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Children's Parasocial Breakups With Media Characters From the Perspective of the Parent

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Abstract

Children's parasocial relationships (PSRs) with media characters end through a process called PSR breakups. An online parent report measure was used to describe preschool and school-aged children's breakups with media characters, as well as the attributes of past and current favorite characters. According to parents ($N = 138$), 51% of children experienced PSR breakups. PSRs lasted about two years before a breakup occurred. Past and current favorite characters were animated, human-like, and embedded in fantastical content. Current favorite characters taught fewer academic lessons than past favorite characters. Both boys and girls had current favorite characters that were more gendered in their physical appearance than past favorite characters. However, girls' current favorite characters had more masculine traits than past favorite characters. Our findings suggest possible avenues for the design of future media characters that can teach as they entertain.

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Friendships play a central role in children's lives. Having high-quality friendships is associated with children's sense of well-being (Hartup & Stevens, 1999; Rubin, Bowker, McDonald, & Menzer, 2013) and predicts adaptive social, emotional, and academic functioning in childhood (Cauce, 1986; Rubin et al., 2013). Although most friendship research has focused on relationships with real peers, there is growing evidence that children's imaginary friendships should be included in the discussion of children's social networks (Calvert, 2017; Giles, 2002; Gleason, 2013; Taylor, 1999). In particular, parasocial relationships (PSRs)—the one-sided, emotionally tinged friendships children develop with media characters—are often experienced in ways that parallel real friendships, affording opportunities for attachment, trust, and emotional security, as well as options for academic and social learning (Bond & Calvert, 2014a; Calvert et al., 2018; Coyne, Linder, Rasmussen, Nelson, & Birkbeck, 2016; Richards & Calvert, 2016, 2017; Richert, Robb, & Smith, 2011a; Rosaen, Sherry, & Smith, 2011).

The link between PSRs and learning of both academic (e.g., Calvert, Richards, & Kent, 2014; Gola, Richards, Lauricella, & Calvert, 2013) and gendered knowledge (e.g., interests and play; Coyne et al., 2016) highlights the powerful role media characters can play in promoting educational and social development in young children (Calvert, 2017). However, the window for optimal learning from favored media characters remains unknown. Just as children's real friendships come to an end, PSRs with media characters end through a process called parasocial breakups (Bond & Calvert, 2014b; Cohen, 2003).

The purpose of the current study was to expand existing knowledge of preschool and school-aged children's PSRs and breakups via parent report. Using an online parent report measure (Bond & Calvert, 2014b), we describe the duration of PSRs, the frequency and reasons for PSR breakups, and the characteristics of former and new favorite characters.

Young Children's PSRs: Definition and Measurement

For children in the United States, there are numerous on-demand opportunities to view and to interact with media characters through mobile apps, websites, television programs, and films (see Common Sense Media, 2017). Through parental encouragement, toy play, and repeated media exposure, many young children develop an emotional bond with a media character, known as a PSR (Bond & Calvert, 2014a). According to parent reports of their preschool-aged

children, PSRs with media characters are multidimensional constructs, consisting of feelings of attachment and character personification (e.g., perceiving the character as a safe and trusted friend), social realism (e.g., perceiving the character as lifelike), and humanlike needs (i.e., viewing the character as having physical and psychological needs; Richards & Calvert, 2016). By about ages 5 to 8, parent reports also revealed that character qualities (perceiving the character as attractive, intelligent, nice, and strong) emerged as a new dimension of PSRs (Aguiar, Richards, Bond, Brunick, & Calvert, 2018).

Preschool and school-aged children are typically measured as having a PSR if a media character can be named as the child's favorite (Hoffner, 1996; Richards & Calvert, 2017; Rosaen & Dibble, 2008; Rosaen et al., 2011). Parent reports are often used to assess young children's PSRs with a favorite character for two main reasons. One is that parents report on children's relationships with favorite media characters in ways that are similar to children's reports; the other is that parent reports are more internally consistent than those of their young children (Richard & Calvert, 2016). Parent reports have also been used to assess children's parasocial breakups with favorite characters (Bond & Calvert, 2014b), which is a focus here.

Young Children's Early Relationships and PSRs

Children develop in a social world that includes vertical and horizontal relationships (Hartup, 1989). Social skills emerge in vertical relationships, such as those initially formed with parents and later their schoolteachers. Social skills are elaborated upon in horizontal relationships that involve friendships with peers (Hartup, 1989). Both vertical and horizontal relationships also occur in children's relationships with media characters (Calvert, 2015, 2017). A key component of close relationships—be it horizontal or vertical—involves trust, which is a component of attachment with actual people as well as with imaginary relationships (Bond & Calvert, 2014a; Bowlby, 1969; Corriveau & Harris, 2009; Gleason & Hohmann, 2006).

Children's early friendships with peers and media characters have numerous parallels that are characteristic of horizontal relationships. Specifically, children's friendships emerge early in life (Howes, 1983), as do children's initial relationships with favorite characters (Bond & Calvert, 2014a). Early friendships are characterized by feelings of affection and support (Furman & Bierman, 1983), as are children's PSRs (Bond & Calvert, 2014a; Richards & Calvert, 2016, 2017). Children view friends as someone to play activities with (Furman & Bierman, 1983), and toy versions of children's television characters provide them with toys that reinforce their *friendships* with media characters as early playmates (Bond & Calvert, 2014a; Calvert & Richards, 2014). Young children dissolve friendships and form new ones (Poulin & Chan, 2010), as they do with their favorite media characters (Bond & Calvert, 2014b).

Children's learning is influenced by vertical relationships with people and media characters that they trust. More specifically, feelings of attachment and trust are linked to young children's learning of educational content, in part because the adults and characters are perceived as more credible. Corriveau and Harris (2009) found that when faced with uncertainty, 3-year-old children selected a known teacher who had previously labeled objects inaccurately over an unknown teacher who had previously labeled objects accurately; if teachers were both familiar and accurate, 4-year-old children found them to be particularly trustworthy (Corriveau & Harris, 2009). Consistent with these findings, 4-year-old children learned educational content from animated media characters better when they trusted them (Schlesinger, Flynn, & Richert, 2016) or had stronger feelings of attachment and friendship, including trust, for the character (Calvert et al., 2018).

Children's perceptions of a character's social realism, a component of PSR, also influences their learning. For example, Richert, Shawber, Hoffman, and Taylor (2011b) assessed preschool-aged children's analogical transfer based on information presented via an orally presented storybook. Younger, but not older, preschool-aged children's analogical transfer was stronger when the main character was a real human protagonist rather than an animated or puppet character. The human characters included children's teachers or a peer, while the animated and puppet characters were familiar nonhuman animated monster characters, a nonhuman bear puppet, or an animated boy fairy (Richert et al., 2011b). These findings suggest the value of real over fantasy characters for analogical reasoning tasks, whether the real character is in a vertical (teacher) or a horizontal (peer) relationship with young preschool-aged children. While potentially promising, these kinds of teaching opportunities by peers are unlikely to be available in real-life teaching situations, including videos designed to teach young children.

Problems in early peer teaching of academic content occur, in part, because being an effective teacher requires the ability to assess how to best communicate with learners and how to gauge interactions so that the lesson focuses on content in developmentally appropriate ways. These kinds of skills are beyond the competencies of young children and their friends, but not beyond the competencies of media characters who are treated as children's friends, and who are controlled by adults who do have the skills to teach. Put another way, children can form relationships with media characters, which feature both the closeness of a horizontal peer relationship, and the teaching skills found in an adult vertical relationship. Moreover, children can engage in parasocial interactions with characters, where the child interacts with characters by mimicking the give and take of a conversation through questions, comments, and pauses programmed into the character's dialogue, which can lead to enhanced learning (Lauricella, Gola, & Calvert, 2011).

In preschool-aged children, the development of PSRs with media characters dovetails nicely with the proliferation of educational and prosocial content designed for children of this age (Piotrowski, Jennings, & Linebarger, 2013). Specifically, television networks like PBS Kids® create high-quality content designed to educate as they entertain (Kirkorian & Anderson, 2008; Piotrowski et al., 2013). However, educational and prosocial programs designed for older children typically do not garner a large enough audience to be financially viable, even though children learn from them (Calvert & Kotler, 2003). Instead, by middle childhood, children prefer programs with social-emotional themes, which are usually entertainment focused (Calvert & Kotler, 2003). These findings suggest that preschool may be a particularly important time to promote educational lessons via the media, which may be optimized when children have a close, emotionally tinged PSR with the characters.

PSRs and Gender Socialization

Throughout development, children come to understand who they are and the roles they are expected to fulfill. One key component of this understanding involves gender identity, the knowledge of being a boy or a girl, which can influence behaviors, attitudes, relationships, and social roles (Bem, 1993; Kohlberg, 1966). Parents (e.g., Halim et al., 2014), peers (e.g., Martin et al., 2013), and media characters (e.g., Coyne et al., 2016) can serve as agents that teach children about gender.

According to Kohlberg's (1966) theory, children's concepts of gender are most rigid during the preschool period, a time in which children begin to understand that a person's gender remains stable over time. This phase of gender development is associated with increases in gender-stereotyped knowledge, positive in-group evaluation, and rigidity in gender appearance (Halim et al., 2014; Ruble et al., 2007). Studies of preschool-aged children's PSRs with media characters have shown that much like children's friendships with real peers (Aboud & Mendelson, 1996; Hartup, 2006), children typically prefer media characters of the same gender (Bond & Calvert, 2014a; Jennings & Alper, 2016). Boys are also more rigid than girls in their selection of favorite characters (Bond & Calvert, 2014b; Jennings & Alper, 2016). One possible explanation for these gender differences is that boys are under more pressure to conform to gender roles than girls are, given the value that is placed on male roles in U.S. culture (Bond & Calvert, 2014a; Ruble & Martin, 1998). Another is that there are simply more male than female characters in television programs (Signorielli, 2012).

During the early grade school years, children develop gender constancy (Kohlberg, 1966), the understanding that gender will not change based on activity or appearance (e.g., a girl will not become a boy if she gets a short haircut; Ruble et al., 2007). With knowledge of gender constancy comes more flexibility in children's gender-stereotyped beliefs and more freedom to violate gender

norms (Huston, 1983; Ruble et al., 2007). However, media characters are often represented in stereotypical ways, which can reinforce the gender-stereotyped schemas that children hold about who matters and what they can do (Calvert, 2015; Calvert & Huston, 1987). For instance, in young children's media, female characters are portrayed less frequently and speak less often compared with males (Aubrey & Harrison, 2004). Disney® princesses and superheroes have traditionally been depicted in gender-stereotyped ways, such as the feminine damsel in distress rescued by the masculine hero (Coyne, Linder, Rasmussen, Nelson, & Collier, 2014; Coyne et al., 2016).

Physical appearance is also gender stereotyped, with female roles often based on how a character looks, which parallels off-screen experiences where a female's value can often be associated with her physical appearance (Glick, Larsen, Johnson, & Branstiter, 2005; Stone, Brown, & Jewell, 2015). Reflecting this cultural stereotype, a content analysis found strong emphasis on physical appearance for female characters compared with male characters in media directed toward older children (Gerding & Signorielli, 2014). Characters that are perceived as cute are also a facet of young children's PSRs, particularly for young girls (Richards & Calvert, 2017).

As children mature, they are more likely to gravitate toward different characters that are the same gender, particularly for boys (Bond & Calvert, 2014b; Jennings & Alper, 2016). Because media characters have traditionally been depicted in ways that conform to gendered stereotypes, boys and girls may be attracted to more gendered media characters as they age—both in appearance and in the gendered traits displayed. However, recent depictions, such as those of Disney® Princesses, suggest that female characters are being portrayed in nontraditional ways (e.g., Merida™ from the film "Brave®" and Moana™ from the film "Moana®"). Thus, older girls might choose media characters with nontraditional personality characteristics due to emerging female characters (Smith, Choueiti, Prescott, & Pieper, 2012).

Children's PSR Breakups With Media Characters

Children's friendships with real peers can last for years—if not a lifetime—but it is not unusual for friendships to end at any time over the course of development (Poulin & Chan, 2010; Rubin et al., 2013). By contrast, children's learning from a favorite character through a close emotionally tinged social bond might be short-lived. A parent report study by Bond and Calvert (2014b), for example, demonstrated that 41% of children ages 2 to 8 years old had experienced a PSR breakup with a favorite media character. For those parents who had observed a PSR breakup by their children, the reasons included outgrowing the character (50%; e.g., character became too *babyish*), interest in a new character (16%; e.g., saw a new movie and changed interests), lost interest due to too much repetition of the content (10%; e.g., had seen every episode multiple times), familial

influence (6%; e.g., a parent was not a fan), a change in the media source (6%; e.g., changes in program scheduling), peer pressure (4%; e.g., peer group all liked the same character), and unknown reasons (8%). One reason that young children may outgrow their favorite media character is that animated characters remain the same age and developmental level (Bond & Calvert, 2014b); by contrast, children are rapidly growing physically, socially, and cognitively (Phillips & Shonkoff, 2000). This discrepancy in age and developmental maturity between children and their favorite characters may make characters that are younger looking and acting less effective social partners. As a result, parasocial breakups could occur in which old favorite characters are replaced with new ones (Bond & Calvert, 2014b).

Reasons for breaking up with characters also change with age. Parents reported that outgrowing the character was the main reason for a PSR breakup for 2- to 8-year-old children (Bond & Calvert, 2014b), but Rosaen and Dibble (2008) found that 5- to 12-year-old children were more likely to have PSRs with media characters that were judged as being higher in social realism, based on whether or not the characters looked and behaved like real people. Animated characters and characters that possessed qualities or abilities that deviated from reality (e.g., having special powers) were coded as having lower levels of social realism. Thus, as children age, they may be more likely to experience breakups with media characters that are embodied as entities other than people (e.g., anthropomorphized animals and objects) and gravitate toward real actors in live-action programs, as opposed to animated characters in an animated series. Children might also be drawn over time to characters from media sources that feature more realistic content (e.g., a situation comedy) rather than sources with high levels of fantasy content. Put another way, as children age, their selection of favorite characters may be changing in response to maturing social and cognitive needs, as well as in their understanding of relationships.

The Current Study

The purpose of this study was to examine descriptive changes in parent perceptions of children's PSR breakups at two points in time. We were particularly interested in the duration of PSRs before breakups occurred, as well as in changes in the characteristics of media characters as children breakup and forge new relationships with different media characters. Based on the extant literature, PSR breakups were of interest in terms of their implications for academic learning and gender socialization.

Our research questions were as follows: RQ_1: According to parents, how many preschool- and school-aged children experience PSR breakups? RQ_2: According to parents, how long do PSRs last before a breakup occurs, and what reasons do parents give for children's breakups? RQ_3: In what ways are the characteristics of past and current favorite media characters similar and in

what ways do they differ? RQ_4: Are children attracted to more gender-typed characters as they age? RQ_5: Does the source of media content (e.g., fantastical content, educational content) for children's past and current favorite media characters differ?

Method

Participants

Our participant pool consisted of 282 U.S. parents living in the Washington, D.C. metropolitan area who had participated in two earlier studies of children's PSRs (Bond & Calvert, 2014a, 2014b; Richards & Calvert, 2016). Of the 282 recontacted parents, 156 agreed to participate (55.32% retention rate; 74.4% from Bond & Calvert, 2014b and 25.6% from Richards & Calvert, 2016). Eighteen of these parents were excluded from the analyses, 8 because they agreed to participate but did not provide any data, and 10 because they reported that their child had stopped liking a media character but reported on multiple media characters across different programs and could not be coded (e.g., one parent reported that the child has stopped liking Thomas the Tank Engine™, Mickey Mouse™, Hello Kitty™, and Spiderman™). Of the children with multiple breakup characters, 8 were girls and 2 were boys.

Our final sample consisted of 138 recontacted parents (*mean child age*[1] = 6.56 years, $SD = 1.34$, age range = 3.25 years – 9.16 years; 72 boys and 66 girls). Parents identified children as 69.6% Caucasian, 19.6% as mixed or other ethnicities, 4.3% as African American, 4.3% as Asian, 1.4% as Hispanic or Latino, with 0.7% not reported. Parents provided information on their children's breakups with media characters approximately 3 years after their initial participation in the earlier studies ($M = 3.02$ years, $SD = 0.50$ years).

Parent PSR Measure

The Parent PSR measure developed by Bond and Calvert (2014a, 2014b) was adapted for use in this study. This PSR measure assesses young children's experiences with past and current favorite media characters. In the survey, parents were asked to provide the names and media sources (e.g., name of the television show) of children's current favorite media characters and children's past favorite media characters. The child's name and media character names were integrated into questions about past favorite media characters such as (a) the ages in which children started and stopped liking the media character (i.e., "How old was [child's name] when [child's name] began liking [character's name]? How old was [child's name] when [child's name] stopped liking [character's name]?); (b) reasons for PSR breakups on 5-point agree/disagree Likert scales (e.g., [Child's name] got tired of [character's name] after high levels of

exposure to [character's name]," with "1" indicating *strongly disagree* and "5" indicating *strongly agree*); (c) rank-ordered items indicating the *most important* reasons for children's PSR breakups with media characters (e.g., "[Child's name] outgrew [character's name]. [Child's name] got bored with [character's name]."); and (d) children's attitudes toward past favorite media characters on 5-point Likert scales (e.g., "How does [child's name] feel about [character's name] now?" with "1" indicating *strongly dislikes the character*, "3" indicating *indifferent to the character*, and "5" indicating *strongly likes the character*.

Procedure

U.S. parents who had originally participated in the two separate studies of young children's PSRs (Bond & Calvert, 2014a, 2014b; Richards & Calvert, 2016) were recontacted via e-mail with an invitation to participate in this follow-up study. The e-mail invitation provided a link to an online questionnaire, which was administered via Qualtrics software (Qualtrics Research Suite©, 2017). This assessment procedure was consistent with the prior PSR survey administrations (Bond & Calvert, 2014a, 2014b; Richards & Calvert, 2016).

The online survey began with an informed consent form, which parents signed electronically to participate. Parents were first given the name of the child that they had previously reported on and whether or not their child had a favorite media character when they were first surveyed (e.g., "When you completed our original study, you indicated that [child] . . . "). Parents were then asked if their child had a current *favorite* media character. If parents responded affirmatively, they answered questions about their child's experiences with the current favorite media character. All parents (irrespective of whether or not their child had a current favorite media character) were asked if their child had ever stopped liking a media character. In a single question, parents were asked, "Has your child ever stopped liking a media character that was ever important to him/her?" If they responded affirmatively, parents answered questions about their child's *breakup* with that character. All questions were presented in unique, randomized orders.

Participants were entered into a drawing to win a $150 Amazon gift card as compensation for participation. Gift cards were awarded to six randomly selected participants.

Coding

A primary research assistant coded the entire sample of programs for parent-reported media characters on physical characteristics, the source of media content, and gender-typed traits. A reliability coder independently rated 22% of the sample; reliability for categorical variables was assessed using Cohen's kappa (κ); and reliability for continuous variables was assessed using Cronbach's alpha (α).

In this study, we were particularly interested in the animation and physical embodiment of characters based on past research examining children's analogical transfer from fictional characters versus real people (Richert et al., 2011b). Given that children's storybooks often include anthropomorphized animals (Richert et al., 2011b), we were interested in the extent to which children's past and current favorite media characters were embodied in more or less fantastical ways (i.e., animated compared with live-action, human compared with anthropomorphized animals and objects). We were also interested in providing some preliminary information about the types of media characters that are popular among younger and older children based on what might be available to them. For instance, are younger children more likely to gravitate toward animated, anthropomorphized animals than older children are? Thus, the following physical characteristics were coded using still images of each character that were obtained from a Google Image search (www.google.com): (a) animation (animated or live-action), Cohen's $\kappa = 1.00$; (b) physical embodiment (i.e., object-like, animal-like, person-like, or "other"), Cohen's $\kappa = .93$; and (c) gender (male or female), Cohen's $\kappa =$. 1.00. Images for media characters were identified based on parents' references to the specific media sources (e.g., Batman™ from the "Lego Batman/Lego Movie").

Coders rated the gender-typed appearance of each media character using a continuous –2 to +2 semantic differential scale (see Bond & Calvert, 2014b). Scores at the negative end of the distribution indicated a hypermasculine appearance, and scores at the positive end of the distribution indicated a hyperfeminine appearance; scores near zero indicated a gender-neutral appearance, Cronbach's $\alpha = .98$.

The approximate age of media characters in years was coded based on descriptions of the characters obtained through independent online searches. Coders read brief descriptions of each character and their source using the online Google search engine. Descriptions were independently obtained from Internet sources such as Wikipedia (www.wikipeida.org), IMDb (www.imdb.com), Common Sense Media (www.commonsensemedia.org), and PBS KIDS® (www.pbskids.com). If no information about a character's age could be obtained, coders were asked to estimate age based on a still image of the character, Cronbach's $\alpha = .88$.

Based on the brief descriptions, coders categorized whether or not the media source made explicit claims to teach academic skills complementing the learning that takes place in schools (e.g., claiming to teach children about numbers, letters, early science concepts), Cohen's $\kappa = .90$. Coders used descriptions of the characters' sources to code whether or not the media source contained any fantastical content (e.g., a completely reality-based program like a situation comedy, or a program that contained fantastical elements, such as animated animals that can talk), Cohen's $\kappa = .94$.

To code for gender-typed traits, we followed the procedure of Bond and Calvert (2014b) and adapted the self-report Bem Sex-Role Inventory Short Form (1981). Characters were coded on 10 traditionally masculine traits (e.g., assertive, dominant, independent) and 10 traditionally feminine traits (e.g., gentle, understanding, warm). Coders rated the characters on 4-point Likert scales, where "0" indicated *not at all* and "3" indicated *very*. Raw scores from each coder were averaged to create composite scores for traditionally masculine traits and traditionally feminine traits. These composite scores were then used to assess reliability on traditionally masculine and feminine traits, Cronbach's $\alpha = .81$ and Cronbach's $\alpha = .85$, respectively.

Results

RQ_1: How Many Preschool- and School-Aged Children Experience PSR Breakups?

Descriptive statistics revealed that approximately half of parents (50.7%) indicated that their children had experienced a PSR breakup with a single favorite media character. There were no age differences associated with PSR breakups. However, there was a trend for a gender difference in PSR breakups, χ^2 (1, $n = 138$) = 3.54, $p = .06$, Cramer's $V = 0.16$. For girls, 59.1% of parents indicated that their child had experienced a PSR breakup compared with 43.1% of boys. Parents of girls were also more likely to report that their child had a new current favorite media character (67.7%) compared with parents of boys (51.4%), χ^2 (1, $n = 137$) = 3.76, $p = .05$, Cramer's $V = 0.16$. According to parents, girls were more likely than boys to experience parasocial breakups and to form new relationships with different media characters. Table 1 presents the names of the children's initial favorite characters, of the characters that children broke up with, and of their current favorite characters, as per parent report.

Of all media characters parents named, Dora the Explorer™ from the popular children's educational television program was the most common past favorite media character reported by parents. Approximately 26% of parents indicated that their children ($n = 18$, 14 girls and 4 boys) had stopped liking Dora™, as their favorite character, perhaps because she was initially one of the most popular characters ($n = 14$; 10 girls and 4 boys)[2] in earlier studies (Bond & Calvert, 2014a; Richards & Calvert, 2016), thereby making it more likely that children would breakup with her than with less popular characters.

RQ_2: According to Parents, How Long Do Children's PSRs Last Before a Breakup Occurs and What Reasons Do Parents Give for PSR Breakups?

To examine the duration of children's PSRs before a breakup occurred, we calculated a duration score by subtracting the parent-reported age of children

Table 1. Children's Original Favorite Characters, Broken Up With Characters, and Current Favorite Media Characters Named by Parents.

Original ($n = 101$)	Breakup ($n = 70$)	Current ($n = 81$)
Anakin Skywalker ($n = 1$)	Arthur ($n = 1$)	Ally from Austin & Ally ($n = 1$)
Backyardigans ($n = 1$)	Barbie ($n = 1$)	Barbie ($n = 2$)
Barbie ($n = 2$)	Ben 10 ($n = 1$)	Batman ($n = 2$)
Barney ($n = 1$)	Blue ($n = 1$)	Big Time Rush ($n = 2$)
Belle ($n = 1$)	Bubble Guppies cast ($n = 1$)	Chase ($n = 1$)
Blue ($n = 1$)	Buddy ($n = 1$)	Chloe ($n = 1$)
Bob the Builder ($n = 2$)	Buzz Lightyear ($n = 1$)	Curious George ($n = 1$)
Buddy ($n = 1$)	Caillou ($n = 2$)	Diego ($n = 1$)
Buzz Lightyear ($n = 1$)	Character in My Little Pony ($n = 1$)	Dinosaur Train ($n = 1$)
Chloe ($n = 1$)	Cinderella ($n = 1$)	Doc McStuffins ($n = 1$)
Cinderella ($n = 3$)	Curious George ($n = 2$)	Dora the Explorer ($n = 1$)
Curious George ($n = 7$)	Darth Maul ($n = 1$)	Elena of Avalon ($n = 1$)
Darth Vader ($n = 1$)	Diego ($n = 1$)	Elsa ($n = 8$)
Diego ($n = 1$)	Dora ($n = 18$)	Ezra ($n = 1$)
Doc McStuffins ($n = 1$)	Elmo ($n = 5$)	Fairy ($n = 1$)
Dora the Explorer ($n = 14$)	Elsa ($n = 5$)	Gil from Bubble Guppies ($n = 1$)
Elmo ($n = 5$)	Geo ($n = 1$)	Girl Meets World ($n = 1$)
Elsa ($n = 2$)	Handy Manny ($n = 1$)	GoldieBlox ($n = 1$)
Fresh Beat Band ($n = 1$)	Jake from the Neverland Pirates ($n = 2$)	Harry Potter ($n = 1$)
Geo ($n = 1$)	Kai Lan ($n = 1$)	Hermione Granger ($n = 1$)
Lightning McQueen ($n = 6$)	Lightning McQueen ($n = 4$)	Jake and the Never Land Pirates ($n = 2$)
Maisy ($n = 1$)	Max and Ruby ($n = 1$)	Jessica Ruiz ($n = 1$)
Martin from Wild Kratts ($n = 1$)	Mickey Mouse ($n = 4$)	Jessie ($n = 2$)
Max & Ruby ($n = 1$)	Molly (bubble guppy; $n = 1$)	Kylo Ren ($n = 1$)
Mickey Mouse ($n = 8$)	Peppa Pig ($n = 1$)	Luke Skywalker ($n = 1$)
Ming Ming ($n = 1$)	Phineas ($n = 1$)	Darth Mal ($n = 1$)
Olivia ($n = 1$)	Pippi Longstocking ($n = 1$)	Maleficent ($n = 1$)
Pablo from Backyardigans ($n = 1$)	Princess Pea ($n = 1$)	Martin ($n = 1$)
Peppa Pig ($n = 2$)	Sofia the First ($n = 1$)	Maya (from Girl Meets World; $n = 1$)
Perry ($n = 2$)	Spiderman ($n = 1$)	Mega Charizard X ($n = 1$)
Phineas ($n = 1$)	Team Umizoomi ($n = 1$)	Mickey mouse ($n = 1$)
Princess Pea ($n = 1$)	Thomas the Train ($n = 5$)	Minnie Mouse ($n = 1$)
Princess Tiana ($n = 1$)	Tinker Bell ($n = 1$)	Ms. Frizzle ($n = 1$)

(continued)

Table 1. Continued.

Original ($n = 101$)	Breakup ($n = 70$)	Current ($n = 81$)
Rachel Berry ($n = 1$)	No character broken up with ($n = 68$)	My Little Pony ($n = 2$)
Rocket from Little Einsteins ($n = 1$)		Octonauts ($n = 1$)
Scooby Doo ($n = 1$)		PAW Patrol ($n = 2$)
Sean from Journey 2 ($n = 1$)		Peppa Pig ($n = 1$)
Sofia the First ($n = 2$)		Pikachu ($n = 2$)
Spiderman ($n = 3$)		Pinkie Pie ($n = 1$)
SpongeBob SquarePants ($n = 3$)		Pokémon ($n = 2$)
Strawberry Shortcake ($n = 3$)		Power Rangers ($n = 1$)
The Hulk ($n = 1$)		Princess Tiana ($n = 1$)
The Wiggles ($n = 1$)		Rey ($n = 1$)
Thomas the Train ($n = 4$)		Robin from Teen Titans ($n = 1$)
KoKo and Brewster ($n = 1$)		Scooby Doo ($n = 1$)
Tigeress ($n = 1$)		Sofia the First ($n = 2$)
Tinkerbell ($n = 2$)		Spiderman ($n = 1$)
Toothless ($n = 1$)		SpongeBob SquarePants ($n = 2$)
No original favorite ($n = 37$)		Steve from Minecraft ($n = 1$)
		Superheroes ($n = 1$)
		Teenage Mutant Ninja Turtles ($n = 2$)
		The Hulk ($n = 2$)
		The Inquisitor from Star Wars ($n = 1$)
		Thomas the Train ($n = 1$)
		Toothless ($n = 1$)
		Tweety bird ($n = 1$)
		Twilight Sparkle/My Little Pony ($n = 2$)
		Wild Kratts – Chris Kratt ($n = 2$)
		Wonder Woman ($n = 1$)
		No current favorite ($n = 57$)

when they started liking former favorite media characters from the parent-reported age of children when they stopped liking a media character as their favorite. On average, parents reported that children's PSRs lasted 2.16 years (median = 2.00 years, $SD = 1.00$ year, range = less than 1 year – 4 years; $N = 69$).

The duration of children's PSR was positively correlated with age, $r = .45$, $p < .001$. Older children were more likely to sustain PSRs with their favorite media characters for a longer period of time. No gender differences were found.

Consistent with the findings of Bond and Calvert (2014b), parents mainly chose outgrowing a media character as the reason for their children's breakups with a favorite character (63.8%), followed by interest in another character (17.4%). Consistent with Bond and Calvert (2014b), boredom with the character (10.1%), peer influence (4.3%), and family influence (4.3%) were cited less often by parents as causes for breakups. No parents in our sample chose changes in the media source (e.g., program changed or ended) as a reason for children's PSR breakups, perhaps reflecting the continuity that is now provided in on-demand/streaming platforms.

In the current follow-up study, parents were also asked to rate their children's attitudes about past favorite media characters, as well as reasons for the break-up on 5-point Likert scales. Sixty-six percent of parents indicated that their children largely felt indifferent to past favorite media characters.

Children's feelings about past favorite characters were associated with other attitudes and causes for the termination of the relationship. According to parents, the more likely children were to view past favorite characters as being *for babies*, the less positively they felt about these characters, $r = -.38$, $p = .001$. Parents who viewed their children as more likely to think of past favorite characters as being *for babies* were also more likely to indicate that peers influenced the termination of the relationship, $r = .46$, $p < .001$ and felt less positive about past favorite characters when peers had influenced the termination of the relationship, $r = -.28$, $p = .02$. There were no significant associations with age or gender on these items.

RQ3: In What Ways Are the Characteristics of Past and Current Favorite Media Characters Similar and in What Ways Do They Differ?

According to parents, 70 children had experienced a breakup with a media character (51%, 31 boys and 39 girls). Of these children, 44 also had a current favorite media character (as reported by parents; 16 boys and 28 girls). Thus, our sample for comparing past and current favorite media characters consisted of 44 children (mean age = 6.69 years, $SD = 1.29$ years, range 3.48 years – 8.85 years).

Overall, past favorite characters and current favorite media characters shared several similarities. McNemar tests indicated that both past favorite characters and current favorite characters were more likely to be animated than live-action characters, and more likely to be person-like, compared with all other embodiment categories, χ^2 (1, $n = 40$) = 1.79, $p = .18$, $\phi = -.19$, odds ratio = 2.5, and χ^2 (1, $n = 40$) = 0.00, $p = 1.00$, $\phi = .004$, odds ratio = 1.1, respectively. By contrast, past favorite media characters were judged by coders as looking significantly younger on average ($M = 11.86$ years, $SD = 8.05$) than current favorite media characters ($M = 16.23$ years, $SD = 7.79$), $t(43) = -2.42$, $p = .02$, $d = 0.37$.

RQ_4: Are Children Attracted to More Gender-Typed Characters as They Age?

Characters' gender. Overall, parents reported that their children were attracted to media characters that matched their children's gender (81.8% across past and current favorite media characters). However, 20.5% ($n = 9$) of past favorite media characters were the opposite gender of children compared with only 2.3% ($n = 1$) of children's current favorite media characters. Thus, parents reported that their children were more attracted to gender matched characters over time.

We were interested in the extent to which children preferred more gender-typed characters, in both the appearance and in the traits that the character displayed. We compared coder judgments of past and current favorite characters on gender-typed appearance using the –2 (hypermasculine) to +2 (hyperfeminine) semantic differential scale. Because of the discrepancy in the number of boys ($n = 16$) and girls ($n = 28$) with both past and current favorite media characters, we conducted paired samples t tests examining changes in the gender-typed appearance of past and current favorite media characters within each gender.

For boys, current favorite media characters were more masculine looking ($M = –0.81$, $SD = 0.75$) than past favorite characters ($M = –0.13$, $SD = 0.81$), $t(15) = 2.11$, $p = .05$, $d = 0.53$. For girls, current favorite media characters were significantly more feminine looking ($M = 1.50$, $SD = 0.79$) than past favorite characters ($M = 0.75$, $SD = 0.97$), $t(27) = –2.83$, $p = .009$, $d = 0.53$.

We also compared past and current favorite media characters using the adapted Bem Sex-Role Inventory Short Form of traditionally feminine and masculine traits. For boys, there were no changes in either feminine or masculine traits from past favorite characters to current favorite media characters, $t(15) = 0.67$, $p = .51$, and $t(15) = –0.50$, $p = .63$, respectively. For girls, however, there were significant changes in both feminine and masculine traits from past to current favorite media characters, $t(27) = 3.06$, $p = .005$, $d = 0.58$, and $t(23) = –2.92$, $p = .007$, $d = 0.55$, respectively. Girls' current favorite media characters were rated as significantly *less feminine* and significantly *more masculine* on personality traits than past favorite characters.

RQ_5: Does the Source of Media Content (e.g., Fantastical or Educational Content) of Children's Past and Current Favorite Media Characters Differ?

Given that children are less likely to learn from fantastical than realistic content (Richert et al., 2011b), we were particularly interested in how the sources of children's past and current favorite media characters overlap with both academic and fantastical content.

Past favorite media characters, as reported by parents, were more likely to be embedded in sources claiming to teach academic skills than current favorite

media characters were, χ^2 (1, $n = 44$) = 13.14, $p < .001$, $\phi = .10$, odds ratio = 10.0. According to parents, 54.5% of children's past favorite media characters were embedded in sources that claimed to have academic content compared with only 13.6% of current favorite media characters.

Within children's reported past favorite media characters, those who were in sources claiming to teach academic skills were often embodied as people (62.5%), although they were rated as looking significantly younger ($M = 7.33$ years, $SD = 4.43$ years) than characters that were not embedded in academic content ($M = 17.30$ years, $SD = 8.12$ years), $t(28.17) = 4.91$, $p < .001$, $d = 0.74$ (e.g., Elmo™ from "Sesame Street®" vs. The Teenaged Mutant Ninja Turtles™). Past favorite characters that were embedded in academic content were also rated as having significantly more feminine traits ($M = 2.67$, $SD = 0.29$) than characters that were not embedded in academic content ($M = 2.02$, $SD = 0.87$), $t(22.60) = -3.19$, $p = .004$, $d = 0.48$.

Descriptive analyses based on parents' reports indicated that almost all favorite characters (88.6%) were embedded in fantastical content. The current favorite media characters that were not embedded in fantastical content ($n = 8$; 18.2%) were often live action television programs featuring teenaged characters (e.g., Disney's® "Girl Meets World" and Nickelodeon's® "Big Time Rush").

Because the majority of characters (both past and current) were embedded in fantastical content, there were no associations between fantastical content and academic content. All of children's past favorite media characters that were from sources claiming to teach academic skills were also embedded in sources containing fantastical content ($n = 24$; 100%). Five out of the six current favorite media characters that were embedded in academic content were also embedded in content containing fantastical elements (83.3%). In other words, fantastical content was prevalent across academic and nonacademic sources.

Summary of Findings

According to parent report, the majority of children (51%) experienced a PSR breakup after about two years, now typically feeling indifferent to a prior favorite character. Characters that children broke up with were more likely to be embedded in educational content than current favorite characters were. New favorite characters were more gender-typed and embedded in entertainment-focused content. All favorite characters—past and present—were more likely to be embedded in media sources with fantastical content. Girls were more likely to break up with and to form new PSRs than boys were. Both boys and girls preferred same-gender characters that were embodied in male and female bodies, respectively, but girls' new favorite characters were portrayed with more masculine personality characteristics than their previous favorites.

Discussion

In our media-rich culture, many young children develop one-sided, emotionally tinged PSRs with media characters (Bond & Calvert, 2014a). Like children's friendships with real peers, PSRs with media characters afford trust, emotional security, and enhanced learning opportunities from digital media (Bond & Calvert, 2014a; Calvert et al., 2018; Richards & Calvert, 2016, 2017; Rosaen et al., 2011). Close PSRs with media characters also influence gender socialization in early and middle childhood (Bond & Calvert, 2014b; Calvert, 2017).

As is true of other real and imaginary friendships, PSRs do not last indefinitely (Bond & Calvert, 2014b; Cohen, 2003; Poulin & Chan, 2010; Taylor, 1999). When PSRs end through parasocial breakups (Bond & Calvert, 2014b; Cohen, 2003; Eyal & Cohen, 2006), the dissolution of these relationships has implications for children's learning of educational content and gender socialization.

Frequency of PRS Breakups

According to parents, 51% of children ages 3-9-years-old experienced a PSR breakup with a media character. Compared with Bond and Calvert's (2014b) initial findings, this is a 10% increase in the incidence of PSR breakups over the course of the 3-year period. The frequency of PSR breakups in this sample could reflect an increase in children's media exposure in the later preschool and early school-age years (Common Sense Media, 2017). For instance, in the initial study by Bond and Calvert (2014b), children's media exposure was positively correlated with the number of PSR breakups; according to parents, children who spent more time consuming digital media on a weekly basis were more likely to experience a PSR breakup. This increase could also reflect broader changes in the role PSRs play in the lives of older children. A study by Rosaen and Dibble (2008) found that older children had weaker parasocial interaction with media characters compared with younger children, suggesting that as children's real social networks expand, the roles of their imaginary social partners diminish.

Our findings, however, might underestimate the frequency with which parasocial breakups occur in older children. A parent report study indicated that as many as 77% of children forged new PSRs with different media characters over the course of a 3-year period (Aguiar et al., 2018). The increase in PSRs with new media characters over time suggests that many former favorite media characters might be dropped entirely, gradually fade away, or remain a *friend* to children—just not their favorite friend. Our findings also suggest that continued interest in media characters over time likely depends on the characteristics of the media characters. For instance, media characters that have more babyish features (e.g., Barney™) could be more likely to be *actively* discarded than media characters that are more mature looking (e.g., Lightening McQueen™ from the

film "Cars®"). Because PSRs can play a role in academic learning and gender socialization (e.g., Calvert et al., 2014; Coyne et al., 2016; Gola et al., 2013), future research could examine the extent to which children's PSRs with media characters end through *active* discard and disliking versus a gradual fade in interest over time.

In our sample, parents reported that the experience of PSR breakups and the selection of a new PSR were more common among girls than boys. This finding reflects similar gender differences that have emerged in both real friendships and in other types of imaginary friendships (Benenson, Apostoleris, & Parnass, 1997; Carlson & Taylor, 2005; Ladd, 1983). For instance, in friendships with real peers, school-aged boys are more likely to expand their social interactions beyond one-on-one dyadic interactions than girls are (Eder & Hallinan, 1978), suggesting that boys have a greater interest in socializing within a larger peer group (Ladd, 1983). Studies of preschool-aged children's role-play behaviors have also found that girls are more likely to create imaginary social partners to interact with (i.e., an imaginary companion), whereas boys are more likely to pretend to be another character (i.e., a pretend identity; Carlson & Taylor, 2005). Thus, gender differences in PSR breakups and in the formation of new PSRs could reflect broader gender differences in children's social interests and behaviors.

Duration of PSRs and Causes of PSR Breakups

According to parents, the average length of children's PSRs with media characters was about two years before a breakup occurred, suggesting that PSRs with media characters have some longevity and can have a sustained impact on children's learning. This was particularly true for older children, who parents said were more likely to maintain consistent PSRs with favorite media characters for a longer period of time. Parents indicated that a small subset of children in our sample (6%) retained the same favorite media characters over the course of a 3-year period, which was the length of time between data collection points for our sample.

It is possible that the relation between PSR duration and age mirrors qualitative changes that occur in children's real friendships. In early childhood, children describe features of friendship that are more superficial in nature, with friendships emerging primarily because of physical proximity (e.g., "he lives next door"), concrete behaviors (e.g., "we play"), and common activities (e.g., "we do things together"; Furman & Bierman, 1983). Although some features are endorsed across age groups (e.g., common activities), older children increasingly describe and endorse features of friendship that are less superficial and more intimate and include psychological affordances such as self-disclosure and acceptance (Bigelow, 1977; Furman & Bierman, 1983, 1984). Thus, as children age, it is possible that they continue to derive similar affordances from

PSRs with media characters as in face-to-face friendships and that these positive relationships qualities—even if they are imagined—promote the endurance of these imaginary friendships.

Nevertheless, parents indicated that breakups occurred primarily because children outgrew the media character, suggesting media characters that cannot *grow with* children are eventually not their preferred social partners (Bond & Calvert, 2014b). Instead, parents in our study reported that their children mainly feel indifferent to those former favorite characters. Other frequently selected reasons for breakups with media characters were that children became interested in another character, or got bored with their current favorite character, which is consistent with prior research (Bond & Calvert, 2014b). Although parents did not report peer influence as a frequent reason for PSR breakups, peer influence was associated with children's negative attitudes toward their former favorite media characters. Specifically, parents who indicated that their child viewed former favorite media characters as being for *babies* were also more likely to report greater peer influence over the break ups and to state that their child had more negative feelings toward their former favorite media characters. These findings lend further support for the role that peers can play in influencing children's preferences and attitudes toward media characters (Mielke, 1983; Valkenburg & Cantor, 2001).

Characteristics and Content of Past and Current Favorite Media Characters

As reported by parents, children's past and current favorite media characters shared two overlapping physical characteristics. Both past and current favorite media characters were embodied as people, and they were generally animated. This finding may partly reflect the preference of animation over live productions by younger children, which shifts as children get older and prefer more complex content (Calvert & Kotler, 2003). For instance, in our sample, parents reported that live-action television programs were more popular among children's current favorite media characters (22.7%) than children's past favorite media characters (8.6%).

Both past and current favorite media characters were also similar in that they were embedded in media content with fantastical elements (e.g., animals that could talk). The high prevalence of fantastical content across past and current favorite media characters suggests that media content developers still view animation and fantasy as a major vehicle for communicating content to children, be it educational or strictly entertainment focused. It is noteworthy, however, that past favorite media characters were more likely to be embedded in academic content than current favorite media characters. Past favorite characters that were also embedded in academic content were rated as younger looking and

more traditionally feminine than past favorite media characters that were not embedded in academic content.

These findings have important educational implications. Our results suggest that educational media characters are replaced by characters that are more entertainment focused. Although they do not necessarily dislike their formerly favorite characters, parents report that their children feel indifferent to them, suggesting that overall exposure to an important out of school educational resource may decrease. In our view, these findings reflect important missed opportunities for children to continue learning beyond the classroom. Media characters have shown promise in promoting mastery of early science, technology, engineering, and mathematics concepts (Calvert et al., 2018; Schlesinger et al., 2016). Embedding popular media characters in educational content can capture U.S. children's interest and create a window of opportunity to close gaps in STEM achievement between children from the United States and other developed nations (Calvert, 2017; U.S. Department of Education, 2011), but only if children choose to view those programs.

Children's Attraction to Gendered Media Characters

Consistent with general patterns of gender development and children friendships with real peers (see Aboud & Mendelson, 1996; Hartup, 2006), children preferred media characters of their own gender. Current favorite media characters were rated as more gender-typed in their *appearance* than past characters were for both genders, but particularly for girls. This finding aligns with the high premium that is placed on physical appearance in girls and women (Glick et al., 2005; Stone et al., 2015) and has implications for the development of a negative body image as girls mature (see Want, 2009).

Although parents reported that both boys and girls preferred media characters whose *appearance* was more gendered, differences in gendered *traits* were found only among girls' former and current favorite media characters. These findings differ from past research in which parents reported that their sons' favorite characters became more masculine over time (Bond & Calvert, 2014b). However, these null findings could be due, in part, to the small number of parents who reported that boys had both a past and a current favorite character.

For girls, current favorite media characters were rated as having significantly *more masculine traits* and *significantly less feminine traits* compared with past favorite media characters. A prior study of PSR breakups found that girls' current favorite characters had more feminine traits than their prior favorite characters (Bond & Calvert, 2014b). The current results suggest greater complexity in the gendered messages girls receive from media characters as they age. For girls, the physical appearance of current favorite characters could encourage adherence to more rigid standards regarding feminine beauty (Harrison, 2000).

However, the increase in masculine traits among current favorite media characters could signal to girls that there is greater flexibility in the traits feminine-looking characters display, which is consistent with theoretical formulations of androgyny (Bem, 1981). Similar findings occurred for second- to sixth-grade girls and boys who reported more masculine than feminine behaviors for their favorite male and female educational television characters (Calvert, Kotler, Zehnder, & Shockey, 2003).

Girls' interest in feminine-looking characters with masculine qualities could also reflect the changes in contemporary gender roles that are reflected in the media. Within the past two decades, there has been a shift in some of the media characters available to young girls. For example, popular 20th century Disney Princesses® such as Snow White™, Cinderella™, and Sleeping Beauty™ were portrayed as damsels in distress (Coyne et al., 2016). By contrast, current female Disney® characters, such as Moana™ and Merida™, are less thin and delicate in their physical appearance, and they are portrayed as stronger (physically and emotionally), more independent, and more adventurous. Because more masculine qualities, such as independence and assertiveness, are associated with higher self-esteem (Bem, 1981), this blending of feminine and masculine dimensions in contemporary female characters may benefit girls' development.

Limitations and Directions for Future Research

There are several limitations to these findings that warrant discussion. A key limitation of this study is that parents' perceptions of children's PSR breakups were measured rather than those actually reported by their children. Future research should develop measures that can track young children's favorite characters and their break ups with characters reliably over time. Future research should also address why children say that they have selected a new character as well as how they feel about those former favorite characters. Specifically, are they indifferent, do they dislike them, or do they still like them but not as much? How do feelings about characters translate into children's decisions to view or to interact with content that features those former favorite characters, as well as their opportunities to learn from educational media? Another future research direction is to dovetail changes in portrayals in children's programs with emerging favorite characters. Finally, our results reveal information about the types of characters younger and older children gravitate toward; however, it is unclear if age differences associated with attraction to different types of media characters are based on developmental changes in children's needs and interests, or if these findings are driven by the types of media characters that are available to children based on what is created for them. In future research, it is important to examine the range of characters that are created for children in different age cohorts to clarify what characters are available to children as potential PSR partners.

Conclusion

The results of this study provide insights into the characteristics that attract children to media characters as they age and the reasons that they break up with characters. According to parents, children ages 3 to 9 years old were consistently drawn to animated, person-like characters that inhabit fantasy worlds. Children sustain PSRs with media characters for about two years before they break up with them, leaving earlier favorite characters behind in exchange for older looking characters that are more gender stereotyped in appearance and who are less involved in educational content. This early 2-year window is an opportunity for educational media characters to garner many children's interest in ways that can benefit early cognitive and social development.

Gendered characters have a long-term impact on children's preferences for specific media characters, at least from early through middle childhood. Despite reported preferences for gendered appearances, older girls were drawn to media characters that displayed more traditionally masculine traits. Boys were reported to consistently prefer male characters who were portrayed with masculine traits. Taken together, our findings highlight the educational and social significance of PSRs and parasocial breakups in children's early development, as media characters serve as social partners and friends who can garner trust, thereby influencing both cognitive and social development.

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Notes

1. $N = 137$, one parent did not report the child's date of birth.

2. Note that some parents reported that children had broken up with media characters that differed from the favorite characters they had reported at the time of the original studies; this is why the number of parents who reported Dora™ as a favorite originally differs from the number of parents who reported that their child had broken up with Dora™.

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