

Conclusions and Implications

This report describes in detail how the activities that young people between the ages of 11 and 18 engage in online, as well as a number of their traits and attitudes, affect their assessments of the credibility of information, and how they go about forming those assessments. Results described herein are generalizable to households in the United States with Internet access.

Summary

The research outlined in this study describes youth who have been using the Internet for much of their lives and who use it for a wide variety of purposes. In many ways, the results are encouraging. For example, the young people in our survey demonstrated an understanding of the potential negative consequences of believing false information online, a tendency to question information that comes from deceptive sources like hoax Web sites, the ability to differentiate between one-sided and two-sided information presentations, general feelings of distrust toward strangers on the Internet, and the inclination to

put more effort into assessing the credibility of highly consequential information (e.g., health information) than less consequential information (e.g., entertainment information). Moreover, parents, teachers, and others provide children with some level of guidance and training with regard to issues of credibility. Consequently, worries that all adolescents are helpless and at the mercy of unscrupulous others on the Internet appear to be generally overstated.

On the other hand, whereas children's concern about credibility appears to be driven largely by analytic credibility evaluation processes (which involve the effortful and deliberate consideration of information), those who find Internet information most credible use more heuristic (hasty and feeling-based) processes to evaluate it. This finding, coupled with the fact that most kids said that people should be concerned about the credibility of information online, suggests that while kids take the issue of credibility seriously, actual decisions about credibility are not always based on a stringent approach to evaluating the information they find online.

In addition, children report being equally likely to believe entertainment and health information online, which implies potentially problematic outcomes since these types of information should typically warrant different levels of skepticism. Also, children consistently overestimate their own skill levels and capacity to discern good from bad information as compared to others. Such overconfidence is troubling, inasmuch as it implies a correspondingly reduced level of vigilance or attention. And, although most children displayed a healthy level of skepticism toward the hoax sites presented to them in this study,

approximately 10 percent of the children still believed the information on these hoax sites “a lot” or “a whole lot.” Findings such as these illustrate that although youth exhibit encouraging signs of achieving appropriate skills and attitudes about online information credibility, there remain important gaps in their knowledge and abilities.

A number of factors appear to partially explain the coexistence of these encouraging and discouraging findings. For example, as kids get older, their Internet use increases both in scope and in time spent online. This increase may be due in part to decreased regulation by parents, and is accompanied by an increase in the variety of tools used to assess the credibility of information online. Older teens also trust the Internet more as an information source than do younger kids but think that people should be more concerned about the quality of information online than do younger children. This might indicate that as kids become more experienced with the Internet they have a greater appreciation for the potential of deceptive information online as well as greater confidence in their ability to find credible information sources.

Indeed, various forms of experience play a critical role in youth’s credibility perceptions and information evaluation behaviors. Kids who have been using the Internet for a longer period of time, who spend a lot of time in virtual worlds, or who have contributed information to an online source (e.g., a blog, *Wikipedia*, etc.) think about credibility more and find more of the information and people they meet online to be credible. Also, older kids and kids who report having had or heard about bad experiences online report lower levels of belief in online

information. In addition, our research indicates a positive relation between experience using the Internet and the use of analytic strategies for assessing the credibility of online information: as kids become more experienced using the Internet, they show more concern for the believability of information online, use more cognitively demanding tools to assess its credibility, and show a higher level of trust toward people and information online. When it comes to actively processing credibility cues to assess information credibility, practice appears to reap real rewards.

Implications and Future Directions

Findings from this study reveal a relationship between youth, the Internet, and credibility that is far more nuanced than previous research has suggested. Our study indicates that a combination of experience using the Internet over time and vital cohort-related changes in youth's cognitive development interact to promote better awareness of general credibility concerns and the ability to evaluate information found online. This has implications for several domains, including education and the creation of media literacy curricula, children's use of the Internet, policy formulations, and future research endeavors.

For example, based on our findings, online media literacy programs should emphasize a structured but graduated approach to guiding children's use of the Internet, which stresses the accumulation of personal experience online, early parental involvement, and the sharing of positive and negative online experiences at an early age. Curricula should be

developed with these factors in mind, and should be assessed in terms of developmental and experiential differences among children.

This study also indicates that although overall experience may be a good predictor of credibility concern, it may also lull youth and even parents into believing they are better at discerning the credibility of information online than they actually are. Therefore, educational efforts regarding credibility evaluation should be ongoing, and should be targeted at youth with varying experience and skill levels in order to remain relevant. Indeed, quite different approaches appear warranted for younger versus older children and for those with lower versus higher online experience and skill.

It is also important to note that a number of limitations inherent in the survey methodology color our findings. For example, as use accumulates over time, children appear to appraise their ability to discern good versus bad information inaccurately. However, since survey data cannot accurately assess people's actual ability to find credible information successfully, techniques other than surveys should be used to validate and reveal any biases that result from this overconfidence. A possible direction for future research into this area is to investigate youth's evaluation of consequential information, such as information sought for schoolwork, during an actual information-seeking task. This could be done experimentally, via observation, or by other means.

As another example of the limitation of the survey method, we relied on screenshots of Web pages in our quasi-experiments to represent actual Web pages. Although this method has the

advantage of experimental control, it suffers from its non-naturalistic nature. The screenshots simply cannot fully represent children's actual information seeking or browsing experiences, which would require methods that retain the context of such experiences. Considering this context could, of course, affect the results presented here, in ways that are not entirely predictable.

Additionally, while it appears most kids were appropriately concerned about the believability of the hoax Web sites represented in this study, there is a need to determine what characteristics and contextual factors led the minority to believe this information, above and beyond simple ignorance that may remain irrespective of the presentation of information via the Internet. To better understand this outcome, future research may investigate the effect of developmental states from age 11 forward, for example, on evaluating Web site credibility.

Overall, the findings presented here not only represent the current state of knowledge on this topic, but also serve as an important springboard for future research. Based on our findings, research should consider the development of children's information evaluation styles and strategies over time, differences in and the effects of parental involvement, the role of negative experiences online, the evolution and influence of false confidence in information evaluation abilities, and the most appropriate educational efforts to enhance and assess online information literacy.

Conclusion

One goal of this study was to move away from the simplistic treatments children often receive in examinations of youth and

digital media, which cast children as either substantially more tech-savvy than adults, and therefore as superior in their use of digital media, or as universally vulnerable, and therefore in need of constant protection. Such accounts are prone to unnecessarily provoke either alienation or outrage, depending on the perspective taken. Our data suggest that neither view is particularly warranted, and that children's relation to digital media with regard to credibility is significantly more nuanced than either of these positions suggests.

In the end, and in spite of some evidence to the contrary, the reality seems to be largely what we would hope for as citizens, fellow Internet users, and parents: children are for the most part aware of the issues surrounding information verity on the Internet and appear generally capable of making informed and appropriate decisions in this regard. Thus, the best strategy to help children become more skillful Internet information consumers would appear to be from a perspective that empowers them and capitalizes on their unique upbringing in an all-digital world. Indeed, in a future in which the information that drives their lives is assembled, transmitted, shared, and processed digitally, children need to develop the skills necessary to navigate that information environment effectively. Perhaps the most encouraging conclusion from our data so far is that, for the most part, children seem to be making inroads toward that goal.

