# **UCSF**

# **UC San Francisco Previously Published Works**

# **Title**

Parenting and Preschooler TV Viewing in Low-Income Mexican Americans

# **Permalink**

https://escholarship.org/uc/item/3gg1c4kr

# **Journal**

Journal of Developmental and Behavioral Pediatrics, 37(6)

# **ISSN**

0196-206X

# **Authors**

Thompson, Darcy A Johnson, Susan L Vandewater, Elizabeth A et al.

# **Publication Date**

2016-07-01

#### DOI

10.1097/dbp.000000000000309

Peer reviewed

J Dev Behav Pediatr. Author manuscript; available in PMC 2017 July 01.

Published in final edited form as:

# Parenting practices regarding TV viewing in low-income Mexican American mothers of preschoolers: Development of the Parenting Practices Regarding TV Viewing (PPRTV) scale

Darcy A. Thompson, MD, MPHa, Susan L. Johnson, PhDa, Elizabeth A. Vandewater, PhDb, Sarah J. Schmiege, PhDc, Richard E. Boles, PhDa, Jerusha Lev, MDd, and Jeanne M. Tschann, PhDe

- <sup>a</sup> Section of Nutrition, Department of Pediatrics, University of Colorado School of Medicine, Aurora, CO
- b Division of Health Promotion and Behavioral Sciences, University of Texas School of Public Health-Austin Regional Campus, Austin, TX
- <sup>c</sup> College of Nursing, University of Colorado School of Medicine, Aurora, CO 80045
- d Department of Pediatrics, Denver Health, Denver CO
- e Department of Psychiatry, University of California at San Francisco, San Francisco, CA

#### Abstract

**Objective**—To develop and test a comprehensive, culturally-based measure of parenting practices regarding TV viewing in low-income Mexican American mothers of preschoolers.

Methods—Low-income Mexican American female primary caregivers of preschoolers were recruited in urban safety-net pediatric clinics during the 2013-14 academic year. Items on parenting practices regarding TV viewing were developed from a prior scale, review of the literature, and results from semi-structured interviews. Items were administered by phone and analyses included evaluation of the factor structure and psychometric properties of a 40-item measure of Parenting Practices Regarding TV Viewing (PPRTV).

**Results**—Using exploratory factor analysis, a 7-factor model emerged as the best fit for the data representing the following domains of parenting practices: Time Restriction, Behavioral Control, Instructive Practices, Coviewing, Planful Restriction, Reactive Content Restriction, and Commercial Endorsement. Internal reliabilities were acceptable (Cronbach's alpha> 0.75). Correlations among the resulting subscales were small to moderate (rs = 0.01-0.43). Subscales were correlated with child TV viewing amounts: Time Restriction (-0.14, p<0.05); Behavioral Control (0.27, p<0.001); Coviewing (0.16, p<0.01); Planful Restriction (-0.20, p<0.001); Commercial Endorsement (0.11, p<0.05), which provides support for construct validity.

Corresponding author: Darcy A. Thompson MD MPH, Associate Professor of Pediatrics, University of Colorado School of Medicine, Anschutz Medical Čampus - Mail Stop F561, 12631 East 17th Avenue, Room 2605, Aurora, CO 80045, Office: 303 724 7471, Darcy. Thompson@childrenscolorado.org.

Conflicts of Inerest The authors have no financial relationships relevant to this article to disclose. The authors have no conflicts of interest to disclose.

**Conclusion**—The Parenting Practices Regarding TV Viewing (PPRTV) scale measures 7 domains of parenting practices, and has good initial reliability and validity. It allows investigators to conduct more in-depth evaluations of the role parents play in socializing young children on TV use. Results of such work will be important to informing the design of interventions aiming to ensure healthy screen media habits in young children.

#### **Keywords**

media; parenting; family context; obesity; Latino; television

# **BACKGROUND**

Almost half of preschoolers in the US watch over 2 hours of television (TV) daily. Television is the main screen media used by preschoolers and its use is associated with poor outcomes including obesity and aggressive behaviors. However, it is also linked in young children to positive outcomes, including increased knowledge and imaginativeness. Given the varying potential outcomes, there is a need to intervene on child TV viewing habits to ensure that children benefit from viewing, while the risks of viewing are minimized.

Existing studies suggest that parents actively attempt to shape their children's TV use in numerous ways<sup>6,7</sup>, including time, content or context restrictions, parent-child coviewing, parental instruction regarding the meaning of content viewed, encouragement of viewing, and making viewing contingent on good child behavior. <sup>7</sup> However, others have noted that evidence regarding the relationship of parenting practices to child TV viewing habits is mixed. These equivocal results have been attributed to a variety of shortcomings, including little to no attention paid to age or developmental differences; the use of a wide array of measures, and inadequate assessment of measurement factor structure, reliability and validity.<sup>6</sup> Perhaps the most widely used measure was published in 1999 by Valkenburg and colleagues. Developed in the Netherlands for parents of school-aged children, it assesses 3 domains of TV parenting practices: restrictive, instructive, and coviewing. 8 Though the authors report acceptable reliability and validity, 8 the scale has several shortcomings. First, the restrictive factor combines restriction of content and time, despite evidence suggesting that these types of restrictions represent independent constructs. Second, this instrument may neglect important factors for parenting practices of young children, as it was designed for school-aged children. Third, the scale lacks comprehensiveness in that it only measures 3 domains. To better understand the role of parenting practices regarding TV viewing and their relationship with child viewing habits, it is essential that the above limitations are addressed. Further measurement development in this area is necessary, with specific attention to assuring that all domains of parenting in this area are included, and to developing a measure appropriate for parents of younger children.

There is also a need to develop a measure of parenting practices in this domain for Latino parents. Currently, little is known about how Latino parents socialize their children on the use of TV despite evidence suggesting that Latino children spend more time viewing television relative to non-Latino white children. <sup>10</sup> This need is underscored by findings suggesting that Latino children are at high risk for negative TV-related outcomes such as

obesity. <sup>11</sup> Moreover, in 2010, 35% of Latino children lived in poverty; children living in poverty are at increased risk for additional negative TV-related outcomes, such as speech problems. <sup>12,13</sup> Scholars of Latino health emphasize the importance of developing culturally sensitive measures consistent with both the culture and social context of the sample population. <sup>14</sup> Highlighting this need for adaptation are studies on child TV viewing that suggest the sociocultural context influences child viewing habits. <sup>10,15</sup> The development of culturally-appropriate measures of parenting practices regarding TV viewing are critical to the development of effective interventions on child TV viewing habits in Latino populations.

The objective of this study was to use a culturally-based approach to develop and then test a comprehensive measure of parenting practices regarding child TV viewing in low-income Mexican American mothers of preschoolers. Because Latinos are not a homogenous population and viewing behaviors vary by country of origin, <sup>15</sup> this study focused on parenting practices in Mexican American families. We aimed to capture the variety of ways parents in this population socialize children regarding television viewing. Given that about 25% of children in the US are Latino, the majority of whom are of Mexican descent, and approximately one-third of whom are low-income, the potential applicability of this measure is great. <sup>16</sup>

#### **METHODS**

#### Measure development

Parenting practices regarding TV viewing—Items were developed from 3 sources. First, we used all 15 items from the Valkenburg scale that measures 3 domains: restrictive mediation (including time and content), instructive mediation (instructing children on the meaning of TV content), and parent-child coviewing (viewing with your child). 8 Second, we developed items based on our own research, consisting of 21 semi-structured interviews conducted with a sample of low-income Mexican American mothers of preschoolers.<sup>17</sup> During the interviews, broad open-ended questions were used followed by probes to facilitate discussion of parenting practices regarding TV viewing. We developed items to reflect the parenting practices identified in these interviews. Third, we developed items reflecting factors that have been reported in the empirical literature. These included contingent viewing, encouragement of viewing, and context-related restriction of viewing.<sup>6,7</sup> Fourth, for the items we developed to reflect encouragement of viewing, we based each item on situations mentioned in the qualitative interviews on the use of TV viewing for behavioral control. All of the newly developed items matched the stem and responses used for the Valkenburg items. 8 In total, 49 items were included in the survey representing the following conceptual domains of parenting practices: restriction of time spent viewing (5), restriction of eating while viewing (2), restriction of viewing of commercials (1), restriction of viewing around bedtime (3), restriction of content (5), parent-child coviewing (9), contingent viewing (3), instructive practices (6), endorsement of requests from commercials (4), restriction of background TV exposure (1), monitoring (2) and encouragement of viewing for behavior control (8). Response options for all items were Never (1), Sometimes, Often, Very Often, Always (5), with the added option of 'Never exposed to inappropriate content' (coded as 5) on items related to restriction of inappropriate content.

**Expert review**—To maximize content validity, 2 experts in the field of TV parenting practices provided input on item relevance and the representativeness of developed items with respect to coverage of important domains.

**Translation**—A bilingual/bicultural team member translated all items into Spanish or English as needed. Both language versions were then compared side by side by bilingual team members (n=3) for conceptual equivalence and cultural appropriateness. A decentering process <sup>18</sup> was utilized in which both languages were considered equally important, and alterations were made to either language version in order to obtain conceptual equivalence. Items were revised until group consensus on functional equivalence was achieved.

**Field pretest**—Cognitive interviews were utilized to identify problems with item comprehension, interpretation, and/or responses.<sup>19</sup> Thirty-seven cognitive interviews were conducted in English or Spanish. Participants met the same eligibility criteria as the main sample described below. Each interview was discussed iteratively in team meetings. Items were revised or dropped as needed and then tested in subsequent interviews. Interviews were conducted until all identified issues were resolved.

#### Survey administration

**Participants**—During the 2013-14 academic year, participants were recruited in the waiting rooms of 3 pediatric safety-net clinics. Eligible participants were Spanish- and/or English-speaking female primary caregivers of self-identified Mexican-descent with a child 3-5 years old and a TV at home. Because caregivers' perceptions and behaviors can differ by gender, this study focused only on female caregivers. Women tend to be the primary caregiver of young children. If participants had more than 1 eligible child, a focal child was randomly chosen. The study was approved by the XXX Institutional Review Board.

**Procedures**—The resulting survey was administered by 7 research assistants (RAs) to the recruited convenience sample. Participants were recruited in-person and then enrolled in a telephone interview. Following informed consent, the survey was administered in a 1-hour phone call. RAs were trained to maintain a consistent approach during the delivery of survey items. Study data were collected and managed using REDCap electronic data capture tools.

#### Measures

In addition to the items on parenting practices, data were also collected on child age and sex, and maternal age, years of education, acculturation level, cohabitation status, and employment status. Acculturation was measured using an adapted version of the Spanish and English language use subscales of the Bidimensional Acculturation Scale for Latinos.<sup>20</sup> Each subscale contained 5 items with responses ranging from Never (1) to Always (5). In this manuscript, these subscales are labeled maternal English language acculturation or Spanish language acculturation.

To evaluate construct validity, we asked mothers about typical average daily amounts of TV use by the focal child, mother, and father. Child average daily amount of TV was measured with 2 items asking about typical child weekday and weekend viewing. The weekday and

weekend amounts were weighted by 5 and 2 respectively prior to summing and then dividing by 7. To capture the average daily amount of TV viewing for each parent, one item was asked about mother's viewing and another about father's viewing. All items on TV viewing amounts were adapted from an item in the Early Childhood Longitudinal Study – Birth Cohort. Responses of TV viewing 15 hours/day were considered implausible and dropped (child: n=3, mother: n=1). Additionally, an adapted item from the *Zero to Six* study was used to obtain data on the average daily hours the TV was on even if no one was watching it. One response (>24 hours) was implausible and therefore dropped.

#### **Analyses**

Exploratory factor analysis (EFA) was applied to determine the underlying factor structure of the 49 items, using maximum likelihood estimation and promax rotation. Promax rotation was chosen because it is an oblique rotation method and some level of correlation among factors was anticipated.<sup>23</sup> Given problems associated with commonly used criteria for factor selection in EFA (e.g., the Kaiser criterion), we chose maximum likelihood estimation specifically because, even in an EFA framework, it allows for the calculation of more formal model goodness-of-fit indices to evaluate the performance of the model at an overall level and relative to alternative models.<sup>24,25</sup> Model fit indices used for the EFA included the root mean square error of approximation (RMSEA) and chi-square difference tests.<sup>24</sup> RMSEA values can range from 0 to 1 and lower values indicate a better fitting model (conventionally, values under 0.05 are considered desirable and those under 0.08 are considered acceptable).<sup>26</sup> Chi-square difference tests were used to compare each model under consideration to an alternative model with one fewer factor. Models with between 4 and 8 factors were evaluated; in addition to RMSEA and chi-square values, the final model was selected based on model convergence, model interpretability, and the observed scree plot. Once the final factor structure was obtained, the internal consistency reliability of the items loading on each subscale was examined using Cronbach's alpha, with values greater than 0.7 considered acceptable.<sup>27</sup> Composite subscale scores were then created by calculating the mean of all the items in a given subscale. These subscales were examined in relation to several demographic variables using Pearson's correlation coefficients. To assess construct validity, subscales were examined in relation to behavioral variables using Pearson's correlation coefficients. Mplus Version 7.2 was used for the exploratory factor analysis and SAS Version 9.4 was used for all other analyses.

#### **RESULTS**

Of the 565 women who were identified as eligible and who expressed interest in participating in the study, 312 (55%) participated in the study. Data were not collected on the number of eligible women who refused to participate. Descriptive statistics regarding characteristics of the 312 participants can be found in Table 1. The mean maternal age was 31 (SD=6.4) and the mean focal child age was 3.9 (SD=0.8).

#### **Exploratory Factor Analysis**

Based on the model selection criteria, a 7-factor model emerged from the exploratory factor analysis as the best fit to the data (RMSEA = 0.06, 95% CI 0.056-0.064;  $\chi^2$  = 289.23, p<.

001 comparing 7 factor to 6 factor model). The 7 factors were interpretable in terms of theory and initial expectations. Table 2 depicts the rotated factor loadings for the 7-factor solution, with the highest loading for each item presented in bold. Factor 1, labeled "Time Restriction" is comprised of 5 items related to restriction of time spent watching TV. Factor 2, labeled "Behavioral Control", is comprised of 2 items measuring whether TV is used as a reward and 8 items measuring whether the mother encourages her child to watch TV. Factor 3, 6 items, assessed whether the mother instructed the child based on TV content and was labeled "Instructive Practices." Factor 4, labeled "Coviewing", is comprised of 9 items assessing whether the mother coviewed with her child. Factor 5, labeled "Planful Restriction", was comprised of 3 items assessing restriction of TV viewing within the context of bedtime, 1 item assessing whether mothers forbid their child from watching specific programs, and 1 item assessing monitoring of the content their child watched. Factor 6, comprised of 3 items related to mothers restricting viewing in reaction to viewing of inappropriate content, was labeled "Reactive Content Restriction." Finally, Factor 7, labeled "Commercial Endorsement", was comprised of 2 items assessing the degree to which mothers endorsed items advertised in commercials. Based on a factor loading cut-off of 0.35, 9 of the 49 items did not load highly enough on any factor and were therefore removed from subsequent analyses. <sup>28</sup>

Table 3 depicts the Cronbach's alpha values and mean scores of the 7 resulting subscales. Alpha values were acceptable to good (Range: 0.76-0.90).<sup>27</sup> Subscale means all potentially range from 1-5, where 5 represents greater endorsement of the construct. In general, mothers more often endorsed Reactive Content Restriction and least often endorsed Commercial Endorsement. Correlations among the subscales (Table 3) were small to moderate (0.01-0.43), with the largest correlations between Time Restriction and Instructive Practices and Planful Restriction; and between Coviewing and Instructive Practices.

#### Correlations

Table 4 shows the relationship of the subscale means to demographic and behavioral variables. Maternal education was positively correlated with Planful Restriction (r=0.23). English language acculturation was positively correlated with Instructive Practices (r=0.19), Coviewing (r=0.17), Planful Restriction (r=0.22), and Commercial Endorsement (r=0.15). Correlations with daily child TV viewing amount were in the expected directions thereby supporting the subscale construct validity. Child average daily amount of TV was negatively correlated with Time Restriction (r= -0.14) and Planful Restriction (r= -0.20) and positively correlated with Behavioral Control (r=0.27), Coviewing (r=0.16) and Commercial Endorsement (r=0.11). Additionally, mother's and father's average daily amount of TV was positively correlated with Coviewing (r=0.23 and 0.24, respectively). Providing support for discriminant validity, child average daily amount of TV was not associated with Reactive Content Restriction.

## DISCUSSION

The Parenting Practices Regarding TV Viewing (PPRTV) scale is a 40-item measure representing the most comprehensive measure of parenting practices regarding TV use in

low-income Mexican American mothers of preschoolers. Exploratory factor analysis supported a 7-factor model with all subscales showing good internal reliabilities and 5 showing initial construct validity. The PPRTV fills a significant gap regarding the need for rigorously evaluated measures of parenting practices regarding TV viewing.<sup>6</sup> This newly developed scale has strong potential to improve our understanding of the role of parenting practices in socializing children's viewing of TV and the relation of such parenting practices with health-related outcomes.

The PPRTV provides a current measure of parenting practices regarding TV viewing and more broadly represents the variety of parenting practices identified since the development of the Valkenburg scale. The 3 constructs in the Valkenburg scale are represented in the PPRTV (Restrictive (content and time), Instructive, and Coviewing), but our measure extends Valkenburg's work in 2 ways. First, a notable difference in our measure is that content and time restriction represent different constructs. Given that recent literature suggests that content and time restriction do not always co-occur, our measure allows for the differentiation of these 2 domains of parenting practices and the ability to separately evaluate their relationships with various outcomes. Second, our measure reflects the most current thinking on media parenting practices. The majority of the domains of media parenting practices identified by a recent workgroup on screen media parenting are represented in the PPRTV subscales. Investigator use of the PPRTV will allow for a fuller understanding of parenting practices regarding TV use.

Three subscales of the PPRTV represent parental restrictive practices. Two relate to time and content restriction. The third domain is labeled Planful Restriction and appears to identify a higher level of general restriction. Items in this subscale either utilize strong words such as "forbid", or they reflect restriction related to a specific context. Analyses show that this subscale is associated with lower amounts of mother and child average daily TV viewing. The Time Restriction subscale was also associated with less daily child viewing amounts and as expected the Reactive Content Restriction subscale was not. Further studies are needed to understand the differences between Planful Restriction and the 2 other restrictive domains and how these 3 domains relate to the amount, content, and context of child TV viewing.

The subscale labeled Behavioral Control represents parental behaviors that encourage children to view TV or use TV as a reward for child behaviors and thus reflect the utility of TV viewing for parents. This subscale was associated with mother, father, and child average daily amount of TV viewing. Further understanding of the use of the TV for behavioral control is needed. A specific focus on whether it is associated with limited general parenting skills would be useful for informing the design of interventions targeting child media use.

Little is known about parenting practices regarding TV commercials, despite increasing evidence suggesting that exposure to food and drink commercials is a linkage between TV viewing and childhood obesity. <sup>29</sup> The 2-item subscale labeled "Commercial Endorsement" reflects parental reactions to child requests for advertised food or drink items. This subscale was positively related to child daily TV viewing amounts. Interestingly, the item regarding limiting exposure to TV commercials was not related to this subscale or other subscales in

our analyses. Further study is needed to explore parental practices related to TV commercials and their relations to child exposure and health-related outcomes.

The remaining 2 subscales, Instructive Practices and Coviewing, consisted mainly of adapted items from the Valkenburg scale. Both of these domains have long been recognized in the literature. <sup>30</sup> Instructive Practices include efforts by parents to educate their children about TV content. The AAP recommends such practices. <sup>31</sup> As expected, this subscale was not associated with TV viewing habits. However, Coviewing was associated with child, mother, and father viewing habits. Coviewing represents the practice of viewing TV with the child. Findings from qualitative work suggest this may involve families viewing together, boys viewing sports with their father, or routine coviewing of shows. <sup>17</sup>

The correlation of demographic factors with each subscale varied by demographic factor. Child age was not correlated with any of the 7 subscales. Given the study's focus on a narrow age range, this finding was not surprising. Valkenburg et al. evaluated parenting practices in parents of children with a broader age range, 5-12 year olds, and found that parents of younger children were more likely to use instructive practices. <sup>8</sup> Interestingly, in the current study, child sex was correlated with 3 subscales. Being a boy was positively related to behavioral control and negatively related to instructive practices and co-viewing. Given the increased physical activity of many preschool boys<sup>32</sup>, it is possible that mothers are more likely to use the television to manage their son's indoor activity. The inclusion of only mothers in this study may explain the negative relationship between male children and co-viewing practices; mothers may be more likely to co-view with their daughters given the potentially increased overlapping interests. The reason for the negative relationship between male children and instructive practices is unknown. We found that more maternal education was associated with more planful restriction. Others have found a similar relationship between maternal education and restrictive practices in parents of school-age children.<sup>33</sup> The acculturation scales were also correlated with different parenting practices. Similar to findings in school age children, we found that more instructive practices, coviewing, and planful restriction were associated with higher maternal English language acculturation. <sup>33</sup> We also found that greater commercial endorsement was related to higher maternal English language acculturation. Given that a large proportion of the programming viewed by Latino preschoolers is in English<sup>34</sup>, mothers who prefer to speak in Spanish, who probably also have limited English-language proficiency (LEP), may be less likely to co-view with their child, use instructive practices, or endorse commercials due to language.

This study's strengths include the culturally-based approach used to develop this measure and the comprehensiveness of constructs. Moreover, the results show initial construct validity. Comparable measures could be developed for use in other cultural groups, using a similar approach, given the prevalence of excessive TV viewing. This measure may also apply more broadly to other forms of screen media use. However, given the possibility that parents may regulate different types of screen media (e.g. tablets, smartphones) in varying ways, an evaluation of parenting of screen media more broadly is needed. Nevertheless, this study has several limitations. Because this is the first application of the PPRTV, additional samples are needed to evaluate the consistency of our findings using confirmatory factor analysis, the test-retest reliability, and measurement invariance among English and Spanish

speaking caregivers. Furthermore, additional research could further develop the subscale Commercial Endorsement. This subscale consists of only 2 items which may not adequately represent the construct, although the internal consistency reliability of these 2 items was high. The correlations between the parenting practices subscales and TV viewing amounts ranged from small to moderate, similar to findings in other studies. <sup>8,33</sup> The use of a maternal estimate of TV viewing may account for this given that it is a less reliable measure of actual TV viewing amounts. <sup>35,36</sup> Global estimates of television viewing are only moderately correlated with observed viewing amounts. <sup>35,36</sup> Finally, survey items were delivered over the phone due to concerns about literacy levels. Research assistants used a consistent approach in delivery of items across interviews. Nevertheless, some evidence suggests social desirability bias is greater in phone interviews compared to other data collection methods. <sup>37</sup> The possible impact of this on these results is unknown.

#### **IMPLICATIONS**

Because TV viewing remains the main media exposure for young children<sup>2</sup>, understanding the multifaceted ways parents interact with their child regarding TV viewing is critical. This importance is reinforced by the ubiquity of TV viewing by young children, and by evidence showing relationships between TV use and adverse child outcomes.<sup>3,4</sup> The measure presented here offers considerable value to investigators aiming to understand the role of parents in shaping Mexican American children's TV viewing habits. Use of this measure will allow investigators to identify parental behaviors, and how these behaviors are related to specific viewing habits and both positive and negative TV-related outcomes. Such information will improve interventions aiming to support the development of healthy media habits in children.

# **Acknowledgments**

We thank Russell Jago, PhD and Teresia O'Connor MD, MPH for providing expert input during the development of this measure.

Source of Funding: Research reported in this publication was supported by the Eunice Kennedy Shriver National Institute of Child Health & Human Development of the National Institutes of Health under award number K23HD060666 and by NIH/NCRR Colorado Clinical & Translational Sciences Institute (CCTSI) Grant Number UL1 RR025780. The design and conduct of the study; collection, management, analysis, and interpretation of the data; preparation, review, or approval of the manuscript; and decision to submit the manuscript for publication are solely the responsibility of the authors and the content does not necessarily represent the official views of the National Institutes of Health.

# References

- Vandewater EA, Rideout VJ, Wartella EA, Huang X, Lee JH, Shim MS. Digital childhood: Electronic media and technology use among infants, toddlers, and preschoolers. Pediatrics. 2007; 119(5):e1006–1015. [PubMed: 17473074]
- 2. A look across media: The cross-platform report. The Nielsen Company; 2013.
- 3. Braithwaite I, Stewart AW, Hancox RJ, Beasley R, Murphy R, Mitchell EA. The worldwide association between television viewing and obesity in children and adolescents: cross sectional study. PLoS One. 2013; 8(9):e74263. [PubMed: 24086327]
- Christakis DA, Zimmerman FJ. Violent television viewing during preschool is associated with antisocial behavior during school age. Pediatrics. Nov 1; 2007 120(5):993–999. 2007. [PubMed: 17974736]

5. Thakkar RR, Garrison MM, Christakis DA. A systematic review for the effects of television viewing by infants and preschoolers. Pediatrics. Nov; 2006 118(5):2025–2031. [PubMed: 17079575]

- 6. Jago R, Edwards MJ, Urbanski CR, Sebire SJ. General and specific approaches to media parenting: A systematic review of current measures, associations with screen-viewing, and measurement implications. Childhood obesity. Aug; 2013 9(Suppl):S51–72. [PubMed: 23944925]
- O'Connor TM, Hingle M, Chuang RJ, et al. Conceptual understanding of screen media parenting: Report of a working group. Childhood obesity. Aug; 2013 9(Suppl):S110–118. [PubMed: 23944919]
- 8. Valkenburg PM, Krcmar M, Peeters AL, Marseille NM. Developing a scale to assess three styles of television mediation: "Instructive mediation," "restrictive mediation," and "social coviewing". Journal of Broadcasting & Electronic Media. 1999; 43(1):52–66.
- 9. Vandewater EA, Park SE, Huang X, Wartella EA. "No-You can't watch that" Parental rules and young children's media use. Am. Behav. Sci. Jan; 2005 48(5):608–623.
- Thompson DA, Sibinga EMS, Jennings JM, Bair-Merritt MH, Christakis DA. Television viewing by young Hispanic children: Evidence of heterogeneity. Archives of Pediatrics Adolescent Medicine. 2010; 164(2):174–179. [PubMed: 20124147]
- 11. Ogden CL, Carroll MD, Kit BK, Flegal KM. Prevalence of childhood and adult obesity in the United States, 2011-2012. JAMA. Feb 26; 2014 311(8):806–814. [PubMed: 24570244]
- Lopez, M.; Velasco, G. Childhood Poverty Among Hispanics Sets Record, Leads Nation. Vol. 28.
   Pew Research Center; Washington DC: Sep. 2011 p. 2011
- Larson K, Halfon N. Family Income Gradients in the Health and Health Care Access of US Children. Maternal and Child Health Journal. 2010; 14(3):332–342. [PubMed: 19499315]
- 14. Rogler LH. The meaning of culturally sensitive research in mental health. American Jounnal of Psychiatry. 1989; 146(3):296–303.
- Thompson DA, Matson PA, Ellen JM. Television viewing in low-income Latino children: variation by ethnic subgroup and English proficiency. Childhood obesity. Feb; 2013 9(1):22–28. [PubMed: 23301653]
- Murphey D, Guzman L, Torres A. Amercia's Hispanic children: Gaining ground, looking forward. Child Trends Hispanic Institue. 9/24/2014.
- 17. Thompson DA, Polk S, Cheah CS, et al. Maternal Beliefs and Parenting Practices Regarding Their Preschool Child's Television Viewing: An Exploration in a Sample of Low-Income Mexican-Origin Mothers. Clin. Pediatr. (Phila.). Aug; 2015 54(9):862–870. [PubMed: 25724994]
- 18. Marin, G.; Marin, BVO. Research with Hispanic populations: Applied social research series. Vol. 23. Sage Publications; Beverly Hills, CA: 1991.
- Willis, GB. Cognitive interviewing: A tool for improving questionnaire design. Sage Publications; 2004.
- 20. Marin G, Gamba RJ. A new measurement of acculturation for Hispanics: The bidimensional acculturation scale for Hispanics (BAS). Hispanic J Behav Sci. 1996; 18:297–316.
- 21. [March 15, 2015] ECLS-B preschool national study: Parent interview. http://nces.ed.gov/ecls/pdf/birth/preschool\_parent\_interview.pdf.
- 22. Rideout, VJ.; Vandewater, EA.; Wartella, EA. Zero to six: Electronic media in the lives of infants, toddlers, and preschoolers. Kaiser Family Foundation; 2003.
- 23. Tabachnick B, Fidell L. Multivariate analysis of variance and covariance. Using multivariate statistics. 32007:402–407.
- 24. Fabrigar LR, Wegener DT, MacCallum RC, Strahan EJ. Evaluating the use of exploratory factor analysis in psychological research. Psychol. Methods. 1999; 4(3):272–299.
- Preacher KJ, Zhang G, Kim C, Mels G. Choosing the optimal number of factors in exploratory factor analysis: A model selection perspective. Multivariate Behavioral Research. 2013; 48(1):28– 56. [PubMed: 26789208]
- 26. Hu, Lt; Bentler, PM. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Structural Equation Modeling: A Multidisciplinary Journal. 1999; 6(1):1–55.
- 27. Nunnally, JC. Psychometric theory. 2nd edition. Vol. 226. McGraw-Hill; New York: 1978.

- 28. Kline, P. Handbook of psychological testing. 2nd edition. Routledge; London: 2000.
- 29. McGinnis, JM.; Gootman, JA.; Kraak, VI. Food marketing to children and youth :threat or opportunity?. National Academies Press; Washington, D.C.: 2006.
- 30. Dorr A, Kovaric P, Doubleday C. Parent-child coviewing of television. Journal of Broadcasting & Electronic Media. 1989; 33(1):35–51.
- 31. Strasburger VC, Hogan MJ, Mulligan DA, et al. Children, adolescents, and the media. Pediatrics. 2013; 132(5):958–961.
- 32. Finn K, Johannsen N, Specker B. Factors associated with physical activity in preschool children. The Journal of Pediatrics. 140(1):81–85. 1// 2002. [PubMed: 11815768]
- 33. Borzekowski DLG, Robinson TN. Conversations, control, and couch-time. Journal of Children and Media. 2007; 1(2):162–176. 2007/07/01.
- 34. Borzekowski, DLG.; Poussaint, AF. Latino American Preschools and the Media. University of Pennsylvania: The Annenberg Public Policy Center; 1998.
- 35. Anderson DR, Field DE, Collins PA, Lorch EP, Nathan JG. Estimates of young children's time with television: a methodological comparison of parent reports with time-lapse video home observation. Child Dev. Oct; 1985 56(5):1345–1357. [PubMed: 4053746]
- 36. Vandewater EA, Lee SJ. Measuring Children's Media Use in the Digital Age: Issues and Challenges. Am. Behav. Sci. Apr 1; 2009 52(8):1152–1176. [PubMed: 19763246]
- 37. Chang L, Krosnick JA. National Surveys Via Rdd Telephone Interviewing Versus the Internet: Comparing Sample Representativeness and Response Quality. Public Opin. Q. Dec 21; 2009 73(4):641–678. 2009.

Table 1

Demographic characteristics of a sample of low-income Mexican American mothers of children 3-5 years of age (n= 312).

DEMOGRAPHICS	Percent (n) or Mean (SD) <sup>a</sup>
Child age (y)	3.9 (0.8)
Male Child (%)	53.5 (167)
Maternal education (y)	10.1 (2.9)
Cohabitating (%)	72.4 (226)
Maternal age (y)	31.0 (6.4)
Maternal employment (% employed)	23.1% (72)
Maternal English language acculturation	2.6 (1.5)
Maternal Spanish language acculturation	3.8 (1.5)
Child: Average daily amount of TV $(h)^b$	2.8 (1.7)
Mother: Average daily amount of TV (h)	2.5 (1.7)
Father: Average daily amount of TV (h)	2.2 (1.9)
Average daily amount TV turned on in home (h)	5.0 (4.1)

<sup>&</sup>lt;sup>a</sup>SD=standard deviation

 $b_{TV} = television$ 

Table 2

Promax rotated factor loadings based on exploratory factor analysis of 49 items on parenting practices regarding television (TV) viewing in low-income Mexican American mothers of children 3-5 years of age (n=312).

					Fa	Factor		
	Item How often do you	Time Restriction	Behavioral Control	Instructive Practices	Co-viewing	Planful Restriction	Behavioral Control Instructive Practices Co-viewing Planful Restriction Reactive Content Restriction Commercial Endorsement	Commercial Endorsement
Time Restriction	tion							
-	set the amount of time that (CHILD) <sup>a</sup> can watch TV before s/he watches TV?	0.73	0.05	-0.01	0.01	-0.01	0.01	0.03
2	set a schedule of what times (CHILD) can watch $TV?^b$	0.79	-0.02	0.02	0.06	-0.10	0.05	0.00
ю	limit when (CHILD) can watch TV?	0.85	0.03	-0.10	0.03	0.08	-0.01	0.02
4	limit how much TV (CHILD) watches at one time?	0.82	0.06	0.06	-0.12	0.02	-0.01	-0.01
v	limit the amount of time you allow (CHILD) to watch TV overall?	0.80	0.04	-0.05	-0.03	0.04	-0.02	0.01
Behavioral Control	ontrol							
9	reward (CHILD)'s good behavior with time watching TV?	0.14	-0.37	0.01	0.22	-0.01	0.07	-0.12
7	reward (CHILD)'s good behavior	0.11	-0.45	0.11	0.21	-0.03	0.03	-0.15

					Ħ	Factor		
	Item How often do you	Time Restriction	Behavioral Control	Instructive Practices	Co-viewing	Planful Restriction	Time Restriction Behavioral Control Instructive Practices Co-viewing Planful Restriction Reactive Content Restriction Commercial Endorsement	Commercial Endorsemer
	with a special TV program or movie?							
	encourage (CHILD) to watch TV?	0.01	-0.49	0.15	0.01	-0.16	0.00	-0.09
	encourage (CHILD) to watch TV so you can get things done?	-0.07	-0.60	-0.10	-0.01	0.07	0.02	0.02
	encourage (CHILD) to watch TV to get him/her to sleep?	-0.08	-0.43	0.05	-0.01	0.07	0.06	0.08
	encourage (CHILD) to watch TV to keep him/her calm?	-0.06	-0.71	-0.05	-0.11	-0.01	0.05	0.12
	encourage (CHLLD) to watch TV to keep him/her from bothering	0.04	-0.77	-0.09	-0.15	0.01	-0.07	-0.07
	encourage (CHILD) to watch TV to keep him/her safe when inside?	-0.15	-0.59	-0.01	0.17	0.04	-0.01	-0.11
	encourage (CHILD) to watch TV to keep him/her quiet?	-0.05	-0.81	-0.13	-0.18	0.03	0.00	0.15
	encourage (CHILD) to watch TV to learn things?	0.05	-0.42	0.12	0.24	-0.06	0.06	0.05
Instructive Practices	ractices							

					Fa	Factor		
	Item How often do you	Time Restriction	Behavioral Control	Instructive Practices	Co-viewing	Planful Restriction	Time Restriction Behavioral Control Instructive Practices Co-viewing Planful Restriction Reactive Content Restriction Commercial Endorsement	Commercial Endorsement
16	try to help (CHILD) understand what s/he sees on TV?	0.02	0.04	0.63	0.08	0.02	0.13	0.11
17	explain to (CHILD) the reasons why TV characters do what they do?	-0.06	0.08	0.89	-0.03	0.01	-0.02	0.06
18	point out why some things actors do are $good?^b$	-0.02	0.00	0.80	0.03	-0.01	-0.02	-0.04
19	point out why some things actors do are bad? $^b$	-0.11	0.06	0.74	0.02	0.13	0.00	0.05
20	explain the motivations of TV characters? $^{b}$	0.02	0.01	0.80	-0.01	-0.04	-0.05	-0.11
21	explain what something on TV really means? $b$	0.07	0.06	0.82	-0.02	-0.05	-0.09	-0.05
Co-Viewing								
22	watch TV with (CHILD)?	-0.07	0.10	-0.18	0.81	0.01	00'0	0.01
23	Watch your favorite TV show with $(CHILD)$ ?	0.06	0.05	-0.07	0.54	-0.06	-0.04	0.03
24	watch TV with (CHILD) because you	0.13	0.01	-0.01	69.0	-0.09	-0.03	0.01

					Fa	Factor		
	Item How often do you	Time Restriction	Behavioral Control	Instructive Practices	Co-viewing	Planful Restriction	Behavioral Control Instructive Practices Co-viewing Planful Restriction Reactive Content Restriction Commercial Endorsement	Commercial Endorsement
	both like a $show$ ?							
25	watch TV with (CHILD) because of a shared interest?	0.07	0.01	-0.03	89.0	-0.02	-0.05	-0.02
26	watch TV with (CHILD) just for $tun$ ?	-0.10	-0.05	0.03	0.57	0.02	-0.02	-0.03
7.2	watch TV with (CHILD) because s/he asked you to watch with him/her?	-0.11	-0.06	0.06	0.45	0.07	0.05	0.12
28	laugh with (CHILD) about things you see on TV together?	-0.08	0.12	0.10	0.62	0.06	-0.05	-0.01
29	watch TV with (CHILD) just to be together?	-0.13	0.07	0.03	69.0	0.03	-0.03	-0.01
30	watch TV shows together as a family?	0.08	0.05	-0.02	0.56	-0.03	0.01	0.06
Planful Restriction	iction							
31	forbid (CHILD) from watching TV before bed?	0.01	-0.09	0.00	-0.05	0.49	-0.14	-0.05
32	limit how much TV (CHILD) watches before bed?	0.11	-0.04	-0.01	-0.10	0.70	-0.16	-0.01

					Fa	Factor		
	Item How often do you	Time Restriction	Behavioral Control	Instructive Practices	Co-viewing	Planful Restriction	Behavioral Control Instructive Practices Co-viewing Planful Restriction Reactive Content Restriction Commercial Endorsement	Commercial Endorsement
33	limit what kinds of programs (CHILD) can watch before bed?	-0.04	-0.03	0.01	-0.02	06.0	-0.04	0.08
34	forbid (CHILD) from watching certain programs?	0.02	0.04	0.00	0.06	0.66	0.11	-0.01
35	make sure you know the exact program (CHILD) is watching on TV?	-0.01	80.0	-0.06	0.15	0.41	0.10	-0.03
Reactive Con	Reactive Content Restriction							
36	tell (CHILD) to change the channel when s/he is watching a scene or program you think is inappropriate?	0.01	-0.02	-0.03	-0.03	-0.01	0.72	-0.07
37	tell (CHILD) to turn off the TV if s/he is watching an inappropriate scene or program on TV? <sup>b</sup>	0.02	-0.01	-0.07	-0.05	-0.07	96'0	0.01
38	tell (CHILD) to look away or close his/her eyes if an inappropriate scene is on TV?	-0.06	-0.02	0.07	-0.08	0.02	0.60	0.02

					Fa	Factor		
	Item How often do you	Time Restriction	Behavioral Control	Instructive Practices	Co-viewing	Planful Restriction	Behavioral Control Instructive Practices Co-viewing Planful Restriction Reactive Content Restriction Commercial Endorsement	Commercial Endorsement
Commercial Endorsement	Endorsement							
39	tell (CHILD) you will buy him/her a food or drink that he/she asked for after seeing it on a TV commercial?	0.02	-0.05	-0.04	0.06	0.06	-0.03	0.91
40	buy the foods or drinks that (CHILD) requests from the TV commercials?	0.03	-0.10	0.04	0.01	-0.02	0.01	0.77
Not loading on any factor	n any factor							
41	have (CHILD) watch TV during meals?	0.12	-0.15	0.03	-0.01	-0.07	-0.06	0.11
42	have (CHILD) eat in between meals when s/he is watching TV?	0.00	-0.26	0.06	0.11	0.02	-0.11	0.09
43	try to limit the amount of commercials (CHILD) sees?	0.27	-0.03	0.00	0.06	0.18	-0.05	-0.03
4	say something to (CHILD) about how good or tasty the food or drinks on TV commercials look?	0.13	-0.16	0.16	0.00	0.00	0.01	0.20
45	say something to (CHILD) about how bad the food or	0.22	-0.09	0.22	-0.10	0.06	-0.07	-0.03

					Fa	Factor		
	Item How often do you	Time Restriction	Behavioral Control	Instructive Practices	Co-viewing	Planful Restriction	Time Restriction Behavioral Control Instructive Practices Co-viewing Planful Restriction Reactive Content Restriction Commercial Endorsement	Commercial Endorsemen
	drinks on TV commercials look?							
46	punish (CHILD) for bad behavior by limiting TV?	0.07	-0.21	0.05	0.01	0.07	-0.01	-0.10
47	tell (CHILD) which programs may be watched before he/she watches TV? <sup>b</sup>	0.14	0.02	0.08	0.05	0.33	0.26	-0.07
48	keep track of how much time (CHIL.D)has watched TV in a day?	0.31	0.13	0.04	0.02	0.17	0.14	0.03
49	watch a TV program you like with (CHILD) playing next to you or in the same room?	0.06	0.03	0.15	0.29	-0.06	0.03	0.07

 $^{a}$ CHILD = focal CHILD's name

b Indicates item is similar to or the same as an item from Valkenburg scale.  $^{7}\,$ 

**Author Manuscript** 

Table 3

Cronbach's alpha reliability coefficients, means, and inter-correlations for the 7 Parenting Practices Regarding television (TV) Viewing (PPRTV)

subscales.								
Subscale	ರ	Time Restriction	Behavioral Control	Instructive Practices	Co-viewing	Planful Restriction	Reactive Content Restriction	Time Restriction Behavioral Control Instructive Practices Co-viewing Planful Restriction Reactive Content Commercial Endorsement Restriction
Time Restriction	0.90	;						
Behavioral Control with TV	0.83	11	I					
Instructive Practices	0.90	.35°	.25 <sup>c</sup>	1				
Co-viewing	0.84	.10	.25 <sup>c</sup>	.42°	;			
Planful Restriction	0.76	.43°	08	.23°	.04	ı		
Reactive Content Restriction 0.79	0.79	.21	02	.15	01	.16	ı	
Commercial Endorsement	0.86	04	.29 <sup>c</sup>	.14	.23°	14 <sup>a</sup>	18 <sup>b</sup>	I
Mean (Standard Deviations)		3.15 (1.09)	1.80 (0.59)	2.86 (0.99)	2.77 (0.77)	3.44 (0.95)	4.08 (1.18)	1.69 (0.66)

 $^{a}$ P < 0.05

 $^{b}$ P < 0.01

Table 4

Correlations between Parenting Practices Regarding television (TV) Viewing subscales and demographic and behavioral variables, in low-income Mexican American mothers of children 3-5 years of age (n=312).

	Time Restriction	Behavioral Control	Instructive Practices	Co-viewing	Planful Restriction	Reactive Content	Restriction Commercial Endorsement
Child age (y)	.11	07	90.	01	02	.07	90.
Male Child	05	.13 <sup>a</sup>	11 <sup>a</sup>	12 <sup>a</sup>	06	06	03
Maternal education (y)	.02	.04	.10	90.	.23°	.004	.04
Cohabitating	12 <sup>a</sup>	07	13 <sup>a</sup>	13 <sup>a</sup>	05	.03	06
Maternal age (y)	.01	04	06	60	05	01	11 <sup>a</sup>
Maternal employment	08	01	.01	.02	.04	11	03
Maternal English language acculturation	.10	.10	.19°	.17	.22°	03	.15
Maternal Spanish language acculturation	02	09	10	11 <sup>a</sup>	11	.05	14 <sup>a</sup>
Average daily amount of TV (h)							
Child	14 <sup>a</sup>	.27 <sup>c</sup>	.04	.16 <sup>b</sup>	20 <sup>c</sup>	.002	.11 <sup>a</sup>
Mother	08	.21°	90.	.23°	15	02	60.
Father	04	.31°	90.	.24 <sup>a</sup>	90.	25 <sup>b</sup>	.03
Daily amount TV turned on in home	19 <sup>c</sup>	.22°	.02	.03	11 <sup>a</sup>		.17

Daily an

a	p<.05
b	p<.01
c	p<.001