# Öğretmenlerin Sendikal Örgütlenme Beklentisi Ölçeğinin Geliştirilmesi ve Sendikal Örgütlenme Beklentilerinin Bazı Değişkenler Açısından İncelenmesi

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## Öz

Bu araştırmanın amacı; öğretmenlerin sendikal örgütlenme beklentisi ölçeğini geliştirmek ve öğretmenlerin görüşlerine göre sendikal örgütlenme beklentilerini çeşitli değişkenler açısından incelemektir. Araştırma iki aşamadan oluşmaktadır. Birinci düzeyde öğretmenlerin eğitim alanında faaliyet gösteren sendikalarda bulunmasını istediği niteliklere ilişkin görüşlerinin belirlenmesi amacıyla "Öğretmenlerin Sendikal Örgütlenme Beklentisi Ölçeğinin" geliştirilmesi amaçlanmıştır. Araştırmanın birinci aşaması 537 öğretmenden oluşan örneklem üzerinden yürütülmüştür. Açımlayıcı faktör analizi sonucunda teorik açıdan anlamlı, toplam varyansın %54,37'sini açıklayan, faktör yükleri .41 ile .98 arasında bulunan, 3 faktörlü ve öz değerleri 1.00'in üzerinde olan 25 maddeli bir yapı ortaya konulmuştur. Doğrulayıcı faktör analizleri sonucunda Ki-kare serbestlik derecesi 23; Karşılaştırmalı Uyum İndeksi (CFI) .93; Tucker Lewis Indeksi TLI .92; Normlaştırılmamış Uyum İndeksini (NNFI) .92; Bollen Uyum İndeksinin (IFI) .93; Tahmin Hatalarının Ortalamasının Karekökü (RMSEA) .06; Standartlaştırılmış Hata Kareleri Ortalamasının Karekökü (SRMR) .06 ve İyilik Uyum İndeksi (GFI) .92 olarak tespit edilmiştir. Sonuç olarak faktör yükleri .41 ile .88 arasında değişen 17 maddeli ve 3 faktörleri bir yapı ortaya konmuştur. Araştırmanın ikinci aşamasında öğretmenlerin örgütlenme beklentilerinin cinsiyet, sendikal üyelik durumu ve yaş değişkenleri açısından olası değişim ilişkileri incelenmiştir. Sendikal örgütlenme beklentilerinin yaş, cinsiyet ve sendikal üyelik durumuna ilişkin test sonuçlarına göre anlamlı bir ilişki bulunmamıştır. Öğretmenlerin sendikal örgütlenme beklentilerine etki eden değişkenlerin belirlenmesine yönelik olarak regresyon analizi çalışmalarının yapılması önerilmektedir.

Anahtar Kelimeler: Mesleki örgütler, Sendikal beklenti, Ölçek geliştirme.



İnönü Üniversitesi
Eğitim Fakültesi Dergisi
Cilt 25, Sayı 3, 2024
ss. 991-1011
DOI
10.17679/inuefd.1394514

<u>Makale Türü</u> Araştırma Makalesi

Gönderim Tarihi 22.11.2023

> Kabul Tarihi 27.09.2024

#### Önerilen Atıf

Erkılıç, T. A. (2024). Öğretmenlerin sendikal örgütlenme beklentisi ölçeğinin geliştirilmesi ve sendikal örgütlenme beklentilerinin bazı değişkenler açısından incelenmesi. İnönü Üniversitesi Eğitim Fakültesi Dergisi, 25(3), 991-1011. DOI: 10.17679/inuefd.1394514

## **GENIŞ ÖZET**

## Giriş

Mesleki örgütler, iş gören ve işverenlerin hak ve çıkarların korunması, geliştirilmesi ve üretim süreçlerinde işyeri ilişkilerinin farklı taraflarca dengeli düzenlenmesi açısından vazgeçilmez öğelerinden biridir. İşlevleri açısından meslek örgütlenmeleri farklı gruplarda betimlemek ve açıklamak olanaklıdır. Bu bağlamda bir dernek, vakıf veya sendika meslek örgütü işlevini görebilir. Bununla birlikte akademik literatürde mesleki örgütler dernekler, vakıflar, barolar, odalar ve sendikalar biçiminde sıralandığı görülmektedir. Özetle genel kabul, iş görenlerin mesleki örgütlenme türleri genelde *oda, baro, vakıf, dernek ve sendikal* örgütlenme biçimindedir. Mesleki örgütlerin en çok öne çıkan türü; özellikle toplu sözleşme kazanımı, gücü veya hakkı nedeniyle sendikalardır. Bireysel ve örgütsel amaçlara birlikte ve eşgüdüm içinde ulaşılmasında sivil örgütlerin önemli katkıları bulunmaktadır. Ancak örgütlenmenin baskın değişkeninin genelde ekonomik boyutlu olduğu görülmektedir. Buna karşılık genel olarak tüm beklentiler ve sendikal örgütlenme gereksinimleri dikkate alındığında, sendikal örgütlenmenin, ekonomik, politik ve psikososyal boyutlarının olduğu ifade edilebilir.

#### Amaç

Sendikal örgütlenme bireysel ve toplumsal boyutlu zor, karmaşık bir süreçtir. Bu açıdan öğretmenlerin sendikal örgütlenme ve dayanışmadan neler beklediği; beklentilerin hangi boyutlara hangi düzeyde yansıdığı önemli bir sorun alanıdır. Öğretmenlerin sendikal beklentilerinin araştırılması hem kamu yönetimi hem de kamuoyu ilgisi nedeniyle kritik bir önem taşımaktadır. Bu araştırmanın amacı; öğretmenlerin eğitim alanında faaliyet gösteren sendikalarda bulunmasını istedikleri niteliklere ilişkin görüşlerinin belirlenmesi amacıyla öğretmenlerin sendikal örgütlenme beklentisi ölçeğini geliştirmek ve öğretmenlerin görüşlerine göre sendikal örgütlenme beklentilerini çeşitli değişkenler açısından incelemektir. Bu amaçla aşağıdaki sorulara yanıt aranmıştır:

- 1. Türkiye'de kamu okullarında görev yapmakta olan öğretmenlerin görüşlerine dayalı olarak sendikal örgütlenme beklentisini değerlendirmeye yönelik nasıl bir ölçek ortaya konulabilir?
- 2. Öğretmenlerin sendikal örgütlenmeye ilişkin beklentileri
  - a) Sendikal üyelik durumuna
  - b) Cinsiyete
  - c) Yaşa

göre farklılık göstermekte midir?

#### Yöntem

Araştırma iki aşamadan oluşmaktadır. Birinci aşamada öğretmenlerin eğitim alanında faaliyet gösteren sendikalarda bulunmasını istediği niteliklere ilişkin görüşlerinin belirlenmesi amacıyla "Öğretmenlerin Sendikal Örgütlenme Beklentisi Ölçeğinin (TEOS)" geliştirilmesi; ikinci aşamada öğretmenlerin sendikal beklentilerinin cinsiyet, yaş ve sendikaya üyelik durumu boyutlarında olası değişkenlik ilişkilerinin TEOS aracılığıyla incelenmesi amaçlanmıştır.

## Katılımcılar

Birinci aşamada 2021-2022 eğitim-öğretim yılında Eskişehir ili Tepebaşı ilçesinde görev yapmakta olan ve kolay ulaşılabilirlik dikkate alınarak seçilen toplam 537 öğretmenden oluşan bir örneklem büyüklüğüne ulaşılmıştır. İkinci aşamada 2021-2022 eğitim-öğretim yılında Eskişehir ili Tepebaşı ilçesindeki kamu okullarında görev yapmakta olan 5221 öğretmen araştırma evrenini oluşturmaktadır. Bu katılımcıların seçiminde yine veri çeşitlemesi ile zaman

ve maliyet unsurları da göz önünde bulundurulup kolay ulaşılabilirlik dikkate alınarak toplam 349 öğretmenden oluşan örneklem büyüklüğüne ulaşılmıştır.

## Veri toplama araçları ve verilerin toplanması

Birinci aşamada aday ölçme aracı için gerekli madde havuzu, uzman görüşü alınarak oluşturulmuştur. Uzman görüşleri doğrultusunda gerekli görülen düzeltmeler yapıldıktan sonra ön deneme aşamasına geçilmiştir. Ön deneme aşamasında 12 katılımcı ile yüz yüze görüşmeler gerçekleştirilmiştir. Araştırmada 39 madde ile analize başlanmış ancak öz değeri 1 ve üzeri olan teorik olarak anlamlı 3 faktörlü 21 maddeli bir ölçek ortaya konulmuştur. İkinci aşamada veriler araştırmacı tarafından geliştirilen TEOS aracılığıyla toplanmıştır.

#### Verilerin analizi

Araştırmanın birinci aşamasında açımlayıcı faktör analizi, ortalama, standart sapma, normallik değerleri ve güvenirlik analizleri IBM SPSS Statistic 26.0 paket programı ile gerçekleştirilmiştir. Doğrulayıcı faktör analizi ise R programındaki Lavaan paketi ile gerçekleştirilmiştir. Açımlayıcı faktör analizi için örneklem uygunluğunu test etmek amacıyla Kaiser-Meyer-Olkin örneklem uygunluk testi; faktör analizi yapmaya uygunluk içinse Barlett küresellik testi sonuçlarından faydalanılmıştır. Faktör sayısını belirlemek amacı ile öz değerler ve çizgi grafiği göz önünde bulundurulmuştur. Faktörlerde bulunacak madde sayısı için karar verilirken en düşük faktör yükünün .32 olması maddelerin binişik olmaması, her bir faktör altında en az 3 maddenin olması, güvenirliğin yeterli olması ve son olarak teorik düzeyde anlamlı olması koşuları dikkate alınmıştır. Araştırmanın ikinci aşamasında veriler araştırmacılar tarafından geliştirilen TEOS aracılığıyla toplanmıştır. Analizler; kayıp ve uç değerler veri setinden ayıklandıktan sonra geriye kalan toplam 349 katılımcıdan sağlanan veriler üzerinden gerçekleştirilmiştir. Araştırmanın nicel verilerin çözümlenmesinde T-testi ve tek yönlü varyans analizi uygulanmıştır.

## Bulgular, Sonuç & Tartışma

Birinci aşamada açımlayıcı faktör analizine uygunluğu test etmek için Kaiser-Mayer-Olkin (KMO) .92 ve Barlett küresellik testi (x²=7101,432; p<.001) uygulanmış, verinin faktörleşmeye uygun olduğu sonucuna ulaşılarak 537 kişi ile analizler gerçekleştirilmiştir. Analize 39 madde ile başlanmış ancak faktör yükü, binişiklik ve teorik olarak anlamlı olmaması sonucu 14 madde ölçekten çıkarılmıştır. Bu aşamada teorik açıdan anlamlı, toplam varyansın %54,37'sini açıklayan, faktör yükleri .41 ile .98 arasında bulunan, 3 faktörlü ve öz değerleri 1.00'in üzerinde olan 25 maddeli bir yapı ortaya konulmuştur.

Doğrulayıcı faktör analizi aşamasında uzaklık değerleri incelenerek veri setinden 11 kişi çıkartılmış ve analize 349 kişi ile devam edilmiştir. Doğrulayıcı faktör analizleri sonucunda Kikare serbestlik derecesi 23; Karşılaştırmalı Uyum İndeksi (CFI) .93; Tucker Lewis Indeksi TLI .92; Normlaştırılmamış Uyum İndeksini (NNFI) .92; Bollen Uyum İndeksinin (IFI) .93; Tahmin Hatalarının Ortalamasının Karekökü (RMSEA) .06; Standartlaştırılmış Hata Kareleri Ortalamasının Karekökü (SRMR) .06 ve İyilik Uyum İndeksi (GFI) .92 olarak tespit edilmiştir. Sonuç olarak faktör yükleri .41 ile .88 arasında değişen 17 maddeli ve 3 faktörleri bir yapı ortaya konmuştur. Güvenirlik analizleri sonucunda genel ölçeğin McDonald Omega değeri .80; Cronbach Alfa değeri .85 ve Guttman Lamda değeri .92 olarak tespit edilmiştir. Bu değerlere göre ölçeğin güvenilir bir yapı ortaya koyduğu sonucuna ulaşılmıştır.

Araştırmanın ikinci aşamasında öğretmenlerin sendikal örgütlenme beklentilerinin cinsiyet, sendikal üyelik durumu ve yaş değişkenleri açısından olası değişim ilişkileri incelenmiştir. Sendikal örgütlenme beklentilerinin yaş, cinsiyet ve sendikal üyelik durumuna ilişkin test sonuçları incelendiğinde anlamlı bir ilişki bulunmamıştır.

# Development of Teachers' Expectation of Union Organization Scale and Investigation of Their Expectation of Union Organizations in Terms of Some Variables

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#### **Abstract**

The aim of this study is to develop the teachers' union organization expectation scale in order to determine teachers' views on the qualifications they want in unions operating in the field of education and to examine their union organization expectations in terms of various variables according to teachers' opinions. The research consists of two phases. At the first phase, it was aimed to develop the "Teachers' Union Organization Expectation Scale" in order to determine teachers' opinions about the qualities they want to have in unions operating in the field of education. The first phase of the research was conducted on a sample of 537 teachers. As a result of the exploratory factor analysis, a theoretically meaningful structure with 25 items, with factor loadings between .41 and .98, with 3 factors and eigenvalues over 1.00, was revealed, explaining 54.37% of the total variance. As a result of confirmatory factor analyses, Free Chi-square degree was 23; Comparative Fit Index (CFI) .93; Tucker Lewis Index TLI .92; Non-normed Fit Index (NNFI) .92; Bollen Fit Index (IFI) .93; Root Mean Square Errors of Prediction (RMSEA) .06; The Standardized Root Mean Square Error (SRMR) was found to be .06 and the Goodness of Fit Index (GFI) was .92. As a result, a structure with 17 items and 3 factors with factor loadings ranging from .41 to .88 was revealed. In the second phase of the research, possible changes in teachers' union organization expectations were examined in terms of gender, union membership status and age variables. According to the test results regarding union organization expectations, age, gender and union membership status, no significant relationship was found. It is recommended to conduct regression analysis studies to determine the variables affecting teachers' union organization expectations.

Key Words: Professional organization, Union expectation, Scale development

#### **Suggested Citation**

Erkiliç, T. A. (2024). Development of teacher's expectation of union organization scale and investigation of their expectation of union organizations in terms of some variables, *Inonu University Journal of the Faculty of Education*, 25(3), 991-1011. DOI: 10.17679/inuefd.1394514



Inonu University
Journal of Education
Faculty
Vol 25, Number 3, 2024
pp. 991-1011
<u>DOI</u>
10.17679/inuefd.1394514

Type of Article
Research Article

Received 22.11.2023

Accepted 27.09.2024

#### 1. Introduction

Professional organizations are one of the indispensable elements for the protection and development of the rights and interests of employees and employers and for the balanced regulation of workplace relations by different parties in production processes. Initially emerging only with the function of professional solidarity in tradesmen and small production areas, professional organizations started to function as one of the determining elements of political democracy and workplace and production processes (Mahiroğulları, 2012; İyilikli, 2023). In the difficult production conditions of the nineteenth century, unions, which were organized to improve the working and living conditions of blue-collar workers, especially in mining, railway, oil, iron and steel enterprises, and to ensure adequate wages, have evolved into different functions and types in the historical development process, from the insurance of democracy, to the tools of reconciliation and bargaining of the main classes of capitalism, to "collaborative" unionism.

It is a reality that professional organizations have different levels and functions. It is possible to describe and explain professional organizations in different groups in terms of their functions. In this context, an association, foundation or trade union can function as a professional organization. However, in the academic literature, professional organizations are listed as associations, foundations, bar associations, chambers and trade unions. In summary, the general acceptance is that the types of professional organizations of employees are generally chambers, bar associations, foundations, associations and trade unions (Şahlanan 1995). The most prominent type of professional organizations is trade unions, especially because of their power or right to collective bargaining. Although there is no "right to strike and collective bargaining in the real sense" in Turkey, public sector unions in the field of civil servants in general and education in particular, although their historical antecedents go back to earlier years, have attracted considerable public attention since the second half of the 1990s, and the structure and functioning of union organizations have been at the center of important debates in the context of change and transformation. This situation can be seen as a reflection of the fact that the social, political and economic structure in the field of education is constantly and critically affecting change and educational processes (Dilbaz, 2023).

In the public opinion, there are different views on union membership and the functions of unions. There are different opinions about being a member of professional organizations in general and trade unions in particular. The expectations of employees or, in human resource management literature, the expectations of employees to become a member of trade unions are gathered in different dimensions. Trade union organizing has individual and social multidimensions. Organizing is a necessity for the individual as well as for those in charge of management. Civil organizations have important contributions in achieving individual and organizational goals together and in coordination (Can, 2002). However, it is seen that the dominant variable of organization is generally economic. On the other hand, when all expectations and requirements for union organizing are taken into consideration, it can be stated that union organizing has economic, political and psychosocial dimensions. Considering the effects, relationship and integration of the triad of organization, employer and employee on the intensity of union organizing, the intensity of union organizing increases when the interests of the union, employee and employer can meet and overlap (Werther and Davis, 1993). The common point of all discussions is that union expectations or union organizing needs can be grouped under three sub-headings: economic, political and industrial democracy and psychosocial union organizing (Allen and Keaveny 1988).

When the scale development and other academic studies on expectations from unions and union organizing needs are reviewed in general, it is seen that there is a focus on the following results in general. Akar and Ersü (2020) found that among the reasons for union organization, the desire for material and social expectations is the priority, followed by

meeting the need for professional and personal development and meeting emotional needs. At this point, it is noteworthy that the variable of protecting, securing and improving personal rights is also an important variable (Köybaşı; Uğurlu & Arslan, 2016).

Another dimension of union organizing is the need to gain political and social power. In the studies of İyilikli (2023) and Selamoğlu (2004), it is stated that the historical class struggle and the development of democracy are important variables in the union organization of workers and public officials. In the literature, leftist, socialist and social semocrat-oriented ideologies and approaches claim that the organization of employees has a political dimension. This approach, which is also referred to as "social justice unionism" in some studies, is that unions should not limit their activities to workplaces, but carry them to all dimensions of social, economic and political life (Buyruk, 2015). However, both in research and in public debates, there are widespread views that unionism is becoming increasingly politicized and that this is not viewed positively by some in the public (Eraslan, 2012; Güneş Karaman & Erdoğan, 2016). On the other hand, an important dimension that should not be forgotten is the reality that professional organization has a political dimension (Erdinc, 2014).

In addition to the variables affecting union organizing in economic, social and political dimensions, there are other variables affecting union organizing in socio-psychological and professional development aspirations and training dimensions. Fisher; Schoenfeldt and Shaw (1999) are of the opinion that employees tend to join professional organizations in order to feel socially and psychologically secure and to keep their individual psychological contracts legally secured. On the other hand, Uğurlu and Arslan (2019), on the other hand, put forward the view that union organizing is a different dimensional "contribution, interest and gain" organization by collecting union organizing in three different dimensions under the names of "personal and professional contribution, personal and professional interest and union interest" in the scale they developed.

Theoretical studies, research and public debates vary in their views on the needs for union organization and the union expectations of workers. In essence, professional organization is a whole with social, economic, political and psychological dimensions. Moreover, union organization is a difficult and complex process with individual and social dimensions. In this respect, what teachers expect from union organization and solidarity, and to what extent these expectations are reflected in which dimensions and at what level is an important problem area. It is clear that the views of education employees themselves on these issues are at least as important as what those outside the working groups think. Therefore, research on teachers' union expectations is of critical importance for both public administration and public interest.

The aim of this study is to develop a scale of teachers' expectations for union organization in order to determine teachers' views on the qualities they want to see in unions operating in the field of education and to examine teachers' expectations for union organization in terms of various variables. For this purpose, answers to the following questions were sought:

- 1. What kind of a scale can be put forward to evaluate the expectation of union organization based on the views of teachers working in public schools in Turkey?
- 2. Does Teachers' expectations regarding union organization differ according to
  - a) Union membership status
  - b) Gender
  - c) Age

## 2. Method

The research consists of two phases. In the first phase, it was aimed to develop the "Teachers' Expectation of Union Organization Scale (TEOS)" in order to determine the opinions

of teachers regarding the qualities they want to be found in unions operating in the field of education.

In the second phase, it was aimed to examine the possible variability relations of teachers' union expectations in the dimensions of gender, age and union membership status through the TEOS. In this context, the second phase of the study was designed in the relational survey model. Relational survey is a method that is handled within the framework of general survey models from descriptive survey models. Relational survey models are used for research models that aim to determine the presence, absence, direction or degree of the relationship between two or more variables (Cohen, Manion & Morrison, 2000).

#### 2.1. Participants

Information about the participants in the process of developing the TEOS is given under the heading of *Phase 1*; information about the sample in the stage of examining the possible variability relations of teachers' union expectations in the dimensions of gender, seniority and union membership status is given under the heading of *Phase 2*.

#### 2.1.1. Phase 1

In the literature, there are different opinions regarding the sample size. While Kline (1994) suggests that the sample size should be at least ten times the number of items, Sönmez (1999) states that it should be at least three times the number of items. In addition, the KMO value of the data set should be higher than .60 and the test of sphericity should be statistically significant. In this context, at the first level, a sample size of 537 teachers working in Tepebaşı district of Eskişehir province in the 2021-2022 academic year and selected by considering easy accessibility was reached, but it is thought that this sample will be sufficient for the research (Henson & Roberts, 2006; Kline, 1994) (See Table 1).

Table 1.Demographic Information About the Teachers

Gender	N	Percentage
Male	265	49.3
Female	272	50.6
Whether there is union membership		
Member	392	72.9
Not a member	145	27.1
Working organization		
Primary School	167	31.1
Middle School	174	32.4
High school and equivalent		-
schools	163	30.4
Pre-school	33	6.2
Age		
21-29	101	18.8
30-39	223	41.5
40-49	150	27.9
50-59	60	11.2
60 and above	3	0.6
Total	537	100

When the table regarding the demographic data of the teachers is analyzed, it is seen that the ratio of women and men is approximately equal. In terms of union membership status, it is observed that the majority of the participants are union members. While 33 of the participants are preschool teachers, the distribution among other education levels is close to

each other. When the age variable is analyzed, it can be said that the participants are concentrated between the ages of 30 and 49.

#### 2.1.2.Phase 2

In the second level of the study, it was aimed to examine the possible variability relations of teachers' union expectations in the dimensions of gender, seniority and union membership status through the TEOS. At this stage, 5221 teachers working in public schools in Tepebaşı district of Eskişehir province in 2021-2022 academic year constitute the research population. In the selection of these participants, the sample size consisting of 349 teachers was reached by taking into account data diversification, time and cost factors and easy accessibility. When the literature is examined, this sample size is considered to be sufficient for the study (Henson & Roberts, 2006; Worthington & Whittaker, 2006; Field, 2005; Kline, 1994). Demographic information about the participants is given in Table 2 (See Table 2).

**Table 2.**Demographic Information About the Participants

Gender	N	Percentage
Female	210	60.1
Male	139	39.8
Working organization		_
Science and Art Center	1	0.2
Other	15	4.2
Public Education Center	1	0.2
High school and equivalent schools	74	21.2
Pre-school	25	7.7
Middle School	128	36.7
Primary School	105	30.1
Age		_
21-29	40	11.5
30-39	160	45.84
40-49	122	34.9
50-59	25	7.7
60	2	0.58
Whether there is union membership	)	_
Yes	269	77.1
No	80	22.9
Total	349	100

When the table is analyzed in terms of gender distribution, it is seen that the majority of the participants are female. Although it is observed that teachers working in primary and secondary schools are predominant in terms of educational level, it can be said that this situation is directly proportional to the total number of teachers working at the relevant levels. When the age variable is analyzed, it is seen that the participants are concentrated between the ages of 30 and 49. 77.1 percent of the participants are union members.

#### 2.2. Data Collection Tools and Data Collection

The information on the scale development stage of the research is discussed under the heading of *Phase 1*, and the information on the examination of teachers' union expectations in terms of various variables is discussed under the heading of *Phase 2*.

#### 2.2.1.Phase 1

In the quantitative dimension of the research, the necessary item pool for the measurement tool developed based on the literature was created by taking expert opinions. After the necessary corrections were made in line with the expert opinions, the pre-testing phase was started. Face-to-face interviews were conducted with 11 participants, 6 of whom were female and 5 of whom were male. As a result, the first part of the measurement tool, which consists of two parts, includes personal information and the second part includes questions aimed at collecting data for its analysis.

After the necessary corrections were made in line with the expert opinions, the pretest phase was started. Face-to-face interviews were conducted with 12 participants in the pre-test phase. In line with the feedback obtained from the face-to-face interviews, corrections and changes were made to ensure comprehensibility in the wording of the items. As a result, the first part of the candidate measurement tool, which consists of two parts, includes personal information and the second part includes questions aimed at collecting data to determine teachers' union expectations. In the research, the analysis started with 39 items, but a theoretically meaningful 3-factor 21-item scale with an eigenvalue of 1 and above was revealed.

#### 2.2.2.Phase 2

The most remarkable source for learning the characteristics of individuals, the behaviors they express, the ideas or opinions they carry and the attitudes they have is their own written and verbal expressions (Balcı, 2001). The scale, which is one of the many techniques developed in this context, is considered to be very effective in gathering information about the "stimulation, reflection, attitudes, thoughts and experiences" revealed by the behavioral codes of the people who are the subject of the study that cannot be observed by others (Özoğlu, 1992). The scale is an important data collection tool used to have objective information on many issues related to society (Gökçe, 2004). This data collection tool consists of questions asked directly to the target group within the scope of the research, without the individual participation of the researcher (Ekiz, 2003).

In the scale, "face validity is obtained by bringing together the ideas and opinions of the researcher, himself/herself, his/her immediate environment, different individuals who are not experts on the subject under investigation, and the respondents who participated in the pilot study to determine whether a scale and/or test measures the construct under investigation (Şencan, 2005). In this study, the scale questions were prepared by the researcher. The main condition for a measurement result to be valid is its reliability (Karasar, 2007). Scale reliability means understanding how accurately a measurement tool measures or does not measure a characteristic that is intended to be measured (Hovardaoğlu, 2000). Mostly, for a scale to be reliable, it should measure the characteristic to be measured consistently and validly and should produce results that can be obtained again (Özdamar, 2004).

The content validity of the measurement tool was based on expert opinions, construct validity was based on exploratory and confirmatory factor analyses, and the reliability of the measurement tool and its sub-dimensions was ensured according to the range of appropriateness of Cronbach's Alpha Reliability Coefficient.

In this study, the test-retest method was used to measure reliability. In order to estimate reliability with this method, another version of a scale form should be available with different locations. After these two seemingly different forms are applied to the same group, the correlation between the two results is examined. Both forms can be administered consecutively or at certain time intervals (Douglas, 2002, p.336). Thus, reliability is achieved.

#### 2.3. Data Analysis

Exploratory factor analysis, mean, standard deviation, normality values and reliability analyses were performed with IBM SPSS Statistic 26.0 package program during the development phase of the TEOS in the study. Confirmatory factor analysis was performed with the Lavaan package in the R program (R Core Team, 2018; Rosseel, 2012). Kaiser-Meyer-Olkin sample suitability test was used to test the sample suitability for exploratory factor analysis, and Barlett's test of sphericity was used to test the suitability for factor analysis. Since the maximum likelihood method is recommended for social sciences for exploratory factor analysis (Fabrigar et al., 1999; Nunnally & Bernstein, 1994; Worthington & Whittaker, 2006), this method was applied. Among the rotation methods for social sciences, promax, which is oblique rotation, was preferred for cases where factors are related to each other (Fabrigar et al., 1999; Ford, MacCallum, & Tait, 1986; Gorsuch, 1997).

Eigenvalues and scree plot were taken into consideration to determine the number of factors (Goldberg & Velicer, 2006; Kline, 2013; Worthington & Whittaker, 2006). While deciding on the number of items to be included in the factors, the following conditions were taken into consideration: the minimum factor loading should be .32 (Worthington & Whittaker, 2006), the items should not be overlapping, there should be at least 3 items under each factor, the reliability should be sufficient, and finally, it should be theoretically significant (Costello & Osborne, 2005; DeVellis, 2012; Fabrigar et al., 1999; Gorsuch, 1997; Kline, 2013; Norris & Lecavalier, 2010; Tabachnick & Fidell, 2007).

In the second level of the study, the data were collected through the TEOS developed by the researcher. The analyses were carried out on the data obtained from 349 participants after the missing and extreme values were removed from the data set. In the analysis of the quantitative data of the study, independent groups T-test was applied for the analysis of the change in teachers' expectations of union organization according to gender and union membership status, and one-way analysis of variance was applied for the analysis of the change according to age.

## 3. Findings

The information on the scale development stage of the research is discussed under the heading of *Phase 1*, and the information on the examination of teachers' union expectations in terms of various variables is discussed under the heading of *Phase 2*.

## 3.1.Phase 1

Under this heading, information on exploratory and confirmatory factor analyses and reliability studies are given.

## 3.1.1. Results of Exploratory Factor R Analysis of TEOS

Exploratory factor analysis was conducted to determine the factor structure of the TEOS. Kaiser-Mayer-Olkin (KMO) sample suitability test was performed to determine the sample suitability. The KMO value was calculated as .92. In the exploratory factor analysis phase, the analyses were conducted with 537 participants and it was determined that this number was sufficient (Tabachnick & Fidell, 2007; Worthington & Whittaker, 2006). Barlett's test of sphericity ( $x^2$  =7101,432; p<.001) confirmed that the data were suitable for factorization. Promax rotation technique and Maximum Likelihood method were used for

factor analysis (Fabrigar et al., 1999). The analysis started with 39 items, but 14 items that did not meet the specified criteria (factor loading above .40, no overlap and theoretically significant) were removed from the scale. Line graph and eigenvalues were taken into consideration when determining the number of factors (Goldberg & Velicer, 2006; Kline, 2013; Worthington & Whittaker, 2006). As a result, a three-factor structure with 25 items was identified. Detailed information about this scale is presented in Table 3.

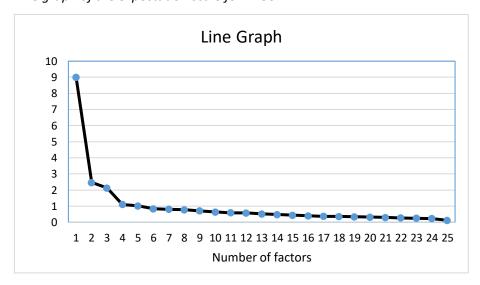
**Table 3.**Factor Load, Item Total R and Descriptive Statistics of TEOS (N=537)

Factors and items	Variance explained (%)	x	Ss	Item total r	Factor loading
Labor Relations dimension					
15. The union fights for the improvement of		4.64	0.65	0.67	0.94
the health services received by employees	_	4.04	0.03	0.07	
32. The union defends the legal rights of its		4.70	0.00	0.67	0.87
members		4.70	0.60	0.67	
23. That the union ensures fairness in wage		4.60	0.66	0.65	0.83
distribution among education workers		4.60	0.66	0.65	
14. The union fights for higher wages	= -	4.59	0.69	0.59	0.80
27. The union acts as an organization of					0.68
professional unity and solidarity		4.49	0.71	0.70	0.00
18. The union contributes to solving					0.61
workplace disciplinary problems		4.50	0.81	0.61	0.01
39. Ensure that the union takes merit as the					0.61
basis for appointment, relocation and	35.99	4.58	0.83	0.47	0.01
promotion in office		4.56	0.83	0.47	
25. For the union to support employees in					0.56
		1 1E	0.74	0.60	0.50
difficult times such as death, natural		4.45	0.74	0.68	
disasters, etc.					0.54
38. The union organizes rallies, meetings,		3.99	1.06	0.51	0.54
demonstrations, etc. to create public opinion					0.52
28. The union organizes training activities for		4.47	0.76	0.69	0.52
the development of its members					0.52
37. The union is active on social media		4.19	0.90	0.64	0.52
platforms					
19. The union should enable teachers to play					0.50
a more active role in participating in school		4.22	1.04	0.54	
management decisions					
Socio-Psychological and Economic dimension					
29. The union should provide its members					0.82
with facilities such as locals, camps, vacations,		4.06	1.06	0.60	
etc.					
30. The union should provide opportunities					0.71
such as courses, scholarships, etc. for the		4.00	1.11	0.56	
education of the relatives of its members	- 9.85 <del>-</del>				
12. The union should provide its members	2.00				0.71
with opportunities such as shopping and		3.52	1.39	0.39	
discount cards					
20. The union organizes concerts,		4.02	1.06	0.65	0.57
entertainment, etc. for unity and solidarity	<del>_</del>	2	1.00	0.03	
36. The union should have media organs such		3.33	1.24	0.43	0.45

as newspapers, television, etc.					
10. The union establish and operate					0.43
cooperatives (business, consumption and		2.65	1.31	0.21	
housing, etc.)					
24. The union to stand by the employees on					0.42
good occasions such as weddings, weddings,		3.98	1.04	0.54	
etc.					
31. The union organizes events such as					0,41
panels, conferences, etc. for people other		4	1.01	0.49	
than its members					
Political and Ideological dimension					
2. The union expresses an opinion on any		2.03	1.26	0.10	0.78
political agenda		2.03	1.20	0.10	
3. The union does not adopt any ideological		1.05	1 17	0.11	0.74
stance	8,52	1.95	1.17	0.11	
9. The union should be politically neutral		4.39	1.01	-0.05	-0.61
1. The trade union working as a unit affiliated		1.20	0.57	0.00	0.43
to any party		1.26	0.57	-0.06	
Total	54.37				

When the table is examined, a structure with three factors, namely the labor relations dimension, the socio-psychological and economic dimension, and the political and ideological dimension, with 25 items, explaining 54 percent of the total variance, was revealed. The factor loadings of the items were between .41 and .98. In the literature, it is stated that .40 and above is a good factor loading. (Pallant, 2007). Accordingly, it can be said that the factor loadings of the items are appropriate. The line graph of the scale is given in Figure 1.

**Figure 1.**Line graph of the expectation scale for TEOS



When examining the scree plot, three factors were retained based on having eigenvalues of 1 or higher and being located before the 'elbow' point, where the plot's slope sharply changes. (McCroskey & Young, 1979; Pett, Lackey, & Sullivan, 2003; Preacher & MacCallum, 2003).

## 3.1.2. Confirmatory Factor Analysis Results of TEOS

Confirmatory factor analyses were conducted to test the three-factor 25-item structure obtained as a result of the exploratory factor analysis of the TEOS. Before the confirmatory

factor analysis, Mahanobolis distance values of the data were examined and it was checked whether the normality condition was met. As a result of the distance values analysis, 11 participants were removed from the data set and the analysis was performed on a total of 349 participants. It was determined that the items were within normal values. In the confirmatory factor analysis, it was seen that the goodness of fit values were below acceptable values. Therefore, items 11, 23, 24 and 25 were removed from the scale. In addition, error covariance was applied between items 18 and 22 and items 5 and 6. The values obtained after this stage were as follows: Chi-square/degree of freedom: 23; CFI .93; TLI .92; NFI .90; IFI .93; RMSEA .06; SRMR .06. It can be said that these values are acceptable values (Hu & Bentler, 1999; Kline, 2005). The factor loadings of the TEOS are shown in Table 4:

**Table 4.**Results of Factor Loadings of TEOS (n=349)

		-				
Factors	Items	s. Factor Ioad	sh	Z	р	R²
Political and Ideological dimension	SEN1	0.53	0.03	9.68	.001	0.29
	SEN2	0.81	0.06	15.64	.001	0.66
	SEN3	0.83	0.05	16.12	.001	0.69
	SEN4	-0.49	0.05	-8.93	.001	0.24
Socio-Psychological and Economic dimension	SEN5	0.44	0.07	8.20	.001	0.20
	SEN6	0.77	0.06	16.43	.001	0.59
	SEN7	0.63	0.04	12.42	.001	0.39
	SEN8	0.64	0.05	12.69	.001	0.41
	SEN9	0.88	0.05	19.91	.001	0.77
	SEN10	0.79	0.05	16.89	.001	0.62
	SEN12	0.47	0.06	8.87	.001	0.22
Work Relations dimension	SEN13	0.76	0.03	16.37	.001	0.57
	SEN14	0.83	0.02	18.69	.001	0.69
	SEN15	0.83	0.02	18.71	.001	0.69
	SEN16	0.65	0.03	13.14	.001	0.41
	SEN17	0.41	0.05	7.64	.001	0.17
	SEN18	0.82	0.02	18.10	.001	0.66
	SEN19	0.71	0.03	14.71	.001	0.49
	SEN20	0.74	0.02	15.86	.001	0.55
	SEN21	0.55	0.03	10.73	.001	0.30
	SEN22	0.69	0.02	14.12	.001	0.47

When the table is examined, it is seen that the relationship between the items and the general structure is significant. The factor loadings of the items in the scale are between .41 and .88. It can be said that convergent validity is achieved for the scale (Peterson, 2000). In addition, the R² values of the TEOS were found to be high (Cohen, 1988).

The measurement invariance of the TEOS was tested on the basis of gender. In the study, 201 female and 139 male participants were included in the test. The results of the tested invariance are shown in Table 5.

**Table 5.** *Invariance Fit Coefficients of the* TEOS

	χ2	sd	р	RMSEA	CFI	TLI	ΔCFI	ΔRMSEA
Types of Invariance								
Structural invariance	706.731	368	.001	.073	.905	.891	-	-
Metric invariance	744.527	386	.001	.073	.899	.890	.006	.001
Scalar invariance	798.330	404	.001	.075	.889	.885	.001	.002
Strict invariance	959.219	427	.002	.085	.850	.853	.03	.01

As seen in the table, although the chi-square value is significant, it is concluded that the structural invariance values are acceptable. In metric invariance, it is seen that the values are acceptable but the chi-square value is significant. In scale invariance, it was determined that the difference of metric invariance  $\Delta$ CFI and  $\Delta$ RMSEA was less than .01, that is, scale invariance was achieved in the context of gender. Although  $\Delta$ CFI is slightly above the limit in strict invariance, it can be said that the scale generally provides measurement invariance (Kline, 2016).

Reliability analyses were conducted again on the final version of the scale. The findings of these analyses are given in Table 6.

**Table 6.** *Reliability Analysis Results* 

Factors	McDonald's ω	Cronbach's α	Guttman's λ6
Political and Ideological	0.792	0.755	0.724
Socio-Psychological and	0.850	0.843	0.843
Economic	0.850	0.843	0.843
Business Relations	0.885	0.884	0.911
General	0.803	0.847	0.916

As seen in the table, the McDonald Omega values of the scale are between .79 and .89, the Cronbach Alpha values are between .75 and .88 and finally the Guttman Lamda values are between .72 and .92. Accordingly, it can be said that the scale reveals a reliable structure.

In the study, it was aimed to test the test-retest reliability. For this purpose, the final version of the scale was administered to 71 teachers with an interval of 21 days and the correlation between the tests was analyzed. Accordingly, it was found that the correlation between the tests was .89, that is, the test-retest reliability of the scale was achieved.

## 3.2.Phase 2

In this section, descriptive findings based on TEOS are discussed.

## 3.2.1.Descriptive Findings Related to Variables

In the study, it was aimed to examine the possible variability relations of teachers' union organization expectations in the context of gender, age and union membership status.

#### Gender

In the study, the change in teachers' expectations of union organization according to gender was examined. In this framework, independent groups t-test was applied to determine whether the trainees' views differed according to gender. The mean scores, standard deviations and t test results are given in Table 7. Variances are equal in the tests.

 Table 7.

 Change in Expectations According to Gender T-Test Results

Gender	N	Average	Ss	Sh	t	Sd	р	d
Female	210	80.238	8.858	0.611	1.688	347	0.092	-0.185
Male	139	81.942	9.776	0.829				

As seen in the table, TEOS does not vary according to gender (t (347) =-1.688, p>.05).

## **Union Membership**

The change in the level of teachers' willingness to unionize according to whether they are a union member or not was examined. The results of the t-test for teachers' willingness to unionize are given in Table 8. Variances are equal.

 Table 8.

 T-test Results of Teachers' Willingness to Unionize

Union Membership	N	Average	Ss	Sh	t	Sd	р	d
Yes	269	81.019	9.558	0.583	0.376	347	0.707	0.048
No	80	80.575	8.218	0.919				

As seen in the table, teachers' expectations for union organization do not change according to whether they are a union member or not (t (347) =0.376, p>.05).

#### Age

In the study, the change in teachers' expectations of union organization according to age variable was examined. Results of fne-way variance analysis, means and standard deviations are given in Table 9. Variances are equal.

**Table 9.**Results of One-Way Variance Analysis

Years of seniority	Average	SS	N	KT	Sd	КО	F	р	η²
11-15	80.165	8.861	91	711.682	5	142.336	1.677	0.140	0.024
1-5	82.828	8.640	29						
16-20	78.921	9.322	76						
21-25	81.038	8.309	53						
26+	82.423	10.863	26						
6-10	82.527	9.727	74						

As seen in the table, it was determined that there was no significant difference in teachers' expectations for union organization according to age F(5, 343)= 1.677 , p> .05,  $\eta^2$ = 0.024.

## 4. Conclusion & Discussion

In the first of the study, the "Teachers' Expectation of Union Organization Scale" was developed. The development of the scale started with 71 items at the question pool stage, but at the end of the expert opinion, qualitative interviews and preliminary evaluation process, it was deemed appropriate to start exploratory factor analysis with 39 items.

Kaiser-Mayer-Olkin (KMO) .92 and Barlett's test of sphericity ( $x^2$  =7101,432; p<.001) were applied to test the suitability for exploratory factor analysis, and it was concluded that

the data were suitable for factorization and the analyses were conducted with 537 participants. The analysis started with 39 items, but 14 items were removed from the scale as a result of factor loading, overlapping and theoretical insignificance. At this stage, a theoretically meaningful structure with 25 items explaining 54.37% of the total variance, factor loadings between .41 and .98, 3 factors and eigenvalues above 1.00 was obtained.

In the confirmatory factor analysis stage, 11 people were removed from the data set by examining the distance values and the analysis continued with 349 people. As a result of the analysis, four items were removed from the scale because the goodness of fit values were below acceptable values.

As a result of confirmatory factor analyses, Chi-square degrees of freedom is 23; Comparative Fit Index (CFI) .93; Tucker Lewis Index TLI .92; Non-Normed Fit Index (NNFI) .92; Bollen Fit Index (IFI) .93; Root Mean Square Error of Estimation (RMSEA) .06; Root Mean Square Standardized Error Squares (SRMR) .06 and Goodness of Fit Index (GFI) .92. As a result, a structure with 17 items and 3 factors with factor loadings ranging between .41 and .88 was revealed.

As a result of the reliability analyses, the McDonald Omega value of the general scale was .80, Cronbach's Alpha value was .85 and Guttman Lamda value was .92. According to these values, it was concluded that the scale revealed a reliable structure.

Uğurlu and Arslan (2019) grouped union organisation in three different dimensions under the names of "personal and professional contribution, personal and professional interest and union interest" and argued that union organisation is more of a "contribution, interest and gain" organisation. When the results of this study are compared with the results of Uğurlu and Arslan's (2019) study, it can be stated that they overlap in the socio-psychological and economic dimension and the labour relations dimension; however, they differ in the sense that the political and ideological dimension is also an important variable. In this context, the political and ideological dimension results of the study support Erdinç's (2014) conclusion that 'the reality that professional organisation has a political dimension'. In addition, Fisher; Schoenfeldt & Shaw's (1999) inference that 'employees tend to join professional organisations in order to feel socially and psychologically secure and to keep their individual psychological contracts legally secured' is also presented in this study as teachers' union expectations.

In the second phase of the study, the possible change relations of teachers' expectations in terms of gender, union membership status and age variables were examined. When the t-test results of union organizing expectations in terms of gender and union membership status were examined, no significant relationship was found. Similarly, when one-way analysis of variance results were evaluated in the context of age variable, no significant relationship was found between union organizing expectations and age variable.

#### 5. Suggestions

Based on the results of the study, it is possible to list the recommendations for research and practice as follows:

- It is recommended that regression analysis studies be conducted to determine the variables affecting teachers' expectations of union organization.
- It is observed that the studies in the literature are mostly correlational survey model studies. Along with these studies, it is recommended to conduct qualitative research to obtain in-depth information from the participants.

 This research was conducted in Tepebaşı district of Eskişehir province. It is recommended that the research should be repeated in different populations and the results should be compared.

## **Conflict of Interest Statement**

The author(s) declared no potential conflicts of interest regarding the research, authorship and/or publication of this article.

## **Support/Financing Information**

The author(s) received no financial support for the research, authorship and/or publication of this article.

## **Ethics Committee Decision**

Ethical permission was received for this research from Anadolu University (on 03/10/2023-597977).

## **Artificial Intelligence Usage**

The author did not use any artificial intelligence tools for the research, authorship, and/or publication of this article.

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