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The Relationship amongst Economic Well-Being and Academic Education between Financial Culture: The Case of the Israeli Ultra-Orthodox Sector

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Abstract

Financial literacy is one of the most essential and necessary skills for all to acquire in life from the young to the old. Many people have to make important financial decisions from a young age and these decisions become weightier and more important with every stage in life especially when becoming responsible for running the finances of a home. Similarly, upon retirement, decisions must be made regarding pension plans for the future. Not for nothing, developed and developing countries have become more and more concerned about their citizens' financial literacy (OECD, 2017). In addition, governments are working to promote policies for the integration of financial education into the curriculum throughout the various stages of education to enhance financial stability for citizens, to improve the national growth index and to increase each and everyone's level of financial well-being (OECD/INFE, 2009).

The level of financial literacy in most countries in the Western world, including Israel, is low. In a research on the topic of financial literacy carried out by INFE/OECD (2016) in 30 countries, some of which belong to the OECD organization, the average score of all the countries that took part was only 13.2 out of 21. In 2012, the Central Bureau of Statistics in Israel (hereafter the CBS) carried out a survey on the subject of financial literacy, which examined the level of financial knowledge of Israelis in comparison to the average of the 12 member countries of the OECD. The report shows a lower than average level of financial literacy in Israel in most of the categories covered in the survey.

The importance of financial skills is raised for a number of reasons. On an individual level those with financial knowledge deal better with debt (More, 2003), amass bigger fortunes (Hilgert, Hogarth & Beverly, 2003) and they plan the stages prior to retirement thus ensuring a higher level of economic well-being (Lusardi & Mitchell, 2013). In addition, greater financial knowledge skills can also contribute towards an improvement in general. Making informed financial decisions has a positive influence on the financial stability of households (OECD/, OECD; 2009, INFE 2009), on future income levels and consequently, can help curb poverty.

Awareness of the importance of financial literacy is also increasing in Israel. Financial education has a long-term effect on reducing the poverty threshold in Israel in general and in the Haredi households in particular. Moreover, the poverty line in the State of Israel is the highest of the OECD countries. The 2014 OECD research data ranked Israel at the top (the negative part) of the table. Poverty incidence in Israel was 1.7 times greater than the average of the OECD countries, which was 11.0%. Among the Jews, poverty rates are highest in the Haredi sector and are similar to those of the Arab population (Adva Center, 2017). Financial literacy is likely to narrow these gaps,

protect the individual as consumer in the global market and contribute to domestic welfare in Israel in general and to that of the Haredi sector in particular.

This paper examines the correlations between income and academic education and financial literacy. These correlations are investigated by applying statistical control of various background variables (internet connection, parents' education, gender, matriculation certificate, partner's education, level of religion and that of parents). Unlike other research papers, this paper focuses on a specific population - the Haredi sector in Israel. This population is characterized by a high demographic growth and a high fertility rate, by low rates of income and employment, high rates of poverty and a low level of educational attainments and achievements as compared to their peers.

Six **research questions** were posed in this paper: (1) to what extent, if at all, are there any connections between background variables and income? (2) to what extent, if at all, are there any connections between background variables and education in general and academic education in particular? (3) to what extent, if at all, is there a connection between income and academic education? (4) to what extent ,if at all, is there a connection between income and the degree of financial literacy? (5) to what extent, if at all, is there a connection between academic education and the degree of financial literacy? (6) to what extent, if at all, is there a connection between education and the degree of financial literacy while statistically controlling for income?

The research hypotheses are as follows:
Hypothesis number 1 is that a positive correlation between the background variables chosen (internet connection, parents' education, gender, matriculation certificate, partner's education, level of religion, parents' level of religion) and the level of income will be found. Hypothesis number 2 is that a positive correlation will be found between the background variables chosen (internet connection, parents' education, gender, matriculation certificate, partner's education, level of religion, parents' level of religion) and between the participant's level of education and the probability of him having an academic education. Hypothesis number 3 is that a positive correlation will be found between income and education. In other words, the higher the income, the higher the education. Hypothesis number 4 is that a positive correlation will be found between income and financial literacy. Hypothesis number 5 is that a positive correlation will be found between education and financial literacy. Hypothesis number 6 is that the positive correlation between income and financial literacy will decrease on acquiring education. Indeed, people with a high income have high financial literacy, however it is predicted here that this link moderates on acquiring education. Meaning that those who have acquired an education but have a low income, will have higher financial literacy in comparison to their peers who have not acquired an education.

The research method includes quantitative analysis using six models of multiple linear regression and one model of logistic regression. Models I-IV provide responses for research questions 3-6. Models V-VII provide responses to research questions 1-2.

In detail, model I responds to the third research question and analyses the correlations between income and academic education, whilst the background variables are statistically controlled. Model II responds to the fourth research question and analyses the correlations between income and financial literacy, where the background variables are statistically controlled. Model III responds to the fifth research question and analyses the correlations between academic education and financial literacy, where the background variables are statistically controlled. Model IV responds to the sixth research question and analyses the correlations between education and financial literacy, where income and the remaining background variables are statistically controlled. The remaining models, V and VI respond to the first and second research questions and analyze the correlations between the background variables and income, and between the background variables and education respectively. Finally, model VII presents the findings of the logistic regression in which a response is given to question number two regarding the correlations between the background variables and academic education.

The research tool used was a questionnaire consisting of two parts: the first part is a **questionnaire on financial literacy** (Ben-David Hadar, 2008). This questionnaire is made up of two main sections. The first section of the questionnaire includes indices of all the research paper's variables, some of which are simple indices of individual questions, such as gender, and some are complex indices assessed by a number of questions some of which fall into the category of questions similar to those in the literacy questionnaire. **The validity and reliability** of this section were assessed by three independent experts in the field of personal finance. The consistency of the questionnaire was assessed by Cronbach's alpha where a high level of reliability was found - Cronbach's alpha of 0.7. The second section is a **survey of personal characteristics** that is composed of questions based on The CBS Social and Economic Survey 2014. The two parts combined consist of a total of 84 questions.

The research participants: This paper analyses data of 187 Haredi households in Israel. The study population that participated in this research defines itself as Haredi although the level of religion differs according to where the participant stands ideologically, and how he subjectively categorizes himself, be it Lithuanian Haredi, Sephardic Haredi, Chassidic Haredi, National Orthodox and Religious. All the subjects run Haredi households in diverse residential areas, most of which are considered to be "Haredi towns" and in other various social clusters. It is important to note that the participants were deliberately grouped according to their level of education, some of whom have an academic education (50.8%) and some of whom do not (49.2%). This is in order to enable comparison of participants of a different education level with their income level and the level of financial literacy, in the light of which they are providing for their own households.

The research findings show that hypothesis number one was partially supported. The background variables that are statistically significantly connected to the household income level are partners' academic education and the participant's level of religion (β=.179* β=.209, see table no. 11 accordingly). It was found that the higher the partner's education, the higher the income. Furthermore, it was found that the lower the level of religion, the higher the income. The correlations between internet connection, parents' education, gender, matriculation certificate and parents' level of religion and between income were not found to be statistically significant.

Hypothesis number two was partially supported. The background variables that were found to have a statistically significant connection to the level of education are; eligibility for matriculation, father's education and partner's academic education (β=0.260**, β=0.174*, β=0,223 see table no. 12 accordingly). That is, it was found that there is a positive and significant statistical connection between eligibility for matriculation and the level of education. In addition, a positive and significant connection was found between the father's education and the participant's level of education. The higher the education of the father, the higher that of the participant. Finally, it was found that there is a positive connection between the partner's education and the participant's level of education. However, the connections between internet connection, gender, and parents' level of religion and education were not found to be statistically significant.

To be specific, when the various background variables are kept at a constant level, then the father's education, partner's education and matriculation certificate, contribute to explaining the variance in the participant's level of education. (see table no. 12: β=.174*, β=.223**, β=.260** respectively). That is to say, that among those who have internet connection and the same level of religion and those with a matriculation certificate, there is a higher level of education compared to their peers. For example, in the case of two individuals of different genders (male/female) but individual 'a' has matriculation qualifications and individual 'b' doesn't have, then individual 'a' will have a higher education in comparison. It also shows that individuals from educated families have a high education in comparison to their counterparts and finally, individuals who have educated partners have a high education in comparison to their peers.

On further analysis of the correlations between the background variables and the participant's academic education, using logistic regression, it was found that there is a significant statistical connection between the academic education of the partner and the participant's academic education. That is, it appears that when the various background variables are kept at a constant level, the variable that contributes to the variances explained in the participant's academic education is the partner's academic education. Meaning that individuals with background variables identical to those married to a partner with an academic education, also have a greater chance of having an academic education in comparison to their peers (β=.876*, see table 13). For example if two individuals have matriculation certificates but 'a's partner has an academic education whereas individual 'b's partner does not have an academic education, then it is likely that individual 'a' will also have an academic education.

In hypothesis number three it was maintained that a significant positive connection would be found between income and education. Meaning that it would be found that the higher the level of income is, then accordingly the level of education is higher when the rest of the background variables are kept constant. Hypothesis number three was supported. According to model I, a significant positive correlation was found between economic well-being (shared income) and the participants' academic level, when the background variables are statistically controlled. Namely, the level of economic well-being of those with an academic education is higher compared with those who do not have an academic education (see table no. 14: β=.138*).

In hypothesis number four, it was assumed that a positive correlation would be found between income and financial literacy. Namely that the higher the level of income, the higher the level of financial literacy and vice versa. Hypothesis number four was supported. From model II it was found that there is a significant positive correlation between the level of income and that of the participants' financial literacy when the background variables are statistically controlled. Meaning that the higher the participant's personal income and the way in which he defines his income is higher, (lower than the average income, similar to the average income or higher than the average income), thus the level of financial literacy is higher (β=.24** -l, β=.29** see table no. 15 accordingly). The remaining background variables that were taken into account were not found to be significant in relation to financial literacy.

In Hypothesis number five it was suggested that a positive correlation would be found between education and financial literacy. This hypothesis was supported. The higher the level of education, the higher the level of financial literacy. In model III it appears that there is a significant positive statistical correlation between academic education and the level of financial literacy when the background variables are statistically controlled. Namely, the higher the level of education, the higher the financial literacy, when the remaining background variables are controlled (β=.36**, see table number 16). The rest of the background variables that were taken into account were not found to be significant vis à vis financial literacy.

In hypothesis number six it was suggested that the positive connection between income and financial literacy will decrease in light of acquiring higher education. Indeed, individuals with a high income have higher financial literacy and vice versa. However, it is predicted here that this connection decreases on acquiring an education. That is, individuals who acquired an education, even if their income is low, will have high financial literacy in comparison to their peers who did not acquire an education. This hypothesis was also supported. In model IV it can be seen that that there is a significant connection between the level of education and that of financial literacy, when income is controlled statistically. It can be seen that the connection between income and financial literacy decreases when education is an intermediate variable. Indeed individuals who have a high income have a high level of financial literacy and vice versa (see table number 15, model II). However this correlation decreases on acquiring an education. Namely, individuals who have acquired an education, even if their income is low, will have a higher level of financial literacy compared to their peers who did not acquire an education. Furthermore, it was found that the connection between income and financial literacy is enhanced when the level of education is not statistically

controlled (β=0.29**, see table no 15). By comparison, the degree of the connection between income and financial literacy drops when education is taken into account (β=0.25**, see table no. 17).

The policy implications of this research paper show that an individual's financial literacy can be improved by providing education from elementary school stage up to integration into academia. Improving financial literacy will lower the rate of poverty in the Haredi sector. In conclusion, the findings of this study show therefore that by acquiring relevant education, financial literacy will be higher. In this way, rates of poverty in the Haredi sector are likely to decrease. Thus the positive correlation between income and financial literacy decreases in the light of acquiring a higher education.

Financial literacy is important for both individuals and society in general. First of all, financial literacy is of importance for individuals regarding optimal economic management of their households, for making informed comparisons between products and financial services and for making rational financial decisions. A high level of financial literacy would ensure that the consumer would likely be able to contribute to improving his own financial well-being, would be able to act independently and efficiently manage his own money matters (OECD, 2016). Those having financial literacy will be able to make informed decisions at a young age or even at a later stage in life regarding their future.

Thus for example, Lusardi & Mitchell (2007) found that those who planned their steps and managed their economic affairs in an educated manner from an early age were found to be in a much better position financially at retirement than that of their peers. Financial literacy enables financial planning and can explain the differences between those reaching retirement in disparate situations of economic well-being, with those having financial literacy being much better off.

Secondly, financial literacy is important for society in general. A high level of financial literacy can help slow down the rate of poverty in the country in general and in the Haredi sector in particular. Thus, the higher the level financial literacy reaches by acquiring relevant education, so accordingly, the level of economic well-being in households will go up and the rate of poverty in the State of Israel will go down.