Abstract: The necessity to clarify the ambiguous relationship between beliefs and attitudes has been underlined by most researchers. In order to analyze theoretically this relationship, it is necessary, in our opinion, to refer to an explicit definition of attitude. Indeed the construct of 'attitude', more than that of 'beliefs', is very ambiguous, and the term itself is used in several studies with different meanings: moreover, researchers rarely explicit these meanings. Among the various definitions of attitude, in this communication we will refer to the two which are most used in mathematics education: according to the first (that we will call 'simple'), attitude is a general emotional disposition; according to the second (that we will call 'multidimensional') attitude has three components (emotions, beliefs, and behavior).
We will analyze from a theoretical point of view the relationship between beliefs and attitudes assuming these two definitions. Finally, we will discuss the traditional approach in assessing and measuring attitude, and we will suggest that the ambiguity between beliefs and attitudes has its origin in this approach.