# Öğrencilerin Öğretmenlerine Güven Düzeyleri, Okul Tükenmişlikleri İle Akademik Başarılarının Yapısal Eşitlik Modellemesiyle İncelenmesi [*]

## Servet ATİK[1], Niyazi ÖZER[2], Nazife KARADAĞ[3][**]

[1]İnönü Üniversitesi, Eğitim Fakültesi, Eğitim Yönetimi Anabilim Dalı
[2]İnönü Üniversitesi, Eğitim Fakültesi, Eğitim Yönetimi Anabilim Dalı
[3]Adıyaman Üniversitesi, Eğitim Fakültesi, Eğitim Yönetimi Anabilim Dalı

| MAKALE BİLGİ | ÖZET |
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| *Makale Tarihçesi*:<br>Alındı<br>09.08.2018<br>Düzeltilmiş hali<br>alındı 21.12.2018<br>Kabul edildi<br>24.12.2018<br>Çevrimiçi yayınlandı<br>31.12.2018 | Bu araştırma ile lise öğrencilerinin öğretmenlere güven düzeyleri, okul tükenmişlikleri ve akademik başarıları arasındaki ilişki yapısal eşitlik modeli kullanılarak çözümlenmesi amaçlanmıştır. Araştırmanın çalışma grubunu Adıyaman il merkezindeki liselerde öğrenim gören öğrenciler oluşturmaktadır. Araştırma kapsamında Ortaöğretim Öğrencileri İçin Okul Tükenmişliği Ölçeği (OOTÖ)'nin "Okula İlgi Kaybı" ile "Öğretmen Tutumlarından Bunalma ve Sıkılma" boyutları ile "Öğretmenlere Güven Ölçeği" kullanılmıştır. Araştırma sonucunda öğretmenlere güvenin; okul tükenmişliğini doğrudan, akademik başarıyı ise hem doğrudan hem de dolaylı etkilediği belirlenmiştir. Araştırmada ayrıca okul tükenmişliğinin akademik başarıyı doğrudan etkilediği sonucu elde edilmiştir. Yapılan analizler sonucunda öğretmenlere güvenin okul tükenmişliğindeki varyansın yaklaşık %18'ini, öğretmenlere güven ve okul tükenmişliği değişkenleri birlikte akademik başarıdaki varyansın yaklaşık %8'ini açıkladığı belirlenmiştir. Araştırmada elde edilen sonuçlar değerlendirildiğinde; öğrencilerin öğretmenlerine güven düzeylerinin yükselmesinin, yaşayacakları okul tükenmişliğini azaltacağı ve akademik başarılarına da olumlu yönde katkı sağlayacağı söylenebilir. Bu araştırma ile öğretmen-öğrenci ilişkilerinin önemi hem kuramsal hem de yapılan analizlerle istatistiksel olarak ortaya konulmuştur<br><br>© 2018 AUJES. Tüm hakları saklıdır<br>Anahtar Kelimeler: Öğretmenlere güven, okul tükenmişliği, akademik başarı, öğrenci |

## Geniş Özet

### Amaç

Alan yazın incelendiğinde öğretmenlere güven, okul tükenmişliği ve akademik başarı arasındaki ilişkileri Yapısal Eşitlik Modellemesi (YEM) ile inceleyen sınırlı sayıda çalışmanın olduğu belirlenmiştir. Bu kapsamda bu ve benzeri araştırmaların, öğrencilerin akademik başarıların yükselmesine, eğitsel uygulamalarda başarıya ulaşmasına, okul etkiliğinin artmasına, öğretmen-öğrenci ilişkilerinin yapılandırılmasına, öğrenci tükenmişliğinin azalmasına, öğrencilerin okula

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bağlılıklarının arttırılmasına sınırlı da olsa katkı yapacağı düşünülmektedir. Bu kapsamda araştırmanın hipotezleri şöyle ifade edilmiştir:

H1. Öğretmenlere güven, okul tükenmişliğinin anlamlı bir yordayıcısıdır.

H2. Öğretmenlere güven akademik başarının anlamlı bir yordayıcısıdır.

H3. Okul tükenmişliği akademik başarının anlamlı bir yordayıcısıdır.

## Yöntem

Bu araştırma lise öğrencilerinin öğretmenlerine güven düzeyleri, okul tükenmişlikleri ve akademik başarıları arasındaki ilişkiyi inceleyen ilişkisel bir araştırmadır. İlişkisel araştırmalarda değişkenler arasındaki ilişki incelenir ve bu ilişkiden yola çıkarak değişkenlerden birinin bilinen bir değerinden diğer bir değişkenin bilinmeyen değeri tahmin edilir (Fraenkel, Wallen ve Hyun, 2012). Lise öğrencilerinin öğretmenlerine güven düzeyleri, okul tükenmişlikleri ve akademik başarıları arasındaki ilişkiler yapısal eşitlik modellemesi kullanılarak çözümlenmiştir. Yapısal Eşitlik Modellemesi (YEM) pek çok değişkeni bir arada değerlendirmeye olanak tanıyan; değişkenler arası nedensellik ilişkilerinin öngörüldüğü modellemelerin kurulabilmesini, özelleştirilen modellerinin birbiri üzerine etkilerinin toplu halde değerlendirilebilmesini ve kurulan modellerde değişkenler arası ilişkilerin modele ilişkin hesaplanan kısmi parametrelerle değerlendirilmesini sağlayan (Boysan, 2006) istatistiksel bir tekniktir (Byrne, 2010).

Araştırmanın çalışma grubu 2012-2013 eğitim-öğretim yılında Adıyaman il merkezindeki liselerde öğrenim gören ve araştırmaya gönüllü olarak katılan 678 öğrenciden oluşmaktadır. Bu araştırmada Aypay (2012) tarafından geliştirilen Ortaöğretim Öğrencileri İçin Okul Tükenmişliği Ölçeği (OOTÖ)'nin *"Okula İlgi Kaybı"* ile *"Öğretmen Tutumlarından Bunalma ve Sıkılma"* boyutları/alt ölçekleri, Özer ve Tül (2014) tarafından Türk Kültürü'ne ve Türkçe'ye uyarlanan *"Öğretmenlere Güven Ölçeği"* kullanılmıştır. Öğrencilerin akademik başarıları 0-100 aralığında değişen genel not ortalamaları kullanılarak elde edilen başarı değişkeni ile değerlendirilmiştir.

Ortaöğretim Öğrencileri İçin Okul Tükenmişliği Ölçeği (OOTÖ); Okula İlgi Kaybı, Ders çalışmaktan Tükenme, Aileden kaynaklı Tükenmişlik, Ödev Yapmaktan Tükenme, Öğretmen Tutumlarından Bunalma ve Sıkılma, Dinlenme ve Eğlenme Gereksinimi, Okulda Yetersizlik olmak üzere toplam yedi boyuttan/alt ölçekten oluşmaktadır. *"Okula İlgi Kaybı"* 6 maddeden ve *"Öğretmen Tutumlarından Bunalma ve Sıkılma"* 4 maddeden oluşmaktadır. Bu araştırmada ölçeğin sadece iki boyutu kullanıldığından Doğrulayıcı Faktör Analizi (DFA) Yapılmıştır. Yapılan Doğrulayıcı Faktör Analizine ilişkin uyum iyiliği değerleri şöyledir: $X^2$=80.345, sd=30, $X^2$/sd =2.678, GFI=0.97, AGFI=0.95, NNFI/TLI=0.96, IFI=0.96, CFI= 0.97, RMSEA=0.050, RMR=0.057, SRMR=0.032. Bu uygulamada *"Okula İlgi Kaybı"ve "Öğretmen Tutumlarından Bunalma ve Sıkılma"* ölçeklerinin Cronbach alfa güvenirlik katsayısı sırasıyla ".80" ve ".75"tir.

*"Öğretmenlere Güven Ölçeği"* Özer ve Tül (2014) tarafından Türk Kültürü'ne ve Türkçe'ye uyarlanan, 12 madde ve tek boyuttan oluşmaktadır. Ölçeğin bu araştırma için Doğrulayıcı Faktör Analizine ilişkin uyum iyiliği değerleri şöyledir: $X^2$=136.086,sd=51, $X^2$/sd=2.668, GFI=0.96, AGFI=0.95, NNFI/TLI=0.96, IFI=0.97, CFI= 0.97, RMSEA=0.050, RMR=0.050, SRMR=0.029. Bu uygulamada *"Öğretmenlere Güven Ölçeği"* ölçeğinin Cronbach alfa güvenirlik katsayısı sırasıyla ".89"dur.

Araştırmada lise öğrencilerinin okul tükenmişliği, öğretmenlerine güven düzeyleri ve akademik başarıları arasındaki ilişki yapısal eşitlik modellemesi kullanılarak çözümlenmiştir. Bu kapsamda oluşturulan modelin sınanması için YEM'de kullanılan bir yöntem olan Path Analizi yöntemi kullanılmıştır.

### Bulgular

Bu araştırma kapsamında lise öğrencilerinin akademik başarıları üzerinde etkisi olan öğretmenlere güven ve okul tükenmişliği arasındaki ilişkiler ve bunların akademik başarı üzerindeki etkisi yapısal eşitlik modellemesi ile incelenmiştir. Kuramsal temelli oluşturulan model doğrulanmış ve yapılan analizler sonucunda elde edilen uyum iyiliği değerlerinin modelin kabul edilebilir olduğu yönünde kanıtlar bulgulanmıştır. Araştırma sonucunda;

- Öğretmene güven ile okul tükenmişliği arasında negatif yönlü orta düzeyde,
- Öğretmene güven ile başarı arasında pozitif yönlü düşük düzeyde,
- Okul tükenmişliği ile başarı arasında negatif yönlü düşük düzeyde ilişkinin olduğu belirlenmiştir.

### Sonuç ve Tartışma

Araştırmanın birinci hipotezi "öğretmenlere güven okul tükenmişliğinin anlamlı bir yordayıcısıdır" biçiminde ifade edilmiştir. Yapılan analizler sonucunda hipotez kabul edilmiştir. Ayrıca öğretmene güven (OG) okul tükenmişliğindeki (OT) varyansın yaklaşık %18'ini açıklamaktadır.

Okullarda öğretmen ve öğrenci arasındaki güven; uzun sürede oluşan ilişki temelli bir kavramdır (Mitchell, Kensler ve Tschannen-Moran, 2016). Öğrencinin öğretmenine duyduğu güven öğrencinin okulla ilgili birçok öğrenmesinde etkili olduğu söylenebilir (Hoy, Gage, ve Tarter, 2006; Hoy, ve Tschannen-Moran, 2007). Öğrenci ve öğretmenler arasında güvenin inşa edilmesi için öğretmenler ve öğrenciler arasında okul ve sınıf içinde ortak yaşantı ve ilişkilerin varlığına ihtiyaç duyulduğu söylenebilir.

Öğrencilerin tükenmişliğinin okulla ilgili etkinliklerden çabuk yorulma, okula ve okul etkinliklerini karşı olumsuz tutum geliştirme ve yetersizlik algısının ortaya çıkması, sinizm, düşük motivasyon, öz denetimde düşüş, depresyon, düşük katılım ve başarı, gibi bir takım olumsuz sonuçlarının olabileceği söylenebilir (Aypay, 2018b; Cooper, Seibert, May, Fitzgerald

& Fincham, 2017; Fiorilli, De Stasio, Di Chiacchio, Pepe & Salmela-Aro,2017; Lee, Puig, Kim, Shin, Lee ve Lee, 2010; Salmela-Aro, Read, Minkkinen, Kinnunen & Rimpelä, 2018).

Öğrencilerin yaşadığı veya yaşayacağı okul tükenmişliğinin nedenleri: aşırı çalışmaya yönelik talepler, kendini yetersiz görme ve hissetme, öğrencinin çevresinin öğrenciden beklentileri, başka öğrencilerle kıyas, okul kaynaklı stres ve baskı, ülke düzeyinde uygulanan yarışmaya dayalı sınavlar (Aypay, 2012,2018a; Çapulcuoğlu, 2012; Kutsal ve Bilge, 2012; Schaufeli, Martínez, Pinto, Salanova ve Bakker, 2002;Seçer ve Gençdoğan, 2012), sınav ve programlardaki sık değişiklikler ve öğrencilerin bu değişimlerden kaynaklı olarak kaygı ve stres düzeylerinin yükselmesi, okullarda yürütülen yoğun programlar ve haftalık ders sayılarının fazlalığı olarak ifade edilebilir.

Araştırmanın ikinci hipotezi "öğretmenlere güven akademik başarının anlamlı bir yordayıcısıdır" biçiminde ifade edilmiştir. Yapılan analizler sonucunda hipotez kabul edilmiştir. Ayrıca öğretmene güven hem doğrudan hem de okul tükenmişliği üzerinden dolaylı olarak akademik başarıyı etkilediği belirlenmiştir.

Güven eğitim örgütleri gibi kendine has yapısı olan örgütlerdeki insan ilişkilerinin başlatılıp devam ettirilmesinde önemli sosyal sermaye unsurlarından biri olduğu ifade edilebilir. Bu açıdan bakıldığında eğitim örgütlerinin insan kaynaklarından olan öğrenciler ve öğretmenler arasında güvenin, öğretmen ve öğrenci arasındaki ilişkide önemli ve kritik bir rol oynadığı ifade edilebilir (Özer, Demirtaş, Üstüner ve Cömert, 2006). Öğretmenler, öğrencilerin okulla ilgili birtakım çıktılara ulaşmasında (Balcı, 2014) ve öğrencilerin hayatlarında önemli etkileri olan kişiler olarak ifade edilebilir (Oktay, 1995). Öğretmen ve öğrenci arasındaki ilişkilerin sosyal, duyuşsal, davranışsal ve akademik açıdan birçok sonucu vardır (Hamre & Pianta, 2001; Roeser, Eccles, & Sameroff, 2000). Bu bağlamda öğretmen ve öğrenci(ler) arasında kurulan etkileşim sonucunda öğrenci(ler)de öğretmen(ler)e karşı güven oluşur ve yükselir. Öğretmen ve öğrenci arasındaki güvene dayalı ilişkiler öğrencilerin eğitim çıktılarına ulaşmalarını, akademik başarılarını (Goddard, Tschannen-Moran ve Hoy, 2001; Kochanek, 2005; Lee, 2007; Van Maele, & Van Houtte, 2014), öğrencinin öğrenme sürecindeki çabalarını arttıran, sınıf yönetimini kolaylaştıran, öğrencinin güdülenmesini (Tschannen-Moran, 2014), okul yaşamını ve okul kültürünü (Dewulf, van Braak & Van Houtte, 2017) etkileyen bir kavramdır.

Bu araştırma ile öğrencilerin okul tükenmişliklerinin akademik başarılarını doğrudan ve negatif yönde etkilediği sonucuna ulaşılmıştır. Okul tükenmişliği beraberinde; devamsızlık artışı, okul terki, okul etkinliklerine katılmama ya da bu etkinliklerden kaçma, ev ödevi ve görevlerini erteleme ya da yapmama, okula gitmek istememe, öğretmenlere ve öğrenmeye karşı olumsuz tutum geliştirme, okulun açık olduğu günlerin sabahında uyanmak istemem ya da uyanmada zorluk yaşama, öz yeterlikte düşüş, arkadaş ilişkilerinde sorun yaşama, okula yabancılaşma, okula karşı olumsuz tutum gibi bir çok olumsuz sonucu getirmektedir (Aypay, 2012-2018b; Çapulcuoğlu ve Gündüz, 2013; Kiuru, Pietikäinen ve Jokela, 2008; Loughrey ve

Harris, 1992; Lee, Puig, Kim, Shin, Lee ve Lee, 2010; Kutsal, 2009; Sorkkila, Aunola, Salmela-Aro, Tolvanen & Ryba, 2018, Salmela-Aro, Savolainen, ve Holopainen, 2009; Yang ve Farn, 2005). Bu olumsuzluklardan biri de öğrencinin akademik başarısının düşmesidir (Wang, Kiuru, Degol & Salmela-Aro, 2018).

**Öneriler**

Öğrencilerin akademik başarıları üzerinde etkisi olan okul tükenmişliğinin önlenebilmesi ve azaltılabilmesi için şu öneriler geliştirilebilir:

- Okullardaki haftalık ders programları gözden geçirilerek olanaklar ölçüsünde ders saatlerinde azaltımaya gidilmelidir.
- Okullarda öğrencilerde stres yaratan okulla ilgili durumlar tespit edilmeli ve bu durumlar için tedbirler alınmalıdır.
- Okullarda öğrencilerin başarılarını ve motivasyonlarını destekleyeci yaparak-yaşayarak öğrenme faaliyetleri sağlanmalıdır.
- Eğitsel süreçlerde bireysel farklılıklar dikkate alınmalıdır.
- Aileler öğrencilerin okulla ilgili görev ve sosrumluluklarında öğrencilere destek olmalı ve aileler bu konuda bilinçlendirilmelidir.
- Öğrencilerin okulla ilgili işleyiş ve süreçlerde etkinlikleri arttırılmalıdır.
- Okullarda öğrencilerin aktif katılabilecekleri sosyal faaliyetler arttırılmalı ve bunlara öğrenci katılımını arttırıcı düzenlemeler yapılmalıdır.

# Investigation of Students Trust Levels to Teachers, School Burnout and Academic Achievement with Structural Equation Modeling[*]

## Servet ATİK[1], Niyazi ÖZER[2], Nazife KARADAĞ[3][**]

[1]İnönü University, Faculty of Education, Department of Educational Administration.
[2]İnönü University,  Faculty of Education, Department of Educational Administration.
[3]Adıyaman University,  Faculty of Education, Department of Educational Administration.

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ABSTRACT

The aim of this research is to analyze the relationship between high school students' levels of trust in teachers, school burnout and academic achievement by using the structural equation model. The study group consisted of students studying in high schools in the city of Adiyaman. Within the scope of the study, the aspects of "Loss of Interest in School" and "Getting tired and bored by Teacher Attitudes" in "School Burnout Scale" (SBS), and "Trust in Teachers Scale" were used for Secondary School Students. It was determined as a result of the study that trust in teachers affected school burnout directly; however, academic achievement affected it both directly and indirectly. In addition, it was concluded that school burnout directly affected academic achievement. As a result of the analyzes, it was determined that trust in teachers accounted for approximately 18% of the variance in school burnout, trust in teachers and school burnout variables together accounted for about 8% of the variance in academic achievement. When the results of the study were evaluated; It can be said that increasing the trust level of the students in their teachers will decrease the school burnout they will experience and contribute to their academic achievement positively. With this research; the importance of teacher-student relations has been statistically revealed not only in a theoretical way but by the analyzes made as well.

## Introduction

Like every institution; schools, with their own unique structure and functioning, have their characteristic objectives (Saglam, 2010). One of the most important objectives of schools is to increase the academic achievement of students. Students' academic achievement is influenced by many variables. Students' school burnout (Atik, 2016; Demir and Gencdogan, 2017; Galbraith and Merrill, 2014; Kutsal and Bilge, 2012; Lin and Huang, 2013; Salmela-Aro, Kiuru, Pietikäinen and Jokela, 2008; Salmela-Aro, Read, Minkkinen, Kinnunen and Rimpelä, 2018) and their trust in their

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teachers (Adams, 2013; Bryk and Schneider, 2002; Dewulf, van Braak and Van Houtte, 2017; Goddard, Salloum and Berebitsky, 2009 Hoy and Tschannen-Moran, 2007; McKinney and Berube, 2018) have been identified as important factors in their success.

The concept of burnout was first introduced in the study by Schwartz and Will in 1953. The conceptual definition of burnout was done by Freudengerg (1974, 1975) and Maslach (1976) (Schaufeli and Maslach, 1993). Burnout is defined in different ways in the literature. Freudenberg (1974) defines burnout as a state of exhaustion resulting from unfulfilled wishes in the inner resources of man, depletion, energy and power loss, or failure. Burnout is an emotional exhaustion and cynicism syndrome psychologically and physically appearing in humans that prevents a person from devoting himself to what he does, causing him to exhibit a negative attitude towards his job and other people, and to regard himself as insufficient (Maslach and Jakson, 1981).

Some key concepts such as excessive fatigue, frustration, anger, cynicism, inadequacy and failure are used in defining burnout (Maslach and Goldberg, 1999). The burnout inventory, which is commonly used to measure the burnout levels of individuals in business life, consists of emotional exhaustion, depersonalization and low personal accomplishment feeling dimensions developed by Maslach and Jackson (1981). Emotional exhaustion means that the individual becomes emotionally tired and exhausted as a result of interacting with others (Maslach and Jackson, 1984). Depersonalization can be defined as the numbness and indifferent response of the individual towards the people whom he or she is obliged to look after (Maslach and Jakson, 1981). A low level of personal accomplishment refers to a person evaluating himself as insufficient and unsuccessful in his work (Izgar, 2003).

The studies on burnout are related more to business life. However, it is stated in the literature that students may also experience burnout due to the fact that academic tasks and responsibilities are continuously sustained in the context of school and home and that student-related actions may be considered within the scope of work life (Aypay, 2018a; Kutsal and Bilge, 2012; Salmela-Aro, Savolainen Holopainen, 2009.; Schaufeli, Martinez, Pinto, Salanova and Bakker, 2002). School burnout can be described as the syndrome arising due to factors such as the difficulties and challenges encountered by students in their academic life, the difference between the self-perception of the student and the extreme expectations and demands of the environment, and stress caused by educational practices (Aypay, 2011-2012; Salmela-Aro, Kiuru, Leskinen and Nurmi, 2009; Kutsal and Bilge, 2012; Walburg, 2014). One of the most important reasons for school burnout is the stress caused by being a student and educational practices (McCarthy, Pretty and Catano, 1990; Schaufeli, Martinez, Pinto, Salanova and Bakker, 2002). Lee, Puig, Kim, Shin, Lee and Lee (2010) express the symptoms of school burnout as exhaustion due to academic demands, negative attitudes towards school and school activities and the emergence of inadequacy perception. The consequences of school burnout can be listed as loss of interest in the school, decrease in academic achievement, breakdown in interpersonal relations and social skills, decrease in school and lesson motivation, school drop-out , postponement of academic tasks, increase in absenteeism, health

problems, depression, suicidal tendency (Aypay and Eryilmaz, 2011; Bask and Salmela-Aro, 2013; Cakir, Akca, Kodaz and Tulgarer, 2014; Dyrbye et al., 2008; Tuominen-Soini and Salmela-Aro, 2014). Studies have revealed a number of factors causing school burnout. One of these factors is the trust between the teacher and the student. School burnout in students is related to the trust of students in their teachers. In the studies conducted, it was determined that the school burnout of the students with a high level of trust in their teachers was low (Atik, 2016; Moore, 2013).

Trust is a fundamental component of human relations (Pawlina, Evans, Chan, Ruit, Wilson and Lachman, 2018). Because trust is a complex and multifaceted concept, it is difficult to define (Hoy and Tschannen-Moran, 2007). Trust is a concept based on a person's character, ability, expertise, honesty/integrity (Harris, Caldwell, & Longmuir, 2013). In trust, the trusted party expects to exhibit important behaviors for the trusting party and the trusting party is willing to remain vulnarable the actions of the trusted party without following or controlling him/her (Mayer, Davis and Schoorman, 1995). Trust is a psychological situation that includes expectations and beliefs based on the common experiences of trusting and trusted parties, affected by certain characteristics of the parties, where the trusted person will not act in a detrimental manner and in return will meet some expectations of trusting party (Ari, 2003). Trust involves taking risks and believing that one party will act in a way that will not harm the other (Hoy, Gage and Tarter, 2006). Trust is the willingness of a person to participate in a relationship involving being vulnerable to another person (Daly and Chrispeels, 2008).

While defining trust in educational organizations, five different dimensions such as benevolence, reliability, expertise, honesty and openness are used (Adams and Forsyth, 2013; Hoy and Tschannen-Moan, 1999; Tschannen-Moran and Hoy, 2000). Benevolence is the belief of a person that he or she will not be harmed by the other party, or his or her belief in the good will of the other party (Tschannen-Moran, 2014). Reliability is to believe that an individual will do what is expected of him or her. Reliability is the perception of the trusting party about the consistency of the trusted party's words and actions (Adams and Forsyth, 2009; Robbins and Judge, 2013). Expertise refers to the individual's competence in a subject or area. In other words, it is the accumulation of knowledge and skills that the individual possesses (Hoy and Tschannen-Moan, 1999; Kochanek, 2005). Honesty is the consistency of the individual's words and actions and accepting responsibility for one's actions (Tschannen-Moran and Hoy, 2000). Openness can be defined as the amount of information shared with the other party (Musah, Abdul Rahman, Tahir, Al-Hudawi and Daud, 2018).

Trust is built over a long period of time as a result of shared experiences and relationships (Bryk and Schneider, 2002; Forsyth, Adams and Hoy, 2011; Kochanek, 2005; Robbins and Judge, 2013; Solomon and Flores, 2001). In this context, students have to have common experiences and relationships both in school and classroom in order to trust their teacher(s). In the process of formation, maintenance and increase of trust; we can state that the consistency of the teachers' words and actions, the nature of the communication he or she has with the student, his or her expertise of technical and personal knowledge, and his or her integrity are important. Lee (2007), defines the

trust between students and teachers as a motivational factor that is a resource for the positive psychological and emotional perceptions that they develop in order to overcome the difficulties encountered in school.

Studies show that trust is an effective factor in the student's academic success (Adams, 2013; Goddard, Tschannen-Moran, M., & Hoy, 2001; Hoy and Tschannen-Moran, 2007; Lee, 2007), in meeting the student's psychological needs (Adams, 2013), in a positive school climate ( Smith, Hoy & Sweetland, 2001; Tarter, & Hoy, 2004; Tschannen-Moran, Parish, & DiPaola, 2006), in student participation (Adams, 2013); in school effectiveness (Adams & Forsyth, 2007; Bryk and Schneider, 2002; Hoy & Sweetland, 2001; Hoy and Tschannen-Moran, 2007; Kochanek, 2005), in family participation (Adams, Forsyth & Mitchell, 2009; Forsyth, Adams, & Barnes, 2004), in school burnout (Atik, 2016). In addition, trust is a social capital that plays a role in meeting the student's psychological needs (Adams, 2013).

When the literature was examined, it was determined that there were a limited number of studies examining the relationships between trust in teachers, school burnout and academic achievement using Structural Equation Modeling (SEM). In this context, it is thought that these and similar studies will contribute, albeit limited, to improving students' academic achievement  and success in educational applications, to increasing school effectiveness, to building teacher-student relations, to decreasing student burnout, to increasing students' adherence to school. In this context, the hypotheses of the research were expressed as follows:

> H1. Trust in teachers is a significant predictor of school burnout.
> H2. Trust in teachers is a significant predictor of academic success.
> H3. School burnout is a significant predictor of academic achievement.

## Method

This research is a relational study examining the relationship between high school students' trust levels in their teachers, school burnout and academic achievement. In relational studies, the relationship between variables is examined; and a known value of one of the variables is used in order to estimate the unknown value of another variable based on this relationship (Fraenkel, Wallen and Hyun, 2012). The relationships between high school students' trust levels in their teachers, school burnout and academic achievement were analyzed by using structural equation modeling. Structural Equation Modeling (SEM) is a statistical technique (Byrne, 2010) that allows for the evaluation of many variables together; that enables establishment of models predicting relationships of causality between variables, the evaluation of the effects of customized models on each other in a collective manner, the evaluation of the relationships between the variables in the established models through partial parameters calculated for the model (Boysan, 2006).

### Study Group

The study group consisted of 678 students who attended high school in the city center of Adiyaman in 2012-2013 academic year and participated in the study

voluntarily. Table 1 shows the demographic characteristics of the students participating in the study.

**Table 1.** Demographic Characteristics of Students Participating in the Study

| Variables | Level | n | % |
|---|---|---|---|
| Gender | Female | 322 | 47.5 |
| | Male | 356 | 52.5 |
| Grade | 9th | 158 | 23.3 |
| | 10th | 241 | 35.5 |
| | 11th | 131 | 19.3 |
| | 12th | 148 | 21.9 |
| Type of School | General High School | 105 | 15.5 |
| | Vocational/Technical High | 205 | 30.2 |
| | Religious Vocational High School | 163 | 24.0 |
| | Anatolian/Science High School | 205 | 30.2 |

A total of 322 (47.5%) of the students were female and 356 (52.5%) were male. 158 (23.3) were in ninth grade, 241 (35.5%) were in tenth grade, 131 (19.3%) in eleventh grade and 148 (21.9%) in twelfth grade. The distributions of these students by school type are as follows: 105 (15.5%) general high school students, 205 (30.2%) vocational/technical high school students, 163 (24%) religious vocational high school students, 205 (%) 30,2) Anatolian/Science High School students.

**Data Collection Tools**

In this study, the aspects of "Loss of Interest in School" and "Getting tired and bored by Teacher Attitudes" in "School Burnout Scale" (SBS) for secondary school students developed by Aypay (2012), and "Trust in Teachers Scale" translated to Turkish and adapted to Turkish Culture by Ozer and Tul (2014) were used. The academic achievement of the students was evaluated with the success variable obtained by using the GPAs ranging from 0-100.

School burnout scale for secondary school students (SBS); consists of a total of seven dimensions/subscales including Loss of Interest in School, Burnout due to Studying, Burnout due to Family, Burnout due to Homework, Depression from Teacher Attitudes, Need for Rest and Recreation, and Inadequacy at School. "Loss of Interest in School "consists of 6 items and" Depression from Teacher Attitudes" consists of 4 items. Since only two dimensions of the scale were used in this study, Confirmatory Factor Analysis (CFA) was performed. The goodness of fit for confirmatory factor analysis is as follows: X2=80.345, sd=30, X2/sd =2.678, GFI=0.97, AGFI=0.95, NNFI/TLI=0.96, IFI=0.96, CFI= 0.97, RMSEA=0.050, RMR=0.057, SRMR=0.032. In this application, the Cronbach's alpha reliability coefficient of the "Loss of Interest in School" and "Depression from Teacher Attitudes" is "0.80" and ula 0.75, respectively.

*The "Trust in Teachers Scale" consists of 12 items and one dimension adapted to Turkish Culture and translated to Turkish by Ozer and Tul (2014). The goodness of fit of the scale for this research is as follows: X2=136.086,sd=51, X2/sd=2.668, GFI=0.96, AGFI=0.95, NNFI/TLI=0.96, IFI=0.97, CFI= 0.97, RMSEA=0.050, RMR=0.050, SRMR=0.029. In this application, the Cronbach's alpha reliability coefficient of the "Trust in Teachers Scale" was 0.89.*

**Data Analysis**

In this research, the relationship between high school students' school burnout, their levels of trust in their teachers and academic achievement was analyzed by using structural equation modeling. In this context, Path Analysis method, which is a method used in SEM, was used to test the model. Path analysis, which is used to test the causal relationships between two or more variables and to compare the direct and non-direct relationships, is a statistical technique that is closely related to multiple regression (Meydan and Sesen, 2011). In the analysis stage of the SEM, two different ways are followed and studies for the consistency of the integrated model and related tests are performed. These approaches, described as a two-stage and one-step analysis approach, explain how the model will be analyzed in a holistic way. In the one-step approach, both structural and measurement models are added to the analysis at the same time. In the two-stage approach, however, the measurement and structural model are tested separately. The first phase of the two-stage approach can be considered as CFA (Celik & Yilmaz, 2013). A two-stage approach was used in this research. In this context, measurement models were tested first. The results of the measurement models were given as the results of Confirmatory Factor Analysis for the measurement tools mentioned in the data collection tools section.

The analyzes were performed using SPSS 21 and SPSS AMOS 21 software. When analyzing the data, an end value analysis was done for the data set first. In order to determine whether each observed variable in the data set had an extreme value, Z scores were calculated with SPSS 21 software. For the extreme values, the values outside the "± 3" limits were considered as extreme values (Cokluk, Sekercioglu and Buyukozturk, 2010). As a result of the calculations, it was determined that there was no end value in the data set.

In order to perform SEM analysis, the data set must meet the assumption of univariate and multivariate normal distribution (Byrne, 2010). Table 1 presents information on the univariate and multivariate normal distribution of the data set.

**Table 2.**Univariate and Multivariate Normal Distribution Findings

| Variable | min | max | skew | c.r. | kurtosis | c.r.**** |
|----------|-----|-----|------|------|----------|----------|
| DFTA* | 4.00 | 20.00 | ,728 | 7,734 | -,918 | -4,882 |
| LIS** | 6.00 | 30.00 | ,112 | 1,187 | ,519 | 2,759 |
| TT*** | 12.00 | 60.00 | -,456 | -4,845 | -,183 | -,972 |
| ACHIEVEMENT | 38.00 | 100.00 | -,127 | -1,347 | -,138 | -,733 |
| Multivariate | | | | | ,661 | 1,242 |

(* DFTA: Depression from Teacher Attitudes, ** LIS: Loss of Interest in School, *** TT: Trust in Teachers, ****C.R.:Critical Ratio, Skew: Skewness)

When Table 1 is examined, it is seen that skewness values of the variables vary between "-0.456" and "0.728"; and kurtosis values vary between "-0.918" and "0.519". In order for the data to have a univariate normal distribution, skewness values should be between "±1" (Larson-Hall, 2010) and kurtosis values between "±1" (Cokluk, Sekercioglu and Buyukozturk, 2010). Multivariate kurtosis and critical ratio values were

examined for the multivariate normality values of the data set. These values are "0.661 "and "1.242", respectively. In order for the data set to have a multivariate normal distribution, the kurtosis value should be between "±2" and the critical ratio value be less than "1.96" (Bayram, 2010). In this context, it can be said that the data set meets the assumption of multivariate normal distribution. The maximum likelihood method (Kline, 2010), which is the most widely used estimation method in Structural Equation Modeling, was used for both the measurement model and the structural model, when the data were normally distributed.

## Results

In this research, the relationships between trust in teachers and school burnout variables, which directly or indirectly affect the success of high school students, were revealed and structural equality modeling was used to analyze their relationship with academic achievement. As a result of the analysis performed within the context of the research, the results of descriptive analysis of variables are shown in Table 2.

**Table 3.** Descriptive Analysis Results, Correlation Coefficients Between Variables

|         | X     | ss    | min | max | TT   | LIS  | DFTA | AA   |
|---------|-------|-------|-----|-----|------|------|------|------|
| 1.TT    | 41.10 | 9.41  | 12  | 60  | 1.00 |      |      |      |
| 2.LIS   | 15.71 | 5.70  | 6   | 30  | -.17 | 1.00 |      |      |
| 3.DFTA  | 10.54 | 4.40  | 4   | 20  | -.23 | -.21 | 1.00 |      |
| 4.AA    | 71.47 | 10.16 | 38  | 98  | .24  | -.13 | -.15 | 1.00 |

(TT: Trust in Teachers, LIS: Loss of Interest in School, DFTA: Depression From Teacher Attitudes, AA: Academic Achievement)

In Table 3, it is shown that there is a low level of significant negative relationship between trust in teachers (TT) and loss of interest in school (LIS) (r= -0.17, p<0.05); a low level of significant negative relationship between trust in teachers (TT) and depression from teacher attitudes (DFTA) (r = -0.23, p<.05), a low level of significant positive relationship between trust in teachers (TT) and academic achievement (AA) (r=0.24, p<0.05); a low level of significant negative relationship between loss of interest in school (LIS) and academic achievement (AA) (r=-0.13, p<0.05);  a low level significant negative relationship between depression from teacher attitudes (DFTA) and academic achievement (AA) (r=-0.15, p<0.05).  In addition, it was determined according to Table 3 that the students' academic achievement ranged from "38" to " 98" points (grading system of 100); and the standard deviation values of the variables included in the study ranged from "4.40" to "10.16" points. The correlation coefficient between the variables lower than "0.30" in absolute value was interpreted as "poorly" related; variables between "0.30" and "0.70" as "moderately" related; and variables over "0.70" as "strongly" related (Cronk, 2008).

## Analysis Results of the Tested Model

The results obtained from the analysis of the model (Figure 1) based on the theoretical model of the study are shown in Table 4.
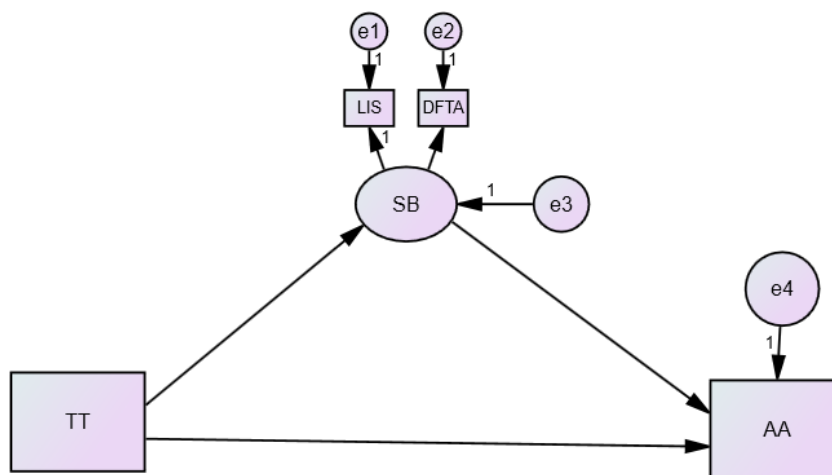
Figure 1. The Theoretical Model Tested

(TT: Trust in Teachers, SB: School Burnout, LIS: Loss of Interest in School, DFTA: Depression from Teacher Attitudes, AA: Academic Achievement)

**Table 4.** Analysis Results Related to the Model

| Relationships Between Variables | | | B | β | S.E. | C.R.(t) | P |
|---|---|---|---|---|---|---|---|
| SB | <--- | TT | -.086 | -.424 | .019 | -4.465 | *** |
| ACHIEVEMENT | <--- | TT | .471 | .159 | .150 | 3.134 | *** |
| ACHIEVEMENT | <--- | SB | -2.673 | -.182 | 1.150 | -2.325 | .02*** |

χ2=1.267; sd=1 (***p<.05) (TT: Trust in Teachers, SB: School Burnout, AA: Academic Achievement)
 (SB<---TT= Trust in teachers affects school burnout)

When the findings in Table 4 were evaluated, it was determined that all the paths in the model were significant (p <.05). As a result of the analyzes; all of the three (3) hypotheses belonging to the structural equation model formed with a theoretical basis were accepted. One of the criteria used when deciding whether to accept a model created in the structural equation model after the test is the goodness of fit values obtained from the analysis result (Avcilar and Varinli, 2013; Kline, 2010; Vieira; 2011). The goodness of fit values for the final model obtained as a result of the analyzes is given in Table 5.

**Table 5.** The results of Goodness of Fit Index for the Final Model

| Fit Indices | Acceptable Fit | Good Fit | Goodness of Fit Values Obtained in the Research |
|---|---|---|---|
| $\chi^2$/sd | 2 ≤ χ2/sd ≤ 5 | 0 ≤ χ2/sd< 2 | 1.267 (Good Fit) |
| GFI | 0.90 ≤ GFI < 0.95 | 0.95 ≤ GFI ≤ 1.00 | 0.99 (Good Fit) |
| AGFI | 0.85 ≤ AGFI < 0.90 | 0.90 ≤AGFI ≤ 1.00 | 0.99 (Good Fit) |
| NFI | 0.90 ≤ NFI < 0.95 | 0.95 ≤ NFI ≤ 1.00 | 0.99 (Good Fit) |
| NNFI/TLI | 0.95 ≤ NNFI < 0.97 | 0.97 ≤ NNFI ≤ 1.00 | 0.98 (Good Fit) |
| IFI | 0.90 ≤ IFI < 0.95 | 0.95 ≤ IFI ≤ 1.00 | 0.99 (Good Fit) |
| CFI | 0.95 ≤ CFI < 0.97 | 0.97 ≤ CFI ≤ 1.00 | 0.99 (Good Fit) |
| RMSEA | 0.05 ≤ RMSEA ≤ 0.08 | 0 ≤ RMSEA < 0.05 | 0.02 (Good Fit) |
| RMR | 0.05 ≤ RMR ≤ 0.08 | 0 ≤ RMR <0.05 | 0.07 (Acceptable Fit) |
| SRMR | 0.05 ≤ SRMR ≤ 0.08 | 0 ≤ SRMR < 0.05 | 0.01 (Good Fit) |

(Celik and Yilmaz, 2013; Cokluk, Sekercioglu and Büyükoztürk, 2010; Harrington, 2009; Hu and Bentler, 1999; Kline, 2010; Schermelleh-Engel, Moosbrugger and Müller, 2003; Sümer, 2000).

Among the fit index values of the final structural equation model verified in Table 5; χ2/sd (1.267) ratio, GFI (0.99), AGFI (0.99), NFI (0.99), NNFI/TLI (0.99), IFI (0.99), CFI (0.99), RMSEA (0.02) and SRMR (0.01) values were found to have a "good fit" value; while RMR (0.07) value was determined to be an "acceptable fit". The path diagram of the final model verified by the analyses, the standardized path coefficients (regression coefficient) and the determination coefficients (R2) are shown in Figure 2.
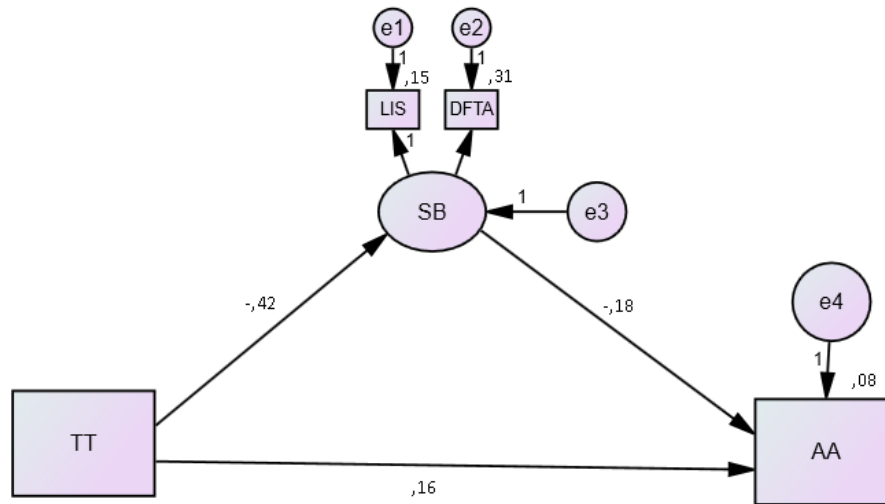


**Figure 2:** Path diagram of the final model, standardized path coefficients (regression coefficient) and determination coefficients (R2)

It was determined, according to the final model verified in Figure 2, that trust in teachers (TT) directly influenced school burnout (SB) in a negative direction (β =-0.42; t=-4.465; p<0.05); directly influenced academic achievement (AA) in a positive direction (β=0.16; t=0.159; p<0.05); and indirectly influenced academic achievement (AA) through school burnout (SB). School burnout (SB) has a partial mediation role in the relationship between trust in teachers (TT) and academic achievement (AA). Trust in teachers (TT) accounts for about 18% of the variance in school burnout (SB). It was determined that school burnout (SB) directly affected academic achievement (AA) in a negative direction (β=-2.673; t=-0.182; p<0.05). Trust in teachers (TT) and school burnout (SB) accounts for about 8% of the variance in academic achievement.

Direct and indirect, total effects are also utilized during the interpretation of the results obtained from the analysis for the structural equation model. The standardized direct effects, indirect effects and total effects for the variables included in the structural equation model are shown in Table 6.

**Table 6.** Standardized Direct, Indirect and Total Effects of the Final Model

| | School Burnout | | | Academic Achievement | | |
|---|---|---|---|---|---|---|
| | **Direct Effect** | **Indirect Effect** | **Total Effect** | **Direct Effect** | **Indirect Effect** | **Total Effect** |
| Trust in Teachers | -0.42 | | -0.42 | 0.47 | 0.07 | 0.23 |
| School Burnout | | | | -0.18 | | -0.18 |

p<0.05

Direct, indirect and total effects lower than 0.10 were considered as "weak" effect, those over 0.50 as "strong" effect, those between 0.10 and 0.50 as "moderate" effect (Kline, 2013). When the direct effects in Table 6 are examined, it is seen that; trust in teachers affected school burnout directly (-0.42) (moderate level), academic achievement (0.47) (moderate level) directly and indirectly (0.07) (weak effect). It was found that the total effect of trust in teachers on academic achievement was found to be "0.23" (moderate level). It was determined that school burnout affected academic achievement directly (-0.18) (moderate level) and its overall effect on academic achievement is "-0.18 (moderate level).

## Discussion and Conclusion

Schools are formal organizations (Aydin, 2007) with unique aspects where education services are produced (Basaran, 1999), that are created for people, that affects and are affected by human (Bursalioglu, 2010)  Schools are the learning areas that source much of human learning (Fry, Ketteridge and Marshall, 2009). One of the outputs of the schools is the academic achievement of the students (Hoy and Miskel, 2010). Student achievement is used in determining the effectiveness of education systems and schools in countries (Lunenburg and Ornstein, 2013; Sweetland and Hoy, 2000), and in the comparison of educational outcomes between countries (PISA, TIMSS). Student achievement is a concept influenced by many variables such as environment, family, teacher (Gehlbach, Brinkworth, King, Hsu, McIntyre and Rogers, 2016). The relationship between teacher and student can be said to have a significant impact on academic achievement of the student as well as shaping his/her feelings and thoughts about the school (Forster, Gower, Borowsky and McMorris, 2017). In this research, the relationships between trust in teachers which has an impact on the academic achievement of high school students and school burnout, and their effect on academic achievement were examined with structural equation modeling. The model which had a theoretical basis was verified and the goodness of fit values obtained from the analyzes proved that the model was acceptable. It was determined at the end of the research that;

- There was a medium level negative relationship between trust in teachers and school burnout,

- A low-level positive relationship between trust in teachers and academic achievement,
- A low-level negative relationship between school burnout and academic achievement.

As a result of the research, it can be argued that an increase in students' trust in their teachers will contribute to decreasing their school burnout and increasing their academic achievement; and a decrease in students' school burnout will contribute to increasing academic achievement in a positive way. it is expected that the students will increase their confidence level, increase school burnout and increase their academic success. decrease in school burnout of students can be interpreted as contributing positively to the increase of academic achievement. It can be said that students' trust in their teachers has many positive educational results such as decreasing school burnout and increasing academic achievement.

### Discussion and Conclusion on the First Hypothesis

The first hypothesis of the study was expressed as "trust in teachers is a significant predictor of school burnout". The hypothesis was accepted as a result of the analysis made. Additionally, trust in teachers (TT) accounts for about 18% of the variance in school burnout (SB).

The trust between teachers and students in schools is a relationship-based concept which is formed in a long term (Mitchell, Kensler and Tschannen-Moran, 2016). The student's trust in his/her teacher can be said to be effective in many of the learnings in the school environment (Hoy, Gage, and Tarter, 2006; Hoy, and Tschannen-Moran, 2007). In order to build trust between students and teachers, it can be said that there is a need for the co-existence of common experiences and relationships between teachers and students in the school and classroom. We can say that the fact that students can trust their teacher(s) depends on the student's belief in the teacher's goodwill, the teacher's consistency in his/her words and actions, the teacher having sufficient technical and personal knowledge, the teacher's honesty and the student's belief in the teacher's openness when communicating with him/her. In their studies, Moore (2013) and Atik (2016) stated that the trust between the teacher and the student affected the student's school burnout.

It can be claimed that the burnout of students may have some negative consequences such as getting tired of school activities quickly, developing negative attitudes towards school and school activities, emergence of a feeling of insufficiency, cynicism, low motivation, decrease in self-control, depression, low participation and success (Aypay, 2018b; Cooper, Seibert, May, Fitzgerald & Fincham, 2017; Fiorilli, De Stasio, Di Chiacchio, Pepe & Salmela-Aro,2017; Lee, Puig, Kim, Shin, Lee and Lee, 2010; Salmela-Aro, Read, Minkkinen, Kinnunen & Rimpelä, 2018).

The reasons of school burnout that students may or will experience can be listed as: demands for over-study, perception or feeling of insufficiency, expectations of the student's environment from him/her, comparison with other students, stress and

pressure caused by school, tests based on the competition applied at country level (Aypay, 2012,2018a; Capulcuoglu, 2012; Kutsal and Bilge, 2012; Schaufeli, Martínez, Pinto, Salanova and Bakker, 2002; Secer and Gencdogan, 2012), frequent changes in test system and curricula and the increase in anxiety and stress levels of students due to these changes, intensive programs and excess number of weekly lessons in schools.

## Discussion and Conclusion on the Second Hypothesis

The second hypothesis of the study was expressed as "trust in teachers is a significant predictor of academic achievement". The hypothesis was accepted as a result of the analysis made. In addition, it was determined that trust in teachers affected academic achievement both directly and indirectly through school burnout.

It can be stated that trust is one of the important elements of social capital in the initiation and continuation of human relations in organizations having unique structure like educational organizations. From this point of view, it can be stated that trust between students and teachers, who are the human resources of educational organizations, play an important and critical role in the relationship between teachers and students (Özer, Demirtas, Üstüner and Cömert, 2006). Teachers can be expressed as persons with significant impacts on students' achieving a number of outputs related to school (Balci, 2014) and on students' lives (Oktay, 1995). The relationship between teacher and student has many consequences in social, affective, behavioral and academic terms (Hamre & Pianta, 2001; Roeser, Eccles, & Sameroff, 2000). In this context, as a result of the interaction between the teacher and the student(s), the student(s) develop a feeling of trust towards teacher(s), and this feeling deepens in time. Trust-based relationships between the teacher and the student is a concept that boosts students' reaching educational outcomes, that increases academic achievement (Goddard, Tschannen-Moran and Hoy, 2001; Kochanek, 2005; Lee, 2007; Van Maele, & Van Houtte, 2014) and the student's efforts in the learning process, which facilitates classroom management (Tschannen-Moran, 2014) and that influences school life and school culture (Dewulf, van Braak & Van Houtte, 2017). We can say that trust, in terms of classroom management, can have an impact on many situations such as teachers' influence and motivation on students, teachers' completing the studies of students, and students' participation in class activities, supporting their friends, and reducing the number of undesirable behaviors both within the classroom and within the school. All the situations discussed above as a result of the trust between the teacher and the student directly or indirectly affect student learning and academic achievement.

## Discussion and Conclusion on the Third Hypothesis

The third hypothesis of the study is expressed as "School burnout is a significant predictor of academic achievement". The hypothesis was accepted as a result of the analysis made.

School burnout of students due to school tasks, responsibilities and a number of activities affect their academic achievement (Holy, 2009; Salmela-Aro, Kiuru, Leskinen, & Nurmi, 2009; Schaufeli, Martínez, Pinto, Salanova, & Bakker, 2002). Through this research, it has been concluded that the school burnout has a direct and negative impact on the academic achievement of students. School burnout brings with it many negative consequences such as; increase in absenteeism, dropout, nonparticipation in or avoidance of school activities, postponing or rejecting homework and tasks, not wanting to go to school, developing negative attitudes towards teachers and learning, not wanting to wake up or difficulty in waking up in the mornings that schools are open, a decrease in self-sufficiency, problems in friendships, alienation from school, negative attitude towards school, etc. (Aypay, 2012-2018b; Capulcuoglu and Gündüz, 2013; Kiuru, Pietikäinen and Jokela, 2008; Loughrey and Harris, 1992; Lee, Puig, Kim, Shin, Lee and Lee, 2010; Kutsal, 2009; Sorkkila, Aunola, Salmela-Aro, Tolvanen & Ryba, 2018, Salmela-Aro, Savolainen, and Holopainen, 2009; Yang and Farn, 2005). One of these problems is the decrease in academic achievement of students (Wang, Kiuru, Degol & Salmela-Aro, 2018).

As a result of the analysis of the model created by this research using the structural equation model, it was found that trust in teachers and school burnout variables directly affect the academic achievement of the students and indirectly affect it through school burnout. In addition, trust in teachers and school burnout variables together account for about 8% of the variance in academic achievement. Considering the fact that academic success is directly or indirectly influenced by many variables, it is expected that the significance of this conclusion will be understood.

### Recommendations

It was concluded as a result of the research that trust in teachers directly affects school burnout and affects academic achievement both directly and indirectly. Based on this result, the following suggestions can be developed to increase the trust levels of students in their teachers:

- Teachers should be supported and encouraged to participate in professional development activities (seminars, courses, scientific activities, etc.), which will contribute to their expertise.
- Extracurricular activities should be organized in schools to strengthen interaction and communication between teachers and students.
- Teachers should be honest, objective, impartial and fair when communicating with students.
- School administrators should set a good example for both teachers and students in order to develop trust-based relationships.

As a result of the research, it is concluded that school burnout directly affects academic achievement. The following suggestions can be made to prevent and reduce school burnout, which has an impact on students' academic achievement:

- Weekly course schedules in schools should be reviewed and the course hours should be reduced as much as possible.
- School-related situations causing stress in students should be determined and measures should be taken for these situations.
- Learning-through-experience activities that will support the achievements and motivations of the students should be provided in schools.
- Individual differences should be taken into consideration in educational processes.
- Parents should support students in their school-related tasks and responsibilities, and families should be made aware of these issues.
- Students' participation in school-related processes and activities should be increased.
- Social activities in which students can participate actively in schools should be increased and arrangements should be made to increase student participation.

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