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Research Article

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Does School Counselors' Self-efficacy to Work with Gifted Students Fed by Their Knowledge and Perception regarding Giftedness

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Abstract

The unique characteristics constituting giftedness make gifted students quite different from other same age peers and differieniate their psychological needs. School counselors have critical roles in providing effective and emotional assistance to those gifted students. School counselors' self-efficacy is an important factor in serving both gifted students and non-gifted students. Thus, the current cross-sectional study aimed to examine whether school counselors' knowledge and perceptions of the gifted students predict counselors' self-efficacy to work with this specific group after controlling for work experience. The sample comprised 118 Turkish psychological counselors actively engaged in psychological counseling practices in school settings in Elazığ, Turkey. As data collection tools, School Counselors' Knowledge, Perception, and Self-Efficacy Scales regarding gifted students, and a demographic form were used. Hierarchical regression analysis was applied to examine predictive associations. Results demonsrated that counselors' work experience, knowledge, and perceptions regarding gifted students were found as significant predictors and explained the 44% of the total variance in their self-efficacy to work with gifted students. By increasing self-efficacy levels of school counselors to work with gifted students and possibility of better counseling and assistance, the current study showed the importance of enhanced knowledge and perceptions towards gifted students.

Key Words

Counselor' knowledge • Counselor' perception • Gifted students • School counselor' self-efficacy

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Introduction

Although researchers do not agree on the definition of giftedness due to the complex nature of the phenomenon, but they agree on the notion that gifted students are different than their chronological peers in terms of cognitive, emotional, psychological, and developmental traits. Cognitive characteristics of gifted students include logical thinking ability (Frasier & Passow, 1994), persistent concentration (Root-Bernstein & Root-Bernstein, 2004), superior memory (Plucker & Callahan, 2008), better speed abilities including inspection time, reaction time (Sternberg et al., 2011), divergent thinkers (Ishak & Abu Bakar, 2010) and persistent intellectual curiosity (Delisle & Galbraith, 2002), Additionally, these students are mostly deal with details of words and their usage, learn with less effort, and do not forgat easily (Kregel, 2015). These capabilities aid gifted students in comprehending concepts at an accelerated pace relative to their non-gifted counterparts, facilitating the cultivation of a heightened degree of depth and complexity in their understanding.

Apart from the positive traits mentioned above, they may have some emotional, social, academic and relational difficulties more than other students because of their distinctive characteristics. What mainly make gifted students different from their same age peers and differentiate their psychological needs could be having emotional intensity or hypersensitivity (Mendaglio & Peterson, 2007), perfectionism (Chan, 2007), and asynchronous development (Davis & Rimm, 1994). There has been extensive literature that gifted students are more likely to have perfectionist tendencies than non-gifted peers (Parker & Adkins, 1995; LoCicero & Ashby, 2000; Davis & Rimm, 1994; Schuler, 2002). Therefore, many gifted students consult counseling services to manage unhealthy perfectionism tendency they have. Gifted students also experience situations such as bullying, parental issues, or peer conflict in the same manner as other students do, but with higher level of intensity (Wood, 2006).

Social-emotional concerns of the giftedness (gifted students) examined by various studies and they reported that gifted students may experience depression, anxiety and many other emotional and social concerns than their non-gifted counterparts (Berlin, 2009; Neihart, ; Jackson & Peterson, 2003). Sensitivity, asynchronous development, and overexcitability are also considered risk factors for gifted students (Silverman, 1994). Coleman and Hughes (2009) argued that gifted students have many stressors which produce anxiety. For example, based on others' high expectations they may force themselves to complete their tasks perfectly, but when there is uncertainty of the performance the feeling of the anxiety may arise (Cross & Cross, 2015). On the other hand, there is no research finding indicating that gifted students tend to have a genetic predisposition for emotional-affective concerns than non-gifted students. According to Webb (1994) depression among gifted students may come from misplacement or continual appraisal and disapproval of their performance and criticism. Besides, Kerr and Cohn (2001) argued that gifted students without a meaningful sense of belonging and a guiding friend might experience depression and alienation.

School counselors are going through intense preservice and inservice education process in order to provide assistance and help students in personal/social, academic and career related issues (American School Counselor Association [ASCA], 2013). Based on their education in many domains, they have no privilige to serve only one group of students, as they are responsible providing assistance to the all students. In this respect their position is ideal

to help the gifted students in solving their problems (Roberts et al., 2010). Elijah (2011) identified several school counselors' roles when they work with gifted students. These include the following: (1) assisting and taking active role in identification process; (2) increasing the awareness and understanding issues affecting them; (3) working with stakeholders to enhance educational opportunities; (4) based on their unique needs advocating for programs or activities that address these needs. Gifted students, much like their contemporaneous peers, also seek guidance and support from school counselors. As Wood (2010) examined their the counseling experience with a sample of 153 gifted students. Findings suggested that gifted students found counseling beneficial for them. In a similar vein Abu Bakar and Ishak (2010) carried out a program in Malaysia and they reviewed the counseling form to shed light on the counseling needs of Malaysian gifted students. Their findings showed that 11 students among the 33 gifted students consulted for counseling.

Studies have indicated that to effectively serve in the counseling field self-efficacy emerge as an important determinator (Larson & Daniels, 1998) due to influencing ability to form a healty and powerful counseling relationships. The self-efficacy as more general concept has emerged and evolved from Bandura's (1977) work, Social Cognitive Theory. According to this theory, in operating specific tasks self-efficacy is a leading factor in motivation and behavior of individuals (Bandura, 1986; Graham & Weiner, 1996). The theory assumes that selfefficacy is not only related to the skills or abilities that a person has but also concerned with judgment about what can one do with what he or she has (Bandura, 1986). In a similar vein, Larson and Daniels (1998) define counselor self-efficacy as "one's beliefs or judgments about her or his capabilities to effectively counsel a client in the near future". Bandura (1995) assumed that person who has a higher self-efficacy also highly motivated, committed, persistent, and resilient in performing his/her roles. In this sense, Bodenhorn et al., (2010) pointed out that contrary to school counselor with lower self-efficacy, with higher self-efficacy school counselors are more beneficials and effective in serving students. However, the conducted studies mostly concentrated on the counseling skills as selfefficacy of this group. Related studies were extensively examined the role of self-efficacy in many domain of the counseling fields (e.g. individual counseling). But, school counselors' self-efficacy in working with gifted seems overlooked and did not piqued researchers' attention to much until now. School counselor self-efficacy is also defined in the context of the school settings as counselors judgements about their capacities to perform counseling tasks in schools (Holcomb-McCoy et al., 2009).

Counselors' knowledge and perceptions regarding gifted students are two factors that influence school counselors' self-efficacy in serving gifted students. In gifted education literature, there is not an empirical research study focused the role of knowledge and perception regarding gifted students on school counselors' self-efficacy to serve this population. School counselors who do not have sufficient and enough knowledge about the unique and special needs of gifted students could not serve this population effectively. In the present study counselors' knowledge of gifted students means that familiarity with historical overview of education of the gifted students, from more general information and knowledge to emergence of the specific counseling needs in this area which may affect their involvement (Carlson, 2004). On the other hand, school counselors' gifted students related perceptions means that feelings, beliefs, attitudes, and misconceptions that may play a powerfull role in school counselors' involvement. These perceptions include school counselor' roles and issues and concerns of gifted students (Carlson, 2004).

Although there is increasing movements in the studies of gifted students in Turkey, the self-efficacy of the counselors, their knowledge, and perceptions of the gifted students are ignored and overlook by researchers. When the literature is reviewed only one dissertation has been found regarding counselors' perceptions regarding gifted students in Turkey. In this study Altun (2015) examined counselors' involvement in gifted students' activities. She discovered that the perception held by counselors regarding gifted students constitutes a substantial predictive factor in their interactions and interventions with gifted students. In this sense, our aim is to help in filling the gap in gifted education literature in Turkey by examining the predictive links of counselors' knowledge and perceptions of the gifted students on school counselor self-efficacy to working with gifted students after controlling for their work experience.

Research Questions and Hypothesis

* Is there any relationship between school counselors' knowledge and perceptions of gifted students with their self-efficacy to work with this group?

*How well does school counselors' work experience predict their self-efficacy to work with gifted students?

*How well does school counselors' knowledge and perceptions of gifted students predict their self-efficacy to work with this group after controlling for the effect of work experience?

We hypothesized that school counselors with higher and more knowledge and positive perceptions of the gifted students will have higher self-efficacy to effectively work with this group. Thus, counselors' knoweledge and perception would be positively associated with counselors' self-efficacy. Moreover, work experience of the school counselor will significantly predict counselors' self-efficacy in working with gifted students.

Method

Design

The present study was conducted by utilizing a correlational research design. Correlational research enables to determine the feature of the relationship between two or more variables. It delineates the degree to which two or more quantitative variables are correlated and correlational research is beneficial to draw the prediction for an outcome variable (Fraenkel et al., 2012). The predictor variable that is utilized to draw the prediction; the variable about which the prediction is made is named the criterion variable. In this research, the predictor variables are counselors' experience, counselors' knowledge, and perceptions related to the gifted students, and counselors' self-efficacy is the criterion variable.

Sampling and Participants

School counselors who work in Elazığ comprised of the population of the present study. Convenience sampling was chosen to participate the study because they were individuals who were the reachable groups (Fraenkel et al., 2012). Although convenience sampling may reduce the generalizability of the research, in this case, it was an useful method for sampling since it partially depicts the whole population. In this context, 61 schools were selected as a reachable population for this research as gifted students continue those schools. School counselors serving in chosen

schools constituted sample of the study. It was seen that two or three school counselors were assigned in some schools due to school size. All the school counselors serving in selected schools were involved in the study. The number participants of the present study comprised of 118 school counselors who serve in Elazığ. Participants' descriptive statistics are shown in Table 1 below:

Table 1.

Descriptive Cl	haracteristics	of F	<i>Participants</i>
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	F	%
Work Experience		
1-5	20	16.9
5-10	59	50
10-15	9	7.6
15-20	20	16.9
20 +	10	8.5
Education Level		
Undergraduate	107	90.7
Master	10	8.5
Doctorate	1	.08

Procedure

In order to collect data of the current study institutional and ethical approval from the Human Subjects Ethics Committee was taken. For controlling the data collector bias one data collector was kept constant during the process of data collection. The eligibility criteria for this study was that there is at least one diagnosed gifted student in the school where school counselors work. After obtaining the list of the schools that gifted students attend by contacting the directory of the Elazığ Science and Art Center, school counselors who serve in selected schools ranging from elementary, middle to high schools in Elazığ. The aim of the research was explained to the school counselors whose schools have diagnosed at least one gifted student. Upon obtaining informed consent from participants and providing them with the requisite information pertaining to the research, including an overview of the study's limitations and potential benefits, counselors were requested to fulfill an extensive 84-item survey. Completing the survey was changed between five to fifteen minutes by participants.

Research Instruments

School Counselors' Knowledge Scale. The scale was developed to assess school counselors' knowledge related to the gifted students (Carlson, 2004). It consisted of two subscales which are general knowledge about gifted students and identification knowledge. Participants were demanded to assess their knowledge regarding gifted students utilizing a five-point likert scale from very knowledgeable to not knowledgeable. Higher scores obtained from the scale indicate that school counselors are highly knowledgeable about gifted students. Turkish adaptation of the scale was conducted by Altun (2015). After validity and reliability studies, Altun (2015) reported the internal consistency coefficients as .98 for general knowledge and .93 for identification knowledge. Internal consistency coefficients were found to a .88 for the current study.

School Counselor Perception. The school counselor perception scale was utilized to evaluate counselors' perceptions regarding gifted students (Carlson, 2004). The scale contains 26 positive (I enjoy counseling gifted students) and negative perceptions (meeting the needs of gifted students generate an elite) about gifted students and asks participants to evaluate their perceptions related to gifted students utilizing a Likert scale (1= strongly disagree, 5=strongly agree). 7, 10, and 11 items of scale are reversed-scored items. The original form of scale was composed of nine dimensions. Turkish adaptation of the scale was carried out by Altun (2015). After validity and reliability studies, Altun (2015) reported that the scale consisted of three dimensions and the internal consistency coefficients as .75 for social and academic risks for gifted students, .64 for the unique characteristics of gifted students, and .72 for counseling gifted students. An internal consistency coefficient was determined as .85.

School Counselor's Self-efficacy regarding Special Education. The School Counselors' Self-Efficacy Scale concerning Special Education was designed to assess the School Counselors' Self-Efficacy Scale concerning Special Education (SCSSSE) (Aksoy & Diken, 2009). Scale has 40 items on a five-point Likert scale changing from "strongly agree" to "strongly disagree." This scale was specially selected since gifted students are placed under the umbrella of special education in Turkey. Aksoy and Diken (2009) reported that the scale comprised of one dimension and the internal consistency coefficient of the scale was found as .98. An internal consistency coefficient was determined as .89 for the current study.

Demographic form. A demographic sheet was prepared to collect information on gender, work experience, and educational attainment of the participants.

Data Analysis

For reliability of the data collection tools, Cronbach alpha coefficients of them are computed and .70 was taken as a criteria. SPSS 24.0 computer program was used to analyse the obtained data. Descriptive statistic, Pearson Moment Correlation, and Hierarchical Regression Analysis was used for data analysis. Descriptive statistics was utilized to show the characteristics of the participants. Pearson Moment Correlation was employed to examine the relationship among school counselors' knowledge, perceptions, and self-efficacy in serving gifted students. Before performing the hierarchical regression analyses, the assumptions of hierarchical regression analyses were controlled based on criteria recommended by Field (2013). To perform hierarchical multiple regression any categorical variable which has more than two levels requires recoding (Tabachnick & Fidell, 2013). In this study dummy coding employed for this aim. In dummy coding, we select a reference category to compare with other categories. In the present study work experience is a categorical predictor variable with three levels (1-5 years' experience, 5-10 years' experience, and 10 and more years' experience), thus, dummy coding was used by taking 1-5 years' experience group as a reference category. The first dummy variable compare 5-10 years' experience group with 1-5 years' experience group and second one compare 10 and more years' experience group again with 1-5 years' experience group. Dummy variables were named as work experience_D1 and work experience _D2 respectively. Hierarchical Regression was utilized in order to examine the predictive relationship among work school counselors' work experience, knowledge, perceptions, and self-efficacy.

Results

Before performing Hierarchical regression analysis, related assumptions of the hierarchical regression were checked. First, descriptive statistics for predictor and outcome variables were controlled. The mean and standard deviation for predictor variables and outcome variable was presented in table 2 below:

Table 2.

Descriptive Statistics of the Variables

Variables	М	SD	
Counselors' Self-efficacy	144.69	27.65	
Counselors' Knowledge	77.59	19.78	
Counselors' Perception	57.90	8.9	

In order to evaluate the normality of residuals, an examination of both the histogram and the Probability-Probability (P-P) plot was conducted, revealing an approximate adherence to the normal distribution, thereby affirming the fulfillment of this assumption (Field, 2013). For controlling the assumption of the interdependence of errors, Durbin Watson statistic was employed. The value should fall between 1.5 and 2.5 so as not to violate the assumption (Tabachnick & Fidell, 2007). For the current study, Durbin Watson value was found as 1.86 showing no violation of the assumption. For the homoscedasticity assumption, the scatter plots of the regression were checked. no apparent pattern was found as evidence of homoscedasticity in the scatter plot (Field, 2013), therefore homoscedasticity assumption was satisfied. Tolerance and VIF values also were controlled. Since all of the tolerance values were higher than .20 and all of the VIF values were smaller than 4, the multicollinearity assumption was fulfilled (Tabachnick & Fidell, 2013). The correlation between outcome variables and predictor variables was checked. The result of the correlation is shown in table 3 below:

Table 3.

Bivariate Correlations of the Study Variables (N=118)

Variable	1	2	3	4	5
1. Counselor' Self-efficacy	1				
2.Work Experience D1	04	1			
3.Work Experience D2	16	70**	1		
4. Counselor' Knowledge	.60**	23	11	1	
5. Counselor' Perception	57**	.16	17	.56**	1

Note. ** *p*<0.01 level (two-tailed).

As presented in Table 3 criterion variable (School counselors' Self-efficacy) significantly and positively correlated with counselors' knowledge (r = 60, p <.01) and perceptions regarding gifted students (r = 57, p <.01). For the main research question, hierarchical regression analysis was carried out to investigate how well counselors' work experience, knowledge, and perceptions concerning gifted students predicted counselors' self-efficacy to work with them. In the present study, work experience of school counselors (D1 and D2) were put into the analysis as model 1

predictors. Counselors' knowledge and perceptions regarding gifted students were entered into the analysis in the second model predictors. The results of hierarchical regression analysis are shown in Table 4 below:

Table 4.

Variable	В	SE B	β	Т	sr ²	ΔR^2	ΔF
Model 1						.07	4.48*
Work Experience D1(1-5 vs. 5-10)	16.6	6.95	30	2.39	.05*		
Work Experience D2 (1-5 vs. 10+)	21.9	7.39	37	2.96	.07*		
Model 2						.37	22.52*
Knowledge of Gifted	.50	.15	.36	3.45	.06*		
Perception of Gifted	1.11	.29	.36	3.82	.07*		

Results of Hierarchical Regression Analysis

According to the findings, the Model 1 was significant F(2, 117) = 4.48, p=.01 and explained 7% of variance in counselor self-efficacy of working with gifted students. As presented from the table both Work Experience_D1 group (5-10 years' experience group vs. 1-5 years' experience group) ($\beta = -.30$, t = -2.39, p=.02) and Work Experience_D2 group (5-10 years' experience group vs. 10+ years' experience group) ($\beta = -.37$, t = -2.96, p=.00) significantly predict the variance in counselor self-efficacy of working with gifted students. According to the these results counselors having 1-5 years of experience had higher self-efficacy of working with gifted students than counselor having 5-10 years of experience. Similarly, counselors having 1-5 years of experience in the first model Work Experience_D2 group_D2 (1-5 vs. 10+) was strongest predictor and uniquely explained 7% of variance of counselors' self-efficacy regarding gifted students.

In model 2, counselors' knowledge and perceptions regarding gifted students variables were entered the model as independent variables. Model 2 was also significant $F(4, 117) = 37.71 \ p=.000$ and explained 44% of variance in the counselors' self-efficacy of working with gifted students. This means that after controlling the effect of variables in first model, second model explained 37% of variance in counselors' self-efficacy regarding gifted students, $\Delta R^2 = .37$, $\Delta F (2, 117) = 22.52$, p = 00. As presented at the table counselors' knowledge regarding gifted students ($\beta = .36$, t = 3.45, p = .00) and their perceptions regarding gifted students ($\beta = .36$, t = 3.82, p = .00) predicted school counselors' self-efficacy of working with gifted students significantly. Although counselors' perceptions regarding gifted students, both variables are important factors and determinators in increasing the counselors' self-efficacy level of working with gifted students.

Discussion

As the needs of children and adolescents alter, it is crucial for school counselors to appropriately address psychoemotional needs of all students. Thus, school counselors play critical roles in career and college planning and providing assistance with the social and emotional concerns of gifted students. Although gifted students are not very different from their peers and experiencing and going through all of the crises and concerns others have, but there are several concerns unique to gifted students that are identified for them as counseling needs (Kerr, 2021). These counseling needs differentiate them from their peers, though basic counseling interventions are also needed for them. As stressed, gifted students ,based on the their unique charecteristics, have quite different psychological needs than their same age peers (Chan, 2007; Davis & Rimm, 1994; Mendaglio & Peterson, 2007). They are more prone and tend to experience anxiety, depression, and loneliness than their non-gifted counterparts (Berlin, 2009; Jackson & Peterson, 2003; Neihart, 1999). For instance, Wood (2010) ascertained that gifted students encounter counseling challenges such as the apprehension of failure, perfectionism, and issues related to social acceptance. Colangelo (2002) emphasized the paramount significance of possessing the requisite knowledge and expertise as essential factors for achieving success in the role of a school counselor when assisting gifted students. Though gifted students related studies has been raising both in Turkey and at globe, but there is limited studies about counselors' self-efficacy, knowledge, and perceptions regarding gifted students. For this reason, the present study aimed to examine the roles of school counselors' knowledge and perceptions of the gifted students in predicting their self-efficacy of working with this specific group after controlling for their working experience.

Firstly, our findings revealed a significant and predictive link between the work experience of counselors and their self-efficacy in serving gifted students. More specifically, the unique contribution of counselors with 0-5 years of work experience group were significantly greater than counselors with the 5-10 year of experience group and 10-more year of experience group in counselors' self-efficacy. This finding confirmed by a previous research in which novice counselors sensed confident in meeting the counseling needs of gifted students (Edwin & Fisher, 2023). Nice et al. (2020) also indicated that school counselors feel confident in dealing with students' challenges after starting to work with students, without lacking more experience. It may be speculated that novice counselors were more eager than senior counselors to serve gifted students. This result may also be explained by counselor preparation programs. Experienced school counselors may feel inadequate in providing counseling to gifted students because they may not receive adequate in-service training or supervision regarding this group.

A great deal number of studies investigated construct of counselors' self-efficacy in the literatüre (Bandura, 1986; Daniels & Larson, 2001; Halverson et al., 2006). However, counselors' self efficacy in relation to their knowledge and perception about gifted students has been under-researched. According to the findings of the current study counselors' knowledge and perception related gifted students heightened their self-efficacy to work with this specific group. These results were consistent with the findings of previous studies which investigated the role of school counselors' perceptions and knowledge about gifted students in supporting them (Carlson, 2004; Kennedy & Farley, 2018; Peres, 2013) and involvement in gifted students' activities and in working with them (Altun, 2015). As the school counselors enhance their knowledge and perceptions towards gifted students, self-efficacy of them escalates in serving and produces positive results , as when compared with counselors with lover self-efficacy, who has higher self-efficacy serve more effectively (Bodenhorn et al., 2010). In gifted students' context as our findings revealed, self-efficacy of the school counselors fed by their knowledge and positive perceptions regarding this group. Our findings also provided evidence for that increased knowledge and positive perceptions about gifted students would

increase the possibility of better counseling and assistance (Colangelo, 2002; Davis & Rimm, 1998) and meeting their unique needs (Kennedy & Farley, 2018).

Gifted students with unique cognitive and social-affective attributes have counseling needs that are distinctive from other same age counterparts. If the proper counseling service is not provided, they may face many challenging problems and might not be able to actualize their innate potential (David, 2021). In this context, it is important to take into consideration counselors' knowledge regarding gifted students as a differentiated and tailored to the needs of gifted students. Previous research suggested that school counselors should provide an effective counseling services for the gifted students (Wood, 2010; Jie & Hassan, 2019). As our findings confirmed, this task can be achieved through the increased knowledge and positive perceptions that counselors possess about gifted students and explore gifted students' unique counseling concerns and develop effective interventions, raising their self-efficacy (Edwin & Fisher, 2023). In other word, in order to serve better to the gifted students, school counselors must have the knowledge on the unique characteristics of gifted students as well as interventions tailored to this group. School counselors with more knowledgeable of the gifted students' needs and socio-emotional lives may provide more beneficial counseling services to them in promoting their well-being and healthy development.

An implication for practice would be for school counselors who work in school settings may increase their knowledge and positive perceptions via attending in-service training. When training programs of school counselors are examined, unfortunately, the needs of gifted students are ignored, underscored and generally are not included as an area of competence (Evans, 1997). In a similar vein Ozcan and Uzunboylu's (2020) study with a 52 school counselors working in the primary school indicated that school counselors did not equip with necessary knowledge regarding the personal, academic and social challenges gifted students experience as well as appropriate interventions targeted them. For this reason gifted students related courses should be included to the training programs of school counselor as our findings underline the importance of knowledge and perception regarding gifted students in predicting their self-efficacy to work with this specific group. It can be possible for school counseling students to take a certain amount of required direct counseling courses regarding gifted students. This experience may help them to gain competencies in working with gifted students. Hence, involvement in courses or conferences about gifted students and their unique social-emotional needs may contribute to school counselors' self-efficacy.

In this context, it is imperative to acknowledge that our findings are subject to certain limitations. The current study, indeed, exhibits several constraints that bear implications for both the validity and generalizability of the obtained results. First of all, participants' knowledge, perceptions, and self-efficacy were evaluated by self-report method. Some participants want to be perceived as more knowledgeable than they were and this causes response bias which influences the validity of the study. The data were gathered from the school counselors working in Elazığ, Turkey via convenient sampling. Therefore, the generalizability of the results is limited to school counselors who work in Elazığ. In addition the data of study was cross-sectional and our analyses were correlational in nature. Thus, results cannot be interpreted in the context of causality. Our findings should be reexamined with larger diverse populations both in Turkey and globally by conducting empirical and longitudinal studies with different analyses which pay the way for directionality and causality. Lastly, mixed method studies can be conducted to rich

understanding of the pheromone. Apart from these limitations we believe that our study has significance in terms of research, theory, and practice. Counselors' self-efficacy, knowledge, and perceptions regarding gifted students are rare and generally investigated in the USA. Therefore, the findings from this study will contribute to the existent gifted education and counseling literature. To date, no empirical study has been carried out to explore the relationship between school counselors' knowledge, perception, and self-efficacy. These variables will assist school counselors in better understanding the constructs of school counselors' knowledge, perceptions, and self-efficacy regarding the gifted student population. This study has implications for pre-service and in-service training in counselor education. Thus, our findings would be a dataset for further research in this area.

School counselors are key personals for talent development and well-being of gifted students. To better meet the psycho-social needs of the gifted students, school counselors need to have a high level of self-efficacy. At the same time, school counselor should increase their knowledge and develop positive perception regarding gifted students. This increased knowledge and positive perception toward gifted students directly influence counselors' self-efficacy in serving this population. Further research should investigate counselors' gender, socio-economical level, gifted students' attitudes toward school counselors which impact the self-efficacy of school counselors in assisting them.

Ethic

Ethical permission was granted from the institutional review board of Middle East Technical University Social and Human Sciences Ethics Committee (Protocol Number: 2022-EGT--091).

Author Contributions

The authors contributed at all stages, including planning, conducting and writing.

Conflict of Interest

There is no conflict of interest in this study.

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