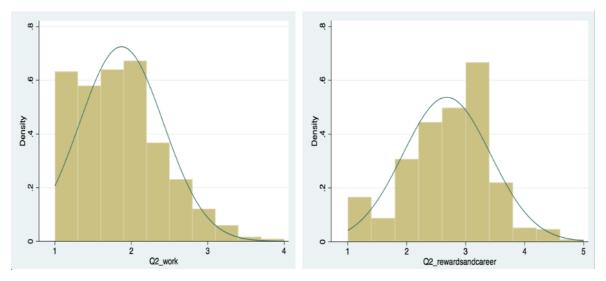


Figure 5. Histograms and density plots of Q2\_work and Q2\_rewardsandcareer.

Both Q2\_work and Q2\_rewardsandcareer are right skewed in figure 5. Figure 6 shows the right skewness in histogram and density plot of Q1\_attitudeandsatisfaction.

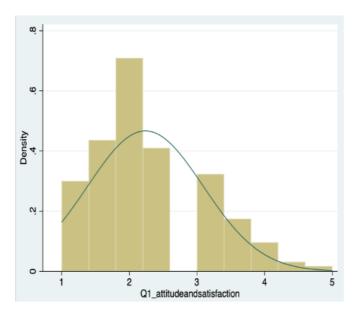


Figure 6. Histograms and density plots of Q1\_attitude and satisfaction.

# 5.2 Mean-comparison test

BV1 has only 2 groups (male and female). Therefore, t-test is used to make mean-comparison test.

BV1 and Q1 attitude:

- 1) The test of equality of variances across the groups
  - a. H0: Variances are equal.

## b. H1: Variances are unequal

Table 5. Summary of Q1\_attitudeandsatisfaction in different groups of BV1.

BV1	Mean	Standard	Frequency
		Deviation	
1	2.2051621	0.85016544	1511
2	2.2676185	0.85582718	1646
Total	2.2377257	0.85355754	3157

W0 = 1.0061920

df(1,3155)

Pr > F = 0.31589378

p-value = 0.315 > 0.05. The null hypothesis is accepted. Variances are equal between female and male.

- 2) The test of equal means:
  - a. H0: Means of the two samples are same.
  - b. H1: Means are not same.

Table 6. Two-sample t test with equal variances.

Group	Mean
1	2.205162
2	2.267618
Combined	2.237762
Difference	-0.0624563

Ha: diff != 0.

Pr(|T| > |t|) = 0.0400.

P-value is 0.04<0.05 => reject H0. So, the attitude and satisfaction between men and women are not same. Based on the survey, the respondent rate from 1 for 'strongly agree' to 5 for 'strongly disagree'. Table 3 showed that the mean value of group 1 (men) is slightly lower than group 2 (women) by 0.06. This indicates that men are more satisfied in job than women.

BV1 and Q2\_work:

1) The test of equality of variances across the groups

a. H0: Variances are equal.

b. H1: Variances are unequal

Table 7. Summary of Q2\_work in different groups of BV1.

BV1	Mean	Standard	Frequency
		Deviation	
1	1.9813524	0.56891283	1500
2	1.7728049	0.51125662	1640
Total	1.8724295	0.54945011	3140

The result of variance test is:

W0 = 10.526830

df(1,3138)

Pr > F = 0.00118888

p-value = 0.001 < 0.05. The null hypothesis is rejected. Variances are unequal between men and women.

- 2) The test of equal means:
  - a. H0: Means of the two samples are same.
  - b. H1: Means are not same.

Table 8. Two-sample t-test with unequal variances.

Group	Mean
1	1.981352
2	1.772805
Combined	1.872429
Difference	0.208475

Ha: diff != 0.

Pr(|T| > |t|) = 0.0000.

Based on the survey, Q2\_work variable consists of values the respondent rate how important the work characteristics to them. The characteristics include work-life balance, usefulness to society, fairness and encouragement from supervisor, opportunities for self-fulfillment, work interest and healthy working environment. The value ranges from 1 for very important to 5 for not important at all and 6 for "can't say".

P-value is 0.0000<0.05 => reject H0. So, there is difference between male and female in evaluating the importance of work characteristics. The mean value of group 2 (women) is lower than group 1 (men) by 0.21. This means women consider work characteristics more important than men do.

# BV1 and Q2\_rewardsandcareer:

- 1) The test of equality of variances across the groups:
  - a. H0: Variances are equal.
  - b. H1: Variances are unequal.

Table 9. Summary of Q2\_rewardsandcareer in different groups of BV1.

BV1	Mean	Standard	Frequency
		Deviation	
1	2.6838563	0.70503743	1498
2	2.6717988	0.77494224	1640
Total	2.6775547	0.74230016	3138

The result of variance test is:

W0 = 14.39 df(1,3136)

Pr > F = 0.00015

p-value = 0.00015 < 0.05. The null hypothesis is rejected. Variances are unequal between female and male.

- 2) The test of equal means:
  - a. H0: Means of the two samples are same.
  - b. H1: Means are not same.

Table 10. Two-sample t test with unequal variances.

Group	Mean
1	2.68
2	2.67
Combined	2.67
Difference	0.012

Ha: diff != 0.

Pr(|T| > |t|) = 0.6481.

Like Q2\_work, Q2\_rewardsandcareer variable consists of values the respondents rate how important the rewards and career to them such as financial reward for good-work performance, the high value of work in society, high income, opportunities for advancement, and flexible working hour with the ability to work from home. The value ranges from 1 for very important to 5 for not important at all and 6 for "can't say".

P-value is 0.64>0.05 => accept H0. There is no difference between male and female evaluating the importance of rewards and career.

#### 5.3 Correlation analysis

As Q1\_attitudeandsatisfaction and Q2\_work variables are not normally distributed, Spearman's test is applied.

Q1\_attitudeandsatisfaction and Q2\_work:

- 1) Spearman's test
  - a. H0: Variables are not correlated.
  - b. H1: Variables are correlated.

Table 11. Relation of Q1\_attitudeandsatisfaction and Q2\_work.

	Q1_attitudeandsatisfact	Q2_work
	ion	
Q1_attitudeandsatisfact	1.00	
ion	3155	
Q2_work	0.1052	1.0000
	3155	3155
	0.0000	

The statistical significance is 0.0000 less than 0.05. Therefore, the hypothesis is rejected. Two variables are positively correlated with correlation coefficient of 0.1052. As the coefficient is under 0.4, this is a low correlation.

Like the previous ones, Q1\_attitudeandsatisfaction and Q2\_rewardsandcareer do not have normal distribution. Spearman's test is applied.

Q1\_attitudeandsatisfaction and Q2\_rewardsandcareer:

## 1) Spearman's test

- a. H0: Variables are not correlated.
- b. H1: Variables are correlated.

Table 12. Relation of Q1\_attitude and satisfaction and Q2\_rewards and career.

	Q1_attitudeandsatisfact	Q2_rewardsandcareer
	ion	
Q1_attitudeandsatisfact	1.00	
ion	3153	
Q2_rewardsandcareer	0.067	1.00
	3153	3153
	0.0002	

The statistical significance is 0.0002 less than 0.05. Therefore, the hypothesis is rejected. There is a positive correlation between 2 variables with correlation coefficient of 0.067. As the coefficient is under 0.4, this is also a low correlation.

In overall, based on the mean-comparison test between BV1 and Q1\_attitudeandsatisfaction, men now more satisfied in job than women. The test between BV1 and Q2\_work proved that women value work characteristics more than men. Lastly, there is no difference between men and women in evaluating the importance of rewards and career.

Mean-comparison test (ANOVA):

BV5 and BV7 have more than two groups. Hence, ANOVA is applied for the mean-comparison test.

Satisfaction in different industry: Q1 attitudeandsatisfaction and BV7

- 1) The test of equality of variances across the groups
  - a. H0: Variances are equal.
  - b. H1: Variances are unequal

Table 13. Analysis of variance.

1 Source 1 S	SS	Df	MS	F	Prob > F
--------------	----	----	----	---	----------

Between	12.62	4	3.15	4.34	0.0017
groups					
Within	2293.50	3157	0.73		
groups					
Total	2306.12	3161	0.73		

Barlett's equal-variances test: chi2(4) = 12.45

Prob>chi2 = 0.014.

p-value = 0.014 < 0.05 => Reject H0. => Variances across groups are unequal.

# 2) The test of equal means

a. H0: Means are same across the groups

b. H1: Means are not same

p-value = 0.0017 < 0.05 => Reject H0. => Means are not the same across groups.

Table 14. Comparison of Q1\_attitudeand satisfaction by BV7.

Row Mean -	1	2	3	4
Col Mean				
2	0.24			
	0.066			
3	0.21	-0.03		
	0.144	1.00		
4	0.25	0.01	0.38	
	0.035	1.00	1.00	
5	0.59	0.35	0.38	0.34
	0.001	9.964	0.031	0.074

Means are not the same in groups:

1 and 4 (p-value = 0.035), 1 and 5 (p-value = 0.01), 3 and 5 (p-value = 0.031).

Table 15. Summary of Q1\_attitudeandsatisfaction in different groups of BV7.

BV7	Mean
1	2.00
2	2.24

3	2.22
4	2.25
5	2.60
Total	2.24

In table 15, the ascending order of mean between groups is: 2.00 (group 1) < 2.22 (group 3) < 2.24 (group 2) < 2.25 (group 4) < 2.59 (group 5). As the respondents rate 1 for agreement with job satisfaction and 5 for disagreement, the lower mean value, the more satisfied the group of industry of employment. So, people in group 1, agriculture and forestry seem to satisfy the most, followed by group 3 (private services industry), group 2 (industry, manufacturing, and construction), group 4 (public services), respectively. The highest value belongs to group 5 (not in paid work), which means they are least satisfied with their jobs.

Satisfaction in different occupational status: Q1 attitudeandsatisfaction and BV5

- 1) The test of equality of variances across the groups:
  - a. H0: Variances are equal.
  - b. H1: Variances are unequal

Table 16. Analysis of variance.

Source	SS	Df	MS	F	Prob > F
Between	4.66	5	0.93	1.28	0.2700
groups					
Within	2301.66	3157	0.73		
groups					
Total	2306.32	3161	0.73		

Barlett's equal-variances test: chi2(5) = 6.3928 Prob>chi2 = 0.270.

p-value = 0.27 > 0.05 => Accept H0. => Variances across groups are equal.

- 2) The test of equal means
  - a. H0: Means are same across the groups
  - b. H1: Means are not same

p-value = 0.27 > 0.05 => Accept H0. => Means are the same across groups of different vocational education (table 17).

Table 17. Comparison of Q1\_attitude and satisfaction by BV7.

Row Mean	1	2	3	4	5
- Col Mean					
2	0.05				
	1.00				
3	0.01	-0.04			
	1.00	1.00			
4	-0.06	-0.11	-0.073		
	1.00	1.00	1.00		
5	-0.067	-0.12	-0.08	-0.08	
	1.00	1.00	1.00	1.00	
6	-0.003	-0.06	-0.017	0.06	0.06
	1.00	1.00	1.00	1.00	1.00

Overall, people no matter what their vocational education background is, have no difference in job satisfaction (Mean-comparison test result BV5 and Q1\_attitudeandcareer). People working in the agriculture and forestry industry seem to enjoy their work the most, followed by people in the private service sector. Manufacturing employees seem to be satisfied with their job as well. Public services also satisfy with theirs but not to a great extent. Lastly, not in paid work group is the least satisfy with their job.

## 6 Discussion

In this study, the primary target was to explore the job satisfaction based on the Survey on Finnish Values and Attitudes 2010 (Finnish Business and Policy Forum, EVA). First, we analyzed if there is a difference between men and women and correlation between job expectations and job satisfaction. Our hypotheses were as follows:

H1: There is a negative correlation between job expectations and job satisfaction.

H2: Men and women are equally satisfied with their job.

Our analysis shows that women rate work characteristics more important than men do. The previous study in the UK in the 90's reported that it was the other way around and women were satisfied to just have a job. It is interesting and a good improvement that women also have higher job expectations nowadays in Finland.

Our analysis also shows that men are more satisfied with their job than women. This is surprising result because the hypothesis was that there is no difference between genders. Also, the previous study in the UK in the 90's reported that women have higher job satisfaction and more recent study from 2016 indicates that men and women are equally satisfied with their job.

Based on these findings the first hypothesis is true and there is a negative correlation between the job expectations and job satisfaction and the second hypothesis is not true because men and women are not equally satisfied with their job. These findings could be the same also in other countries. Women have better possibilities and more equality in labor market in Finland and other countries and that might have affected women's expectations of job and job satisfaction. It would be interesting to find out if this is true and the real reasons why the results have changed over the time and is there more changes in men or women satisfactions and expectations.

Second, we analyzed if there is a difference between individuals with different vocational education background and different industries of employment. Our hypotheses were as follows:

H3: Individuals with higher vocational education background are more satisfied with their job.

H4: Individuals working in the private sector are more satisfied with their job.

Our analysis shows that there is no difference in the job satisfaction between the individuals with different vocational education background. It is interesting result because it is usually assumed that individuals with higher education have better

opportunities to get "better" jobs and that might affect the job satisfaction too. So, our third hypothesis is no true.

Our analysis also shows that there is a difference between industries on employment what it comes to job satisfaction. The individuals in the agriculture and forestry industries seem to enjoy their work the most and the private sector comes just after that. Our hypothesis was that the job satisfaction in the private sector would be the highest but based on our analysis, it is not true.

It is usually spoken that work conditions, salaries, benefits, etc. are best in the private sector so it is interesting that in Finland the best job satisfaction is in the agriculture and forestry industries. Our analysis also presents that job satisfaction is lowest in public services (if not counting individuals who do not work at all) and this result is not surprise considering the public opinion in Finland. These findings could be different in other countries than Finland. The agriculture and forestry industries are big part of Finnish economy, and this setup could differ from other countries and affect the results of job satisfaction between industries of employment. Also, the education in Finland is very good on every level and that could be different in other countries and thus influence the results of job satisfaction.

#### 7 Conclusions

It is important to summarize some of the limitations of the research. Firstly, the dataset we used is based on a questionnaire bringing possibility of dishonest responses. Utilizing a questionnaire also means that the data shows trends but fails to reveal underlying reasons as to why these trends appear. Combining a questionnaire with an interview could have provided more insights into the results. Personal perception also has a role in questionnaires where respondents rate their own experiences on a scale. A questionnaire has little to no ways of scaling responses so that responses are perceived similarly amongst respondents. For example, Q1\_attitudeandsatisfaction responses are simply based on how a respondent perceives their current situation being biased with elements such as colleagues, friends and simply their standard of living.

The data utilized was extracted in 2010 which means that results might not be applicable to the general population of 18–70-year-olds in Finland during the year 2021 as the expectations, rewards and career associated differences amongst men and women have most likely changed. We have not divided our sample into age categories either which means that we are unable to show differences in the variables when contrasting with respondent age.

Combining survey data with interviews can provide further avenues of research to provide why these results appeared. With further research there is a need for understanding what the root causes are for why men rate to be more satisfied in their work and why women rate work characteristics more important than men do (2010: at the time the data was collected). We recommend a multi-method approach in which multivariate analysis is conducted to find the hidden reasons for why these trends appear in the data.

# LIST OF REFERENCES

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