



### Missouri University of Science and Technology Scholars' Mine

Library and Learning Resources Faculty Research & Creative Works

Library and Learning Resources

01 Oct 2011

### An Analysis of Online News Comments on Children's Racial Perceptions in the U.S.

Hsin-Liang Chen Missouri University of Science and Technology, chenhs@mst.edu

Robin A. Moeller

Follow this and additional works at: https://scholarsmine.mst.edu/library\_facwork



Part of the Library and Information Science Commons

#### **Recommended Citation**

Chen, H., & Moeller, R. A. (2011). An Analysis of Online News Comments on Children's Racial Perceptions in the U.S.. Proceedings of the 74th Annual Meeting of the Association for Information Science and Technology (2009, New Orleans, LA), 48 John Wiley & Sons Inc..

The definitive version is available at https://doi.org/10.1002/meet.2011.14504801248

This Article - Conference proceedings is brought to you for free and open access by Scholars' Mine. It has been accepted for inclusion in Library and Learning Resources Faculty Research & Creative Works by an authorized administrator of Scholars' Mine. This work is protected by U. S. Copyright Law. Unauthorized use including reproduction for redistribution requires the permission of the copyright holder. For more information, please contact scholarsmine@mst.edu.

# An Analysis of Online News Comments on Children's Racial Perceptions in the U.S.

Hsin-liang Chen
Indiana University - Indianapolis
755 West Michigan Street,
Indianapolis, Indiana 46202-5195
chenhsin@iupui.edu

Robin A. Moeller
Appalachian State University
108 Duncan Hall
Boone, NC 28608
moellerra@appstate.edu

#### **ABSTRACT**

This paper studies how a large online community made sense of a television and online news organization's cosponsored study of children's perceptions of race in the America. 2,906 readers' comments from the CNN special report were collected in December 2010. After classifying these comments, there were four data sets: all comments, negative comments, positive comments, and popular comments (comments with "Like). Wordstat, a contentanalysis software program, was used to analyze the word/phrase frequency of four data sets. The purpose of the content analysis was to identify any similar pattern of word/phrase among the data sets. Of 2,906 comments, 1,745 comments (60%) received the "Like" votes from other online readers. However, the majority of these comments (1,723; 59.29%) received fewer than 26 votes of Regarding the positive comments, only 68 comments were agreed upon by the three reviewers. Seven of those comments were highly positive (over 6 based on a 7-point Likert scale). On the other side, 456 comments were agreed upon by the reviewers as negative comments. However, the majority of those comments (443) were slightly negative (2.01-3 based on a 7-point Likert scale).

#### Keywords

Online news comments, online news, social issues, user studies

#### INTRODUCTION

The days in which people have to wait until the next workday to discuss news topics around the proverbial "water cooler" are long gone. In no way is this message communicated more profoundly than journalists' current use of online tools such as Color, Tumblr, and Storify to assist them in finding relevant news stories through online data. While using Storify to cover the shooting of Arizona Rep. Gabrielle Giffords, one NPR editor noted, "It [the story] quickly evolved into looking at how people were

ASIST 2011, October 9-13, 2011, New Orleans, LA, USA. ©2011 Hsin-liang Chen and Robin A. Moller

discussing media coverage surrounding it and its potential impact" (Cain Miller, 2011, para. 10). Social media has become the "water cooler" around which we now gather. Thelwall and Wouters (2005, p. 187) suggested that "information scientists can play a valuable role by evaluating new information *sources* in a meta-disciplinary context, developing tools and methods to analyse the data and, crucially, contributing to the predication of the kinds of research questions that the data may usually help address."

Therefore, the purpose of this paper was to understand how a large online community made sense of a television and online news organization's co-sponsored study of children's perceptions of race in the America.

#### LITERATURE REVIEW

First, as Powazek noted in the introduction to his 2002 book, many definitions of "web communities" exist, but for the purposes of this paper. Powazek's own definition will be used; "Web communities happen when users are given tools to use their voice in a public and immediate way, forming intimate relationships over time" (2002, p. xxii). The type of online community analyzed for this research project allowed users to post and comment on others' postings, providing a threaded format for discussion. Nissenbaum and Introna (2004), and Manosevitch and Walker (2009) noted that the type of technology that made CNN's forum discussion on race possible, suggests political and moral fairness, or "the Web as a public good" (Nissenbaum and Introna, 2004, p. 23). Wachbroit (2004) furthers this notion by suggesting that the ease of accessibility and inexpensive means of communication allows people to discuss ideas effortlessly.

In 2010, the Pew Research Center published a paper that provided a snapshot of how many Americans are participating with their online news sources and how. According to their study, "37% of internet users have contributed to the creation of news, commented about it, or disseminated it via postings on social media sites like Facebook or Twitter" (Pew Research Center, 2010, p. 2). The report also noted that the vast increase in mobile phone usage and coverage has made the process of news gathering and news awareness an activity that is no longer bound by time or space. Furthermore, Pew also noted that

72% of American news consumers reported that they enjoy following the news because they like to discuss current events with others.

Thelwall (2006) and Thelwall, Bryne, and Goody (2007) have described how bloggers use the Internet to reflect on online news stories from organizations such as CNN and the BBC. Powazek (2002) described how corporations that create online forums for their consumers help their online community become informed – in essence, creating a space in which people can facilitate a dialogue and learn from each other about what is important to them. The way in which news organizations provide the space and continuous content for users to interact with makes this type of online communication different from blogs.

In 2010, CNN commissioned a study to be conducted in order to understand children's beliefs, preferences, and attitudes with regard to race at "two different developmental periods" (2010b, p. 1) of their childhood. In brief, the results of this study indicated that those children, both in early childhood and middle childhood, who associated lighter skin tones with more positive traits such as "smart, nice, good, good looking" also associated darker skin tones with negative traits such as "dumb, mean, bad, ugly" (2010b, p. 41). CNN's visual demonstration of what had been an academic study made this "one of the most discussed stories on [CNN's] site, eliciting more than 4,500 comments" (2010a).

The results of this study went beyond those published in the commissioned report, however. CNN described this report as well as aired several of the post-questionnaire interviews that were conducted with the children who acted as participants in the study. Viewers were allowed to see how these particular children chose which hue of skin tone and listened as they explained to the interviewer their rationale for their choice. CNN correspondent Anderson Cooper himself re-interviewed some of the children, asking some of the same questions as the original interviewers such as, "show me the dumb child" (2010a). This forum provides a unique snapshot of America's commentary on race in this particular time in our country's history.

#### RESEARCH QUESTIONS AND METHODOLOGY

The purpose of this paper was to understand how a large online community made sense of the CNN co-sponsored study of children's perceptions of race in the America.

- 1. Are news comments more positive or negative regarding the issues of racial preference and children?
- 2. What were the common words and phrases used in all news comments?
- 3. What were the common words and phrases used in positive news comments?
- 4. What were the common words and phrases used in negative news comments?

We gathered 2,906 readers' comments from the CNN special report in December 2010. Figure 1 is an example of the reader's comment. We used a spreadsheet program to record the reader's online name, comment, and the number of "Like" votes. The "Like" count was used to indicate the popularity of a reader's comment.



#### HGranfield

I'd be curious to hear the responses to questions like, "Show me the dumbest/smartest/good/bad... child" if the questions were worded as, "IS there a dumb/smart/good/bad... child shown here"? Worded the way the questions were, the child is led, by an adult, to assume that one of the pictured chilir... more

1 year ago | Like (43) | Report abuse

Figure 1. A reader's comment

Three LIS master's students (two females and one male) were recruited to review the positivity and negativity of the comments. The reviewers were given two months to review the comments independently and properly. They reviewed the comments based on a 7-point Likert scale (1-negative and 7-positive). All scores were recorded in spreadsheet files.

We calculated the means and standard divisions (SDs) of the scores. When a SD was 1 or higher, we considered that was a disagreement among the three reviewers. Therefore, those comments were excluded from further analysis. Next, we treated comments with a mean score was 3 or lower as negative comments, when comments with a mean score 5 or higher as positive comments. After classifying these comments, there were four data sets: all comments, negative comments, positive comments, and popular comments (comments with "Like).

Wordstat, a content-analysis software program, was used to analyze the word/phrase frequency of four data sets. The purpose of the content analyze was to identify any similar pattern of word/phrase among the data sets. Stop words (e.g., of, the, and) were excluded from the data sets. We reported the results based on the frequency of top word/phrase, the number of comments, and the percentage of the comments.

#### **RESULTS**

Of 2,906 comments, 1,745 comments (60%) received the "Like" votes from other online readers. However, the majority of these comments (1,723; 59.29%) received less than 26 votes of "Like." Regarding the positive comments, only 68 comments were agreed upon by the three reviewers. Seven of those comments were highly positive (over 6 based on a 7-point Likert scale). On the other side, 456 comments were agreed upon by the reviewers as negative comments. However, the majority of those comments (443) were slightly negative (2.01-3 based on a 7-point Likert scale).

Data sets	N	%
All comments	2,906	100
Comments with "Like"	1,745	60%
Over 100 "Like"	1	0.03%
76-100	1	0.03%
51-75	5	0.17%
26-50	15	0.52%
1-25	1,723	59.29%
Positive comments	68	2.34%
Over 6	7	0.24%
5-5.99	61	2.1%
Negative comments	456	15.69%
2.01-3	443	15.24%
1.01-2	10	0.34%
1	3	0.1%

**Table 1. Distributions of comments** 

### RQ #1: Are news comments more positive or negative regarding the issues of racial preference and children?

According to Table 1, more comments were perceived as negative by the reviewers. In the meantime, 40% of the readers' comments did not receive any "Like" vote that indicated an area for further research: the relationship between the popularity of the comments and their negativity/positivity,

### RQ #2: What were the common words and phrases used in all news comments?

Among the top 10 words, only "WHITE" and "BLACK," appeared in over 25% of all readers' comments. All top 10 phrases appeared in less than 5% of all readers' comments (Table 2). The significant gap of the top word/phrase usage indicates that those online news readers' opinions were widespread. This speculation is also supported by the number of comments which received the "Like" votes (Table 1).

	Frequency	# of	% of
	Trequency		
		comments	comments
Word			
WHITE	1480	817	28.1%
BLACK	1408	777	26.7%
PEOPLE	1025	617	21.2%
CHILD	783	448	15.4%
KID	720	440	15.1%
RACE	653	431	14.8%
COLOR	586	380	13.1%
SKIN	514	336	11.6%
STUDY	513	370	12.7%
DON	394	324	11.2%
Phrase			
SKIN COLOR	159	119	4.1%
WHITE	142	114	3.9%
PEOPLE			
BLACK	106	90	3.1%
PEOPLE			

LIGHT SKIN	89	75	2.6%
BLACK KID	74	62	2.1%
BLACK CHILD	63	49	1.7%
WHITE KID	57	47	1.6%
LIGHT	55	44	1.5%
SKINNED			
AFRICAN	54	40	1.4%
AMERICAN			
WHITE CHILD	48	37	1.3%

Table 2. Top 10 common words and phrases from all comments (N=2,906)

## RQ #3: What were the common words and phrases used in positive news comments?

By comparison, the top 10 words from the positive comments have higher percentage of appearance (Table 3). Seven out of ten words have over 20% of appearance. In the meantime, the top 3 phrases have over 5% of appearance in the positive comments.

	Frequency	# of	% of
		comments	comments
Word			
PEOPLE	40	17	24.6%
BLACK	35	17	24.6%
WHITE	32	18	26.1%
KID	25	16	23.2%
CHILD	22	15	21.7%
SKIN	22	12	17.4%
RACE	21	15	21.7%
COLOR	18	12	17.4%
DON	17	14	20.3%
PARENT	15	9	13.0%
Phrase			
WHITE	7	4	5.8%
PEOPLE			
BLACK	6	5	7.2%
PEOPLE			
SKIN COLOR	6	4	5.8%
SKIN TONE	5	3	4.3%
GIRLS AT THE	3	3	4.3%
END			
COLOR HAVE	3	3	2.9%
THEIR SKIN			
COUNTRY IN	2	2	2.9%
THE WORLD			
BLACK OR	2	2	2.9%
WHITE			
WHITE	2	2	2.9%
FAMILY;			
EARLY AGE;			
AMERICAN			
CULTURE;			
KID DON;			
BLUE EYE			

### Table 3. Top 10 common words and phrases from positive comments (N=68)

### RQ #4: What were the common words and phrases used in negative news comments?

"WHITE," "BLACK," and "PEOPLE" are still the top three words in the negative comments. However, only "WHITE" and "BLACK" appeared in over 20% of the negative comments. The top three phrases are "WHITE PEOPLE," "LIGHT SKINNED," and "BLACK KID" as all top 10 phrases have a low appearance percentage, 4% (Table 4).

	Frequency	# of	% of
		comments	comments
Word			
WHITE	237	136	29.8%
BLACK	206	112	24.5%
PEOPLE	155	88	19.3%
KID	118	68	14.9%
STUDY	101	68	14.9%
RACE	97	62	13.6%
RACIST	88	64	14.0%
CHILD	86	54	11.8%
CNN	72	57	12.5%
DON	63	50	10.9%
Phrase			
WHITE	22	18	3.9%
PEOPLE			
LIGHT	13	11	2.4%
SKINNED			
BLACK KID	12	11	2.4%
BLACK MAN	12	10	2.2%
WHITE KID	12	9	2.0%
BLACK	12	9	2.0%
PEOPLE			
WHITE MAN	11	10	2.2%
ANDERSON	10	10	2.2%
COOPER			
WHITE CHILD	8	8	1.8%
LIGHT SKIN	8	8	1.8%

Table 4. Top 10 common words and phrases from negative comments (N=456)

#### **DISCUSSION**

The preliminary results indicate that common top words and phrases were used in readers' comments. However, the appearance percentages of the words/phrases vary in four different data sets. The variations reflect online readers' different opinions on the issues of kids and racial perceptions. We plan to use *Wordstat*'s correspondence analysis to identify relationships between top words and phrases at the next analysis stage.

#### **ACKNOWLEDGMENTS**

We thank Dr. Staša Milojević for her assistance in the data analysis procedure as well as Sarah Gilchrist and Christina Fitch for their assistance in the data collection procedure.

#### **REFERENCES**

- Cain Miller, C. (2011). Filtering the social web to present news items. Retrieved April 24, 2011 from http://www.nytimes.com/2011/04/25/technology/internet /25storify.html.
- CNN. (2010a). *Black or white: Kids on race*. Retrieved April 24, 2011 from http://www.cnn.com/SPECIALS/2010/kids.on.race/.
- CNN. (2010b). CNN pilot demonstration. Retrieved April 24, 2011 from http://i2.cdn.turner.com/cnn/2010/images/05/13/expande d\_results\_methods\_cnn.pdf.
- Manosevitch, E. & Walker, D. (2009). *Reader comments to online opinion journalism: a space of public deliberation*. Paper presented at the 2009 International Symposium on Online Journalism (April, 17-18, 2009).
- Nissenbaum, H. &Introna, L. D. (2004). Shaping the web: shy the politics of search engines matter. In *The Internet in Public Life*, V. V. Gehring, Ed. Rowman& Littlefield. Lanham, MD, 7-27.
- Pew Research Center. (2010). Understanding the participatory news consumer: how internet and cell phone users have turned news into a social experience. Retrieved April 24, 2011 from http://www.pewinternet.org/~/media/Files/Reports/2010/Understanding%20the%20Participatory%20News%20C onsumer.pdf.
- Powazek, D. M. (2002). Design for community: the art of connecting real people in virtual places. New Riders, Indianapolis, IN.
- Thewall, M., & Wouters, P. (2005). What's the deal with the Web/blogs/the next big technology: A key role for information science in e-social science research? In Proceedings of CoLIS. 2005, 187-199.
- Thelwall, M. (2006). *Bloggers during the London attacks: top information sources and topics*. Retrieved April 24, 2011 from citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.72.3 025.pdf.
- Thelwall, M., Bryne, A. & Goody, M. (2007). *Which types of news story attract bloggers?* Retrieved April 24, 2011 from http://informationr.net/ir/12-4/paper327.html.
- Wachbroit, R. (2004). Reliance and reliability: the problem of information on the internet. In *The Internet in Public Life*, V. V. Gehring, Ed. Rowman& Littlefield. Lanham, MD, 29-41.