



ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/rcrs20

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To cite this article: Melinda Aley, Lindsay Hahn, Ron Tamborini, Henry Goble, Lu Zhang, Sara M. Grady & Joshua Baldwin (2021): What Does Television Teach Children? Examining the Altruistic and Egoistic Lessons in Children's Educational Television, Communication Reports, DOI: 10.1080/08934215.2021.1918738

To link to this article: <u>https://doi.org/10.1080/08934215.2021.1918738</u>



Published online: 23 May 2021.

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What Does Television Teach Children? Examining the Altruistic and Egoistic Lessons in Children's Educational Television

Melinda Aley , Lindsay Hahno, Ron Tamborini, Henry Gobleo, Lu Zhango, Sara M. Gradyo, & Joshua Baldwino

To distinguish and systematically categorize message content emphasized by children's educational media, we applied a coding scheme based on the model of intuitive motivation and exemplars to a sample of educational television series recommended by CommonSenseMedia.org. Results revealed a preponderance of the egoistic motivation of competence (overall and in TV series emphasizing scholastic learning) and the altruistic motivation of care (in series emphasizing social skills). By applying a scheme of comprehensive human motivations to identify the values emphasized in different types of children's educational television, this study may help scholars more meaningfully identify, predict, and explain outcomes resulting from exposure to media content.

Keywords: Children's Television; Common Sense Media; Educational Television; Morality

Parents hold most of the responsibly for ensuring their children are socialized toward the dominant values encouraged in their society (Potter & Potter, 2001). For parents looking to foster their children's mental or social development, knowing what values are championed in television content is crucial. Television can be an

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effective purveyor of social skills, science facts, and moral values (Bonus & Mares, 2018; Mares & Acosta, 2008), particularly when it supplements more formal sources of learning (Fisch, 2014; Haidt & Joseph, 2007).

The United States Federal Communications Commission's (FCC) Children's Television Act of 1990 defines educational children's media as "programming that furthers the positive development of children ... including the child's intellectual/ cognitive or social/emotional needs" and must contain a significant informative purpose (Federal Communications Commission (FCC), 1996, p. 74). In 1996, the FCC began requiring broadcast television stations to label educational/informational content E/I. However, the terms "educational" and "informational" are broadly defined, not specifying the messages or values contained in content, and making it difficult for parents and educators to adequately select content.

The present study begins to address this shortcoming. Guided by the model of intuitive motivation and exemplars (MIME; Tamborini, 2013), we apply a coding scheme of universal human motivations to identify specific *intuitive motivations* emphasized in children's educational television series recommended by Common-SenseMedia.org, focusing on whether content highlights motivations for behavior that are *altruistic* (i.e., other-focused) or *egoistic* (i.e., self-focused).

Children's Learning from Media

Educational media rely on the assumption that children learn by watching content. Media are most effective as an instructional tool when playing a supporting role to other, more formal sources of learning, such as school or direct instruction (Fisch, 2014). Unlike formal learning, media may foster more *informal* learning through illustrative examples in educational entertainment content. For educational media to serve as an effective supplement to more formal forms of learning, it is crucial that the values emphasized in media are consistent with those learned in formal settings (Haidt & Joseph, 2007). To help parents select media content consistent with values they want to promote, a well-conceptualized rating system for defining children's educational media and the values it highlights is required.

To help parents, guardians, and educators sift through educational television programming targeted at children, many independent organizations (e.g., Parent's Television Council, Common Sense Media) have compiled recommendation lists. However, these, too, rely on loosely defined categorizations of learning content with varying degrees of specificity (e.g., "science" or "role models"). We apply a scheme of comprehensive human motivations to identify the specific values emphasized in academically educational (i.e., emphasizing scholastic learning) and socially educational (i.e., emphasizing positive role models) programming recommended for children by Common Sense Media.

Previous Research on Children's Media

Studies have examined educational programming content and its ability to teach scholastic proficiencies, such as quantitative reasoning or scientific thinking (e.g., Bonus & Mares, 2018; for review see Fisch, 2014). In many ways, educational content is simple to categorize: The learning outcomes are explicitly labeled within existing areas of academic achievement. This categorization is relatively straightforward for those looking to media content as an informal educational tool to supplement formal instruction.

However, categorizing educational content supporting socio-emotional development is less straightforward. Research in this area often investigates the portrayal of social consequences associated with prosocial (or moral) and antisocial (or immoral) actions, and how exposure to this content can influence children's social judgments and behavior (Padilla-Walker et al., 2013). Researchers typically define prosocial content in broad terms of socially-oriented behaviors such as helping or being honest, while antisocial behaviors encompass acts of prejudice or aggression (Coyne & Whitehead, 2008; Jordan, 2004).

Exposure to this type of prosocial or antisocial content is thought to act as a force of moral socialization through which particular behaviors are encouraged or discouraged (Haidt & Bjorklund, 2008; Jordan, 2004). For example, children exposed to prosocial content emphasizing fairness demonstrated increased perspective-taking (Krcmar & Cingel, 2019). Additionally, children exposed to prosocial content emphasizing character diversity were more willing to play with children of a different race than children not exposed to such content (Gorn et al., 1976) and showed deceased outgroup biases (Cole et al., 2003). Different outcomes associated with exposure to different types of prosocial content highlights the limited utility of the term "prosocial."

This literature indicates educational television can be an effective tool for supporting children's learning of scholastic proficiencies and socio-emotional (i.e., social) skills across a range of domains. To date, though, scholars and parents have been forced to consider these two content types as separate areas of inquiry, as no existing conceptual scheme clearly demarcates them. The ability to identify, explain, and predict what children get from media content requires a typology of values and motivations emphasized in the wide variety of content that comprises educational media content. The present study attempts to fill part of this need by applying a typology of altruistic and egoistic motivations to children's educational television.

The MIME

Logic from the model of intuitive motivation and exemplars (MIME; Tamborini, 2013) suggests that exposure to media content exemplifying different *intuitive motivations* can increase the salience of motivations in audiences' minds. Intuitive motivations are evolutionarily developed evaluative sensitivities toward specific

domains of social behavior (Haidt, 2001). This suggests children can learn to place value on specific intuitive motivations if they observe those motivations emphasized in media content.

Drawing from moral foundations theory (Haidt & Joseph, 2007), the MIME describes five altruistic motivations: care (feeling compassion and empathy for others), fairness (focusing on justice, reciprocity, and equality), ingroup loyalty (favoring one's ingroup), respect for authority (deferring to benevolent leaders/ institutional structures), and *purity* (pursuing nobility and thwarting social contamination). Recent MIME research has incorporated six additional egoistic motivations (Tamborini et al., 2016). Three are derived from the selfdetermination theory (Deci & Ryan, 1985): competence (desire for achievement), autonomy (desire for control over one's choices), relatedness (desire for connection with others). The other three are adopted from research on universal human values (Schwartz, 1994): security (desire to feel safe); hedonism (desire to experience physical pleasure), and power (desire for control over rights or resources). These egoistic motivations have evolved to guide individuals toward assets that increase healthy functioning and personal well-being (Ryan, 2009), whereas altruistic motivations prompt individuals to behaviors that support their social group (Haidt & Joseph, 2007).

A coding scheme based in the MIME has been used to examine the frequency these motivations are portrayed in entertainment programming. In contrast, previous research in this area has typically focused on the representation of *behaviors* (e.g., acts that are prosocial/antisocial) (Coyne & Whitehead, 2008). However, the same act can be motivated by different reasons. If *Sofia the First* gives her classmate candy, she may want to share with her classmate (an altruistic act of care), or she may want to solicit her classmate's vote in a school election (an egoistic act of power). In traditional coding schemes, the act of *giving candy* would be identified simply as *prosocial*, regardless of the reason underlying motive, rendering the labels prosocial and antisocial unable to capture the nuance of social interactions children observe through television.

A *motivation*-based scheme would identify Sofia's act as altruistic or egoistic, depending on the underlying drive for her behavior. Importantly, existing efforts that have attempted to delineate behavioral motivations have focused on distinguishing only prosocial behavior, and questions remain regarding the comprehensiveness of their content categories (e.g., Padilla-Walker et al., 2013). The MIME scheme is not limited in this regard, as it distinguishes between 11 specific and comprehensive human motivations within these broader categories by drawing on evolutionary theory. This coding specificity would more clearly delineate the type of motivations and values emphasized in educational content, adding clarity for scholars working in this area.

The MIME coding scheme has been applied to several types of children's media, including: Grammy-nominated songs (Hahn et al., 2019), books (Tamborini et al., 2021), and television (Hahn et al., 2017; Lewis & Mitchell, 2014). This work suggests

popular entertainment television more frequently presents egoistic motivations, but altruistic motivations are portrayed as more desirable (Hahn et al., 2019; Tamborini et al., 2021).

To our knowledge, no research has applied the MIME's categorization scheme across different types of children's educational media content. Common Sense Media's lists of recommended educational television provide a unique opportunity to examine the types of motivations emphasized in educational content. However, current educational content rating systems do not reveal what specific information is emphasized in content, including not distinguishing content intended to increase scholastic proficiencies (egoistic, self-driven goals) from content intended to foster social skills (altruistic, other-driven goals). Importantly, to date scholastic proficiencies and social skills have been considered separate areas of inquiry, even though examining them together can provide a more complete understanding of what children might gain from television content. Moreover, current content rating systems preclude more nuanced content distinctions (e.g., whether specific altruistic domains are emphasized, such as caring for others). This study attempts to address this gap by investigating whether there are detectable trends among the motivations and values emphasized in educational media recommended by CommonSenseMedia.org.

Guided by the MIME (Tamborini, 2013), we focus on determining the extent to which children's educational television emphasizes the importance of motivations for behavior that are altruistic (i.e., other-focused) or egoistic (i.e., self-focused). Given that educational television content categories may incorporate aspects of personal academic success (i.e., scholastic proficiencies) and social behavior (i.e., social value programing), we might expect egoistic motivations to appear most often in scholastic proficiency programing and altruistic motivations to feature prominently in social value programing. However, we know of no research that provides evidence of this. With this in mind, we propose the following research questions:

RQ₁: How frequently are altruistic and egoistic motivations featured in educational television series recommended by Common Sense Media? RQ₂: Does the frequency of motivations portrayed in children's educational television series recommended by Common Sense differ according to whether a series is recommended because of its emphasis on scholastic proficiencies or social skills?

Method

Sample

Content was sampled from television series recommended by Common Sense Media, an online, nonprofit children's media advocacy organization. The organization's website reports that their recommendation lists are consulted by over 80 million parents and educators a year (Common Sense Media, 2021). Because of this popularity, Common Sense Media's recommendations have been used as a sampling frame for investigating children's media topics such as science facts

(Bonus & Mares, 2018) and gender roles (Friesem, 2016). The organization reviews media according to their educational value, positive messages, positive role models and representations, language, sex, violence, consumerism, and drinking, drugs, and smoking. Educational value focuses on traditional academic proficiencies in the arts and sciences. The remaining seven topics focus on social skills.

We sampled the television series using three recommendation lists from Common Sense Media, which included programming from broadcast television, cable, and video-on-demand services (VOD; e.g., Netflix, Amazon Prime, Hulu, etc.). The three lists were "Educational TV Shows for Kids" (https://www.commonsensemedia. org/lists/educational-tv-shows-for-kids), "TV That's Good for Boys" (https://www. commonsensemedia.org/lists/tv-thats-good-for-boys) and "Positive Role Model TV for Girls" (https://www.commonsensemedia.org/lists/positive-role-model-tv-forgirls). "TV That's Good for Boys" and "Positive Role Model TV for Girls" were combined to represent programs focusing on social skills. "Educational TV Shows for Kids," which Common Sense Media describes as programing focusing on STEM and other academic skills, was used to represent programs focusing on scholastic proficiencies.

To be included in our sample, a series had to meet several criteria. First, it had to feature a narrative, defined as containing characters who had a goal to accomplish, and episodes within the series had to contain a distinct beginning, climax, and ending. Series that did not meet these criteria (n = 16; e.g., Brain Games, How Stuff Works) were removed from the sample. Second, the series had to be available online. We randomly selected three episodes per series for analysis, using IMDb to source full episode lists. If any of the three episodes could not be found online, the series was removed from the sample. This resulted in the removal 21 series (e.g., Pitch, The Legend of Korra). To avoid conflating the analysis between scholastic proficiency and social skills programing, any series appearing on more than one list of the three recommendation lists was removed (n = 26 series; e.g., Blaze and the Monster Machines, Earth to Luna); including these in our analyses would have interfered with our ability to examine differences between the types of content. This process resulted in a final sample of 72 series in our analyses $(n_{scholastic proficiencies} = 23, n_{social skills} = 49; n_{episodes} = 216)$. A complete list of the series included can be found in the project's OSF files (see https://osf.io/36dzm/? view_only=8b33b1a73be04eb0a22f65447e6d1da5).

Two raters coded scene demarcations within each episode, and these scenes served as the units of analysis. The two coders were instructed to demarcate scenes any time there was a change in the story's setting, main characters, or time. Coders received two weeks of training to recognize and record scene changes according to their respective timecodes. These coders were trained to identify the main character of each scene. Twenty episodes (n = 846 scenes, 10.88%) were randomly selected to determine reliability of scene demarcation within series. Any scenes coded within five seconds of each other were considered to be in agreement. Reliability for scene demarcation was strong, with 90.65% agreement. Reliability for main character

identification was also strong, with 94.7% agreement. Coders discussed disagreements of scene's demarcation until agreement was reached. Coding the full sample resulted in 7821 total scene units for the study's main analyses.

Coding Procedure

Coding Manual

Three separate raters coded for the presence of altruistic and egoistic motivations using a coding scheme based on the MIME. This scheme has been used successfully to identify altruistic and egoistic motivations featured in children's television (Hahn et al., 2017; Lewis & Mitchell, 2014), children's songs (Hahn et al., 2019), and books (Tamborini et al., 2021). The scheme outlines the 11 motivations. The coding manual, with detailed descriptions of all motivations, is available in our OSF files.

Coding Steps

For the main variables of interest, three coders participated in 12 weeks of training on the MIME coding scheme. During training sessions, coders reviewed the manual, practiced coding examples, and discussed disagreements, completing individual practice assignments outside of training. After completing training, coders were instructed to identify the presence of the 11 motivations in each scene.¹

We randomly selected 10.86% (n = 849) of all scenes in our sample to assess intercoder reliability. Using Krippendorff's α as a metric for assessing intercoder agreement, we set the criterion for acceptable intercoder reliability at .70. With the exception of ingroup loyalty, all motivation reliabilities exceeded this criterion (see Table 1). Closer inspection of ingroup loyalty revealed it was rarely featured (n = 29scenes or 3.4% of the reliability sample). Infrequent appearance of a coding category is known to severely skew measures of intercoder reliability that take into account

Motivation	Percent Agreement	Krippendorff's a
Care	94.47	.81
Fairness	96.64	.79
Ingroup Loyalty	98.14	.64
Authority	97.71	.73
Purity	92.81	.71
Competence	92.61	.73
Autonomy	96.77	.74
Relatedness	94.17	.78
Hedonism	98.21	.80
Power	96.81	.72
Security	96.01	.70

Table 1 Intercoder Agreement for Variables of Interest

chance agreement (e.g., Zhao, 2011). We examined the simple percentage of agreement among coders for the ingroup loyalty motivation's presence, which was 98.14% and well above the commonly accepted criterion of 80% agreement (see Neuendorf, 2017). As such, we elected to retain this variable in our main analyses.

Majority rule was used to address coder disagreements in the scenes coded for reliability.

After achieving acceptable reliability for the study's coding categories, we divided the remaining scenes (n = 6432) into three equal portions so each of our three raters coded one portion.

Results

We first examined how frequently the categories of altruistic and egoistic motivations appeared in the entire sample. Overall, 5939 motivations were coded in the sample. Of 7821 scenes, 5621 (71.9%) featured at least one motivation. Notably, 318 scenes contained more than one motivation. Next, we conducted a one-way χ^2 test to determine whether altruistic or egoistic motivations appeared more often. Of the 5939 motivations present, there were significantly more representations of egoistic motivations (n = 3360, 56.6%) than altruistic motivations (n = 2579, 43.4%), χ^2 (1, N = 5938) = 102.70, p < .001.

To examine whether any individual motivation was featured more than others, we compared the frequency of a single motivation to every other motivation individually. This resulted in 55 pairwise one-way χ^2 tests on every possible pair of the eleven coded motivations (using a Bonferroni correction for multiple comparisons, $\alpha = .05/55 = .0009$). Table 2 contains the frequency of each individual motivation, the percentage of all motivations featured, and the pairwise comparison results noted in superscript. Overall, the egoistic motivation of competence was featured most

Motivation	Frequency across all motivations	Percent of all depictions of a motivation
Competence	1505 ^a	25.34
Care	1226 ^b	20.60
Relatedness	764 ^c	12.86
Loyalty	600 ^{cd}	10.10
Security	510 ^e	8.59
Fairness	437 ^f	7.35
Hedonism	240 ^f	4.04
Authority	218 ^f	3.67
Power	191 ^f	3.21
Autonomy	150 ^{fg}	2.52
Purity	98 ^g	1.65

Table 2 Pairwise Comparisons of Motivation Representation in Content

Frequencies with different superscripts indicate significant differences at p < .0009 level.

prominently in content, followed by the altruistic motivation of care. The full results of the pairwise comparisons, as well as the frequency for the presence of individual motivations can be found in our OSF files.

We examined RQ₂ (whether the representation of altruistic and egoistic motivations differed between children's television programming that emphasized scholastic proficiencies versus social skills) by comparing frequencies across the different recommendation lists published by Common Sense Media. In scholastic television programs, 1598 motivations were found compared to 4341 motivations in social skill television programs. Social skill programing featured more altruistic motivations (n = 2006) than scholastic programing (n = 573).

To analyze the proportion individual motivations within scholastic and social skill programs, we divided the frequency with which each motivation appeared by the respective series type ($n_{scholastic proficiencies} = 2338$, $n_{social skills} = 5482$). In both cases, the egoistic motivation of competence and the altruistic motivation of care were depicted proportionally more often than any other motivation. Table 3 shows the percentage of each individual motivation across the entire sample and by series category.

Next, we conducted a 2 (series type: scholastic/social) x 2 (motivation type: altruism/egoism) χ^2 test on all presence of motivations to compare differences in motivation representation between series types, χ^2 (1, N = 5938) = 50.96, p < .001, F = .09. Egoistic motivations were featured proportionally more often in scholastic programing (adjusted standardized residual = 7.1), and altruistic motivations were featured proportionally more often in social skill (adjusted standardized residual = 7.1).

Motivation	Combined	Scholastic	Social skill
Care	15.68	12.19	17.16
Fairness	5.59	3.93	6.92
Loyalty	7.67	5.00	8.18
Authority	2.79	1.58	3.30
Purity	1.25	1.80	1.02
Altruistic Total	32.98	24.50	36.58
Competence	19.24	26.98	15.94
Autonomy	1.98	1.06	2.28
Relatedness	9.76	5.26	11.69
Security	6.52	5.09	7.13
Hedonism	3.07	3.59	2.85
Power	2.44	1.84	2.70
Egoistic Total	43.01	43.82	42.59
No motivation	24.02	31.68	20.83

 Table 3 Percentages of Individual Motivations by Program Type

Finally, focusing on the presence of a motivation, we conducted a 2 (programs type) x 11 (individual motivation type) χ^2 test to examine the representation frequency of individual motivations in scholastic versus social skill programs, χ^2 (10, N = 5929) = 295.5, p < .001, *Cramer's* V = .22. Frequency of individual motivation presence by program type (scholastic/social skills) can be found in Table 4. This test suggested social skill programs featured more instances of care, fairness, loyalty, authority, autonomy, and relatedness than scholastic programs, whereas scholastic programs were more likely to emphasize purity, competence, and hedonism. No differences were found in the representation of security or power between program type.

Finally, we examined differences in the frequency with which different motivations were (a) upheld/violated and (b) emphasized in programming recommended for different age groups. Due to space considerations, we have reported the results of these analyses on OSF.

Discussion

This study examined the representation of altruistic and egoistic motivations depicted in children's educational television series recommended by Common Sense Media. Although educational programming is recommended as an instructional tool for children, which particular motivations and values are featured in such programming has received little attention. Knowing what messages are contained in content created for young viewers is important for parents and others who want to use television as a source of informal instruction to reinforce learning across particular domains. Our findings suggest intuitive motivations are pervasive in educational television series recommended by Common Sense Media, appearing in over 70% of all scenes, although egoistic motivations are more common than altruistic motivations across both

Motivation	Scholastic n (%)	Social skill n (%)	Adjusted Standardized Residual
Care (<i>n</i> = 1226)	285 (23.24)	941 (76.75)	3.2
Fairness $(n = 437)$	92 (21.05)	345 (78.94)	2.9
Loyalty $(n = 600)$	117 (19.50)	483 (80.50)	4.3
Authority $(n = 218)$	37 (16.97)	181 (83.03)	3.4
Purity $(n = 98)$	42 (42.85)	56 (57.14)	3.6
Competence $(n = 1505)$	874 (58.07)	631 (41.92)	15.2
Autonomy ($n = 150$)	25 (16.67)	125 (83.33)	2.9
Relatedness $(n = 764)$	123 (16.10)	641 (83.90)	7.2
Security $(n = 510)$	119 (23.34)	391 (76.66)	1.9
Hedonism $(n = 240)$	156 (65.00)	84 (35.00)	2.9
Power $(n = 191)$	43 (22.51)	148 (77.49)	1.4

 Table 4
 Presence of Individual Motivation by Program Type

Bold numbers represent significant differences in frequency of the motivation between series type at p < .05.

programming types. Examining specific types of programming, altruistic motivations were represented far more often in social skill programming than in than scholasticbased programming, whereas egoistic motivations were slightly more common in scholastic programming than in social skill programming.

MIME logic suggests exposure to content emphasizing altruistic and egoistic motivations can increase the importance, or salience, that audiences place on those motivations in real life (Tamborini, 2013). Increases in temporary or chronic salience (through recent or repeated exposure respectively) can give motivations greater weight in determining audiences' subsequent judgments, attitudes, and behaviors. In line with this logic and this study's results, we might expect that exposure to content highlighting scholastic proficiencies would increase the salience of egoistic motivations, such as competence, leading audiences to adopt self-focused behaviors. Conversely, exposure to content highlighting social skills might be expected to increase the salience of altruistic motivations, such as care, leading audiences to adopt other-focused behaviors. Future researchers should examine the effect of repeatedly viewing these types of content, which seem to emphasize the importance of very different motivations. Additionally, as reported in OSF, 13% of scenes containing a motivation depicted a violated motivation. Future research is needed to understand the effect that viewing the violation of moral motivations.

Notably, motivation salience in any one domain is not inherently a bad (or good) thing. Although a focus on self-interest is usually associated with negative connotations, research in positive psychology reveals that egoistic motivations are necessary for children's socio-emotional development (Deci & Ryan, 1985). For instance, a preponderance of competence suggests content is attempting to highlight the value of being capable, effective, and skillful – all of which can contribute to an audience member's drive to succeed. Similarly, a focus on altruistic motivations, which have positive connotations, might run counter to values parents are attempting to instill in their developing children. For instance, content emphasizing the importance of deferring to authority structures might contravene parents' attempts at fostering children's free-thinking and autonomy.

By applying a comprehensive scheme to identify the motivations and values emphasized by children's educational television recommended by Common Sense Media, this study may help scholars more meaningfully identify, predict, and explain outcomes resulting from exposure to media content. For scholars, this study's importance lies in its synthesis of knowledge gleaned from two traditionally siloed areas of research: educational content and "prosocial" content. Historically, these two areas of research have been considered as two independent areas of inquiry, yet a unifying scheme highlights the potential that examining them together can provide a more complete understanding of what children might get from television content.

Limitations and Future Directions

Several limitations exist. First, we sampled over 70 children's educational television programs recommended by only one trusted, high-profile organization used in prior content analyses: Common Sense Media. Nevertheless, future research should examine content recommended by additional sources, and perhaps examine the extent to which Common Sense Media's labels for specific types of educational content are reliable across source. Second, we removed 26 series from our investigation because they were cross-listed on Common Sense Media's scholastic and social skills programming lists, and our investigation was primarily focused on examining content features that distinguished the two types of educational television. Nevertheless, future research should attempt to apply the MIME coding scheme to a wider sample of children's educational television as a way to further explore the utility of defining educational media by the specific motivations it emphasizes. Finally, building on the content analytic work here, future researchers should experimentally investigate the specific lessons children might adopt from consuming educational media content.

Conclusion

The broad labels traditionally used to identify children's educational media are inadequate for identifying many of the nuanced features contained in programming. Current rating systems do not provide parents with detailed information regarding the values presented in content. The MIME-based coding scheme begins to address this concern by categorizing the *motivations* responsible for character behaviors. Unlike previous research focusing on differentiating prosocial versus antisocial behavior (e.g., Coyne & Whitehead, 2008), this nuanced scheme can differentiate moral, immoral, and even amoral drives.

Exposing children to educational media can serve as an effective method for fostering informal learning, especially due to the abundance of easily accessible platforms featuring educational content (e.g., television, Internet, video games). Exposure through multiple media platforms can help strengthen young audiences' memory of information learned formally (Fisch, 2014). However, for educational media to effectively supplement more formal types of learning, the values emphasized in media must be consistent with those learned formally. In addition to providing greater clarity for scholars conducting research on children's media, this scheme can help parents identify the motivations and values contained in programming designed for young audiences and aid their efforts to reinforce learning through informal media exposure.

Note

1. Coders also rated the extent to which present motivations were upheld/violated. Overall, motivations were substantially more likely to be upheld compared to violated. We report the results of analyses examining differences in the upholding/violation of motivations and

provide a brief interpretation of these results on OSF: https://osf.io/36dzm/? view_only=8b33b1a73be04eb0a22f65447e6d1da5.

Disclosure Statement

No potential conflict of interest was reported by the authors.

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- 14 M. Aley et al.
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