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#### DO DEMOGRAPHICS MATTER IN CHILDHOOD ATTITUDES ON MATERIALISM? UNDERSTANDING SOUTH AFRICAN TWEEN CONSUMERS



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#### **ABSTRACT**

Purpose: This study examined materialism among South African tweens. The goal of the study was to determine whether demographic differences such as age, gender, and socioeconomic status have a bearing on children's attitudes to materialism.

Theoretical Framework: Scholarly interest into childhood materialism has been concerned with how materialism develops, how it is sustained and the effects of materialism. The current study hypothesises that age, gender and socioeconomic class have an influence on children's attitudes on material happiness, material success, and material centrality as first- order constructs for materialism, and consequently, how they have an influence on materialism.

Design/methodology/approach: The study adopted a quantitative methodology, with a self-administered questionnaire as the data collection instrument. An adapted 9-item Material Values Scale for children (MVS-c) was used to measure material centrality, material happiness and material success as first-order factors for materialism. Data were collected from a sample of 192 school children aged 10 to 14. Structural equation modelling was used to validate the scale while the independent samples t-test and ANOVA were used to assess the demographic differences.

**Findings:** The results revealed that there are gender differences in tweens' attitudes towards materialism but no age and socioeconomic differences. The results also revealed that demographic differences exist regarding some of the materialism factors but not others. The study overall found that demographics have a limited influence on children's attitudes regarding materialism.

Research, Practical & Social implications: The study offers a glimpse into the minds of South African tweens regarding their materialistic values. The paper enriches the literature on childhood materialism by bringing perspectives from cultures other than the West, which has dominated much of the knowledge on child consumers.

Originality/value: Materialism in children has been examined in various social science disciplines from a variety of perspectives. However, much of the studies have been on Western child consumers, largely ignoring African children. This is despite the fact that the African consumer market has grown steadily over the years. This study contributes to the conceptualisation of childhood materialism in an African context.

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# A DEMOGRAFIA IMPORTA NAS ATITUDES DA INFÂNCIA EM RELAÇÃO AO MATERIALISMO? COMPREENDENDO OS CONSUMIDORES DE INTERPOLAÇÃO DA ÁFRICA DO SUL

#### **RESUMO**

**Propósito:** Este estudo examinou o materialismo entre os pré-adolescentes sul-africanos. O objetivo do estudo foi determinar se as diferenças demográficas, como idade, gênero e status socioeconômico têm influência na atitude das crianças em relação ao materialismo.

**Estrutura Teórica:** O interesse acadêmico no materialismo infantil tem se preocupado com a forma como o materialismo se desenvolve, como é sustentado e os efeitos do materialismo. O presente estudo pressupõe que idade, gênero e classe socioeconômica têm influência nas atitudes das crianças sobre a felicidade material, o sucesso material e a centralidade material como construções de primeira ordem para o materialismo e, consequentemente, como elas têm influência no materialismo.

**Projeto/metodologia/abordagem:** O estudo adotou uma metodologia quantitativa, com um questionário autoadministrado como instrumento de coleta de dados. Uma Escala de Valores de Materiais para Crianças (MVS-c) adaptada de 9 itens foi usada para medir a centralidade material, a felicidade material e o sucesso material como fatores de primeira ordem para o materialismo. Foram coletados dados de uma amostra de 192 crianças entre 10 e 14 anos. A modelagem de equações estruturais foi utilizada para validar a escala, enquanto as amostras independentes t-test e ANOVA foram utilizadas para avaliar as diferenças demográficas.

**Constatações:** Os resultados revelaram que há diferenças de gênero nas atitudes dos interpoladores em relação ao materialismo, mas não há diferenças socioeconômicas e de idade. Os resultados também revelaram que existem diferenças demográficas em relação a alguns fatores do materialismo, mas não outros. O estudo concluiu que a demografia tem uma influência limitada sobre as atitudes das crianças em relação ao materialismo.

**Pesquisa, implicações práticas e sociais:** O estudo oferece um vislumbre das mentes dos adolescentes sulafricanos em relação a seus valores materialistas. O artigo enriquece a literatura sobre o materialismo infantil ao trazer perspectivas de outras culturas além do Ocidente, que tem dominado grande parte do conhecimento sobre os consumidores infantis.

**Originalidade/valor:** O materialismo em crianças tem sido examinado em várias disciplinas de ciências sociais a partir de uma variedade de perspectivas. No entanto, muitos dos estudos têm sido sobre os consumidores infantis ocidentais, em grande parte ignorando as crianças africanas. Isto apesar do fato de que o mercado consumidor africano tem crescido constantemente ao longo dos anos. Este estudo contribui para a conceitualização do materialismo infantil em um contexto africano.

**Palavras-chave:** Comportamento do Consumidor, Materialismo, Consumidores Infantis, Diferenças Demográficas.

## ¿IMPORTA LA DEMOGRAFÍA EN LAS ACTITUDES INFANTILES SOBRE EL MATERIALISMO? ENTENDER A LOS INTERCONSUMIDORES SUDAFRICANOS

#### RESUMEN

**Propósito:** Este estudio examinó el materialismo entre los adolescentes sudafricanos. El objetivo del estudio fue determinar si las diferencias demográficas como la edad, el género y el nivel socioeconómico influyen en las actitudes de los niños hacia el materialismo.

**Marco teórico:** El interés académico en el materialismo de la infancia ha estado relacionado con cómo se desarrolla el materialismo, cómo se sostiene y los efectos del materialismo. El presente estudio plantea la hipótesis de que la edad, el género y la clase socioeconómica influyen en las actitudes de los niños sobre la felicidad material, el éxito material y la centralidad material como constructos de primer orden para el materialismo y, en consecuencia, cómo influyen en el materialismo.

**Diseño/metodología/enfoque:** El estudio adoptó una metodología cuantitativa, con un cuestionario autoadministrado como instrumento de recolección de datos. Se utilizó una escala adaptada de valores materiales para niños (MVS-c) de 9 ítems para medir la centralidad material, la felicidad material y el éxito material como factores de primer orden para el materialismo. Se recolectaron datos de una muestra de 192 escolares de 10 a 14 años. Para validar la escala se utilizó el modelo de ecuaciones estructurales y para evaluar las diferencias demográficas se utilizaron la prueba t de muestras independientes y el ANOVA.

**Hallazgos:** Los resultados revelaron que hay diferencias de género en las actitudes de los adolescentes hacia el materialismo, pero no diferencias de edad y socioeconómicas. Los resultados también revelaron que existen diferencias demográficas respecto a algunos de los factores del materialismo, pero no a otros. El estudio en general encontró que la demografía tiene una influencia limitada en las actitudes de los niños con respecto al materialismo.

**Investigación, implicaciones prácticas y sociales:** El estudio ofrece un vistazo a las mentes de los adolescentes sudafricanos con respecto a sus valores materialistas. El artículo enriquece la literatura sobre el materialismo infantil al aportar perspectivas de culturas distintas de Occidente, que ha dominado gran parte del conocimiento sobre los niños consumidores.

**Originalidad/valor:** El materialismo en los niños ha sido examinado en diversas disciplinas de las ciencias sociales desde diversas perspectivas. Sin embargo, muchos de los estudios se han realizado sobre consumidores infantiles occidentales, ignorando en gran medida a los niños africanos. Esto a pesar del hecho de que el mercado de consumo africano ha crecido constantemente a lo largo de los años. Este estudio contribuye a la conceptualización del materialismo infantil en un contexto africano.

**Palabras clave:** Comportamiento del Consumidor, Materialismo, Consumidores Infantiles, Diferencias Demográficas.

#### INTRODUCTION

Since the early 90s, children's involvement in consumer society has attracted considerable research attention. Scholarly interest into young consumers has grown, parallel to an increase in their involvement in consumer culture. Unfortunately, children's active participation in the consumer marketplace has seen the development of negative consequences such as materialism, which is a tendency to view material possessions as a key to happiness (Dávila et al., 2017; Nairn & Opree, 2021; Maison & Adamczyk, 2020. Marketers have been accused of contributing to the materialistic tendencies of children by targeting them for consumerism (Hawkins, 2016; Roach et al., 2019). As the interest in child consumers has expanded, so has the research into childhood materialism, with a stream of research exploring the links between materialism and factors such as age (Chaplin et al., 2014; Chaplin et al., 2020), socioeconomic status (Chaplin et al., 2014; Nairn & Opree, 2021), parenting style (Richins & Chaplin, 2015; Zawadzka et al., 2022), parental materialism (Allsop et al., 2021; Russell & Shrum, 2021), self-esteem (Jiang et al., 2015; Nairn & Opree, 2021), peer influence (Jiang et al., 2015; Richins, 2017) and media exposure (Opree et al., 2020; Russell & Shrum, 2021). The rising level of materialism among child consumers has prompted concern from parents, educators and social scientists (Dávila et al., 2017; Chaplin et al., 2014). This is because research has shown some negative consequences of materialism, such as lower life satisfaction (Opree et al., 2012; Kasser et al., 2014), poor interpersonal relationships (Lenka, 2014: Kasser, 2016) and lower self-esteem (Kasser et al., 2014; Jiang et al., 2015). Although the research on consumption and childhood materialism has coalesced into a considerable body of knowledge on child consumers, much of this work lacks African perspectives on childhood materialism. According to Ger and Belk (1996), materialism is culture specific in its development and expression. As such, findings from Western and Eastern children cannot be generalised to African children.

This research is necessary for three main reasons. Firstly, much of the research into childhood materialism has been conducted in economically developed Western societies (Kasser & Linn, 2016; Richins, 2017; Nairn & Opree, 2021). The current study therefore offers a glimpse into the minds of South African tweens regarding their materialism values. The paper enriches the literature on childhood materialism by bringing perspectives from cultures other than the West, which has dominated much of the knowledge on child consumers. Secondly, the sociological changes that have taken place in society over the past few decades have seen a rise in the importance placed on researching children's lives from their own perspective (Mason & Watson, 2013; Coyne et al., 2021). It has been widely acknowledged that attempts to measure and assess the well-being of children must prioritise the participation and perspectives of children (Ben-Arieh & Kosher, 2020; Gross-Manos et al., 2021; Blaisdell et al., 2019). Much of the literature on materialism in Africa has been informed by studies on adult consumers, therefore, studies on child consumers are necessary. Lastly, the research is important because it makes both a theoretical and a methodological contribution to the literature on childhood materialism. The study was developed based on existing research and frameworks and thus builds on the background of child consumers using African perspectives. The overall aim of this study is to investigate whether demographics have an influence on childhood materialism. The objective of the study is to bring African children into the discussion on childhood materialism by assessing whether age, gender and socioeconomic class have an influence on children's attitudes regarding materialism. The study brings a new dimension to the understanding of African child consumers.

#### LITERATURE REVIEW

### **Conceptualising Materialism**

Materialism is defined as "the importance a person places on possessions and their acquisition as a necessary or desirable form of conduct to reach desired end states, including happiness" (Jiang et al., 2015). Materialism describes the value orientation whereby individuals place value on extrinsic possessions when evaluating themselves, their success and the success of others (Allsop et al., 2021). People who are materialistic tend to be overly interested in money and material goods, placing great importance on possessions in their life (Maison & Adamczyk, 2022). Materialists view possessions as a pathway to happiness (Dávila et al., 2017). A complex, multifaceted phenomenon, materialism has been positioned as either a negative trait associated with negative consequences (Jaspers & Pieters, 2016; Dittmar and

Isham, 2022) or a positive characteristic with the potential for positive societal influences (Duh, 2015; De Klerk, 2020). Much of the research into childhood materialism is delineated into three facets: (i) discovering whether materialism exists in children; (ii) the factors that contribute to the development of materialism and (iii) the effects of materialism on children. The objective of the current study is to discover any demographic differences among South African children regarding their attitudes on materialism.

#### **Influences on Childhood Materialism**

Consumer researchers have had a long-standing interest in understanding how materialism develops. A review of the literature on materialism reveals that materialism mainly develops when children are exposed to social models that encourage materialistic values (Chaplin & John 2010; Jiang et al., 2015; Richins 2017; Allsop et al., 2021). According to Chaplin et al. (2019), studies on the development of materialism can be grouped into psychological factors and socialisation factors. Psychological factors include the internal identity motives that form the core of identity and include, inter alia, self-esteem, power and the need to belong. Socialisation factors, which are the processes by which behaviour, norms and values are learned, include parental, peer and media influences. This also includes consumer socialisation, a process by which consumer-related values and beliefs are acquired. Materialism is a central component of consumer socialisation (Chaplin, et al. 2019). The article focuses on the socialisation factors, with income inequality being added as an important environmental factor that has a significant influence on consumer socialisation (Paus-Hasebrink et al., 2019).

#### Parental materialism

Studies have shown that parenting styles and the materialistic values of parents can cultivate a materialistic worldview in children (Chaplin & John 2010; Richins & Chaplin, 2015; Russell & Shrum, 2021; Zawadzka et al., 2022; Shrum et al., 2022). Parents are the primary socialisation agents of children and as they grow up, children tend to internalise the values and attitudes of their parents. Materialistic parents tend to have materialistic children (Dávila et al., 2017). Richins & Chaplin (2015) introduced the concept of *material parenting*, which is the use of material goods to express love or shape children's behaviour. Material parenting influences the material values of children by encouraging them to use possessions to transform and shape the self. Parents may also cultivate materialistic values in their children if they spend

too much time in pursuit of material possessions, external success and a higher standard of living (Chaplin & John, 2010; Richins, 2017; Allsop et al., 2021).

#### Peer influence

Child development research has documented the fact that peer groups, such as neighbourhood friends, classmates and teammates, are important socialising agents (Chaplin & John, 2010; Bukowski et al., 2015; Choukas-Bradley et al., 2015; Shrum et al., 2022). Similarly, consumer researchers have established that peers are one of the primary socialisation agents through which consumption attitudes, goals and motives are transmitted to children (Chaplin & Roedder John, 2010; Wang & Wei, 2012; Richins 2017). Studies on adolescent materialism have also shown the influence of peers in the development of materialism (Jiang et al., 2015; Islam et al. 2018; Zawadzka et al., 2022; Shrum et al. 2022). In a similar manner to which parents transmit their materialistic values onto children, peers can also exert their influence. For example, when children communicate with their peers about consumption (e.g., talking about the latest cool brands, discussing how much they spent at the mall or to purchase a gadget) and observe the acquisitions they desire, they will most likely model these consumption behaviours and desire on what the peers have or want (Chaplin & John, 2010; Dávila & Casabayo., 2013).

#### Advertising and marketing

Throughout the years, research has established a link between children's exposure to advertising and childhood consumer behaviour (Rasmussen et al., 2022). While marketing may help to socialise children as consumers, develop their product knowledge and help them craft their unique identities as consumers, scholars have found that there is a legitimate need for concern about how marketers approach these developmentally delicate consumers (Lapierre et al., 2017; Opree et al., 2021). Researchers have long recognised children as a vulnerable consumer group whose budding developmental abilities make them susceptible to the persuasive intent of advertising (Lapierre et al., 2017). Studies have shown links between exposure to television advertising and increased materialism and participation in consumer culture (Opree et al., 2012; Lenka, 2014; Opree et al., 2020; Russell & Shrum, 2021; Nairn & Opree, 2021). According to Opree et al. (2012), television advertising promotes the idea that material possessions can be used to cope with decreasing life satisfaction.

#### Income inequality

Research on childhood materialism has suggested a link between income inequality and materialism (Chaplin et al., 2014; Ku, 2015; Nairn & Opree, 2021). The link can be attributed to the fact that income inequality increases uncertainty and insecurity, thereby making people anxious about their social status (Rözer et al., 2022). People therefore develop materialistic attitudes to compensate for economic deprivation (Trzcińska, & Sekścińska, 2021). Likewise, Nairn & Opree (2021) found that children from deprived backgrounds are more materialistic than their affluent counterparts, owing to their higher levels of exposure to advertising and their greater likelihood to believe in the credibility of advertisements. Richins & Chaplin (2021) found that children who experience financial insecurity will form transitory attachments with material objects. Such children will form attachments with multiple objects before swiftly moving on to desiring newer or different objects, thereby displaying a manifestation of materialism.

#### **Demographic Differences in Materialism**

Demographic differences in materialism have been a subject of interest among researchers of both child and adult materialism because they are considered an important variable in the development of materialistic values. Studies considering demographics have investigated the influence of age (Jaspers & Pieters, 2016; Martin et al., 2019; Islam et al., 2018), gender (Antiniené et al., 2021; Allsop, 2021: Tarka et al., 2022) and the role of socioeconomic status (SES) on materialism (Antiniené et al., 2021; Nairn & Opree, 2021). While the research on materialism has been expansive, it has not been conclusive, particularly with regard to the demographic influences on materialism (Parasha & Bain, 2017; Antiniené et al., 2021). Studies on childhood materialism have focused mainly on the factors that contribute to the development of materialistic values and the effects of materialism on childhood materialism, and even so, most of these studies are not conclusive in their findings. One characteristic shared by most of these studies on childhood materialism that investigate the influence of demographics is that they consider one demographic variable at a time. The current study is unique in that it considers three demographic variables simultaneously.

#### Gender

A review of the literature on the association between gender and materialism in children fails to answer the question of whether there is a correlation between gender and a child's propensity for materialism. A few studies have found gender differences in materialism (Goldberg et al., 2003; Kasser, 2005) while other studies have not (Chan et al., 2006; Kiang et al., 2016; Dávila et al., 2017; Yang et a., 2018). In their systematic review of the factors that contribute to childhood materialism, Dávila & Casabayo (2013) found that previous studies on the development of materialism revealed that in Western societies, boys showed a greater propensity for materialism than girls. Conversely, the same authors found that studies in China did not find any significant differences between the genders. According to Dávila et al., (2017) this can be attributed to the fact that, in the West, children identify with their fathers, who score higher on materialism given their tendency to focus on material possessions as indicators of success. Based on the above discussion, it can be hypothesised that:

**H1:** Gender will have a significant difference on material values

#### Age

Studies on the relationship between age and childhood materialism are rare (Opree et al., 2012). However, developmental psychology has shown that the desire for material possessions begins at an early age (Chaplin & John, 2007), with middle childhood being a particularly vulnerable stage for the development of materialism (Opree et al., 2012). Cognitive development theories suggest that in middle childhood, children become more aware of the social aspects of consumption and the symbolic meanings of brands (Watkins et al, 2016; John & Chaplin, 2019). Entering adolescence typically comes with insecurities that lead to children focusing on material possessions as a means of self-enhancement, with adolescents acquiring brands and products used by desired peer groups in order to fit in and manage self-impressions (Richins, 2017). A few studies have found age to be a predictor of materialism (Chaplin & John, 2007; Bindah & Othman, 2012). Chaplin & John (2014) found age differences in childhood materialism, with 11–13-year-olds turning out to be more materialistic than their 8–10-year-old and 16-17-year-old counterparts. Conversely, other studies have found that age is not a significant predictor of materialism (Chan and Prendergast, 2007; Kiang et al., 2016; Yang et al., 2018). Given the interest in the influence of age on the development of materialism, the study proposes the following hypothesis.

**H2:** Age has a statistically significant relationship to material values

#### **Socioeconomic Status**

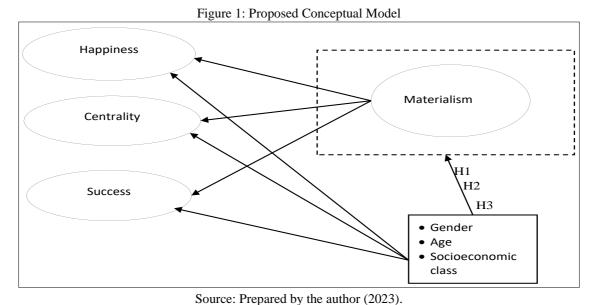
Previous studies on materialism among children consider socioeconomic status (SES) as one of the motivators of materialism. Children from low-income households are reported to be more materialistic than their high-income counterparts (Chaplin & Roedder John, 2014; Ku, 2015; Nairn & Opree 2021). This could be explained by the fact that children who lack material resources will value wealth and possessions more than children who already have them (Dávila et al., 2017). In a longitudinal study on the development of materialism in adolescents, Ku (2015) found evidence to support the notion that social economic status has a significant influence on the development of materialistic values, with children from lower socioeconomic backgrounds reporting higher levels of materialism than their counterparts from higher socioeconomic backgrounds. Similarly, in their study comparing the materialistic values of affluent vs impoverished children, Chaplin et al., (2014) found that impoverished youth exhibited higher levels of materialism than their wealthier counterparts and that this was related to their low self-esteem, which in itself is driven by being poor. In their study on the role of socioeconomic status in childhood materialism, Nairn & Opree (2021) found that children from economically deprived backgrounds were more materialistic, owing to their higher exposure to television advertising and a greater likelihood of believing in the credibility of advertising. Similarly, Zawadzka et al., (2022) found that socioeconomic status was positively correlated to adolescent materialism. Furthermore, they found that this role of socioeconomic status may be mediated by cultural or national context. As such, it is hypothesised that:

**H3:** Socioeconomic status will have a statistically significant effect on material values.

#### **Conceptual Model**

A review of the materialism studies on adults by Richins and Dawson (1992) revealed that the most common conceptualisations of materialism entail at least one of the following concepts: material centrality (where one sees material possessions as being central to their life); material happiness (where one believes that material possessions will make them happier) and material success (where one uses material possessions to gauge their or other's success). It was upon these three concepts that the Material Values Scale for adults was developed. This scale was the inspiration of the Material Values Scale for children (MVS-c) developed by Opree et al., (2011), upon which the present study was predicated. The study proposes that while the three material values contribute to materialism, they do so within the context of demographic differences. Studies that investigate demographic differences in childhood materialism have

typically done so in a piecemeal fashion, examining only one or two demographic variables at a time. The current study is, to the author's knowledge, the first to examine three demographic variables at once. Concurrently, the study seeks to validate a 9-item material values scale for children. The original material values scale for children (MVS-c) contains 18, 6 or 3 items. While all three have been validated and found to be reliable, a pilot study using the 18-item scale revealed that it was too long for the children to maintain their attention span, while the author believes that the 6- and 3-item scales were too short to gather meaningful information from the children. Figure 1 below is the proposed conceptual model. The study hypothesises that age, gender and socioeconomic class have an influence on children's attitudes towards material happiness, material success, and material centrality as first-order constructs for materialism, and consequently have an influence on materialism.



#### Source. Trepared by the author (2025)

#### **METHODOLOGY**

A sample of 192 tweens, ages 10 to 14 (M=11.40, SD=1.31), was drawn from primary schools in the Gauteng Province of South Africa (male n=69; female, n=123). The numerous levels of consent required to conduct research with children adversely affected the sample size. Only one third of the parental consent forms given to children were returned. A survey including research teams from 35 countries revealed that children's participation in research decreased as the number of permissions required increased (Gross-Manos et al., 2021). Sampling for the study was done using the convenience method as children were being included as participants based on them being granted consent by their parents to participate. Data were

collected through an in-class, paper-and-pencil survey. According to Opree et al., (2011) the use of paper-and-pencil questionnaires is appropriate for children over the age of 7. The use of a questionnaire to study materialism in children has also been adopted by renowned researchers such as Bottomley et al., 2010; Opree et al., 2011; Opree et al., 2012; Van de Meulen et al., 2018; and Nairn & Opree, 2021. Incomplete questionnaires were eliminated from the analyses. Table 1 below provides a summary of the respondent profile. While race was included as a demographic variable in the questionnaire, it was excluded from the data analysis, given that the overwhelming number of respondents came from one racial group. This made it challenging to test for differences between groups.

Table 1: Respondent Summary

Sample Characteristics	N N	%
Gender $(n = 192)$		
Male	69	35.9
Female	122	64.1
Age (n =192)		
10	49	25.5
11	50	26.0
12	32	16.7
13	45	23.4
14	16	8.3
Race ( <i>n</i> =192)		
Black	138	71.9
White	23	12.0
Coloured	19	9.9
Indian	12	6.3
Socioeconomic class ( <i>n</i> =192)		
Upper-middle class	45	23.4
Lower-middle class	38	19.8
Emerging middle class	44	22.9
Low emerging middle	33	17.2
Second-lowest class	32	16.7

Source: Prepared by the author (2023).

#### **Informed Consent**

Access to children as research participants is strictly controlled; thus, recruiting child participants is a challenging stage in the research process (Ben-Arieh & Kosher, 2020; Gross-Manos et al., 2021). A critical aspect of child research relates to ethical considerations around gatekeeper permission, parental consent and child consent and assent. Firstly, accessing child research participants in social institutions requires gatekeeper consent from each of the research sites in which research will be conducted (Singh & Wassenaar, 2016). In the case of the current study, gatekeeper letters were provided to the principals of the target schools. After the principal had signed this letter, agreeing for the school to participate, consent forms were then given to

the parents so that they could give consent for their children to participate in the study. Parental consent is required as children do not have the legal capacity to give consent (Gross-Manos et al., 2021). Lastly, the children were given forms which described the nature of the study in a language they understand. They were required to write down their names to show that they understood what the research was about, were aware that they could withdraw at any time and that they agreed to participate in the survey.

#### **Measures**

Data required for this study were collected using a self-administered questionnaire. The questionnaire comprised a section requiring the demographic information of the respondents and a section containing items adapted from the Material Values Scale for Children (MVS-c) by Opree et al. (2011). Material values scales designed for adults often have low content validity for children, are difficult for them to understand because of the language, and usually have more response options than the optimum number recommended for children (Opree et al., 2011). The scale has been validated in previous studies and measures materialism by means of three subscales, namely material centrality, material happiness and material success (Soni & Behal, 2015; van de Meulen et al., 2018; Kuhne & Opree, 2019). Each of these subscales comprised a three-item, four-point Likert scale. The Likert scale included four response categories, namely 'No, not at all', 'No, not really', 'Yes, a little' and 'Yes, very much'. Although the items were loaded on three separate factors (eigen values 2.160, 1.700 and 2.389), they did form one reliable scale (α = .803).

#### **Reliability of the Scales**

To measure the internal consistency of the scale, Cronbach's alpha was computed using SPSS 28. The factor analysis on the nine MVS-c items revealed good sampling adequacy (KMO = 0.725; Bartlett's  $\chi 2$  (36) = 973.007; p < .001) and accounted for 71% of the variance. The composite scale met the minimum threshold of 0.7 with a Cronbach's alpha value of 0.803. Cronbach alpha values >.70 are acceptable for advanced stages of research (Ab Hamid et al., 2017; Puriwat & Tripopsakul, 2022). Cronbach's alpha was also computed for the individual constructs. Happiness, success and centrality had alpha values of 0.779, 0.611 and 0.872 respectively. Additionally, the data were tested for normality. The skewness tests revealed values of -.086, 0.328 and 0.343 for happiness, success and centrality respectively. Values between -0.5 and 0.5 indicate that the data is symmetrical (Rahi & Ghani, 2018). The kurtosis

indicated values of -1.074, -0.912 and -1.053 for the variables respectively. Kurtosis between -2 and +2 is considered acceptable to prove normal univariate distribution (Westfall, 2014). The average variance extracted (AVE) and the composite reliability were also computed for each of the factors. AVE scores must exceed 0.50 while composite reliability values must be >0.70 (Ab Hamid et al., 2017). Table 2 reveals the values of the individual constructs as well as the composite scale were all above the minimum threshold.

Table 2: Reliability of the scales

Variable	Item	Factor Loading	Cronbach Alpha	AVE	Composite Reliability
Happiness	MH1	.558	0.779	0.721	0.880
	MH2	.958			
	MH3	.966			
Success	MS1	.773	0.611	0.567	0.796
	MS2	.823			
	MS3	.653			
Centrality	MC1	.896	0.872	0.796	0.921
	MC2	.901			
	MC3	.879			
Material Values			0.803	0.695	0.952

Source: Prepared by the author (2023).

#### **RESULTS**

Data from the questionnaire were analysed using SPSS Statistics, version 28. Structural equation modelling (SEM) was conducted using SPSS AMOS to demonstrate the discriminant validity of the measurements and test whether the items load onto their designated factors (Nairn & Opree, 2021). While previous studies adopting the MVS-c have validated the 18-, 6and 3-item scales, the current study adopted a 9-item scale. As such, the scale had to be validated using this method. The model was estimated with maximum likelihood estimation in AMOS 28. The fit of the model was evaluated based on the model fit indices indicated in table 3 below. The results of the conceptual model showed a good fit with the data ( $\chi 2 = 48.864$ , df = 24, p = 0.002, RMSEA = 0.074, CFI = 0.974). The discriminant validity was further supported by the fact that the covariances between the observed variables were all within the recommended range. Values below <0.5 are considered normal while covariant indices >0.5 indicate poor validity (Rahi & Ghani, 2018). The indicated values for the three factors were 0.38 (happiness and success), 0.29 (happiness and centrality) and 0.41 (success and centrality). With the exception of item MH1 on the material happiness construct, all the indicators had a positive and significant factor loading on their designated factor. As such, the 9-item material values scale is considered appropriate for measuring material values.

Table 3 Model Fit Indices Material Values Model

Measure	Threshold	Indices for model	Comment
Cmin/df	<5.0	2.036	Acceptable
X <sup>2</sup> /df	2-5	2.037	Acceptable
CFI	>0.9	0.974	Acceptable
AGFI	>0.85	0.879	Acceptable
RMSEA	< 0.08	0.074	Acceptable
PCLOSE	>0.05	0.092	Acceptable

Note: CFI, Comparative Fit Index; AGFI, Adjusted Goodness of Fit Index, RMSEA, Root Mean Square Error of Approximation; γ2, chi square; df, degrees of freedom.

Source: Prepared by the author (2023).

#### **Material Values and Gender**

The relationship between gender and material values was measured using the independent samples t-test. A test for homogeneity of variance was assessed using Levene's Test for Equality of Variances. The results for happiness, success and centrality ( $\alpha$ =.391, .378 and .974) were above the recommended threshold (p=.05, Wang et al., 2017); therefore, equal variances were assumed. An independent t-test was run on the data with a 95% confidence interval (CI) for the mean difference. For the happiness variable, there were no significant differences (t(df) = 1.181, p = .120) in the mean scores between boys (M = 2.6135, SD = 1.01882) and girls (M = 2.4417, SD = .93748). For the success variable, there were significant differences between (t(df) = 1.798, p = .037) in the mean scores, with the mean scores for boys (M = 2.2802, SD = .82570) being higher than that of girls (M = 2.0650, SD = .77842). Similarly, there were also significant differences (t(df) = 1.752, p = .041) between the two groups for the centrality variable between the boys (M = 2.3671, SD = .96023) and girls (M = 2.1111, SD = .96023) .97759), with the boys having higher scores. For the composite materialism scale, there were significant differences (t(df) = 2.089, p = .019) in the mean scores, with the mean scores for boys (M = 2.4203, SD = .77001) being higher than for girls (M = 2.2060, SD = .05709). These results indicate that, overall, there were statistically significant differences in the attitudes of boys and girls regarding material values.

Table 4 T-test for differences in means: Gender and materialism

Dimension	df	Mean Difference	t-score	p value	α
Happiness	190	.17179	1.181	.120	Non-Significant
Success	190	.21515	1.798	.037*	Significant
Centrality	190	.25604	1.752	.041*	Significant
Materialism	190	1.8598	2.089	.039*	Significant

Note: \* = significant at <0.05 level Source: Prepared by the author (2023).

#### **Material Values and Age**

A one-way between-subjects ANOVA was conducted to compare the effect of age on material values. Analysis of variance (ANOVA) tests whether several means exist in the same population (Abdi & Williams, 2010). A test for homogeneity of variance was assessed using Levene's Test for Equality of Variances. The results for happiness, success and centrality  $(\alpha=.391, .378 \text{ and } .974)$  were above the recommended threshold (p=.05, Wang et al., 2017); therefore, equal variances were assumed. The one-way ANOVA revealed that there was a statistically significant difference in the mean score between at least two groups (F(4, 187) = [2.545], p = 0.041) for the material happiness variable. As such, a post-hoc analysis, using Tukey's method, was conducted to reveal what the actual differences were between the groups. This is a pairwise comparison that indicates which groups differ from each other (Abdi & Williams, 2010). The post-hoc analysis failed to show which of the age groups had significant differences. A possible explanation for this is that the group sizes for the different ages were too small and pairwise comparison tests are sensitive to sample size (Pereira et al., 2015). Table 5 below reveals that ANOVA for age and the success, centrality and materialism variables failed to show any significant differences. The composite scale also did not reveal any significant differences.

Table 5 One-way ANOVA age and materialism

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Happiness	Between Groups	9.249	4	2.312	2.545	.041*
	Within Groups	169.860	187	.908		
	Total	179.109	191			
Success	Between Groups	1.149	4	.287	.443	.777
	Within Groups	121.182	187	.648		
	Total	122.331	191			
Centrality	Between Groups	4.144	4	1.036	1.088	.364
	Within Groups	178.046	187	.952		
	Total	182.189	191			
Materialis	Between Groups	2.637	4	.659	1.391	.239
m	Within Groups	88.617	187	.474		
	Total	91.254	191			

Note: \* = significant at <0.05 level Source: Prepared by the author (2023).

#### **Material Values and Socioeconomic Status**

The relationship between socioeconomic status and materialism was measured using one-way ANOVA. The test for homogeneity of variance was assessed using Levene's Test for Equality of Variances. It revealed significant differences for success, centrality and materialism ( $\alpha$ =.002, .001 and .039), hence equal variances were assumed. Happiness was the only variable

for which equal variances were assumed ( $\alpha$ =.975). The one-way ANOVA revealed that there was a statistically significant difference in the mean score between at least two groups (F(4, 187) = [2.576], p = 0.039) for the material centrality variable. The post-hoc analysis to determine the actual differences revealed that there were significant differences between the upper-middle class and the second-lowest class ( $\alpha$ =.010) as well as the middle class and the second-lowest class ( $\alpha$ =.023). There were no statistically significant differences between the classes for the material happiness, material success and overall materialism variables. The means for upper-middle class (M=2.385) and the middle class (M=2.803) were higher than the means for the second-lowest class (1.718), indicating that the children from the second-lowest class were less materialistic.

Table 6 One-way ANOVA age and socioeconomic class

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
Happiness	Between Groups	.739	4	.185	.194	.941
	Within Groups	178.370	187	.954		
	Total	179.109	191			
Success	Between Groups	5.764	4	1.441	2.312	.059
	Within Groups	116.567	187	.623		
	Total	122.331	191			
Centrality	Between Groups	9.514	4	2.379	2.576	.039*
	Within Groups	172.675	187	.923		
	Total	182.189	191			
Materialism	Between Groups	3.474	4	.868	1.850	.121
	Within Groups	87.780	187	.469		
	Total	91.254	191			

Note: \* = significant at < 0.05 levelSource: Prepared by the author (2023).

#### **DISCUSSION**

Extant research on childhood materialism has taken steps to examine the relationship between materialism and the demographic characteristics of child consumers (Chaplin & Roedder John, 2014; Ku, 2015; Nairn & Opree, 2021; Zawadzka et al., 2021). Considering that most of these studies examined a single demographic variable at a time, the current study sought to explore the link between materialism and three demographic variables, namely age, gender, and socioeconomic status (SES). The findings of the study reveal that South African children are largely not materialistic. The average means for the constructs (happiness, M=2.5035; success, M=2.1424, centrality, 2.2031 and materialism, M=2.2830) on the 4-point Likert scale, reveal that the responses were nearer to the 'no, not really' point than the 'yes, a little' point. This result is contrary to studies from Western and Chinese children who have been found to be highly materialistic (Baker & Chan, 2020; Nairn & Opree, 2021). This result supports the

argument that studies on African consumers are needed as theories from the West cannot be generalised to African consumers. The study then sought to determine if there were any demographic differences between the children's responses.

The study first assessed the relationship between gender and attitudes on materialism. Studies on childhood materialism investigating gender have produced mixed results, with some studies finding gender differences in materialism (Goldberg et al., 2003; Kasser, 2005), while others have not (Chan et al., 2006; Kiang et al, 2016; Dávila et al., 2017; Yang et a., 2018). Additionally, studies have found gender differences among Western children but have not found significant differences among Chinese children, which could suggest that gender differences in the development of materialistic traits may stem from cultural differences (Dávila & Casabayo, 2013). Given that materialism is culture specific in its development and expression (Ger & Belk, 1996; Baker & Chan, 2020), the current study sought to bring an African perspective into the discussion. The results of the independent samples t-test revealed that there were gender differences among the tweens' responses for the material success and material centrality variables but not for the material happiness variable. However, a t-test of the composite scale revealed gender differences, therefore we can conclude that there are gender differences among South African tweens with regard to attitudes on materialism. The mean scores were higher for males than females, indicating that boys have a higher propensity for materialism, even though the tweens are largely not materialistic. The study therefore confirms the proposed hypothesis that gender will have a statistical significance on attitudes on materialism.

The study then assessed the age differences using a one-way ANOVA. As is the case with gender differences, previous studies on childhood materialism have been inconclusive on the age differences, with some studies finding significant differences (Chaplin & John, 2007; Chaplin et al. 2014), while others have not (Kiang et al., 2016; Yang et al., 2018).). The ANOVA results revealed that there was a statistically significant difference in the mean score between at least two groups for the material happiness variable. However, the post-hoc analysis failed to identify which groups these were. The ANOVA did not reveal any differences for the other two variables. The different results for the variables suggest that there may be demographic differences regarding some materialism values but not others. For instance, there may be differences between the age groups with regard to material happiness but not material success. For example, this may manifest itself in a younger child believing that money buys happiness but not believing that money is central to life, while an older child may also believe

that money buys happiness and that it is also central to life. However, given that the composite materialism scale did not reveal any significant differences, the study concludes that there are largely no differences in age among South African children regarding their attitudes on materialism. The study therefore rejects the hypothesis that age has a statistically significant relationship with materialism.

Lastly, the study sought to determine whether there are significant differences in children's attitudes regarding materialism in terms of socioeconomic class. Previous studies have found that children from low-income households are more materialistic than their highincome counterparts (Chaplin & Roedder John, 2014; Ku, 2015; Nairn & Opree, 2021). The results of the current study revealed that there are largely no differences between the different social classes with regard to materialism. The only variable that revealed significant differences was material centrality. The post-hoc tests revealed that there were differences among children from the upper and middle classes compared with children from the second-lowest class. The lower means for the children from the second-lowest class indicates that they are the least likely to be materialistic. This finding was contrary to prior studies on materialism and socioeconomic class, which found that children from deprived backgrounds are more materialistic owing to their lack of access to material goods (Dávila et al., 2017; Nairn & Opree, 2021; Zawadzka et al., 2021). The composite materialism scale also failed to reveal any significant differences; thus, we can conclude that there are largely no significant differences among South African tweens with regard to materialism on the basis of socioeconomic class. The study thus rejects the hypothesis that socioeconomic status will have a statistically significant difference in terms of materialism.

#### **CONCLUSION**

This study sought to determine whether there are demographic differences in children's attitudes on materialism. The purpose of the study was to discover whether gender, age and socioeconomic status played a role in the way children respond to questions on materialism. The study found that there are significant differences between girls and boys but no significant differences in age and socioeconomic status. Given that previous studies on childhood materialism conducted in other cultures have revealed significant differences, the current study is evidence of the importance of having perspectives on consumer behaviour other than those from Western consumers. Overall, the present study makes a useful contribution to the literature

on childhood materialism by introducing an African perspective and attempting to recover African children's voices in the consumer behaviour space.

While the current study has several important strengths, it is not without its limitations. The first limitation is that the sample size (n=192) was smaller than what was needed to have a generalisable sample. The implication of this is that the results of the study cannot be generalised to the larger South African population. The reason for the smaller sample was that the numerous levels of gatekeepers regarding child research reduced the sample size. Research has shown that multiple levels of consent have an adverse effect on sample size. The second limitation of the study is a gender bias of the sample, with females (n=123) representing a far greater proportion of the research participants than males (n=69). Given that gender was one of the main variables under study, a more balanced sample would have been preferable. However, considering that there are gender disparities in favour of females in South African schools, a sample skewed in favour of girls was expected. The final limitation of the study is that data were collected from only one province. A national study, involving children from other provinces, might yield more generalisable results. As South Africa is a multi-cultural country, involving children from other provinces may help present a more holistic picture of South African children's materialistic values.

Given the dearth of studies on childhood materialism in Africa, the current study offers a useful foundation for work that investigates demographic differences in materialism among children from different African countries. Secondly, in the current study, most of the discussions were based on literature from Western contexts, thus lacking African children's voices. Additionally, although it is tempting to generalise the results of this study to other African countries, the cultural differences that exist make such generalisations impossible. Given the culture-specific nature of materialistic values, cross-cultural studies involving children from other African countries could provide valuable insights into childhood materialism among African children. Given that the literature is largely silent on African child consumers, such studies can bolster the arguments for the inclusion of insights from African children in the theories of consumer behaviour in children. Furthermore, future research could involve longitudinal studies, which could provide valuable opportunities to investigate how demographics change over time and how these changes affect childhood materialism.

#### REFERENCES

- Ab Hamid, M. R., Sami, W., & Sidek, M. M. (2017, September). Discriminant validity assessment: Use of Fornell & Larcker criterion versus HTMT criterion. *In Journal of Physics: Conference Series*, 890, (1-5), 012163.
- Abdi, H., & Williams, L. J. (2010). Principal component analysis. Wiley interdisciplinary reviews: computational statistics, 2(4), 433-459.
- Adler, K., Salanterä, S., & Zumstein-Shaha, M. (2019). Focus group interviews in child, youth, and parent research: An integrative literature review. *International Journal of Qualitative Methods*, 18, 1609406919887274.
- Allsop, D. B., Wang, C. Y., Dew, J. P., Holmes, E. K., Hill, E. J., & Leavitt, C. E. (2021). Daddy, mommy, and money: The association between parental materialism on parent—child relationship quality. *Journal of Family and Economic Issues*, 42, 325-334.
- Anselmi, P., Colledani, D., & Robusto, E. (2019). A comparison of classical and modern measures of internal consistency. *Frontiers in psychology*, 10, 2714.
- Antinienė, D., Šeinauskienė, B., Rutelione, A., Nikou, S., & Lekavičienė, R. (2021). *Do demographics matter in consumer materialism*?. Engineering Economics, 32(4), 296-312.
- Ben-Arieh, A., & Kosher, H. (2020). The child study movement. In: S. Hupp, & J. Jewell (Eds.), *Encyclopedia of adolescent development*. Wiley.
- Bindah, E. V., & Othman, M. N. (2012). Age and gender differences associated with family communication and materialism among young urban adult consumers in Malaysia: A one-way analysis of variance (ANOVA). *International Journal of Academic Research in Business and Social Sciences*, 2(11), 228.
- Blaisdell, C., Arnott, L., Wall, K., & Robinson, C. (2019). Look Who's Talking: Using creative, playful arts-based methods in research with young children. *Journal of Early Childhood Research*, 17(1), 14–31.
- Bottomley, P. A., Nairn, A., Kasser, T., Ferguson, Y. L., & Ormrod, J. (2010). Measuring childhood materialism: refining and validating Schor's Consumer Involvement Scale. *Psychology & Marketing*, 27(7), 717-739.
- Bukowski, W. M., Castellanos, M., Vitaro, F., & Brendgen, M. (2015). Socialization and experiences with peers. In J. E. Grusec & P. D. Hastings (Eds.), *Handbook of socialization: Theory and research*, 228–250. The Guilford Press.
- Chan, K., & Prendergast, G. (2007). Materialism and social comparison among adolescents. *Social Behavior and Personality: an international journal*, 35(2), 213-228.
- Chan, K., Zhang, H., & Wang, I. (2006). Materialism among adolescents in urban China. *Young Consumers*, 7(2), 64-77.
- Chaplin, L. N., & John, D. R. (2007). Growing up in a material world: Age differences in materialism in children and adolescents. *Journal of Consumer Research*, 34(4), 480-493.

Chaplin, L. N., & John, D. R. (2010). Interpersonal influences on adolescent materialism: A new look at the role of parents and peers. *Journal of Consumer Psychology*, 20(2), 176–184.

Chaplin, L. N., Shrum, L. J., & Lowrey, T. M. (2019). Children's materialism and identity development. In *Handbook of research on identity theory in marketing*, 434-447. Edward Elgar Publishing.

Chaplin, L. N., Hill, R. P., & John, D. R. (2014). Poverty and materialism: A look at impoverished versus affluent children. *Journal of Public Policy & Marketing*, 33(1), 78-92.

Choukas-Bradley, S., Giletta, M., Cohen, G. L., & Prinstein, M. J. (2015). Peer influence, peer status, and prosocial behavior: An experimental investigation of peer socialization of adolescents' intentions to volunteer. *Journal of youth and adolescence*, 44, 2197-2210.

Coyne, I., Mallon, D., & Chubb, E. (2021). Research with young children: Exploring the methodological advantages and challenges of using hand puppets and draw and tell. *Children & Society*, 35(5), 813-830.

Dávila, J. F., Casabayó, M., & Singh, J. J. (2017). A world beyond family: How external factors impact the level of materialism in children. *Journal of Consumer Affairs*, 51(1), 162-182.

De Klerk, N. (2020). Influence Of Status Consumption, Materialism and Subjective Norms on Generation Y Students' price-Quality Fashion Attitude. *International journal of business and management studies*, 12(1), 163-176.

Dittmar, H., Bond, R., Hurst, M., & Kasser, T. (2014). The relationship between materialism and personal well-being: A meta-analysis. *Journal of Personality and Social Psychology*, 107(5), 879–924.

Dittmar, H., & Isham, A. (2022). Materialistic value orientation and wellbeing. *Current Opinion in Psychology*, 46, 101337.

Duh, H. (2015). Testing three materialism life-course theories in South Africa. *International Journal of Emerging Markets*, 10(4), 747-764.

Francisco Dávila, J. and Casabayó, M. (2013), "Influences in children's materialism: a conceptual framework", *Young Consumers*, 14 (4), 297-311.

Ger, G., & Belk, R. W. (1996). Cross-cultural differences in materialism. *Journal of Economic Psychology*, 17(1), 55–77.

Gross-Manos, D., Kosher, H., & Ben-Arieh, A. (2021). Research with children: Lessons learned from the international survey of children's wellbeing. *Child Indicators Research*, 14(5), 2097-2118.

Goldberg, Marvin E., Gerald J. Gorn, Laura A. Peracchio and Gary Bamossy (2003), Understanding Materialism among Youth. *Journal of Consumer Psychology*, 13(3), 278-288.

Guest, G., Namey, E., & McKenna, K. (2017). How many focus groups are enough? Building an evidence base for nonprobability sample sizes. *Field methods*, 29(1), 3-22.

- Hawkins, C. (2016). Brand consumers. In Rethinking Children as Consumers, 98-117. Routledge.
- Hennink, M. M., Kaiser, B. N., & Weber, M. B. (2019). What influences saturation? Estimating sample sizes in focus group research. *Qualitative health research*, 29(10), 1483-1496.
- Islam, T., Sheikh, Z., Hameed, Z., Khan, I. U., & Azam, R. I. (2018). Social comparison, materialism, and compulsive buying based on stimulus-response-model: a comparative study among adolescents and young adults. *Young Consumers*, 19 (1), 19-37.
- Jaspers, E. D. T., & Pieters, R. G. M. (2016). Materialism across the life span: An age-period-cohort analysis. *Journal of Personality and Social Psychology*, 111(3), 451–473.
- Jiang, J., Zhang, Y., Ke, Y., Hawk, S. T., & Qiu, H. (2015). Can't buy me friendship? Peer rejection and adolescent materialism: Implicit self-esteem as a mediator. *Journal of Experimental Social Psychology*, 58, 48-55.
- John, D. R., & Chaplin, L. N. (2019). Children's understanding of the instrumental value of products and brands. *Journal of consumer psychology*, 29(2), 328-335.
- Kasser, T. (2005). Frugality, generosity, and materialism in children and adolescents. What do children need to flourish? *Conceptualizing and measuring indicators of positive development*, 357-373.
- Kasser, T. (2016). Materialistic values and goals. *Annual review of psychology*, 67, 489-514.
- Kasser, T., & Linn, S. (2016). Growing up under corporate capitalism: The problem of marketing to children, with suggestions for policy solutions. *Social Issues and Policy Review*, 10(1), 122–150.
- Kasser, T., Rosenblum, K. L., Sameroff, A. J., Deci, E. L., Niemiec, C. P., Ryan, R. M., ... & Hawks, S. (2014). Changes in materialism, changes in psychological well-being: Evidence from three longitudinal studies and an intervention experiment. *Motivation and Emotion*, 38(1), 1-22.
- Kiang, L., Mendonça, S., Liang, Y., Payir, A., O'Brien, L. T., Tudge, J. R., & Freitas, L. B. (2016). If children won lotteries: materialism, gratitude and imaginary windfall spending. *Young Consumers*, 17(4), 404-418.
- Ku, L. (2015). Development of materialism in adolescence: The longitudinal role of life satisfaction among Chinese youths. *Social Indicators Research*, 124, 231-247.
- Kühne, R., & Opree, S. J. (2019). Validating the short material values scale for children for use across the lifespan. *Child & Youth Care Forum*, 48, 339-359.
- Lapierre, M. A., Fleming-Milici, F., Rozendaal, E., McAlister, A. R., & Castonguay, J. (2017). The effect of advertising on children and adolescents. *Pediatrics*, 140(Supplement\_2), S152-S156.
- Lenka, U. (2014). A review on the role of media in increasing materialism among children. *Procedia-Social and Behavioural Sciences*, 133, 456-464.

- Martin, C., Czellar, S., & Pandelaere, M. (2019). Age-related changes in materialism in adults—A self-uncertainty perspective. *Journal of Research in Personality*, 78, 16-24.
- Mason, J., & Watson, E. A. (2013). Researching children: Research on, with, and by children. *Handbook of child well-being: Theories, methods and policies in global perspective*, 2757-2796.
- Maison, D., & Adamczyk, D. (2020). The relations between materialism, consumer decisions and advertising perception. *Procedia Computer Science*, 176, 2526-2535.
- Nairn, A., & Opree, S. J. (2021). TV adverts, materialism, and children's self-esteem: The role of socio-economic status. International Journal of Market Research, 63(2), 161-176.
- Opree, S. J., Buijzen, M., van Reijmersdal, E. A., & Valkenburg, P. M. (2011). Development and validation of the Material Values Scale for children (MVS-c). *Personality and Individual Differences*, 51(8), 963-968.
- Opree, S. J., Buijzen, M., & Valkenburg, P. M. (2012). Lower life satisfaction related to materialism in children frequently exposed to advertising. *Pediatrics*, 130(3), e486-e491.
- Opree, S. J., Petrova, S., & Rozendaal, E. (2020). Investigating the unintended effects of television advertising among children in former-Soviet Bulgaria. *Journal of Children and Media*, 14(2), 141–157.
- Parashar, S., & Jain, S. (2017). Effect of demographics on materialism: An empirical study. *Pacific Business Review International*, 10(2), 124-132.
- Paus-Hasebrink, I., Kulterer, J. & Sinner, P. (2019). *Social Inequality, Childhood and the Media A Longitudinal Study of the Mediatization of Socialisation*. Springer Nature, Netherlands.
- Pereira, D. G., Afonso, A., & Medeiros, F. M. (2015). Overview of Friedman's test and post-hoc analysis. *Communications in Statistics-Simulation and Computation*, 44(10), 2636-2653.
- Prior, J., & Van Herwegen, J. (Eds.). (2016). Practical research with children. Routledge.
- Puriwat, W., & Tripopsakul, S. (2021). Understanding Digital Social Responsibility in the Social Media Context: Evidence from Thailand. *International Journal of Professional Business Review*, 7(1), e0257.
- Rahi, S., & Abd Ghani, M. (2018). A structural equation modeling (SEM-AMOS) for investigating brand loyalty and customer's intention towards adoption of internet banking. *Economic and Social Development: Book of Proceedings*, 206-220.
- Rasmussen, E. E., Riggs, R. E., & Sauermilch, W. S. (2022). Kidfluencer exposure, materialism, and US tweens' purchase of sponsored products. *Journal of Children and Media*, 16(1), 68-77.
- Richins, M. L. (2017). Materialism pathways: The processes that create and perpetuate materialism. *Journal of Consumer Psychology*, 27(4), 480-499.

- Richins, M. L., & Dawson, S. (1992). A consumer values orientation for materialism and its measurement: Scale development and validation. *Journal of consumer research*, 19(3), 303-316.
- Richins, M. L., & Chaplin, L. N. (2015). Material parenting: How the use of goods in parenting fosters materialism in the next generation. *Journal of Consumer Research*, 41(6), 1333-1357.
- Richins, M. L., & Chaplin, L. N. (2021). Object attachment, transitory attachment, and materialism in childhood. *Current Opinion in Psychology*, 39, 20-25.
- Roach, B., Goodwin, N., & Nelson, J. (2019). *Consumption and the consumer society*. Medford, MA.: Global Development and Environment Institute, Tufts University. Recuperado de https://www.bu.edu/eci/files/2019/10/Consumption\_and\_Consumer\_Society. pdf
- Rözer, J., Lancee, B., & Volker, B. (2022). Keeping up or giving up? Income inequality and materialism in Europe and the United States. *Social Indicators Research*, 159(2), 647-666.
- Russell, C. A., & Shrum, L. J. (2021). The Cultivation of Parent and Child Materialism: A Parent–Child Dyadic Study. *Human Communication Research*, 47(3), 284-308.
- Shrum, L. J., Chaplin, L. N., & Lowrey, T. M. (2022). Psychological causes, correlates, and consequences of materialism. *Consumer Psychology Review*, 5(1), 69-86.
- Singh, S., & Wassenaar, D. R. (2016). Contextualising the role of the gatekeeper in social science research. *South African Journal of Bioethics and Law*, 9(1), 42-46.
- Soni, P., & Behal, M. (2015). Testing validity and reliability of material value scale (MVS-c) for late adolescents and young adults in India. *Vision*, 19(4), 349-356.
- Tolbert, A. N., & Drogos, K. L. (2019). Tweens' wishful identification and parasocial relationships with YouTubers. *Frontiers in psychology*, 10, 2781.
- Tarka, P., Kukar-Kinney, M., & Harnish, R. J. (2022). Consumers' personality and compulsive buying behavior: The role of hedonistic shopping experiences and gender in mediating-moderating relationships. *Journal of Retailing and Consumer Services*, 64, 102802.
- Trzcińska, A., & Sekścińska, K. (2021). Financial status and materialism—The mediating role of self-esteem. *Australian Journal of Psychology*, 73(4), 557-568.
- Van der Meulen, H., Kühne, R., & Opree, S. J. (2018). Validating the Material Values Scale for Children (MVS-c) for use in early childhood. *Child Indicators Research*, 11, 1201-1216.
- Wang, X., Yu, C., & Wei, Y. (2012). Social media peer communication and impacts on purchase intentions: A consumer socialization framework. *Journal of interactive marketing*, 26(4), 198-208.
- Wang, Y., Rodríguez de Gil, P., Chen, Y. H., Kromrey, J. D., Kim, E. S., Pham, T., ... & Romano, J. L. (2017). Comparing the performance of approaches for testing the homogeneity of variance assumption in one-factor ANOVA models. *Educational and psychological measurement*, 77(2), 305-329.

Watkins, L., Aitken, R., Robertson, K., Thyne, M., & Williams, J. (2016). Advertising's impact on pre-schoolers' brand knowledge and materialism. *International Journal of Consumer Studies*, 40(5), 583-591.

Westfall, P. H. (2014). Kurtosis as peakedness, 1905–2014. RIP. *The American Statistician*, 68(3), 191-195.

Yang, Z., Fu, X., Yu, X., & Lv, Y. (2018). Longitudinal relations between adolescents' materialism and prosocial behavior toward family, friends, and strangers. *Journal of Adolescence*, 62, 162-170.

Zawadzka, A. M., Lewandowska-Walter, A., Borchet, J., & Iwanowska, M. (2022). Risk factors for materialistic attitudes and values of teenagers—role of parents and peers. *Journal of Family Studies*, 31, 1427-1440.