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# Saving in Childhood and Adolescence

## Insights from Developmental Psychology

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# Saving in Childhood and Adolescence: Insights from Developmental Psychology

*This paper addresses variables related to child and adolescent saving and explains the development of skills and behaviors that facilitate saving from an economic socialization perspective. References are made to the differences between the economic world of children, adolescents, and adults as well as to existing theories of saving. Children's and adolescents' ability and willingness to save are looked at, taking into account the social context of the family and general child and adolescent development. The paper concludes with directions for future research in this area.*

**Key words:** *saving, childhood, adolescence, family context*

People often name their parents when they are asked from whom they learned their money management skills (Danes, 1994; Kempson, Bryson, & Rowlingson, 1994). To date, the role of parents in economic socialization has been investigated in terms of how they manage the child's pocket money, whether allowances are given unconditionally or (partly) have to be earned (Furnham, 2001; Miller & Yung, 1990), what the parents' motives for giving an allowance are (Danes, 1994; Feather, 1991; Furnham, 1999a; Furnham & Kirkcaldy, 2000), or which role family structure plays for amount of pocket money given (Barnet-Verzat & Wolff, 2002; Mortimer, Dennehy, Lee, & Finch, 1994). Family income has been investigated in relation to adolescent spending (Alhabeeb, 1996), parents' level of education in relation to child's savings for post-high school expenses (Pritchard, Myers, & Cassidi, 1989) as well as child's level of economic knowledge (Lewis & Scott, 2000). More recently, parents' saving for children has been used to predict children's savings (Friedline, 2012; Friedline, Elliott, Nam, & Choi, under review). Using a retrospective approach, research has demonstrated the importance of parental encouragement to save money during childhood and adolescence for adult saving (Webley, Nyhus, & Otto, under review) as well as an association between the recall of parental saving habits (as one indicator for financial experiences in childhood) and the saving rates of young adults (Peng, Bartholomae, Fox, & Cravener, 2007).

Researchers have investigated the development of money attitudes, saving attitudes, money management, and saving behavior in childhood and adolescence, but have not determined what processes are involved in the development of saving behavior and whether family relationships, day-to-day family interaction, and the teaching of behaviors in the family might facilitate the development of saving behavior that is carried into adulthood. This paper will review findings from research on children and adolescent saving and point out how these can be understood in terms of the family context and general child and adolescent development.

## **Economic socialization in childhood**

According to social learning theory, children learn by observing and imitating the most relevant models (Bandura & Walters, 1963). Very early in life, children encounter money by watching their parents buy things (Lunt & Furnham, 1996). According to Bandura (1977), children adopt new behaviors through imitating or modeling. This process is called observational learning. Children attempt to reproduce what they observe in their environment (Murray, 1985). Children learn by

making mental notes on what they have seen, and later they will recall the mental representation to reproduce the behavior of the social model. From this, it becomes clear that learning through observation is a form of cognitive learning (Shaffer, 2001). Furthermore, social learning theory draws on reinforcement and punishment (behavioristic learning theory). Children are often responsible for creating the very reinforcers that strengthen new habits, which highlights their active role. That is, the environment affects the child, and the behavior of the child is considered to affect the environment (reciprocal determinism, Bandura, 1986).

A different approach to economic socialization is the cognitive developmental structuralist theory of Jean Piaget (Stacey, 1987). Burriss (1981, 1983) and Jahoda (1979) for example, could demonstrate that the developmental stages found in other areas can also be observed in the child's economic thinking. While these studies tell us what children at various ages are able to understand with regard to the economic world of adults, they do not necessarily tell us whether children are able to engage in economic behavior themselves.

To investigate economic socialization, Sonuga-Barke and Webley (1993) adopt a view they call the socio-developmental approach. This approach takes a child-centered view of economic activity and sees the child as an economic problem solver. According to them, economic behavior is constructed within the social group. Similarly, Webley, Levine, and Lewis (1991) have suggested that childhood spending and saving are social activities that depend on negotiations with others (e.g., parents).

In the literature, we find that parents and family are important economic socialization agents (Moschis, 1987; Webley & Nyhus, 2006). Research from France suggests that pocket money and allowances play a more educative role during adolescence than during childhood (Lassarre, 1996). Findings from Germany suggest that parents gradually adjust their expectations with regard to the ways in which allowances should be used (Furnham & Kirckaldy, 2000). The majority of the parents in their study seemed to think that six years would be a good age for starting with pocket money and eight years would be a good age to start encouraging saving part of this money. A specific example of how parents can contribute to the range of their children's economic experiences is the establishment of earning opportunities for doing household chores (Warton & Goodnow, 1995). Whether parents will consider implementing payment for doing household chores for example, is likely to depend on a variety of factors (Warton & Goodnow) and may also be moderated by their particular view of childhood (Goodnow, 1988).

Leiser and Ganin (1996) distinguished between two general types of parents when it comes to socialization behavior and socialization goals in the economic domain. First, there are parents who try to shield their children from economic worries and responsibilities. These parents avoid talking about financial matters and important purchases in front of their children. This approach goes along with the notion that economic matters are grown-up preoccupations and children should be free of these worries, because they are only young once. Second, there are parents who take into account educational considerations. Those parents act on the assumption that children need to be trained to be economically independent in the future. They consider it important that their child learns how to budget and how to save and to delay gratification. They might encourage their child to earn money so that the child can learn the "value of money" while young.

Likewise, Furnham (1993) used the terms "educators" and "regulators" (or "protectors") to distinguish the two approaches. Educators are in favor of exposing the child to all aspects of the

economic world, while protectors are against advertising to children and try to protect the child where possible. Protectors favor regulation (and run the risk of underestimating their child's ability and understanding), while educators believe that parents are better consumer educators of their children than schools or businesses (Gunter & Furnham, 1998).

An even more general approach to parents as economic socialization agents would be the investigation of the general parenting style of parents in relation to the economic behavior of their children. Examples of the impact of perceived parenting style on delay of gratification (Mauro & Harris, 2000) as well as future orientation (Trommsdorff, 1983) suggest that an investigation of perceived parenting style in relation to adolescents' saving behavior could further our understanding of the role parents play in the economic socialization of their adolescent child. This paper argues that a consideration of the family context helps us understand some of the processes that can be assumed to facilitate saving implicitly and explicitly.

## **The economic world of children and adolescents**

### *Practical issues*

*Income.* Children often receive pocket money, birthday money and holiday money (Webley & Plaisier, 1998) while overall, adults can be assumed to earn their own money. In contrast, adolescents typically have opportunities to receive both an allowance and money from earnings (from doing chores or working outside of school hours). Compared to children, adolescents usually have larger budgets (Furnham & Thomas, 1984). The opportunity to earn money (in and) outside the home has an impact on the variety of experiences of economic activities adolescents can engage in. The fact that they can independently earn money should, at least in part, free them from adult economic control (Alhabeed, 1996).

*Freedom.* In the Western world, children's financial freedom will be rather limited. Children will be making their first purchases in the company of a parent, participating in routine family shopping, and gradually, more autonomously on their own (Brenner, 1998; Webley, Burgoyne, Lea, & Young, 2011). Adolescents will be allowed to make more independent choices. For a range of economic activities, their autonomy and independence will increase (Furnham, 2001; Lassarre, 1996). While adults can do what they want with their money (in principle), children and adolescents are likely to be given some guidelines or rules on what they should or should not spend their money on (Furnham & Kirckaldy, 2000). They are also not fully contractually capable yet. Without a parent, a 13-year-old cannot buy cigarettes or a mobile phone with a contract, and in most countries the legal age to buy alcohol is at least 16.

*Responsibilities.* Like children, adolescents are not responsible for their living costs. They do not have to pay rent or bills or pay back mortgages, which means that overall, their income could be considered (more or less) discretionary. Sometimes, parents do expect their adolescent child to pay for certain necessities with their allowance money. Meeks (1998) used data from the National Survey of Families and Households and found that most of a teenager's income was used for discretionary purchases. Only 20% of the adolescents between 12 and 18 with earnings were expected to contribute to household expenses.

*Opportunities.* Adolescents have more spending opportunities than children, for example when they start going out in evenings and into town with their friends. However, compared to the economic world of adults, their spending opportunities are still fairly restricted.

*Skills and experiences.* Due to limited opportunities, adolescents can be expected to be less skilled and experienced than adults but more skilled and experienced than children (Abramovitch, Freedman, & Pliner, 1991; Marshall & Magruder, 1960).

*Knowledge and understanding.* How knowledgeable children and adolescents are of economic concepts is likely to depend on age, participation in economic life, income, and control of expenses (Leiser & Ganin, 1996; Marshall & Magruder, 1960), context (Bonn & Webley, 2000), and their social environment (Berti & Bombi, 1988). It is very likely that college students do not know much more about finances than adolescents in high school, and at the same time, they do have a lot more freedom (Norvilitis & MacLean, 2010).

### *Theoretical issues*

The life-cycle hypothesis predicts that people optimize expenditure over their life span (Modigliani & Brumsberg, 1954). Provided that they are successful in approaching their parents, children and adolescents can optimize their expenditure through trying to get more money out of their parents. Up to age 15, this strategy seems to be as popular as saving (Otto & Webley, under review). For adolescents above the age of 15, saving is the preferred option when it comes to the acquisition of larger sums of money (for more expensive purchases).

The behavioral life-cycle model is the most psychological of the economic approaches to saving and incorporates self-control, mental accounting, and framing (Shefrin & Thaler, 1988). The achievement of self-control is described as “one of the (...) central and significant cognitive-developmental hallmarks of the early childhood period” (Flavell, 1977, p. 64). Parenting behavior and developmental aspects concerning self-control issues will be important for saving in childhood and adolescence.

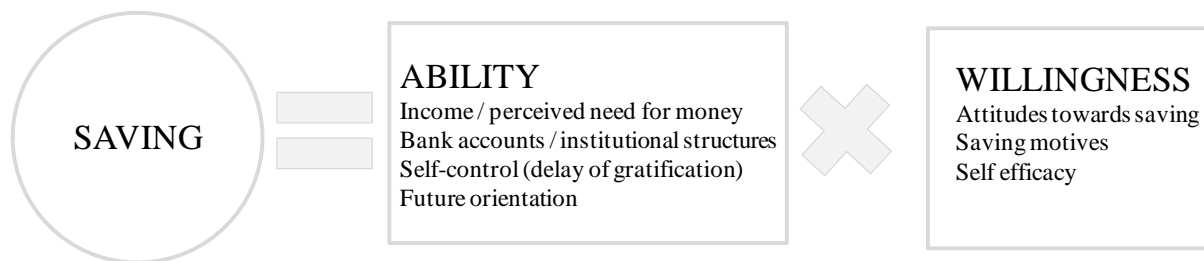
While the Absolute Income Hypothesis (Keynes, 1936) applies to adults who pay for their rent (or mortgage rates) and bills, one can imagine that it can also be generalized to younger people. During childhood and adolescence, spending is hardly constrained by fixed costs such as rent or bills, because living expenses are usually met by parents. When money is needed, parents sometimes hand out “daily extras” (Lassarre, 1996) or “activity money” (Otto & Webley, under review) and in general, they seem to consider pocket or allowance money as “spending money” (Sonuga-Barke & Webley, 1993). Together, this illustrates that from a purely economic point of view, children and adolescents should be able to save.

Duesenberry’s Relative Income Hypothesis (1949) seems to fit adolescent saving more than child saving. Adolescents have a variety of opportunities to observe the consumption levels of their peers and relevant others. Duesenberry’s theory implies that an adolescents’ consumption level might change independently from a pocket money raise, because of a change in the consumption level of relevant others one might want to keep up with. Relevant others may also influence consumption in the opposite direction; that is, the adolescent might experience a raise in income and not instantly change his or her level of consumption.

Katona's (1975) theory of saving is based on the assumption that saving/ consumption is dependent on the ability to save/ consume and the willingness to save/ consume. Someone's ability to save/ consume would be equal to disposable income and someone's willingness to save/ consume would depend on financial expectations and attitudes. This theory is based on a combination of economic and psychological variables. While income is important, willingness to save should be considered as well when predicting saving. In other words, those who are able to save still need to choose to do so, that is, they have to make a decision that requires some degree of willpower. According to Katona, willingness is determined by the economic environment and people's perceptions of it. Consumer expectations and consumer sentiment influence saving decisions, as well as pessimism and optimism with regard to a general and one's personal evaluation of the economic situation. While people save for different reasons, Katona assumes that a person's evaluation of the economic situation influences contractual as well as discretionary saving decisions.

Viewing pocket money and allowances to be discretionary spending money, young people's saving should mostly depend on their willingness. Yet, considering the context of child and adolescent development, ability to save is probably best understood taking into account a combination of economic and psychological variables (such as skills and capabilities, see Figure 1). Willingness to save is assumed to depend on saving motives, attitudes towards saving, and perceived likelihood of being successful at it.

Figure 1. Saving in childhood and adolescence: Demographic, social, and psychological determinants (Katona, 1975, adapted)



The next two sections are used to first describe variables most likely to impact on child and adolescent saving ability, followed by an illustration of variables believed to be related to child and adolescent willingness to save. Where applicable, references will be made to the role of parents and aspects related to general development.

### Ability to Save in Childhood and Adolescence

#### Income, perceived need for money, and bank accounts

Children and adolescents, like adults, need money to be able to save. Through pocket money, a fixed sum of money given on a set day (Leiser & Ganin, 1996) often received as of the age of six (Barnet-Verzat & Wolff, 2002; Furnham, 2001), children get their first chance to spend or save real money. Because throughout childhood and adolescence, living expenses are usually covered by parents, the majority (if not all) of the money young people have at their disposal, should be discretionary

income which could, in principle (or according to the Absolute Income Hypothesis, Keynes, 1936), easily be saved.

Presumably, perceived need for money for activities to engage in with friends, for example, will impact on how much money is perceived as disposable and savable. That is, the more money I think I need in my free time (or need to contribute to household expenses) the less I think I can save. Here, it will be important to consider spending opportunities as well as the spending behavior and the “life style” of important others, such as classmates and friends.

For saving, a bank account will be helpful, but not at all ages, at least from a child’s point of view. From economic games (Sonuga-Barke & Webley, 1993) we know that for a six-year-old child banks are not necessarily safe places for keeping money. For them, money in a bank is out of sight and sometimes even considered lost. Only by age 12 did the children use the bank in a functional way and realize that it is possible to deposit money to protect their money from themselves. Thus, while children younger than 12 could be using bank accounts, for various reasons (e.g., because they know their parents think they should, or because their parents help them with depositing money), it will take time and experience for children to recognize that banks can facilitate saving because money in a bank or savings account is not as easily spent as cash (i.e., reducing the need for self-control). This shift is likely to be related to the adolescents’ cognitive monitoring skills and the development of meta-cognition (for a description of differences in metacognitive development in children and adults, see Flavell, Miller, & Miller, 2002). On the other hand, being able to use a bank account can be an effective way of motivating children to learn about money (Sherraden, Johnson, Gui, & Elliott, 2011) and of helping children and adolescents with saving, because it increases the number of saving strategies at hand (i.e., it could replace leaving money with a parent for safe keeping). Further, there is evidence that having a savings account as an adolescent is related to saving in young adulthood (Friedline, Elliott, & Nam, 2011) and adulthood (Kotlikoff & Bernheim, 2001). These findings suggest that having the opportunity of using a bank account to make deposits could foster the development of a saving habit.

### **Self-control (delay of gratification and dealing with temptation)**

Self-control, locus of control (Rotter, 1966), and the ability to delay gratification have been identified as important skills for being successful at saving (Ainslie, 1975; Lunt & Livingstone, 1991; Romal & Kaplan, 1995; Shefrin & Thaler, 1992; Wärneryd, 1999; Wood, 1998).

While there are stable individual differences in regulatory strength visible early in life (Mischel & Ayduk, 2011), children’s use of strategies to successfully self-regulate and delay gratification have been found to be experimentally modifiable. Examples are the redirection of attention such as looking away (Mischel, Ebbesen, & Zeiss, 1972) or the reframing of the situation, such as thinking of a desired sweet as something that’s not eatable (Mischel, Shoda, & Rodriguez, 1989). Purposeful self-distraction is positively related to age and verbal intelligence (Rodriguez, Mischel, & Shoda, 1989). After the age of six, it becomes more and more practicable for children to use self-distraction or to invent mental games (e.g., cognitive cooling strategies), so that delaying can be less difficult. Presumably, as children grow older, they may become better able to save and consequently more successful at saving, as has been demonstrated in experimental studies (Otto et al., 2006; Sonuga-Barke & Webley, 1993). In addition, throughout adolescence, regulatory skills continue to mature (Collins & Steinberg, 2008; Keating, 2004).



While this research demonstrates that developmental trajectories impact children's and adolescents' use of self-control strategies in the economic domain, developmental research suggests that the investigation of parental discipline and parenting styles will also better our understanding of the development of children's ability to delay gratification (Mauro & Harris, 2000) and children's effortful control (Hofer, Eisenberg, & Reiser, 2011). The parenting styles identified by Baumrind (1967, 1971) vary in their level of control and strictness on the one hand and their level of parental warmth, acceptance, and involvement on the other hand. Some of the positive outcomes researchers have found in relation to the authoritative parenting style (Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987; Mauro & Harris, 2000; Steinberg, Elmen & Mounts, 1989) suggest that there might also be positive relationships between this style and a young person's saving attempts. Several studies have, for instance, reported that self-control and self-regulation skills are fostered by authoritative parenting (Baumrind, 1971; Patock-Peckham, Cheong, Balhorn, & Nagoshi, 2001; Madigan, 2005; Morris, 2003; Soward, 2006). Soward's (2006) findings suggest that higher levels of the authoritative parenting style predict higher levels of children's self-control. Likewise, Morris' (2003) results indicate that an authoritative parenting style is a predictor of self-regulation skills in young children. Apart from parenting style research, the responses of parents to their children's emotions have been found to be associated with effortful control in children (Eisenberg, Cumberland, & Spinrad, 1998). Parents who appropriately respond to children's emotions seem to teach their children effective strategies for self-regulation (Eisenberg, Smith, & Spinrad, 2011).

In spite of this, it should be noted that parenting might also be a consequence of the behavior of children and the child's ability to self-regulate. Otto and Webley (under review) for example found that adolescents, who reported to give into temptation more than others, also reported relying on their parents more when faced with a short-term income constraint. In addition, they reported receiving money irregularly for certain activities more frequently. Since data were correlational, this could be the result of their impulsive behavior, or their behavior could be the result of them having more approachable parents. It certainly indicates that an investigation of saving in childhood and adolescence will benefit from taking the social context of the family into account as well as the development of self-regulation, delay of gratification and self-control, and the role parents play in this.

Interestingly, in a study on risky credit card behavior, Lyons (2003, 2008) found that students who were found to be financially at-risk, were more likely to have acquired their credit card from a campus table, over the phone, or online, than students who had received their credit card from their parents. It remains unclear why this is the case, but it would be feasible that the parents of these students have been and still are more involved in the economic behavior of their (by then grown-up) child. They could even have encouraged their child to own and use a credit card, because they expect their child to successfully control his or her spending behavior.

### **Future orientation**

Saving means, as a rule, that consumption is postponed for future spending (Wärneryd, 1999). This means that, in order to save, individuals must have some sense of planning for the future. For that reason, time horizons have been investigated in relation to saving behavior (Julander, 1975; Nyhus, 2002; Wärneryd, 1996).

Future orientation was associated with bank saving in a Dutch sample of 16- to 20-year-olds (Webley & Nyhus, 2006), and future time perspective was associated with general tendency to save in 11 to 18 year old adolescents in the UK (Otto, 2009). This evidence stresses that future time orientation is—as for adult saving—important for adolescent saving. In this respect, it is helpful to know that a change of time perspective is a fundamental aspect of development during adolescence (Hill, 1980; Lewin, 1951). While children have learned to distinguish between fantasies, dreams, wishes on the one side and reality on the other (Samuels & Taylor, 1994), the adolescent is assumed to develop an understanding of the past and to adopt a new outlook on the future (Muuss, 1996). This aspect should be taken into account and may help us understand why saving becomes more reasoned with age. The young child mainly lives in the present. For the adolescent, the future becomes more meaningful and life goals are developed (Shanahan, 2000). McInerney (2004) points out that “a sense of purpose for the future is important in motivating individuals to engage in activities perceived to be instrumental in achieving valued future outcomes” (p. 141). For a discussion of future time perspective and its relationship to desired educational outcomes, see McInerney’s (2004) discussion and critiques of current research on future time perspective.

In addition to developmental issues related to time horizon and future orientation, Trommsdorff’s (1983) study suggests links between perceived parenting style and future orientation. Therefore, an investigation of perceived parenting style in relation to adolescents’ saving behavior should further our understanding of the role parents play in the economic socialization of their child, their adolescent child, and their adult child.

### **Willingness to Save in Childhood and Adolescence**

#### **Motives**

The fact that 10- or 11-year-old children are able to buffer save (Otto, Schots, Westerman, & Webley, 2006) in an experimental setting demonstrates their ability to use rather sophisticated saving strategies but not their willingness in terms of their own motives. The saving motives children and adolescents consider important to them are likely to differ from those relevant to adults. Why should a ten-year-old save for a “rainy day”? Children and adolescents who live at home can be assumed to have their parents as a buffer in the background for unforeseen circumstances, so that they don’t feel a real need to save “for a rainy day” (though they might have picked up the notion of this reason for saving as one that is important to their parents).

Research suggests that adolescents have “simple” goals in their mind for saving. Furnham (1999b) found that adolescents between the ages of 11 and 16 reported saving for something special they want to buy, simply to have more money, or because their parents tell them to. Jundin’s (1988) interview study revealed that between the ages 13 and 18, the saving motive most frequently mentioned was indeed related to short-term consumption goals. Thirty percent of the adolescents however stated that “Saving gives you a feeling of security.” Whether this response reflects a precautionary saving motive rather than a cash management motive (by saving you feel secure and in control of your finances) remains unclear. Considering the hierarchical order of saving motives identified by Lindqvist (1981), the first motive of cash management might be more relevant for young people than the precautionary saving motive. Finally, approximately 20% mentioned saving for the future (“*I save so as to have money when I move from home*”). A systematic investigation of the importance of the saving motives identified by Keynes (1936, bequest motive was left out) and

Lindqvist revealed that, for 11 to 18 year old adolescents, “goal saving” and “independence” were more important than “foresight” (Otto, 2009). The importance of the motive of “independence” (saving to increase their freedom) is consistent with the idea that young people strive for independence during adolescence (Coleman & Hendry, 1999). Apparently, this developmental progress is reflected in their saving motives. As adolescents grow older, their activities become more autonomous. Thus, despite being financially dependent on their parents, adolescents seem to aim for greater independence through saving larger sums of money which will allow them to buy things without having to ask their parents (“*I save money because then I don't have to ask my parents for the more expensive things I want to buy.*”). Through saving, adolescents can experience a limited period of economic independence from their parents, a goal particularly relevant for adolescents 15 and older (Otto & Webley, under review).

Achieving a healthy sense of autonomy is one of the most important developmental tasks that adolescents face (Shaffer, 2001). As defined by Douvan and Adelson (1966), behavioral autonomy refers to both the ability to make decisions independently and the attainment of self-governance and self-reliance. Although other types of autonomy have also been defined, behavioral autonomy is the most relevant for the study of the development of adolescent saving. Four different ways in which parents can facilitate the development of behavioral autonomy have been described by Collins and Steinberg (2008). Parents can, for example, function as good decision making models. In the family context, they can also encourage independent decision making or reward independent decision making when this has taken place outside the family context. Finally, they can help their adolescent child to develop a more general sense of self-efficacy through the use of parenting that is characterized by both responsiveness and demandingness (Darling & Steinberg, 1993).

### Self-efficacy

Bandura (1994) defines self-efficacy as someone’s confidence (or lack of confidence) in the ability to do something or to learn something that is new. Self-efficacy is therefore considered to be relevant for the study of the development of saving behavior of children and adolescents. The results from a study in the UK with adolescents between 13 and 14 support this claim (Otto, 2009). Here, adolescents were asked how well they think they can do the following things and then were presented with a list of strategies that could be used for saving (e.g., *How well can you avoid shops and places that involve money?*” or *How well can you concentrate on what you are saving for?*”). This 10-item saving strategy self-efficacy measure was associated with adolescents’ general tendency to save as well as their saving choices when faced with a short-term income constraint. People are more likely to set goals when they think they have the ability to reach these (Bandura, 1994). When saving is regarded as a skill, confidence will be important for the formation of saving goals.

Investigating the role of parents, work, and education for the financial socialization of first-year college students, Shim, Barber, Card, Xiao, and Serido (2009) used a measure of “perceived behavioral control.” Very likely, this measure is related to financial self-efficacy. In their model, the students’ perceived behavioral control was associated with their parents’ direct teaching through financial knowledge as well as their parents’ behavior as role models (indirect).

## Attitudes towards saving

There is some evidence that most people in Western economies have positive attitudes towards saving (Lea, Tarpy, & Webley, 1987; Wårneryd, 1991). In the interview study by Roland-Lévy (1995) in France, adults reported that they perceive saving as difficult. The responses given centered on the experience of saving as something that is hard, difficult, and necessary. Those difficulties, however, were mainly expressed by participants in the low and intermediate salary group. Clearly, level of income plays a role in how difficult saving will be and will be perceived, but because saving requires self-control (behavioral life-cycle model, Shefrin & Thaler, 1988), it may be difficult for children and adolescents by definition. Saving attitudes, however, are assumed to be connected and deeply rooted with upbringing and life style (Ölander & Seipel, 1970).

What we know about the saving attitudes of children is that six-year-olds seem to have an idea of saving as something that *must* be a good thing. In the Sonuga-Barke and Webley study (1993), their saving behavior was functionless, but they saved. At the same time, they did not like it and they were not very good at it (which is probably why they did not like it very much). They saved because they thought they ought to. Very likely, they have picked up from their parents the notion that self-control and patience are good things. Ward, Wackman, and Wartella (1977) investigated children's "money use norms," and their results provide evidence for the development of saving attitudes within the family. Children were first prompted to pretend being a mother/father, who would give \$25 to her/his child and then asked what they would tell their child what s/he should do with the money (*prescriptive* norm). Of the kindergarten children, 35% said "long-term save" in comparison to 69% of the sixth-grade children. Across all three age groups, only 10% mentioned short-term saving. Interestingly, in terms of socio economic status, they observed a 20% gap in referring to long-term saving: 70% of the high-SES third-graders referred to it, compared to 50% of the middle and low-SES third-graders. This difference could be related to more direct teaching or might be mediated through differences in future-oriented behavior and remarks made by these parents, but it was only found in one of the three age groups. To the question of what they would tell their child not to do with the money (*proscriptive* norm), the researchers found an increase with age with regard to not wasting money, and a decrease with age with regard to being careful with money (while one quarter of the kindergarten children had no answer to this question). This difference is believed to reflect the advice received from parents. Young children are more likely to be instructed not to lose their money, while the older children can be expected to have received some advice on spending money wisely and not wasting money. In sum, the findings by Ward and colleagues (1977) show how children's attitudes towards saving and money develop in the family context through prescriptive and proscriptive financial advice. It also illustrates that if parents value saving, their children might adopt this in a very general way and before it become meaningful to themselves.

What we know about the saving attitudes of adolescents is that adolescents who think that saving is difficult have less positive attitudes towards saving in the sense of it being (morally) good (Otto, 2009). In addition, as adolescents grow older, their attitudes towards saving as something that is difficult decrease. It could of course be that this is because they improve on it, which illustrates the well-known problem of the relationship between attitudes and behavior and the causal link between them. A proxy for the level of experienced difficulties with saving might also be the perceived need for money for leisure activities. If two adolescents with the same amount of allowance money differ with regard to their perception of how much money they need, saving will appear more difficult for the one with a higher need for money. However, perceived need for money in leisure time can be

assumed to increase with age, and therefore, better money management, more saving experiences, and better saving strategies are more likely to influence a reduction in perceived difficulties (in spite of perceived need for money). There are many things that older children compared to younger children are better at. But from this information alone, we do not exactly know what is going on and can therefore not conclude that saving automatically becomes easier with age. Yet, the study points towards an issue that might be related to this progress—an increase in the use of cognitive strategies with age. Furthermore, older adolescents might be more experienced as savers, and therefore experience fewer difficulties. In addition, 13 to 14-year-old adolescents who perceived their parents as warm, supportive, and high in behavioral control, experienced fewer difficulties with saving than adolescents, who perceived their parents as authoritarian or neglectful (Otto, 2009). Furthermore, adolescents who perceived their parents as warm, supportive, high in behavioral control and at the same time low in psychological control, less often reported to be thinking about saving as something unnecessary (“*I think saving money is not necessary as long as you live at home and your parents support you financially*”) than all others. These findings could be the result of processes that underlie the positive relationship between authoritative parenting and delay of gratification, as well as self-regulation (Mauro & Harris, 2000; Morris, 2003; Soward, 2006), which in the economic domain might foster independent economic thinking and behavior.

Furnham and Goletto-Tankel (2002) also report an increase in positive attitudes towards saving behavior with age in 16- to 21-year-olds. Their results showed that older and more educated participants had more positive attitudes towards saving. Age predicted positive attitudes towards saving behavior, beliefs about pensions, and a need for life insurance, with attitudes becoming more positive as age increased.

The statement that most adults hold positive attitudes towards saving (Katona, 1975; Keynes, 1936) cannot simply be generalized to adolescents. In adolescence, saving seems to be predominantly associated with difficulties by those who do not save (or are not good at it). This means that in adolescence, perceived difficulties and saving self-efficacy are crucial for saving; that is, saving becomes a relevant option only when it is perceived as manageable. This is important for the research on saving in general as it indicates that saving could be considered “pointless” by those who lack the belief in their ability to be successful at it. Furthermore, the difficulties experienced with lack of control and the frustration may result in a negative attitude towards saving.

Looking at the attitudes towards child and adolescent saving in parents, Otto (2009) found that for adolescent saving, it mattered whether the adolescent’s mother thinks of herself as someone who should educate the child in the economic domain. Mothers who were conscious about their function as a role model had adolescent children who were more likely to save. Likewise, recent research indicates that parental financial role modeling as well as parental direct teaching has an impact on the formation of financial attitudes of first-year college students (Shim et al., 2009). All these results indicate that the assumption made by Ölander and Seipel (1970) about saving attitudes being deeply rooted with upbringing might hold true. They also suggest that parents labeled as educators by Leiser and Ganin (1996) or Furnham (1993) may indeed foster independent economic behavior more than parents who tend to protect or regulate the economic socialization opportunities of their children.

### Concluding Remarks and Implications for Future Research

The paper highlights differences between the child, the adolescent, and the adult economic world and explores the applicability of saving theories to children and adolescent patterns of saving behavior. Based on Katona's (1975) theory of saving, variables believed to be related to child and adolescent ability to save are presented, followed by a description of variables believed to be related to child and adolescent willingness to save. In doing so, the paper focuses primarily on developmental trajectories as well as the influence parents have on selected variables related to children's and adolescents' saving.

Children's and adolescents' ability and willingness to save do not only develop as a result of social learning (i.e., observation of role models) and direct teaching (such as explanations and guidance with regard to the spending and saving of pocket money or allowances). Rather, skills and attitudes related to saving are indirectly related to parenting behaviors that lead to higher self-efficacy beliefs, better self-regulation strategies, and more independent economic behavior in general. Using parenting style as a context variable can help us better understand the processes involved with the development of saving behavior. Furthermore, because of the long lasting effects of different parenting styles for adolescent development in various other domains, such as child and adolescent learning, the investigation of parenting style should provide insight into the underlying mechanisms for why the "early years" may be important for adult saving (as indicated by Ashby, Schoon and Webley, 2011). Focusing on family relationships should also, for example, help us understand why it is that college students who acquire their credit card from their parents seem to be better at handling their finances when compared to college students who got their credit cards from a source other than their parents (Lyons, 2003).

A limitation of most studies described in this paper is their correlational approach. Only longitudinal research on saving in the context of the family will provide us with information about causes and effects of parenting behavior as context variable. To date, we can only speculate about the impact parents have. Furthermore, child characteristics and the speed with which adolescents accomplish developmental tasks will enrich our understanding of what children and adolescents need to know and learn in order to become independent economic agents.

In conclusion, a number of factors seem to influence child and adolescent saving behavior and attitudes toward saving, including the social context of the family, developmental trajectories, parental encouragement to save (Webley, Nyhus, & Otto, under review), and the saving behavior of the parents themselves (Friedline, 2012; Friedline, Elliott, Nam, & Choi, under review). This knowledge should be taken into account to improve asset-building interventions aimed at young people.

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