

Mind or Virtue

Western and Chinese Beliefs About Learning

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ABSTRACT—*Traditional research on human learning has neglected people's beliefs about learning, the role of culture in shaping those beliefs, and people's consequent learning behavior. Recent research provides evidence that cultural beliefs about learning are essential in influencing individuals' beliefs and their actual learning. This article reviews research on Western learning beliefs, which emphasize the mind, and Chinese learning beliefs, which emphasize personal virtue, as well as on the differences these beliefs produce in people's actual learning. Developmental evidence is also presented to show that the cultural influences begin early. Future research directions are discussed.*

KEYWORDS—*learning beliefs; cultural differences; mind; virtue*

When Socrates tutored the slave boy Meno about the Pythagorean theorem, he led the pupil to believe that he possessed a mind capable of discovering knowledge. The Socratic ideal still underlies Western cultural beliefs about teaching and learning. The best learner is one who develops and uses his or her mind well to inquire into the world.

Chinese culture also carries a long learning tradition, one that is exemplified by the great tutor Mencius and his students. Unlike those of his Greek counterpart, Mencius's pupils were not powerless slaves, but rather kings and dukes. When Mencius tutored them about compassion and human capacity for goodness, they, like Meno, were led to believe that they were powerless (despite, in this case, having political power) unless they sought to perfect themselves morally. This basic orientation—to become a better (more virtuous) person—is still believed, in Chinese culture, to be the most essential quality for any learner.

Recent research shows that these different beliefs have profound influence on how people in these two cultures view and approach learning.

LEARNING BELIEFS ARE ESSENTIAL TO HUMAN LEARNING

Human learning has been approached from a great many perspectives. In research, the primary focus has been on children's ability or readiness to learn and the process of learning, including motivation, achievement, and pedagogy. However, this research paradigm privileges the researcher's position as one that looks at children from without. Although useful, this paradigm has paid less attention to children's own understanding of the object of learning as that understanding has been influenced by cultural values and childrearing processes.

People's own understanding of learning, which I refer to as beliefs about learning (Li, 2003), include their beliefs regarding cognition, affect, and behavioral processes (Dweck, 1999). Such beliefs concern purposes (e.g., what people think they gain from learning), processes (e.g., what it takes to learn something), personal regard (e.g., whether or not and why they regard learning as important), affects (e.g., whether they experience joy or dread from learning), and social perceptions (e.g., perception of those who learn well vs. those who do not and their perception of teachers). These beliefs underlie people's motivation for learning and influence children's actual learning and achievement.

Because learning beliefs are not innate but develop through the process of socialization together with individuals' own active construction, the beliefs are profoundly influenced by cultural value systems. As the Socratic and Mencian tutoring examples illustrate, intellectual traditions across cultures may shape individuals' beliefs differently. Recent research on thinking styles in Asians and Westerners (Nisbett, 2003) underscores the importance of cultural influence. Although less research on learning models across these cultures exists, significant advancements have been made.

RESEARCH ON BELIEFS ABOUT LEARNING

Recent research yields important findings in three areas: cultural beliefs about learning, their influence on individuals' learning orientations, and development of learning beliefs.

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Cultural Beliefs

I (Li, 2003) began my inquiry by mapping culture-level (as opposed to individual) beliefs. I examined middle-class European American (EA) and Chinese learning beliefs as two distinct cultural models toward which children in the respective cultures are socialized.

I began by collecting terms that referred to learning from college students in China and the United States. Analyses of these terms resulted in each culture's conceptual map of learning. I then analyzed written descriptions of model learners by college students in China and in the United States (Li, 2002). The basic findings converged to comprehensive pictures of the two cultures' respective beliefs regarding learning (including purpose, process, achievement standards, and affect).

EA beliefs indicated what I (Li, 2002) termed a mind orientation, which elaborates on finely differentiated mental functions to understand the world, develop personal skills, and realize personal goals. The learner is actively engaged in a broad range of activities and experiences. Thinking assumes key importance, and inquiry guides the learner to question the known and to explore and discover the new. Communication is also essential, in understanding as well as in making others understand one's own learning results. Personal curiosity, intrinsic enjoyment, and a disposition to challenge or question given knowledge accompany the learner throughout these processes. Learning, according to the Western model, leads to understanding the essentials of a given topic or developing expertise in a field, as well as to personal insights and creative problem solving. When they succeed, learners feel proud of themselves. However, when they experience failure, they feel disappointment and low self-esteem.

Chinese beliefs revealed what I (Li, 2002) termed a virtue orientation, which has an overarching moral tone regarding the whole person. Chinese also value efforts to achieve understanding of the world, but mentally oriented understanding (understanding achieved by articulation, analysis, and reasoning rather than by experience, practice, or meditation) alone is not central to their learning beliefs. When asked to define what knowledge is, 79% of Chinese college students (but only 15% of EA students) defined it as "a need to self-perfect" and "spiritual wealth/power"; 32% of Chinese students (as opposed to 96% of EA students) defined it in terms of facts, information, skill, and understanding of the world. For Chinese students, the purposes of learning are mainly to perfect themselves morally and socially, to achieve mastery of the material, and to contribute to society. To accomplish these aims, the learner needs to develop the virtues of resolve, diligence, endurance of hardship, perseverance, and concentration. These virtues are not task-specific but are viewed as enduring personal dispositions that are more essential than actual learning activities (e.g., reading), and they are believed applicable to all learning activities and processes. Personal passion is important for learning but not necessarily intrinsic to it, as in the West. Respect for knowledge and teaching authorities is emphasized, but this does not mean blind

acceptance of what is taught—rather, the idea of humility. Learning aims at breadth and depth of knowledge, its application to real-life situations, and unity of one's knowledge and moral character. When succeeding, learners remain humble in order to continue self-perfecting. When experiencing failure, they feel shame and guilt, both for themselves and in reference to those who nurtured them. However, shame and guilt are not simply self-denigrating, but affective and moral states that motivate Chinese learners to improve themselves further.

Other research supports these basic differences in learning beliefs. Cheng (1996) found that parents in China, whether well off or destitute, sent their children to school primarily not to learn literacy and numeracy skills, but to become knowledgeable of the world, able to function well in social relations, and, most important of all, morally cultivated. In analyzing parent-teacher conflict, Ran (2001) found that whereas British teachers focused on recognizing and expressing satisfaction with their Chinese students' apparent high achievement, Chinese parents in Britain were discontented, emphasizing the need for more demanding learning materials and their children's continuous need to self-improve regardless of their achievement. Jin and Cortazzi (1998) further discovered that the image of a good teacher as described by British students is one who is able to arouse students' interest, explain clearly, use effective instructions, and organize activities. However, the image of a good teacher offered by their Chinese peers is one who has deep knowledge, is able to answer questions, and is a good moral model. Finally, even Chinese science teachers, but not their Western counterparts, emphasize moral guidance in addition to cultivating students' adaptive attitudes toward learning (Gao & Watkins, 2001).

These findings show that, despite the comparable complexity of the two cultures' conceptual maps, the actual meanings that people construct about learning differ markedly. These findings are surprising, considering that learners in both cultures attend schools of similar structure (China adopted the Western school system in the 20th century) and learn by and large similar subject matter. It is not difficult to see contemporary Western beliefs reflecting their intellectual tradition as epitomized by the Socratic approach to learning. Likewise, current Chinese beliefs also reflect their intellectual tradition as exemplified by Confucius and Mencius.

Individuals' Learning Orientations

Available evidence indicates that both Western and Chinese beliefs influence how individuals in the respective cultures actually learn. Hess and Azuma (1991) documented that because U.S. preschool children were socialized to rely on their curiosity, intrinsic motivation, mental independence, task efficiency, and creativity, they showed less patience, persistence, and attention to detail in actual learning than did Japanese children (who are culturally similar to Chinese children). In each culture, these culturally based learning orientations (diligence/persistence for Japanese children and independence/originality

for U.S. children) predicted children's school achievement in 5th and 6th grade: Those U.S. students who showed higher levels of independence/originality than their own peers in kindergarten also showed higher achievement in later grades; the Japanese students who showed higher levels of diligence/persistence likewise showed higher achievement than their peers.

Dahlin and Watkins (2000) also found that Chinese students used memorization (hard work and commitment) and repetition (i.e., diligence) more than their British peers did, and they used these learning activities for different purposes. British students viewed understanding as a process of sudden insight (i.e., mind orientation), and they used repetition to check their memory. In contrast, Chinese students believed understanding to be a long process that requires extensive personal effort, and memorization (aiming at deeper understanding through persistence) and repetition are two such concrete ways of showing effort.

Pratt, Kelly, and Wong (1999) found that Western teachers in Hong Kong often characterized Chinese students as quiet and receptive, lacking a challenging attitude toward authority. However, Chinese students believed that learning is a gradual process that requires tremendous dedication and methodical steps. As shown previously, typical Chinese learners initially commit the new material to memory, then seek to understand it, and next try to apply the knowledge to real life situations; questioning and modifying the original material is the final step. Whereas the last step calls for verbal interaction and discussion with others, the first steps call for more solitary learning and contemplation (an important aspect of Chinese intellectual tradition). Clearly, this learning orientation does not promote the immediate verbal exchange as emphasized by Western learning beliefs, and can extend over a period of time (e.g., publishing a paper to challenge a teacher with whom one disagreed several years earlier). Chinese students were found to feel frustrated and bewildered when Western teachers expected them to engage immediately in questioning and analysis.

In an attempt to explain the widely noted quietness among Asian learners, Kim (2002) provided further evidence for differences in beliefs surrounding speaking (and not speaking) and their effects on thinking and learning among EA and Asian American college students. It was found that EA students believed more in the causal effect of speaking on thinking and learning than Asian-Americans did. Moreover, speaking did not interfere with EA students' performance, but did interfere with the performance of Asian American students. These findings correspond to my (Li, 2003) documentation of the importance of verbal expression in the Western learning model. The Asian belief that speaking interferes with learning may well reflect the essential learning virtue of concentration. It is also likely related to Asians' distrust in speaking on moral grounds: Speaking is viewed by Confucians as an act of committing oneself to one's claim; if one is unable to back one's claim with action, one should remain silent.

Taken together, the data show that people in these cultures do seem to develop different learning orientations that influence their learning and outcomes.

Development

To trace developmental origins of learning beliefs, I (Li, 2004; Li & Wang, 2004) examined Chinese and EA preschool children's beliefs about learning. Children were told story beginnings and asked to complete the stories. One set of stories depicted a protagonist child who liked to go to school and another child who did not. Another set showed a child who achieved best in his or her class. Yet another set presented a hardworking bird who tried hard to learn how to fly and succeeded, as well as a bear who tried to learn how to catch fish but gave up in the end. The first set of stories elicited children's perceptions of the purposes of school learning; the second set tapped children's perceptions of their achieving peers; and the third set focused on their construals of what the learning process involves.

Results showed that, consistent with their cultural models, EA children as young as 4 talked more about smartness (i.e., emphasizing the mental), literacy, friendship, and play as their purposes for going to school. Chinese children mentioned more the need to self-improve morally, mastery of knowledge (defined with a moral component), social contribution, and social respect/economic reward as their purposes.

Regarding their perceptions of the achieving peer in the second of the three stories, EA children mentioned the achiever's intellectual development and positive affects (e.g., happiness, pride) among the achiever and his or her parents and teachers. But they expressed significantly more concerns about negative consequences of achieving well in school (e.g., rejection and social isolation from peers) than Chinese children did. Chinese children talked more about the social respect the high achievers got and their ability to help others with their knowledge. Although Chinese students voiced more negative parental concerns about lack of achievement among other students in the class than EA students did, they often expressed respect for their high-achieving peers and desire to emulate them. The high achievers were also perceived as having a need to be humble in order to improve themselves further (see Fig. 1). In their construals of the learning process, EA children referred more to ability and related mental processes, to learning as a task to be tackled, and to creative strategies. Chinese children mentioned more the virtues of diligence, persistence, and concentration. Moreover, the observed trends in all three sets of narratives became more consistent as children's age increased. These developmental data suggest that cultural models of learning are likely to shape the beliefs and learning orientations of individuals in the respective cultures.

CONCLUDING NOTE

The research presented here compels us to rethink the psychological processes of human learning. If our goal is to understand the entirety of human learning, we stand to gain a great deal more insights from considering culture as a source of influence. Much

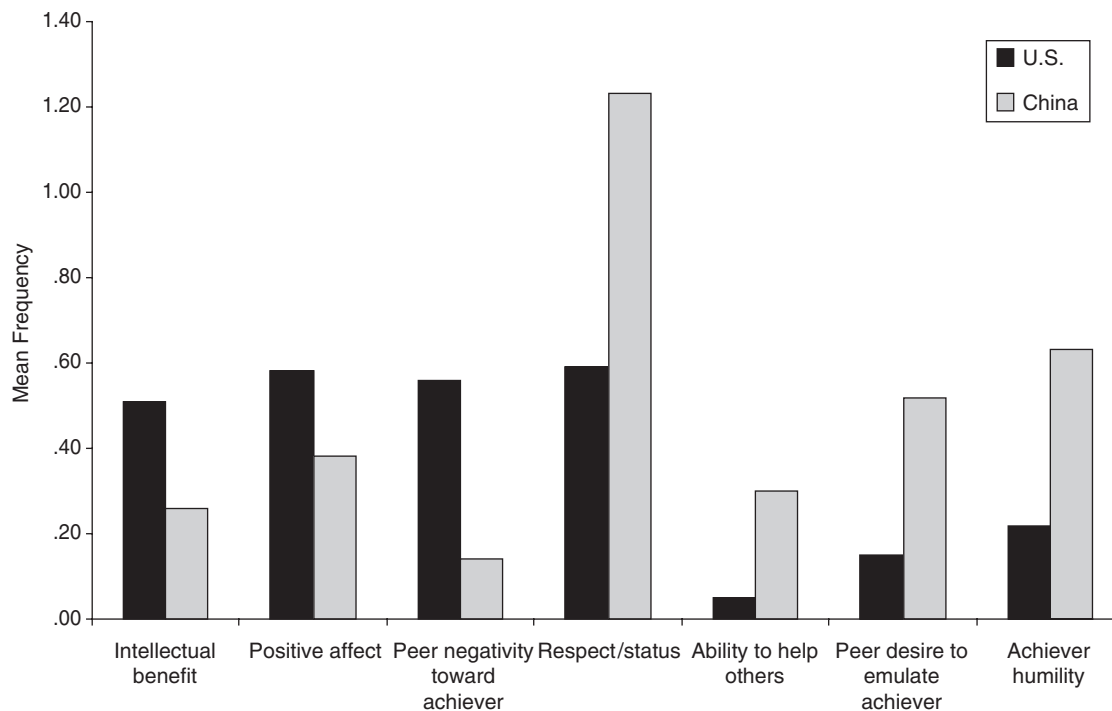


Fig. 1. Chinese and U.S. children's frequency of mentioning various beliefs about learning in response to a high achiever in a fictional story. U.S. students more frequently mentioned ideas related to personal knowledge and intellectual growth (intellectual benefit); the achiever's positive affects like happiness, pride, and fun; as well as peers' negativity toward the high achiever. Chinese students more frequently mentioned greater status and respect for the high achiever, the high achiever's ability to help others, the achiever as an object of emulation by peers, and the high achiever's humility.

still remains to be studied. Here I venture to consider some directions for future research.

First, considering that children begin to develop learning beliefs early in life, what is the developmental process across cultures? What, specifically, do parents and teachers do to socialize children in developing learning beliefs? More systematic research in socialization will illuminate how children come to hold different beliefs. This knowledge will inform childrearing and education.

How should we think about learning beliefs and education from the perspective of increasing cultural exchange and international trends in education? It is all too common to see educational reforms launched that unfortunately meet failure rather than success. One reason is that we do not fully understand how learning beliefs are formed and how they function in children in different cultures. How do people and education systems conceptualize learning beliefs in relation to their need to change? Learning beliefs, once constructed by an individual, are likely to be resistant to change: In light of the Japan-U.S. study and my developmental studies, children's beliefs become stronger, not weaker, as they grow older. How, in that case, is education practice, whose purpose is to cause desirable change in children, to respond to their learning beliefs? What happens when beliefs come into conflict? Clarke's (2003) recent research showing the Indian belief in duty as incompatible with ideals of Western progressive education is a case in point.

Further, how does acculturation of learning beliefs proceed when children reared in one culture attend school in another? How does this process affect children's learning and related development? For example, it has been widely noted that Asian American children are quiet and deferential toward teachers. As discussed previously, quietness may be highly valued in Asian cultures, but Asian American children may suffer the stereotypical view that something is wrong with them for being quiet. To what extent should educators and parents attempt to reform Asian American students into talkers; or similarly, to what extent should Asian educators make Western children in Asia quiet learners?

Answers to these and many other questions will undoubtedly illuminate the ubiquitous but still largely enigmatic existence of learning beliefs, their development, and their educational implications in an ever-shrinking world.

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