

Attributions for Problem Behavior as Described by Turkish Teachers of Special Education

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The purpose of this survey study was to determine Turkish teachers' attributions of problem behaviors. The participants' (special education teachers) attributions of problem behaviors varied with some teachers showing agreement with a behavioral perspective while others attributed the occurrence of problem behaviors to other factors (e.g., poor parenting, God, the child's disability). Teachers' educational area of specialty and training on behavioral interventions were associated with their beliefs about problem behaviors. Results are discussed in the context of current literature and directions for future researches are suggested.

Keywords: *attributions; challenging behavior; teacher perception; functional assessment; behavior support*

Problem behavior can detract from students' ability to acquire and improve new skills and hinder their ability to develop positive relationships with others (Horner & Carr, 1997). Furthermore, the presence of problem behaviors can affect the behavior of teachers. For instance, teachers have been observed to spend less time interacting with and teaching students with problem behaviors, resulting in lower student outcomes and increased teacher stress (Brouwer & Tomic, 2000; Carr, Taylor, & Robinson, 1991). The presence of problem behaviors is one of the major reasons for referrals to special education in Turkey (Turkish Ministry of Education, 2004). Therefore, teachers working with children with problem behaviors need skills to prevent and intervene with problem behaviors.

Researchers agree that educators enter the teaching profession with a set of beliefs and behaviors, which are often very difficult to change (e.g., Stuart & Thurlow, 2000). Teachers' beliefs about the causes of problem behaviors might be influenced by their educational backgrounds, experiences, and cultural beliefs and values. In Turkey, for example, special education teachers are trained in undergraduate programs offered by the special

education departments within nine public universities (Kırcaali-Iftar, 2006). These undergraduate programs are field based and designed to prepare teacher candidates to work with individuals with intellectual disabilities, hearing impairments, or visual impairments or those individuals who are gifted and talented (Cavkaytar, 2006). As Cavkaytar (2006) indicated, prospective teachers who complete the requirements for the special education credential in the area of intellectual disabilities are authorized to work with students from preschool through age 21 who have mild to severe disabilities. These programs consist of approximately 144 credit hours offered in

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eight semesters, including two semesters of field-based experiences (Turkish Council of Higher Education, 2007). Also, some universities have master's and doctoral programs in special education. In the undergraduate programs, teacher training is based on a behavioral perspective, and each prospective teacher takes three courses focusing on challenging behavior (Cavkaytar, 2006). It is likely that teachers from these undergraduate programs would have a behavioral perspective about the causes of problem behaviors. Course content for graduate programs, however, varies from one program to another.

Because of teacher shortages, in addition to graduates of special education programs, graduates of other professions, such as psychology, social work, early childhood education, and elementary education, are able to work as special education teachers in public schools and agencies upon the completion of short-term certification programs (Kırcaali-Iftar, 2006). These professionals typically hold undergraduate degrees and add the "special education certificate" in their current areas of specialty. The certification programs require participants to complete 160 hours of in-service training offered through the Turkish Ministry of Education (2007). Kırcaali-Iftar (2006) reported that these programs have been successful in increasing the number of special education teachers in Turkey. However, the qualifications of individuals who complete these programs have been questioned because of the design of these programs. Concerns regarding these programs include the relevance of course content, the use of in-service staff members with limited training, large class sizes, attendance issues of the prospective teachers, and certification not being tied to a passing grade (Kırcaali-Iftar, 2006). Thus, these professionals' attributions about problem behaviors might differ from those of special education teachers who have completed typical preservice training programs.

In addition to educational background, culture is an important variable to consider in understanding teachers' views of problem behaviors. All behaviors are affected by culture and context (Chen, Downing, & Peckham-Hardin, 2002; Lynch & Hanson, 2004). Although some behaviors might be considered problematic in some cultures, these behaviors might not be viewed as problematic in others (Wang, McCart, & Turnbull, 2007). Similarly, cultural values might influence teachers' perceptions of problem behaviors. These beliefs might influence teachers' selection and use of interventions for problem behaviors.

Research on attributions has been conducted primarily in Western countries (e.g., Brophy & Rohrkemper, 1981; Christenson, Ysseldyke, Wang, & Algozzine, 1983; Guttman, 1982; Hastings, Tombs, Monzani, & Boulton,

2003; Soodak & Podell, 1994). This line of research, influenced by Weiner's (1985) theory of attributions, has revealed that if a caregiver or a staff member views a child's problem behavior as beyond the child's control, the caregiver is less likely to express negative emotions toward the child (e.g., Dix, Ruble, & Zambarano, 1989; Smith & O'Leary, 1995) and is more willing to assist the child (Hastings et al., 2003). These results suggest that caregivers' or educators' beliefs about behavioral problems play a critical role in their responses to students with problem behaviors. Most studies of teachers' attributions have shown that teachers tend to attribute problem behaviors to student- or family-related factors rather than classroom- or teaching-related factors (e.g., birth defects, parents' level of education; Christenson et al., 1983; Guttman, 1982; Miller, 1995; Soodak & Podell, 1994; Wilson & Silverman, 1991). However, a few studies have shown that school- and teacher-related factors are critical (Hughes, Barker, Kemenoff, & Hart, 1993; Maxwell, 1987).

Recently, a few researchers have begun to explore cultural factors that influence caregiver or teacher beliefs with respect to problem behaviors (Chavira, Lopez, Blacher, & Shapiro, 2000; Ho, 2004; Mavropoulou & Padelidiadu, 2002). Mavropoulou and Padelidiadu (2002) reported that Greek elementary school teachers found that student characteristics (learning difficulties) and family variables (family problems and parental attitudes) accounted for problem behaviors rather than school factors. This finding is consistent with previous studies conducted in Western countries. More recently, Ho (2004) compared Australian and Chinese teachers' attributions for problem behaviors. They found that regardless of cultural background, teachers attributed inappropriate behaviors mostly to student factors (lack of effort, self-discipline) and least often to teacher factors. However, Chinese teachers attributed inappropriate behaviors more often to family factors than Australian teachers, representing a more collective responsibility.

Because teachers' attribution styles influence how caregivers and staff members interact with individuals with challenging behaviors (e.g., Chavira et al., 2000; Dix et al., 1989; Hastings et al., 2003; Smith & O'Leary, 1995), and few studies on teacher attribution styles have been conducted outside of Western countries, this line of research must be expanded. Turkish educators' experiences regarding problem behaviors has received limited attention to date (e.g., Atici & Merry 2001; Ozen & Batu, 1997; Ozen, Colak, & Acar, 2002).

Turkish culture is diverse, derived from various elements of the Ottoman Empire, Europe, and Islamic values. Unlike mainstream American values of individual achievement and independence (Hanson, 2004), the collective

achievement of the family is often indicated as a source of pride and identity in Turkish culture (Kagıtcıbası, 1990). Even though modern treatment options are used and valued (e.g., biomedical and educational practices; Diken, 2006), fate and God are believed to be responsible for most events (Lamorey, 2002; Masood, Turner, & Boxter, 2007). On the other hand, people of Western European heritage commonly believe that most events have known and physical causes (Althen, 1988; Condon & Yousef, 1975). These differences in values and beliefs should be considered when studying teachers' attribution styles across cultures. Cross-cultural examinations of perceptions of challenging behaviors provide a better understanding of educational practices in different cultural contexts (Ho, 2004).

In the United States, a widely used educational practice to address problem behaviors is behavioral strategies. Functional assessment is derived from applied behavior analysis and aims to explain environmental variables that trigger the occurrence of problem behaviors and the consequences that maintain those behaviors (O'Neill, Horner, Albin, Storey, & Sprague 1997). This is followed by an intervention in which variables that support problem behaviors are removed or altered to reduce the occurrence of these behaviors (e.g., Carr et al, 1999; Koegel, Koegel, & Steibel, 1998; Vaughn, Dunlap, Fox, Clarke, & Bucy, 1997). Furthermore, research shows that problem behaviors can serve a communicative function, and the aim of an effective support plan is to teach individuals more appropriate and effective ways to communicate their needs and wants to make problem behaviors less relevant (Carr, 1994). Thus, these features of functional assessment reflect American mainstream cultural values with respect to

individualism (e.g., focus on personal choice and needs), change and progress for the future (e.g., control problem behavior and reinforce desirable behavior), time (e.g., efficacy of behavior remediation and future-oriented prevention), and action and achievement (e.g., remediation of problem behavior is doable and achievable). (Wang et al., 2007, p. 40)

The overall goal of this study was to explore Turkish teachers' experiences and beliefs about challenging behaviors. We were particularly interested in exploring whether Turkish special education teachers' attribution styles regarding problem behaviors aligned well with current recommended practices (e.g., functional assessment and positive behavior support), which evolved in the United States and reflect Western cultural values. The study was an initial exploratory effort to address this question in Turkey. The following research questions guided the study: (a) What are Turkish teachers' views

Table 1
Participants' Demographic Information (n = 408)

Variable	n (%)
Gender	
Female	257 (63)
Male	151 (37)
Age (years)	
20 to 30	235 (57.6)
31 to 40	76 (18.6)
41 to 50	70 (17.2)
≥51	27 (6.6)
Degree (level of education)	
High school	14 (3.4)
Associate's degree	79 (19.4)
Bachelor's degree	284 (69.6)
Master's degree	31 (7.6)
Teaching credentials (area of specialization)	
Other with special education certificate	135 (33.1)
Elementary with special education certificate	123 (30.1)
Special education credential	112 (27.5)
Early childhood with special education certificate	38 (9.3)
Type of disability served by teachers ^a	
Intellectual disabilities	354 (87)
Learning disabilities	150 (37)
Autism	140 (34)
Attention-deficit/hyperactivity disorder	101 (25)
Severe or multiple impairments	88 (22)
Behavioral and emotional disorders	86 (21)
Physical or health impairments	61 (15)
No response	13 (3)
Training in behavior management	
Yes	208 (51)
No	200 (49)
Training in behavior management by area of specialization	
Special education	112 (53.8)
Other	45 (21.6)
Elementary	30 (14.4)
Early childhood	21 (10.2)

a. Respondents could "check" all disability categories describing the students they currently supported. Consequently, there was overlap among the disability categories, so the total is greater than 100%.

regarding the underlying causes of problem behaviors, as measured by the Scale for Problem Behavior Causality (SPBC)? and (b) Are differences on the SPBC associated with specific teacher characteristics (e.g., area of specialization, years of experience, geographical region)?

Method

Participants

Participants were teachers from special education schools in Turkey, which serve 3- to 21-year-old individuals with developmental disabilities. These schools were selected purposefully from three different cities

across Turkey to represent different regions of the country (e.g., rural, urban, suburban; see Table 1). All special education schools from the cities of Eskişehir (suburban) and Kayseri (rural) were included in the sample. Because Istanbul (urban) is a city with a large population, it was not feasible to collect data from all schools. Therefore, data in Istanbul were collected only from those schools serving more than 100 students. Thus, the sample included a total of 337 special education schools. Given that the majority of individuals with disabilities receive services in separate educational settings in Turkey (i.e., 28% in inclusive classrooms, 5% in self-contained classrooms, and 67% in segregated special education schools; Turkish Ministry of Education, 2007), teachers were recruited from segregated special education schools. These schools serve individuals with mild to severe intellectual disabilities and/or autism. Although all of the students had developmental disabilities, some also had additional challenges, such as physical disabilities and/or sensory impairments.

Selection criteria for teachers included (a) a willingness to participate, (b) being employed as a special education teacher in a classroom serving individuals with disabilities, and (c) being a lead teacher for at least 1 year at the time of the study. Six hundred nineteen surveys were distributed, and 418 were returned. Ten of the 418 surveys were excluded because of missing data; thus, the adjusted return rate was 66%.

As Table 1 shows, the majority of participants were women (63%), and slightly more than half were between 20 and 30 years of age (57.6%). The number of students in each classrooms ranged from 4 to 10. The type of teaching credentials held by the participants included elementary education with special a education certificate (30.1%), special education (27.5%), early childhood with a special education certificate (9.3%), and other subjects (33.1%). The “other” group included teachers having credentials in the areas of psychology, social work, math, music, and art, with certificates in special education. The types of students with disabilities served by teachers included students with intellectual disabilities (87% of teachers), learning disabilities (37% of teachers), autism (34% of teachers), attention-deficit/hyperactivity disorder (25% of teachers), severe or multiple impairments (25% of teachers), behavioral and emotional disorders (21% of teachers), or physical and health impairments (15% of teachers). Because participants could “check” all disability categories describing the students in their current classrooms, there was overlap among disability categories, so the total was greater than 100%. Fifty-one percent of the participants indicated that they received training in

behavior management, with the majority being special education teachers (53.8%).

Survey Instrument

The initial survey was developed in Turkish by research project staff members after examining the literature and surveys designed by other researchers (Chandler & Dahlquist, 2002; Hemmeter, Santos, & Ostrosky, 2008; Peckham-Hardin, 2002). The survey included new items and some items that were selected directly from other instruments (e.g., Hemmeter et al., 2008; Peckham-Hardin, 2002). The items derived from existing surveys were translated to English and translated back to Turkish for accuracy by two special education faculty members who are fluent in both English and Turkish. Then drafts of the instrument were revised on the basis of feedback from four faculty in special education (two professors from the United States and two professors from Turkey) and one Turkish faculty member in educational psychology with expertise in constructing and developing survey instruments. The experts provided feedback in four major areas: (a) content (e.g., behavioral vs. less behavioral strategies and beliefs), (b) clarity (i.e., the readability of instructions and items), (c) appropriateness (i.e., match between research questions and survey questions), and (d) appearance (i.e., physical design and the order of the questions and sections). Finally, the survey was field tested with 12 teachers from different geographical regions across Turkey (rural, urban, and suburban). The questions were then refined for clarity.

The revised survey was 11 pages in length. It was developed to evaluate Turkish teachers’ beliefs and experiences about problem behaviors and to explore their views of intervention strategies to address the problem behaviors of individuals with developmental disabilities. It was divided into four major sections. For the purpose of this article, data from Sections 1 and 4 are presented. Data from rest of the survey will appear in a separate article because of the scope of the study (Turan, Erbaş, Kurkcuoglu, & Yucesoy, in review). Section 4 included only demographic information, and Section 1 (the SPBC) was developed to assess teachers’ attributions pertaining to the causes of problem behaviors. This section included 13 statements representing both behavioral (e.g., obtain adult attention, escape difficult tasks) and other (e.g., disability, a bad home situation) perspectives that might affect problem behaviors (see Table 2). Teachers were asked to indicate their agreement or disagreement with each of the 13 statements using the following scale: 1 = *strongly disagree*, 2 = *disagree*, 3 = *agree*, and 4 = *strongly agree*.

Table 2
Teacher Attributions of Problem Behaviors (*n* = 408)

Variable	<i>M</i>	<i>SD</i>	Percentage of Teachers Who Agreed or Strongly Agreed
Behavioral statements			
My students engage in problem behavior to obtain adult attention to get a preferred activity	3.17	0.680	90.0
to escape hard or nonpreferred tasks	3.13	0.715	86.8
to get preferred items or toys	3.15	0.718	86.3
to obtain peer attention	2.99	0.621	84.6
to obtain peer attention	2.77	0.752	71.3
Less behavioral statements			
My students engage in problem behavior because parents have poor parenting skills and do not use effective discipline	3.28	0.737	88.5
because of a bad home situation	2.72	0.799	65.0
because of their disabilities	2.49	0.976	52.0
because they do it on purpose to annoy teachers	2.36	0.766	44.1
because of their personalities	2.05	0.818	26.0
because of their genes	1.95	0.835	25.0
because of their gender	1.79	0.762	16.8
because of God's will	1.73	0.849	16.4

Note: Scale for Problem Behavior Causality: 1 = *strongly disagree*, 2 = *disagree*, 3 = *agree*, 4 = *strongly agree*.

agree. Section 2 included strategies using and not using positive behavior support and required participants to indicate how often they used these strategies and to rate their effectiveness and acceptability. Finally, Section 3 included questions about current resources available to teachers and the support needed to address students' problem behaviors.

To test the construct validity of the SPBC, an explanatory factor analysis was conducted in which a principal components analysis was followed by varimax rotation. Visual inspection of the screen plot and the eigenvalue > 1 rule were used to determine the number of components to retain. To evaluate component membership after rotation, we established that items had to be associated with a single component greater than the absolute value of 0.40. Similar to our original grouping of SPBC items, the principal components analysis revealed two factors that accounted for 42.21% of the total variance. The first factor (behavioral perspective) explained 22.19% of the variance. The second factor (less behavioral perspective) accounted for 20.01% of the variance. Estimates of internal consistency for the SPBC were calculated using Cronbach's α coefficients. The related Cronbach's α values for behavioral and less behavioral statements were .64 and .69, respectively.

Procedures

Data collection began simultaneously in all three cities in January 2006 and was completed in April 2006.

To collect data, permission was obtained from both the Turkish Ministry of National Education and the General Directorate of Social Welfare and Child Protection Agency. In addition, the addresses and telephone numbers of schools serving individuals with developmental disabilities were obtained from these agencies. Then, project staff members contacted school administrators to arrange for the distribution of the surveys. To increase the return rate, the surveys were hand delivered to potential participants in each school by project staff members at a prearranged time. During contact with teachers, the project staff members discussed the importance and purpose of the study, provided information about the confidentiality of the information to be collected, and asked teachers to complete the survey. Participants were informed that their participation was voluntary and completely anonymous. The surveys were not coded for the purpose of identifying individual participants; however, they were coded to distinguish participant schools and cities.

Depending on the participants' preferences, they either completed the survey at the initial contact or at a different time individually. If participants preferred to complete the survey at a different time, they were given 1 week to complete the survey. Then, project staff members arranged dates with school administrators to pick up the surveys. Surveys were typically collected at the end of a weeklong period. On the basis of the pilot data, it took approximately 50 minutes to complete the survey.

Data Analysis

Data obtained from the teachers were analyzed using SPSS Version 13.0 for Windows. Data analyses were conducted using both descriptive and inferential statistics. To describe teacher demographics and teachers' ratings on Section 1, percentages, frequency distributions, and measures of central tendency were calculated. In addition, inferential statistics, including *t* tests for independent samples or one-way analyses of variance (ANOVAs), were computed depending on research questions.

Results

Causality of Problem Behaviors

The first research question involved identifying teachers' beliefs about the causes of problem behaviors. Data were analyzed using both descriptive and inferential statistics. Table 2 summarizes teachers' agreement and disagreement with behavioral statements and less behavioral statements (i.e., statements related to children's homes and parents, to God, etc.). Overall, participants were more likely to agree or strongly agree with behavioral perspectives than with other statements. All five behavioral statements received a mean score of 2.50 or better, indicating agreement with these statements. The statement "obtain adult attention" received the highest mean score ($M = 3.17$, $SD = 0.680$). Further analysis revealed that 90% of the participants agreed or strongly agreed with this statement. On the other hand, the statement "obtain peer attention" received the lowest mean score of the behavioral statements ($M = 2.77$, $SD = 0.751$); 71.3% of teachers agreed or strongly agreed with this statement.

When teachers' ratings regarding less behavioral statements were analyzed (i.e., statements related to children's homes and parents, to God, etc.), ratings were lower than ratings of behavioral statements. Only two of the less behavioral statements received mean scores of more than 2.5, indicating disagreement with the remaining six statements. The statement "their parents have poor parenting skills" received the highest mean score ($M = 3.28$, $SD = 0.737$). Further analyses showed that the majority of participants (88%) agreed or strongly agreed with this statement. On the other hand, the statement asserting that "God created them" had the lowest mean ($M = 1.73$, $SD = 0.849$), with 16.4% of teachers agreeing or strongly agreeing with this statement.

In addition to descriptive statistics, a series of one-way ANOVAs were conducted to determine whether there were statistically significant differences among

teacher groups on the basis of teacher characteristics (e.g., area of specialization, years of experience, training) in their ratings on the SPBC. Although the one-way ANOVA did not show significant differences among teacher groups as a function of area of specialty (special education, elementary education, early childhood, other subjects) on their ratings of behavioral statements, it yielded significant differences among teachers for their ratings of less behavioral perspective statements, $F(3, 404) = 9.148$, $p = .001$ (Table 3). Follow-up Bonferroni analyses further revealed which teacher groups were significantly different, with elementary school teachers having significantly higher mean ratings on less behavioral statements ($M = 2.23$, $SD = 0.456$) than special education teachers ($M = 1.96$, $SD = 0.535$) and teachers of other subjects ($M = 2.12$, $SD = 0.426$).

In addition to ANOVAs, a nondirectional *t* test for independent samples was computed to determine whether teachers' SPBC ratings varied on the basis of their training. The results revealed statistically significant group differences on ratings of less behavioral statements between teachers who did and did not attend behavior management university courses, $t(408) = -4.625$, $p = .0001$ (Table 3). Specifically, teachers with no training rated less behavioral statements higher ($M = 2.25$, $SD = 0.455$) than teachers with training ($M = 2.04$, $SD = 0.476$).

Discussion

Research has shown that caregivers' or educators' beliefs about behavior problems influence the way they respond to students with problem behaviors (Chavira et al., 2000; Dix et al., 1989; Hastings et al., 2003; Smith & O'Leary, 1995). For example, researchers have found that if a caregiver views a child's problem behavior as beyond the child's control, then he or she is more likely to help (Hastings et al., 1993) and less likely to express negative emotions toward the child (e.g., Dix et al., 1989; Smith & O'Leary, 1995). Therefore, it is critical to understand teachers' beliefs about problem behaviors as well as factors that influence these beliefs. Once variables that affect teachers' attributions are identified, it might be feasible to educate them to expand their understanding of potential explanations and treatments for problem behavior. In this study, we hypothesized that teacher training and cultural beliefs might be a few of the variables influencing teachers' attributions.

Given that few studies regarding teachers' attribution styles have been conducted outside Western countries, the purpose of this study was to explore teachers' perspective regarding the cause of problem in a Muslim Eurasian

Table 3
Teachers' Perceptions of Underlying Causes of Problem Behaviors by Area of Specialization and Training

Teacher Characteristic	Causal Attributions			
	Behavioral Statements		Less Behavioral Statements	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Area of specialization				
Special education	3.21	0.337	1.96*	0.535
Elementary	3.05	0.414	2.23*	0.456
Early childhood	3.06	0.470	2.14	0.436
Other	3.10	0.420	2.12*	0.426
Training in behavior management				
Yes	3.09	0.426	2.04**	0.476
No	3.08	0.428	2.25**	0.455

* $p < .001$. ** $p < .0001$.

country (Turkey). The results demonstrated that although teachers' attributions of problem behaviors varied, there was strong agreement with behavioral perspectives, along with some family- and child-related factors. Further analysis revealed that teachers' areas of specialty and training on behavioral interventions influenced their attributions of problem behaviors.

Previous research, influenced by Weiner's (1985) cognitive theory of attribution, classified causal factors along three dimension (i.e., external vs. internal, stable vs. unstable, and controllable vs. uncontrollable). In general, the results of previous studies revealed that teachers perceived factors related to students and their families (e.g., learning difficulties and family problems [external]) as most responsible for problem behaviors; teachers perceived themselves (e.g., teacher attitude and classroom rules [internal]) as less responsible (e.g., Christenson et al., 1983; Guttman, 1982; Mavropoulou & Padelidu, 2002; Miller, 1995; Soodak & Podell, 1994; Wilson & Silverman, 1991). Many treatment models for problem behaviors are derived from a behavioral perspective and suggest that challenging behavior serves a function such as "attention seeking" or "avoidance of task demands" (O'Neill et al., 1997). Therefore, in the current study, we classified causal factors along two dimensions: behavioral (e.g., escape from task demands, access to adult or peer attention), and less behavioral (e.g., poor parenting skills, child's personality, God's will). Similar to previous studies (Atici & Merry, 2001; Christenson, et al., 1983, Miller, 2005), statements addressing family factors such as "parents have poor parenting skills and do not use effective discipline" received the highest mean scores (see Table 2). Because Turkish culture places an emphasis on collective family achievement as a source of pride, a

child's problem behavior might reflect negatively on his or her family. This might explain why teacher participants in the present study rated families as a source of students' problem behavior.

Another interesting finding was that even though the participants rated some less behavioral statements as affecting problem behavior (e.g., poor parenting skills, bad home situation, child's disability), they were more likely to agree or strongly agree with behavioral statements. In other words, the majority of teachers attributed the causes of problem behaviors to factors such as "access to attention," "escape from difficult and/or unpreferred tasks," and "access to preferred items." These statements suggest that teacher's behavior and/or teaching styles affect problem behaviors. For example, the statement "access to adult attention" suggests that teachers provide attention to students following engagement in problem behaviors. Similarly, the statement "escape from difficult tasks" implies that teachers present tasks that are too difficult for their students. This finding is not consistent with previous studies, which suggested that teacher and teaching-related factors were rated least responsible by teachers as the sources of problem behaviors (e.g., Christenson et al., 1983; Guttman, 1982; Mavropoulou & Padelidu, 2002; Miller, 1995). One explanation for this discrepancy might be that statements related to teacher and teaching-related factors were less explicitly indicated in the survey. The second explanation might be related to differences among participants. The majority of previous studies were conducted in the context of general education classrooms and included elementary educators as participants (e.g., Christenson et al., 1983; Guttman, 1982; Mavropoulou & Padelidu, 2002). On the other hand,

participants in the current study were special education teachers from segregated schools.

A promising finding is that factors related to “God’s will,” “gender,” and “heredity” were rated by fewer than 25% of teachers as causes of problem behaviors. These factors represent a more passive approach to address problem behaviors than that empowered under a behavioral paradigm. These explanations imply that problems are within the family or child or are related to God and cannot be improved or changed (Chandler & Dahlquist, 2002). Considering that 98% of the Turkish population is Muslim, this finding was somewhat surprising. One explanation for these results is that Turkey has a secular educational system, and therefore, teachers might be reluctant to share their religious beliefs. Another explanation is that a number of variables, such as teachers’ experience, training, and educational backgrounds, might influence their beliefs about the causes of problem behaviors.

When further analyses were conducted to understand variables influencing teachers’ ratings (geographical region, years of teaching experience, area of specialization, training) we found that the teachers who had special education credentials agreed with statements related to family, child, and religious factors less frequently than elementary school and other subjects teachers. Similarly, teachers who had taken university courses in functional assessment and behavioral interventions agreed with statements related to family, child, and religious factors less frequently than teachers with no training. Although these results were statistically significant, all mean scores clustered close to 2 (i.e., near *disagree*), making the differences less important clinically.

Limitations

Participants were recruited purposefully from three geographical regions in Turkey (urban, suburban, and rural), and the return rate was high at 66%. However, these results might not apply to all teachers in Turkey, because we were not able to randomly select participants. Furthermore, the sample included special education teachers who worked at special education schools, so the results might not reflect the views of special education teachers who teach in inclusive programs. Given that survey methodology was used, the results are based on self-reports. Classroom observations would have strengthened the validity of the findings. Also, we were unable to gather accurate information about the students unless they had obvious conditions and/or disabilities (e.g., Down’s syndrome, sensory and physical disabilities), because of an unreliable identification and evaluation process in Turkey.

Implications for Research and Practice

Several implications warrant further discussion. Teachers’ areas of specialization and university coursework on functional assessment and behavioral approaches appear to influence their attribution styles. These findings are promising and suggest that preservice and in-service training programs should include course content and experiences that emphasize recommended practices (e.g., functional assessment, positive behavior support). In this way, we can help teachers make accurate attributions about their students’ problem behaviors, resulting in more appropriate educational programs for individuals with disabilities. Our position is not to disregard teachers’ beliefs regarding other causal agents about their students’ problem behaviors, but we believe that teachers also should recognize the effects of teacher and teaching-related factors on students’ problem behaviors. In this way, they can take a more proactive approach to prevent and reduce behavioral problems.

Another implication is related to findings about family attributions regarding problem behaviors. In educational settings in which collective family responsibility is highly valued, such as Turkey, more family involvement might be highly valued (Ho, 2004). Teachers in such settings might need to learn supportive and constructive strategies to involve and collaborate with families.

Overall, the results show that some individuals might attribute the cause of problem behaviors to several factors that might not be related. In other words, an individual might believe that families or God influences children’s behavior and also agree that children engage in a problem behaviors to escape from task demands. Individuals might believe that God, family influence, or children’s disabilities affect problem behavior, but they might use behavioral interventions to prevent or change problem behaviors. These findings are somewhat similar to those of a recent study that focused on Turkish mothers’ perceptions about their children’s disabilities (Diken, 2006). Similar to the present study, Turkish mothers indicated that both traditional (e.g., God’s will, fate, spell) and biomedical causal agents (e.g., lack of oxygen at birth, x-rays, premature birth) were sources of their children’s disabilities. They further indicated that their children received educational services, and yet some also sought help from more traditional and alternative treatment options (e.g., religious agents). Taken together, these findings might be a reflection of Turkish culture as influenced by elements of European and Islamic values. As indicated previously, Turkey has a secular educational system, and its teacher education programs have been influenced by educational theories and practices

from Western societies (e.g., behavioral interventions; Akyüz, 1994; Tasdemirci, 2002), yet God's will and fate are believed to cause most events. In educational settings in which teachers' beliefs and behaviors are affected by various conflicting cultural influences, an effort should be made to recognize and respect teachers' beliefs without jeopardizing educational outcomes for students. In such settings, teachers might need assistance to broaden their ideas beyond a typical attribution framework that might be culturally constrained (Ho, 2004). Given that educational practices to address problem behaviors have primarily emerged from the United States and reflect mainstream U.S. cultural values, future research should explore how these practices are viewed by other cultural groups in the United States and in countries where educational systems are not secular but rather influenced by more traditional and religious beliefs.

We know from previous research that caregivers' and staff members' attributions about problem behaviors influence whether they will develop negative emotions or assist individuals with problem behaviors (e.g., Dix et al., 1989; Hastings et al., 2003; Smith & O'Leary, 1995). However, we do not know whether teachers' attributions affect how they select and implement interventions. Future research should explore whether there is a direct link between attributions and teachers' actions in their classrooms. For example, if teachers attribute the cause of problem behaviors to behavioral explanations, researchers might study if teachers are more likely to select and implement behavioral interventions with fidelity.

In conclusion, this study extends the current literature by increasing our understanding about Turkish teachers' perceptions of challenging behavior within the context of a culture in which Islamic and collective family responsibilities are highly valued. Some of the results were consistent with previous studies conducted in other countries (e.g., family attribution). Yet the results also differed slightly from previous studies; behavioral explanations about problem behavior, which implied teacher and teaching-related factors, were valued more frequently than other explanations, such as children's diagnoses and gender and God's will. These findings are promising because they suggest that teachers' views might be influenced by their training. Because functional assessment and behavioral interventions have proved effective in preventing and modifying problem behaviors, both preservice and in-service programs should focus on training teachers to prevent and intervene in challenging behaviors using recommended practices such as these.

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