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Offline Friendships Affect Facebook Activity and Teens' Theory of Mind

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SEM results with 657 adolescents revealed that quality (quantity) of offline friendships is positively (negatively) related to being more active on Facebook (making more connections; posting more comments; posting more photos). Adolescents who are more active on Facebook, in turn, have more developed theory of mind.

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Thought You Had It All Figured Out? Look at Children's Consumer Behavior and Think Again

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Paper #1: Offline Friendships Affect Facebook Activity and Teens' Theory of Mind

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Paper #2: Ownership Shapes Children's Judgments about Material Goods

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Paper #3: Signaling Versus Accumulating Wealth: For Children, Refraining from Spending Implies Poverty

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Paper #4: How Do Children Derive Happiness from Past Experiences? Developmental, Experimental, and Longitudinal Evidence

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SESSION OVERVIEW

The goal of this session is to motivate consumer researchers to incorporate more studies with children into some of their work to develop a fuller understanding of the phenomenon they are studying. Why? When most consumer researchers conclude something about "consumers," what they really mean, is "adult consumers" (and not much, if anything, can be said about the 2.4 billion consumers in the world who are under the age of 18 (U.S. Census Bureau 2014).

We need more research with children for a number of reasons: 1) The consumption landscape has changed dramatically in the last decade, with social media penetrating every aspect of children's lives, from how they shop to how they interact with others. 2) Children lack the social-cognitive sophistication, as well as the experience with products, brands, and spending that adults have, which may (or may not) lead them to behave similarly to adults. 3) Studying children would allow researchers to understand how early certain consumer phenomena emerge and any age-related changes in the phenomena.

This session includes four papers, each offering either a novel approach to a research question or surprising findings. In **Paper #1**, Gentina brings old school, forgotten "offline" friendships back into the socialization discussion to better understand the trend of developing "online" friendships. In **Paper #2**, Friedman and Pesowski report results of four experiments with 3-5 year-olds that show that ownership is central in even young children's reasoning about material goods. In **Paper #3**, Kappes shows that surprisingly similar to adults, four year-olds—who lack knowledge of and experience with money (Webley 2005)—perceive spending as a signal of wealth. Finally, in **Paper #4**, Chaplin et al. report results of six studies with 3-17 year-olds and identify an exception to the accumulating body of evidence that "experiences are preferred over material objects."

Altogether, this session will report findings from twelve studies (correlational, experimental, longitudinal) with children ages 3-17. The four papers use a variety of methodological approaches, and present often surprising results (especially when compared to

results based on adults-only research). The topic, overall, should be of interest to those doing research with children, as well as to scholars who study materialism and experiential consumption. Together, the papers contribute to consumer behavior, in that most challenge "common-sense" beliefs about consumption and findings based on adult participants. The papers offer a very cohesive and synergistic view of how children's developmental stages impact their consumption behaviors, but each paper offers novel insights. For all of the papers, data collection is complete, and analysis is ongoing, but preliminary results for each paper already contribute significantly to the field. We expect the session to generate intense discussions (possibly debates) as well as raise at least two questions for future research: 1. When will children's lack of social-cognitive sophistication, and experience with products, brands, and money lead them to behave similarly to (differently from) adults? 2. In general, how can testing children help consumer researchers develop a fuller understanding of consumer phenomena?

Offline Friendships Affect Facebook Activity and Teens' Theory of Mind

EXTENDED ABSTRACT

Facebook has revolutionized day-to-day social interactions (Subrahmanyam and Lin 2007), making it an integral part of adolescents' lives. It is estimated that 92% of adolescent social media users have a Facebook profile and go online daily (Pew 2015). With many adolescents active on Facebook, we investigated how quality versus quantity of offline (non-computer-mediated) friendships might impact the degree to which adolescents are active on Facebook, and, how degree of Facebook activity affects adolescents' theory of mind (ToM), the ability to understand others' mental states and predict their behavior (Begeer et al. 2010).

Some researchers suggest that the use of Facebook increases relationship closeness and connectedness with friends (Ellison et al. 2007). Others have found that Facebook deteriorates the quality of social bonds (Hei-Man 2008). We look to offline friendships to shed more light on Facebook friendships. Specifically, we examined how quantity vs. quality of adolescents' offline friendships affects their activity level on Facebook, and how this in turn, affects their interpersonal social skills, namely ToM.

We tested an integrative model with two independent variables – 1) offline friendship quality (measured using self-reports of peer support and loneliness), 2) offline friendship quantity (measured using peer-and-self-reports of adolescents' social integration within a classroom setting). Friendship quality refers to the degree to which relationships are meaningful within a social network (degree centrality) regardless of quantity (number of offline friends). Quantity of friendships refers to the size of participants' offline social network regardless of the quality—the larger the network the more direct connections to others. Our model also included frequency of Facebook activity (making connections, posting selfies, and posting comments), and ToM.

Hypotheses

How do offline friendships affect the frequency with which adolescents use Facebook? The answer is unclear. Having fewer offline friendships may lead adolescents to use Facebook more to fill

a void in their offline social networks. However, offline friendships can be effective in cultivating quality relationships. Keller and Fay (2012) have shown that individuals prefer face-to-face interactions (offline friendships) over Facebook to keep in touch with others. We predicted:

Hypothesis 1 Offline friendship quantity is positively related to the frequency of Facebook activity

Hypothesis 2 Offline friendship quality is negatively related to the frequency of Facebook activity.

How do offline and online friendships influence ToM development? Little is known about the relationship between ToM, exposure to media, and information sharing among adolescents. Nathanson et al. (2013) emphasized that exposure to media such as television is not enough to affect ToM. Instead, for ToM to develop, children must experience an "exchange and negotiation of thoughts and ideas" (Nathanson et al. 2013, p. 1102). Because Facebook provides a place for these conversations and exchanges of content to take place, we predicted:

Hypothesis 3 Frequency of Facebook activity is positively related to adolescents' ToM.

Adolescents with quality relationships may prefer offline friendships over Facebook to communicate with friends (Keller and Fay 2012), and maintain networks of strong and meaningful relationships (regardless of the quantity) that provide them social support and a sense of belonging (Podolny and Baron 1997), resulting in low levels of loneliness (Baumeister and Leary 1995). Thus, we hypothesize:

Hypothesis 4 Online friendship quantity is positively related to the frequency of Facebook activity, which in turn is positively related to ToM.

Hypothesis 5 Offline friendship quality is negatively related to the frequency of Facebook activity, which in turn is positively related to ToM.

Method

The survey was administered in the classroom, a suitable environment to identify adolescents' social positions (Gentina and Bonsu 2013). A questionnaire was distributed to 647 adolescents across 28 classrooms. This sample was then randomly divided into two sub-samples. The first sample ($N_1 = 238$) served to validate the measurement scales. The second sample ($N_2 = 409$) was used to test the proposed model. It encompassed 17 classrooms (public and private schools), and consisted of 419 students: 65 thirteen-fourteen year-olds, 200 fifteen-sixteen year-olds, and 144 seventeen-eighteen year-olds.

To measure offline friendship quantity, we measured adolescent's social integration within the social network using peer and self reports. To measure offline friendship quality, we used Chaplin and John's (2010) peer support scale and Peplau and Cutrona's (1980) revised UCLA Loneliness scale.

Frequency of Facebook activity (making connections, posting comments and posting selfies) was measured using a frequency scale

(1 = never, 5 = always). ToM was measured using the general ToM scale (Dietvorst et al. 2009), a false belief task (Birch and Bloom 2007) and the eye-test (Baron-Cohen et al. 2001).

Results

Confirmatory factor analyses on the first sample ($N_1=238$) showed good fit statistics ($\chi^2 = 216.242$, RMSEA = 0.055, GFI = 0.907, CFI = 0.900, adjusted $c^2 = 1.716$). The composite reliability coefficients were acceptable (Jöreskog $\rho > .704$); convergent and discriminant validity tests were also conducted and results were acceptable.

Structural equation modeling (SEM) based on maximum likelihood estimation was used to estimate the conceptual model ($n_2 = 409$). The fit of the full model was good (RMSEA = .017; $X^2/df = 1.117$; GFI = .985; CFI = .990, and square SRMR = .041).

Results indicated that offline friendship quantity (quality) is positively (negatively) associated with how active adolescents are on Facebook. Additionally, the frequency of Facebook activity mediated the relationship between offline friendship quantity and ToM, as well as the relationship between offline friendship quality and ToM. Findings from this research underscore both the importance of offline friendships and the benefits of online social networks in the development of adolescents' ToM.

Ownership Shapes Children's Judgments about Material Goods

EXTENDED ABSTRACT

Ownership is a major influence on how people think and feel about material goods, and how they use them. For instance, people value and prefer their own goods over non-owned goods (Beggan 1992; Kahneman, Knetsch, and Thaler 1991; Morewedge, Shu, Gilbert, and Wilson 2009); ownership impacts people's memory for objects (e.g., Coventry, Griffiths, and Hamilton 2014; Cunningham, Turk, Macdonald, and Macrae 2008; DeScioli, Rosa, and Gutchess 2015); and ownership even influences how people physically handle objects (e.g., Constable, Kritikos, and Bayliss 2011).

An increasingly influential view of ownership draws a distinction between "psychological" and "legal" aspects of ownership (e.g., Pierce, Kostova, and Dirks 2001, 2003; Peck and Shu 2009). For instance, people can feel ownership over material goods that are not actually theirs, and can also feel little or no ownership over goods that do belong to them. That is, feelings of ownership (i.e., "psychological" ownership) are not always aligned with ownership status (i.e., "legal" ownership).

However, there are reasons to think that "legal" aspects of ownership are not strictly legal, and are themselves psychological. One reason to believe this is that people regularly make a variety of judgments about the ownership status of material resources, even though they have no legal training, and even though their judgments do not always align with legal rulings and precedent (e.g., DeScioli and Karpoff 2015; Friedman 2010). In fact, such judgments and effects of ownership status are already evident in toddlers and preschool-aged children. Young children's judgments not only lack familiarity with the law, but their judgments about the ownership of material goods may sometimes be at odds with adult input or intuitions (e.g., Kanngiesser, Gjersoe, and Hood 2010; Neary and Friedman 2014; Ross 1996). For instance, young children often uphold ownership rights in instances where adults' give priority to other principles entitling people to use material goods. As such, young children's sensitivity to the ownership status of material goods suggests that ownership status is itself psychological (rather than legal), and like-

wise that there is more to psychological ownership than feelings of ownership over goods.

Present Experiments

We review four experiments showing that ownership status shapes young children's judgments about particular material goods. We show that ownership affects these judgments even when owned goods are physically identical with other available goods (also see Gelman, Manczak and Noles 2012; Gelman, Manczak, Was, and Noles 2016; Gelman, Noles, and Stilwell 2014), or when they are inferior to other available goods. We also show that ownership affects judgments that are fundamental to children's social functioning: The first two experiments examine children's judgments regarding how people *should* behave, and the second two examine children's predictions about how they *will* behave.

First, we will present two experiments showing that ownership status affects children's judgments about how people should behave in relation to physically identical material goods. For instance, in one study, children were shown vignettes in which a girl and boy had identical balloons. The boy took the girl's balloon, and then one of the balloons happened to pop. When children were asked whether the girl could take the remaining balloon, their answers depended on whose it was. When the boy's balloon popped, and the one belonging to the girl remained, children said she could take it back. However, when the girl's balloon popped, children said the girl should not take the boy's balloon. In other words, they upheld his ownership rights, even though the two balloons were identical, and even though the boy's actions essentially deprived the girl of her property. These findings show that ownership status is a powerful factor in children's reasoning about how people ought to behave, and also that pre-schoolers view owned objects as non-fungible.

The next two experiments show that children, aged three to five years, also use ownership status to predict people's behavior. In these experiments, children were shown vignettes in which a character stood between two objects. Children were then told about the ownership status of the objects, and asked which object the person would use or take. For instance, in one vignette, a girl was shown standing between two wagons, one of which was more attractive than the other. Children were told that the less attractive wagon belonged to the girl, and that the more attractive one belonged to someone else. Children were then either asked to predict which wagon the girl would take home, or to judge which one she liked more. We found that children indicated the wagon belonging to the girl more when predicting which one she would take than when asked about liking, and that this difference increased with age. These findings are noteworthy because they show that ownership influences children's judgments even when consideration of material goods should lead to opposite judgments—we normally expect people to use superior material goods.

Summary

In sum, we show that from early in development, ownership status plays an important role in assessments and predictions of others' behavior. The "legal" aspect of ownership is crucial for basic psychological judgments from early childhood.

Signaling Versus Accumulating Wealth: For Children, Refraining from Spending Implies Poverty

EXTENDED ABSTRACT

Consumer economists (e.g., Lea, Webley, and Young 1992) point out that "savings = income – spending." Holding income

constant, lowering spending increases savings, and thereby builds wealth. In fact, wealth accumulation often relies on refraining from spending (Stanley and Danko 1996). Although individuals who refrain from spending may be wealthier than their counterparts who spend money in similar situations, these individuals may not be perceived that way. Indeed, the vast literature on signaling status via consumption indicates that spending money often succeeds in conveying impressions of wealth. Thus, refraining from spending may be interpreted as a signal of relative poverty rather than wealth. This research examines whether children (who lack knowledge and experience with money), also use spending as signal of perceived wealth.

Even young children (ages 3-10) associate groups of people with different levels of wealth (Olson, Shutts, Kinzler, and Weisman 2012), and are able to tell based on appearance whether someone is poor (Ramsey 1991). Marketers use status-based appeals to attract children, and children are sensitive to status symbols (Schor 2004). However, it is unclear how refraining from spending affects perceived wealth for children, and whether the effects of spending versus refraining on perceived wealth might vary across ages. The present research investigates these questions.

Method

To test how children perceive refraining from spending, participants ages 4-12 ($N = 75$) were presented with a short scenario describing a target child, "Casey," visiting a store with her (his) friends. Casey's gender was matched to the participant's gender.

Design

The scenarios were varied in a between-subjects experimental design such that children read about Casey visiting a candy store or a bookstore, and either buying something or refraining from buying.

Measures

As a manipulation check, participants were asked whether Casey had bought anything at the store; those who answered incorrectly ($N = 21$, 14.6%) were excluded from the analyses below. Thereafter, children were asked to judge Casey's wealth on 7-point scales, with the questions "Do you think Casey has a lot of money?" (reversed) and "How poor do you think Casey is?" These items were combined into an index of perceived wealth. Children answered an open-ended question about why they thought Casey bought/did not buy candy/a book.

Results and Discussion

Wealth

Children who learned that Casey refrained from buying candy or a book judged Casey to be less wealthy ($M = 4.50$) than children who learned that Casey bought something ($M = 3.86$), $F(1, 54) = 5.33$, $p = .025$, $\eta^2_{\text{partial}} = .09$.

In response to the open-ended question about why Casey bought/did not buy candy/a book, more than half of the explanations for why Casey refrained from buying (58%) spontaneously referred to money, whereas none of those for why Casey bought something did so, $\chi^2(1) = 22.73$, $p < .001$. Children who spontaneously referred to money in their explanation for why Casey refrained from buying were older than those who did not refer to money, $t(29) = 2.92$, $p = .007$ (8.39 years versus 6.15 years old).

Moreover, tests of interaction effects between participant age and target behavior (spend versus refrain from spending) on the target's perceived wealth suggested that older children were less likely to take refraining from spending as an indicator of poverty.

Summary

This research finds that children as young as four years-old perceive spending as a signal of wealth. As children age—and acquire more experience with and knowledge about money (Webley 2005)—they may come to understand that refraining from spending is a way to acquire wealth rather than an indicator of less wealth.

How Do Children Derive Happiness from Past Experiences? Developmental, Experimental, and Longitudinal Evidence

EXTENDED ABSTRACT

People evaluate experiential purchases more favorably and are happier after recalling an experiential purchase compared to material purchases (Van Boven 2005; Van Boven and Gilovich 2003). Many experiences are inherently social (Caprariello and Reis 2013), which may make experiences more likely than objects to foster strong social relationships, which are crucial to happiness and well-being (Diener and Seligman 2004; Howell and Hill 2009).

To enjoy past experiences, people must be able to recall them, which relies on memory processes. Enjoyment of past experiences might also rely on an understanding their social significance. To understand experiences' role in terms of social relationships, people can make use of others' feelings and perspectives, which relies on theory of mind. Although memory and theory of mind skills often are taken for granted in adults, children are deficient in these cognitive skills and develop them as they grow older. Memory development helps children recall details of experiences (which otherwise can be difficult given their intangible nature), and theory of mind development helps children make sense of their social world and the actors in it. Both skills should help children enjoy experiences.

If these cognitive capabilities are necessary for the full enjoyment of experiences, then it is likely that children may not derive that much happiness from past experiences, especially at young ages. However, as children age and become more cognitively advanced, they may become able to derive happiness from past experiences, and eventually, should eventually surpass objects in the happiness they give.

Present Research

Across six studies with over 400 children and adolescents ages 3-17, we show that children ages 3-12 derive more happiness from objects than from experiences. As children age, the happiness they derive from experiences increases, to the point that older adolescents derive more happiness from experiences than from objects.

Study 1 (N=242) used a longitudinal design spanning a two-year interval to achieve two aims. The central aim was to test the development of happiness from past experiences. The second aim was to test whether memory improvements boost theory of mind, which in turn boosts retrospective happiness from experiences. To measure happiness with experiences, we used a collage methodology because it is able to capture the variables of interest and was suitable for our participants' wide age range of 3 to 17 years old (Chaplin and John 2005, Chaplin and Lowrey 2010). Children created a collage using images of experiences and objects in order to answer the question, "What makes you happy?" We measured memory (recall and recognition) and theory of mind (false beliefs) using standard tasks.

Study 1 revealed that over the course of 2 years, children's memory improved as well as their theory of mind. Memory scores positively predicted theory of mind scores at both T1 and T2. Not only did theory of mind scores positively predict the proportion of happiness collages that were made up of experiences at both times,

but the effect also significantly increased as children mature. Finally, over the course of 2 years, the proportion of happiness collages that were made up of experiences also increased (see Appendix B).

Study 2 starts off a chain of experiments with 3-5 year-olds to enhance the happiness that experiences can provide. Studies 2 (N=40) and 3 (N=35) used two different memory interventions to assess whether it improved happiness from experiences. If being able to remember an experience is a key component of being able to derive happiness from experiences that have long since passed, then experimentally boosting memory should increase happiness from a past experience. We tested this proposition by experimentally manipulating memory for an experience in 3-5 year old children and measuring their happiness from that experience two weeks later. The experience was an initial interview with the experimenter. Studies 2 and 3 demonstrated that increasing children's memory for an experience increased their retrospective evaluation of the experience. These results replicated that of Study 1's longitudinal findings.

Study 4 (N= 38) moved to testing theory of mind. Study 4 made use of a manipulation aimed at improving understanding of people's inner mental worlds among children ages 3-5. The intervention took place over two weeks, and manipulation checks confirmed that it worked as intended. The children who were randomly assigned to receive a theory of mind intervention (training to understand the mental states of others) were subsequently more skilled at theory of mind tasks than a neutral condition that received numerical training.

Results showed that children in the theory of mind condition reported being happier than children in the neutral condition when recalling the initial study experience. Additionally, from a within-subjects perspective, children in the theory of mind condition were happier at time 2 than they were at time 1, whereas no change in happiness occurred among children in the numerical-boost condition. These results showed that theory of mind is needed to derive happiness from experiences, with this experiment showing its causal role.

Study 5 (N= 68) replicated and extended findings from Studies 1-4 by using an experiment to confirm the mediating role of theory of mind on the relationship between memory and happiness derived from experiences. These results show that being able to remember experiences is a key reason why experiences bring pleasure. However, having a good memory is not sufficient. Children must also develop good theory of mind, and remember the social aspects of experiences, to fully appreciate them.

This study further demonstrated that giving children a salient reminder of an experience can increase the pleasure they derive from that experience. What kind of salient reminders result in the greatest pleasure? Reminders about the social aspects of the experience result in more happiness than reminders of non-social aspects or no salient reminders at all. These results provide causal evidence of the link between memory, theory of mind, and happiness derived from experiences.

Deriving more happiness from experiences than from objects is a developmental process that unfolds overtime. Having good memory and a mature theory of mind set the stage for children to fully appreciate the benefits of experiences.

REFERENCES

- Baron-Cohen, Simon, Sally Wheelwright, Jacqueline Hill, Yogini Raste, and Ian Plumb (2001), "The "Reading the Mind in the Eyes" test revised version: A study with normal adults with Asperger syndrome or high functioning autism," *Journal of Child Psychology and Psychiatry*, 42 (2), 241-251.

- Baumeister, Roy F. and Mark R. Leary (1995), "The need to belong: Desire for interpersonal attachments as a fundamental human motivation." *Psychological Bulletin*, 117 (3), 497.
- Beggan, James K. (1992), "On the social nature of nonsocial perception: The mere ownership effect," *Journal of Personality and Social Psychology*, 62, 229-237.
- Begeer, Sander, Betram F. Malle, Mante S. Nieuwland, and Boaz Keysar (2010), "Using Theory of Mind to Represent and Take Part in Social Interactions: Comparing Individuals with High-functioning Autism and Typically Developing Controls," *European Journal of Developmental Psychology*, 7 (1), 104-22.
- Birch, Susan AJ, and Paul Bloom (2007), "The curse of knowledge in reasoning about false beliefs," *Psychological Science*, 18 (5), 382-386.
- Caprariello, Peter A., and Harry T. Reis (2013), "To do, to have, or to share? Valuing experiences over material possessions depends on the involvement of others," *Journal of Personality and Social Psychology* 104 (2), 199.
- Chaplin, Lan Nguyen, and Deborah Roedder John (2005), "The development of self-brand connections in children and adolescents," *Journal of Consumer Research* 32 (1), 119-129.
- _____, and Tina M. Lowrey (2010), "The development of consumer-based consumption constellations in children," *Journal of Consumer Research* 36 (5), 757-777.
- _____, and Deborah Roedder John (2010), "Interpersonal influences on adolescent materialism: A new look at the role of parents and peers," *Journal of Consumer Psychology*, 20 (2), 176-184.
- Constable, Merryn D., Ada Kritikos, and Andrew P. Bayliss (2011), "Grasping the concept of personal property," (2011). *Cognition*, 119, 430-437.
- Coventry, Kenny R., Debra Griffiths, and Colin J. Hamilton (2014), "Spatial demonstratives and perceptual space: Describing and remembering object location," *Cognitive Psychology*, 69, 46-70.
- Cunningham, Sheila J., David J. Turk, Lynda M. Macdonald, and C. Neil Macrae. (2008), "Yours or mine? Ownership and memory," *Consciousness and cognition*, 17, 312-318.
- DeScioli, Peter, Nicole M. Rosa, and Angela H. Gutchess (2015), "A memory advantage for property," *Evolutionary Psychology*, 13, 411-423.
- _____, and Rachel Karpoff (2015), "People's judgments about classic property law cases," *Human Nature*, 26, 184-209.
- Diener, Ed, and Martin EP Seligman (2004), "Beyond money toward an economy of well-being," *Psychological science in the public interest* 5 (1), 1-31.
- Dietvorst, Roeland C., Willem JMI Verbeke, Richard P. Bagozzi, Carolyn Yoon, Marion Smits, and Aad Van Der Lugt (2009), "A sales force-specific theory-of-mind scale: Tests of its validity by classical methods and functional magnetic resonance imaging," *Journal of Marketing Research*, 46 (5), 653-668.
- Ellison, Nicole, Charles Steinfield, and Cliff Lampe (2007), "The benefits of Facebook "friends": Exploring the relationship between college students' use of online social networks and social capital," *Journal of Computer-Mediated Communication*, 12(3).
- Fiasse, Catherine, and Nathalie Nader-Grosbois (2012), "Perceived social acceptance, theory of mind and social adjustment in children with intellectual disabilities," *Research in Developmental Disabilities*, 33(6), 1871-1880.
- Friedman, Ori (2010), "Necessary for possession: How people reason about the acquisition of ownership," *Personality and Social Psychology Bulletin*, 36, 1161-1169.
- Gelman, Susan A., Erika M. Manczak, and Nicholas S. Noles (2012), "The nonobvious basis of ownership: Preschool children trace the history and value of owned objects," *Child Development*, 83(5), 1732-1747.
- _____, Erika M. Manczak, Alexandra M. Was, and Nicholas S. Noles (2016), "Children seek historical traces of owned objects," *Child Development*, 87, 239-255.
- _____, Nicholas S. Noles, and Sarah Stilwell (2014), "Tracking the actions and possessions of agents," *Topics in cognitive science*, 6, 599-614.
- Gentina, Elodie, and Samuel K. Bonsu (2013), "Peer network position and shopping behavior among adolescents," *Journal of Retailing and Consumer Services*, 20 (1), 87-93.
- Hei-Man, T.S.E. (2008), "An ethnography of social network in cyberspace: the Facebook phenomenon," *The Hong Kong Anthropologist*, 2(1).
- Howell, Ryan T., and Graham Hill (2009), "The mediators of experiential purchases: Determining the impact of psychological needs satisfaction and social comparison," *The Journal of Positive Psychology*, 4 (6), 511-522.
- Hughes, Claire, and Sue Leekam (2004), "What are the links between theory of mind and social relations? Review, reflections and new directions for studies of typical and atypical development," *Social Development*, 13(4), 590-619.
- HSBC. (2013). The future of retirement: Life after work? UK Report. Retrieved from <https://investments.hsbc.co.uk/myplan/files/resources/130/future-of-retirement-uk-report.pdf>
- Kahneman, Daniel, Jack L. Knetsch, and Richard H. Thaler (1991), "Anomalies: The endowment effect, loss aversion, and status quo bias," *Journal of Economic Perspectives*, 5, 193-206.
- Kanngiesser, Patricia, Nathalia Gjersoe, and Bruce M. Hood (2010), "The effect of creative labor on property-ownership transfer by preschool children and adults," *Psychological Science*, 21, 1236-1241.
- Keller, Ed, and Brad Fay (2012), "Facebook Can't Replace Face-to-Face Conversation," USA TODAY, (April 29).
- Lea, Stephen E.G., Paul Webley and Brian M. Young (Ed) (1992), *New Directions in Economic Psychology: Theory, experiment and application*, Cheltenham: Edward Elgar.
- Lusardi, Annamaria, Daniel J. Schneider, and Peter Tufano (2011), "Financially fragile households: Evidence and implications. National Bureau of Economic Research," Retrieved from <http://www.nber.org/papers/w17072>
- Morewedge, Carey K., Lisa L. Shu, Daniel T. Gilbert, and Timothy D. Wilson (2009), "Bad riddance or good rubbish? Ownership and not loss aversion causes the endowment effect," *Journal of Experimental Social Psychology*, 45, 947-951.
- Nathanson, Amy L., Molly L. Sharp, Fashina Aladé, Eric E. Rasmussen, and Katheryn Christy (2013), "The relation between television exposure and theory of mind among preschoolers," *Journal of Communication*, 63(6), 1088-1108.
- Neary, Karen R., and Ori Friedman (2014), "Young children give priority to ownership when judging who should use an object," *Child Development*, 85, 326-337.
- Olson, Kristina R., Kristin Shutts, Katherine D. Kinzler, and Kara G. Weisman (2012), "Children Associate Racial Groups With Wealth: Evidence From South Africa," *Child Development*, 83(6), 1884-1899.

- Peck, Joann, and Suzanne B. Shu (2009), "The effect of mere touch on perceived ownership," *Journal of Consumer Research*, 36, 434-447.
- Peplau, Letitia. A. and Catherine E. Cutrona (1980), "The revised UCLA Loneliness Scale: Concurrent and discriminant validity evidence," *Journal of personality and social psychology*, 39(3), 472-480.
- Pew Research Center (2015), "Teens, Social Media & Technology Overview 2015," (April 9).
- Pierce, Jon L., Tatiana Kostova, and Kurt T. Dirks (2001), "Toward a theory of psychological ownership in organizations," *Academy of Management Review*, 26, 298-310.
- _____, _____, and _____ (2003), "The state of psychological ownership: Integrating and extending a century of research," *Review of General Psychology*, 7, 84-107.
- Podolny Joel M. and James N. Baron (1997), "Resources and relationships: Social networks and mobility in the workplace." *American Sociological Review*, 673-693.
- Ramsey, Patricia G. (1991), "The salience of race in young children growing up in an all-White community," *Journal of Educational Psychology*, 83(1), 28-34.
- Ross, Hildy S. (1996), "Negotiating principles of entitlement in sibling property disputes," *Developmental Psychology*, 32 (1), 90-101.
- Schor, J. (2004). *Born to buy: The commercialized child and the new consumer culture*. Scribner.
- Stanley, Thomas J., and William D. Danko (1996), *The millionaire next door: The surprising secrets of America's wealthy*, Taylor Trade Publishing.
- Subrahmanyam, Kaveri, and Gloria Lin (2007), "Adolescents on the net: Internet use and well-being," *Adolescence*, 42(168), 659.
- The Economist (April 9, 2005), Special report: The economics of saving: The shift away from thrift, Retrieved from <http://www.economist.com/node/3839554>.
- U.S. Census Bureau (2014), Population Data, Retrieved from <http://www.census.gov/topics/population/data.html>
- Van Boven, Leaf, and Thomas Gilovich (2003), "To do or to have? That is the question," *Journal of personality and social psychology* 85 (6), 1193.
- _____, (2005), "Experientialism, materialism, and the pursuit of happiness," *Review of General Psychology* 9 (2), 132.
- Webley, Paul (2005). "Children's understanding of economics," In M. Barrett & E. Buchanan-Barrow (Ed.), *Children's understanding of society* (pp. 43-68). New York, NY: Psychology Press.
- Weinger, Susan (2000), "Economic status: middle class and poor children's views," *Children & Society*, 14(2), 135-146.