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## More than Just a Laughing Matter: A Coding Framework of Humor in Media Entertainment for Tweens and Teens

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### ABSTRACT

Despite the crucial role of humor in t(w)eens' media entertainment, we lack a theoretically informed approach to investigate the prevalence and co-occurrence of humor types in such entertainment. Therefore, this study tested a coding framework of humor in t(w)eens' media entertainment by content-analyzing 107 television series (5,633 scenes) listed by 10- to 14-year-olds as their favorite. Results confirmed ten humor types (aggressive, slapstick, self-defeating, sexual, irreverent, coping, parody, wordplay, incongruity, absurdity) with aggressive humor most often and coping humor least often present (in 87.9% versus 23.4% of series, respectively). Humor types also frequently co-occurred, highlighting the need to revise existing theories.

Humor is ubiquitous in people's lives, functioning as the social lubricant that holds both private and professional relationships together. Mirroring daily life, humor is also frequently used in media entertainment (Papacharissi, 2012) – providing audiences with opportunities for laughter as well as ways to enhance relationships, release tension, and maintain a positive outlook on life (Martin, 2007). Without humor, most media entertainment programs would be boring. In fact, without humor, media entertainment could hardly be called entertainment. Indeed, humor has frequently been listed as media entertainment's most attractive characteristic and correspondingly, to greatly increase audiences' selective exposure (Bryant & Anderson, 1983; Patino et al., 2012).

While appreciated by all audiences, humor in media entertainment may be especially relevant for tweens and teens since learning how to use humor to

form friendships, gain peer approval, and solidify one's social position in the peer group is considered to be vital for healthy development (Klein & Kuiper, 2006). The ability to use humor as an effective means of communication emerges around middle childhood and develops into early adolescence (Fox et al., 2013). And while the development of humor is influenced by many sources, media entertainment is among the most common ways for t(w)eens to learn about humor and its effective use in daily life (cf. Bandura, 2001).

Through media entertainment t(w)eens are exposed to various types of humor. These may be rather innocent, for example, instances of wordplay or clownish behavior, whereas others may be less innocent, such as mockery and ridicule (aggressive humor). To that end, humor researchers have examined the potential positive and negative consequences of humor (e.g., Martin et al., 2003). For instance, aggressive humor has been found to negatively affect t(w)eens' social competence and emotional well-being, whereas the reverse has been found for coping humor (i.e., humor to deal with difficult or sensitive topics). Yet, while scholars have studied the effects of (different types of) humor, far less attention has been paid to the numerous ways in which humor is expressed in t(w)eens' media entertainment.

In fact, to our knowledge, only five studies have attempted to capture the different types of humor in t(w)eens' media entertainment, and these have several limitations. For example, in three studies where t(w)eens were interviewed directly about their humor type preferences (Bergen, 1998, 2009; Dowling, 2014), it became clear that t(w)eens found it very difficult to describe the types of humor they liked in media entertainment. To circumvent this, other scholars used content analysis to examine humor types on television (Stocking et al., 1977; Suls & Gastoff, 1981). However, these two studies are dated in relation to the current television landscape, examined only a very small selection of humor types, and did not focus on content preferred by t(w)eens. Thus, there is a clear need for a comprehensive analysis of the humor present in media entertainment popular with t(w)eens.

With this in mind, the aim of this study is to develop and test a coding framework of humor types in media entertainment for t(w)eens. We operationalize media entertainment as television series (aired via multiple platforms, e.g., public and commercial networks, Netflix, YouTube), because television series are one of the most pervasive forms of media entertainment in t(w)eens' lives (Nielsen Media Research, 2017). Through a content analysis of television series listed by t(w)eens' as their favorite, we examine the prevalence of different humor types in these series and, guided by contemporary humor effects research, whether these may be classified as positive or negative.

## **Operationalizing Humor Types**

The lack of research on different types of humor in media entertainment for t(w)eens may be largely due to the difficulty of demarcating specific humor types. Over the years, there has been widespread disagreement about how many different types of humor can actually be distinguished (Gruner, 1991; McGhee, 1979). In a conference paper with the telling title “On the impossibility of having a taxonomy of humor,” Gruner (1991) argues there is no universally accepted classification of humor. Yet, at the same time, scholars have put forth several theories to help explain the appeal of particular forms of humor. The three most important theories in this respect are superiority, relief, and incongruity theory (Martin, 2007). Although scholars originally argued for a focus on one of these, we concur with contemporary researchers that each theory offers unique a value (Lynch, 2002; Martin, 2007). We, therefore, propose an intertheoretical-perspective in which we integrate these three theories to identify the types of humor that may be most relevant to t(w)eens and thus most appropriate for inclusion in our coding framework.

### **Superiority Theory – Humor Types**

Superiority (also called disparagement) theory sees aggression as the fundamental component of humor (Zillmann, 1983). Enjoyment arises from the superiority or triumph one feels when favorably comparing oneself to the inadequacies or misfortunes of others (Zillmann, 1983). With regard to specific disparaging humor types, t(w)eens may like to see *aggressive humor* (i.e., ridiculing someone, e.g., discriminatory humor based on sex, race, or intelligence), *slapstick* (i.e., physical, pie-in-the-face humor, often involving degradation of someone’s status), and *self-defeating humor* (i.e., poking fun at one’s own faults). This is supported by focus-group research that found that t(w)eens are greatly appreciative of aggressive and slapstick humor (Dowling, 2014). Self-defeating humor has never been examined with t(w)eens (Fox et al., 2013), but it has been suggested that self-defeating humor may be particularly prominent during adolescence because it is often employed to create and sustain friendships (Martin et al., 2003). In light of that, aggressive, slapstick, and self-defeating humor are likely of interest to t(w)eens and will thus be included in our coding framework.

### **Relief Theory – Humor Types**

Relief theory posits that humor is a mechanism to release tension (or arousal) (Berlyne, 1972; Freud, 1960; Freud, 1960). For example, it has been argued that through *sexually-themed humor*, t(w)eens are able to release sexual tension and talk about a sensitive topic without accountability, as it is “just a joke” (Wolfenstein, 1954). Indeed, t(w)eens who are mastering their

physical development and developing sexual interests often use humor containing sex or body parts (Park, 1977). In addition, it has been suggested that t(w)eens may take a strong interest in *irreverent humor* (i.e., humor lacking proper respect for authority or prevailing norms) because it “allows them to express their defiance of parental and societal impositions on their freedom to persons in authority, as well as to their peers and, last but not least, to themselves” (Oppliger & Zillmann, 1997, p. 425). With this in mind, it seems likely that sexual and irreverent humor are humor types to which t(w)eens will gravitate.

In the past decades, the focus of relief theory has broadened considerably to now also include *coping humor* – using humor to deal with stress and the adversities of life (Martin, 2007). Research on coping humor in t(w)eens is still scarce. Some have argued that it may be unreasonable to look for coping humor among t(w)eens because they lack the appropriate amount of life experience needed (Führ, 2002). However, one could also argue that t(w)eens experience considerable anxiety and discomfort with specific life events, such as being teased, feeling left out, or embarrassed (Führ, 2002), where humor can be used as an effective coping mechanism. Indeed, t(w)eens have reported using humor to tackle uncertain and stressful situations (Führ, 2002). As such, coping humor is likely to be of interest to t(w)eens.

### ***Incongruity Theory – Humor Types***

In contrast to superiority and relief theory, the emphasis of incongruity theory does not lie on the theme of the humor, but on the cognitive processes that lead to the perception of humor (McGhee, 1979). The core of this theory is that humor results from a mental reaction to something that is “unexpected, out of context, inappropriate, unreasonable, illogical, absurd or exaggerated” (McGhee, 1979, p. 10). According to incongruity theory, humor appreciation depends on one’s level of cognitive development. Through advancing cognitive schemata, t(w)eens develop an appreciation for more abstract and implied incongruities based on general knowledge, multiple meanings of words, and the rules of logic (McGhee, 1979; Warnars-Kleverlaan et al., 1996). Therefore, humor types that may be appealing to t(w)eens include *parody* (i.e., poking fun at well-known things, situations, or public figures), *wordplay* (i.e., playing on words, or misinterpreting someone’s words), “*pure*” *incongruity* (i.e., a surprising visual, auditory, or conceptual violation of one’s expectation), and *absurdity* (i.e., things that go against all logical rules).

Taken together then, our integration of three theoretical perspectives suggests that there are ten humor types that are likely to appear in t(w)eens’ preferred media entertainment. We pose a research question to explore the appearance of each of these humor types below.

**RQ1:** How often are (a) aggressive humor, (b) slapstick, (c) self-defeating humor, (d) sexual humor, (e) irreverent humor, (f) coping humor, (g) parody, (h) wordplay, (i) incongruity, and (j) absurdity present in t(w)eens' self-reported favorite television series?

### ***Operationalizing Humor as Positive or Negative***

The three humor theories all revolve around motivations (*antecedents*) that lead people to find different types of humor appealing, which helped us identify ten humor types that may be present in t(w)eens' media entertainment. Yet, for a more complete conceptualization of the role of humor in entertainment, it is also important to reflect upon what it means if these humor types are indeed present in t(w)eens' media entertainment, that is, consider the *consequences* that exposure to these humor types may have. In the field of interpersonal communication, three theoretical models have been proposed to explain humor in terms of associated outcomes. First, Lynch (2002) differentiates between humor that promotes in-group cohesion (identification humor) and humor that creates divergence and distance (differentiation humor). Second, Martin et al. (2003) make a distinction between the use of adaptive humor, which has been associated with greater self-esteem, less anxiety, and more positive self-competency judgments, and maladaptive humor, for which the reverse has been found (Fox et al., 2013; Martin et al., 2003). Finally, Socha and Kelly (1994) distinguish between prosocial and antisocial humor, based on whether the humor may leave a positive or negative impression.

If we were to apply these classifications to the ten humor types identified as relevant for t(w)eens, it is clear that some humor types are easily classified as having positive or negative consequences. For example, exposure to aggressive humor has been said to lower the threshold to engage in aggressive behavior, because such humor may trivialize aggression and send the message that aggression is acceptable (Potter & Warren, 1998). Likewise, irreverent humor, that revolves around authority-mocking or norm-defying behavior, may teach the viewer negative lessons as to how to use humor in daily life. For instance, exposure to irreverent humor (e.g., placing a whoopee cushion on the teacher's chair, setting off a stink bomb in school) may inspire t(w)eens to engage in such behavior, which may have detrimental outcomes (e.g., getting suspended or expelled).

Yet, other humor types may not so squarely fit a positive-negative typology, but instead may be more context-dependent. Take, for example, sexual humor. According to Socha and Kelly's prosocial-antisocial categorization, sexual humor is considered antisocial, based on the fact that it is often inappropriate, crude, or even vulgar. However, what if sexual humor is

paired with, for example, coping humor? This co-occurrence would be consistent with Wolfenstein's (1954) extension of relief theory, in which she argues that t(w)eens may use humor as a coping strategy to talk about the difficult topic of sexuality (as it is "just a joke"), which enables them to release buildup tension. It would seem odd, then, to consider sexual humor as antisocial. Yet, there is no empirical data to support or reject a positive-negative classification of humor types in media entertainment. To that end, to gain a better understanding of the context-dependency of humor in media entertainment, we also examine whether and in what way the 10 humor types co-occur in our sample of t(w)eens' favorite television series. Such results will provide insight as to whether existing classifications can also be applied to humor in t(w)een entertainment content.

**RQ2:** How do the ten individual humor types co-occur in t(w)eens' self-reported favorite television series?

## Method

### Sample

To address the research questions guiding this study, we conducted a content analysis of t(w)eens' favorite television series. As part of a larger representative survey conducted in fall 2012, 1,029 t(w)eens were asked to report up to three favorite series available via television, streaming platforms (e.g., Netflix, YouTube), or DVD (cf. Manganello & Chauhan, 2011). From this pool, we randomly selected data from 165 t(w)eens<sup>1</sup> ( $M_{age} = 11.73$  years,  $SD_{age} = 1.42$  years). Specifically, from each t(w)een, we included the first two favorite series that met Gray's definition of entertainment as "programming designed with entertainment as the primary goal" (Gray, 2009, p. 3). This led us to exclude two news-related series (i.e., content whose primary goal is "to inform and educate"; Gray, 2009, p. 3). This resulted in a sample of 109 different television series, of which two were no longer obtainable.<sup>2</sup> The final sample thus consisted of 107 television series. For each series, two episodes were included in the content analysis (cf. Banerjee et al., 2009). Episodes were randomly selected – via omitting the first and final episode of a season because these may be less representative of an average episode (cf. Manganello et al., 2008) – from the season that aired around fall 2012.

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<sup>1</sup>We sampled at the participant-level rather than the series-level to facilitate potential post-hoc analyses linking participant with humor preferences.

<sup>2</sup>One Dutch show was not available online, nor in media archives. The second show was only purchasable on *Amazon Prime*, which was not possible for Dutch residents at time of coding.

In total, 214 episodes (from 107 different television series) were included, ranging from two and a half minutes (*Monster High*) to 2 hours (*The Voice*), with a mean duration of 32 minutes and 21 seconds. In line with other content analyses of television series, episodes were divided into scenes. A scene was defined as “an uninterrupted sequence of thematically-related activities occurring within a given physical context” (cf. Weaver, 1991). Two research assistants were trained to identify scenes, using training content that was comprised of several television episodes from different genres (not included in the sample). They were instructed to code a new scene when a time shift occurred (e.g., flashback or flashforward, dream, etc.), a new event took place, and/or when the location clearly changed (for full instructions: <https://ccam-ascor.nl>). Intercoder reliability (ICR) was calculated using Krippendorff’s alpha (Kalpha). For these kinds of coding decisions, Kalpha needs to be at least .80 (De Swert, 2012). ICR was high with a Kalpha of .91. On average, episodes consisted of 26.32 scenes (range: 4–234 scenes) with a mean duration of 1 minute and 14 seconds. The final sample consisted of 5,633 scenes with a total duration of 115 hours, 23 minutes, and 40 seconds. Scenes served as the coding unit.

### **Procedure**

The first author (who also participated in the coding) trained two coders in two six-hour sessions, using series that were not part of the coding sample. Next, coders independently coded two series, after which they compared their coding decisions and resolved disagreements and areas of uncertainty through discussion. After completing the training, all three coders coded the same subsample of 10% from the full sample of television series to calculate ICR using two indexes (cf. Lombard et al., 2002): percent agreement and Kalpha. Sufficient ICR for the coding categories was defined as percent agreement being 80% or higher and Kalpha being .67 or higher (De Swert, 2012; Lombard et al., 2002). The subsample was balanced so that all genres were included, in addition to various types of comedy shows (e.g., a sitcom, an animated series, a sketch-show), to ensure the best likelihood of encountering all potential expressions of humor.

After reaching sufficient ICR, television series were randomly assigned among the coders. They completed both episodes of a show consecutively and watched each episode twice. First, they watched an episode without coding in order to become familiar with the show, after which they coded the genre of the show. Next, they watched the show again and coded each scene for the presence of humor and if present, for the particular type(s) of humor present in the scene. Lastly, in addition to ICR, *intracoder* reliability



was calculated half-way through the content-coding process (2 months after the ICR test) to ensure that coders' understanding and use of the codebook had not changed over time. To test this, coders coded a show again that they had coded at the start of the project. Results indicated good reliability over time with each coder scoring the maximum of 100% agreement and Cohen's kappa of 1 (cf. Gwet, 2008).

## **Coding Categories**

### **Genre**

Guided by classifications used in media industries, genre was operationalized in seven categories: drama, action/adventure, thriller/mystery, comedy, reality, talk show, and edutainment. Coders were instructed that they should try to assign one genre to a show, but because some series may be difficult to subsume under one genre, more than one genre was possible. ICR between coders was perfect for all genres, with percent agreement being 100% and a Kalpha of 1. Of the 107 series, 35.5% were coded as comedies (e.g., *South Park*, *Spongebob Squarepants*, *The Big Bang Theory*), 25.2% were reality series (e.g., *Say Yes to the Dress*, *The Voice*), 16.8% were dramas (e.g., *The Vampire Diaries*, *Awkward*), 14% were action/adventure series (e.g., *Ben 10*, *Pokemon*), 12.1% were edutainment series (e.g., *MythBusters*, *How Do They Do It*), 8.4% were thriller/mystery series (e.g., *Crime Scene Investigation*, *Law and Order*), and 1.9% were locally produced talk shows. Because more than one genre could be assigned, percentages add up to more than 100%.

### **Humor**

For each scene, coders had to determine whether humor was present. Humor was defined as a characteristic that is intended to make actions or characters appear funny. Coders were told that although they may not perceive something as humorous, they must still recognize that an incident is *meant to be* humorous by the person in question – or the creators of the show – and thus code it as humorous content. ICR for this variable was high, with an average percent agreement of 95.8% and Kalpha of .91.

### **Humor Types**

The coding scheme for our theoretically derived selection of humor types was developed by integrating and extending the work of various scholars. For example, we incorporated work by Buijzen and Valkenburg (2004) on definitions of humor techniques, Martin et al.'s (2003) theoretical work on humor styles, Klein and Kuiper (2006) adaptation of humor styles in middle childhood, and McGhee's (1979) conceptualization of incongruity humor. Definitions of humor types were adjusted as necessary to be suitable for

content analysis; an extensive list of examples and decision rules per humor type was devised.

The coding scheme was fine-tuned during piloting, based on the coders' experiences and expressions of humor encountered in the pilot sample of television series. For example, initially, we included more and less severe forms of aggressive humor (putdown humor versus gentle teasing) as separate codes. However, coders differed too much in their interpretation of the aggression's severity, so these codes were collapsed. We similarly worked to achieve a broader umbrella definition of incongruity that coders could better understand, as our initial effort (i.e., separate codes that represented two types of incongruity) was not successful. After these adjustments were made, definitions were clear for the coders and reliability reached sufficient levels. **Table 1** lists definitions, examples, and ICR of all ten humor types (with percent agreement ranging from 86.5% to 100% and Kalpha ranging from .67 to 1).

Coders were instructed that one instance of humor could be coded as multiple types of humor (e.g., a humorous remark that is *sexually-themed* in the form of *wordplay* should be coded as both types of humor). In addition, a scene may include the same type of humor multiple times. Since the coding occurred for the presence versus absence of each humor type on a scene level, in such situations, the humor type was necessarily only coded as present once. The full coding manual including a detailed description of the development of the coding scheme, various examples, and decision rules, is available online (<https://ccam-ascor.nl>).

## Results

### *Humor Types*

The unit of coding was the scene (N = 5,633). We coded the scenes of two episodes for each of the 107 television series (i.e., 214 episodes), which were then combined on a series-level for analysis purposes. To answer RQ1, we examined the prevalence of the ten humor types in our sample of series on two levels: first, by analyzing the percentage of series in which a particular humor type was present (series-level coding) and then by analyzing in what percentage of scenes this humor type was present within these series (scene-level coding).

Humor (in some shape or form) was present in 94.4% of all coded series (i.e., 101 out of 107), meaning that these series contain at least one instance of humor. With regard to specific types, all ten humor types were present to some degree. Aggressive humor was the most prevalent: In 87.9% of the series, this humor type was present at least once. The second most prevalent types were incongruity and wordplay humor, both present in 75.7% of series,

**Table 1.** Humor types, definitions, examples, and intercoder reliabilities.

Humor type	Definition	Example	Percent Agreement	Kalpa
Aggressive	To ridicule, to make a fool of someone	In an episode of <i>Law and Order</i> , a group of at-risk youths ridicule police officers by saying: "they are not the top dogs, their suits are too cheap"	88.0%	.77
Slapstick	Pie-in-the-face humor (physical comedy) often involving degradation of someone's status	Someone slipping on a banana peel, bumping into a glass door (e.g., <i>America's Funniest Home Videos</i> ), or being hit in a cartoonish way (e.g., <i>Tom and Jerry</i> )	87.7%	.74
Self-defeating	Poking fun at one's own faults	In an episode of <i>Law and Order</i> , a skinny-looking guy is questioned by police whether he subdued a suspect. He replies with: "sure, I put him in a headlock and made him my bitch, what do you think?!"	100.0%	1.00
Sexual	Involves alluding to, hinting at, or making a reference or insinuation to sexual or naughty matters	In an episode of <i>The Fashion Police</i> , the stylist is pointing out "the room to grow" in the groin area of a pair of baggy pants, which is "convenient for a man"	96.7%	.85
Irreverent	Lacking proper respect for authority or prevailing norms; including sick, impolite, taboo, poor in taste, or overly vulgar humor	Making a prank call; setting of a stink bomb; disobeying one's parents	92.2%	.82
Coping	Humor about misfortune, sickness, or death, employed as a coping mechanism to deal with the difficulties of life	A cancer patient joking about the benefits of losing her hair (not having to spend a lot of money on the hairdresser).	95.9%	.85
Parody	Making a fool of, or poking fun at well-known things, situations or public figures	In an episode of <i>Family Guy</i> , there is a persiflage of the show <i>The Voice</i> in which the main character Peter auditions for a jury sitting on chairs with their backs turned to him.	93.4%	.82
Wordplay	Making puns or playing on words, or to misinterpret someone's words	In an episode of <i>Ducktales</i> , Gyro Gearloose has invented a machine that can duplicate anything. Huey, Dewey, and Louie Duck test the machine on a coin and when the coin duplicates one of them says: "Now that's what I call a double your money back guarantee!"	86.8%	.74
Incongruity	Revolves around an outcome that wasn't expected, and which takes one by surprise	In an episode of <i>Family Guy</i> , Peter thinks he sees his wife Lois but when "she" turns around it happens to be a man.	86.5%	.67
Absurdity	Things or behavior that's neither here nor there; nonsense, things that go against all logical rules. This also includes stupid humor; things that are funny because no one can be that stupid (making it absurd) and clownish behavior (e.g., clownish gestures or exaggerated irregular physical behavior).	In an episode of <i>Family Guy</i> , out of nowhere, a scene opens with Peter lying in bed with a sheep. Then, he asks her to move in with him. In an episode of <i>Spongebob Squarepants</i> , Spongebob's best friend doesn't know what Spongebob's gender is (which is absurd as no one does not know his best friend's gender).	91.8%	.82

in turn closely followed by irreverent humor (74.8%). Parody was present in 62.6% of series, while sexual humor, slapstick, and absurdity were present in 58.9%, 55.1%, and 52.3% of series, respectively. The least prevalent were self-defeating humor and coping humor, in 39.3% and 23.4% of series, respectively. See [Table 2](#) for the prevalence of humor types by genre.

Given that the previous analysis would qualify a series as containing humor based on a single instance, we also examined the average contribution of humor on the scene-level. Of the 101 series that contained humor, we found that on average, 55.1% of a series' scenes contained humor, showing that humor is highly prevalent within the series in our sample. Broken down by humor type, incongruity was the most prevalent (in 12.9% of a series' scenes), followed by aggressive humor (8.9%), irreverent humor (7.1%), wordplay (6.7%), slapstick and absurdity (both 5.1%), parody (3.9%), sexual humor (3.7%), self-defeating humor (0.9%), and coping humor (0.8%) – together accounting for 55.1% of humor-containing scenes.

### **Co-occurrence of Types**

To answer our second research question, we examined how humor types co-occur. Specifically, we used the humorous scenes ( $N = 2,695$ ) from the 101 series featuring humor to calculate tetrachoric correlations (suitable for binary data, cf. Lorenzo-Seva & Ferrando, 2012) between the ten humor types, displayed in [Table 3](#). Except for self-defeating and coping humor, almost all humor types correlated with each other in a small to moderate way (ranging from  $-.33$  to  $-.08$  and from  $.09$  to  $.42$ ). The strongest positive relationship was found between incongruity and absurdity humor ( $r = .42$ ), meaning that scenes containing incongruity humor often also contain absurdity humor. The strongest negative relationship was between sexual humor and slapstick ( $r = -.33$ ), meaning that scenes that contain sexual humor are less likely to also contain slapstick humor. Most correlations between humor types were positive, with the exception of slapstick humor, which correlated negatively with seven out of nine humor types.

The tetrachoric correlations inform us about how humor types co-occur on the individual level. As a next step, we tested for the most common patterns of co-occurrence in our sample of television series, by means of an Exploratory Factor Analysis (EFA), using the software package FACTOR (Lorenzo-Seva & Ferrando, 2006). Tetrachoric correlations between humor types were used as input for the EFA (Lorenzo-Seva & Ferrando, 2012). Parallel analysis (the preferred approach over the Kaiser-criterion, Watkins, 2018) revealed an underlying four-factor structure. As the primary purpose was to identify how the humor types group together into “components” (as opposed to an underlying latent

**Table 2.** Prevalence of humor types by genre.

Genre Humor type	Drama (N = 18)	Action/Adventure (N = 15)	Thriller/Mystery (N = 9)	Comedy (N = 38)	Reality (N = 27)	Talk show (N = 2)	Edutainment (N = 13)
Aggressive	66.7%	100%	88.9%	92.1%	96.3%	100%	69.2%
Slapstick	33.3%	40.0%	11.1%	78.9%	48.1%	100%	38.5%
Self-defeating	27.8%	20.0%	22.2%	44.7%	55.6%	100%	15.4%
Sexual	27.8%	46.7%	55.6%	71.1%	70.4%	100%	38.5%
Irreverent	61.1%	80.0%	66.7%	92.1%	77.8%	100%	30.8%
Coping	22.2%	6.7%	33.3%	28.9%	25.9%	100%	100%
Parody	22.2%	60.0%	77.8%	84.2%	55.6%	100%	53.8%
Wordplay	38.9%	60.0%	66.7%	89.5%	88.9%	100%	69.2%
Incongruity	55.6%	80.0%	77.8%	100%	55.6%	100%	61.5%
Absurdity	11.1%	53.3%	33.3%	94.7%	29.6%	100%	23.1%

Because more than one genre could be assigned, total N is higher than 107.

**Table 3.** Tetrachoric correlation matrix of ten humor types.

Humor type	Aggressive	Slapstick	Self-defeating	Sexual	Irreverent	Coping	Parody	Wordplay	Incongruity	Absurdity
Aggressive	–									
Slapstick	-.17*	–								
Self-defeating	.25*	-.10	–							
Sexual	.07	-.33*	.05	–						
Irreverent	.34*	.02*	.08	.24*	–					
Coping	-.08	-.27*	.02	.16*	.19*	–				
Parody	.18*	-.13*	-.06	.12*	.16*	.12	–			
Wordplay	.09*	-.10*	.09	.09*	.05	-.03	.12*	–		
Incongruity	.07	-.08*	.05	.09*	.30*	.02	.11*	.02	–	
Absurdity	-.01	.09*	-.14	.04	.18*	.06	.25*	-.02	.42*	–

The number of humor types present in a scene ranged from one to eight (out of a maximum of 10), with a mean of 2.44 humor types present per scene. \* $p < .05$ . Tetrachoric correlations range from  $-1$  to  $1$ .

**Table 4.** Rotated factor loadings matrix for the ten humor types.

	Factor 1 <i>(Buffoonery)</i>	Factor 2 <i>(Disparagement)</i>	Factor 3 <i>(Cognitive Fun)</i>	Factor 4 <i>(Coping with Sexuality)</i>
Explained variance	20.5%	15.1%	12.8%	10.4%
Humor Type				
Aggressive		.79		
Slapstick				-.72
Self-defeating		.77		
Sexual				.61
Irreverent	.72			
Coping				.76
Parody			.63	
Wordplay			.77	
Incongruity	.80			
Absurdity	.75			

Extraction Method: Principal Component Analysis; Factor Retention Criterion: Parallel Analysis; Rotation Method: Robust Oblimin; loadings lower than absolute.4 omitted.

Subsequently chosen factor names in italic brackets. Following factor analysis recommendations (Gorsuch, 2013), the cross-loading of irreverent humor on “Disparagement” (.57) was removed, due to its higher loading on “Buffoonery”.

variable) Principal Components Analysis was used to extract the four factors (cf. Baglin, 2014), using an oblique rotation method (Robust Promin, cf. Lorenzo-Seva & Ferrando, 2019). The factor structure was cleaned for variables with communalities lower than 0.4.

The four factors that were extracted explained 58.7% of the variance and met the assumptions of homoscedasticity and sphericity (Kaiser-Meyer-Olkin test = 0.5, Bartlett’s Sphericity Test  $p < .0001$ ). Factor loadings are displayed in Table 4. The first factor, which we labeled “Buffoonery,” consisted of incongruity, absurdity, and irreverent humor. The second factor, which we refer to as “Disparagement,” consisted of aggressive and self-defeating humor. The third factor, “cognitively Fun,” consisted of two cognitive-challenging humor types: parody and wordplay. Finally, the fourth factor, “Coping with Sexuality,” reflected the combination of sexual and coping humor in television series. “Cognitive Fun” was featured in 47.5% of the series that contained humor, “Buffoonery,” was represented in 38.4% of those series, “Disparagement” in 28.3%, and “Coping with Sexuality” in 11.1% of series containing humor.

## Discussion

While media entertainment provides an important source for t(w)eens to learn about humor, the field lacks a systematic approach to examining the expressions of humor in t(w)eens’ media entertainment. To address this, we created and tested a coding framework of humor in t(w)eens’ media entertainment. We applied a novel intertheoretical-approach in which we integrated motivational aspects from the three leading humor theories:

incongruity, superiority, and relief theory (Freud, 1905; Freud, 1960; McGhee, 1979; Zillmann, 1983). This led us to identify ten specific humor types that may be used in media entertainment for t(w)eens: aggressive, slapstick, self-defeating, sexual, irreverent, coping, parody, wordplay, incongruity, and absurdity humor. A subsequent content analysis showed that all ten humor types were indeed present in our sample of t(w)eens' favorite television series. Interestingly, the largest contributors to humor were incongruity, aggressive, and irreverent humor, which offers support for our inter-theoretical-approach to humor, as each is explained by a different theory (i.e., incongruity, superiority, and relief theory, respectively). In addition, these humor types also correspond with the types of humor most enjoyed by t(w)eens in daily life (Dowling, 2014).

Coping and self-defeating humor were the least frequent humor types in our sample of television series. Coping humor revolves around the cognitive process of turning a difficult situation into something humorous (Fox et al., 2013). Self-defeating humor relies on externalizing negative self-cognition to make other people laugh (Fox et al., 2013). It may be that these humor types are cognitively too challenging for t(w)eens. The "cognitive congruency principle" (Zigler et al., 1966) suggests that humor appreciation is greatest when the humor stimulus is optimally challenging – not too easy and not too difficult. Consequently, because t(w)eens may still struggle to appreciate coping and self-defeating humor, it could be that media developers rarely feature these humor types for this audience. Future research with broader samples of television series should parse out whether series aimed at general audiences (or adults specifically) feature these humor types more often than content popular with t(w)eens, or whether these humor types are scarce in entertainment in general.

### ***Rethinking Humor Classifications***

The function of humor in media entertainment is first and foremost to produce enjoyment (Zillmann & Bryant, 1994). Inasmuch, this study provides some interesting insights into the types of humor t(w)eens may particularly enjoy in media entertainment. But, humor is not just a laughing matter, as some types of humor may teach the viewer positive and others negative lessons as to how to use humor in daily life (Cann et al., 2009). To that end, we also examined whether the humor types in our sample of television series could be classified – in terms of their anticipated positive or negative outcomes – guided by existing classifications from interpersonal communication (Lynch, 2002; Martin et al., 2003; Socha & Kelly, 1994). Although these classifications have suggested a binary distinction between positive and negative humor types, we argued that in the rich context of media entertainment such a classification may not always be possible, as the



presence of other types of humor may change the humor's (positive or negative) meaning.

Our study shows that while series did feature independent presentations of individual humor types, nearly all humor types were also positively associated with each other (except for slapstick humor, which seems to be more a genre of its own). Specifically, there were four consistent ways that humor types co-occurred in our sample: comparable humor types occurred together – namely, with “Cognitive Fun” (parody and wordplay) and “Disparagement” (self-defeating and aggressive humor). At the same time, we also found that humor types that might separately be considered as positive or negative occurred together in the factors “Buffoonery” (incongruity, absurdity, and irreverent humor) and “Coping with Sexuality” (coping and sexual humor). Replication is needed to confirm these patterns, but the high number of positive relations between humor types does suggest that co-occurrence between humor types is common in t(w)eens' media entertainment.

Based on these findings, we would argue that humor classification models (Lynch, 2002; Martin et al., 2003; Socha & Kelly, 1994) must be extended and refined to suit the multifaceted nature of media entertainment. For instance, the perception of humor's positive or negative message may be strengthened (e.g., when aggressive and self-defeating humor are paired), diluted (e.g., when irreverent humor is combined with incongruity and absurdity), or even converted (e.g., in case of the clustering of sexual and coping humor) by its combination with other humor types. In refining existing models, it will also be important to take the target audience into account. For example, for younger children, existing binary classifications (e.g., positive vs. negative) may, in fact, be applicable to media entertainment, since such humor is likely to be less complex and effects more straightforward. Yet, with age, the suitability of binary distinctions (and related predictions) may no longer be appropriate – as our results suggest.

### **Next Steps**

Our findings indicate that humor is not only present in a wide variety of television series but also occurs frequently within series, suggesting that humor is an attractive and important feature of t(w)eens' media entertainment. This underscores the need for further empirical investigations on this topic. We encourage researchers to apply and extend our coding framework to other formats and broader representative samples of media entertainment in which the humor type preferences of different groups are compared. In that regard, we are not suggesting one study, but rather a larger domain of scholarship. We posit that the same way research on mediated aggression has expanded over time, the study of humor should be extended as well.

For example, for mediated aggression, we know that several personality characteristics predict the types of aggression t(w)eens prefer to watch (Van der Wal et al., 2019). Yet, in the context of humor preferences, we know very little about the predictive role of personality characteristics. Some attention has been paid to sex differences (Bergen, 1998; Socha & Kelly, 1994), but other individual differences (e.g., sensation seeking, empathy, developmental level) may also matter. Moreover, individual differences in humor preferences may be mediated by differential motivations that guide exposure to specific humor types. This would be in accordance with an often-heard criticism of the three leading humor theories (McGraw & Warren, 2010), namely, that the appeal of a particular humor type may sometimes be explained by multiple motivational humor theories (e.g., providing tension relief and/or feeling superior), depending on the person. As individual differences in selective exposure lead to different processing and effects (Valkenburg & Peter, 2013), it is important to examine how personality characteristics may predict humor type preferences.

At the same time, returning to our example of mediated aggression, just as the effect of aggressive content depends on a variety of factors (e.g., reward vs. punishment; reality vs. fantasy; Smith et al., 1998), similar boundary conditions may be in place for humor. For instance, slapstick presented in an animated, fantasy setting may not have any effects except for enjoyment, whereas slapstick humor in a realistic setting (e.g., in series like *Jackass*) may result in inspirational effects. In addition, just as aggression may be used in narratives as a means to advance a story arc in unique ways, it would be interesting to examine the context of humor vis-à-vis a narrative perspective, as different types of humor may serve different functions in storytelling. For example, some humor types may be used at the beginning of a television episode to lure the audience in or signal that the genre is a comedy, while others may accompany action or conflict to potentially increase arousal and subsequent tension relief.

Inasmuch, by presenting a theoretically-informed coding framework for assessing the prevalence and types of humor in media entertainment, and by illustrating the prominence of humor in t(w)eens' media entertainment, we hope that this study provides a conceptual and empirical basis for future work on humor in the mediated space. At the same time, our findings regarding the frequent co-occurrence of humor types highlight the need for further theoretical refinement in which mediated humor is seen as a dynamic and complex interaction across humor types. Such theoretical refinement will have clear and important consequences for our understanding of humor, and its effects.

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## References

- Baglin, J. (2014). Improving your exploratory factor analysis for ordinal data: A demonstration using FACTOR. *Practical Assessment, Research & Evaluation*, 19(5), 1–15. <https://doi.org/10.7275/dsep-4220>
- Bandura, A. (2001). Social cognitive theory of mass communication. *Media Psychology*, 3(3), 265–299. [https://doi.org/10.1207/S1532785XMEP0303\\_03](https://doi.org/10.1207/S1532785XMEP0303_03)
- Banerjee, S. C., Greene, K., Krcmar, M., & Bagdasarov, Z. (2009). Who watches verbally aggressive series? An examination of personality and other individual difference factors in predicting viewership. *Journal of Media Psychology*, 21(1), 1–14. <https://doi.org/10.1027/1864-1105.21.1.1>

- Bergen, D. (1998). Development of the sense of humor. In W. Ruch (Ed.), *The sense of humor: Explorations of a personality characteristic* (pp. 329–358). Walter de Gruyter.
- Bergen, D. (2009). Gifted children's humor preferences, sense of humor, and comprehension of riddles. *Humor*, 22(4), 419–436. <https://doi.org/10.1515/HUMR.2009.024>
- Berlyne, D. E. (1972). Humor and its kin. In J. H. Goldstein & P. E. McGhee (Eds.), *The psychology of humor* (pp. 43–60). Academic Press.
- Bryant, J., & Anderson, D. R. (1983). *Children's understanding of television: Research on attention and comprehension*. Academic Press.
- Buijzen, M., & Valkenburg, P. M. (2004). Developing a typology of humor in audiovisual media. *Media Psychology*, 6(2), 147–167. [https://doi.org/10.1207/s1532785xmep0602\\_2](https://doi.org/10.1207/s1532785xmep0602_2)
- Cann, A., Zapata, C. L., & Davis, H. B. (2009). Positive and negative styles of humor in communication: Evidence for the importance of considering both styles. *Communication Quarterly*, 57(4), 452–468. <https://doi.org/10.1515/humr.2011.001>
- De Swert, K. (2012). Calculating inter-coder reliability in media content analysis using Krippendorff's Alpha. *Center for Politics and Communication*, 1–15. <https://www.polcomm.org/wp-content/uploads/ICR01022012.pdf>
- Dowling, J. S. (2014). School-age children talking about humor: Data from focus groups. *Humor*, 27(1), 121–139. <https://doi.org/10.1515/humor-2013-0047>
- Fox, C. L., Dean, S., & Lyford, K. (2013). Development of a humor styles questionnaire for children. *Humor*, 26(2), 295–319. <https://doi.org/10.1515/humor-2013-0018>
- Freud, S. (1960). *Jokes and their relation to the unconscious*. Norton. (original work published in 1905).
- Führ, M. (2002). Coping humor in early adolescence. *Humor*, 15(3), 283–304. <https://doi.org/10.1515/humr.2002.016>
- Gorsuch, R. L. (2013). *Factor analysis*. Psychology Press.
- Gray, J. (2009). *Television entertainment*. Routledge.
- Gruner, C. R. (1991). *On the impossibility of having a taxonomy of humor*. Presented at the Ninth International Conference on Humor and Laughter, Brock University, St. Catarines, Ontario, Canada.
- Gwet, K. L. (2008). Intrarater reliability. In R. B. D'Agostino, L. Sullivan, & J. Massaro (Eds.), *Wiley encyclopedia of clinical trials* (pp. 1–13). <https://doi.org/10.1002/9780471462422.eoct631>
- Klein, D. N., & Kuiper, N. A. (2006). Humor styles, peer relationships, and bullying in middle childhood. *Humor*, 19(4), 383–404. <https://doi.org/10.1515/humor.2006.019>
- Lombard, M., Snyder-Duch, J., & Bracken, C. C. (2002). Content analysis in mass communication: Assessment and reporting of intercoder reliability. *Human Communication Research*, 28(4), 587–604. <https://doi.org/10.1111/j.1468-2958.2002.tb00826.x>
- Lorenzo-Seva, U., & Ferrando, P. (2019). Robust Promin: A method for diagonally weighted factor rotation. *LIBERABIT. Revista Peruana De Psicología*, 25(1), 99–106. <https://doi.org/10.24265/liberabit.2019.v25n1.08>
- Lorenzo-Seva, U., & Ferrando, P. J. (2006). FACTOR: A computer program to fit the exploratory factor analysis model. *Behavior Research Methods*, 38(1), 88–91. <https://doi.org/10.3758/bf03192753>

- Lorenzo-Seva, U., & Ferrando, P. J. (2012). TETRA-COM: A comprehensive SPSS program for estimating the tetrachoric correlation. *Behavior Research Methods*, 44(4), 1191–1196. <https://doi.org/10.3758/s13428-012-0200-6>
- Lynch, O. H. (2002). Humorous communication: Finding a place for humor in communication research. *Communication Theory*, 12(4), 423–445. <https://doi.org/10.1111/j.1468-2885.2002.tb00277.x>
- Manganello, J., Franzini, A., & Jordan, A. (2008). Sampling television programs for content analysis of sex on TV: How many episodes are enough? *Journal of Sex Research*, 45(1), 9–16. <https://doi.org/10.1080/00224490701629514>
- Manganello, J. A., & Chauhan, A. G. (2011). Car riding behavior in television programs watched by adolescents in the US. *Journal of Children and Media*, 5(2), 194–203. <https://doi.org/10.1080/17482798.2011.558276>
- Martin, R. A. (2007). *The psychology of humor: An integrative approach*. Elsevier Academic Press.
- Martin, R. A., Puhlik-Doris, P., Larsen, G., Gray, J., & Weir, K. (2003). Individual differences in uses of humor and their relation to psychological well-being: Development of the humor styles questionnaire. *Journal of Research in Personality*, 37(1), 48–75. [https://doi.org/10.1016/S0092-6566\(02\)00534-2](https://doi.org/10.1016/S0092-6566(02)00534-2)
- McGhee, P. E. (1979). *Humor: Its origin and development*. WH Freeman.
- McGraw, A. P., & Warren, C. (2010). Benign violations: Making immoral behavior funny. *Psychological Science*, 21(8), 1141–1149. <https://doi.org/10.1177/0956797610376073>
- Nielsen Media Research. (2017). *The total audience report: Q1 2017*. Retrieved from <https://www.nielsen.com/us/en/insights/report/2017/the-nielsen-total-audience-report-q1-2017/>
- Oppliger, P. A., & Zillmann, D. (1997). Disgust in humor: Its appeal to adolescents. *Humor*, 10(4), 421–437. <https://doi.org/10.1515/humr.1997.10.4.421>
- Papacharissi, Z. (2012). Audiences as media producers: Content analysis of 260 blogs. In M. Tremayne (Ed.), *Blogging, citizenship, and the future of media* (pp. 21–38). Routledge.
- Park, R. (1977). A study of children's riddles using Piaget-derived definitions. *The Journal of Genetic Psychology*, 130(1), 57–67. <https://doi.org/10.1080/00221325.1977.10533230>
- Patino, A., Kaltcheva, V. D., & Smith, M. F. (2012). Adolescent motivations for reality television viewing: An exploratory study. *Psychology & Marketing*, 29(3), 136–143. <https://doi.org/10.1002/mar.20510>
- Potter, W. J., & Warren, R. (1998). Humor as camouflage of televised violence. *Journal of Communication*, 48(2), 40–57. <https://doi.org/10.1111/j.1460-2466.1998.tb02747.x>
- Smith, S. L., Wilson, B. J., Kunkel, D., Linz, D., Potter, W. J., Colvin, C. M., & Golden, S. (1998). *National television violence study*. Sage Publications, Inc.
- Socha, T. J., & Kelly, B. (1994). Children making “fun”: Humorous communication, impression management, and moral development. *Child Study Journal*, 24(3), 237–252.
- Stocking, S. H., Sapolsky, B. S., & Zillmann, D. (1977). Sex discrimination in prime time humor. *Journal of Broadcasting & Electronic Media*, 21(4), 447–457. <https://doi.org/10.1080/08838157709363854>
- Suls, J., & Gastoff, J. W. (1981). The incidence of sex discrimination, sexual content, and hostility in television humor. *Journal of Applied Communication Research*, 9(1), 42–49. <https://doi.org/10.1080/00909888109360287>

- Valkenburg, P. M., & Peter, J. (2013). The differential susceptibility to media effects model. *Journal of Communication*, 63(2), 221–243. <https://doi.org/10.1111/jcom.12024>
- Van der Wal, A., Fikkers, K. M., & Valkenburg, P. M. (2020). What's in it for them? Teens' differential preferences for types and contexts of televised aggression. *Communication Research*, 47(8), 1206–1227. <https://doi.org/10.1177/0093650219832231>
- Warnars-Kleverlaan, N., Oppenheimer, L., & Sherman, L. (1996). To be or not to be humorous: Does it make a difference? *Humor*, 9(2), 117–142. <https://doi.org/10.1515/humr.1996.9.2.117>
- Watkins, M. W. (2018). Exploratory factor analysis: A guide to best practice. *Journal of Black Psychology*, 44(3), 219–246. <https://doi.org/10.1177/0095798418771807>
- Weaver, J. B. (1991). Are “slasher” horror films sexually violent? A content analysis. *Journal of Broadcasting & Electronic Media*, 35(3), 385–392. <https://doi.org/10.1080/08838159109364133>
- Wolfenstein, M. (1954). *Children's humor: A psychological analysis*. Free Press.
- Zigler, E., Levine, J., & Gould, L. (1966). Cognitive processes in the development of children's appreciation of humor. *Child Development*, 37(3), 507–518. <https://doi.org/10.2307/1126675>
- Zillmann, D. (1983). Disparagement humor. In P. E. McGhee & J. H. Goldstein (Eds.), *Handbook of humor research: Vol. 1. Basic issues* (pp. 85–107). Springer.
- Zillmann, D., & Bryant, J. (1994). *Entertainment as media effect*. Lawrence Erlbaum Associates, Inc.