

Research Article

Burnout Levels Among Speech and Language Therapy Students: A Cross-Sectional Study

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ABSTRACT

Purpose: Burnout is common among healthcare professionals, including speech and language therapists (SLTs), who frequently face high workloads, long working hours, and significant occupational stress. These challenges may also affect students during their academic training. This study aimed to examine burnout levels among speech and language therapy students and to investigate the relationship between burnout, depression, and trait hope.

Method: The study was conducted with 291 undergraduate students aged between 18 and 25 years at Biruni University in Türkiye. Data were collected using the Burnout Scale, the Trait Hope Scale, and the Beck Depression Inventory, all of which are validated and reliable instruments. Due to non-normal data distribution, non-parametric statistical analyses were performed.

Results: A total of 291 students (260 female, 31 male) participated in the study. No significant differences were found in burnout, hope, or depression scores across class levels ($p > .05$). Descriptive findings indicated that students experienced notable levels of burnout overall, with variability across individuals. Third-year students showed relatively higher burnout tendencies, which may reflect increasing academic workload and clinical responsibilities. Spearman correlation analysis revealed a significant positive correlation between burnout and depression ($r = .647, p < .001$). In contrast, hope was negatively correlated with both depression ($r = -.462, p < .001$) and burnout ($r = -.320, p < .001$).

Conclusion: Burnout appears to be a relevant concern among SLT students, even in the absence of differences across academic years. The strong association between burnout and depression highlights the importance of addressing students' psychological well-being, while the negative relationship with hope suggests a potential protective role. Supporting psychological resources and coping strategies may help reduce burnout and promote well-being in SLT students.

Keywords: burnout, depression, trait hope, speech and language therapy, academic stress



Araştırma Makalesi

Dil ve Konuşma Terapisi Öğrencilerinin Tükenmişlik Düzeyleri: Kesitsel Bir Çalışma

GENİŞLETİLMİŞ ÖZET

Amaç: Tükenmişlik, uzun süreli stres ve yoğun sorumluluk karşısında ortaya çıkan fiziksel, zihinsel ve duygusal tükenme durumudur. Bu sendrom özellikle sağlık hizmetleri, eğitim ve sosyal hizmetler gibi bireylerle yoğun etkileşim gerektiren yardım mesleklerinde yaygın olarak görülmekte; duygusal tükenme, duyarsızlaşma ve kişisel başarı algısında azalma boyutlarıyla tanımlanmaktadır. Sağlık alanında görev yapan diğer profesyoneller gibi dil ve konuşma terapistleri (DKT) de yüksek akademik ve klinik talepler nedeniyle tükenmişlik açısından risk altındadır. Bununla birlikte tükenmişlik yalnızca meslek yaşamında değil, mesleğe hazırlık sürecindeki öğrenciler arasında da gözlenebilmektedir. Özellikle sağlık temelli lisans programlarında eğitim gören öğrenciler, yoğun ders yükü, klinik uygulamalar, performans beklentileri ve gelecek kaygısı gibi faktörler nedeniyle psikolojik açıdan kırılgan bir grup oluşturmaktadır. Türkiye’de DKT eğitimi, teorik bilgi ile klinik uygulamanın iç içe yürütüldüğü, akademik olarak yoğun bir programdır. Öğrenciler anatomi, fizyoloji, nörojenik iletişim bozuklukları ve ses bozuklukları gibi kapsamlı derslerin yanı sıra ilerleyen sınıflarda artan staj yükümlülükleri ile karşılaşmaktadır. Bu bağlamda mevcut çalışmanın amacı, DKT öğrencilerinin tükenmişlik düzeylerini belirlemek; tükenmişlik ile depresyon ve sürekli umut düzeyleri arasındaki ilişkileri incelemek ve elde edilen bulgular doğrultusunda eğitim süreçlerine yönelik çıkarımlarda bulunmaktır.

Yöntem: Araştırma betimsel ve kesitsel tasarımda yürütülmüştür. Çalışma grubunu Türkiye’de Biruni Üniversitesi Dil ve Konuşma Terapisi Bölümü’nde öğrenim gören 18–25 yaş aralığındaki toplam 291 lisans öğrencisi oluşturmaktadır. Katılımcıların 260’ı kadın (%89.3), 31’i erkektir (%10.7). Örneklem uygun/elverişlilik (convenience) örnekleme yöntemiyle belirlenmiştir. Araştırma öncesinde etik kurul onayı alınmış ve tüm katılımcılardan yazılı bilgilendirilmiş onam temin edilmiştir. Veri toplama sürecinde Tükenmişlik Ölçeği (Kısa Form), Beck Depresyon Envanteri ve Sürekli Umut Ölçeği kullanılmıştır. Tükenmişlik Ölçeği bireylerin tükenmişlik düzeylerini 7’li Likert tipinde değerlendirmektedir. Beck Depresyon Envanteri öğrencilerin depresyon belirtilerinin şiddetini ölçmek amacıyla uygulanmıştır. Sürekli Umut Ölçeği ise eyleyici düşünce (agency) ve alternatif yollar düşüncesi (pathways) olmak üzere iki alt boyuttan oluşmakta ve bireylerin hedeflerine ulaşma motivasyonunu ve strateji geliştirme kapasitesini değerlendirmektedir.

Bulgular: Toplam 291 üniversite öğrencisi (260 kadın, 31 erkek) çalışmaya katılmıştır. Yapılan analizler sonucunda sınıf düzeyine göre tükenmişlik, umut ve depresyon puanları arasında istatistiksel olarak anlamlı bir fark bulunmamıştır ($p > .05$). Spearman korelasyon analizi sonuçları, tükenmişlik ile depresyon arasında anlamlı ve pozitif yönlü bir ilişki olduğunu göstermiştir ($r = .647, p < .001$). Ayrıca umut ile depresyon ($r = -.462, p < .001$) ve umut ile tükenmişlik ($r = -.320, p < .001$) arasında anlamlı ve negatif yönlü ilişkiler saptanmıştır. Elde edilen bulgulara ek olarak, tükenmişlik puanlarının betimsel incelemesi öğrencilerin genel olarak dikkat çekici düzeylerde tükenmişlik yaşadıklarını göstermiştir. Sınıf düzeyleri arasında istatistiksel olarak anlamlı bir fark saptanmamış olmakla birlikte, puanların dağılımı örneklem içinde değişkenlik olduğunu ve bazı öğrencilerin görece daha yüksek tükenmişlik düzeyleri bildirdiğini ortaya koymuştur. Özellikle üçüncü sınıf öğrencilerinin tükenmişlik eğilimlerinin diğer sınıflara kıyasla daha yüksek olduğu gözlenmiştir. Bu durum, söz konusu dönemde artan akademik yük ve klinik sorumluluklarla ilişkili olabilir. Tüm bu bulgular, gruplar arasında istatistiksel olarak anlamlı farklar bulunmasa dahi, tükenmişliğin dil ve konuşma terapisi öğrencileri açısından önemli bir sorun olmaya devam ettiğini göstermektedir.

Sonuç: Bu çalışma, dil ve konuşma terapisi öğrencilerinde tükenmişlik, depresyon ve umut düzeyleri arasındaki ilişkileri ortaya koyarak öğrencilerin psikolojik iyi oluşlarına ilişkin önemli bulgular sunmuştur. Yapılan analizler sonucunda, sınıf düzeyine göre tükenmişlik, umut ve depresyon puanları arasında istatistiksel olarak anlamlı bir farklılık saptanmamıştır. Bu durum, söz konusu psikolojik değişkenlerin eğitim sürecinin belirli bir sınıf düzeyine özgü olmaktan ziyade öğrenciler arasında daha genel ve bireysel farklılıklar gösteren bir yapı sergileyebileceğini düşündürmektedir. Bununla birlikte öğrencilerin psikolojik iyi oluşlarının eğitim süreci boyunca dikkatle izlenmesi gerektiği açıktır.

Çalışmanın önemli bulgularından biri, tükenmişlik ile depresyon arasında anlamlı ve pozitif yönlü bir ilişkinin bulunmasıdır. Bu sonuç, öğrencilerde tükenmişlik düzeyi arttıkça depresif belirtilerin de artma eğiliminde olduğunu göstermektedir. Aynı zamanda umut ile hem depresyon hem de tükenmişlik arasında anlamlı ve negatif yönlü ilişkiler saptanmıştır. Başka bir ifadeyle öğrencilerin umut düzeyleri yükseldikçe hem tükenmişlik hem de depresyon puanlarının azalma eğiliminde olduğu görülmektedir. Bu bulgular, umudun öğrencilerin psikolojik iyi oluşlarını destekleyen önemli bir koruyucu kaynak olabileceğini düşündürmektedir. Umut, bireyin hedeflerine ulaşma motivasyonunu sürdürmesini ve karşılaştığı zorluklar karşısında alternatif yollar geliştirebilmesini sağlayan önemli bir psikolojik güç olarak değerlendirilmektedir. Bu özellikler, yoğun akademik beklentiler ve klinik uygulamalara hazırlık süreciyle karşı karşıya kalan dil ve konuşma terapisi öğrencileri açısından özellikle önemli olabilir.

Elde edilen bulgular, üniversite ortamında öğrencilerin ruh sağlığını desteklemeye yönelik farkındalık ve destek mekanizmalarının geliştirilmesinin yararlı olabileceğini göstermektedir. Özellikle akademik stresle başa çıkmayı destekleyen danışmanlık hizmetleri ve üniversite bünyesinde sunulan psikolojik destek olanaklarının güçlendirilmesi, öğrencilerin tükenmişlik ve depresyon risklerinin azaltılmasına katkı sağlayabilir. Bunun yanı sıra eğitim programlarında öğrencilerin psikolojik dayanıklılıklarını ve umut düzeylerini destekleyici müdahalelerin planlanması da önemli bir katkı sağlayabilir.

Gelecekte yürütülecek çok merkezli ve boylamsal araştırmaların, tükenmişlik, depresyon ve umut gibi psikolojik değişkenlerin zaman içindeki seyrini daha kapsamlı biçimde ortaya koyacağı düşünülmektedir. Sonuç olarak, dil ve konuşma terapisi öğrencilerinin psikolojik iyi oluşlarının desteklenmesi yalnızca bireysel refah açısından değil, aynı zamanda gelecekte sunacakları klinik hizmetlerin niteliği açısından da büyük önem taşımaktadır. Eğitim programlarının akademik içeriğinin yanı sıra öğrencilerin psikososyal gereksinimlerini de dikkate alan destekleyici yaklaşımlarla güçlendirilmesi hem akademik başarıyı hem de mesleki sürdürülebilirliği artırabilir.

Anahtar Sözcükler: tükenmişlik, depresyon, sürekli umut, dil ve konuşma terapisi, akademik stres

Introduction

Higher education plays a vital role in advancing a country's knowledge economy and overall social development (George, 2006). In this context, the academic and professional performance of students in higher education institutions not only shapes individual success but also contributes significantly to societal progress (Plessis et al., 2023). However, the intense academic workload, stress, and uncertainties encountered during this period can lead to various psychological difficulties, including burnout syndrome (Al-Wofari, 2024; Pham Thi & Duong, 2024). Burnout is defined as a syndrome characterized by emotional, physical, and mental exhaustion, which negatively impacts an individual's motivation, performance, and quality of life (Edú-Valsania et al., 2022).

Burnout is particularly common among individuals in helping professions, such as medicine, nursing, and education, where emotional demands are high (Dyrbye & Shanafelt, 2016). Maslach and Leiter (2016) conceptualize burnout as comprising three key dimensions: emotional exhaustion due to prolonged stress; depersonalization, involving a detached or indifferent attitude toward others; and a reduced sense of personal accomplishment, where individuals feel ineffective or unsuccessful in their roles (Edú-Valsania et al., 2022; Maslach & Leiter, 2016). Rosales-Ricardo et al. (2021) found high prevalence rates for all three dimensions of burnout (emotional exhaustion, cynicism, and reduced academic efficacy) among university students, especially those in medical, nursing, and engineering faculties. This model provides a valuable framework for understanding the impact of burnout on both professional and personal functioning.

A growing body of international research has highlighted the prevalence of burnout among healthcare professionals, including physicians, nurses, laboratory technicians, and physiotherapists (Džubur et al., 2018; Ibikunle et al., 2016; Embriaco et al., 2007; De Hert, 2020). These studies consistently identify long working hours, shift-based schedules, high workload, lack of vacation time, and interpersonal conflicts as primary contributors to burnout (Ibikunle et al., 2016; Embriaco et al., 2007; De Hert, 2020). At the individual level, burnout can cause emotional exhaustion and psychological distress, while at the institutional level, it may lead to reduced patient satisfaction and increased medical errors (De Hert, 2020).

Burnout is not limited to working professionals; university students, particularly those in intensive academic programs, are also at risk. Similarly, Arian et al. (2023) found a burnout rate of 46% among nursing students, with levels increasing as academic demands intensified, negatively impacting both academic performance and future career preparedness.

Studies on medical and dental students have further revealed that factors such as high academic load, prolonged training, and chronic stress significantly contribute to burnout (Gil-Calderón et al., 2021; Bolatov et al., 2022; Montero-Marin et al., 2011). Conversely, protective factors such as strong family support and intrinsic motivation have been shown to buffer against burnout, while academic failure and long study hours exacerbate it. Daud et al. (2022) highlighted a significant association between burnout and emotional intelligence, noting that students with higher emotional intelligence were better equipped to manage burnout symptoms.

In the specific context of speech and language therapist (SLT) education, Gregory et al. (2021) emphasized that the uncertainties brought about by the COVID-19 pandemic adversely

affected students' confidence, sense of efficacy, and professional identity development. These disruptions were identified as significant risk factors for burnout, particularly in clinical and practical components of the curriculum.

Despite growing global attention to this issue, research focusing on SLT students in Türkiye remains scarce. SLT programs in Türkiye are situated at the intersection of healthcare and education and are characterized by a demanding curriculum that blends theoretical knowledge with intensive clinical practice. The academic workload includes challenging subjects such as anatomy, physiology, voice disorders, and neurogenic communication disorders, alongside internship placements that intensify in the final year. These internships, while critical for professional development, may impose considerable emotional and academic pressure on students.

SLTs may be particularly vulnerable to burnout due to the emotionally demanding nature of their profession. SLTs frequently work with individuals who have complex communication, cognitive, or swallowing disorders and often require long-term therapeutic support. These therapeutic relationships may involve intensive interaction with patients and their families, and progress in therapy may sometimes be slow or uncertain, which can increase emotional strain and professional fatigue. In addition, SLTs are expected to manage complex clinical decision-making processes while maintaining a high level of empathy and effective communication with patients and caregivers. Previous studies have demonstrated that burnout is a considerable concern in this profession and is associated with factors such as high workload, emotional labor, and professional stress among speech language therapists (Brito-Marcelino et al., 2015; Bordarie & Mourtiolon, 2023). Similarly, research conducted with speech language therapists working in clinical settings has reported notable levels of occupational stress related to professional responsibilities and workload (Mahrukh et al., 2023). Evidence from Türkiye also indicates that burnout is an emerging concern among SLTs. For example, a recent study conducted with SLTs in Türkiye reported that approximately 43.1% of participants experienced moderate levels of emotional exhaustion, highlighting the presence of notable burnout symptoms within this professional group (Biçen & Balo, 2025). The authors also emphasized that factors such as workload, clinical responsibilities, and work environment characteristics may contribute to burnout risk among SLTs in the Turkish context. These findings indicate that burnout among SLTs should be considered not only a global occupational issue but also an emerging concern within the Turkish literature.

Among SLTs, burnout has also emerged as a concern. For instance, Bordarie and Mourtialon (2023) reported that 77.41% of SLTs in their study experienced moderate to high levels of burnout, with those exhibiting high sensory processing sensitivity being particularly vulnerable. Importantly, the authors emphasized that, with appropriate strategies, this sensitivity could be transformed into a professional strength rather than a liability.

Considering these professional demands, students preparing for careers in speech and language therapy may also experience psychological strain during their academic training. SLT education programs typically involve intensive theoretical coursework combined with clinical preparation and the development of professional competencies. Students are required to complete demanding courses such as anatomy, neurogenic communication disorders, and voice disorders while simultaneously preparing for clinical practice. These academic and clinical expectations may contribute to psychological stress and increase vulnerability to burnout even before entering professional practice. Although burnout has been widely examined among healthcare professionals and university students (Dyrbye & Shanafelt, 2016), research specifically investigating burnout and related psychological factors among SLT students remains limited. Investigating burnout and its associated variables in this population is therefore important for better understanding the challenges faced by SLT students and for informing strategies that may support their psychological well-being during professional training.

Given these challenges, examining burnout levels among SLT students and their association with other psychological variables—such as depression and hope—can yield important insights. Although studies on burnout in Turkish university students exist, there is a notable gap in the literature concerning SLT students specifically. The present study aims to address this gap by contributing to the national literature and informing efforts to support student mental health and optimize educational practices. The findings may provide preliminary insights that could inform future research and institutional strategies aimed at supporting the psychological well-being of SLT students.

In line with the purpose of the study, the following research questions were addressed:

1. What are the levels of burnout, depression, and trait hope among speech and language therapy students?
2. Do burnout levels differ according to demographic variables such as gender and academic year?
3. Is there a relationship between burnout, depression, and trait hope among SLT students?

Based on the existing literature, the following hypotheses were proposed:

H1: Burnout levels will be positively associated with depression levels among SLT students.

H2: Burnout levels will be negatively associated with trait hope levels.

H3: Burnout levels may differ according to academic year due to increasing academic and clinical demands.

Methods

This is a descriptive, cross-sectional study. It received ethical approval from the Biruni University Ethics Committee (Protocol no. 2024 BIAEK/07-54) and was conducted on 291 undergraduate students at Biruni University in Türkiye during the academic year. Of the participants, 260 (89.3%) were female and 31 (10.7%) were male. Regarding class distribution, 75 students (25.8%) were first-year, 68 (23.4%) were second-year, 82 (28.2%) were third-year, and 68 (23.4%) were fourth-year students. The mean age of the participants was 19.49 years (SD = 1.11). Demographic Characteristics of Participants are given in Table 1. All participants voluntarily participated in the current study. Written consent for each participant was obtained by the researchers. For the purpose of speed and convenience, the participants were selected using the technique of convenience sampling during the data collection process.

Data were collected using three validated instruments: the Trait Hope Scale, the Burnout Scale, and the Beck Depression Inventory. These scales were administered to first-, second-, third-, and fourth-year students enrolled in the Department of Speech and Language Therapy at Biruni University.

Table 1

Demographic Characteristics of Participants

Variable	Category	n	%
Gender	Female	260	89.3
	Male	31	10.7
Class level	First year	75	25.8
	Second year	68	23.4
	Third year	82	28.2
	Fourth year	68	23.4
Age	Mean (SD)	19.49 (1.11)	

Inclusion criteria include the following: (1) being currently enrolled in the Department of Speech and Language Therapy at Biruni University; (2) completing the form without missing data; (3) being native speaker of Turkish. Exclusion criteria include the following: (1) having graduated from the department; (2) not being able to complete any of the scales; (3) not being a native speaker of Turkish; (4) being a student in another department besides SLT. Data were initially collected from 298 students. However, seven participants were excluded from the analysis due to incomplete data. Therefore, the final sample consisted of 291 students.

During the assessment of participants' psychological states, students who exhibited clinically significant depression scores were identified and referred to the university's psychological counseling center in accordance with ethical considerations. This procedure was conducted under the supervision of members of the research team with relevant mental health expertise, including a researcher trained both in psychology and SLT and another researcher with a background both in psychological counseling and guidance and SLT.

Data Collection Tools

The Burnout Scale

To determine the burnout levels of the participants, the Burnout Scale (BS) developed and validated in Turkish by Çapri (2013) was used. This scale consists of 10 items designed to assess burnout-related emotional and psychological states, including feelings of fatigue, frustration with others, hopelessness, being trapped, helplessness, feeling overwhelmed, weakness, insecurity, sleep difficulties, and reaching a breaking point. Participants rate each item on a 7-point Likert-type scale ranging from “never” to “always,” with higher scores indicating higher levels of burnout.

The Turkish version of the scale has demonstrated satisfactory psychometric properties. Çapri (2013) reported a Cronbach's alpha reliability coefficient of 0.91, indicating high internal consistency. The scale was originally adapted from the Burnout Measure and has been validated for use in Turkish populations. The scale provides a continuous burnout score, and no specific diagnostic cut-off value is defined; higher total scores indicate greater burnout levels.

The Beck Depression Scale

Depression levels of the students were assessed using the Beck Depression Scale (BDS), which was adapted into Turkish by Hisli (1989). The scale consists of 21 items designed

to evaluate the severity of depressive symptoms. Each item is rated on a 4-point scale ranging from 0 to 3, with total scores ranging between 0 and 63. Higher scores indicate greater levels of depressive symptoms. In the Turkish adaptation study, the scale demonstrated good psychometric properties, with a Cronbach's alpha reliability coefficient of 0.80. Based on the established scoring guidelines, scores of 0–9 indicate minimal depression, 10–16 mild depression, 17–29 moderate depression, and 30–63 severe depression.

The Trait Hope Scale

Hope levels of the participants were assessed using the Trait Hope Scale (THS) adapted into Turkish by Tarhan and Bacanlı (2015). The scale consists of 12 items, including four agency (goal-directed energy) items, four pathways (planning to meet goals) items, and four filler items. Participants respond to each item using an 8-point Likert-type scale ranging from “definitely false” to “definitely true.” The total score is calculated based on the agency and pathways subscales, with higher scores indicating higher levels of dispositional hope. In the Turkish adaptation study, the scale demonstrated satisfactory psychometric properties, with Cronbach's alpha coefficients ranging between 0.74 and 0.86 for the subscales. The scale does not define a specific diagnostic cut-off score; instead, higher scores reflect greater levels of hope.

Data Analysis

Statistical analyses were performed using IBM SPSS Statistics for Windows, Version 25.0 (IBM Corp., Armonk, NY, USA). Descriptive statistics, including frequency, percentage, mean, and standard deviation, were calculated to summarize the characteristics of the participants and the scale scores. Prior to inferential analyses, the normality of the data distribution was examined using the Kolmogorov–Smirnov test and skewness–kurtosis values, which indicated that the data were not normally distributed. Therefore, non-parametric statistical tests were employed. Differences between groups were analyzed using the Mann–Whitney U test and the Kruskal–Wallis test, as appropriate. Relationships between burnout, depression, and hope scores were examined using Spearman's rank correlation coefficient (Spearman's rho). Statistical significance was determined at a $p < .05$ level.

Comparative Analysis

A Kruskal–Wallis test was conducted to examine whether burnout, hope, and depression scores differed across class levels (first to fourth year) in Table 2.

The results indicated that there were no statistically significant differences between class levels in burnout scores, $H(3) = 1.95, p = .583$. Similarly, hope scores did not significantly differ across class levels, $H(3) = 2.96, p = .397$. Depression scores also showed no statistically significant differences between the class levels, $H(3) = 5.88, p = .117$.

Because the overall tests were not statistically significant, post-hoc pairwise comparisons were not performed.

Table 2

Comparison of Study Variables Across Class Levels (Kruskal–Wallis Test)

Variable	Class	Min	Max	Median	Mean	Mean Rank	<i>H</i>	<i>df</i>	<i>p</i>
Burnout	1st year	1	6.50	3.20	3.25	141.08	1.95	3	.583
	2nd year	1.50	7	3.05	3.31	143.21			
	3rd year	1	7	3.40	3.53	157.00			
	4th year	1.10	7	3.05	3.24	141.04			
Hope	1st year	8	64	45.50	45.92	143.24	2.96	3	.397
	2nd year	9	64	46	44.44	134.39			
	3rd year	8	64	47	46.43	147.58			
	4th year	13	64	49	47.72	158.74			
Depression	1st year	0	43	15	14.45	154.33	5.88	3	.117
	2nd year	0	46	12	13.46	137.00			
	3rd year	0	43	15	15.37	159.17			
	4th year	0	59	12	12.96	130.24			

Note. Values are presented as mean, median, and range (min–max). Group comparisons were conducted using the Kruskal–Wallis test.

Correlational Analysis

Spearman’s rank-order correlation analysis was conducted to examine the relationships between burnout, depression, and hope among the participants in Table 3.

The results revealed a significant positive correlation between burnout and depression ($r = .647, p < .001$), indicating that higher levels of burnout were associated with higher levels of depressive symptoms.

Hope was negatively correlated with both depression and burnout. A moderate negative correlation was found between hope and depression ($r = -.462, p < .001$), suggesting that higher levels of hope were associated with lower levels of depressive symptoms. Additionally, hope showed a negative correlation with burnout ($r = -.320, p < .001$), indicating that higher hope levels were associated with lower burnout levels.

Overall, the findings suggest that burnout and depression are strongly related, whereas hope appears to be associated with lower levels of both burnout and depressive symptoms.

Table 3

Spearman Correlations Between Burnout, Depression, and Hope (N = 291)

Variable	1	2	3
Depression	—		
Burnout	.647*	—	
Hope	-.462*	-.320*	—

Note. Spearman's rho correlation coefficients are reported. * $p < .001$

Spearman correlation analysis was conducted to examine the relationships between burnout, depression, and hope. The results revealed a significant positive correlation between burnout and depression ($r = .647, p < .001$). Hope was negatively correlated with both depression ($r = -.462, p < .001$) and burnout ($r = -.320, p < .001$), indicating that higher levels of hope were associated with lower levels of depression and burnout.

Discussion

The present study examined the relationships between burnout, depression, and hope among undergraduate students enrolled in a Speech and Language Therapy (SLT) program. The findings revealed a strong positive association between burnout and depressive symptoms, while hope was negatively associated with both burnout and depression. Additionally, no statistically significant differences were found in burnout, hope, or depression scores across different class levels.

One of the most notable findings of the study is the strong positive correlation between burnout and depression. This result suggests that students who experience higher levels of

burnout also tend to report higher levels of depressive symptoms. This finding is consistent with previous research indicating that burnout and depression share overlapping emotional and cognitive components, particularly feelings of exhaustion, helplessness, and reduced motivation (Bayram & Bilgel, 2008; Eisenberg et al., 2007). Within demanding academic environments such as health-related training programs, prolonged academic stress and workload may contribute to both emotional exhaustion and depressive symptomatology. University students, especially those enrolled in health-related disciplines, often encounter intensive coursework, clinical expectations, and performance pressure, all of which may increase psychological vulnerability (Rosales-Ricardo et al., 2021). Therefore, the strong association observed in the present study supports the notion that burnout and depressive symptoms may represent closely related dimensions of psychological distress in student populations.

The results also demonstrated that hope was negatively associated with both depression and burnout. Students with higher levels of hope tended to report lower levels of depressive symptoms and burnout. Hope has been conceptualized as a cognitive–motivational construct involving goal-directed thinking, including both pathways (planning ways to achieve goals) and agency (motivation to pursue those goals). Individuals with higher levels of hope may be better able to cope with academic stress, maintain motivation, and generate adaptive strategies when facing challenges. In this sense, hope may function as a psychological resource that helps protect students against emotional distress and academic exhaustion. These findings are consistent with previous research suggesting that psychological resources such as emotional intelligence, resilience, and hope may buffer against burnout among healthcare students (Daud et al., 2022). Promoting hope and adaptive coping strategies within educational environments may therefore play an important role in supporting students' mental well-being.

It is also possible that the academic structure of SLT programs exposes students to consistently high levels of emotional, cognitive, and clinical demands throughout their training. SLT students are required to engage early with individuals presenting complex communication and swallowing disorders, which involves sustained interpersonal interaction, emotional attunement, and clinical responsibility. These demands, combined with performance expectations in supervised clinical settings, may contribute to an increased risk of burnout and psychological distress. Previous research has similarly highlighted that students in health-related professions are particularly vulnerable due to the emotionally demanding and

responsibility-intensive nature of their training (Brito-Marcelino et al., 2015). In addition, studies have suggested that burnout levels may increase as academic and clinical demands intensify across training (Arian et al., 2023).

Alternatively, students may gradually develop coping strategies and psychological resilience over time, which may help maintain relatively stable levels of psychological functioning across class levels. This balance between increasing demands and developing coping mechanisms may explain the relatively stable levels of burnout, depression, and hope observed in the present study. Nevertheless, future studies employing longitudinal designs could provide more detailed insights into how these psychological constructs evolve across different stages of professional training. Previous studies conducted in healthcare education programs have similarly suggested that students may adapt to academic and clinical demands over time (Arian et al., 2023). Nevertheless, future studies employing longitudinal designs could provide more detailed insights into how burnout, depression, and psychological resources evolve across different stages of professional training.

The findings of this study highlight the importance of considering psychological resources such as hope in understanding student well-being in health-related academic programs. Given the observed associations between hope, burnout, and depression, interventions aimed at strengthening students' goal-directed thinking, coping skills, and motivational resources may contribute to improved psychological well-being. Universities may therefore benefit from integrating psychological support programs, counseling services, and resilience-building interventions into their educational environments. Such approaches may help reduce the risk of burnout and depressive symptoms among students while promoting healthier adaptation to the academic and clinical demands of healthcare training.

Despite the strengths of this study, several limitations should be acknowledged. First, the use of a convenience sampling method and the recruitment of participants from a single university limit the generalizability of the findings to all SLT students in Türkiye or elsewhere. Future studies should include more diverse and representative samples from multiple institutions. Second, the cross-sectional design of the study precludes the ability to infer causal relationships between burnout, depression, and hope levels. Longitudinal studies are recommended to better understand the developmental trajectories of these psychological constructs. Third, the reliance on self-reported measures may introduce response biases, such as social desirability bias or inaccuracies in self-assessment. Incorporating objective or multi-

informant measures in future research could mitigate this limitation. Fourth, although validated scales were used, the general burnout scale applied in the study may not fully capture academic- or clinical-specific dimensions of burnout experienced by SLT students. Utilizing more specialized instruments, such as academic burnout scales, could provide deeper insights. Finally, the relatively small proportion of male participants in the present sample may have reduced the statistical power to detect potential gender differences and could therefore increase the risk of a Type II error. As such, future studies with more gender-balanced samples may provide clearer insights into potential gender-based differences in psychological well-being. At the same time, the absence of gender differences in the present findings may indicate that psychological factors such as stress and burnout operate relatively independently of gender within similar academic contexts. The relatively small number of male participants (approximately 10% of the sample) limits the ability to fully explore potential gender differences in burnout, depression, and hope levels. Future research with more gender-balanced samples is warranted to examine these differences more thoroughly.

Building upon the findings and addressing the noted limitations, future research should prioritize longitudinal designs to explore how burnout, depression, and the trait of hope evolve throughout the academic and early professional careers of SLT students. Multi-center studies involving participants from various universities and regions would enhance the generalizability of results. Additionally, the development and implementation of targeted intervention programs such as hope-based resilience training or burnout prevention workshops could be evaluated for their effectiveness in promoting psychological well-being among SLT students. Incorporating qualitative methods, such as interviews or focus groups, may also provide deeper insights into the subjective experiences of burnout and resilience strategies within this population.

Conclusion

This study examined the relationships between burnout, depression, and hope among undergraduate SLT students in Türkiye. The findings revealed a strong positive association between burnout and depressive symptoms, while hope was negatively associated with both burnout and depression. Additionally, no significant differences were observed in burnout, depression, or hope scores across class levels.

These findings suggest that psychological well-being among SLT students may be influenced more by individual psychological resources than by demographic characteristics or

academic year. In particular, the negative association between hope and both burnout and depression highlights the potential protective role of hope as a psychological resource in demanding academic environments.

Given the intensive academic and clinical demands of SLT training programs, universities may benefit from implementing mental health support services, early screening mechanisms, and interventions aimed at strengthening hope and resilience. Such initiatives may help reduce the risk of burnout and depressive symptoms while supporting students' academic success and long-term professional development.

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