Who can put ‘learning disability label’ on your child? Issues of sociocultural affects on learning disability

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To cite this article:

Abstract: This paper provides a theoretical foundation on the topic “Issues of sociocultural affects on learning disability.” The intent of this paper is to challenge the legitimacy of the claim that standardized tests do not relate to students’ sociocultural backgrounds with theoretical perspectives. To examine the relationship between standardized tests and students’ sociocultural backgrounds, we drew on idealism and empiricism as its framework. We examined the cogency of the definition for learning disability and the methodology applied to diagnosing students with Learning Disabilities. In consequence, we sought to determine meaningful implications in which to understand and diagnose students with Learning Disabilities.

Keywords: Learning Disabilities, Sociocultural Affect, Idealism, Empiricism

1. Introduction

In 1962, Kirk introduced the term learning disability (LD) in order to describe students who “displayed retardation disorder, or delayed development in one or more of the processes of speech, language, reading, writing, arithmetic, or other school subjects resulting from a psychological handicap caused by possible cerebral dysfunction and/or emotional or behavioral disturbances. It is not the result of mental retardation, sensory deprivation, or cultural or instructional factors” (p. 263) [1]. According to Kirk’s assumption, from the origins of LD, learning problems have been unexpected and the child’s learning achievement has been discrepant from his or her presumed ability and achievement. Based on this assumption, the diagnosis of a learning disability has widely employed the IQ-Achievement Discrepancy standard, as intelligence has been considered to be a significant variable in the diagnosis of learning disabilities.

However, because the IQ-Achievement Discrepancy standard is wait-to-fail model, it conflicts with early intervention emphasizing by special education. Therefore, Response to Intervention (RTI) emerged as a way to address these criticisms and as an alternative way to identify students with disabilities; this method involves research-based instruction and interventions, regular monitoring of student progress, and the subsequent use of the data over time to make educational decisions [2].

Despite the critiques made of the IQ-Achievement Discrepancy standard, most school psychologists continue to employ this approach for identifying children with LD [3]. Furthermore, some researchers have suggested that although the IQ-Achievement Discrepancy standard may not be the best approach for identifying children with LD, school psychologists should continue to use intelligence tests as part of the assessment process [4, 5].

In this paper, we present the concerns of using the IQ-Achievement Discrepancy standard in identifying students with LD based on the theoretical foundation; while the definition of LD excludes sociocultural aspects of students’ knowledge, IQ tests or academic achievement tests should not be separated from students’ sociocultural backgrounds. To explore the relationship between standardized tests and society, we draw on idealism and empiricism as the framework for this study. Based on this approach, we examine the cogency of LD’s definition and the methodology used to diagnose students with LD. In consequence, this paper seeks meaningful implications in which to understand and diagnose students with LD.
2. Using Idealism as a Way to Examine the Relationship between IQ Tests and Students’ Sociocultural Backgrounds

In diagnoses of LD students, the results of standardized tests, including IQ scores, refer to students’ presumed abilities, which indicate their latent academic abilities [6]. Idealism may provide a framework in which to understand students’ presumed abilities, as measured by IQ tests, because idealism emphasizes the natural ability of perception that all entities have in the mind or spirit. Although there is still controversy about whether IQ is one of the abilities that a student possesses innately or not, there is a thread of connection between IQ and idealism in terms of the possibility that learning takes place in the same way as other biological functions.

Idealism claims that students’ understanding of reality reflects the workings of their mind and that the properties of objects have no standing independence of the mind perceiving them [7]. Therefore, in idealism, the way to acquire knowledge involves the process of unfolding students’ innate perception, rather than achieving information, which is located outside of students’ minds. Taking this idealistic viewpoint toward knowledge, IQ might be regarded as something that has value neutrality from its sociocultural background. In this respect, IQ indicates presumed ability, representing students’ innate or possessive knowledge. In this case, students’ learning might be regarded as external stimuli that help with the emergence of students’ presumed abilities.

However, a critique of idealism is that it only focuses on innate perceptive ability and that it underestimates experiences, including learning [8]. For example, let us think about colors. Students may not have true knowledge of colors if they do not have any opportunities to experience colors. Although they have innate knowledge of color, such as colors that are on the surface of something, people can recognize colors with their own eyes, or colors have saturation, which is the colorfulness of a color relative to its own brightness. Consequently, for knowledge to have concreteness, one must have actually experienced it. Also, innate perceptive ability may not be changed into real knowledge without examples provided by experiences.

The same might be true of IQ; students’ presumed ability that the IQ test intends to rate may mean nothing if students do not have experiences that relate to it. Furthermore, when we look at it from another viewpoint, students may have greater chances of getting a high score when they already have the knowledge covered by IQ tests. The following story illustrates this relationship clearly.

The psychologist Michael Cole and some colleagues once gave members of the Kpelle tribe in Liberia a version of the Wechsler Intelligence Scale for Children similarities test: they took a basket of food, tools, containers, and clothing and asked the tribesmen to sort them into appropriate categories. To the frustration of the researchers, the Kpelle chose functional pairings. They put a potato and a knife together because a knife is used to cut a potato. “A wise man could only do such-and-such,” they explained. Finally, the researchers asked, “How would a fool do it?” The tribesmen immediately re-sorted the items into the “right” categories. It can be argued that taxonomical categories are developmental improvement—that is, that the Kpelle would be more likely to advance, technologically and scientifically, if they started to see the world that way. But to label them as less intelligent than Westerners on the basis of their performance on that test is merely to state that they have different cognitive preferences and habits [9].

What does this story imply? This may show that one’s knowledge cannot be distinguished from one’s sociocultural background of the information on the assessment. In addition, this may demonstrate that the perceptive ability that IQ tests purport for cannot be separated from the values that society seeks. This does not indicate that an IQ test has validity issues in it. However, we need to consider whose values of knowledge are measured by IQ tests. Also, we need to check the ways of using and interpreting knowledge from IQ tests, when it comes to ways of using and interpreting knowledge from IQ tests in terms of diverse sociocultural contexts.

In addition, when we assume that students use their innate knowledge already developed by their experiences when they take IQ tests, the pathway of developing knowledge through experiences is the most significant factor in which to achieve a high score on an IQ test. It may be axiomatic, for students who have experiences in similar contexts as what is being measured by IQ tests may also have an advantage on their IQ tests. Therefore, the suitability of IQ tests should be examined by students’ previous experiences based on their respective sociocultural backgrounds.

Based on these points of view, there are conflicting approaches between the definition of LD and the diagnoses of LD students. While an LD is considered a neurological disorder, IQ tests may have a relationship with sociocultural aspects. This may indicate that we need to modify the definition of LD or develop new methods that may more accurately measure students’ presumed abilities.

Subsequently, what is the relationship between academic achievements, which is another factor in diagnosing LD students, and students’ sociocultural backgrounds? In the following section, we examine this connection by drawing on the framework of empiricism.

3. Using Empiricism as a Way to Examine the Relationship between Academic Achievement and Students’ Sociocultural Backgrounds

Empiricism may help us understand the level of academic achievement that students might achieve by their
acquired ability, along with experiences, such as learning in school. Empiricism is a theory of knowledge that suggests that knowledge comes only, or primarily, from sensory experiences [10]. Empiricists might view the mind as an originally blank or empty recorder on which experience leaves marks [11]. That is, empiricism denies the basic assumption of idealism that humans have innate ideas.

Empiricism also suggests that the origin of knowledge is in the real world that represents what is outside of human beings as well as sensory experiences that may help human beings draw knowledge into their inside. With a sensory system, individuals may perceive the characteristics of features, which are then stored in their memory systems [12]. In this manner, a series of memories is stored separately from each other, and the growth of the amount of knowledge indicates that the process of connecting individual memories by uniting pieces of memories meaningfully. Therefore, the growth of knowledge is proportional to the strength and number of stimuli from external features.

When we assume that learning is an external stimuli and that academic achievement refers to the knowledge that students acquire while learning, the viewpoint toward academic achievement and empiricism is in the same vein because the attainability of knowledge is located outside of the students. Based on empiricism, the absolute evaluation of academic achievement is reasonable because students experience the same external stimuli, such as class instructions; if students have similar academic abilities, which mean that they have similar IQ scores, their academic achievements should be similar to each other.

However, a critique of empiricism is that it makes decisive errors in ignoring students’ perceptive framework as it relates to their sociocultural background, and the same can be true in interpreting academic achievement [13]. Regardless of its significance, the sensory experiences that empiricism proposes as its justification for the bases of knowledge may not occur without the perceptive framework. Let us consider the color example again. A student should understand the basic concept of colors in order to perceive colors. If a student just sees “red” without logically understanding colors, it might be a similar experience as when a student is looking at features with a blank stare. That is, if a student looks at something with a blank stare, he or she sees nothing in this case. Similarly, if students have perspective frameworks that relate to academic topics, their frameworks may influence their understanding and achievement. For instance, students who already have a perception of the sea may understand the academic concept regarding the sea more easily than those who do not have this background information when they learn about sea-related concepts in school [14].

Subsequently, how are these perceptive frameworks formed? We would suggest that this perceptive framework is defined by others, not by a student’s own experiences. That is, students may only perceive that the color is red when somebody defines red for them. Based on this definition, students may accumulate the knowledge that relates to red, such as the colorfulness, chroma, or saturation of red, by experiences.

What does this story imply in terms of academic achievement? Although students have the same opportunities to learn in the same class at a school, students’ academic achievement may not be the same based on their own perceptive frameworks. As we pointed out above, it is not students’ own experiences, but the other person might provide the perceptive framework for students. Therefore, if students who have had more opportunities to acquire perceptive frameworks that can be useful for academic learning, they may have received greater advantages in their learning; thus, they will have had more chances to attain high academic achievement compared with their peers who lack perceptive frameworks.

The argument that students’ experiences may affect their academic learning also illustrates that academic achievement cannot be measured by distinguishing it from students’ sociocultural backgrounds. One of the major resources of providing perceptive frameworks for students before they enter a school might be their parents. That is, parents’ sociocultural backgrounds, including their education levels, might affect students’ perceptive frameworks, and this might lead to the differences in academic achievement. Recent studies [15] that investigate the relationship between students’ academic achievement in school and their parents’ academic backgrounds may provide some clarification on this assumption.

Consequently, it may be difficult to say that students should achieve at the same academic level, regardless of their sociocultural backgrounds, because they did not stand at the same starting line at the beginning of their formal school experience. How can we determine that a student has a learning disability because he or she receives a low score on an IQ test, regardless of his or her own efforts to overcome the gap of perceptive frameworks? We do not suggest that academic achievement is meaningless. Rather, we suggest that we need to be careful when we interpret students’ academic achievement because students’ sociocultural backgrounds may affect their learning. In this sense, we need to take a more careful approach when diagnosing students with LD based on their backgrounds. Although two students acquire the same score on their achievement test, their effort or the level of understanding might be different based on their own perceptive framework.

4. Conclusion

In this paper, we challenged the traditional view of the IQ-Achievement Discrepancy standard by posing fundamental questions about the relationship between the diagnosis methods and students’ sociocultural characteristics based on the theoretical foundation. There needs to be more discussion about the fundamental aspects of defining LD with discrepancy between IQ and academic
achievement. Particularly, we are concerned with whether we can make a diagnosis of students with LD without considering their background. When we looked at IQ and academic achievement from the fundamental aspects of acquiring knowledge—idealism and empiricism—we concluded that IQ and achievement tests might not be the best instruments in which to measure students’ knowledge regardless their sociocultural background. However, we would acknowledge that there need to be more empirical studies on the relationship between students’ achievement tests score and their sociocultural background because we only focused theoretical aspects of it in this paper.

LD studies that used IQ and achievement tests as their standards for diagnosing LD have contributed to broaden our understanding of LD. However, as we pointed out, there might be some students who may not receive the appropriate assistance because of its inappropriate approaches. Recent study proposes that making a precise diagnosis is essential to helping students with LD [16]. In addition, we may include some students who do not actually have LD, or students who were determined to have LD because of improper measurement methods. Therefore, we need to continue to be attentive to the diagnosis methods of students with LD. By doing so, we also need to develop new ways to help students LD.

We also recognized that knowledge and education do not possess value neutrality; therefore, scores from standardized tests, such as a high-stakes test or an IQ test, may not tell everything about students’ intelligence abilities. Furthermore, we propose that there needs to be more investigations in developing new diagnostic methods to identify students with LD that are inclusive of the sociocultural aspects of the students being assessed.

References