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Original Research

Team Decision Making Questionnaire Turkish Form (TDMQ-TR): Validity and Reliability Study

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Abstract

Objectives: Professionals in the fields of education and health who work with children with special needs and their families should be in communication and cooperation. At each stage of these services, professionals specialized in different fields provide services to the child and family with different perspectives. In this way, it is ensured that children are evaluated in a multidimensional and comprehensive manner, and their families are informed. However, some difficulties may be encountered in the implementation of teamwork in the process of providing health, rehabilitation and education services to children and their families with special needs in Turkey. In the literature, although there are research studies on "teamwork" in some occupational groups in the field of health, to our knowledge there are no similar studies in the field of education. Based on this, a questionnaire is researched and this study is planned for the decision-making situation of the professional groups that provide services to children in our country.
Materials and Methods: The aim of the study is to examine the Turkish validity and reliability of the Team Decision Making Questionnaire developed by Batorowicz and Shepherd. 167 professionals working with children from both education and health fields participated in the study.
Results: As a result of the statistical analysis of the data, the overall Cronbach α coefficient of TDMQ-TR was 0.96, the Guttmann Split-Two Half Reliability Coefficient was 0.92, and the correlation between both halves of the questionnaire was 0.86. The 19-item questionnaire is integrated with a single factor and 61.75 percent of the total variance is explained.
Conclusion: As a result, TDMQ-TR is proven to be a reliable and valid tool for evaluating the team decision-making process.

Keywords: *Interprofessional, questionnaire, reliability, team work, validity*

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Introduction

Specialists working in the field of education and healthcare provide services together in the evaluation and re/habilitation processes of children with special needs. Having specialists with expertise in different fields at every stage of the services ensures that the child and the family encounter different perspectives and increase the quality of the service provided to them. Experts in the fields of supportive health and education (audiologists, occupational therapists, child developers, special educators, language and speech therapists, physiotherapists, etc.), are involved in evaluation, diagnosis, follow-up support and therapy processes in Turkey. In this way, it is ensured that children are evaluated in a multidimensional and comprehensive manner, and their families are informed. The ongoing "expert knows" and "solves problems" approach in the practice of professionals working with children with special needs and their families has begun to leave its place to "family participation" and "common language" approach in the literature (Powel & Sable, 2001). However, there may be difficulties in the teamwork implementation process in the health, education, and the provision of rehabilitation services for children with special needs and their families.

When the joint studies of different specialties in education and health are examined, there are prominent terminologies and approaches to teamwork. In the literature, three different teamwork has been specified in the services provided in healthcare applications: multidisciplinary, interdisciplinary, and transdisciplinary. Multidisciplinary teams conduct independent evaluations, set goals and share the results with the overarching team (Reilly, 2001; Thylefors et al., 2005). In interdisciplinary teams, treatment plans and results are determined according to the input from team members and the members cooperate but do not step out of their roles (Beukelman & Mirenda, 2005). In transdisciplinary teams, team members share information with each other, the limit disappears in the intervention and each member cooperates equally. Also, meetings are held around the same table, where all decisions are taken jointly, and evaluations are made with the participation of all team members (Beukelman and Mirenda, 2005; Locke and Mirenda, 1992; Reilly, 2001; Thylefors et al., 2005). In effective teams, members from each professional group make unique contributions to the child and their family (Hall et al., 2012).

Although healthcare field have already adopted multidisciplinary teamwork methods, it has been increasingly applied in social, rehabilitation and education areas, especially in the education and therapy processes of individuals with special needs (York-Barr et al., 2009). Individuals with special needs are provided with professional services from many different

disciplines, especially special education teachers, child development specialists, psychologists, physicians, psychological counselors, depending on the type and/or degree of needs. The cooperation among professionals providing services to individuals with special needs are guaranteed by law in Turkey and other countries. The article of Decree No. 573 on Turkish Special Education Law clause 4 (e) emphasizes that special education services should be carried out "in cooperation". In addition, in the clause (g) of the same item, it is stated that their families should be directly involved in the special education process. In the Regulation on Special Education Services of the Ministry of National Education of Turkey, there are articles for professionals and families to cooperate during the preparation and implementation of an IEP in all educational settings (official schools, special education centers, etc.) where the individual is served (Ministry of National Education of Turkey [MEB], 2018). However, after the medical diagnosis given by the health institutions, the educational diagnosis process begins at the Guidance and Research Centers (RAM). At this point, a partial cooperation can be made between the Ministry of Health and the Ministry of National Education in terms of providing services to individuals with special needs. Overall, it is accepted that multidisciplinary working methods are very effective in assessment services of individuals with special needs (Aslan & Şahin, 2020). Especially in the transdisciplinary working method, all team members make unique contributions to individuals with special needs, while creating a common language in the process, maximizing the continuity and effectiveness of the service (Er-Sabuncuoğlu, 2020). The prominent feature of the transdisciplinary method is that the family is also considered an indispensable member of the team. From this point of view, it is important that the parents take part in the evaluation, diagnosis, and planning process of support programs and therapy services of the individual with special needs (depending on individual's cognitive and mental status) (Harbin et al., 2000).

WHO takes on biopsychosocial framework for better care of individuals and encourages use of ICF as a tool to provide holistic approach with transdisciplinary teams in healthcare. ICF offers an international conceptual classification system that can provide an inter-expert common language in the transdisciplinary approach (Nguyen et al., 2018). The transdisciplinary work of the experts is important for the holistic evaluation of the individual and to provide appropriate measures and interventions. As the biopsychosocial framework suggests during the educational and health decision making processes, health professionals, school staff and parents should collaborate for effective ongoing services (Moore et al., 2012). Despite efforts for collaboration, parents may not be aware of the ongoing teamwork among professionals and

about decision processes concerning educational and heath needs of children with special needs. An interview with parents of children with social maladjustment or learning difficulties indicated that parents have difficulty navigating the health and educational services and would like professionals to collaborate (Tétreault et al., 2013).

Studies about Transdisciplinary Approach (TA) in early intervention settings indicate that professionals with high level of expertise are more willing to work as a transdisciplinary team (King et al., 2009; Aubin & Mortenson, 2015). These studies also present the need for professional development opportunities on TA, including applied information. The professionals would like to know what a transdisciplinary team is and how it functions. When Aubin and Mortenson (2015) field tested transdisciplinary approach in an early intervention program setting, creating opportunities to for team members to share their experiences, skills and socialize with one another while providing trainings, and an open learning space which were key to adopting the TA (transdisciplinary approach). With these trainings team members are expected to "role release" as a key component of the TA and be open to consultation from and to other members because of overlapping roles (King et al., 2009). As a result, the transdisciplinary teams become effective collaborators, respect each other's knowledge and skills, and keep being lifelong learners (Pilkington, 2006; King et al., 2009). Little (2010) also emphasized the training needs of mental health providers on TA in order to effectively perform in an interdisciplinary team. The literature provides evidence on how promising the TA is, however, preliminary work is needed on informing and preparing the teams.

Examining the transition from single-disciplinary working models to multi-disciplinary working models, Lowe and O'Hara (2000) determined that service delivery develops effectively, efficiently and with high quality. In multi-disciplinary working models, teams need more research in order to better understand the functioning of the service provided during the study and to determine its effects (Batorowicz & Shepherd, 2008). Collaboration of all professionals and families serving individuals with special needs has an impact on the individual's development (Francisco et al., 2020) and the quality (Love & Horn, 2021) of the services provided. In a study conducted with parents with children with special needs, it was reported that those who received multidisciplinary support had higher levels of satisfaction than those who received support from professionals separately (Larsson, 2000). Larkin and Callaghan (2005) state that although most of the professionals are aware of their duties in the team, they do not have enough information about the duties of the other members of the team. This is an important finding that will negatively affect the functioning of the team. In order for this to be

resolved, team members should feel free to research the roles of other team members and take on responsibility when necessary.

Despite legal grounds in Turkey, it is known that teamwork is mostly dependent on individual initiative. To our knowledge there is no study about providing assessment, diagnosis, and support services to individuals with special needs in Turkey, although there are studies providing examples of teamwork in the field of health. The most important issues in multidisciplinary studies are team decision making, the quality of the process and the evaluation of the activities, however there is not any research found on this either. For this reason, we hope that this study will plant seeds to attract transdisciplinary work by increasing the awareness of the employees in the field towards teamwork. Thus, we aimed to adapt the Team Decision Making Questionnaire (TDMQ) developed by Batorowicz and Shepherd (2008) to analyze the reliability and the validity of the Turkish version.

Method

The Team Decision Making Questionnaire -Turkish Version (TDMQ-TR) study was conducted with the approval of the Social and Human Sciences Research Ethics Committee of Istinye University (16.04.2020, 2020/ 04-07). Consent was obtained from participants who were chosen on a voluntary basis and were informed about the purpose of the study. Quantitative research method was used in the study. Participants were reached through professionals' associations and professional online groups, besides private education and rehabilitation centers, hospitals, private institutions, and guidance research centers. A web-based form was used to obtain volunteer responses. Participants also shared the questionnaire with other centers and message groups; thus, the snowball method was used in data collection.

The study was conducted with 167 professionals in between April 2020 and February 2021. Among all participants, 117 (70.1%) of them were identified as female and 50 (29.9%) of them as male. While 56 participants were health professionals (Nutrition and Dietetics, Child Development, Language and Speech Disorder, Occupational Therapy, Physiotherapy and Rehabilitation, Psychology, Audiology), 111 participants were professionals in the field of education (Physical Education and Sports, Biology, Philosophy Teacher, Visually Impaired Teaching, Fine Arts Education, Machinery, Mathematics, Preschool Teaching, Special Education Teaching, Psychological Counseling and Guidance, Classroom Teaching, Social Studies Teaching, Turkish Language Teaching). While 100 of the professionals stated that they received undergraduate education, 59 of them had master's degree and 8 of them had doctorate

education. During their professional life 27 of them experienced teamwork for less than a month, 75 of them between 1 month and 2 years, 30 of them 3-4 years, and 35 of them more than 4 years (Table 1).

Table 1: Socio-demographic characteristics of the participants

Variables	Frequency (f)	Percentage (%)
Age (year)		
23 - 29	80	47.9
30 - 39	47	28.1
40+	40	24.0
Total	167	
Gender		
Female	117	70.1
Male	50	29.9
Total	167	
Profession		
Health	56	33.5
Education	111	66.5
Total	167	
Education Level		
Bachelor's degree	100	59.9
Master's degree	59	35.3
Doctorate Degree	8	4.8
Total	167	
Years of Experience in Profession		
0 - 5	78	46.7
6 - 15	54	32.3
16+	35	21.0
Total	167	
Participants' professional experiences in teamwork (year)		
Never and less than 1 month	27	16.2
1 month – 2 years	75	44.9
3 – 4 years	30	18.0
5+ years	35	21.0
Total	167	

Data Collection Tools

Participant information form

The information form developed by the research team included demographic information about the participants, such as year of birth, gender, educational status. In addition to this information, the form also included questions such as whether teamwork was carried out at the institution, whether the participant was involved in teamwork, whether parents were included in the team, and which model of teamwork was preferred.

The team decision making questionnaire (TDMQ)

TDMQ was developed by Batorowicz and Shepherd (2008). TDMQ has 19 items and four subscales; it consists of (a) decision making, 7 questions (b) team support, 5 questions (c)

learning, 4 questions and (d) providing quality services, 3 questions. The items are rated on a 7-point likert type scale, ranging from 1 (not at all) to 7 (to a vast extent). The internal consistency and reliability of the TDMQ subscales were found to be quite high (Cronbach's Coefficient Alpha, 0.83 to 0.91), and the total internal consistency of the questionnaire was 0.96.

TDMQ Turkish Translation Process

The consent was obtained from Tracy Shepherd, who is the developer of the questionnaire, via email before the beginning of the study in January 2020. After obtaining the permission of the ethics committee, the questionnaire was translated from English to Turkish and Turkish to English by academicians in the subject area who are competent in English, through the Expert Opinion Form developed by the study group. The questionnaire was finalized based on their opinions and contributions. For words with different views in the Expert Opinion Form data; the decision was made according to the final opinion of 3 experts from the fields of special education, psychological counseling and guidance, and physiotherapy and rehabilitation. The pilot application of the questionnaire was carried out with ten professionals who are fluent in both Turkish and English. The correlation between the Turkish and English versions of the questionnaire was analyzed by Pearson's product-moment correlation analysis. A high level of correlation was found between the items of the Turkish and English questionnaires ($r=.971$, $p<.01$). This shows that there is a highly strong linguistic equivalence between the original of the scale and its Turkish (Seçer, 2015).

Data Collection Process

Potential participants were sent an e-mail or phone message and were asked to complete an online questionnaire by clicking the link that takes them to a secure online research service. Only the participants who submitted the responses and completed the forms completely were included in the study. In order to increase the participation in the study, 3 social science books were gifted to 3 randomly chosen participants.

Analysis of Data

Descriptive analysis was conducted to summarize variables such as age, gender, education level, and profession in the data set obtained from the participants. To estimate the construct validity of the questionnaire, Principal Component Analysis (PCA) with varimax rotation was performed on SPSS software version 23. Kaiser-Mayer-Olkin (KMO) measurement of sampling adequacy and Bartlett's test were applied to analyze the data for factor analysis. The explained total variance (%) and factor loadings were used to evaluate the extent

to which the concept under study could be measured. The reliability of TDMQ-TR was estimated with Cronbach α and Guttman Two Half Reliability coefficients.

Results

The aim of the study was to adapt and validate the TDMQ-TR. The study was conducted with 167 professionals in between April 2020 and February 2021 using an online questionnaire. Characteristics of all participants are shown in Table 1. The average age of the participants was found to be 33.77 ± 8.84. Occupational experience of the participants was determined as an average of 101.87 ± 91.225 months (between 3 and 384 months).

TDMQ-TR Validity Review

Construct validity

Exploratory Factor Analysis was conducted to examine the construct validity. The KMO sampling adequacy coefficient was within the acceptable range with 0.95. Also, Bartlett's Test of Sphericity showed that the data matrix was not similar to the identity matrix, and the results showed the presence of factors in the data (X^2 = 2786.958, df = 171, p<0.001) (Table 2).

Table 2: TDMQ-TR factor analysis and factor loads

No	Items	Factor 1	Factor 2
1	Does it help you get support in clinical/technical decision making?	.733	.438
2	Will it help you make consistent recommendations for all customers?	.774	.419
3	Does it help you apply standards consistently in your team?	.732	.239
4	Does it help you make personal decisions regarding prescriptions?	.540	.072
5	Will it help you validate my clinical / technical decisions?	.788	.246
6	Will it help you consistently apply the policies to your caseload?	.853	.162
7	Will it help you apply the policies correctly?	.882	.227
8	Help you support your colleagues' clinical technical decision-making	.850	.027
9	Helps you share innovative ideas	.773	-.193
10	Helps you get clinical / technical advice	.858	.074
11	Helps you be more competent	.835	-.078
12	Helps you share success	.773	.001
13	Does it help you keep information about changing policies up to date?	.774	-.202
14	Does it help you learn about the implementation of new technologies/strategies?	.798	-.309
15	Does it help you gain a variety of clinical/technical perspectives?	.775	-.291
16	Does this help you stay up to date with equipment and new technology in the field of clinical practice?	.761	-.316
17	Does it help you develop effective problem solving?	.819	-.147
18	Does it help you ensure the quality of service?	.770	-.133
19	Does it help you generate new ideas with your colleagues?	.785	-.220
Extraction Sums of Square Loadings			%61.758

Note: TDMQ-TR = Team Decision Making Questionnaire Turkish Version

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Principal components factor analysis was performed to estimate factor loads. Factor analysis of the 19-question questionnaire with one factor was determined, 61.75% of the total variance was explained. Also, the slope plot confirmed the one-factor structure. Details of the factor loadings of each item are listed in Table 2. As a result of factor analysis the three sub-dimensions of the questionnaire and the distribution of the original questionnaire items in these subtests can be seen in Table 3.

Table 3: TDMQ original items and subtest descriptions

No	Items	DM	TS	LE	DQS
1	Does it help you get support in clinical/technical decision making?	TDMQ-O			
2	Will it help you make consistent recommendations for all customers?	TDMQ-O			
3	Does it help you apply standards consistently in your team?	TDMQ-O			
4	Does it help you make personal decisions regarding prescriptions?	TDMQ-O			
5	Will it help you validate my clinical / technical decisions?	TDMQ-O			
6	Will it help you consistently apply the policies to your caseload?	TDMQ-O			
7	Will it help you apply the policies correctly?	TDMQ-O			
8	Help you support your colleagues' clinical technical decision-making		TDMQ-O		
9	Helps you share innovative ideas		TDMQ-O		
10	Helps you get clinical / technical advice		TDMQ-O		
11	Helps you be more competent		TDMQ-O		
12	Helps you share success		TDMQ-O		
13	Does it help you keep information about changing policies up to date?			TDMQ-O	
14	Does it help you learn about the implementation of new technologies/strategies?			TDMQ-O	
15	Does it help you gain a variety of clinical/technical perspectives?			TDMQ-O	
16	Does this help you stay up to date with equipment and new technology in the field of clinical practice?			TDMQ-O	
17	Does it help you develop effective problem solving?				TDMQ-O
18	Does it help you ensure the quality of service?				TDMQ-O
19	Does it help you generate new ideas with your colleagues?				TDMQ-O

Note: TDMQ-O=Team Decision Making Questionnaire Original, DM=Decision Making, TS=Team Support, LE=Learning, DQS=Developing Quality of Services

TDMQ-TR Reliability Analysis

Internal consistency reliability was analyzed using the Cronbach α and Guttman Split-Two-Half Reliability Coefficients. The overall Cronbach α coefficient of TDMQ-TR was 0.96 (Table 4). Also, the Guttman Split-Two-Half Reliability Coefficient was 0.92 and the correlation between both halves of the questionnaire was 0.86. The internal consistency of the

questionnaire was examined, and values > 0.5 indicated moderate reliability.

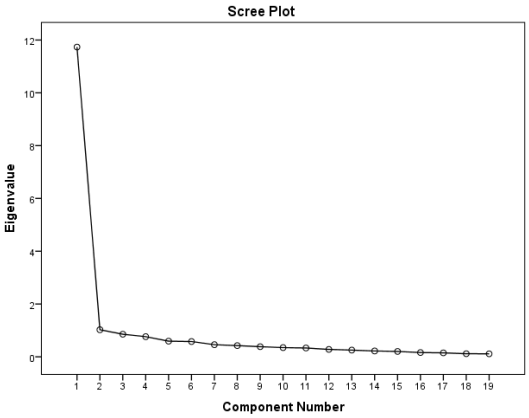

Figure 1: TDMQ-TR slope plot

Participants' experiences and views on teamwork

The difference between the profession groups was determined by Kuskall-Wallis (X^2 = 16,405, $p < 0.001$). When the differences between professional groups are examined, it is seen that participants working in the field of Health achieved higher TMDQ scores.

When the disability groups served by the participants were examined, 3 participants did not answer the question. 57 of the remaining 123 participants reported working with 3 or more disability groups and 66 participants with 1 or 2 disability groups.

Table 4: Participants' teamwork experiences and usage information (n = 167)

	Yes		No	
	f	%	f	%
Have you received in-service training for teamwork in your institution?	40	24.0	127	76.0
Is teamwork done in the services provided in your institution?	144	86.2	23	13.8
Do you take part in the teamwork done in your institution?	139	83.2	28	16.8
Are parents involved in teamwork in your institution?	90	53.9	77	46.1
Do you think that all team members contribute equally professionally to the teamwork done in your institution?	72	43.1	95	56.9
If teamwork is not done in your institution, would you want it to be done?	158	94.6	9	5.4

While 22.2% (n = 40) of the participants stated that they received in-service training for teamwork in their institutions, 76% (n = 127) stated that they did not receive training. It has been determined that the participants who received in-service training for teamwork in the institution where they hold duties, have already teamwork in their institutions (r = 0.224, $p <$ 0.004), and these participants were also a part of those teams (r = 0.177, $p < 0.022$).

When the preferred methods of teamwork in institutions are listed, the first place is the multidisciplinary team method (n = 71) with 42.5%, the second is the interdisciplinary method with 39.5% (n = 66) and the last one was the transdisciplinary method with 11.4 % (n = 19). 11 of the participants stated that there is no teamwork in their institutions. 86.2% (n = 144) of the participants stated that teamwork was applied in their institutions, and 13.8% (n = 23) of them stated that there was no teamwork. 83.2% (n = 139) of the participants stated that they participated in teamwork in their institutions, and 16.8% (n = 28) did not. When the answers given for the number of professionals participating in teamwork in their institutions are examined, 86 participants are between 1 and 4 people; 64 participants answered that between 5 - 9 people and 36 people attended 10 or more professionals.

The rate of those who stated that families participated in the teamwork carried out in their institutions was 53.9% (n = 90) and the rate of those who did not participate was 46.1% (n = 77). Although 43.1% (n = 72) of the participants reported that all members contributed equally professionally in teamwork, 56.9% (n = 95) disagreed. 35 participants left the question of permanent members who participated in the teamwork unanswered. 15 of the participants included families as permanent members of the teamwork (Table 4). The rate of those who reported that both professionals and managers participated in teamwork was 35.3% (n = 59). However, 13.2% (n = 22) of them reported that only managers and 25.7% (n = 43) only professionals participated in teamwork. 25.7% (n = 43) of the participants did not answer the question or stated there was none.

Relationship between TDMQ-TR, participants' characteristics, and teamwork experiences

The relationships between the total score of the Turkish version of TDMQ scores in terms of the characteristics and teamwork experiences of the participants were examined. A significant relationship was found between the number of types of disability studied and the total TDMQ score. When the relationship of TMDQ total scores with respect to other variables was examined, there was no significant relationship in terms of the method used in teamwork, while a high level of negative correlation was observed in the involvement of parents in teamwork (r = - 0.19, p <0.05). This shows that the score obtained on the questionnaire of team decision-making processes increase as the family is included in the team. (Table 5).

Table 5: The relationship between TDMQ-TR scores and participants' opinions about teamwork

	TDMQ-TR Total Score	
	r	*p*
Are parents involved in teamwork in your institution?	-0.19	.011*
Which disability groups do you work with?	0.16	.040*

*p<.05

Discussion

This study was conducted in order to adapt the "Team Decision Making Questionnaire" developed by Batorowicz and Shepherd (2008) to Turkish, since there is no assessment tool specific to transdisciplinary teamwork in our country in the literature. The adaptation of this questionnaire to Turkish population may directly affect the process of the services that professionals working in fields such as health, education, and social services, etc. will provide to children. In this process, it will be possible to determine the perspectives of professionals on teamwork and to plan further studies that increase the service quality based on this data. According to the research findings, TDMQ-TR which is the Turkish adaptation of the TDMQ, is valid and reliable.

During the adaptation of the TDMQ to Turkish, data were collected from professionals working in the fields of health and education. With the data obtained, the validity analysis of the questionnaire was evaluated in terms of structure and content validity. The construct validity of the questionnaire was examined by Exploratory Factor Analysis. According to Bartlett's Test of Sphericity, it was found that the data matrix does not resemble the identity matrix and is one-dimensional. The original form of TDMQ consists of four sub-dimensions: decision-making, team support, learning and improving the quality of services. As a result of the analysis, it has been found that the Turkish form of TDMQ-TR shows a distribution in one dimension. There were only a limited number of publications in the field of health and education for teamwork in the scientific literature of Turkey, and data on the prevalence of teamwork across the country could not be reached in these studies (Kavuran et al.2021; Okuyan, Çağlar & Erden 2021, Çelik & Karaca, 2017; Ulusoy & Tokgöz, 2009; Demirci, 2020; Satman & Duyan, 2013). In addition, while there are a limited number of publications in our country in the field of health and education for multidisciplinary teamwork (Şahin et al., 2018; Coşkun, 1996; Yurttaş, Kartal, & Çağlar 2020; Karakuş, Türkkan, and Karakuş 2017), to our knowledge there aren't any research literature on transdisciplinary work in Turkey. These findings show that there are still a limited number of studies on teamwork in the field of education and health in our country, while there

are no publications on transdisciplinary teamwork. In addition, in the legislation on education and health services offered to children, methods for team work and content for functioning could not be found. This current situation directly affects the planning and implementation of the services of professionals working in the field. Therefore, only 19 of 167 participants in the study stated that they used the transdisciplinary approach in teamwork. The lack of transdisciplinary approach in the application processes in the fields of education and health causes the professionals working in the field to stay away from the current terminology. In the study, it is thought that the participants' lack of terminology, knowledge and practice on this subject, as well as cultural differences (Korkmaz, 2007), are also effective in the unidimensional development of TDMQ-TR.

The transdisciplinary approach to early intervention services has been highly recommended despite its challenges (Guralnick, 2001; Kilgo, 2006), however it was not the top choice of participants in this study. More than half of our participants (56.9%, n = 95), reported unequal contribution of professionals in their teamwork. This is likely due to low level of expertise and unfamiliarity with the approach. In the reliability analysis of TDMQ-TR, it is reported that the Cronbach alpha internal consistency reliability coefficient is greater than 0.70 and the results are in the "acceptable" range (Karakoç and Dönmez 2007; Erkuş, 2007; Güngör, 2016). The Cronbach α coefficient of TDMQ-TR for all items was determined to be 0.96. It was reported that Cronbach α coefficients ranged from 0.83 to 0.90 when compared with the original, and when all items were examined together, it was reported to be 0.98. According to these results, it was determined that high internal consistency-reliability coefficients were obtained, similar to the original questionnaire (Alpar, 2011). Also, the Guttman Split-Two-Half Reliability Coefficient (CIAC) was 0.92 and the correlation between both halves of the questionnaire was 0.85. Finding the GBİYGK between 0.80 and 0.90 in the two half test findings proves that the TDMQ-TR has high reliability (Soğuksu & Alıcı, 2016).

There are also a number of limitations that should be taken in consideration. The first is that the questionnaire is based on the self report of participants. Another is that the application is carried out through the internet-based questionnaire. The internet-based application has both positive and negative effects on the results of the study (Chang & Vowles, 2013; Van Selm & Jankowski, 2006). Internet-based application is also considered to be one of the positive aspects of the study. This approach has eliminated the bias that can be created by applying the study face to face.

Conclusion and Future Directions

Overall, results indicate that TDMQ-TR is a valid and reliable tool for the use of health and education professionals working with children. The fact that the questionnaire consists of a small number of items, that it provides a quantitative criterion, and that it provides information to practitioners about teamwork, will provide practical use in applications in the field. With TDMQ-TR, detailed data on team strengthening and support will be available during the evaluation of teamwork. Also, longitudinal studies would contribute to check the effectiveness of the team decision-making processes and the characteristics of an effective team. The data obtained from TDMQ-TR can be a guide in the evaluation and development processes of teamwork for professionals in Turkey.

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Conflict of Interest

The authors declare that they have no conflict of interest.

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Appendix

Ekip Karar Verme Ölçeği (TDMQ-TR)

Aşağıdaki formu doldururken lütfen ekip karar verme ile ilgili genel deneyiminizi göz önünde bulundurun. Lütfen her bir soruyu okuyun ve sizin için en uygun cevabı işaretleyin.

Ekip karar verme süreci …

Ekip Karar Verme Süreci size ne ölçüde yardımcı olur?	Büyük ölçüde	Çok büyük ölçüde	Büyük ölçüde	Orta derecede	Küçük ölçüde	Çok az ölçüde	Hiç değil	Uygulanamaz
1. Klinik / teknik karar vermede destek almanıza yardımcı olur mu?	7	6	5	4	3	2	1	N/A
2. Tüm müşteriler için tutarlı önerilerde bulunmanıza yardımcı olur mu?	7	6	5	4	3	2	1	N/A
3. Ekibinizde standartları tutarlı bir şekilde uygulamanıza yardımcı olur mu?	7	6	5	4	3	2	1	N/A
4. Reçetelerle ilgili kişisel kararlar almanıza yardımcı olur mu?	7	6	5	4	3	2	1	N/A
5. Klinik / teknik kararlarımı doğrulamanıza yardımcı olur mu?	7	6	5	4	3	2	1	N/A
6. Politikaları kendi vaka yükünüzde tutarlı bir şekilde uygulamanıza yardımcı olur mu?	7	6	5	4	3	2	1	N/A
7. Politikaları doğru bir şekilde uygulamanıza yardımcı olur mu?	7	6	5	4	3	2	1	N/A
8. Iş arkadaşlarınızın klinik teknik karar verme süreçlerine destek sağlamanıza yardımcı olur	7	6	5	4	3	2	1	N/A
9. Yenilikçi fikirleri paylaşmanıza yardımcı olur	7	6	5	4	3	2	1	N/A
10. Klinik / teknik tavsiye almanıza yardımcı olur	7	6	5	4	3	2	1	N/A
11. Daha yetkin olmanıza yardımcı olur	7	6	5	4	3	2	1	N/A
12. Başarıyı paylaşmanıza yardımcı olur	7	6	5	4	3	2	1	N/A
13. Değişen politikalarla ilgili bilgileri güncel tutmanıza yardımcı olur mu?	7	6	5	4	3	2	1	N/A
14. Yeni teknolojilerin / stratejilerin uygulanması hakkında bilgi edinmenize yardımcı olur mu?	7	6	5	4	3	2	1	N/A
15. Çeşitli klinik / teknik perspektifler edinmenize yardımcı olur mu?	7	6	5	4	3	2	1	N/A
16. Bu klinik uygulama alanında ekipman ve yeni teknoloji ile güncel kalmanıza yardımcı olur mu?	7	6	5	4	3	2	1	N/A
17. Etkili problem çözme geliştirmenize yardımcı olur mu?	7	6	5	4	3	2	1	N/A
18. Hizmet kalitesini sağlamanıza yardımcı olur mu?	7	6	5	4	3	2	1	N/A
19. Meslektaşlarınızla yeni fikirler üretmenize yardımcı olur mu?	7	6	5	4	3	2	1	N/A