Common elements of symbolism in consumption and its implication in the psychosocial development of schoolchildren

Elementos comunes del simbolismo en el consumo y su implicancia en el desarrollo psicosocial de escolares

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ABSTRACT:
The objective of this study is to determine the common elements that describe the symbolic consumption in groups of nine-year-old schoolchildren with a similar intellectual level. The study was carried out through interviews in small groups of students in the Peruvian jungle, applying the TMP test and two interview guides (child-parents). The results indicate that seven out of ten elements indicate hedonic behavior, awareness of material content and advertising adherence, which involve 78.0% of children. The difficulties of persuasive comprehension cover 50% of children in the rural area and 92.3% in the urban area.

Keywords: Symbolism/attitude, consumption, cognition, child development, advertising.

RESUMEN:
El objetivo de este trabajo es determinar los elementos comunes que describen el simbolismo en grupo de escolares de nueve años de edad con un nivel intelectual similar. El estudio se realizó mediante entrevistas en pequeños grupos en escolares de selva peruana, aplicándose la prueba TMP y dos guías de entrevista (niños-padres). Los resultados señalan que siete de diez elementos configuran el simbolismo organizado en hedonismo, la conciencia del contenido material y adhesión publicitaria que involucran a 78,9% de niños. Las dificultades de comprensión persuasiva abarcan a 50% de niños (área rural) y 92,3% (urbana).

Palabras clave: Simbolismo/actitud, consumo, cognición, desarrollo infantil, publicidad.

1. Introduction
The difficulties to cognitively recognize the persuasive intention of advertising in vulnerable age groups, which according to Piaget are children up to eight years of age (henceforth generic for boys and girls) who are going through the concrete operational stage of cognitive
development (Piaget, 1970) and whose critical thinking is limited, has been well studied since the seventies and under the scheme of the symbolic consumption of food products exhibited on television, because they are associated, among other aspects, with action scenes and children's feats (Hudders, De Pauw, Cauberghe et al., 2017; Young, 2015; Rozendaal, Buijzen & Valkenburg, 2011; Kunkel, 2010; Wartella, 2009; Hastings, Stead, McDermott et al., 2003; Lawlor & Prothero, 2003; Young, 1996). This means that the if the child is younger, his representative activity would be more subordinated to images and less to verbal messages (Rozendaal, Buijzen & Valkenburg, 2011; Šramová, 2014; Aktaş, 2006; Lawlor & Prothero, 2010; Nunes, 1998).

However, little attention has been paid to the common characteristics and their variability of the symbolic attitude (SA) according to the intellectual cognitive development (Lawlor, 2010; Crescenzi, 2010; Wartella, 2009), and particularly taking into account geographical areas where TV and Internet Broadcast are still rare. It is pertinent to examine this attitude in a group of children where it is assumed that the limitations of the cognitive recognition of advertising have been overcome (Young, 2015) and thus broaden the bases to determine the implications in school mental health and propose the contents of psychosocial programs for the development of the critical attitude in children, parents and teachers. While the interventions in these groups remains unknown (85.4%) (Soto, 2010), the topic acquires relevance due to two reasons: first, because the influence of children in parents' decision making is still unexplored, and second, because in the last decade and a half Peru has experienced sustained economic and social changes but with ethical implications for school health. Part of the agenda of psychology and community nursing is assisting to the balancing of needs and health. Several authors consider it necessary to strengthen cognitive, moral and emotional beliefs of those involved (Hudders, De Pauw, Cauberghe et al., 2017; Rozendaal, Buijzen & Valkenburg, 2011; Šramová, 2014; Aktaş, 2006; Nairn, 2015; Wilson, Grizzle, Tuazon et al., 2011).

**Psychosocial assumptions of the symbolic attitude in school mental health**

The symbolic attitude (SA) is defined as the predisposition organized through experience, which encourages individuals to react to people, things, activities and ideas, from their cognitive (knowledge, belief, value and thought), behavioral and affective dimensions (Marcos, 2014; Petty, 2006). Particularly in the field of psychosocial interventions, SA are difficulties of both behavior and emotions as well as interpersonal relationships (Addis & Holbrook, 2006). Thus, they are priority goals in the activities of guidance and social support for children's health for the World Association for Infant Mental Health (WAIMH), UNESCO and UNICEF (Marcos, 2014).

Although the reference framework does not specify, it points out that SA is a common characteristic of a given consumer culture through external and internal mediation (Easterbrook, Wright, Dittmar et al., 2014; Kulaczkowski, 2003; Livingstone, 2005). These must be delimited for the scope of this study. They are the expression of desire for possession as a way to show success or social status. Hence, television (TV) symbolic contents generate shopping behaviors which answer more to hedonistic attitudes than to necessity, a paradox that makes healthy products stigmatized and others better valued (Elliot, 2014; Jones, Mannino & Green, 2010; Fenollar & Ruiz, 2006; Tsai, 2005). The WHO (2010) points out a problem that in the last decade has been affecting health in young people, but with greater impact on the emotional development of children, which according to several authors (Young, 1996; Nairn & Fine, 2015 Kulaczkowski, 2003; Šramová, 2014) is due to the high level of materialism present in ads that negatively influence self-esteem, orientation of values, habits and attitudes (table 1).
Between the elements that make up SA, selfishness is becoming more common among young people and children, because of the influence of their friends or because they give too much importance to the opinion of others (Young, 2015) and because the parents’ tolerant attitudes reinforce the hedonistic behavior of their children (Rozendaal, Buijzen & Valkenburg, 2011; Tsai, 2005; Raba'ah, Suandi, Hamzah et al., 2014; Neme & Rodríguez, 2013). Other elements are also insecurity and desire turned into a state where the main focus of seeking pleasure would be wanting instead of having, and where being socially respected is a necessity (Neme & Rodríguez, 2013; O'Shaughnessy & O'Shaughnessy, 2002; Holbrook, 1987) (table 1), in addition to the attachment between friends and even the religious tendencies of their parents, which favor the hedonistic behavior of the children, thus increasing the consumption of brands because they are loaded with symbolism (Jones, Mannino & Green, 2010) and because they facilitate ways to relate and be accepted among themselves (Kulaczkowski, 2003; Raba'ah, Suandi, Hamzah & Tamam, 2014; Neme & Rodriguez, 2013). Other elements are also insecurity and desire turned into a state where the main focus of seeking pleasure would be wanting instead of having, and where being socially respected is a necessity (Neme & Rodríguez, 2013; O'Shaughnessy & O'Shaughnessy, 2002; Holbrook, 1987) (table 1), in addition to the attachment between friends and even the religious tendencies of their parents, which favor the hedonistic behavior of the children, thus increasing the consumption of brands because they are loaded with symbolism (Jones, Mannino & Green, 2010) and because they facilitate ways to relate and be accepted among themselves (Kulaczkowski, 2003; Raba'ah, Suandi, Hamzah & Tamam, 2014; Neme & Rodriguez, 2013). Other elements are also insecurity and desire turned into a state where the main focus of seeking pleasure would be wanting instead of having, and where being socially respected is a necessity (Neme & Rodríguez, 2013; O'Shaughnessy & O'Shaughnessy, 2002; Holbrook, 1987) (table 1), in addition to the attachment between friends and even the religious tendencies of their parents, which favor the hedonistic behavior of the children, thus increasing the consumption of brands because they are loaded with symbolism (Jones, Mannino & Green, 2010) and because they facilitate ways to relate and be accepted among themselves (Kulaczkowski, 2003; Raba'ah, Suandi, Hamzah & Tamam, 2014; Neme & Rodriguez, 2013). There is a consensus that SA are always pre-immune to both the affective and cognitive component (Sharma & Sonwaney, 2014; Nefat & Dujmović, 2012; Nefat & Benazić, 2011; Uribe, Acuña, Carrasco et al., 2006). The first would increase the power of influence of children on purchasing decisions in families in different contexts (India, Croatia and Chile); while the second, much more emphasized, the level of schooling and the presence of state TV announcements in the Chinese context (Chan & McNeal, 2010; Chan, 2010).

This study examines the characteristics of SA in nine-year-old children with equal intellectual cognitive development. Thus, it is assumed that they would have a better understanding of the persuasive intention, because reflective thinking is also better developed (Piaget, 1970) and consequently the limitations for the cognitive recognition of advertising would be overcome (Hudders, De Pauw, Cauberghe et al., 2017; Rozendaal, Buijzen & Valkenburg, 2011; Kunkel, 2010; Šramová, 2014). This study also compares characteristics according to the geographical area: a) urban, with access to broadcast TV and Internet (ETIA4), versus b) rural, also with broadcast TV and Internet but very limited (ETIL5). The children

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**Table 1**

<table>
<thead>
<tr>
<th>Author</th>
<th>Country, sample and age</th>
<th>Methodological description</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wartella (2009)</td>
<td>USA n=99 (7-9)</td>
<td>Interview on 30 commercials with crossed promotions on drinks and juices in three levels (low, little, nothing).</td>
<td>Social influence and media.</td>
</tr>
<tr>
<td>Easterbrook (2014)</td>
<td>UK n=150 (8-11)</td>
<td>Survey using Likert scales according to age, on different lifestyle of food and beverages.</td>
<td>Psychosocial influence associated with fun, friendship, image-status, axiomatic, attitudinal and family mediation.</td>
</tr>
<tr>
<td>Kakel (2010)</td>
<td>USA n=23; n=152</td>
<td>Partner interview, non-verbal stimulus material.</td>
<td>Psychosocial influence associated with fun, friendship, image-status, axiomatic, attitudinal and family mediation.</td>
</tr>
<tr>
<td>Lawler et al (2010)</td>
<td>UK n=26 (7-9)</td>
<td>Interview in small groups of children about different food and beverage brands:5 groups x4 and 2 groups x3.</td>
<td>Psychosocial influence associated with fun, friendship, image-status, axiomatic, attitudinal and family mediation.</td>
</tr>
<tr>
<td>Chan (2010)</td>
<td>China n=64 (7-12)</td>
<td>Interview and exhibition of 3 materials on brands in food, drinks and toys.</td>
<td>Psychosocial influence associated with fun, friendship, image-status, axiomatic, attitudinal and family mediation.</td>
</tr>
<tr>
<td>Young (2003)</td>
<td>USA n=NS (9-12)</td>
<td>Interview in 5 areas on image compression and family decision in different foods.</td>
<td>Psychosocial influence associated with fun, friendship, image-status, axiomatic, attitudinal and family mediation.</td>
</tr>
</tbody>
</table>

Note: NS - Not specified. Data in parentheses indicate age.
participate in social state aid programs, allowing to direct future lines of research aimed at the development of psychosocial intervention strategies for school mental health, based on a theoretical framework of how children process the persuasive intention of embedded advertising.

The objective of the study was to determine the common elements that describe the presence of SA in a group of nine-year-old schoolchildren with similar intellectual development and compare them according to geographical area (group with ETIA vs group with ETIL).

2. Methodology

The study is a cross-sectional descriptive study. Nine-year-old schoolchildren and their parents, enrolled between January and May of 2016, were invited to participate in the Inter-institutional Primary Care Program (Ministry of Health, Naval Medical Center and Academic Department of Human Development of the National Agrarian University of the Selva, Peru).

Study population

The included population met the eligibility criteria: nine years of age, fourth grade of studies, both sexes, adequate general intelligence or higher for age according to the progressive matrix test of J.C. Raven (TMP) with standardized scales for the region (Abregú, 2009).

The random sample size was based on the population of school children in the ETIL group (rural) with a 95% confidence level and an error of 5%, resulting in a minimum size of \( n = 12 \); and for the comparison group ETIA (urban) \( (n = 17) \), after calculating margin of loss of 40%, the final sample would be \( n = 16 \) for the first and \( n = 22 \) for the second. The total of children selected, losses for various reasons and the final sample of both children and parents are presented in Figure 1, which is greater than or equal to those reported in several reports (Kunkel, 2010; Lawlor & Prothero, 2010; Jones, Mannino & Green, 2010; Nefat & Dujmović, 2012; Chan & McNeal, 2010) (table 1).

![Figure 1](image)

**Figure 1**
Sequence of choice for children

Eligibles: 46

Excluded: 21
- By default \((n=13)\)
- Lower intellectual level \((n=1)\)
- Incomplete interviews \((n=2)\)
- Incomplete psychometric evaluation \((n=4)\)
- Does not participate in social program \((n=1)\)

Included: 25

Procedure

The research project was approved in January 2015 by the subcommittee of ethics of the Research Council and the Academic Area of Human Development of the National University of La Selva (Peru). The students of both groups were included with the prior approval of the parents to participate in the study (because they are minors). Each of the children and
parents who agreed to participate were informed of the purpose of the study and the form of their participation, which was corroborated by signing an informed consent —each parent signed their own and another one for the child that was to participate in the study.

The age of nine years was taken as a limit for both groups, considering that minors at that age would still have natural difficulties to understand the persuasive intent of advertising. The selection of the sample of children began in the ETIL group (rural area) and then in the comparison group (ETIA) until finding a sufficient number of children comparable according to the variables of sex, age, level of studies and appropriate intellectual level. Both groups are located in the Peruvian High Forest (very humid semi warm climate and 3rd zone with the highest poverty). The rural area is 35km away from the urban area, which is different because 78% of the parents attended only primary education and their income is US $ 87.00 / month -UNDP- (2013), while 51% of the children participate in domestic activities between 7-16 hours / week, only 3.6% access the internet and 35% are corrected by their parents by calling attention or depriving them of watching TV or the internet (UNICEF, 2011).

**Instruments**

**Children**

a) In order to know intellectual cognitive development, the non-verbal TMP test (36 color matrices) was applied, a reliable and internationally accepted test to assess perceptual and neurocognitive functioning (which underlies analogical thinking and learning of children up to 11 years of age), using standardized scales for the study area. Thus, the scores 29-36, definitely higher than normal, correspond to an outstanding intellectual level (Elliot, 2014; Jones, Mannino & Green, 2010; Fenollar & Ruiz, 2006; Tsai, 2005), 22 to 28 scores correspond to a higher than normal level (Easterbrook , Wright MI, Dittmar et al, 2014; Kulaczkowski, 2003; Livingstone, 2005), and 16 and 21 scores to a normal intellectual level (Abregú, 2009). The psychometric evaluation administered in the child's school library was individual, with no time limit and during two sessions for each one.

b) To describe and determine the common elements of the SA, a 16-item interview guide was used, which included guidelines to formulate general questions related to leisure time and children's favorite practices, then more focused on the SA and how their parents influence the product symbolized. For the purpose of the study, "yogurt" was chosen as a healthy and symbolized product (Kähkönen, Tuorila & Lawless, 1997), which belongs to the second food category and an advertising group associated with fun and adventure (González, 2008). Then advertising sheets that identify the product in the four brands (A, B, C, D) were sequentially shown, which were recognized without any difficulty by children.

To determine the presence of SA, the interview was carried out in small groups, developing sequentially in the family home and in a maximum number of three children. Hence, their discourse would be fluent, and they would not feel strange or evaluated so that normally veiled feelings would emerge to the adult view and understanding (although susceptible to access -ethical implications-, by the effect of memory -own childhood- and by the interpretation of the behavior or discourse). In this regard, some authors (Threlfall, 1999; Gunter & Furnham, 1998) support the technique as appropriate in studies on publicity and shared beliefs or ideas, highlighting that girls tend to be more collaborative than boys, although boys are more competitive in a group situation and like to show their feelings, convictions and ideas (Threlfall, 1999; Ruyter & Scholl, 1998).

**Parents**

To describe the symbolic attitude, an individual session with the parents was established (average 8 minutes), applying an interview guide formed by 10 items in which six of them evaluate the child's acquiescence vs. parents'.

The interviews with both the children and their parents were developed alternately by a psychologist, a community nurse or a social worker. The registered responses were grouped into conceptual categories (archetypes), then transformed into equivalent values on an interval scale and then into standardized scores (enneatypes). Then, to determine the
The content validity of the two interview guides (a) children version, and b) parent version) were evaluated by experts, resulting in a significant agreement between the three judges and seven criteria. The Kendall ranges were for a) \( W = 0.882 \) (\( p < 0.01 \)); for b) \( W = 0.791 \) (\( p < 0.01 \)); when \( p < 0.05 \) is the minimum required (Escobar & Cuervo, 2008). In addition, the validity of the subjects' responses was assessed by the degree of acquiescence in six items (children vs. parents). The reliability obtained is high according to internal consistency (pilot study: \( n = 10 \) children, Nov 2014), with the global Cronbach alpha coefficient: a) \( \alpha = 0.795 \); and, b) \( \alpha = 0.800 \); knowing that \( \alpha : 0.61-0.80 \) is high; and, \( 0.81-1.00 \) is very high (Escobar & Cuervo, 2008).

**Materials:** Four color laminated advertising sheets (21 x 29.7 cm) with symbolized product images (yogurt) in the marks: A = "yoleit", B = "puravida", C = "laive", D = "gloria". The product is classified in the second category of foods and due to its low fat content is considered healthy (verbal information is unnecessary) and is a reference to study symbolic and hedonistic responses (Kähkönen, Tuorila & Lawless, 1997).

**Statistical analysis**

To assess the independence of frequencies according to intellectual levels and the correspondence between the frequency of brand preferences vs purchase decision, the adjusted \( X^2 \) test was used. To know the frequency differences of categorical responses on SA according to elements, area and gender, the Pearson contingency coefficient test (C) was used. To evaluate the differences in cognitive development between geographical areas and gender, the Student's \( t \) test was used. In all three cases, a level of significance of \( p <0.05 \) was used. To explore the elements and common factors that are supposed to represent and share the conceptual principles of the SA, an exploratory factor analysis was applied by the principal component method with varimax rotation and KMO normalization based on two criteria: a) only elements with weights were taken factorials greater than 0.500; b) those that appear in a single factor with values greater than 1.00. The analysis of the data was made through the SPSS software (v.18).

**3. Results**

The characteristics of nine-year-old children with a fourth grade of basic studies, of which 52.0% were males, are shown in Table 2. When comparing intellectual development for age according to geographical area, statistically significant differences were not found (\( p <0.213 \)), nor according to frequencies between the four intellectual levels (\( X^2 = 3.776, p <0.287 \)), although the proportion in the three levels above normal is \( P=5:3 \) for the first and \( P=5:4 \) for the second. Among gender, there were no significant differences (\( t = 0.896, p <0.879 \)).

The common characteristics of the SA for both areas are organized into three factors (F1, F2, F3): the first, where there are four elements with higher factorial coefficients (0.921 to 0.705) related to sensitivity or adhesion by TV advertising (SPT); the second, composed of four elements (coefficients between 0.845 and 0.545) linked to the associated hedonistic symbolism (AHS), and the third, organized by three elements whose coefficients range between 0.793 and 0.683, referred to the degree of awareness of the material content of advertising (CMP) (table 03).
Within the AHS factor verified by the degree of correspondence of frequencies between the preferences of the child for a product brand symbolized and the purchase decision by their parents, it is highly significant (p < 0.0001) and oriented towards the "D" brand (64%) (table 4). Regardless of the choice of children, 80% of parents also opted for the same brand.

The conglomerate of common elements that describe the presence of SA accounts for approximately 66.6% of the total variance, with the acceptable Kaiser-Meyer-Olkin sample adequacy (KMO = 0.505) and the significant Bartlett's sphericity test (X² = 151.715; p < 0.0001). According to the exploratory analysis, in the CMP factor there is a higher frequency of children (81.3%), following the AHS factors with 71% and SPT with 60%. From this factorial rotation it was found that ten of the eleven elements are statistically homogeneous (C = 0.429, p < 0.011). Because "AS8" is the heterogeneous element of the CMP factor (p < 0.011), it is where the highest frequency of children with difficulties to understand the persuasive tactics of advertising yogurt in the area with ETIA (92.3%) and 50% are in the other area (table 03). In summary, of the ten elements, seven make up the SA that integrates up to 78.9% of children.

### Table 2

<table>
<thead>
<tr>
<th>Intellectual level</th>
<th>N</th>
<th>Rural: ETIL</th>
<th>Urban: ETIA</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Average</td>
<td>Standard deviation</td>
<td>Average</td>
<td>Standard deviation</td>
</tr>
<tr>
<td>RPMT score</td>
<td>25</td>
<td>23.3</td>
<td>3.92</td>
<td>25</td>
<td>2.48</td>
</tr>
</tbody>
</table>

Note: ETIL - with very limited television and internet broadcast; ETIA - with open television and internet broadcast. RPMT - Raven's Progressive Matrices Test; t - student's t test (df=23; if p<0.05).

### Table 3

<table>
<thead>
<tr>
<th>Elements</th>
<th>Factor</th>
<th>Rural: ETIL</th>
<th>Urban: ETIA</th>
<th>Pearson coefficient &quot;C&quot;</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS9 Possessed yogurt is the same as displayed on TV</td>
<td>F2</td>
<td>12</td>
<td>11</td>
<td>0.273</td>
<td>0.157</td>
</tr>
<tr>
<td>AS2 Since TV and advertising are beautiful, they do not change channel</td>
<td>F1</td>
<td>11</td>
<td>11</td>
<td>0.108</td>
<td>0.588</td>
</tr>
<tr>
<td>AS11 Mothers often shop accompanied by their children</td>
<td>F3</td>
<td>11</td>
<td>11</td>
<td>0.108</td>
<td>0.588</td>
</tr>
<tr>
<td>AS3 They claim that television advertising does not lie</td>
<td>F3</td>
<td>11</td>
<td>10</td>
<td>0.197</td>
<td>0.315</td>
</tr>
<tr>
<td>AS10 Prefer that yoghurt because your friends like</td>
<td>F2</td>
<td>10</td>
<td>9</td>
<td>0.163</td>
<td>0.409</td>
</tr>
<tr>
<td>AS7 The yoghurt obtained is the one observed in television advertising</td>
<td>F2</td>
<td>9</td>
<td>7</td>
<td>0.215</td>
<td>0.546</td>
</tr>
<tr>
<td>AS6 They always ask for the yoghurt they saw on television</td>
<td>F2</td>
<td>8</td>
<td>5</td>
<td>0.386</td>
<td>0.225</td>
</tr>
<tr>
<td>AS1 They love TV and they would watch it as long as possible</td>
<td>F1</td>
<td>7</td>
<td>8</td>
<td>0.256</td>
<td>0.417</td>
</tr>
<tr>
<td>AS5 They claim that television advertising is fun</td>
<td>F1</td>
<td>7</td>
<td>5</td>
<td>0.196</td>
<td>0.608</td>
</tr>
<tr>
<td>AS8 They claim that television advertising always says good things</td>
<td>F3</td>
<td>6</td>
<td>12</td>
<td>0.514</td>
<td>0.011 a</td>
</tr>
<tr>
<td>AS4 TV advertising of yoghurt is always lovely</td>
<td>F1</td>
<td>4</td>
<td>7</td>
<td>0.202</td>
<td>0.302</td>
</tr>
</tbody>
</table>

Note: ETIL - with very limited television and internet broadcast; ETIA - with open television and internet broadcast.

1. Ordered from highest to lowest frequency of children in both geographical areas.

a. Heterogeneous contingency.

Within the AHS factor verified by the degree of correspondence of frequencies between the preferences of the child for a product brand symbolized and the purchase decision by their parents, it is highly significant (p < 0.0001) and oriented towards the "D" brand (64%) (table 4). Regardless of the choice of children, 80% of parents also opted for the same brand.
4. Discussion

The study indicates that nine-year-old school children with adequate intellectual cognitive development and of both sexes, show vast SA in both geographical areas. There is controversy in the literature of various developed countries, where they argue that at that age and even from the age of eight, they are able to cognitively recognize the persuasive intention of advertising because reflective thinking is developed, therefore the presence of SA is rare (Piaget, 1970; Hudders, De Pauw, Caubergh et al., 2017; Young, 2015; Rozendaal, Buijzen & Valkenburg, 2011; Lawlor & Prothero, 2003; Jones, Mannino & Green, 2010; Chan, 2010).

Prolonged SA could be due to the lack of basic information processing skills to understand the nature of advertising messages (Young & Hetherington, 1996; Wartella, 2009), showing that 81.3% of children are still not aware of the CMP. It is reasonable to note that the differences are attributable, first, to the difficulties in discriminating between commercial and non-commercial content; and second, to the difficulties in understanding the persuasive intention of the advertising attribute and interpretation of the message. Therefore, the negative consequences of SA that several authors indicate for self-esteem, the orientation of values as in habits, would have implications for school mental health and especially emotional development (Young & Hetherington, 1996; Nairn & Fine, 2015; Kulaczkowski, 2003). In this sense, the early assessment of the incidence of SA is important for future longitudinal studies on infant psychosocial development that would increase the predictive capacity of children at risk, estimating an approximate population of 1,398 schoolchildren according to the configuration index (CI = 0.789) with SA in the area and 14,885 in the region.

On the other hand, the differences lead to affirm that SA is not only a state but also a situation, which responds more to the adaptive behavior of emotions and individual interpersonal relationships (Wartella, 2009; Addis & Holbrook, 2006) than to the intellectual functions themselves, related to the assimilation of knowledge, reasoning, symbolic representation and semantic-visual verbal memory, which develop over time and to a large extent as a cognitive function (Kunkel, 2010). The prolonged SA up to nine years old would also be due to limitations in analogical reasoning (AR), as verified in a longitudinal cohort study from five to eleven years of age, preventing the child from understanding the rules of inferential processes on way of development for the generation of abstract thought (Abregu, 2009).

In this sense, neither the teachers nor the parents are providing the children with the skills

<table>
<thead>
<tr>
<th>Brand choice</th>
<th>Purchase decision (n=25)</th>
<th>Total</th>
<th>Percentage</th>
<th>$X^2$</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>4.0</td>
</tr>
<tr>
<td>B</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>20.0</td>
</tr>
<tr>
<td>C</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>4.0</td>
</tr>
<tr>
<td>D</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>16</td>
<td>72.0</td>
</tr>
<tr>
<td>Re-count</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>20</td>
<td>100.0</td>
</tr>
<tr>
<td>Percentage</td>
<td>8.0</td>
<td>8.0</td>
<td>4.0</td>
<td>80.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note: A, B, C, D - Different brands of yogurt; $X^2$ - Pearson’s chi-square test (df=9; if p <0.05).
for the development of the critical attitude (16), making it necessary to orient for the balance between needs and health, strengthening their abilities, beliefs, values, and feelings (Hudders, De Pauw, Cauberghe et al., 2017; Rozendaal, Buijzen & Valkenburg, 2011; Šramová, 2014, Aktaş, 2006; Nairn & Fine, 2015; Wilson, Grizzle, Tuazon et al., 2011), and thus provide opportunities to promote the RA that facilitates the visualization of abstract concepts, the memory of information and its contextualization to develop the subsequent critical thinking (Abregu, 2009).

Regarding the ten common elements that describe SA in a group of nine-year-old schoolchildren with similar intellectual development, there is convergence in two factors (SHA, CMP) and the third (SPT) as a moderating variable. In the first, it is evident that the hedonistic symbolism is associated to the brand by direct influence, which was determined by the degree of correspondence of frequencies between the preferences of the child for a product brand symbolized and the purchase decision by their parents (p. <0.0001), surpassing the findings in Turkey (Nefat & Dujmović, 2012) with a percentage variation of $\Delta = 76.2\%$ (71.0\% vs. 40.3\%), who demanded from their parents only the product exhibited on television, moving towards the "D" brand up to 64.0\% of requests.

In this regard, there is agreement in the literature in three common assumptions: First, that the consumption of brands occurs because they are loaded with social symbolism that facilitate the ways of relating and being accepted (Neme & Rodríguez, 2013), fact that shapes the SA reinforced by the influence of the peers, of the attachment between them (Raba'ah, Suandi, Hamzah et al., 2014), of the importance of opinion and of being socially respected as a necessity (Tsai, 2005; Raba 'ah, Suandi, Hamzah et al., 2014; Neme & Rodríguez, 2013; O'Shaughnessy & O'Shaughnessy, 2002; Holbrook, 1987), as it is evident that 76.0\% of the children studied preferred the product symbolized in a brand that was also a favorite of their friends. Second, because the attitude of the parents is tolerant towards the hedonistic behavior of their children (Raba'ah, Suandi, Hamzah et al., 2014), there were children pleased by their parents with predefined marks ("C" n = 1; "D" n = 16) for them up to 68.0\% of the frequency of requests. Third (generic), because SA is a common characteristic of a consumer culture given through the associated social symbolism through external intermediaries such as TV advertising or the Internet (Fenollar & Ruiz, 2006; Tsai S. 2005). It should be remembered that the analysis is exploratory as long as the sample size by groups may be insufficient to infer the real common elements of the SA.

In the second factor of convergence (CMP), we found that the majority of children (81.3\%) show difficulties to understand. There is an agreement with the findings of Elliot (2014), who points out that the symbolic contents of TV generate behaviors of hedonistic purchase, due to the high level of materialism present in the advertisements and negatively influence the orientation of the values as well as the child's attitudes (Young B. 2015; Šramová, 2014a; Šramová, 2014b). In the context of this study, it is evidenced that most children claimed that TV advertising "did not lie" (84\%) or that "TV said good things" (72\%), and more intensely in urban children because ETIA has no restrictions (p <0.011). This marks a difference with the report in Santiago de Chile (Uribe, Acuña, Carrasco et al., 2006) where parents with lower socioeconomic status had a slightly more positive view of advertising, compared to 52\% of Peruvian family parents in rural areas (ETIL) that were more restrictive. It is consistent with the findings in mothers of the medium-low group who were distrustful towards advertising because they exerted negative influence for their children (Šramová, 2014; Nefat & 2012; González, 2008). Therefore, it is considered that the socioeconomic level of the parents, the religion, the number of siblings, the type of family as the communication style, are interesting mediators to study the SA differentiated by specific groups.

**Limitations**

The study has several limitations: the first one is related to the size of the sample (8 groups x 3 children). The children's responses show consistent patterns and guide the need for new research to gather more information about levels of exposure to child food advertising, as well as their knowledge and pre-existing attitudes in relation to other products. Second, the
participants were exposed to only four ads of the same product, making it important to examine new answers and in larger advertisements. Third, the study was carried out in Peru, using the best selling children’s TV advertising, so the results may not be generalizable for other populations.

Being the only study of its nature in the country with an important contribution in the psychosocial aspects of child mental health and development, a priority activity in health education, is a strength of this study. It will contribute to the intervention and multidisciplinary implementation of programs of emotional development for the critical attitude towards the media and the consequences of SA in self-esteem, values and habits. It is recommended to develop media literacy programs for families and schools (teachers, counselors), which will help to understand the persuasive intention of advertising and guide the balance between need and health, as well as regulate child food advertising based on evidence and public health initiatives that pay more attention to the symbolic aspects of food versus nutritional qualities. In future research on SA it is recommended that socioeconomic aspects of parents be included as moderating variables, such as the stratum, religion, type of family, communication style and number of children, as important mediators for the study of SA differentiated by specific groups.

5. Conclusions

The findings indicate the presence of prolonged SA in school children of nine years of age with adequate intellectual cognitive development, of both sexes and geographical areas (ETIL, ETIA). These findings are controversial in the literature for they argue that, at that age and even from eight years on, AS is rare because they are already able to recognize the CMP cognitively. The common elements that describe the presence of the SA converge in two factors (SHA, CMP) and the third that acts as a moderating variable (SPT). There is agreement in this aspect with the literature integrated into three common assumptions and it is confirmed that TV advertising or the Internet are external intermediaries of consumption associated with symbolism. It is evident that 76.0% of children prefer the same brand chosen by their peers and that parents reinforced the hedonistic behavior of their children to the same brand up to 68.0% of requests. The majority of children (81.3%) show difficulties in understanding the CMP, for example: "TV does not lie" (84%), "TV says good things" (72%), and more frequently in children in the area urban (p <0.011). 52% of parents in rural areas were more restrictive with TV advertising.

4 In Spanish, emisión de televisión e internet abierta.
5 In Spanish, emisión de televisión e internet limitada.

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