

# Do Epistemological Beliefs and Ways of Knowing Predict Reactions to a Child With Asperger Syndrome?

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**Abstract.** This study explored the relationship between epistemological beliefs, ways of knowing, parenting styles, and how one reacts to a child with Asperger Syndrome acting out in public. The purpose was to determine if epistemological beliefs, ways of knowing, and/or parenting style predict how an individual would respond in such a situation. Two hundred and nine college students participated in the study. Participants completed questionnaires to determine their epistemological beliefs, connected or separate knowing, and parenting style. They then responded to a scenario involving a child with Asperger Syndrome. People who gave appropriate advice had higher scores in connected knowing than people who gave inappropriate advice, suggesting that higher levels of connected knowing lead to more appropriate reactions to such situations.

## 1. Introduction

Many factors play a role in how a person with a disability is treated by society and by those who encounter them in the educational system. In our society, visible physical disabilities tend to produce sympathy and more tolerance for shortcomings, whereas mental disabilities may be perceived less benignly unless a physical trait indicates a cause for the mental deficit. So-called 'invisible' disabilities, such as autism or attention-deficit disorder, may produce a complete lack of tolerance because the presence of the disability is not apparent to the casual observer.

Asperger Syndrome (AS) is a pervasive developmental disorder on the autism spectrum. The primary deficits in AS are the lack of social skills, difficulties with pragmatics in language, and fixation on topics of special interest. By definition, people with AS have no significant cognitive or speech delays [1], and in fact, many children with AS have very high IQs. This usually places them in general education classrooms.

Unless in a high stress situation, those with AS generally appear much the same as their non-AS counterparts, and in fact, many go through life undiagnosed, merely perceived as a bit peculiar [2]. This can cause a highly negative perception of them

when their behavior fails to meet society's norms. Less desirable behavior is frequently elicited when individuals with AS are in new, stressful, or even ordinary social situations. Recognizing the reason for this behavior, and understanding how to best respond to it, is essential for teachers and others in the education system who are working with these children. Determining if there is a set of characteristics that make a person more likely to respond in a helpful way would help in identifying those best suited to working with such students, and may also indicate if such characteristics can be taught.

## 2. Experiment, Results, Discussion, and Significance

For this study, we looked at three characteristics with the potential to affect how a person reacts to a situation. Epistemological beliefs are those beliefs an individual holds about the nature and source of knowledge. Dr. Schommer-Aikins' work in this area describes a continuum of knowledge and learning characteristics, including the source of knowledge and the certainty of knowledge. The source of knowledge ranges from the naïve belief in an external, or omniscient source (all knowledge must come from experts), to the advanced belief in the self as the source or constructor of knowledge. As an individual moves along this continuum, they learn that they can make sense of the world and draw their own conclusions, rather than relying solely on the information given to them by others. Certainty of knowledge refers to the continuum of belief that all knowledge is fixed and definite, to the advanced belief that all knowledge is tentative and changing [3]. Movement along this continuum allows the individual to incorporate and accept newly discovered ideas into their worldview.

The second characteristic examined was the concept of ways of knowing, defined as the relationship between the knower and the object or subject of knowing. Separate knowing has at its heart the idea of critical thinking; the individual looks for truth by

trying to prove it wrong, and demands that proof be given before something is accepted as true. In contrast, connected knowing begins from a stance of agreement rather than disagreement, from a position of sharing the possibility of others' realities rather than requiring proof of them [4]. As with epistemological beliefs, these orientations exist on a continuum, and can exist in varying degrees in the same person [5].

The third characteristic examined was parenting style. Parenting style is defined as fitting one of three types of parental control patterns. Authoritative parents control in a nurturing manner, with clear communication. Authoritarian parents control with little nurturing and unclear communication. Finally, permissive parents are less controlling and have lower levels of nurturing and clarity of communication [6]. An increase in complex epistemological beliefs leads to more authoritative parenting strategies, and such parents are more likely to view child development and behavior in a less categorical manner. As a result, they are more likely to consider the context in which a child's behavior occurs and take that into consideration for their response [7].

The research on epistemological beliefs, ways of knowing, and parenting styles led to several hypotheses about the interaction of epistemological beliefs and ways of knowing, and an encounter with a child with AS. The reaction of a person to such a student was quantified by the classification of the advice they give to the parents of the child. In this study, it was hypothesized that people with stronger beliefs in the certainty of knowledge and omniscient authority would be more likely to give inappropriate advice. It was also hypothesized that people with a higher connected knowing score would be more likely to give appropriate advice. Finally, it was hypothesized that individuals with higher authoritative parenting scores would be more likely to give appropriate advice.

After responding to instruments to measure participants' epistemological beliefs, ways of knowing, and parenting styles, students then read a description of a child having a meltdown in a restaurant and were asked what advice they would give the parents about the situation. Advice was categorized as appropriate if it followed guidelines of responses shown to be effective, and inappropriate if it did not. The students were then told that the child in the vignette had AS, and were given a description of AS. Then they were asked if their advice to the parents would change, and if so, what it would be.

### 3. Conclusions

The hypothesis that people with higher connected knowing scores would be more likely to give appropriate advice was supported by the results of this study. Participants with higher connected knowing scores were significantly more likely to give appropriate advice, both with and without knowledge of how AS affected the situation. Taking the other person's perspective is how a connected knower forms an opinion, and empathy is an important part of this. This willingness to take the perspective of the other party opens a person to accepting the possibility of acceptable explanations for generally unacceptable behaviors. This openness is particularly important in the case of 'invisible' disabilities, where the child and even their parents frequently find themselves the target of negative opinions, stereotyping, and even punishment for behavior that the child is not able to control.

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