

Moral Development in the Information Age

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Abstract

Families and schools must assume a leadership role in preparing youth for success in the emerging information age by teaching ethical online behavior in addition to academic skills. This paper presents a preliminary overview of moral development issues that are raised when young people interact in cyberspace. A preliminary classification system of Internet ethics issues that parents and educators must address includes (1) respect for property, (2) respect for territory and privacy, (3) respect for others and common courtesy, (4) respect for institution, and (5) respect for self. Based on preliminary analysis, there appear to be four factors that influence online behavior: (1) lack of affective feedback and remoteness of harm, (2) reduced fear of risk of detection and punishment, (3) a new environment with new rules, and (4) perceptions of social injustice and corruption. Moral development research explores moral reasoning, including cognitive-moral development and domain theory; moral motivation, including internal moral orientation; and moral control, including the social cognitive theory of moral thought and action and the theory of limited acceptable morality. This review of moral development research raises many questions including, ultimately, the question of whether humans, as a species, have the capacity to expand our moral reasoning, moral motivation, and moral control capabilities to deal with the complexities of the information age.



Introduction

Families and schools must assume a leadership role in preparing youth for success in the emerging information age. This preparation goes beyond skills in mathematics, understanding of scientific principles, and effective writing. Preparation for success in the information age must include:

- Respect for the laws and standards that society has agreed upon for governing behavior related to the use of information technologies, including appropriate ways to work with others to change laws that are not in the best interests of society.
- Ability to engage in moral reasoning and decision making, especially when there are conflicts in values and interests.
- Moral motivation and self-control to engage in appropriate and ethical behavior, even in situations where there is the freedom to do otherwise.

This paper presents a preliminary overview of moral development issues that are raised when young people interact in cyberspace. Research in moral development, while not specifically addressing issues related to information technologies, brings insight to factors that affect behavior. This insight includes an understanding of (1) the underlying moral/cognitive development process and issues related to moral reasoning, (2) moral motivation and the role of empathy, and (3) the factors influencing moral control and behavior. The research provides a basis for initiating an analysis of issues raised through the use of information technologies and the Internet.

The Context

It is important to understand the context in which schools and families will be addressing moral development in the information age. The Internet, which can be viewed as a paradigm for the information technology environment, was created by the U.S. military to withstand a nuclear attack. To do

so, the network technology was designed to function without centralized control and with the ability to route around technological barriers. This “open systems” capability virtually guarantees that whenever a technological barrier is developed, the technology to get around this barrier follows shortly thereafter. The decision by the U.S. government to make the technology publicly available for international and commercial use has led to the rapid emergence of a global network of networks, transmitting massive amounts of data every second.

The bottom line is that while there will always be a role for laws and technical security and blocking systems, ultimately decisions about information sent or received and the activities engaged in through the use of information technologies will largely be controlled by *individual choice*.

The word “anarchy” comes to mind when considering the Internet. “Anarchy” comes from the Greek word “*anarchos*,” which means without a ruler or without leadership. The definitions provided for this word are seemingly in opposition.¹ The generally recognized definition of anarchy includes concepts of a state of lawlessness, disorder due to the absence of governmental authority, and confusion, chaos, and despair. But “anarchy” also refers to a Utopian or ideal society, with the absence of coercive government, built and managed instead through voluntary cooperative actions of individuals and groups. To achieve an ideal society in the absence of central control would necessarily require that the individuals within that society choose to act in accord with common values and with regard to their responsibilities to others.

Internet Ethics Issues and Concerns

The terms “Internet ethics,” “cyberethics,” “cyberlaw,” “netiquette,” “appropriate use,” and others have been applied to discussions or analysis of the legal, ethical, and moral issues raised by this emergence of information technologies. It is helpful to more clearly define and categorize the kinds of behavioral issues that parents and educators must deal with as their children or students are going online. The following is a preliminary classification system of these issues:

- *Respect for Property*. Respect for property issues include: system security issues, such as

computer hacking, and respect for intellectual property rights, such as copyrights.²

- *Respect for Territory and Privacy*. Respect for territory and privacy issues also include system security issues as well as the dissemination or gathering of private information.
- *Respect for Others and Common Courtesy*. Respect for others involves respectful communication and the avoidance of irresponsible speech. Irresponsible speech includes defamation, harassment, flaming or abusive language, and spamming.³ A related problem is the use of e-mail forgery to disguise the source of the irresponsible speech.
- *Respect for Institution*. Respect for the institution addresses the use of a limited-purpose Internet account in accord with its limited purpose. The activities that are permitted through a particular Internet account may be restricted due to the source or institution providing that account, such as limited-purpose accounts provided by educational institutions and business or government employers.
- *Respect for Self*. Respect for self issues include those activities that generally do not have an impact on others but can be injurious to the self, such as addiction, personal safety, and “garbage” activities.⁴

Rationalizations for Inappropriate Use

The following are some sample common rationalizations for inappropriate use of information technologies and the Internet. These statements attempt to capture the essential ideas of the writings of the proponents of such rationalizations and comments made by individuals discussing these issues. They are presented to provide a framework for an initial analysis of the issues, pending more in-depth research.

Hacking

“Companies and government agencies have no right keeping any information secret in the first place. I am a modern-day Robin Hood who will seek and disclose all examples of corruption and other bad acts by companies and government agencies.”

"I didn't actually 'break-in.' Breaking in is a 'locks and doors' concept that has no online equivalent."

"I don't plan on taking anything. Copying information in electronic form is not taking because the original is left behind."

"By figuring out how to gain access to your system, my learning about computers has been enhanced. Everyone should be in support of increased learning."

"By gaining access to your system, I have demonstrated to you the deficiencies of your security protection. You should be grateful for this service I have provided."

Copyright Infringement

"Nobody ever gets caught."

"Everybody does it."

"This is not the same as stealing, because I really didn't take anything."

"Companies charge too much because they think everyone is copying, so I have already paid for extra copies."

"Bill Gates is so rich he isn't going to be hurt."

"I don't have the money to buy such expensive software."

"Information wants to be free."

Irresponsible Speech

"You can say anything you want on the Internet."

"You can't censor my free speech."

Four Key Factors

Based on a preliminary analysis, there appear to be four key factors that have an influence on behavior in the use of information technologies and the Internet. These include:

Lack of Affective Feedback and Remoteness from Harm

When people communicate or take some other action in cyberspace, they do not receive strong affective feedback about the hurtful impact of their communication or actions. Electronic text alone, without visual and auditory clues, provides little insight about the impact of communications or actions. Users of technology are also distanced from

the potential harm they may cause by their actions. The intangible nature of cyberspace creates the impression that actions or words have no real impact.

Reduced Fear of Risk of Detection and Punishment

Negative consequences will only work as a deterrent to misbehavior if there is a high enough risk of detection and punishment. On the Internet, there is a reduced likelihood of detection and punishment for activities that are illegal or could lead to civil liability, much less actions that are merely unethical or rude. The Internet is simply not a "law-and-order" paradigm.

New Environment Means New Rules

Many rationalizations make the basic argument that "real-world" concepts and values do not have any standing in cyberspace. This issue must be evaluated carefully because we are moving into a new era that will require new rules. Basic values of respect for property and territory will likely continue to exist in the new era, but some of the rules and laws that accompany these values will need to be reshaped.⁵ The need to reshape some rules and laws creates an environment that supports disregard for the underlying values.

Peer and authority support for new rules is a related factor. It is quite possible to find authority support for the proposition that it is or should be perfectly appropriate for people to break into computer systems or to engage in copyright infringement.⁶

Perceptions of Social Injustice and Corruption

Issues related to social injustice and corruption of business and government are frequently raised rationalizations for inappropriate behavior. For those who have the perception that they are the "have-nots" and that individuals or organizations who have power and wealth (the "haves") are corrupt or unjustly enriched, information technologies provide the means to even the score.

Moral Development Research Insight

The following is an analysis of moral development research that has been developed to serve as a preliminary framework for inquiry into information technology ethics issues.

Moral Reasoning

Cognitive-Moral Development. Kohlberg's (1984) theories on cognitive-moral development emerged from the cognitive development understandings introduced by Piaget (1965) together with Kantian concepts of justice that emerged from the work of Rawls (1971). On the basis of his research, Kohlberg identified six stages in the development of moral reasoning, grouped into three major levels. The progression through the stages reflects cognitive development in the understanding of moral issues. The progression depends on the widening cognitive capacity to understand the perspective of others.

At the Preconventional Level, moral reasoning is characterized by a concrete, egocentric perspective. Individuals at the Conventional Level are gaining the ability to understand the perspectives of others and an understanding of the norms and laws that are necessary for society to function effectively. At the Postconventional Level, moral reasoning is based on an understanding of the principles of justice and social cooperation that underlie the norms and laws of society.

There appear to be two key concepts, rooted in a Kohlbergian framework, that will assist in developing an understanding of moral reasoning in the information age. The first is that young people construct their framework for reasoning about moral issues through their interactions with others, and these interactions are shaped by their level of cognitive development. This concept raises the need to consider what the impact of electronically mediated interactions will be on young people as they are in the process of constructing their moral reasoning framework. Early adolescence appears to be a time when young people who have online access become strongly interested in Internet communications. Their emerging moral framework is being developed in an environment where there is little affective feedback, where there is a reduced risk for authoritarian-delivered punishment but the potential for being ostracized as a consequence of inappropriate behavior, where individuals are judged on the basis of what they write and not who they are, where there is a constant need to authenticate information to determine its truthfulness, where there is a high level of interaction with people from throughout the world, and where there is the ability to act out different personae. The impact of interactions in this kind of an environment on the development of moral reasoning is unknown.

The second concept is that cross-cultural studies have found that less industrialized societies tend to have fewer individuals who reason at the higher stage levels (Snarey, 1985). A probable explanation is that individuals in societies that are not administratively complex do not need to engage in higher-level reasoning to ensure the orderly continuation of their society. An optimistic interpretation may be that individuals within a certain society gain the level of moral reasoning maturity that is necessary for their society to function effectively and that as the complexities of society increase, humans have the capability to expand their moral reasoning capacity to a level necessary to effectively sustain greater complexity. Society's transition into the information age may be the ultimate test of this hypothesis.

Domain Theory

Turiel's (1983) domain theory research focuses on the differences between concepts of moral values, social conventions, and personal choice. Moral values are categorical, universalizable, and structured by underlying conceptions of justice, rights, and welfare. Social conventions are arbitrary and agreed-upon uniformities in social behavior that are determined by the social system and that are alterable and context dependent. Personal choice issues are those issues that affect only the self. Some issues involve domain overlap; they are multifaceted issues that raise moral values as well as social conventions or personal choices (Nucci, 1989). Just as concepts of moral issues undergo development in accord with the cognitive development of the child, so does the understanding of social conventions.

Several key concepts from domain theory appear to have direct relevance to issues that are emerging in cyberspace. The first concept is that a key factor that appears to be relevant in distinguishing moral values from social conventions or personal choices is the determination of whether a certain action will result in harm to another. The second concept is that social conventions are context dependent and alterable. The third concept is domain overlap or multifaceted issues where an issue may raise moral values, social conventions, and personal choices. Actions taken in cyberspace are distanced from the resulting harm, and that distance may impair a person's ability to discern an underlying moral value. Our transition into the information age is resulting in

changes in social conventions. Many issues related to the use of information technologies appear to be multifaceted issues. All of these concepts appear to be related to the difficult situation of discerning underlying moral values when social conventions are changing and it is difficult to perceive the resulting harm of actions taken.

Moral Motivation

Internal Moral Orientation. Hoffman (1991) has focused primarily on the internal moral orientation and the role of empathy in moral motivation. Hoffman views empathy as the significant vehicle by which external or society-based norms become an internalized motivator of action, an internalized moral orientation. Empathic arousal is a trait that humans are born with. Empathy is connected with cognitive development; as humans gain greater abilities to perceive the perspectives of another, this insight also impacts their empathic response to the perceived distress of others. The underlying empathic disposition of individuals varies. Life experiences also affect the level of empathic awareness. Humans have the capacity for representation, and represented events can arouse an empathic response. The degree to which individuals actually have the ability for a representative empathic response (internalized empathy) varies. The internalization of an external moral norm occurs when a person feels an obligation to act in accord with the norm even in the absence of concern about being caught and punished if they do otherwise. Internalized empathy is the motivating force behind the internal moral orientation.

Hoffman's research has determined that the disciplinary approach used in response to a young person's transgression affects the internalization process. Discipline that is focused on how an individual's actions have affected another tends to support the internalization of empathy, whereas discipline that is rule and punishment oriented does not. Hoffman's findings are strongly supported by the work of Baumrind (1989) who investigated the impact of parenting styles. Baumrind has found that children of parents who attempt to inculcate conventional values through rules and punishment have difficulty in developing an autonomous sense of social responsibility. Children of parents who support their child's natural empathic response by explicitly confronting them about actions that may be harmful

to others tend to have an active sense of social responsibility.

In light of these findings, it would appear that young people who have been disciplined in a manner that forces them to focus on the consequences of their actions and who have a well-developed sense of internalized empathy will be more likely to behave ethically in cyberspace, than those who have been raised in an authoritarian (rule-and-punishment) environment.

Moral Control

Social Cognitive Theory of Moral Thought and Action. Bandura (1991) has focused his research on an analysis of ways in which social factors and moral orientation combine to effect moral conduct. His research has focused on mechanisms by which internal control is selectively disengaged. Several key mechanisms that allow for disengagement have been identified. Those that appear most relevant to the use of information technologies are:

- *Moral justification*—the cognitive restructuring of an analysis of a situation that leads to support of immoral acts. Conduct is made personally and socially acceptable by portraying it as being for moral purposes, for example, fighting ruthless oppressors, saving humanity, self-defense, or, in the case of hacking, breaking into computers to find evidence of corruption by government or business. The changing social conventions in cyberspace appear to facilitate cognitive restructuring.
- *Disregarding, minimizing, or ignoring the consequences.* If the consequences of one's actions can be disregarded, minimized, or ignored, there is little reason for self-censure. Judgments and actions can be influenced by their proximity to resulting harm—people are more likely to cause or permit harm to occur when they are more remote from the victim of that harm. As we move into the information age, technology will continue to distance people from the harm resulting from their actions, thus facilitating the ability to disregard, minimize, or ignore the consequences.
- *Dehumanizing the victim.* The evaluation of injurious conduct partly depends on how the actor views the victim. To perceive another as a human activates an empathic response, but this

response can be disengaged by dehumanizing the other. Technology can act to de-humanize others because of the lack of affective or tangible feedback.

- *Blaming the victim or environmental circumstances.* People rationalize inappropriate actions by viewing themselves as victims and their inappropriate actions as self-defense due to injurious conduct by another or being forced by the circumstances. Many of the social injustice and corruption rationalizations for inappropriate conduct related to the use of technologies appear to contain attributes of blaming the victim.

Gibbs (1991), who works specifically with antisocial adolescents, reports processes similar to those found by Bandura. Gibbs held discussions with youth involved with juvenile justice systems. These discussions revealed that young people demonstrated a sociomoral developmental delay, that is, the persistence beyond childhood of egocentric bias that appeared to be supported by significant cognitive distortions of situations presented (“because I want it, it should be mine”). Gibbs also discovered what he termed rationalizations. The most common of these, externalization of blame (“the shopkeeper is at fault for shoplifting because he does not have effective monitoring”) and mislabeling (serious vandalism is termed “a prank”), appeared to protect the individual from considering the factors that might restrict inappropriate behavior, such as empathy for the victim or dissonance with self-concept.

The rationalizations identified by Gibbs are somewhat understandable given that his subject population were youth involved with juvenile justice systems. What is not quite as understandable is why rationalizations in support of “innocent hacking” set forth by college professors (see endnote 6) are so similar in nature to those of juvenile delinquents.

Limited Acceptable Morality

Nisan (1991) has approached his analysis of moral control from a slightly different perspective. His theory of Limited Acceptable Morality is that humans strive for a moral balance—that we each have a personal moral ideal, but we are all willing, under certain circumstances, to waiver from that ideal. Individuals appear to set a limit on how far they are

willing to waiver from the ideal, and this limit protects against unlimited transgressions. The boundaries of this limit vary according to the person. There are three factors that appear to support transgression:

- The transgression will not cause any perceptible harm.
- The harm is perceptible but small in comparison with the personal advantage gained.
- The harm is to the system, and no specific person sustains any loss.

Thus in Nisan’s theory, the issue of the perception of the degree of harm caused is a critical factor that is weighed in decision making.

Questions

The review of moral development research raises some very significant and complicated questions.

- How will online interactions impact our young people as they are in the process of developing their moral reasoning framework?
- How can adults, who may have some difficulty keeping up with the technical competence of young people, effectively guide our young people in the development of a moral reasoning framework that is based on principles of justice, rights, and welfare?
- How do we recognize and act in accord with basic moral values when dealing with multifaceted issues in an environment where the social conventions components of these issues may be changing? How do we assist young people in doing so?
- How do we recognize and act in accord with basic moral values when it is difficult to recognize the moral development components of issues because of our distance from the resulting harm? How do we assist young people in doing so?
- How will reduced affective feedback when interacting in an electronic environment impact the internalization of empathy by our young people?
- How can we, as parents, teachers, and others working with youth, raise the level of internalized empathy and internal moral orientation of our young people so that their actions are guided internally?

- How do we increase the recognition of resulting distant harm caused by our actions? How do we assist young people in doing so?
- How do we increase internalized moral control of people who are participating in an environment that appears to effectively support a variety of mechanisms that allow disengagement of moral control?
- Does humankind have the capacity, as a species, to expand our moral reasoning, moral motivation, and moral control capabilities to deal with the complexities of the information age?

Endnotes

¹See, for example, *Random House Webster's College Dictionary*. 1992.

²Losses due to computer hacking are estimated to be around \$100 billion per year in the United States alone. According to estimates of the Software Publishers Association, as much as \$3.3 billion of American software may be illegally copied and distributed in the United States.

³Spamming is posting an unwanted or annoying message to large numbers of people either through a discussion group or individual e-mail addresses. The term frequently refers to junk e-mail.

⁴Garbage activities involve accessing material that reflects the less desirable sides of humanity, such as pornography and hate literature. Virtually all teenagers can be expected to spend some time looking at this material, simply to find out for themselves what all of the fuss is about. Curiosity is, after all, a trait that is generally valued in society. The issue of concern is not whether young people will access this material, but what their reaction is to what they find. Of concern are the young people who find this material to be in accord with their values and return repeatedly.

⁵A good case in point is copyright law. The underlying value of copyright law is respect for the intellectual "property." Copyright laws provide protection for works created by an individual to enable that individual to reap a financial benefit that will reward his or her efforts. Society is benefited because such works are created. The past century has been dominated by broadcast media, acting as intermediaries between the creator and the recipient. The Internet will allow more direct communication between the creator and the recipient of the creative works. To the extent that copyright laws have been written for the protection of the broadcast media or other intermediaries, we can anticipate these laws will change (although not without complaint by the intermediaries). But the underlying value of respecting

the rights of individuals to protect the results of their creative efforts is a basic value that should not change.

⁶In a standard text for use in computer science classes (Forester & Morrison, 1994), the authors state: "When a hacker gains access to a system and rummages around in a company's files without altering anything what damage has been caused? . . . Indeed, if the hacker informs the company of its lax security procedures, is he or she creating a public benefit by performing a service that the company otherwise might have to pay for?" (p. 99). "Given that more and more information about individuals is now being stored on computers, often without their knowledge or consent, is it not reassuring that some citizens are able to penetrate these databases to find out what is going on? Thus, it could be argued that hackers represent one way in which we can help avoid the creation of a more centralized, even totalitarian, government" (p. 84).

John Perry Barlow, former lyricist for the Grateful Dead and a founder of the Electronic Frontier Foundation has argued that intellectual property rights do not apply to digitized information such as computer software, e-mail messages, and Web pages. He argues that the fact that most people have copied software illegally "proves" that intellectual property laws are out of step with our moral intuitions (Barlow, n.d.).

References

- Bandura, A. (1991). Social cognition theory of moral thought and action. In W. M. Kurtines & J. L. Gewirtz (Eds.), *Handbook of moral behavior and development* (Vol. 1, pp. 45-96). Hillsdale, NJ: Lawrence Erlbaum.
- Barlow, J. P. (No date). *Selling wine without bottles: The economy of mind on the global net* [Online]. Available: http://www.eff.org/pub/Intellectual_property/idea_economy.article.
- Baumrind, D. (1989). Rearing competent children. In W. Damon (Ed.), *Child development today and tomorrow* (pp. 349-378). San Francisco: Jossey-Bass.
- Forester, T., & Morrison, P. (1994). *Computer ethics: Cautionary tales and ethical dilemmas in computing* (2nd ed.). Cambridge, MA: MIT Press.
- Gibbs, J. C. (1991). Sociomoral developmental delay and cognitive distortions: Implications for the treatment of antisocial youth. In W. M. Kurtines & J. L. Gewirtz (Eds.), *Handbook of moral behavior and development* (Vol. 3, pp. 95-108). Hillsdale, NJ: Lawrence Erlbaum.

Hoffman, M. L. (1991). Empathy, social cognition and moral action. In W. M. Kurtines & J. L. Gewirtz (Eds.), *Handbook of moral behavior and development* (Vol. 1, pp. 275-299). Hillsdale, NJ: Lawrence Erlbaum.

Kohlberg, L. (1984). *The philosophy of moral development: The nature and validity of moral stages*. San Francisco: Harper & Row.

Nisan, M. (1991). The moral balance model: Theory and research extending our understanding of moral choice and deviation. In W. M. Kurtines & J. L. Gewirtz (Eds.), *Handbook of moral behavior and development* (Vol. 3, pp. 213-247). Hillsdale, NJ: Lawrence Erlbaum.

Nucci, L. (1989). Challenging conventional wisdom about morality: The domain approach to values education. In L. Nucci (Ed.), *Moral development and character education* (pp. 183-203). Berkeley, CA: McCutchan Publishing.

Piaget, J. (1965). *The moral judgment of the child*. New York: Free Press.

Rawls, J. (1971). *A theory of justice*. Cambridge, MA: Harvard University Press.

Snarey, J. R. (1985). The cross-cultural universality of social moral development: A critical review of Kohlbergian research. *Psychological Bulletin*, 97(2), 202-232.

Turiel, E. (1983). *The development of social knowledge: Morality and convention*. New York: Cambridge University Press.

