Financial literacy among children: the role of involvement in saving money

Tali Te'eni-Harari

Tali Te'eni-Harari is Head of Marketing Department at the Business School, Peres Academic Center, Rehovot, Israel.

Abstract

Purpose - This study aims to examine the role of involvement in saving money (ISM) to better understand children's saving behavior and allow a deeper understanding of financial literacy processes among children. The emphasis on ISM is based on previous studies indicating the central role of involvement variables in information processing among young people.

Design/methodology/approach - The study is based on one-on-one interviews among 103 first-grade children. The interviews explored the relationship between the child's ISM and substantial finance-related outcomes (attitudes toward saving money, intention to save money and saving behavior) and factors that might explain the child's ISM (access to money, perceived importance of parental and peer attitudes toward saving money and actual parental and peer attitudes toward saving money).

Findings - Children with a high level of ISM expressed more positive attitudes toward saving, as well as more positive behavior with regard to saving. With respect to the factors that might explain the child's level of ISM, two out of the three variables, namely, the perceived importance of parental and peer attitudes toward saving money and the child's access to money, played a significant role in determining the child's level of ISM.

Originality/value - This initial study demonstrates the importance of the involvement variable in the context of financial literacy and the need to investigate the child's perceptions of, and motivation for, saving, with a focus on the child's viewpoint.

Keywords Involvement, Children, Financial literacy, Saving money

Paper type Research paper

he new media-marketing environment in which young people are growing up includes endless marketing and advertising stimuli, 24/7, wherever they are, on diverse media platforms. Content analyses of advertising stimuli show that one of the most prominent values promoted in advertisements is materialism, presenting happiness, social acceptance, success and respect as being directly related to material consumption (Asya and Hezroni, 2002; Good, 2007; Richins and Dawson, 1992). Thus, children and parents living in today's consumer environment are faced with an enormous gap between the media-marketing environment and the ability and motivation of the young to cope with the endless stimuli surrounding them. Given these conditions, financial literacy has become increasingly important in both academic research and public consideration and treatment of the issue (Gudmunson and Danes, 2011). Educational systems worldwide are also addressing the issue and have recognized the importance of integrating financial literacy content into the curriculum. A growing number of countries have developed and implemented national strategies for financial education to improve the financial literacy of their populations in general, often with a particular focus on the younger generation (OECD, 2014; Sherraden et al., 2011). Financial literacy is perceived as a life skill necessary for intelligent financial conduct in modern life and an important basis for the economic and financial stability of society and the state (Holden et al., 2009; OECD, 2014).

Received 19 January 2016 Revised 16 March 2016 Accepted 27 March 2016

One of the skills that constitutes financial literacy is the ability to save financial resources for different purposes, such as preparing "for a rainy day" or saving up for a large purchase. Saving requires the ability to delay gratification; in other words, to forgo an immediate purchase for enabling a future purchase. In general, it can be said that nowadays consumers do not save enough for various reasons, including lapses in self-control, disproportionate emphasis on the present rather than the future and cultural influences (Ulkumen and Cheema, 2011). The media-marketing environment seems to play a role in this context too, affecting the ability and willingness of children to delay gratification and save money, primarily because the environment is so dynamic, changes so rapidly and emphasizes immediacy.

This study is a response to the need to expand existing knowledge about financial literacy (Hagedorn et al., 2012; Metcalf and Atance, 2011; Sonuga-Barke and Webley, 1993), and especially the need to explain differences in financial processes and the factors influencing consumer savings, focusing particularly on young people's saving (Friedline et al., 2011; Gudmunson and Danes, 2011; Ulkumen and Cheema, 2011). As such, the current study explores the role of involvement in saving money (ISM) among young people by testing the relationship between ISM and financial outcomes (attitudes toward saving, saving intention and saving behavior) and the factors that may explain ISM (access to money, perceived importance of parental and peer attitudes toward saving money and perceived parental and peer attitudes toward saving money). Despite the importance of the involvement variables in understanding information processing among young people (Te'eni-Harari, 2013; Te'eni-Harari et al., 2007, 2009), this variable has not been explored enough as a factor in financial literacy, financial success and financial education.

Financial literacy and young people

Financial literacy is defined by the Organization for Economic Cooperation and Development as:

[...] knowledge and understanding of financial concepts and risks, and the skills, motivation and confidence to apply such knowledge and understanding in order to make effective decisions across a range of financial contexts, to improve the financial well-being of individuals and society, and to enable participation in economic life (OECD, 2014, p. 33).

Various studies testify to an improvement in the financial consumer skills of the child as he grows older (De Clercq, 2009; Lundby, 2013; Leiser et al., 1990; Otto et al., 2006; Roedder and Whitney, 1986). From the age of three, the child begins to realize that money is used for payment, but has not yet formulated a clear system of rules and relations that tie together the different financial concepts. Progress can be observed from the age of six, when the child begins to formulate rules, make connections and differentiate between different types of money, and is also able to classify products according to their price level. Nevertheless, the child may have difficulties in making connections in a systematic manner, and his perceptions are based primarily on his own personal experience (Berti and Bombi, 1988; Damay et al., 2015; Roos et al., 2005; Sosin et al., 1997).

As he grows up, the child learns that saving is good for him, but he neither necessarily enjoys saving nor is he good at it. Between 6 and 12 years of age, the child starts to understand the value of saving and the link between saving and future opportunity. Young people begin to engage in more complex saving and spending strategies around the age of 12 years (Friedline et al., 2011; Sherraden et al., 2011; Otto et al., 2006; Webley et al., 1991). According to Sonuga-Barke and Webley (1993), the development of saving behavior is affected by the ability to understand the concept of "temptation" and the consequences of spending today on future opportunities. Studies had shown that older children save more money than younger children (Furnham and Thomas, 1984; Mischel and Mischel, 1983; Tysoe, 1983).

Together with the influence of the child's age on the development of financial literacy, children are also influenced by their family. According to the family financial socialization theory (Gudmunson and Danes, 2011), financial literacy among young people is influenced mainly by the child's family, which is a primary source of financial socialization, especially for young children. Families are important for learning about finance and play an important role in modeling saving habits (Barnet-Verzat and Wolff, 2002; Beutler and Dickson, 2008; Grusec and Davidov, 2007; Jorgensen and Savla, 2010; Kuczynsk and Parkin, 2007; Liable and Thompson, 2007).

Acquiring financial knowledge and skills depends on others factors too, including cultural influences, media and peers (Beutler and Dickson, 2008; Bodnar, 2005; Rajasekhara *et al.*, 2010); sources and amounts of money that the child controls (Belk *et al.*, 1984; Doss *et al.*, 2005); and education about basic financial concepts (Furnham and Argyle, 1998; Miller and Van Fossen, 2008; Roland-Levy, 1990; Sherraden *et al.*, 2011). Children can learn financial concepts using real-life examples (such as using their allowance) and progress toward financial literacy (Hagedorn *et al.*, 2012; Harter and Harter, 2007; Schug and Hagedorn, 2005).

With regard to saving, young people's saving behavior has been found to be significantly related to factors such as grade, future orientation, parents and peers but not related to the number of hours a young person worked per week and their earnings (Danes and Dunrud, 2008; Friedline *et al.*, 2011; Holden *et al.*, 2009; Metcalf and Atance, 2011; Pritchard *et al.*, 1989; Webley *et al.*, 2001). Interestingly, children are able to learn saving habits, even based on a single trial (Metcalf and Atance, 2011).

The importance of the involvement variable in the decision-making process among young people

The socio-developmental approach adopts a child-centered view of financial activities, focusing on children's perception of financial concepts rather than on their knowledge of those concepts (Sonuga-Barke and Webley, 1993). However, the involvement variable, which represents the subjective way in which the individual perceives and attributes importance, interest and relevance to a given object in his surroundings (Zaichkowsky, 1986), has not yet been explored in this context. Studies have discussed the importance of the perception of reality in financial decision-making and even mentioned the relevance of involvement theories in explaining the financial decision-making process, but these studies actually investigated other variables (Nga *et al.*, 2010; Nga and Yien, 2013; Ulkumen and Cheema, 2011).

To date, the involvement variable has been studied primarily in the context of information processing among adults (Chen *et al.*, 2008; Feiereisen *et al.*, 2009; Petty *et al.*, 2005), although some initial studies have been conducted among young people. Te'eni-Harari *et al.* (2009) found that involvement has an important role in information processing among young people; when the object was perceived as not relevant (a low level of involvement), attitude measures were influenced to a significantly lower degree compared with when the object was perceived as being relevant (a high level of involvement). Muratore's study (2003) shows the importance of involvement in the context of sales; the child noticed sales only when the sales were for products relevant to them.

In view of the importance of the involvement variable in information processing, the present study seeks to expand the investigation to the financial area, studying the role of ISM in financial literacy processes among children. As a positive relationship has been found between involvement and attitudes in the information processes (Te'eni-Harari *et al.*, 2009), and findings also indicate that adults' savings can be increased or decreased merely by changing the way consumers think about their saving goals (Ulkumen and Cheema, 2011), it can be posited that a positive correlation will be found between ISM and (*H1*) attitudes toward saving, (*H2*) the intention to save and (*H3*) saving behavior in a young population.

In addition, to better understand the ISM variable, this study explores the role of three factors that may influence ISM: the child's access to money, the perceived importance of parental and peer attitudes toward saving money and perceived parental and peer attitudes toward saving money.

As mentioned above, findings have shown that a young person's access to money is correlated with financial understanding and skills and that parents and peers are important actors in financial socialization. Furthermore, in the context of information processing, it was found that involvement was positively and significantly influenced by both parents and peers (Te'eni-Harari and Hornik, 2010). In view of these findings, the fourth hypothesis (H4) addresses the role of these three factors and examines whether ISM among children will be positively influenced by:

- 1. the young person's access to money;
- 2. the perceived importance of parental and peer attitudes toward saving money; and
- 3. perceived parental and peer attitudes toward saving money.

Method

Sample and procedure

One-on-one interviews based on a structured questionnaire were conducted with 103 first-grade students from seven schools in the central region of Israel, with the approval of the Ministry of Education and the schools' principals. All seven schools that participated in the study were secular schools. First-graders in these schools were given an approval note to be signed by their parents, and only those who returned this note with their parent's signature and agreement to participate, actually took part. In addition, only six-year-old children took part in the study and not who were in the first grade for an extra year or who had entered the first grade a year early. This was done in liaison with the home-room teacher.

Students' participation in the study was voluntary and confidential. Each participant was interviewed individually, at school during teaching time, in comfortable conditions. All questions were read aloud by a trained interviewer. Each child had a 20-min interview. Sometimes, the child asked the interviewer to repeat a question that they did not understand or asked for time to think about the answer. Each child was given all the time needed to respond to the questions.

The sample consisted of 47 (45.6 per cent) male and 56 (54.4 per cent) female participants. Each child-participant gave their responses to all measures using the Pollimeter as a measuring tool (Lampert, 1981; Lampert and Stashevsky, 2006; Stashevsky and Lampert, 2008). The PolliMeter consists of two basic components: a rectangular scaling device and a sliding colored ruler that can be moved to the right or the left in its housing. The participant's side is scaled in black and white, and the participant is informed that black represents a negative attitude, while white represents a positive attitude. The participant is requested to set the scale, adding either more black or more white to the ruler as needed, to reflect his or her response to the question. The tester's side of the Pollimeter "translates" the participant's response onto a numerical scale between 0 and 100. Several previous studies have used the Pollimeter as the main tool of measurement for conducting research with young participants (Te'eni-Harari, 2013; Te'eni-Harari and Hornik, 2010; Te'eni-Harari et al., 2007, 2009). The Pollimeter facilitates the answering process, while increasing the validity and reliability of the responses.

Measurement

Involvement in saving money. Involvement was measured using Zaichkowsky's improved personal involvement ten-question index (Zaichkowsky, 1994). Zaichkowsky's scale is considered a valid measure for involvement (Kim et al., 2009; Ram and Jung, 1994) and was used in previous studies among young people (Te'eni-Harari and Hornik, 2010; Te'eni-Harari, 2013; Te'eni-Harari *et al.*, 2009). The responses in this study were given using the Pollimeter and were "translated" onto a numerical scale of 0-100. All ten questions were combined to create a single unified index (Cronbach's alpha = 0.771).

Attitude toward saving money. According to the family financial socialization theory (Gudmunson and Danes, 2011), it is important to study financial attitudes as a financial socialization outcome. The attitude toward saving refers to the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior (Ajzen, 1991). As in previous studies (Belch, 1982; Te'eni-Harari, 2013; Te'eni-Harari *et al.*, 2007, 2009), participants were asked three questions about saving money: Is it good/bad to save? Is it smart/stupid to save? Should/should not a person save? All answers were given using the Pollimeter on a 0-100 scale. The three answers were then combined into one index (Cronbach's alpha = 0.665).

Savings intention. According to the theory of reasoned action (Ajzen, 1988), behaviors can be predicted from intentions with considerable accuracy. Therefore, participants were asked two questions about their intentions to save money: "If you were to receive 100 shekels (25\$) for your birthday, would you save the money?" (with answers ranging from "Definitely" to "Definitely not") and "If you were given money, would it be important for you to save the money you received?" (with answers ranging from "Very important" to "Not important at all"). All answers were given using the Pollimeter, on a 0-100 scale. Both of these questions were integrated into one index (r = 0.350, p = 0.000).

Saving behavior. Financial behavior is a central financial socialization outcome (Gudmunson and Danes, 2011). Participants were asked three questions about their saving behavior: "Do you keep your money in a savings box?", "Do you keep your money in a wallet?" ("Always" to "Never") and "Do you know how much money you have now?" ("I know exactly" to "I don't know at all"). All answers were given using the Pollimeter on a scale of 0-100. These questions were integrated into one index (Cronbach's alpha = 0.619).

Access to money. Participants were asked three questions about their access to money: "Do you get regular weekly pocket money from your parents?", "Do you get money from your parents on special occasions?" and "Do you get money from your grandparents on special occasions?". Responses were on a scale ranging from "Always" to "Never" (0-100), obtained by calculating the average total of answers to the three questions and ranged from 0 to 300 (M = 149.94, SD = 93.38).

Perceived parental and peer attitudes toward saving money. A person's subjective perception of others' attitudes may have an influence on that person (Fishbein $et\ al.$, 2002; Fishbein and Yzer, 2003; Gunther $et\ al.$, 2006; Gunther and Storey, 2003). In this study, the sample was composed of children, so they were asked about their perceptions of purposive financial socialization (Gudmunson and Danes, 2011), focusing on the respective influence of parents and peers with regard to saving money. The participants were asked what their peers and what their parents think about saving money. Their responses regarding their peers'/parents' attitudes toward save money were marked on a scale ranging from "Very good" to "Not good at all", using the Pollimeter. Both of these questions were integrated into one index (r=0.264, p=0.007).

Perceived importance of parental and peer attitudes toward saving money. The second social factor refers to the perceived social pressure to perform or not perform the behavior (Ajzen, 1991; Broeder and Stokmans, 2013). Participants were asked how important their peers' and their parents' attitudes toward saving money were to them ("Very important" to "Not important at all"). Both of these questions were integrated into one index (r = 0.350, p = 0.000).

Results

H1–H3 tested whether ISM among children has a positive correlation with attitudes toward saving, saving intention and saving behaviors (Table I).

Variable	Ν	М	SD	1	2	3	4
SM	103	73.57	21.92	1	0.27***	0.19*	0.32***
Attitudes toward saving	103	89.16	21.67		1	0.11	0.12
Saving intention	103	81.17	29.13			1	0.05
Saving behaviors	103	71.03	27.59				1

The correlation that was found by examining the relationship between ISM and saving attitudes (H1) was positive and significant (r = 0.268, p = 0.006) and indicates that as ISM increases, attitudes toward saving become more positive, supporting H1. On the other hand, the correlation found between ISM and saving intention (H2) was not significant (r =0.193, p = 0.051). The correlation between ISM and saving behavior (H3) was found to be significant (r = 0.324, p = 0.001) and indicates that as ISM increases, a greater degree of saving behavior is shown, supporting H3 (Table II).

H4 predicted that ISM among children is positively influenced by the young person's access to money, the perceived importance of parental and peer attitudes toward saving money and by perceived parental and peer attitudes toward saving money.

Regression analysis showed that the independent variables accounted for 40 per cent of the variation in ISM ($R^2 = 0.402$; adjusted $R^2 = 0.384$, F = 22.219, p = 0.000). ISM was positively and significantly influenced by the perceived importance of parental and peer attitudes toward saving money (B = 0.362, $\beta = 0.517$, p = 0.000) and by the young participants' access to money (B = 0.042, $\beta = 0.181$, p = 0.025). On the other hand, ISM was not significantly influenced by perceived parental and peer attitudes toward saving money (B = 0.123, $\beta = 0.133$, p = 0.106).

Discussion

This study examined the role of ISM to better understand financial literacy processes among the first-grade children based on interviews. The study explored the relationship between the child's ISM and substantial finance-related outcomes (attitudes toward saving money, intention to save money and saving behavior) and factors that might explain the child's ISM (access to money, the perceived importance of parental and peer attitudes toward saving money and perceived parental and peer attitudes toward saving money).

The results of the study show that children with a high level of ISM express more positive attitudes toward saving, as well as more positive behavior with regard to saving. It appears that the perception of saving as important and relevant to the child (high ISM) is likely to generate a positive approach toward saving. These findings are consistent with previous findings about the importance of involvement in forming positive attitudes during information processing (Te'eni-Harari et al., 2009; Muratore, 2003) and with the socio-developmental approach that focuses on the child's perception of financial concepts rather than on their knowledge of these concepts (Sonuga-Barke and Webley, 1993).

Table II Test for variables predicting ISM, H4							
Variable	β	t					
Access to money Perceived importance of parental and peer attitudes toward saving money Perceived parental and peer attitudes toward saving money	0.042 0.362 0.123	2.27* 6.19*** 1.631					
Notes: $R^2 = 0.40$; $F = 22.22$; $p < 0.001$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$							

The considerable importance of ISM found in this study may be explained by the age of the children in the sample. At this age, the child is developing their understanding of financial concepts and may experience difficulties in making connections in a systematic manner (Berti and Bombi, 1988; Damay *et al.*, 2015; De Clercq, 2009; Lundby, 2013; Leiser *et al.*, 1990; Otto *et al.*, 2006; Roos *et al.*, 2005). The child may be confused about saving money; he has begun to learn that saving is good for him, but does not necessarily feel that saving is fun or fully understand the benefits to be gained from saving money (Friedline *et al.*, 2011; Sherraden *et al.*, 2011; Otto *et al.*, 2006; Webley *et al.*, 1991). In addition, the mechanism for delaying gratification is still developing at this age, and the child is not always capable of resisting "temptation" (Furnham and Thomas, 1984; Mischel and Mischel, 1983; Sonuga-Barke and Webley, 1989, 1993; Tysoe, 1983). This sense of confusion and frustration may be a good reason why children of this age group "use" ISM as a mechanism to direct their attitudes and behavior toward saving, a tool that may help them cope better with the new media-marketing environment.

In the future, it would be of interest to explore the role of ISM among children of different age groups, especially comparing this age group to young people aged 12 years and older, who are beginning to engage in more complex saving and spending strategies (Friedline et al., 2011; Sherraden et al., 2011; Otto et al., 2006; Webley et al., 1991). Another interesting question to be addressed is whether the mechanism for delaying gratification is associated with ISM among children. A better understanding of the mechanism for delaying gratification would be very important, not only in the context of financial attitudes and behavior but also in relation to more discerning consumerism among young people, and even with regard to the extent to which the young person relates critically to the many different stimuli, including materialistic stimuli (Asya and Hezroni, 2002; Good, 2007; Richins and Dawson, 1992).

In addition to examining the relationship between ISM and its implications for financial outcomes (attitudes and behavior), this study also investigated factors that might explain the child's level of involvement. Three variables relevant to this question were examined:

- 1. the perceived importance of attitudes toward saving in their environment (parents and peers);
- 2. the attitudes toward saving in their environment (parents and peers); and
- 3. the child's access to money.

The study indicates that two out of the three variables – the perceived importance of attitudes in the child's environment and their access to money – play a significant role in determining the child's level of ISM. According to the study's findings, the greater the perceived importance of attitudes of parents and peers, the higher the child's involvement in saving. Likewise, the greater access to money the child has, the higher the involvement level. These findings are important because they enable us to better understand the way in which the child's ISM can be modified, an important task in light of the study's findings about the role of ISM in establishing positive attitudes toward saving and more appropriate financial behavior.

The findings about the importance of parental and peer attitudes toward saving are consistent with a previous study that examined the factors influencing involvement among children (Te'eni-Harari and Hornik, 2010), with the financial socialization theory (Gudmunson and Danes, 2011), and with research on the importance of parents and peers in the child's financial socialization (Barnet-Verzat and Wolff, 2002; Beutler and Dickson, 2008; Grusec and Davidov, 2007; Jorgensen and Savla, 2010; Kuczynsk and Parkin, 2007; Liable and Thompson, 2007). It is interesting to note that in this study, the importance of parental and peer attitudes toward saving predicted ISM, indicating that the process whereby parents' and peers' attitudes influence the child is not necessarily directed at

behavior, but may be, in fact, a more complex process that includes an important, more stable variable - the involvement variable.

The finding concerning the importance of the child's access to money and the amount of money the child has is also in line with earlier studies (Belk et al., 1984; Doss et al., 2005). Access to money seems to provide children, who are in the process of acquiring financial concepts, with an important opportunity to gain hands-on experience in managing their money. Therefore, regular pocket money is an important source of income for the child and is likely to raise their level of ISM, thereby contributing to the formation of positive attitudes toward saving and more positive financial behaviors.

The findings of this study suggest that parents play a dual role in the process by which their children acquire financial literacy. Their role is to raise the issue of saving as an important subject, but also by giving the child regular pocket money, to enable them to encounter hands-on financial experiences that give them an opportunity to manage their budget and understand the significance of saving. According to the study's findings, a parental action such as this can help raise the child's ISM.

Implications

The limited nature of children's consumer skills on the one hand, and the material messages that flood children via the media on the other, demand that children be provided with the necessary tools and basic skills needed to help them cope better with the persuasive messages they are constantly exposed to. The study's findings have important implications for financial education, suggesting the need for different learning programs according to different levels of ISM and the need for financial education that is not based on knowledge alone (Gudmunson and Danes, 2011). It is also important for teaching staff to understand the role of ISM and the way in which more intelligent financial behavior and more meaningful saving can be encouraged when ISM is higher. In addition, the finding that parents are an important factor affecting ISM suggests that inclusion of parents in the learning programs is essential, and that they should be encouraged to talk about saving at home and even to practice saving with their child, using pocket money as an integrative tool in this learning process.

Understanding the factors that influence consumer savings is of great interest to government agencies and financial services firms (Ulkumen and Cheema, 2011). The conclusions of the study have implications for financial policy, highlighting important factors that influence saving attitudes and behaviors among young people. Decision-makers (governmental, legislative and regulatory entities) should consider ISM as a factor in improving the public's saving indices, as the findings demonstrate a correlation between high ISM and better saving habits. In addition, decision-makers should think about the ways in which they could use the two important factors influencing ISM - parents and pocket money - as tools for increasing saving behavior among the young, and thereby increase saving among the poor, encourage sufficient savings for health care and retirement, increase well-being and also improve economic and financial stability in general (OECD/INFE, 2014; Ulkumen and Cheema, 2011).

Study limitations and suggestions for future research

This study is an initial study examining the role of ISM among children. The findings demonstrate the importance of this variable and the need to investigate the child's perception of saving and its importance for them, focusing on the child's world view, as proposed by the socio-developmental approach (Sonuga-Barke and Webley, 1993). However, because of the study's exploratory nature, its findings indicate a need for further research on this variable. It is recommended that ISM be investigated among other age groups and among children in different countries. A deeper understanding of the significance of this variable among younger and older children may be gained by investigating additional age groups, also enabling the study of differences between different age groups regarding involvement. In addition, a comparative study among children from different countries may well contribute to the understanding of the cultural contexts of ISM and provide important insights to augment the findings of the present study. An investigation among parents of those issues explored among children in the present study is another possibility for further research.

This study used a quantitative research method based on face-to-face interviews with the children. The use of the qualitative research methods to investigate the issues and trends suggested by this paper may well reveal additional important aspects of the involvement variable.

A further recommendation suggested by the research findings is to examine ISM in the context of the effectiveness of finance-related learning programs. This variable may possibly contribute to a better understanding of the degree to which learning programs are successful among different students.

References

Ajzen, I. (1988), Attitudes, Personality, and Behavior, Dorsey Press, Chicago, IL.

Ajzen, I. (1991), "The theory of planned behavior", *Organizational Behavior and Human Decision Processes*, Vol. 50 No. 2, pp. 179-211.

Asya, I. and Hezroni, A. (2002), "A comparison of values in infomercials and commercials", *Corporate Communications: An International Journal*, Vol. 7 No. 1, pp. 34-45.

Barnet-Verzat, C. and Wolff, F. (2002), "Motives for pocket money allowance and family incentives", *Journal of Economic Psychology*, Vol. 23, pp. 339-366.

Belch, G.E. (1982), "The effects of television commercial repetition on cognitive response and message acceptance", *Journal of Consumer Research*, Vol. 9, pp. 56-65.

Belk, R.W., Clifford, R. and Randall, H. (1984), "Adolescents' reporting saving, giving, and spending as a function of sources of income", in Hirschman, E.C. and Holbrook, M.B. (Eds), *Advances in Consumer Research*, XII, Association for Consumer Research, Provo, UT, pp. 42-46.

Berti, A.E. and Bombi, A.S. (1988), *The Child's Construction of Economics*, Cambridge University Press, Cambridge.

Beutler, I. and Dickson, L. (2008), "Consumer economic socialization", in Xiao, J. (Ed.), *Handbook of Consumer Finance Research*, Springer, New York, NY, pp. 83-102.

Bodnar, J. (2005), *Raising Money-Smart Kids: What They Need to Know About Money and How to Tell Them*, Kaplan Business, Chicago, IL.

Broeder, P. and Stokmans, M. (2013), "Why should I read? – a cross-cultural investigation into adolescents' reading socialisation and reading attitude", *International Review Education*, Vol. 59, pp. 87-112.

Chen, T., Wang, H. and Tsui, C. (2008), "Validating the integrated paradigm for advertising involvement with the intuitionistic fuzzy set theory", FUZZ-IEEE International Conference on Fuzzy Systems, Hong Kong, pp. 797-804.

Damay, C., Guichard, N. and Clauzel, A. (2015), "Children's price knowledge", *Young Consumers*, Vol. 15 No. 2, pp. 167-177.

Danes, S.M. and Dunrud, T. (2008), "Teaching children money habits for life", UW Minnesota Extension Children and Money Series, available at: www.cehd.umn.edu/fsos/projects/ruralmnlife/pdf/moneyhabitsforlife.pdf (accessed 29 December 2015).

De Clercq, B. (2009), "Do our children know anything about money? An exploratory study", *Meditari Accountancy Research*, Vol. 17 No. 1, pp. 1-13.

Doss, V.S., Marlowe, J. and Godwin, D.D. (2005), "Middle school children's sources and uses of money", *Journal of Consumer Affairs*, Vol. 29 No. 1, pp. 219-241.

Feiereisen, S., Broderick, A.J. and Douglas, S.P. (2009), "The effect and moderation of gender identity congruity: utilizing 'real woman' advertising images", *Psychology & Marketing*, Vol. 26 No. 9, pp. 813-843.

Fishbein, M., Cappela, J.N., Hornik, R., Sayeed, S., Yzer, M. and Ahern, R.K. (2002), "The role of theory in developing effective anti-drug public service announcements", in Crano, W.D. and Burgoon, M. (Eds), Mass Media and Drug Prevention: Classic and Contemporary Theories and Research, Erlbaum, Mahwah, NJ, pp. 89-117.

Fishbein, M. and Yzer, M.C. (2003), "Using theory to design effective health behavior interventions", Communication Theory, Vol. 13 No. 2, pp. 164-183.

Friedline, T.L., Elliott, W. and Nam, I. (2011), "Predicting savings from adolescence to young adulthood: a propensity score approach", Journal of the Society for Social Work and Research, Vol. 2 No. 1, pp. 1-22.

Furnham, A. and Argyle, M. (1998), The Psychology of Money, Routledge, London.

Furnham, A. and Thomas, P. (1984), "Pocket money: a study of economic education", British Journal of Developmental Psychology, Vol. 2, pp. 205-212.

Good, J. (2007), "Shop'til we drop? Television, materialism and attitudes about the natural environment", Mass Communication and Society, Vol. 10 No. 3, pp. 365-383.

Grusec, J.E. and Davidov, M. (2007), "Socialization in the family: the roles of parents", in Grusec, J.E. and Hastings, P.D. (Eds), Handbook of Socialization: Theory and Research, Guilford Press, New York, NY and London, pp. 284-308.

Gudmunson, C.G. and Danes, S.M. (2011), "Family financial socialization: theory and critical review", Journal of Family and Economic Issues, Vol. 32 No. 4, pp. 644-667.

Gunther, A. and Storey, D. (2003), "The influence of presumed influence", Journal of Communication, Vol. 53, pp. 199-215.

Gunther, A.C., Bolt, D., Borzekowski, D.L.G., Liebhart, J.L. and Dillard, J.P. (2006), "Presumed influence on peer norms", Journal of Communication, Vol. 56, pp. 52-68.

Hagedorn, E.A., Schug, M.C. and Suiter, M. (2012), "Starting early: a collaborative approach to financial literacy in the Chicago public schools", Journal of Economics and Finance Education, Vol. 11 No. 2, pp. 1-9.

Harter, C.L. and Harter, J.F.R. (2007), "Assessing the effectiveness of financial fitness for Life in Eastern Kentucky", available at: www.aeaweb.org/annual_mtg_papers/2007/0105_1015_1204.pdf (accessed 31 December 2015).

Holden, K., Kalish, C., Scheinholtz, L., Dietrich, D. and Novak, B. (2009), "Financial literacy programs targeted on pre-school children: development and evaluation", La Follette School Working-paper No. 2009-009, University of Wisconsin- Madison, WI.

Jorgensen, B.L. and Savla, J. (2010), "Financial literacy of young adults: the importance of parental socialization", Family Relations, Vol. 59, pp. 465-478.

Kim, S., Haley, E. and Koo, G. (2009), "Comparison of the paths from consumer involvement types to ad responses between corporate advertising and product advertising", Journal of Advertising, Vol. 38 No. 3, pp. 67-80.

Kuczynski, L. and Parkin, C.M. (2007), "Agency and bidirectionality in socialization: interactions, transactions, and relational dialectics", in Grusec, J.E. and Hastings, P.D. (Eds), Handbook of Socialization: Theory and Research, Guilford Press, New York, NY and London, pp. 259-283.

Lampert, S. (1981), "A new scale for consumer research", Journal of Advertising Research, Vol. 21, pp. 23-29.

Lampert, S. and Stashevsky, S. (2006), "A new method for attitude measurement", in Stashevsky, S. (Ed.), Work Values and Behavior, International Society for the Study of Work and Organizational Values, Department of Management and Marketing, Louisiana State University Shreveport, Shreveport, LA, pp. 168-175.

Leiser, D., Sevon, G. and Levy, D. (1990), "Children's economic socialization: summarizing the cross cultural comparison of ten countries", Journal of Economic Psychology, Vol. 11, pp. 591-614.

Liable, D. and Thompson, R.A. (2007), "Early socialization: a relationship perspective", in Grusec, J.E. and Hastings, P.D. (Eds), Handbook of Socialization: Theory and Research, Guilford Press, New York, NY, London, pp. 181-207.

Lundby, E. (2013), "'You can't buy friends, but [...]' children's perception of consumption and friendship", *Young Consumers*, Vol. 14 No. 4, pp. 360-374.

Metcalf, J.L. and Atance, C.M. (2011), "Do preschoolers save to benefit their future selves?", *Cognitive Development*, Vol. 24 No. 4, pp. 371-382.

Miller, S.L. and Van Fossen, P.J. (2008), "Recent research on the teaching and learning of pre-college economics education", in Levstik, L.S. and Tyson, C.A. (Eds), *Handbook of Research in Social Studies Education*, Routledge, New York, NY, pp. 284-304.

Mischel, H. and Mischel, W. (1983), "The development of children's knowledge of self-control strategies", *Child Development*, Vol. 54, pp. 603-619.

Moschis, G.P. (1985), "The role of family communication in consumer socialization of children and adolescents", *Journal of Consumer Research*, Vol. 11, pp. 898-913.

Muratore, I. (2003), "Involvement, cognitive development and socialization: three antecedents of the child's cents-off sensitivity", *Journal of Product and Brand Management*, Vol. 12, pp. 251-266.

Nga, J.K.H. and Yien, L.K. (2013), "The influence of personality trait and demographics on financial decision making among Generation Y", *Young Consumers*, Vol. 14 No. 3, pp. 230-243.

Nga, J.K.H., Yong, L.H.L. and Sellappan, R.D. (2010), "A study of financial awareness among youths", *Young Consumers*, Vol. 11 No. 4, pp. 277-290.

OECD (2014), PISA 2012 Results: Students and Money: Financial Literacy Skills for the 21st Century (Volume VI), OECD Publishing, Pisa, available at: http://dx.doi.org/10.1787/9789264208094-en (accessed 31 December 2015).

Otto, A.M.C., Schots, P.A.M., Westerman, J.A.J. and Webley, P. (2006), "Children's use of saving strategies: an experimental approach", *Journal of Economic Psychology*, Vol. 27, pp. 57-72.

Petty, R.E., Cacioppo, J.T., Strathman, A.J. and Priester, J.R. (2005), "To think or not to think: exploring two routes to persuasion", in Brock, T.C. and Green, M.C. (Eds), *Persuasion: Psychological insights and perspectives*, Sage, Thousand Oaks, CA, pp. 81-116.

Pritchard, M.E., Myers, B.K. and Cassidy, D.J. (1989), "Factors associated with adolescent saving and spending patterns", *Adolescence*, Vol. 24 No. 95, pp. 711-723.

Rajasekhara, M.P., Pool, George, R.I., II, and Saule, M.T. (2010), "Young Kazakhstan consumers: catch them if you can", *Young Consumers*, Vol. 11 No. 1, pp. 47-56.

Ram, S. and Jung, H. (1994), "Innovativeness in product usage: a comparison of early adopters and early majority", *Psychology and Marketing*, Vol. 11 No. 1, pp. 57-67.

Richins, M.L. and Dawson, S. (1992), "A consumer values orientation for materialism and its measurement: scale development and validation", *Journal of Consumer Research*, Vol. 19, pp. 303-316.

Roedder, J.D. and Whitney, J.C. (1986), "The development of consumer knowledge in children: a cognitive structure approach", *Journal of Consumer Research*, Vol. 12, pp. 406-417.

Roland-Levy, C. (1990), "Economic socialization: basis for international comparisons", *Journal of Economic Psychology*, Vol. 11, pp. 469-482.

Roos, V., Chiroro, P., van Coppenhagen, C., Smith, I., van Heerden, E., Abdoola, R.E., Robertson, K. and Beukes, C. (2005), "Money adventures: introducing economic concepts to preschool children in the South African context", *Journal of Economic Psychology*, Vol. 5, pp. 243-254.

Schug, M.C. and Hagedorn, E.A. (2005), "The money savvy pig goes to the big city: testing the effectiveness of an economics curriculum for young children", *The Social Studies*, Vol. 96 No. 2, pp. 68-71.

Sherraden, M.S., Johnson, L., Guo, B. and Elliott, W. (2011), "Financial capability in children: effects of participation in a school-based financial education and savings program", *Journal of Family and Economic Issues*, Vol. 32 No. 3, pp. 385-399.

Sonuga-Barke, E. and Webley, P. (1989), "The development of adaptive choice in self-control paradigm", *Journal of the Experimental Analysis of Behavior*, Vol. 51 No. 1, pp. 77-85.

Sonuga-Barke, E. and Webley, P. (1993), *Children's Saving: A Study in the Development of Economic Behavior*, Lawrence Erlbaum Associates, Hove.

Sosin, K., Dick, J. and Reiser, M.L. (1997), "Determinants of achievement of economics concepts by elementary school students", Journal of Economic Education, Vol. 28, pp. 100-121.

Stashevsky, S. and Lampert, S. (2008), "Comparative study of measuring attitudes change caused by an intervention", in Galperin, B.L. (Ed.), Work Values and Social Responsibilities in a Changing World: From Being Good to Doing Good, ISSWOV, New Orleans, LA, pp. 278-287.

Te'eni-Harari, T. (2013), "Clarifying the relationship between involvement variables and advertising effectiveness among young people", Journal of Consumer Policy, Vol. 37 No. 2, pp. 183-203.

Te'eni-Harari, T. and Hornik, J. (2010), "Factors influencing product involvement among young consumers", Journal of Consumer Marketing, Vol. 27 No. 6, pp. 499-506.

Te'eni-Harari, T., Lampert, S. and Lehman-Wilzig, S. (2007), "Information processing of advertising among children: the elaboration likelihood model as applied to youth", Journal of Advertising Research, Vol. 47 No. 3, pp. 326-340.

Te'eni-Harari, T., Lampert, S. and Lehman-Wilzig, S. (2009), "The importance of product involvement for predicting advertising effectiveness among young people", International Journal of Advertising, Vol. 28 No. 2, pp. 203-229.

Tysoe, M. (1983), "Children and money", New Society, Vol. 64, pp. 433-444.

Ulkumen, G. and Cheema, A. (2011), "Framing goals to influence personal savings: the role of specificity and construal level", Journal of Marketing Research, Vol. 48, pp. 958-969.

Webley, P., Burgoyne, C., Lea, S.E.G. and Young, B. (2001), The Economic Psychology of Everyday Life, Psychology Press, Hove.

Webley, P., Levine, M. and Lewis, A. (1991), "A study in economic psychology: children's saving in a play economy", Human Relations, Vol. 44, pp. 127-146.

Zaichkowsky, J.L. (1986), "Conceptualizing involvement", Journal of Advertising, Vol. 15 No. 2, pp. 4-14.

Zaichkowsky, J.L. (1994), "The personal involvement inventory: reduction, revision and application to advertising", Journal of Advertising, Vol. 23 No. 4, pp. 59-69.

Corresponding author

Tali Te'eni-Harari can be contacted at: tee.tal100@gmail.com

For instructions on how to order reprints of this article, please visit our website: www.emeraldgrouppublishing.com/licensing/reprints.htm Or contact us for further details: permissions@emeraldinsight.com