ED 282 098 CE 047 366

AUTHOR Kramer, Deirdre A.
TITLE Improved Learning in Aging: Implications for Education.
PUB DATE 9 Apr 87
NOTE 12p.; Paper presented at "Information and Aging: Coalitions for the Future" (New Brunswick, NJ, April 9, 1987).
PUB TYPE Speeches/Conference Papers (150) -- Viewpoints (120)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Adult Development; Adult Education; Adult Learning; Adults; *Aging (Individuals); *Cognitive Development; *Cognitive Processes; *Developmental Psychology; Educational Psychology; Intelligence; Moral Development; *Older Adults
IDENTIFIERS Dialectical Reasoning; Wisdom

ABSTRACT

Three types of lay theories about the social world form a developmental sequence. Earlier developing theories are reorganized at the next level into a more inclusive, encompassing view of the world in order to make better predictions. The absolute thinker sees the world as fixed and unchanging, reasons with absolute rules, and has a narrow world view. Relativistic reasoning involves the awareness that everything is relative, a point of view; knowledge is subjective; and contradiction is inherent in reality. The problem with this world view lies in the inability to make decisions and have relationships. Typically, not before middle age, the individual develops an integrated world view that operates according to dialectical, or systems, principles. Contradiction and change are basic features, each event brings about its opposite, and reciprocity is a basic assumption. Integrated thinking is believed to characterize highly mature thought that is very adaptive because it attempts to go beyond the self, take other perspectives into consideration, and find cooperative solutions. An implication for the education of adults, especially middle-aged and older adults, is that retraining adults in the social sciences or developing think tanks with older adults would be worthwhile in dealing with complex social issues. (YLB)

Improved Learning in Aging: Implications for Education

Deirdre A. Kramer

Department of Psychology

Rutgers, The State University of New Jersey

Presented in B.J. Turock (Organizer), Information and aging: Coalitions for the future, April 9, 1987, at Rutgers University, New Brunswick, N.J.

I would like you to consider the following quotes. They were responses to an interview about their reactions to an hypothetical hostage crisis set in the future.

(Were the (hostage takers) justified in taking hostages?) No. (Under any circumstances?) Only if it's Americans taking -- then it's right. (Are you serious?) Sure. Being an American, I definitely feel that what we do is correct, and it's right. I was taught that in school. (Hmmhmm. More right than what other people do?) We never went into depth on any political problems in the country. We, uh, always seem to elect the right people for every job -- that was before Absc-, Abscam, Nixon, and uh -- even that, I feel it was all perfectly alright if he had a reason for breaking into uh, the Democratic Headquarters. Certainly, uh, it wasn't enough reason for him to lose office. Peace through superior fire power. What's good for America is good for you and I. (Hmmhmm. And you think what's good for America is good for the world too?) Eh, we pay for what we get. We never steal anything from anybody. Certainly nothing that they're using at the moment. I always feel that we're right, but I only see our, I only hear our side of it. (Yeah, if you heard the other side do you think that you might not feel that way?) I'd think that they were just making it up.

Now, contrast this with the following quote:

I don't think you can go ahead and just say, "This is mine and I'm gonna take it and I don't give a damn what happens to anybody else." I think that is the wrong attitude for us to take about anybody in the world, because we're all interlaced, and we're all gonna sink or

swim together, I think, and I think that we (the United States) have, as the arrogant brat for too long taken that attitude. And uh, we just can't be big kid on the block. Therefore, I think you've got to be understanding and cooperative.

These two quotes are representative of two modes of thinking, a less mature and a more mature one, respectively. These two thinkers would probably interpret the material taught in a history or political science course very differently. My research has been focusing on shifts in people's thinking as they go from adolescence to adulthood, and from early adulthood through old age. The first illustrates a less mature form of thinking, which typically characterizes adolescence or early adulthood. The second quote, which was by an older woman, represents a more mature form of thinking.

I have been exploring three general modes of thinking. We can think of them as being like lay theories about the social world. People use these theories to make predictions about their interactions with other people. If the predictions are not very accurate, the individual may revise the theory. A premise of my work is that these three types of lay theories form a developmental sequence, and earlier-developing ones are reorganized at the next level into a more inclusive, encompassing view of the world, in order to make better predictions. These three theories, or levels, are called a) Absolute, b) Relativistic, and c) Integrated. They are listed, along with their assumptions, in Table 1.

The absolute thinker is likely to see the world as fixed and unchanging. In order to understand this complex machine, the world, the absolute thinker would want to break it down to its basic components.

These components can be ideal forms, in the Platonic sense -- blueprints underlying reality, or they can be stimulus-response units. In the case of ideal forms, the absolute thinker would try and determine into what category a person fits; relationships would be seen as succeeding or failing based on the inherent, stable personality traits of the partners, as well as the inherent compatibility of the personality traits of both partners. In the case of stimulus-response units, a personality would be reduced to its environmental antecedents, such as childhood events, which are believed to completely determine behavior. In either case, the emphasis of absolute thinking is on reducing personality and social interactions to absolute, deterministic explanations. This thinker reasons in black and white -- there are absolute rules, principles, and laws which have to be followed, and little room for shades of gray. What applies at one time, in one setting, is equally applicable to another side or another setting.

Such an approach to thinking serves the function of simplifying thoughts, simplifying one's interactions with others. However, it is a narrow view of the world, which sometimes can fail to capture the complexity of people and relationships. This could result in problems, especially in conflict situations, when there would be a strong tendency to blame either the self or the other (usually the other) for the problem. This can be deleterious when the capability for violence exists.

Relativistic reasoning involves the awareness that there are no clearcut rights or wrongs -- everything is a point of view, everything is relative. Knowledge is deemed completely subjective -- how you look at

something influences what you see. Therefore, there are an infinite number of ways to understand the same event, some which are mutually incompatible. One cannot say that his or her own way is the only or even the best way to view that event. Contradiction, therefore, is an inherent feature of social reality, according to a relativistic world view. Furthermore, the contradictions cannot be resolved. When two individuals engage in a conflict, one cannot try to impose his or her way on the other, but must accept the conflicting viewpoints. Furthermore, one could not make predictions about what the outcome of the conflict, or any situation, would be, because in a relativistic world view, the world is constantly changing -- as each new generation brings with it its own way of viewing things. The problem with this world view lies in the inability to make decisions, and commitments, and the difficulties in having a relationship with another, when one feels s/he has no right to make demands of the other. Therefore, it is adaptive for the person to construct a new framework for understanding the social world -- one that will provide a way to synthesize these contradictions, and that sees change as occurring in a systematic way. This third kind of thinking will be called integrated, and was represented in the second quote at the beginning of this talk.

Typically not before middle age, the individual will develop an integrated world view, which operates according to dialectical, or systems, principles. Like relativism, contradiction and change are basic features of the social world -- people change, relationships change, social institutions change, even societies change -- but they do so systematically. Each event brings about its opposite, resulting in

subsequent attempts to integrate the opposing perspectives into a mutually satisfying one. One of the basic assumptions of this world view is that of reciprocity -- that everything is interrelated, and therefore a change in one part of the system will necessarily bring about changes in the whole system, as it leads to reorganization of the whole system. This is the assumption that was illustrated in the second quote at the opening of this paper -- that we (countries) are "all interlaced and would all sink or swim together."

Integrated thinking is believed to characterize highly mature thought. It is very adaptive because it attempts to go beyond the self to take other perspectives into consideration, and find cooperative solutions that will please the majority. Research in social psychology shows that attempting to coerce others to one's own way only leads to resentment, which breeds further conflict; this conflict is destructive and often results in violence. Cooperative solutions also lead to new problems, but because old ones have been solved, the system has moved forward, and the new ones reflect new problems that were previously absent. They, in turn, will be the impetus for further growth. The integrated reasoner is aware of this process, and would thus see the need for cooperation in human relationships.

My associates and I have been conducting extensive research on the development of these paradigm beliefs, and have constructed a questionnaire to assess them. This work points to more dialectical reasoning in middle-aged samples and those in their sixties (Kramer, Goldston, & Kahlbaugh, 1987; Kramer, Melchior, & Levine, 1987; Kramer & Woodruff, 1986), as has that done by other researchers (Basseches, 1980;

Blanchard-Fields, 1986). There may be some age-related drop in dialectical thinking thereafter (Kramer, et al., 1987), but that may reflect cohort differences as well. My own subjective impression, after interviewing nearly 200 people, is that, when such beliefs are present, in their full form, it is usually someone at least middle-aged (save someone with a Ph.D. in philosophy). Not everyone develops his or her potential. For every person who embraces health and growth, there are those who find it too threatening. We find Absolute people at all ages, and even the rare integrated adolescent (e.g., someone unusually sensitive and perceptive, or perhaps someone who has traveled extensively). The man in our first quote was, in fact, middle aged. In one of our studies, our scale loaded on two factors -- a factor with just paradigm scales, like ours, and a factor with just age. This finding suggests that these world view beliefs represent both an individual differences dimension and a developmental dimension. I suspect that much of a person's lay theory is influenced by emotional as well as intellectual factors, and these are ones we are exploring currently in some of our research. People at any age can theoretically be at any stage.

Let us now shift our focus back to the educational process. Social scientific theory often deals with systems principles, which are similar to those underlying integrated thinking. For example, in the area of conflict resolution, coercive tactics are conceived of as maladaptive, and in fact typically prove to be. They just lead to a vicious cycle of retaliation and counter-retaliation. Yet when under stress -- as those in conflict situations often are -- people often revert to such tactics

(Janis & Mann. 1977). As we well know, many of our politicians revert to them as well. In my own research, when people answered a political version of our questionnaire, if the words United States, Libya, Khadafy, and Reagan were substituted for country and leader, people's reasoning level went down. In real life situations, there are a multitude of factors that need to be considered in any given conflict situation, and emotional factors prohibit seeing the issues clearly, etc. These may all influence a person to make shortsighted decisions, and to reason at a lower cognitive level.

If we are to solve the most complex problem ever facing our civilization -- that of nuclear destruction --- it seems that politically the world needs to make better use of such systems principles. If we are to educate people to be more sensitive to the complexities of the human problem solving, and human interaction, and the desperate need for cooperative problem solving, not to mention the means by which cooperative strategies can be enacted -- it is useful to take into account the social cognitive level of the student. If the student is a young person, efforts at challenging him or her to ever-higher levels of reasoning would be useful in social science courses. More interestingly, this work has implications for the education of adults, especially middle-aged and older adults. Equipped with the potential intellectual wherewithal to deal with complex issues, as well as having the benefit of real-life experience to temper their judgments, perhaps retraining older adults in the social sciences, or developing think tanks, etc., on the basis of older adults, would be worthwhile efforts. Roodin, Rybash, & Hoyer (1984) have argued that with age comes greater integration of

cognition with affect -- people become more consistent in applying their moral principles, despite the anxiety or discomfort that doing so can bring. They feel greater responsibility to themselves to act in accordance with their values, not to mention feeling responsibility for the welfare of their children, and future generations (e.g., see Kohlberg, 1973). They have had a chance to have their ideals shattered, make a place for themselves in the real world, and learn ways to reintegrate that experience with the principles in which they believe. This integration of cognition, or knowledge, with affect, is, I believe, at the very heart of wisdom. There is a massive untapped population that is cognitively mature enough to deal with complex social issues; in addition, with childrearing and occupational tasks aside, they may be psychologically freer and emotionally prepared for such action. One such example is that of Mahatma Gandhi, who did not lead his people to independence until he was in his middle years. He spent much of his youth and early adulthood mastering the self-discipline and principles he felt were necessary for the task -- not to mention gaining the requisite political momentum to have an impact.

In conclusion, I would like to echo the words of Plato, written over 2000 years ago. His writings in the Myth of the Cave reflect many of the same issues surrounding aging today. Foremost among these is the idea that the lens through which one sees reality will influence the learning potential (Plato, 1982). Young students may not be cognitively or emotionally equipped to assimilate some of the ideas that a mature thinker could. To assume that because an older person may not think in the way a young, fresh mind would means that the older person has

deteriorated does an injustice to ourselves, the aged, and society. This is the second point raised by Plato, that when we judge the elderly through the eyes of the young, who do not have access to some of the elderly's potential wisdom, we cannot help but think that the older person is blind and foolish. If educators are to judge the impact of education on the adult and, in particular, the older adult, it must begin to judge by age-appropriate standards.

References

Basseches, M. (1980). Dialectical schemata: A framework for the empirical study of the development of dialectical thinking. Human Development, 23, 400-421.

Blanchard-Fields, F. (1986). Reasoning on social dilemmas varying in emotional saliency: An adult developmental perspective. Psychology and Aging, 1, 325-333.

Janis, I.L., & Mann, L. (1977). Decision making: A psychological analysis of conflict, choice, and commitment. New York: The Free Press.

Kohlberg, L. (1973). Stages and aging in moral development -- some speculations. The Gerontologist, 13, 497-502.

Kramer, D.A., Goldston, R.B., & Kahlbaugh, P.E. (1987). A measure of people's paradigm beliefs. Paper presented at the 58th Annual Meetings of the Eastern Psychological Association, April, in Arlington, VA.

Kramer, D.A., Melchior, J., & Levine, C. (1987). Age-relevance of content material on relativistic and dialectical reasoning. Paper presented at the 17th Annual Symposium of the Jean Piaget Society, May, in Philadelphia.

Kramer, D.A., & Woodruff, D.S. (1986). Relativistic and dialectical thought in three adult age groups. Human Development, 29, 280-290.

Plato. (1982). Myth of the cave. In P.L. McKee (Ed.), Philosophical foundations of gerontology (pp. 42-53). New York: Human Sciences Press.

Roodin, P.A., Rybash, J., & Hoyer, W.J. (1984). Affect in adult cognition: A constructivist view of moral thought and action. In C.A. Malatesta & C.E. Izard (Eds.). Emotion in adult development (pp. 297-316). Beverly Hills, CA: Sage Publishers.

The Levels of Thinking

Level	Assumptions
Absolute	types/traits, stability/fixedness, individual as passive, linear causality, absolute principles
Relativistic	change as basic, knowledge subjective, uniqueness, unpredictability, contradiction inherent in reality
Integrated	implication of opposites, emergence, movement through form, reciprocity