In 1972 Fishbein and Ajzen identified over 500 indices and scales designed to measure attitude (p. 492). In a search of Google scholar (search terms attitude AND index OR scale OR instrument) returned 571,000 items excluding citations and patents from 1973 to 2011. “Clearly, when the single label “attitude” is attached to all of these different and unrelated measures, results of different studies, as well as generalizations about attitude, have to appear contradictory and confusing” (Fishbein & Ajzen, 1972, p.493). While there were many attitude scales Cullen, Gregory, and Noto (2010) compared instruments for evaluating teacher attitudes toward the inclusion of students with disabilities and determined that there was a need for an instrument that was theoretically and technically adequate (p. 6).

Attitude as a combination of factors

Since attitudes have three components, cognitive, affective, and conative, (Fishbein & Ajzen, 1972; Insko & Schopler, 1967; Morton & Campbell, 2007) it was important to include all three in evaluating teachers’ attitudes towards inclusion. The cognitive component is made up of one’s thoughts, ideas or beliefs about something or someone, this may be stereo-typing. The affective dimension of attitude includes the feelings, the emotional response to something or someone, while the conative part of attitude is the behavioral dimension. The conative or behavioral component is a description of the tendency to act in a way towards something. When studying attitudes it is important to include all three dimensions (Fishbein & Ajzen, 1972, p. 529). Fishbein and Ajzen asserted that the conative intentions will affect behavior and that the affective cognitive components of attitude affect the conative intentions.

Development of the TATIS

When considering pre-service teacher’s attitudes towards inclusion the three dimensions of attitude have been approached differently by different studies. Antonak and Larrivee in their 1995 effort to revise a scale to evaluate educator’s attitudes identified eight possible dimensions that they then narrowed to “five factors: General Philosophy of Mainstreaming, Classroom Behavior of Special Needs Children, Perceived Ability to Teach Special Needs Children, Classroom Management of Special Needs Children, and Academic and Social Growth Special Needs Children” (p. 141-147). Upon further review these factors revised and regrouped into four: of Integration, Integrated Management, Perceived Ability to Students with Disabilities, and Versus Integrated General.

Slightly more than a decade later, Loreman, Earle, Sharma and Forlin sought to distill several other attitudinal scales into an improved scale measuring pre-service teacher attitudes toward inclusive education. In their 2007 study, Loreman et al. developed the Sentiments, Attitudes, and Concerns about Inclusive Education scale (SACIE) using five factor themes: 1) workload and stress, 2) resources, 3) time, training, competence, 4) other student relationships, and 5) academic impact on rest of class (p.156). Loreman et al. used the work of Martinez (2003) who identified the core values of inclusive education as: (a) positive attitudes toward increased inclusion of students with disabilities, (b) high sense of teaching efficacy and (c) willingness and ability to adapt one’s teaching to meet the individual educational needs of students with disabilities” (p. 474). Martinez addresses all three of the components of attitude while Loreman et al., Antonak and Larrivee, and the researchers who developed the instruments they synthesized did not. In this way, there was a need for another instrument that could measure all three of the dimensions of attitude according to Fishbein and Ajzen.

Specifically, a tool was needed that would measure teacher attitudes toward the inclusion of children with disabilities. The review of the literature revealed this subject to have three key dimensions: 1) Affective: Perceptions of students with disabilities (POS), 2) Cognitive: Perceptions of professional roles and functions (PRF), and 3) Conative: Beliefs about the efficacy of inclusion (BEI). There was no existing instrument found that measured all three dimensions (Cullen, Gregory, & Noto, 2010, p. 6).

The survey tool (Teacher Attitudes Toward Inclusion Survey - TATIS) was developed to measure teacher attitudes on all three dimensions of attitude. Becoming an effective teacher requires desire to be good for all students, including students with disabilities. Current educational practices require general education teachers to be effective instructors for all students (i.e., No Child Left Behind- NCLB, P.L. 107-110, 2001; Individuals with Disabilities Education Improvement Act- IDEIA, P.L. 108-446, 2004). In order to be effective, pre-service teachers will gain skills in teacher preparation courses, field experience, student teaching, and later through the job experience and professional development. Influences on teacher attitudes come from many sources – personal experiences in K-12 education, personal knowledge of disabilities, and/or individuals with disabilities and the teacher preparations program.

Development of the TATIS-p

The TATIS focuses on attitudes as a combination of three factors, cognitive, affective and conative. In a presentation of data collected using the TATIS, Noto and Gregory found a higher variance on the reverse scored items (Noto & Gregory, 2011). The TATIS reverse scores factor 2, respondents’ beliefs about the efficacy of inclusion. This result is consistent with Fishbein and Ajzen’s assertion that the cognitive and affective results to be more closely linked, and the conative factor to express higher variances (p. 506). To assess whether the higher variance is indeed a function of the conative facet of attitude and not a result of the reverse scoring of the items, the TATIS instrument was revised to be nearly entirely positively scored.

The TATIS-p fills a crucial gap in existing instrumentation to measure attitudes towards the inclusion of students with mild to moderate disabilities. It is anticipated that the TATIS-p will serve programs in evaluating whether their pre-service training programs are impacting teacher attitudes, and will help guide the development of programmatic efforts through its assessment of the three dimensions of attitude. The TATIS-p can also be used to investigate whether demographic, experiential, or other differences in teacher backgrounds impact the three dimensions of attitude towards inclusion.