Chapter 3

Method
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Over recent years, moves towards the inclusion of students with special needs in mainstream classrooms has brought about increasing attention to the way general education teachers perceive these students. Commensurate with this has been a growing interest in what may constitute educational success for children with special educational needs in mainstream classrooms, plus the ability of general education teachers to provide effective and appropriate instruction for them. Currently these mainstream, inclusive classrooms also suffer from limitations in funding and the provision of ongoing material resources and support, further adding to the difficulties faces by general education teachers. Taken together, these issues foreground a need to understand the beliefs and attitudes that general education teachers might hold, not only about their overall role as practitioners, but also in relation to those students in their classrooms who have difficulty learning.

The self-beliefs that teachers have about their ability to influence the academic achievement and outcomes for learners with special educational needs are more than likely to impact upon their behaviour towards these students. Accompanying attitudes relating to the expectations general education teachers might have of students with different learning needs, including how they are as teachers might explain or rationalise the academic outcomes that may or may not occur, will also influence their perceptions.

It has been well documented that teachers’ past experiences as learners are powerful in shaping conceptions and expectations about teaching diverse students (Flores & Day, 2006; Pop, 2008). It is known that teachers form beliefs about the process of teaching during their pre-service training and also that once a belief has been held for a long time, it becomes extremely difficult to change (Bandura, 1977). Consequently it was considered that the need to explore teachers’ perceptions, understandings,
expectations and behaviours in relation to students who have learning disabilities (LD), is indeed critical.

In light of these issues, this study was developed to provide an in-depth exploration of urban, middle school teachers’ attributions about students with LD. The investigator sought to explore to what degree teachers’ knowledge of the presence or absence of a LD would influence (a) the feedback (reward/punishment) given to a hypothetical student based on his/her ability and the effort expended, (b) the anger teachers felt toward each student, (c) the pity teachers felt toward each student, and (d) the expectations of future failure for each student.

**Design**

In the present research, the differences between the teachers’ responses, namely, feedback (reward/punishment), anger, pity, and expectancy of future failure to the students with learning disabilities and those to their nondisabled counterparts were studied. Since the research involved a single group, hence a single group design with repeated measures was used where the teachers’ responses, i.e., the feedback (reward/punishment), anger, pity, and expectation of future failure toward students with and without learning disabilities were the within-group factors.

**Schools**

The present study was carried out in government run middle schools of Tehran, the capital of Iran. Tehran is divided into 21 educational zones, out of which educational zone number 8 was randomly chosen for the present study. This zone has 35 government run middle schools out of which 18 were only for boy and 17 were only for girl students. All the 35 schools were included in the study.

**Participants**

There were 525 teachers teaching in the above mentioned 35 government run middle schools, out of which, those were selected who met the inclusion criteria. The inclusion criteria required that the participants were at least 30 years of age, had a
minimum qualification of Post Diploma (i.e., 12+2) according to the Iranian Education System with Psychology and Education as their qualifying subjects, were trained to deal with exceptional children, had a minimum teaching experience of ten years, and were currently employed in the Government run middle schools. One hundred and ninety-three teachers (female = 99 & male = 94) fulfilled these criteria. From the total number of 99 female teachers, five teachers could not participate, thus a total of 94 females were included. Thus the final sample consisted of 188 teachers (female = 94 & male = 94) who participated in the present study.

**Figure 3.1 : Inclusion Criteria:**

<table>
<thead>
<tr>
<th>Participant’s Age</th>
<th>30 years and above</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Educational Qualifications</td>
<td>12+2 (i.e., Diploma after 12(^{th}) standard)</td>
</tr>
<tr>
<td>Teaching Experience</td>
<td>10 years and above</td>
</tr>
<tr>
<td>Essential Qualifications</td>
<td>Studied Psychology and Education</td>
</tr>
<tr>
<td>Training</td>
<td>Training in dealing with exceptional children</td>
</tr>
</tbody>
</table>

**Measures**

The purpose of the present study was to test basic attributional principles as applied to children with learning disabilities. The researcher sought to explore to what degree teachers' knowledge of the presence or absence of a learning disability would influence (a) the feedback, i.e., the level of reward or punishment they gave a hypothetical student based on his/her ability and effort expended, (b) the anger, and (c) the pity the teachers felt, and (d) the expectations the teachers held for the student's future failure. In order to measure, teachers’ attributional style toward students with and without learning disabilities, vignettes were used.

**Vignettes.** In the present study, vignettes were devised on the lines of the ones developed by Clark (1997) who examined the way in which American teachers
perceived the achievement of students with LD in comparison to students without LD. Vignettes may consist of text, images and other forms of stimuli to which research participants are asked to respond with their opinions and reactions to the content (Hughes & Huby, 2002; Schoenberg & Ravdal, 2000). When vignettes are used to answer quantitatively-focused research questions, according to Gould (1996), and Sumrall and West (1998), they can quickly generate considerable amounts of data. Even though vignettes cannot completely capture the reality of people’s lives, they can simulate real life experiences more than many other methods. Vignettes are also an appropriate tool to use with large samples.

Scholars from a variety of disciplines have used vignettes to study a range of topics which include cognition and motivation (Stolte, 1994), behaviours (Burgio, Cotter, Stevens, Hardin, Sinnott & Hohman, 1995; Poutou & Norwich, 2001), attitudes and perceptions (Arbeau & Coptan, 2007; Avissa, Reiter & Leyser, 2003; McNally, Cole & Waugh, 2001; Yoon, 2004), and attributions (Clark, 1997; Clark & Artiles, 2000; Woolfson et al., 2007).

Particularly in the US, researchers who have conducted in-depth investigations of teachers’ causal attributions, perceptions of self-efficacy, emotional reactions, or intervention choices predominantly employed the use of vignettes (Poutou & Norwich, 2001).

Although vignettes have certain common features (such as a brief and familiar hypothetical scenario, followed by statements and questions or decision-making) they can be modified to be consistent with the researcher’s topic and population of interest (Kayser-Jones & Koenig, 1994). When used as part of a survey instrument, they can also be seen as a relaxing, pleasant, non-threatening, and interesting approach which is likely to reduce the feeling of being overburdened by other methods such as interviewing (Kayser-Jones & Koenig, 1994).

Clark (1997) had created eight vignettes, each describing a hypothetical boy who had just taken a typical classroom test and failed. Three types of information were
provided in each vignette in the instrument: a statement of student ability, the typical pattern of effort expended by the student in the classroom, and additional information on academic performance identifying four of the boys as learning disabled and four as nondisabled. The boys were matched on ability (high or low), on typical effort (high or low), and on presence /absence of a learning disability (LD/NLD), creating eight Ability x Effort x LD/NLD cells. It should be noted that the vignettes did not specify the reason for the hypothetical boys' failures, so as to stimulate causal thinking on the part of the participants. The low-ability, high-effort, LD vignette read as follows:

Andrew is a student in your class. He is considered to have lower aptitude for academic tasks than most children in the class. He works slowly, but hard, in class, generally finishing shortened class assignments. His family works with him at home, where he finishes his homework and prepares for school. To help him be successful in language arts and math, he receives services from the Resource Specialist.

The vignettes did not specifically use the terms high ability or low ability, high effort or low effort, or learning disability, but used language that teachers might be expected to encounter in the school setting to describe the hypothetical boys. Thus, the boys with learning disabilities were identified by describing their participation in the Resource Specialist Program (RSP).

Since the present study was conducted in Iran, hence the vignettes created by Clark (1997) were translated into Persian by a bilingual expert who had proficiency in both Persian and English. Further, in Iran there are separate schools for boys and girls with male and female teachers respectively, hence for boys’ schools, the vignettes gave a description of a hypothetical boy student and for girls’ schools the vignettes gave a description of a hypothetical girl student. The translated vignettes were then reviewed by a professor of Persian literature to rule out any ambiguous usage of words or phrases. Finally, it was given for a review to a Persian psychologist who was also a bilingual. Minor changes in wording and sentence construction were made as a result of the reviews.
Pilot Testing

The instrument was pilot tested in two stages prior to the study, in order to refine the instrument and socially validate the vignettes. Prior to the pilot study, a group of 10 Subject Matter Experts with a minimum teaching experience of 10 years, from Azad University, Tehran reviewed the vignettes to validate the level of ability and effort exhibited by each hypothesized student and to identify which of the students had learning disabilities. Although they generally concurred, some revisions were made in order to address discrepancies and clarify the vignettes more fully; the Subject Matter Experts fully concurred on the students’ characteristics in the revised vignettes.

Following this review, 30 male teachers and 30 female teachers from 9 government middle-schools in area 8 of Tehran participated in the pilot study. During the pilot, participants were asked to comment on the clarity of the vignettes, to point out any problems they felt were present, and suggest any changes they would like to make. They were requested to include any ideas or comments they believed were helpful. After completion of the instrument, they were asked to identify the types of children that were described in the vignettes. The participants’ comments indicated that all of them perceived the four students (boy/girl) who were served by the Resource Specialist Program as having learning disabilities. The suggestions given by the participants were incorporated.

Finally, after pilot study, eight vignettes were used in the present study. Each describing a hypothetical student (boy/girl) who had just taken a typical classroom test and failed. Three types of information were provided in each vignette in the instrument: a statement of student ability, the typical pattern of effort expended by the student in the classroom, and additional information on academic performance identifying four of the students as learning disabled and four as nondisabled. The students were matched on ability (high or low), on typical effort (high or low), and on presence/absence of a learning disability (LD/NLD), creating eight Ability x Effort x LD/NLD cells. It should be noted that the vignettes did not specify the reason for the hypothetical students’ failures, so as to stimulate causal thinking on the part of the
participants. Thus, eight vignettes, creating a two (ability) by two (effort) by two (LD/NLD) matrix were formed.

**Figure 3.2 : A matrix of two by two by two vignettes**

<table>
<thead>
<tr>
<th></th>
<th>NLD (boy/girl)</th>
<th>LD (boy/girl)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Ability High Effort</td>
<td>Hasan/Faranak</td>
<td>Mahdi/Kiana</td>
</tr>
<tr>
<td>High Ability Low Effort</td>
<td>Hamid/Fatemeh</td>
<td>Farhad/Nilofar</td>
</tr>
<tr>
<td>Low Ability High Effort</td>
<td>Hossein/Mahsa</td>
<td>Resa/Mahdieh</td>
</tr>
<tr>
<td>Low Ability Low Effort</td>
<td>Mohammad/Azadeh</td>
<td>Arian/Tanaz</td>
</tr>
</tbody>
</table>

The vignettes did not specifically use the terms *high ability or low ability, high effort or low effort, or learning disability*, but used language that teachers might be expected to encounter in the school setting to describe the hypothetical students. Thus, the students with learning disabilities were identified by describing their participation in the Resource Specialist Program (RSP). In Iran, RSP is a resource room program, the majority of whose students are children with learning disabilities, and teachers typically associate RSP with learning disabilities. However, in order to ensure that participants interpreted the vignettes in this way, they were socially validated prior to the study. Description of the vignettes used in the present study is given below:

**High Ability and High Effort (LD)**

Mahdi/Kiana is a student in your class. He/she is of higher ability than many in his/her class but has difficulty with tasks he/she must do in writing. Such as writing stories where hes/he must formulate correct sentences and spell correctly. He/she receives RSP services which are helping him/her develop strategies to improve his/her written work. He/she works hard but slowly in class, using methods he/she was
taught; he/she usually completes assignments. His/her homework is generally done properly, as well.

High Ability and Low Effort (LD)

Farhad/Nilofar is a student in your class. He/she is a rather bright boy but has some difficulty with comprehension, both in math and in reading. He/she sees the Resource Specialist for assistance with his comprehension difficulties. He/she does the majority of his/her classwork quickly, often making many errors. Homework is done the same way unless a parent supervises him/her. His/her participation in group work varies but usually limited.

Low Ability and High Effort (LD)

Resa/Mahdieh is a student in your class. He is considered to have lower aptitude for academic tasks than most children in the class. He works slowly but hard in class, generally finishing shortened class assignments. His family works with him at home where he finishes his homework and prepares for school. To help him be successful in language arts and math, he receives services from the Resource Specialist.

Low Ability and Low Effort (LD)

Arian/Tanaz is a student in your class. He is of limited ability as compared to most of his classmates. He seldom completes his class work or homework, is often off task, and does not participate in instructional groups. Because of his deficits in language arts and math, he receives services from the Resource Specialist Program.

High Ability and High Effort (NLD)

Hasan/Faranak is a student in you class. He is a very bright child, among the brightest in the class. He always works hard in class, finishes his assignments and does his homework properly. He is able to work independently and rarely has to ask for help.
High Ability and Low Effort (NLD)

Hamid/Fatemeh is a student in your class. He has greater aptitude for academic tasks than most children in his class. Although he occasionally does excellent work, he is usually off task and does not participate in class often. He rarely completes class assignments and does not do much of his homework.

Low Ability and High Effort (NLD)

Hossein/Mahsa has ability somewhat below that of most children in his class. He works hard in class, asking for help when he needs it. He tries to participate in group work. His homework is finished regularly, and class work, even if not always quite finished, is done properly.

Low Ability and Low Effort (NLD)

Mohammad/Azadeh is a student whose limited ability is below that of most children in his class. He seldom does classwork completely or hurries through it, making many errors. He rarely does his homework or studies at home, but always has an excuse why he hasn’t. When encouraged to slow down and work carefully, his work can be appropriate for his grade level.

Scoring: Following each vignette, teachers were presented with four questions that asked them to (a) provide evaluative feedback, (b) rate their anger, (c) rate their pity, and (d) rate their expectations following each hypothetical student's failure. Responses to the four measures were made on Likert scales.

In response to the question, “What feedback would you give this child?”, teachers provided positive or negative feedback to each student using a single scale running from +5 though +1 (positive feedback or reward) to -1 through -5 (negative feedback or punishment). It should be noted that the absence of a zero at the midpoint of the scale forced teachers to provide either negative or positive feedback. To assist teachers in making their ratings, positive points were equated with gold stars given to the child and the negative points with red stars, an analogy used by Weiner and Kukla (1970).
On the second measure, teachers rated how much anger they felt toward the student, and on the third measure how much pity they felt for the student. Each measure used a scale ranging from 1 (very little) to 7 (very much). The fourth measure asked teachers to predict how likely it was that each student would fail on future tests on a scale running from 1 (very unlikely) to 7 (very likely).

**Procedure**

The present study was conducted in two stages, first a pilot study was carried out that was followed by the main study. In the present study, the researcher sought to explore to what degree teachers’ knowledge of the presence or absence of a learning disability would influence (a) the level of reward or punishment they gave a hypothetical student based on his/her ability and effort expended, (b) the pity and anger the teachers felt, and (c) the expectations the teachers held for the student's future failure. In order to measure, teachers’ attributional style toward students with and without learning disabilities, vignettes were used. These vignettes were in line with the ones used by Clark (1997, 2000) in her studies. Since the present research was carried out in Iran, the first step was to translate Clark’s (1997, 2000) text into Persian language. Then pilot study was conducted.

For the pilot study, permission was acquired from the Ministry of Science to conduct the research in Government run middle schools in Tehran. The Ministry of Science forwarded the request to the Ministry of Education with whom all the 21 educational zones of Tehran are affiliated. Consequently, an application seeking the permission to carry out the study was sent to the Director of Education of Area 8 of Tehran, who then sanctioned an introductory letter mentioning the purpose of research and other related details for the reference of principals of the Government run Middle Schools in the Area 8. Nine schools in the Area 8 participated in the pilot study. During the pilot, participants were asked to comment on the clarity of the vignettes, any problems they encountered, and changes they would make. They were invited to include any thoughts or ideas that they believed were helpful. Following completion of the instrument, participants were asked to identify what types of children were addressed.
by the vignettes. Oral and written comments indicated that all the participants perceived the four students who were served by the Resource Specialist as having learning disabilities, with no evidence of confusion with other areas of disability.

Following completion of the pilot study, all the 35 Government run Middle schools (including the nine schools that participated in the pilot study) in the Area 8 located in **East North Central Tehran** were contacted. Since the permission had been granted by the Ministry of Education, hence all the schools agreed to participate in the study. Over the next few days, the researcher met the principals of all the 35 schools individually, explained the purpose of the study and fixed a day and time convenient to the teachers for an initial meeting with the researcher.

In Tehran a faculty meeting is held every fortnight, during which almost all the teachers are present, hence the researcher decided to meet the teachers of the various schools during the faculty meetings. During the meeting, the researcher addressed the teachers and explained about the purpose of her visit. Once the rapport was established, the teachers were asked to provide brief information about themselves, such as age, educational qualification, teaching experience, and whether they had training to deal with exceptional children. The necessity of such information was explained to them as on the basis of this information, teachers could be selected who fulfilled the above mentioned inclusion criteria, further, anonymity and confidentiality was guaranteed.

Each of the 35 schools had to be visited for an average of four times, starting with the appointment with the principal through meeting with the participants of a particular school as due to their prior engagements all the participants were not available at a specific time. While some of the participants had to be met during the lunch break, some others preferred to complete the instrument after their classes got over, whereas the rest wanted to participate in the study after the faculty meeting was held. Utmost care was taken to follow the preferences of the participants to ensure that they had a relaxed and comfortable state of mind while answering without any compulsion or restraints.
Data were collected during the appointed timings in one 1-hour session in all the participating schools. Prior to beginning the instrument, participants were briefed on the purpose of the study but not informed of the specific hypotheses. During the briefing, participants were told that the purpose of the study was to study their responses to a group of students who had just failed a test, and that the study would examine their feedback, affective responses, and expectations based on the information provided in the vignettes. The vignettes were described as containing information on student ability based on typical school indicators, classroom effort, and other relevant information. Keeping in mind that in Tehran, the schools are segregated for gender, where female teachers provide teaching instruction to girls and male teachers to boys, hence, vignettes describing hypothetical girls with and without learning disability were given to female participants and those describing the hypothetical boys with and without learning disability were given to male participants. Written directions for completing the instrument were provided to each teacher. Directions included a brief overview of the study, a statement of its purpose, and procedures for completing the instrument. Participants were invited to add any written comments to the instrument they might wish to. While participants completed the instrument, the researcher circulated, answering any questions that arose. A debriefing of participants was conducted immediately following completion of the instrument and data survey asked were questions answered at this time. Finally the participants were thanked for their cooperation.

**Precautions**

- Informed consent was obtained from schools as well as from teachers.
- Inclusion criteria were strictly followed for identification of the participants.
- Vignettes were translated into Persian by an English-Persian bilingual expert.
- Vignettes were socially validated and pilot study was conducted to establish their reliability.
Participants were assured of anonymity and confidentiality and the researcher strictly adhered to it.

Data was collected during the appointed time periods, fixed prior to the study according to the participants’ convenience.

Completion of instrument took place in the quite environment with minimum disturbances, e.g., noise.

A debriefing of participants was conducted immediately following completion of the instrument.