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RESEARCH ARTICLE

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Perceived Parenting Styles, Perfectionism, and Social Appearance Anxiety among Emerging Adults: A Mediation Analysis*

Merve Sema Aygün¹, Müge Akbağ²

¹ M.A., Maltepe University Medical Faculty Hospital, İstanbul/Türkiye
ORCID: 0000-0001-7219-7912
E-Mail:
mervesemaaygun@gmail.com

² Assoc. Prof. Dr., Marmara University, Department of Educational Sciences, Guidance and Psychological Counseling, Istanbul/Türkiye
ORCID: 0000-0003-0507-9072
E-Mail:
makbag@marmara.edu.tr

Corresponding Author:
Müge Akbağ

Abstract

The main purpose of the study is to examine the mediating role of perfectionism in the relationship between perceived parenting styles (emotional warmth, overprotection, and rejection) and social appearance anxiety among emerging adults. Conducted as a relational survey model, the study sample included 410 university students (262 females, 148 males). Data were collected using the Personal Information Form, the Social Appearance Anxiety Scale, the Frost Multidimensional Perfectionism Scale, and the The Short Form of EMBU for Children. Pearson Product-Moment Correlation and Bootstrapping techniques were used for data analysis. Social appearance anxiety was positively correlated with perfectionism, maternal/paternal overprotection and maternal/paternal rejection, but negatively related to maternal/paternal emotional warmth. Moreover, perfectionism was positively correlated with maternal/paternal overprotection and rejection but not with emotional warmth. The results of the bootstrapping analysis revealed that maternal/paternal overprotection and rejection, but not emotional warmth correlated with social appearance anxiety via perfectionism. This suggests that parenting styles are indirectly linked to social appearance anxiety through perfectionism in emerging adults. These findings are expected to shed light on preventive and therapeutic interventions, especially in the context of mental health counselling to reduce social appearance anxiety in emerging adults, and to guide future research.

Keywords: *Perceived parenting styles, perfectionism, social appearance anxiety, emerging adulthood.*

Öz

Bu çalışmada, algılanan ebeveynlik stilleri (duygusal sıcaklık, aşırı koruma ve reddetme) ile sosyal görünüş kaygısı arasındaki ilişkide mükemmeliyetçiliğin aracı rolünün incelenmesi amaçlanmıştır. İlişkisel tarama modelinde tasarlanan çalışmanın örneklemi beliren yetişkinlik dönemindeki toplam 410 üniversite öğrencisinden oluşmaktadır. Katılımcıların 262'si kadın, 148'i erkektir. Veriler Kişisel Bilgi Formu, Sosyal Görünüş Kaygısı Ölçeği, Frost Çok Boyutlu Mükemmeliyetçilik Ölçeği ve Kısaltılmış Algılanan Ebeveyn Tutumları Ölçeği-Çocuk Formu'ndan yararlanılarak toplanmış, Pearson Momentler Çarpım Korelasyonu ve regresyon temelli Bootstrapping teknikleri ile analiz edilmiştir. Sosyal görünüş kaygısı; mükemmeliyetçilik, annenin/babanın aşırı koruyuculuğu ve reddediciliği ile pozitif, annenin/babanın duygusal sıcaklığı ile negatif yönde ilişkilidir. Ayrıca mükemmeliyetçilik anne/baba için algılanan aşırı koruyucu ve reddedici ebeveynlik stilleri ile pozitif yönde ilişkiliyken, her iki ebeveynin de duygusal sıcaklığıyla anlamlı bir ilişki göstermemiştir. Bootstrapping analizi sonuçları, mükemmeliyetçiliğin annenin/babanın aşırı koruyuculuğu ve reddediciliğiyle sosyal görünüş kaygısı arasındaki ilişkide aracı rolü oynadığını ortaya koymuştur. Bununla birlikte, annenin/babanın duygusal sıcaklığı ile sosyal görünüş kaygısı arasındaki ilişkide mükemmeliyetçilik aracılık rolüne sahip değildir. Bu bulgular, beliren yetişkinlerde ebeveynlik stillerinin sosyal görünüş kaygısıyla mükemmeliyetçilik üzerinden dolaylı bir ilişkisi olduğuna işaret etmektedir. Araştırmanın bulgularının, özellikle ruh sağlığı danışmanlığı bağlamında, beliren yetişkinlik dönemindeki bireylerde sosyal görünüş kaygısını azaltmaya yönelik uygulanacak olan önleyici ve iyileştirici müdahalelere ve gelecekte yapılacak araştırmalara önemli katkılar sağlaması beklenmektedir.

Anahtar Kelimeler: *Algılanan ebeveynlik stilleri, mükemmeliyetçilik, sosyal görünüş kaygısı, beliren yetişkinlik*

Introduction

As social beings, individuals continuously interact with one another, resulting in mutual influence (Hortaçsu, 2003). However, social anxiety may arise when individuals believe that they are incapable of making a favorable impression in social settings. Social anxiety is defined as an intense concern and discomfort regarding how one is perceived by others (Clark & Wells, 1995; APA, 2013). This intense fear and anxiety often occurs during social interactions and performance situations. Individuals experiencing this anxiety worry about being humiliated or constantly scrutinised by others (Antony & Rowa, 2008).

Social appearance anxiety (SAA) is defined as the intense stress and worry an individual feels about how their physical attributes - such as body shape, facial structure, height and weight - will be judged by others (Hart et al., 2008). Leary and Kowalski (1995) link this anxiety to an individual's desire to conform to societal standards of physical appearance and the fear of being judged on the basis of appearance. SAA differs from general social anxiety as it specifically concerns one's perceived attractiveness to others. The desire to make a positive impression and the belief that it is necessary can heighten this anxiety. Individuals with a negative body image tend to focus on how others perceive and evaluate their appearance (Hart et al., 2008). If they feel inadequate in making a positive impression, their SAA may intensify. Existing research findings in the literature show that the desire for social acceptance, negative body image and body dissatisfaction are strongly associated with SAA (Atalay & Gençöz, 2008; Boursier et al., 2020; Garcia, 1998; Levinson & Rodebaugh, 2013).

Social Appearance Anxiety in Emerging Adulthood

SAA can negatively impact relationships. Research shows that SAA affects social interactions (Moneva et al., 2020) and leads to feelings of loneliness (Amil & Bozgeyikli, 2015). Due to this impact, SAA is recognized as a phenomenon that should be particularly examined in individuals during emerging adulthood, which spans the ages of 18 to 25. Emerging adulthood is a crucial period when indi-viduals strive for independence and define themselves within social relationships (Arnett, 2000). Additionally, this period is considered a developmental stage in which individuals are expected to resolve the intimacy versus isolation conflict described in Erikson's psychosocial development theory (Bishop, 2018). Difficulties in forming social relationships or challenges within these relationships can impact the quality of life of emerging adults. Inded, Kocovski and Endler (2000) highlight that the anxiety experienced during this period can have adverse effects on social relationships, academic success and overall life satisfaction. Furthermore, as emerging adults seek acceptance and strive to leave a positive impression in social settings, they become more sensitive to social evaluation. This heightened sensitivity can trigger SAA and negatively impact their social relationships. Besides, research indicates that external factors such as social media and peer pressure exacerbate SAA in this group (Boursier et al., 2020; Holland & Tiggemann, 2016). In particular, it has been reported that the widespread use of visual-based social media platforms (Instagram, Facebook, Flickr, etc.), which we encounter with new forms by the day, leads young people to make more appearance comparisons due to their exposure to unrealistic and idealized body images. This, in turn, increases body dissatisfaction fostering a stronger desire to achieve the perfect body (e.g., Bahtiyar, 2021; Karsay et al., 2020; Özmen & Çelik, 2024; Türk & Bayrakçı, 2019). Recent research indicates that this is a risk factor for SAA in emerging adults (e.g., Liu, 2024; Papapanou et al., 2023; Şengönül & Aydın, 2023), and leads to feelings of loneliness (Papapanou et al., 2023). Therefore, considering the developmental characteristics of this stage and the aforementioned effects of social media, it is crucial to examine both external (environmental) and internal (individual) factors contributing to SAA in emerging adults and to implement preventive interventions to mitigate its effects.

Perfectionism and Social Appearance Anxiety

Perfectionism is characterized by a persistent drive to set exceptionally high standards for oneself, along with an intense fear of making mistakes

(Frost et al., 1990). Research indicates that perfectionism, as a personality trait, is linked to various behavioral issues, including anxiety, anxiety-related disorders, eating disorders, interpersonal rumination, and depression (e.g., Hewitt et al., 2002; Nepon et al., 2011; Smith et al., 2017). Additionally, studies emphasize that perfectionism shapes expectations in social relationships and is associated with both social anxiety and SAA (e.g., Çelik & Güzel, 2018; Nepon et al., 2011; Levinson et al., 2013). Perfectionistic individuals may be more sensitive about their physical appearance, making them vulnerable to criticism and increasing their likelihood of experiencing SAA. At this point, the relationship between perfectionism and SAA can be explained by the view that parenting styles play a crucial role in shaping the cognitive foundation of perfectionism (Gabbard, 2004; Hewitt et al., 2017).

Parenting Styles, Perfectionism and Social Appearance Anxiety

The literature highlights the long-term effects of parenting styles from early childhood into later life (Flett et al., 1995; Frost et al., 1990; Hewitt et al., 2017; Hamachek, 1978). In this regard, studies also draw attention to the role of parenting styles in the development of perfectionism (Flett & Hewitt, 2002; Frost et al., 1991; Hamachek, 1978; Hewitt et al., 2017) and report their association with both perfectionism and anxiety disorders (Affrunti & Woodruff-Borden, 2015, 2018; Mitchell et al., 2013). Moreover, researchers have increasingly focused on the effects of parenting styles on domain-specific anxiety problems (Affrunti & Woodruff-Borden, 2018; Yaffe, 2018). All of these factors have led us to examine the relationship patterns between parenting styles, perfectionism, and anxiety, particularly in the context of SAA, a distinct form of anxiety.

Although various classifications of parenting styles exist in the literature, the most widely accepted classification of parenting styles comes from Baumrind's (1967) model, which identifies three types: authoritative (democratic), authoritarian (restrictive), and permissive (indulgent). This model was later expanded by Maccoby and Martin

(1983), who introduced a fourth parenting style, neglectful (rejecting). In this model, it is essential that parenting styles are defined on the basis of two key dimensions: reactivity (emotional warmth, sensitivity, interest, and supportiveness), which reflects the extent to which parents respond to their children's needs, and control (demandingness and discipline), which represents the degree to which parents establish authority and set limits for their children (Baumrind, 2005; Maccoby & Martin, 1983). In this study, parenting styles were analyzed in the context of *overprotection, rejection,* and *emotional warmth*, as these styles cover the two dimensions proposed by Baumrind.

Relatively little research has directly examined the relationship between parenting styles and SAA (Sen et al., 2020). Existing studies have primarily focused on the effects of parenting styles on other types of anxiety, such as generalised anxiety disorder, separation anxiety, and school anxiety (e.g., Yaffe, 2018; Stevens et al., 2015; Wood et al., 2003). As SAA is a specific form of social anxiety, research on parenting styles and social anxiety (e.g., Bögels et al., 2001; Banerjee, 2005; Lieb et al., 2000) suggests a possible link between parenting styles and SAA. In addition, some studies indicate that the parent-child relationship may predict body satisfaction even years later. (Boutelle et al., 2009; Crespo et al., 2010). Given that body satisfaction is linked to SAA, early experiences with parenting styles may contribute to its development over time. On the other hand, many theorists argue that perfectionistic tendencies stem from the family environment, parent-child interactions, and parenting styles (Flett et al., 1995; Frost et al., 1991; Hewitt & Flett, 1991; Hamachek, 1978; Rice et al., 1996). For example, overprotective and rejecting parenting styles may contribute to the development of perfectionism (Hewitt & Flett, 1991; Soenens & Vansteenkiste, 2010; Soenens et al., 2005). Furthermore, parental emotional warmth supports the adaptive aspects of perfectionism while buffering against its maladaptive aspects (Hibbard & Walton, 2014; Richter et al., 2000). Given the evidence linking perfectionism with SAA, perfectionism may act as a mediator in this relationship. In other words, early exposure to these parenting styles may shape perfectionistic tendencies, which in

turn may strongly contribute to the development of SAA later in life.

Aim of the Present Study

As highlighted earlier, the literature review revealed that studies have examined the relationships between parenting styles, perfectionist personality traits, and SAA separately. However, no study has been found that directly examines the relationship patterns among these three variables. In addition, it is common in the literature to consider children's perceptions rather than parents' reports when determining parenting styles. Based on the results of their studies, researchers emphasize that parents may tend to rate their own parenting style more positively —more supportive and moderate or less controlling— than they actually are (e.g., Hou vd., 2020; Korelitz & Garber, 2016). The fact that they responded in the direction of social desirability may explain this situation (Khaleque et al., 2008). Therefore, children's perceptions can be considered a more reliable indicator than parents' reports in parenting research. Indeed, it is noteworthy that in studies conducted on the variables examined in the present study, parenting styles are often assessed based on offspring perceptions rather than parents' self-reports (e.g., Avcanok, 2013; Bakiler, 2022; Banerjee, 2005; Yaffe, 2018; Ying et al., 2022). Based on these rationales, the present study aims to examine the relationship between perceived parenting styles in childhood and SAA in emerging adults, both directly and indirectly through perfectionism.

Understanding how mediating mechanisms, such as perfectionism, shape the relationship between perceived parenting styles and SAA may offer deeper insights into the dynamics of SAA. Identifying these relationship patterns is expected to pave the way for preventive, protective, and therapeutic interventions, particularly in mental health counseling, to reduce SAA in emerging adulthood. Additionally, this research may contribute to future studies on this topic. In line with the aim of the study, the following hypotheses were tested.

H1: Perceived maternal parenting styles (i.e., emotional warmth, rejection and overprotection) have indirect effects on social apperance anxiety via perfectionism in emerging adults.

H2: Perceived paternal parenting styles (i.e., emotional warmth, rejection and overprotection) have indirect effects on social apperance anxiety via perfectionism in emerging adults.

Method

Research Model

This study was designed using the correlational survey model, a quantitative research method. The hypothetical model constructed to analyze the relationships between variables was tested using a simple mediation model. A mediation model shows how M (*mediating variable: perfectionism*) mediates the relationship between X (*independent variable: parenting styles*) and Y (*dependent variable: social appearance anxiety*) through the pathway X → M → Y (Hoyle, 2012). Additionally, the study has a retrospective design, as participants rated their perceptions of parenting styles during childhood.

Population and Sample

The study population consists of university students in the emerging adulthood period, enrolled in one public and one private university in Istanbul. The study sample was selected using a random cluster sampling method from students in different departments. A total of 84,834 students from the specified universities constituted the study population. To determine the sample size, the Cohen et al.'s (2000) table, commonly used when the total population size is known, was utilized, establishing a minimum of 384 participants at a 95% confidence level. To account for potential missing or inaccurate data, the study sample size was expanded, and after data cleaning, the final sample comprised 410 participants. Of the participants, 262 (63.9%) were female and 148 (36.1%) were male, aged between 18 and 25 years, with the mean age of 21.00 years (SD = 1.66). Additionally, 236 (57.6%) were enrolled in a public university and 174 (42.4%) in a private university.

Data Collection Tools

Personal Information Form (PIF)

A PIF specifically created for this study was used to collect participants' personal details, including gender, age, and their enrolled university.

Social Appearance Anxiety Scale (SAAS):
The SAAS is a 16-item, 5-point Likert scale (1 = not at all appropriate to 5 = completely appropriate) developed by Hart et al. (2008) and adapted into Turkish by Doğan (2010). It measures appearance-related social anxiety, with higher scores indicating greater SAA. Reliability analyses of the Turkish version showed a Cronbach's alpha of 0.93, test-retest reliability of 0.85, and split-half reliability of 0.88. In this study, Cronbach's alpha was 0.92 and McDonald's omega (ω) was 0.93.

Frost Multidimensional Perfectionism Scale (FMPS):
The FMPS, developed by Frost et al. (1990) to assess perfectionistic tendencies, was adapted to Turkish by Kağan (2011). It consists of 35 items across six subscales, rated on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). The adaptation confirmed the original six-factor structure in the Turkish sample. The subscales include *concern over mistakes, personal standards, parental expectations, parental criticism, doubts about actions,* and *organization.* The overall Cronbach's alpha was 0.91, with subscale values ranging from 0.64 to 0.94. Test-retest reliability was 0.82 for the total scale and ranged from 0.63 to 0.82 for the subscales. In this study, Cronbach's alpha for the total scale was 0.89, with subscale values between 0.71 and 0.92, while McDonald's omega (ω) for the total scale was 0.89.

The Short Form of EMBU for Children [Egna Minnen Barndoms Uppfostran; One's memories of upbringing] (S-EMBU-C):
The S-EMBU-C is a self-report scale used to assess adults' perceptions of their parents' parenting styles during childhood. The scale was developed by Arrindell et al. (1999) and adapted to Turkish by Dirik et al. (2015). It consists of 23 items rated on a 4-point Likert scale (1 = no, never; 4 = yes, most of the time). The scale includes three dimensions: *emotional warmth, overprotection,* and *rejection.* It is administered separately to mothers and fathers. Reliability analyses showed that Cronbach's alpha for maternal parenting styles were 0.75 (emotional warmth), 0.72 (overprotection), and 0.64 (rejection), while for paternal parenting styles, they were 0.79, 0.73, and 0.71, respectively (Dirik et al., 2015). In this study, Cronbach's alpha ranged from 0.62 to 0.79 for mothers and from 0.64 to 0.80 for fathers. McDonald's omega (ω) reliability coefficients ranged from 0.70 to 0.81 for maternal and from 0.71 to 0.81 for paternal parenting styles.

Procedure

Before data collection, ethical approval was obtained from the Maltepe University Ethics Committee on December 13, 2018 (Decision No: 2018/07, Protocol No: 2018/07-09), along with permission from the university rectorates. Data collection was conducted in the classroom setting under the guidance of the first researcher. Participants confirmed their voluntary participation by signing the informed consent form. The data collection tools were administered in the following order: PIF, SAAS, FMPS, and S-EMBU-C, with an approximate completion time of 25–30 minutes.

Data Analysis

Missing values and outliers were identified prior to data analysis. Scales with incomplete responses were excluded. Outliers were detected using standard z-scores, and 15 cases exceeding ±3.29 (Çokluk et al., 2012) were excluded. Mahalanobis distance values (p < 0.001) were calculated to assess multivariate normality (Tabachnick & Fidell, 2019), resulting in the removal of five additional outliers. Mean (M), standard deviation (SD), skewness and kurtosis were computed, with skewness and kurtosis values falling within ±1.5 (see Table 1), confirming a normal distribution (Tabachnick & Fidell, 2019).

Given the normality of the data, parametric tests were applied. Pearson Product-Moment Correlation was used to examine relationships between variables. A simple mediation model, using

bootstrapping with PROCESS Macro Model 4, was performed to explore whether perfectionism mediates the relationship between perceived maternal/paternal parenting styles (emotional warmth, overprotection, rejection) and SAA in emerging adults. Separate models for maternal and paternal parenting styles were tested, with gender as a covariate. Gender was transformed into a dummy variable and coded as female = 0, male = 1.

Tablo 1. Descriptive statistics of the study variables (N= 410)

Variable	M	SD	Kurtosis	$SD_{kurtosis}$	Skewness	$SD_{skewness}$
SAA	1.84	0.60	0.58	0.24	0.91	0.12
PER	2.42	0.52	-0.24	0.24	0.08	0.12
OVERPRO-M	2.07	0.47	-0.09	0.24	0.34	0.12
WARM-M	2.10	0.55	-0.16	0.24	-0.49	0.12
REJ-M	1.26	0.26	0.67	0.24	1.07	0.12
OVERPRO-F	1.96	0.48	0.10	0.24	0.53	0.12
WARM-F	2.84	0.59	0.07	0.24	-0.44	0.12
REJ-F	1.24	0.27	1.53	0.24	1.34	0.12

Note. SAA: Social Appearance Anxiety, PER: Perfectionism, OVERPRO-M: Over Protection-Mother, WARM-M: Warmth-Mother, REJ-M: Rejection-Mother, OVERPRO-M: Over Protection-Father, WARM-M: Warmth- Father, REJ-M: Rejection-Father.

As the bootstrapping technique is regression-based, multicollinearity among independent variables was tested using tolerance and VIF values. All VIF values were below 10 (1.00-1.10) and tolerance values were above 0.20 (0.91-1.00), confirming the absence of multicollinearity (Hair et al., 2019).

resamples and a 95% confidence interval. In bootstrapping, the significance of direct and indirect effects is determined using confidence intervals. If the lower (BootLLCI) and upper (BootULCI) confidence intervals for the indirect effect exclude zero, indicating mediation (Hayes, 2022). Effect size determination is recommended to assess the strength of mediation and the completely standardized indirect effect sizes are classified as small (≈ .01), medium (≈ .09), and large (≈ .25) (Cohen, 1988; Preacher & Kelley, 2011).

IBM SPSS 24.0 was used for descriptive statistics, bivariate correlations, and Cronbach's alpha. McDonald's omega was computed with Jamovi 2.3.26, and mediation analyses were conducted using PROCESS Macro 4.0 in SPSS. Statistical significance was set at $p < .05$.

Findings

Preliminary Analysis

Prior to testing the mediation model, the bivariate relationships between participants' retrospective perceptions of parental styles, perfectionistic traits, and SAA were examined (see Table 2).

The results of the Pearson correlation analysis revealed that SAA correlated positively with per-

Table 2. Bivariate correlations

Variable	1	2	3	4	5	6	7
1. SAA	-						
2. PER	.40**	-					
3. OVERPRO-M	.24**	.30**	-				
4. WARM-M	-.14**	.03	.07	-			
5. REJ-M	.29**	.28**	.32**	.34**	-		
6. OVERPRO-F	.15**	.30**	.72**	.03	.23**	-	
7. WARM-F	-.20**	.01	.02	.77**	-.24**	.11*	-
8. REJ-F	.22**	.28**	.22**	-.25**	.69**	.33**	-.28**

Note. SAA: Social Appearance Anxiety, PER: Perfectionism, OVERPRO-M: Over Protection-Mother, WARM-M: Warmth-Mother, REJ-M: Rejection-Mother, OVERPRO-F: Over protection- Father, WARM-M: Warmth- Father, REJ-M: Rejection-Father,

*p<.05, **p<.01.

Correlation values below 0.90, as seen in Table 2, further support this (Çokluk et al., 2012). Autocorrelation was assessed using Durbin-Watson (DW) values, which were approximately 2, within the expected range of 1.5-2.5, suggesting no autocorrelation problem (Kalaycı, 2006). This study performed bootstrapping technique with 5000

fectionism (r = 0.40, p<0.01), maternal overprotection (r = 0.24, p<0.01), paternal overprotection (r = 0.15, p<0.01), maternal rejection (r = 0.29, p<0.01) and paternal rejection (r = 0.22, p<0.01). It was negatively correlated with maternal (r = -0.14, p<0.01) and paternal emotional warmth (r = -0.20, p<0.01). Perfectionism was positively associated with maternal (r = 0.30, p<0.01) and paternal overprotection (r = 0.30, p<0.01) and with maternal (r = 0.28,

p<0.01) and paternal rejection (r = 0.30, p<0.01), but showed no significant relationship with maternal (r = 0.03, p>0.05) or paternal emotional warmth (r = 0.01, p>0.05).

Mediation Analysis

To test H1 and H2, six separate simple mediation analyses were conducted to examine the indirect effects of perceived parenting styles – *emotional warmth, rejection and overprotection*—on SAA via perfectionism for both mothers and fathers. The general hypothetical model is shown in Figure 1.
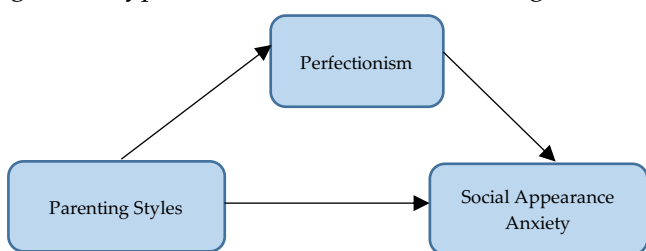

Figure 1. Hypothetical model for the mediating role of perfectionism

The Mediating Role of Perfectionism in the Relationship Between Perceived Maternal Parenting Styles and Social Appearance Anxiety

The first three mediation analyses tested H1, which proposed that perfectionistic traits would mediate the relationship between perceived maternal parenting styles—emotional warmth, rejection, and overprotection—and SAA in emerging adults, controlling for gender.

The direct effects in the first model indicated that perceived maternal warmth did not significantly predict perfectionism (B_a = 0.15, p>.05), but perfectionism positively predicted SAA (B_b = 0.27, p<.001). Conversely, perceived maternal warmth negatively predicted SAA (B_c = -0.38, p<.001). The indirect effect analysis showed that even when perfectionism was included in the model, the effect of perceived maternal warmth on SAA did not diminish and remained statistically significant ($B_{c'}$ = -0.42, p<.001). Thus, perfectionism does not mediate this relationship. The overall model was significant (R^2 = 0.20, F (406,3) = 34.20, p <.001), explaining 20% of the total variance in SAA.

Table 3. Direct and indirect effects of maternal warmth parenting style (N= 410)

Model 1	Boot Effect	SE	t	LLCI	ULCI
Total Effect (c: WM→SAA)	-.38	.12	-3.05**	-.62	-.13
Direct Effect (c': WM →SAA)	-.42	.11	-3.71***	-.64	-.20
Indirect effect (WM → PER→ SAA)	.04	.06		-.07	.15

Notes: WM (Warmth-Mother Independent variable); PER (Mediating variable); SAA (Dependent variable); ***p<.001; **p<.01; *p<.05

Bootstrapping analysis further confirmed the absence of mediation as the bootstrapped confidence interval of the indirect effect (bootstrap effect = 0.04, 95% CI *[-0.07, 0.15])* included zero (see Table 3).

The second mediation model was conducted to test whether perfectionism mediated the relationship between perceived maternal overprotection and SAA in emerging adults. The direct effects of the model showed that the perceived maternal overprotection positively predicted perfectionism (B_a = 1.10, p<.001). Perfectionism was also a positive predictor of SAA (B_b = 0.24, p<.001), and perceived maternal overprotection positively predicted SAA (B_c = 0.53, p<.001). When the indirect effect was analyzed, including perfectionism as a mediator, the effect of perceived maternal overprotection on SAA decreased but remained significant ($B_{c'}$= 0.26, p<.01). This indicated mediation, meaning perfectionism mediated the relationship between maternal overprotection and SAA. The overall model was significant (R^2 = 0.19, F(406,3) = 31.10, p<.001), explaining 19% of the total variance in SAA.

Table 4. Direct and indirect effects of maternal overprotection parenting style (N= 410)

Model 2	Boot Effect	SE	t	LLCI	ULCI
Total Effect (c: OM→SAA)	.53	.11	4.84***	.31	.74
Direct Effect (c': OM →SAA)	.26	.11	2.47**	.05	.47
Indirect effect (O → PER→ SAA)	.26	.05		.17	.38

Notes: OM (Overprotection-Mother, Independent variable); PER (Mediating variable); SAA (Dependent variable); ***p<.001; **p<.01; *p<.05

Upon examining the bootstrapping analysis, the confidence interval of the indirect effect does not include zero (bootstrap effect = 0.26, 95% CI [0.17, 0.38]), confirming mediation. The completely

standardized indirect effect size was found to be 0.12, indicating a moderate effect (see Table 4).

The third model tested whether perfectionism mediated the relationship between perceived maternal rejection and SAA. In terms of direct effects, perceived maternal rejection was a positive and significant predictor of perfectionism ($B_a = 2.25$, $p<.001$). Consistent with the previous two models, perfectionism positively predicted SAA ($B_b = 0.23$, $p<.001$), and maternal rejection had a significant and positive predictive power on SAA ($B_c = 1.52$, $p<.001$). Including perfectionism as a mediator reduced the effect of maternal rejection on SAA, though it remained significant ($B_{c'} = 1.01$, $p <.001$), indicating mediation. The overall model was significant ($R^2 = 0.21$, $F (406,3) = 35.71$, $p<.001$), explaining 21% of the total variance in SAA.

Table 5. Direct and indirect effects of maternal rejection parenting style (N= 410)

Model 3	Boot Effect	SE	t	LLCI	ULCI
Total Effect (c: RM→SAA)	1.52	.25	6.14***	1.03	2.01
Direct Effect (c′: RM →SAA)	1.01	.24	4.18***	.53	1.48
Indirect effect (RM → PER→ SAA)	.51	.11		.31	.76

*Notes: RM (Rejection-Mother, Independent variable); PER (Mediating variable); SAA (Dependent variable); ***p<.001; **p<.01; *p<.05*

The results of the bootstrapping analysis indicated that the indirect effect was significant, as the confidence interval did not include zero. This confirms that perfectionism mediates the relationship between perceived maternal rejection and SAA (bootstrap effect = 0.51, 95% CI [0.31, 0.76]). The completely standardized indirect effect size was 0.10, indicating a moderate effect (see Table 5).

The Mediating Role of Perfectionism in the Relationship Between Perceived Paternal Parenting Styles and Social Appearance Anxiety

The procedures conducted for mothers were repeated to test H2, which posited that perfectionistic personality traits would mediate the relationship between perceived paternal parenting styles during childhood and SAA, controlling for gender.

In the first model, the direct effects revealed that perceived paternal warmth was not a significant predictor of perfectionism ($B_a = 0.09$, $p>.05$). However, perfectionism positively predicted SAA ($B_b = 0.27$, $p<.001$). Additionally, paternal warmth was a negative and significant predictor of SAA ($B_c = -0.51$, $p<.001$). After including perfectionism as a mediator, the effect of paternal warmth on SAA remained significant and unchanged ($B_{c'}= -0.53$, $p<.001$), indicating no mediation. The overall model was significant ($R^2 = 0.23$, $F (406,3) = 39.43$, $p<.001$), explaining 23% of the total variance in SAA.

Table 6. Direct and indirect effects of paternal warmth parenting style (N= 410)

Model 1	Boot Effect	SE	t	LLCI	ULCI
Total Effect (c: WF→SAA)	-.51	.11	-4.47***	-.73	-.28
Direct Effect (c′: WF→SAA)	-.53	.10	-5.17***	-.73	-.33
Indirect effect (WF → PER→ SAA)	.02	.05		-.07	.14

*Notes: WF (Warmth-Father, Independent variable); PER (Mediating variable); SAA (Dependent variable); ***p<.001; **p<.01; *p<.05*

Bootstrapping results showed that the confidence interval of the indirect effect included zero, indicating that perfectionism did not mediate the relationship between perceived paternal warmth and SAA (bootstrap effect = 0.02, 95% CI [-0.07, 0.14]).

Table 7. Direct and indirect effects of paternal overprotection parenting style (N= 410)

Model 2	Boot Effect	SE	t	LLCI	ULCI
Total Effect (c: OF→SAA)	.32	.11	2.92**	.10	.53
Direct Effect (c′: OF→SAA)	.03	.11	.29	-.18	.24
Indirect effect (OF → PER→ SAA)	.29	.05		.19	.40

*Notes: OF (Overprotection-Father, Independent variable); PER (Mediating variable); SAA (Dependent variable); ***p<.001; **p<.01; *p<.05*

The second mediation model tested whether perfectionism mediated the relationship between perceived paternal overprotection and SAA. The direct effects of the model indicated that paternal overprotection positively predicted perfectionism ($B_a = 1.11$, $p<.001$), which in turn had a positive effect on SAA ($B_b = 0.26$, $p<.001$). Paternal overprotection also positively predicted SAA ($B_c = 0.32$, $p<.01$). When perfectionism was included, the ef-

fect of paternal overprotection on SAA became insignificant (Bc' = 0.03, p>.05), indicating mediation. The overall model was significant (R^2 = 0.17, F (406,3) = 28.67, p<.001), explaining 17% of the total variance in SAA.

Bootstrapping analysis also confirmed the mediating role of perfectionism, as the confidence interval of the indirect effect excluded zero (bootstrap effect = 0.29, 95% CI [0.19, 0.40]). The completely standardized mediation effect size was 0.13, indicating a moderate effect (see Table 7).

The final model tested the mediating role of perfectionism in the relationship between perceived paternal rejection and SAA in emerging adults. Examining the direct effects, it was found that paternal rejection positively predicted perfectionism (B_a = 2.24, p<.001). Consistent with the previous two models, perfectionism also positively predicted SAA (B_b = 0.24, p<.01). In addition, paternal rejection was a positive and significant predictor of SAA (B_c = 1.20, p<.001). Including perfectionism as a mediator reduced the direct effect of paternal rejection on SAA, though it remained significant ($B_{c'}$ = 0.67, p<.01), indicating mediation. The overall model was significant (R^2 = 0.19, F (406,3) = 31.68, p<.001), explaining 19% of the total variance in SAA.

Table 8. Direct and indirect effects of paternal rejection parenting style (N= 410)

Model 3	Boot Effect	SE	t	LLCI	ULCI
Total Effect (c: RF→SAA)	1.20	.25	4.80***	.71	1.70
Direct Effect (c': RF →SAA)	.67	.24	2.75**	.19	1.14
Indirect effect (RF → PER→ SAA)	.54	.12		.33	.80

Notes: *RF (Rejection-Father,Independent variable); PER (Mediating variable); SAA (Dependent variable); ***p<.001; **p<.01; *p<.05*

Bootstrapping analysis confirmed the mediating role of perfectionism, as the indirect effect was significant and the confidence interval did not include zero. This finding revealed that perceived paternal rejection was associated with SAA through perfectionism (bootstrap effect = 0.54, 95% CI [0.33, 0.80]). The completely standardized mediation effect size was 0.10, indicating a moderate effect (see Table 8).

Discussion and Conclusion

This section discusses findings in terms of the direct and indirect relationship of childhood parenting styles with SAA in emerging adults. As expected, both perceived maternal and paternal overprotection and rejection significantly predict perfectionism. In other words, as parental overprotection and rejection increase, perfectionistic traits in emerging adults also rise. This finding paralells with research highlighting the critical and long-term impact of early parenting experiences on the development of perfectionistic personality traits (Flett et al., 1995, Flett et al., 2002; Hewitt et al., 2017). Overprotection is manifested by excessive parental control that limits a child's autonomy (Parker, 1979). Overprotective parents also give their children the implicit message: 'I know what is best for you. Do what I say'. This parenting style is similar to Baumrind's (1967) authoritarian style, characterised by high expectations, low sensitivity to the child's needs and a demand for unquestioning obedience. Research suggests that overprotection promotes maladaptive perfectionism and feelings of inadequacy in children (Hewitt & Flett, 1991). Overprotected children may avoid making mistakes in order to meet their parents' high expectations and gain approval. Overprotection may also hinder the development of autonomy, leading the individual to constantly seek approval with a sense of inadequacy. Such tendencies may increase fear of negative evaluation (Soenens & Vansteenkiste, 2010) and contribute to the development of perfectionism over time (Frost et al., 1990; Hewitt & Flett, 1991). This finding of the direct relationship between perceived overprotective parenting and perfectionism is consistent with previous cultural and cross-cultural studies (Avcanok, 2013; Aydın, 2022; Banerjee, 2005; Ju et al., 2020; Segrin vd., 2021; Soenens & Vansteenkiste, 2010). In a meta-analysis study evaluating the relationship between parental overprotection—measured by the S-EMBU-C scale used in this study—and offspring psychological adjustment, the effect of parental overprotection on the psychological adjustment of the offspring yielded similar results in dif-

ferent cultures (de Roo et al., 2022). Although parental overprotection often leads to negative outcomes, some researchers emphasize that this behaviour may sometimes provide emotional security, in other words, it may have both positive and negative effects (Kağıtçıbaşı, 2010) and may not be perceived negatively as a form of 'love and protection' in societies like Turkey that experience the transition from collectivism to individualism (Ungar, 2009). This inconsistency in the literature may be related to methodological and measurement differences as well as cultural factors. For this reason, it is thought that there is a need for more cross-cultural, longitudinal studies in which variables such as socioeconomic level and parental educational status are taken into consideration along with regional differences within a culture.

The rejecting parenting style is characterized by excessive criticism, neglect, emotional unavailability, conditional acceptance, and disregard for the child's emotional and physical needs (Parker, 1979; Maccoby & Martin, 1983; Rohner et al., 2012). This approach can make a child feel worthless and unloved, leading them to base their self-worth on external standards and approval. As a result, this situation may contribute to the development of socially prescribed perfectionism, where individuals strive to meet the expectations of others in order to gain approval and avoid rejection (Flett et al., 1995; Hewitt & Flett, 1991). This finding is consistent with similar research findings in the national and international literature (Aydın, 2022; Walton et al., 2020; Maloney et al., 2014; Ying et al., 2021). Indeed, the results of 12 meta-analyses conducted to explore the universality of the Interpersonal Acceptance-Rejection Theory indicate that although the expression of parental behaviors may differ across cultures, children and adults tend to exhibit similar behavioral responses when they perceive rejection or acceptance from their parents (Khaleque & Ali, 2017).

However, no significant relationship was found between perceived maternal/paternal emotional warmth and perfectionism. Emotional warmth is characterized by accepting, caring, appreciative, and supportive parenting behaviors (Rohner, 1986; Parker, 1979; Baumrind, 1967). This style, aligning with Baumrind's (1967) authoritative parenting,

validates children's emotions while maintaining high but reasonable behavioral expectations. Research indicates that parental emotional warmth fosters healthy self-esteem and competence (Baumrind, 2013; Hamachek, 1978; Khaleque, 2012) and may reduce perfectionistic tendencies (Carmo et al., 2021). Previous studies have generally examined this parenting style in relation to both adaptive and maladaptive dimensions of perfectionism together, concluding that increased parental emotional warmth is associated with higher adaptive perfectionism and lower maladaptive perfectionism in children (Hibbard & Walton, 2014; Richter et al., 2000). The literature emphasizes that these two dimensions have distinct effects on individuals' behavior (e.g., Akbağ, 2024; Bieling et al., 2004; Chang et al., 2004). Therefore, the absence of a significant relationship between parental emotional warmth and perfectionism in this study may stem from the fact that both dimensions of perfectionism were not considered. Furthermore, when examining the relationship between these two variables, it is also crucial to determine whether emotional warmth is provided to the child unconditionally—without expectations, or conditionally, with demands and expectations. Indeed, Frost et al. (1990), who have conducted extensive theoretical and empirical studies on perfectionism, suggest that even when parents are emotionally warm, their high expectations and overemphasis on them – whether consciously or unconsciously - may be a risk factor for the development of maladaptive perfectionism.

The other finding of the study is that perfectionism is directly related to SAA. In other words, as perfectionism increases, so does social appearance anxiety. SAA, which is defined as the intense anxiety and discomfort an individual feels that he/she will be judged negatively because of his/her physical appearance (Hart et al., 2008), has been found to be positively associated with negative body image (Atalay & Gençöz, 2008; Boursier et al., 2020; Garcia, 1998; Levinson & Rodebaugh, 2013). There is also a positive relationship between perfectionism, body image dissatisfaction, and the tendency to avoid social situations where appearance may be the focus (Hewitt et al., 1995). Perfectionists' heightened sensitivity to their physical appearance

may make them more vulnerable to criticism. Their belief that they are not attractive or socially desirable enough may lead them to expect negative evaluations from others, thereby increasing their SAA. Furthermore, this finding is in line with research showing that individuals with social anxiety and SAA share similarities with perfectionists in their efforts to meet high standards and achieve perfection (Çelik & Güzel, 2018; Koçyiğit & Yalçın, 2021; Nepon et al., 2011; Zhu et al., 2021). This finding also supports research indicating that perfectionistic personality tendencies are an important risk factor for SAA (e.g., Levinson et al., 2013; Shah, 2023).

It was also concluded that perceived emotional warmth, overprotection, and rejection from both parents were directly associated with SAA. As parental emotional warmth increased, SAA decreased, whereas higher levels of overprotection and rejection were associated with increased SAA. The effect of parental overprotection in increasing SAA can be explained by several factors: excessive control may hinder the development of an individual's sense of competence (Ju et al., 2020), prevent them from discovering their identity and forming a positive self-concept (Beyers & Goossens, 2008), and lead to self-doubt due to controlling behaviors that do not allow mistakes. In addition, excessive self-consciousness may result in heightened feelings of shame (Flett et al., 2002), and dependency on others may cause individuals to become overly concerned with how they are perceived by others. Individuals who experience this parenting style during childhood may place excessive importance on gaining approval from others and use external evaluations as a reference point. As a result, they may develop heightened sensitivity to how their physical appearance is perceived in social settings, which may increase their level of SAA. Reseach supported this finding mainly report that children of overly controlling and protective parents tend to experience higher levels of social anxiety in later life (Banerjee, 2005; Spokas & Heimberg, 2009; Lieb, 2000; Stevens et al., 2015; Wood et al., 2003). A recent study in the national literature also found that an overprotective parenting style contributes to increased SAA in individuals (Bakiler, 2022). This finding regarding the relationship between overprotective parenting and social appearance anxiety can be interpreted in the context of cross-cultural similarities and differences, similar to the discussion of the finding regarding the relationship between this parenting style and perfectionism.

On the contrary, the decrease in SAA as the emotional warmth perceived by emerging adults for their mothers and fathers increases may be explained by the fact that these individuals form positive images of their own self and appearance as a result of their early experiences of unconditional acceptance and a sense of worthiness, and thus develop a basic belief system that they will be positively perceived based on the positive self-definition they have formed, rather than focusing too much on how others judge them in social settings. Khaleque (2012) found that parental emotional warmth was associated with positive self-esteem, self-competence, and psychological adjustment. Consistent with the findings of this study, research has also reported that parental acceptance reduces social anxiety (Wood et al., 2003) and SAA (Pınar & Epli, 2023).

Besides, emerging adults who perceived their parents as rejecting during childhood may not have experienced sufficient unconditional acceptance. A critical and insensitive parental approach may damage their emotional security, leading them to develop negative self-images in terms of both their identity and appearance (Bögels & Perotti, 2011; Hewitt & Flett, 1991). This, in turn, may contribute to the development of beliefs that they are not adequately perceived in a positive way in their social lives. In this context, an increase in SAA can be considered an expected outcome. It has been found that individuals who report experiencing a rejecting parenting style during childhood tend to have higher levels of negative body image perception and social physique anxiety (Sen et al., 2020), as well as higher levels of social anxiety (Lieb, 2000). Recent research in our culture also provides evidence for the relationship between a rejecting parenting style and SAA (Bakiler, 2022; Pınar & Epli, 2023).

Meanwhile, based on the findings of meta-analyses that provide global evidence that parental warmth/acceptance is associated with children's

psychological adjustment and cover many countries, including Turkey (e.g., Khaleque & Ali, 20017; Khaleque, 2012), researchers have pointed out that although there are differences in the way parents show warmth, meeting (i.e. warmth/acceptance) or not meeting (i.e. rejection) children's universal need for acceptance and love has the same function on offspring in different cultures (Khaleque & Ali, 2017; Lansford, 2022).

In conclusion, the findings of this study, which reveal the relationship between parenting styles and SAA, support the views of researchers that parental rejection and overprotection are early life risk factors for SAA (Brook & Schmidt, 2008; Stevens et al., 2015), while the parental emotional warmth serves as a protective factor (Bakiler, 2022; Pınar & Epli, 2023).

Findings regarding the indirect effects indicated that perfectionism mediated the relationship between SAA and perceived parental overprotection/rejection, but not emotional warmth. In another saying, parental warmth was only directly related to SAA, but not indirectly. Thus, hypotheses H1 and H2 were partially supported.

In view of the findings on indirect effects in the study, overprotective and rejecting parenting styles are not only directly related to SAA but also indirectly via perfectionism, which can be considered an expected outcome. As previously explained, individuals who are overprotected may struggle to develop sufficient autonomy, leading them to constantly shape themselves according to others' expectations and develop perfectionistic tendencies due to the fear of making mistakes (Soenens & Vansteenkiste, 2010; Soenens et al., 2005). In particular, maladaptive perfectionism is often observed in children of overprotective parents, and this tendency is known to drive them to pursue an ideal, flawless appearance in social settings as they grow older (Hewitt & Flett, 2002). This situation may increase the pressure to conform to societal standards of physical appearance, leading individuals to engage in excessive self-monitoring in social settings, thereby increasing SAA. Thus, perfectionism may act as a mediating variable that strengthens the relationship between overprotection and SAA. Studies highlighting the mediating role of perfectionism in the relationship

between parenting styles and different types of anxiety further support this finding (Banerjee, 2005; Wang & Yu, 2024).

On the other hand, the rejecting parenting style, characterised by criticism, lack of emotional support, emotional unavailability and conditional acceptance, may lead to sensitivity to rejection (Ibrahim et al., 2021), high levels of negative body image perceptions (Sen et al., 2020) and the pursuit of perfection in adulthood. Therefore, perfectionism is more likely to develop in children with overly critical parents (Flett et al., 1995; Frost et al., 1991). The rejecting parenting style experienced early on may lead the individual to internalise the belief that self-worth depends on meeting external standards. Rohner and Rohner (1980) noted that growing up with rejecting and overcontrolling parents can lead to overly critical thoughts about oneself and to being overly influenced by the opinions of others. This leads to over-adaptation which may increase social anxiety and appearance sensitivity. Indeed, some studies have shown that a rejecting parenting style is associated with 'socially oriented perfectionism', which refers to individuals' perception that others expect them to be perfect (Curran & Hill, 2022; Flett et al., 1995). As a result, this type of perfectionism may lead emerging adults to focus excessively on their physical appearance and increase their SAA for fear of being judged negatively in social settings (Leary & Kowalski, 1995). From another perspective, children who are exposed to overly critical, emotionally cold and lacking in compassion from parents with a rejecting parenting style may internalize this criticism and lack of compassion over time. This may inhibit the development of self-compassion and lead the individual to harshly criticise themselves and their appearance in a self-destructive way, increasing their vulnerability and causing them to be anxious and fearful in social settings. In the literature, studies demonstrating that individuals with a rejecting parenting style have low levels of self-compassion (Bakiler, 2022; Chen et al., 2020) and studies examining the relationship between self-compassion and perfectionism (Flett et al., 2023), provide evidence for this explanation.

The unexpected finding in this study that perfectionism did not play a mediating role in the relationship between perceived maternal/paternal emotional warmth and SAA. The lack of a direct relationship between parental warmth and perfectionism may explain this finding. However, previous studies have suggested that perceived parental warmth decreases maladaptive perfectionism and increases adaptive perfectionism (Hibbard & Walton, 2014; Flett et al., 1995), and the lack of expected findings may be due to the fact that both dimensions were not addressed in this study. Furthermore, the way in which parental warmth is expressed may affect perfectionism and SAA differently. If parents are supportive but emphasize success or have high expectations, perfectionism may still develop (Frost et al., 1990) and potentially contribute to the development of SAA (Wang & Yu, 2024). Different combinations of parenting styles - for example, controlling and overly demanding attitudes combined with emotional warmth - may increase or decrease SAA, with varied effects on different dimensions of perfectionism. Researchers suggest that in cases of overly warm parenting, children's ability to act independently may be weakened, leading to increased social anxiety (Van der Bruggen et al., 2010). In other words, excessive parental warmth may lead the child to seek more support in social settings and become more sensitive to others' judgements. In such situations, individuals may develop SAA by trying to maintain an idealized image in order to meet social approval standards. In summary, the influence of parenting styles is complex. Although the relationship between emotional warmth and SAA has been well documented in the literature, more research is needed to determine how emotional warmth affects perfectionism and how perfectionism, in turn, shapes this relationship.

Implications for Mental Health Practitioners

The results of this study point to a critical role for perfectionistic personality traits in the occurrence of SAA in emerging adults. As this study was conducted with university students in emerging adulthood, the findings may guide the development of preventive and intervention-based programmes within psychological counselling and guidance services in higher education. In individual or group intervention programmes, helping emerging adults to recognize their perfectionistic tendencies, to learn to base their self-worth on internal and realistic expectations rather than external standards, and to shift from destructive self-criticism to self-compassion could help to mitigate the negative effects of perfectionism. As a result, the risk of SAA may also be reduced.

The results of this study, conducted with individuals in emerging adulthood, provide clues to the long-term effects of parenting styles experienced since childhood. Given that overprotective and rejecting parenting styles are risk factors, while emotional warmth serves as a protective factor in the development of perfectionism and related SAA, implementing psychoeducation and counseling programs for parents may help them to adopt appropriate parenting styles and become aware of the long-term effects of negative parenting styles, such as overprotection and rejection, on their offspring.

Limitations of the Study and Recommendations for Future Research

This study has several limitations. Its retrospective and cross-sectional design limits understanding of the long-term effects of perceived parenting styles on perfectionism and SAA. Longitudinal studies are needed to track changes in parenting behaviors over time.

The study was conducted in a non-clinical sample, which limits the generalizability of the findings to individuals diagnosed with SAA. Future research should include clinical samples or be designed as comparative studies to gain deeper insights into the dynamics of SAA.

Data collection relied on self-report measures, making it unclear whether parental emotional warmth was unconditional or conditional, or in combination with another parenting style. To clarify this ambiguity, mixed-method research with triangulation of data should be designed.

This study did not find a significant relationship between parental emotional warmth and perfectionism, nor did it confirm the mediating role of perfectionism. Since adaptive and maladaptive aspects of perfectionism have different psychological effects (Akbağ, 2024; Bieling et al., 2004; Chang et al., 2004), not addressing both dimensions is a limitation of the study. Future research should include both dimensions for a clearer understanding of the relationships between these variables.

This study assessed perfectionism as a general trait. However, individuals may not display perfectionism across all domains of life. As researchers have increasingly emphasized (Affrunti & Woodruff-Borden, 2018; Stoeber, 2018; Stoeber & Stoeber, 2009), perfectionism should be examined in a domain-specific manner (e.g., appearance perfectionism).

To better understand the relationships between the study variables, a latent profile analysis could be conducted that includes factors such as combinations of parenting styles, number of siblings, birth order, single-parent upbringing, and parental divorce. Identifying profile types of individuals with SAA through such an analysis could provide mental health professionals with valuable guidelines for case formulation and intervention planning.

Finally, parenting styles may differ according to gender of both the child and the parent (Stephens, 2009; Yaffe, 2020). Future studies should investigate how gender moderates the relationships between the variables examined in this research.

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Journal of Society Research

RESEARCH ARTICLE

The Use of Artificial Intelligence for Decision-Making Process for Strategic Management

Osman Kurter[1]

[1] Dr., Karabük University, Economic & Administrative Sciences, Karabük/Türkiye
ORCID: 0000-0001-7581-1316
E-Mail:
osmankurter@karabuk.edu.tr

Abstract

Artificial intelligence (AI) is a rapidly developing technology with the potential to create profound changes across various domains, from societal structures to economic systems. This study focuses specifically on the impact of AI on strategic management decision-making processes. The primary aim is to explore how AI can enhance the quality of these processes and contribute to improved organizational performance. A literature review method was employed in the research, through which the theoretical foundations of artificial intelligence, its historical development, and its application areas in decision-making processes were thoroughly examined. The findings indicate that AI accelerates decision-making processes, leading to significant time and cost savings, while also minimizing human error. Decision support systems empowered by AI technologies enable organizations to make more accurate, consistent, and data-driven decisions in strategic management. However, to effectively integrate and benefit from these technologies, organizations must be adequately prepared in terms of both technological infrastructure and organizational culture. In this regard, the study emphasizes that AI is not merely a technical tool, but also a strategic asset that can offer competitive advantages when effectively adopted and utilized.

Keywords: *Artificial Intelligence, Decision Making, Strategic Management, Application of Artificial Intelligence, Effective Decision Making.*

Öz

Yapay zeka, günümüzde toplumların işleyişinden ekonomik yapılara kadar pek çok alanda köklü değişimlere yol açma potansiyeline sahip, hızla gelişen bir teknolojidir. Bu çalışma, özellikle yapay zekanın stratejik yönetim karar süreçlerine olan etkisini incelemeye odaklanmaktadır. Temel amaç, yapay zekanın bu süreçlerin kalitesini nasıl artırabileceğini ve organizasyonel performansa nasıl katkı sağlayabileceğini ortaya koymaktır. Araştırmada, literatür taraması yöntemi kullanılmış ve bu bağlamda yapay zekanın teorik altyapısı, tarihsel gelişimi ve karar verme süreçlerindeki uygulama alanları detaylı biçimde ele alınmıştır. Elde edilen bulgular, yapay zekanın karar alma süreçlerini hızlandırarak zaman ve maliyet açısından önemli avantajlar sağladığını, ayrıca insan kaynaklı hataları büyük ölçüde azaltabildiğini ortaya koymaktadır. Yapay zeka destekli karar destek sistemleri sayesinde, stratejik yönetimde daha isabetli, tutarlı ve veriye dayalı kararlar alınması mümkün hale gelmektedir. Ancak bu teknolojilerin etkin bir şekilde kullanılabilmesi için, organizasyonların hem teknolojik altyapı açısından donanımlı olmaları hem de yeniliklere açık bir organizasyonel kültüre sahip olmaları büyük önem taşımaktadır. Bu yönüyle çalışma, yapay zekanın yalnızca teknik bir araç değil, aynı zamanda stratejik bir avantaj unsuru olduğuna dikkat çekmektedir.

Anahtar Kelimeler: *Yapay Zeka, Karar Alma, Stratejik Yönetim, Yapay Zeka Kullanımı, Etkili Karar Verme*

Introduction

The recent expansion of the use of smart information systems has had a significant impact on all institutions and industrial sectors. The innovation of Artificial Intelligence (AI) aims to reformulate the strategy of institutions in line with rapid technological advancements, as it focuses attention on simulating human intelligence to accomplish the greatest possible amount of work that requires high intelligence capabilities in the shortest possible time (Venkatraman, 2017).

Following its first usage as terminology in 1958, research on AI's usage and application in many different industries has expanded rapidly. The accumulation and use of big data and the creation of new technological capabilities and capacity to handle said large volumes of data; called metadata, followed suit (Kedra et al., 2019). The introduction of new systems to handle big data, which was not possible earlier, was a natural progress that would have been impossible to handle by the human mind. Due to AI's application in so many different areas, it has become a frequently used term in daily life in the recent decade, and its potential application area has been researched and expanded in almost every segment of human life and scientific fields. Literature is rich with research exploring the use of AI in telecommunication (Morocho-Cayamcela, Lee, & Lim, 2019); civil engineering (Yigitcanlar, Desouza, Butler & Roozkhosh, 2020); education (Alenezi & Faisal, 2020; Harry, 2023); medicine (D'Souza, Prema, & Balaji, 2020; Foulquier, Redou, Le Gal, Rouvière, Pers & Saraux, 2018; Kedra et al., 2019; Orgeolet, Foulquier, Misery, Redou, Pers, Devauchelle-Pensec & Saraux, 2020); accounting (Sezer, Güdelek & Özbayoğlu, 2020); computer science (Zheng, Chien, & Wu, 2018; Wang, 2019); sustainability (Nishant, Kennedy, & Corbett, 2020); engineering (Rupali & Amit, 2017), and other areas.

While the utilization of AI and big data in the business administration domain has created corporate giants such as Amazon, Google, and Uber, the study of AI in strategic decision-making has rarely been explored in depth because 'strategy' has always been associated with the human mind and intuition (Wilson & Daugherty, 2018; Bean, 2019; Vasiljeva, Kreituss, & Lulle 2021). The change

of this misconception may have started to change with the World Chess Champion Garry Kasparov's loss to the Deep Blue computer developed by IBM in 1997. Therefore, research about this complex area has gained popularity in the last decade. After all, decision-makers in the business community have mixed feelings toward AI, because of its complexity and the research area's involvement in so many different scientific fields, hardware, and software systems.

This study will research the prospects of this new technology's usage in management and decision-making processes in detail using a Systematic Literature Review (SLR) in detail (Davenport & Ronanki, 2018; Leavy, 2020; Cubric, 2020; Büyükyılmaz, 2024). Alongside the positive perception of AI, such as IBM CEO Ginni Rometty claiming AI will enhance human intelligence further (Duan et al, 2019), there is also a negative perception, such as a bleak prediction of machines replacing human beings in the coming years attributed to Steven Hawking (Cellan-Jones, 2014; Haenlein & Kaplan, 2019; Dwivedi et al., 2019). Bill Gates' recommendation that humans should be worried about AI and machines competing with human beings in the future is also in line with this bleak prediction (Rawlinson, 2015). Along with these individual predictions, The World Economic Forum (WEF) analysis predicts that 20% of jobs in the UK, and 26% in China and India will be affected by the adoption of AI (Dwivedi, Rana, Jeyaraj, Clement, & Williams, 2019). Approximately one-third of researchers anticipate that the widespread adoption of AI in the future could have detrimental effects on humanity (Müller & Bostrom, 2016). From an ethical standpoint, the study provides a detailed analysis of the positive and negative impacts of this technological application.

Just like the application of automation systems used in manufacturing and other areas, organizations use AI to make more accurate decisions in the shortest time in strategic management and organizational behavior areas to increase their competitive edge, boost their profit margins, and save time. The decision-makers in the organizational settings started to develop awareness and full conviction of AI to utilize the maximum use of technological in-

novations. The precise procedures for making accurate and beneficial organizational decisions whilst relying heavily on automation systems such as AI and the Internet of Things to carry out their activities with increased efficiency became possible with the use of these new technological systems (Cockburn, Henderson & Stern, 2019; Sadat, 2023; Bruno, 2024; Büyükyılmaz, 2024). The creation of management information systems, AI, and expert systems is intended to provide the necessary support for decision-makers at all levels of management activities to perform their functions better and more accurately. Therefore, it is important to conduct practical research on the relationship between AI, and the decision-making process from the point of cost-benefit analysis. If there is a greater benefit than the cost while using these systems in an organizational setting, the utilization of them is advisable since the trend is toward more digitalization of the world (Kurter et al, 2021; Buhalis and Moldavska, 2021; Wirtz, Kunz, & Paluch, 2021; Ismanov, Qayumov, Mukhamadjonova, & Akhmadaliyev, 2024).

The Subject of Study

The objectives of this study are to investigate, and analyze the literature to discover how AI will impact strategic decision-making in the following management areas:

- Identifying the role of using AI and its impact on the decision-making processes for the organization.
- Discovering the most prominent strategic decision-making advantages, and the benefits for organizations while using the AI applications.
- Demonstrating the role of AI and its impact on the management activities and decision-making processes for the management team.
- Proposing solutions for organizational decision-makers while initiating and using AI.

Study Problem

Traditional decision-making processes used by management teams are based on intuition and provide insufficient data which results in inaccurate critical decisions that can be avoided by the usage of "AI". The utilization of "Artificial intelligence" can also benefit teams in the sense that it is practical and eliminates the time-consuming aspects that negatively affect management teams with the usage of traditional decision-making methods.

Data Collection Methodology

A literature review, a scientifically accepted research methodology is used to examine existing literature on a particular topic in a comprehensive and structured manner. This methodology offers a systematic approach to summarize existing knowledge on a topic, answer a clear research question, and identify gaps in the literature. The data of the study carried out for this purpose was obtained from databases such as PubMed, Scopus, Web of Science, and Google Scholar. The databases searched in question were made with the keywords "Artificial Intelligence", "Strategic Decision Making", and "Management Systems" only from peer-reviewed articles published between 2015-2023 excluding student theses and dissertations. In addition, reports from official sources, and statistics on the subject were examined and included, limited to the scope of the study.

Literature Review

Craig, Goldstein, Rougier, and Seheult (2001), investigated Bayesian forecasting for complex systems using computer simulators. The study indicates that when an organization needs to solve a complex problem, it usually resorts to expert advice because they have the experience and are aware of the available alternatives and opportunities for success. The research concludes that expert systems are decision-making systems or any computer devices and software packages used for solving problems that can reach a certain level of performance, equal to or exceeding human expertise.

The study explains that expert systems are by nature an applied branch of AI and that widespread in complex application fields such as real estate management, corporate plans, marketing, health care, and error analysis in many other industries.

Negnevitsky (2008), investigated computational intelligence applications in crisis management and power systems. This study considers expert systems as the key to the success of AI despite the vast new developments in human knowledge. This study concludes that expert systems are limited by a specific scope of expertise "as human psychological factors." Expert systems are not coherent and flexible enough, and it is difficult to verify their accuracy and integrity. Currently, there is no method to analyze the degree of their imperfection and inconsistencies.

Duan, Edwards & Dwivedi (2019), conducted detailed research to investigate the evolution of AI during the last six decades which includes the challenges and benefits associated with this new technology. This study proposes advanced research areas for Information Systems (IS) professionals who work in the areas of designing and implementing new AI systems for organizational decision-making applications.

Chang (2019) conducted a Data Envelopment Analysis (DEA) on the efficacy of using AI-based environmental management systems in the convention and exhibition industry in China. A quantitative methodology based on questionnaires and a qualitative methodology derived from interviews were used to achieve this study's objectives. The results indicate that the performance level of AI-based environmental management systems was effective and qualified in performing various administrative tasks. As the size of their companies expanded, and the usage of AI-driven decision-making systems continued, they were able to further improve their efficiency and ensure their competitive edge in the industry.

Borges, Laurindo, Spínola, Gonçalves, and Mattos (2021) conducted a detailed systematic literature review to discover the challenges, opportunities, and benefits of using AI. Their research concludes with the benefits, challenges, and research opportunities in 'decision support, customer and employee engagement, automation,' and 'new product and service offerings.'

Duangekanong (2022), conducted a research titled "Applications of AI for Strategic Management of Organization." This rare empirical research employs 231 academicians, strategic management specialists, organizational strategists, and consultants as their subject groups employing the Modified Unified Theory of Acceptance and Use of Technology (UTAUT) model to distinguish factors in their organizations that help the application of AI systems. UTAUT is a widely accepted empirical calculation method that figures out how likely a new technology will be employed by certain industries (Dwivedi et al., 2019). The researcher attempts to see how likely the sample group mentioned above would be to use AI systems by measuring these four different factors of 'performance expectancy, effort expectancy, social influence' and 'facilitating conditions.' The research result shows that all the measured variables were influential while employing AI-related expert systems. The most important factor was found to be the organization's technological preparation for this adaptation. The 'performance expectancy,' and 'effort expectancy' were measured to be intermediaries, while 'organization culture' had a significant effect, but was the least of all measured variables. This study shows a greater need for evaluation of the ethical considerations and utility of AI.

The Concept of Artificial Intelligence

It is claimed that early research started by British Mathematician Alan Matthison Turing who discussed the idea of developing advanced computing programming to create AI in 1947 in his university lectures (McCarthy, 2007). The development concept of artificial intelligence was later announced by American Computer Scientist, Stanford University Professor John McCarthy during the Dartmouth Conference at Dartmouth College in 1956. AI was initially built on two aspects. One is 'rationalist,' or machine-centered, bringing together mathematics and engineering performed by a computer (Trappl, 1986), and the other one is centered around 'empirical' human behaviors of ex-

periment and hypothesis (Haugeland, 1989). AI refers to the machines' ability to acquire intelligence and think logically, similar to the human ability to think and progressively learn from its actions. This is done through programs that computers are equipped with to help them benefit from data and think logically to reach the desired result (Wang, 2019).

The Organization for Economic Co-operation and Development (OECD) defined artificial intelligence as "a machine-based system capable of making predictions, recommendations and effective decisions in real and virtual environments to achieve a set of goals specified by humans, and uses machine or human inputs to visualize real or virtual environments and converts these visualizations into abstract models in an automated manner, and uses typical reasoning to formulate options for information or actions" (Yeung, 2020). Despite the above OECD definition, there is no single accepted definition of AI by the researchers in the literature. According to Sharma (2024), a 1983 survey shows 143 different definitions of AI definitions used by different researchers.

From here we conclude that the main goal of AI is to enable computers to perform tasks that the human mind traditionally performs, i.e. to simulate the behavior of another intelligent human being.

History of Development of Artificial Intelligence

In the old days in 1940, the French philosopher Paul Valéry was the first to talk about the future of machines and the extent of their coexistence with men. He said that "every human being is in the process of transforming into a machine, and the truth is that it is the machine who is in the process of evolving to transform into a human being" (Valéry, 1989).

Initially, the most difficult thing for the researchers was to figure out how machines can enumerate mathematical formulation of things that are easily and traditionally done by humans (Abramson, Braverman & Sebestyen, 1963). Overcoming this challenge required AI to acquire capabilities that allowed extracting patterns from big data called 'metadata' and creating its own knowledge

(Solomonoff, 1985; Michie, 1968). This new challenging ability, called Machine Learning (ML), was attained at the beginning of this century, allowing computers to detect prevailing patterns without any explicit instruction and programming. This ability of machines and software programs to mimic human behavior, and learn from its mistakes, allowed AI to enter into its current advanced standings. When Multiple-Complex (ML) abilities described above are working at the same time hierarchically, advancing from simple to complex levels, we call this complicated higher learning ability of machines 'deep learning' state (LeCun, Bengio, & Hinton, 2015).

Starting in 2010, AI became a very popular term and part of our daily jargon. In association with AI, the common use of ML, and 'data mining' terminology is also reflective of recent technological changes. Especially following the wide media reports of the AlphaGo system defeating its most competitive human counterpart (Koch, 2016) and IBM's Watson system beating the TV Jeopardy champion on the US TV show (Gladwell, 2010), the AI and its associated technologies had spotlight shine on them.

Types of Artificial Intelligence

As shown in the following Figure 1, several types of AI can be distinguished. Other than Weak AI, all other two types of AI are still in their theoretical form and have not fully materialized yet.
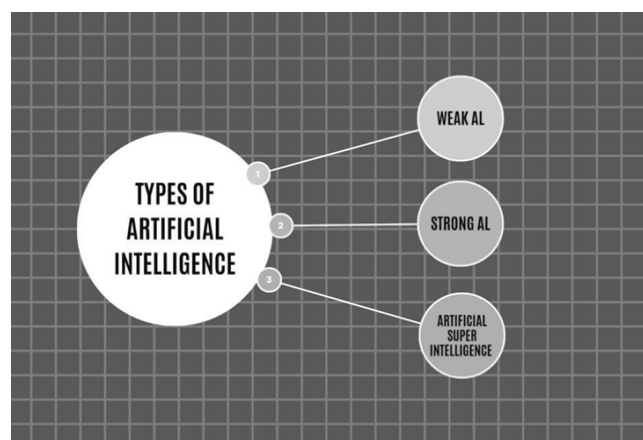

Figure 1: Types of AI
Source: Researcher's depiction.

Weak AI, also known as narrow AI, has been programmed to analyze data to write news reports, check the weather, and play chess (Fjelland, 2020). Computers can be trained to carry out a single function much faster and more efficiently than the human mind. These systems cannot function out of their programmed functions. Apple's Siri, Google's Assistant, Amazon's Alexa, and ChatGPT type of systems are all examples of Narrow or Weak AI. Narrow AI can be trained to be used as visual identifiers such as image recognition, object recognition, tracking, and facial recognition. Robots in industrial settings also use narrow AI.

Strong AI, also known as Artificial General Intelligence (AGI), is a type of intelligence that can perform any intellectual task with the efficiency of a human. This type of AI is characterized by collecting and analyzing information and benefiting from the process of accumulating experience, which qualifies it to make independent and autonomous decisions (Al-Imam, Motyka, & Jędrzejko, 2020).

Super AI exceeds the human intelligence level, which worries many skeptics of this technology. One of those cautious scientists is Physicist Stephen Hawking, who announced that in the future he "fears that artificial intelligence will completely replace humans." Another skeptic is Bill Gates who stated that AI represents a threat to humanity, to the point that it could lead to the extinction of the human species (Rawlingson, 2015; Cellan-Jones, 2014).

Some major categories of AI

AI applications are used in many areas including health care, security, education, and many other industries. They are divided into many subfields and groups, but for our purpose, we will only identify the major categories.

Robots' behaviors resemble human beings, facilitating human-like thinking and acting to carry out tasks that are sometimes impossible, dangerous, cumbersome, and costly for humans to accomplish. Working on a car manufacturing assembly line to lift heavy vehicle parts, or carrying out duties in hazardous nuclear reactors are examples of jobs that are impossible for humans to accomplish,

but can easily and safely be achieved by robots (Perez et al., 2018).

Other than the customary areas of use, Robots and AI-assisted applications are finding extensive use in our daily lives. In the dental and medical fields, the role of robots and AI-assisted diagnosis and treatment is expanding rapidly. Due to its increased accuracy, precision, and efficiency, the use of AI and robots is being preferred over traditional human utilization in the Prosthodontics and Restorative areas of dentistry (Karnik, Chhajer, & Venkatesh, 2024).

The use of robots and AI in the field of assisted living enables individuals with disabilities to perform the daily activities that without AI-supported systems they are unable to. Steven Hawkings' AI-supported system that facilitated his mobility and communication with others is an example of this type of system. According to the World Health Organization (WHO), about 15% of the world's population is living with some sort of physical disability. With the use of home automation systems using AI, most of these people can carry on their daily lives without any major hindrance thanks to AI-assisted robots (Pancholi, Wachs, & Duerstock, 2024).

Computer vision is based on equipping computers with the ability to "see;" in other words, interpret a visual image. Examples of this include facial recognition with a success rate of up to 99%, and reading handwriting with intertwined letters and complexity (Lemley, Bazrafkan, & Corcoran, 2017). The other types of applications based on AI-supported visual cues can be seen in safety, security, and legal areas under the realm of forensic sciences.

Along with the basic form of this application seen in smartphones, facial recognition applications are gaining popularity in data-driven marketing areas using AI applications. Srivastava and Bag (2024) conducted empirical research on AI-assisted marketing activities, discovering that following the COVID-19 pandemic, data-driven marketing activities are currently taking over conventional marketing activities. According to this research, although this application is not fully explored by the industry yet, the modern marketing

strategies enabled by AI support using information from visual cues such as facial expressions, neuro signals, and behaviors can boost sales revenue and slash costs drastically in the marketing industry. Like Srivastava and Bag (20224), many other researchers in the marketing sector recommend AI-assisted advertising and Customer Service (CS) to be an essential part of their operational activity and not an optional one (Micu et al., 2022).

The last major category where AI applications are utilized is speech recognition. This application makes computers more interactive with the users, as it searches for ways to give computers human speech recognition ability, capable of directing commands to computers verbally, and the computers understanding these commands and executing them as needed (Basak, Agrawal, Jena, Gite, Bachute, Pradhan & Assiri, 2023).

Other than the forensic and security-related applications of Voice Assisted or Voice-Activated (VA) AI usage, many new applications are emerging and becoming popular. One of the major recent research projects conducted in VA AI is Buhalis and Moldavska, (2021). They researched VA AI usage in the hospitality and CS fields. This study along with many other studies discovered that although still in its infancy, VA AI applications are increasingly becoming the norm due to their operational capabilities such as the use of multilingual operations and the ability to slash operating costs drastically (Liang-Pholsena, 2020; Tussyadiah, 2020; Samala, 2020; Wirtz et al., 2021).

AI Applications Supporting Strategic Decision-Making

AI's effectiveness and usefulness would only be realized when these applications are integrated into organizational IT systems and used by decision-makers (Edwards, Duan & Robins, 2000). Let's look at major application support systems and their functions.

Expert systems are information programs that attempt to simulate human logic and were very popular up until 2000, and lost their popularity afterward (Dhaliwal & Tung, 2000; Duan, Edwards & Dwivedi, 2019).
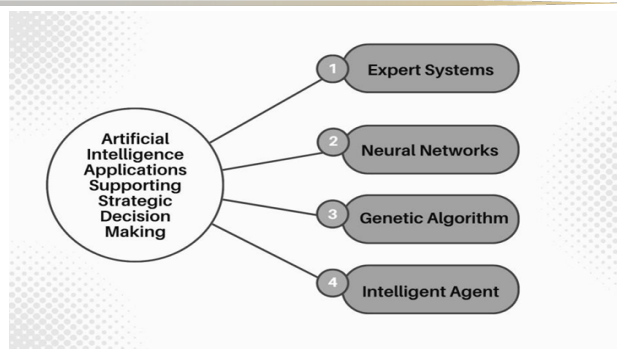
Figure 2: AI Applications Used for Decision-Making
Source: Athour's depiction.

This system is an application of AI that models human experience in a specific field of knowledge to solve problems in a computerized manner. Expert systems rely on the latest developments through the following stages (Edwards et al, 2000; Bahrammirzaee, 2010).

- The first stage is for identifying the problem, classifying it, and showing its severity.
- The second stage is selecting alternative solutions to conduct further analyses that help to show alternative solutions for complex problems.
- The third stage is choosing the appropriate alternative for decision-making.
- The last and the fourth stage for execution or implementation of the solution.

Neural networks is an application utilizing AI that teaches computers to process data in a way inspired by the human mind. It is also known as Artificial Neural Networks (ANN). It is a type of deep learning process that computers use to learn from their mistakes and to continuously improve their functionality and accuracy. The most important fields of application are 'targeted marketing' by filtering social networks and analyzing behavioral data; financial forecasting by processing historical data of financial instruments, and 'processing of quality control mechanisms' (Bose, 1994; Duan et al, 2019). Although it is at the forefront of AI research currently, Neural Network applications have been in use since the 1980s (Ford, 1989; Bose, 1994). The most recent 2024 Nobel Prize for Physics was awarded to two Scientists, John J. Hopfield and Geoffrey E. Hinton for developing ML technology using ANN. This shows how important and current this field is.

Genetic algorithms are an important application in random searches, and they represent the prevailing belief that human intelligence is innate and acquired largely through heredity. They are computer programs that simulate biological processes to analyze problems in evolutionary systems. This discovery is based on the course of events and is routinely used to find useful solutions to improve and investigate problems. It is used in many fields such as financial and banking, business fields, investment applications, solving logistical problems, and applied in modern technology such as space technology, materials, and biotechnology (Vas, 1999).

Intelligent Agents are autonomous intelligent systems in AI that perform specific tasks without any human intervention. Organizations use intelligent agents using AI to achieve specific goals with more efficient business outcomes. Teams are expected to be more productive when they delegate repetitive tasks to AI agents that do not require any comprehension and judgments (Spangler, 1991).

Using AI in the Decision-Making Process for Strategic Management

Although not to the current extent, AI has been employed in businesses since the 1980s in a simpler format such as computer vision systems, expert systems, and other software and hardware systems using computer automation technology (Boden, 1984; Ford, 1989; Bose, 1994). Despite the fact AI was still in its infancy, in the past it was quoted by researchers and businesspeople as a competitive advantage and strategic tool to differentiate companies from the competition (Porter and Millar, 1985). The use of AI continued until the turn of the millennium with its basic functions focusing on algorithms to improve current ones or add similar new functions. Starting in 2001, the researchers realized that in the field of AI, and IT in general, the major challenge was the volume of data compiled in large databases. Because of these shortcomings, new AI technologies needed hardware evolution to eradicate this obstacle. The new hardware storage advancement capabilities allowed a larger volume of data storage, lightning speed to process

these large amounts of data from multiple databases, cross-reference to identify certain elements and obtain needed insights and analysis (Boyd & Crawford, 2012; Zhuang, Wu, Chen & Pan, 2017).

The recent developments in modern management science, resulting from the use of state-of-the-art AI applications, require reconsideration of many aspects related to how business is conducted. With these current settings, the most important tool decision-makers need is sound hardware systems comprising large storage space and a fast Central Processing Unit (CPU) to handle the demands of efficient decision-making functions and speed (Jarrahi, 2018).

Simon (1987) believes that decision-making is the heart of management. Decisions are nothing but a series of connected choices, and every critical selection is followed by a series of connected verdicts, decisions may appear insignificant until the goals are implemented and achieved fully. He believes that all organizational processes revolve around decision-making and that organizational behavior is nothing but a result of successive decision-making (Simon, 1979).

The importance of decision-making lies in all management functions and activities. When management exercises the planning function, it makes certain decisions at each stage of developing a plan, whether when setting the goal, or preparing new programs. When management creates an appropriate organization for various tasks and activities, it also designs the organizational structure. When the manager assumes his leadership function, he makes a set of decisions, whether directing his subordinates, coordinating their efforts, consulting their motives, motivating them to perform well, or solving potential problems. When management performs its duty, it also makes important decisions regarding the selection of appropriate technological tools, and standards for measuring work performance (Simon, 1987; Westerman, Bonnet & McAfee, 2014). This is why choosing an appropriate technological tool such as an AI system is very critical for an organization's well-being, profitability, and competitive edge.

It is expected that utilizing AI in an organization can benefit the company in multiple ways

from decision-making to measuring customer expectations and designing new products (Eisenhardt & Zbaracki, 1992; Eisenhardt, 1999; Barnabè, 2011; Westerman, Bonnet & McAfee, 2014).

The Role of Expert Systems in The Decision-Making Process of Strategic Management

The role played by expert systems in decision-making functions is different from the other information systems used for other industries and functions. They rely on what the human element has already learned and apply the results of this learning in specific circumstances and situations. They utilize AI tools to identify and diagnose problems, and access information used to solve them through the knowledge base, which is one of the components of the expert system. They can also identify alternatives to solve problems, evaluate them, and suggest appropriate alternate solutions. Although evaluation of the viability of the solution is the responsibility of the system user, the expert system provides him with the logic that helps him carry out this process. Expert systems are usually used in the business field to play an advisory role. It is always better for the human element to exercise influence in objecting to the output of computers. However, expert systems provide sufficient knowledge to the decision-maker and help them collect the necessary alternatives in the decision-making process. This helps in reducing the percentage of error and managing the state of uncertainty more efficiently. Thus, decisions are made according to a sound scientific methodology. Expert systems also help in the process of monitoring the implementation of decisions during carrying out the work (Edwards et al, 2000; Kersten, 1989).

Challenges and Benefits of AI Applications Adaption at Organizations

With the use of faster data storage space and faster CPU systems, AI has changed the business environment and decision-making process significantly and permanently. At the same time, decision-makers are having difficulties identifying the best solution for their organizational need in this rapidly changing technological era, since these decision-making support systems and applications come with challenges, risks, and difficulties along with the expected benefits (Shiau, Chen, Wang, & Dwivedi, 2023). It would be wise to review the literature on expected benefits, issues, and obstacles while converting traditional human intellect-based businesses into AI-equipped organizations.

While planning a business model change to include AI systems in organizational IT infrastructure, one of the most important challenges to decide on is the cost-effectiveness of the system (Jarrahi, 2018; Pillai & Sivathanu, 2020). A thorough investigation is needed to evaluate the relative advantage of the AI system as opposed to its cost-effectiveness before initiating the conversion. In basic business terminology, a detailed cost-benefit analysis must be conducted to ensure potential benefits from the system. The other challenges are related to the end users' beliefs and capabilities. Their trust in the system and attitude toward the AI system could be challenging and overcoming these issues ensures the success of the conversion (Pillai & Sivathanu, 2020).

Let's summarize the major areas where decision-makers and organizations would be challenged by the implementation of AI-supported decision-making as we conclude this section:

- The initial investment amount for the system could be high and amortization may take time, especially for small businesses (Kejriwal, 2022; Ismanov, Qayumov, Mukhamadjonova, & Akhmadaliyev, 2024).
- Privacy issues and the security of organizational data may be challenged greatly (Zekos & Zekos, 2021; Brown, Ward, & Duane, 2024).
- Employees may resist change while switching to AI-supported decision-making applications (Li, Ashraf, Amin, & Safdar, 2023).
- AI-supported systems may use older and biased data leading to skewed decision-making practices as seen in Amazon's recruiting policies displaying prejudices against minorities (Keding, 2021)

- The last important challenge is the ethical considerations, which are studied in detail separately in later pages of this research.

Benefits of Adapting AI at an Organization

It is expected that AI will enhance doing business for decision-makers, reduce processing time, improve quality, bring out innovation, allow the use of big data, engage with employees and customers, and large operational costs reduction (Venkatraman, 2017; Davenport & Ronanki, 2018; Wilson, & Daugherty, 2018). As shown in Figure 3, based on the findings of Ashritha and Reddy (2023), there is a linear improvement in decision-making quality each year following the implementation of AI applications or decision support systems (DSS) by businesses (Ashritha, and Reddy, 2023).

Improved Decision Quality
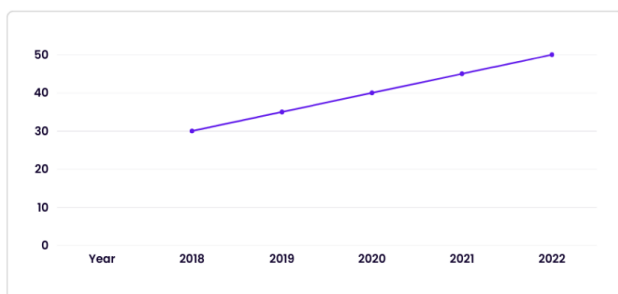
Figure 3: Application of Decision Support Systems (DSS)-time Versus Improved Decision Quality
Source: Ashritha, and Reddy (2023).

As we can observe in Figure 4, the same study also finds improved efficiency with the application of AI-supported DSS by surveyed businesses (Ashritha & Reddy, 2023).

Increased Efficiency
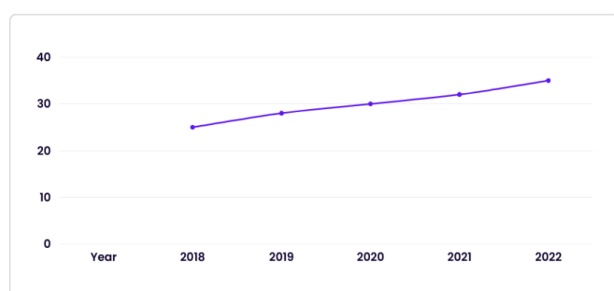
Figure 4: AI Application Versus Improved Efficiency by Businesses (%)
Source: Ashritha, and Reddy (2023).

Let's summarize the major areas where decision-makers and organizations benefit from the application of AI-supported systems as we conclude this section:

- With the application of AI-supported DSS, the decision quality will improve by eliminating human biases and errors by improving the accuracy of the decisions (Oguntibeju, 2024).
- With the use of AI-supported strategic management practices and access to large data quickly, competitive advantage may be ensured by following market trends and greater profitability (Chintala, 2024).
- The application of AI in organizations could help improve risk management and loss prevention (Baryannis, Validi, Dani, & Antoniou, 2019; Zekos & Zekos, 2021).
- AI-supported systems' use can guarantee cost reduction through optimal resource utilization and procurement practices (Ismanov et al, 2024).
- Efficiency and speed can be ensured greatly with the help of AI-supported systems while making strategic decisions (Ashritha, & Reddy, 2023).

Risks of AI Applications and Ethical Consideration

While AI has numerous advantages in multiple areas of science and our daily lives, it also has risks and ethical concerns that need our attention before its wide application. Just like other technological advancements in the past, while human beings can benefit greatly from new technology, it can also create undesirable and unpredicted outcomes for humanity. The case of fossil fuel combustion machine development causing global warming and environmental issues, and nuclear developments causing nuclear incidents, such as the Chornobyl incident, and increasing the fear of nuclear war are great examples of technological developments' adverse effects (Russel & Norving, 2010; Stein, 2022).

Some of the potential risks and ethical issues can be summarized as the autonomous ML ability of AI enhancing its capabilities without any spe-

cific algorithms and instruction, which was mentioned in the earlier quote of Steven Hawking's famous warning. Unregulated ML activities acting oversights can create major legal and human rights issues, posing a threat to human safety and security (Bostrom, 2014). Misuse of sensitive information such as racial, religious, or other confidential data could create serious social and legal rights issues (Bostrom, 2014). Cybersecurity issues such as data theft and hacking activities become a serious concern to consider as AI usage expands into sensitive areas.

Some biases were discovered in the recruitment practices of Amazon using an automated hiring system that discriminated against women and ethnic minorities (Stahl et al, 2021; Popova & Karadzhov, 2023). Similarly, AI used in risk assessment programs such as Correctional Offender Management Profiling (COMPAS) for surveillance areas and in legal areas was discriminatory against certain groups and created legal dilemmas for the authorities in the past (Yeung, 2020; Popova & Karadzhov, 2023).

The last, but one of the most important issues for social and labor scientists is the issue of labor force reduction with the application of AI-supported systems and automation. Although labor-cost reduction is looked upon as one of the most beneficial aspects of AI technology for the business community, it is also one of the risky areas that require active management from social service and political authorities. Management of labor and social issues to avoid any major unemployment shifts, social problems associated with job force reduction, employee retention, and economic crises may need to be reconciled if AI applications become widespread. Eurobarometer 2017 surveys reveal that 88% of the surveyed population fear job loss and economic problems with the widespread use of AI-supported system applications and the use of automated robots (Yeung, 2020; Burlacu & Luta, 2023).

Conclusion

Organizations should evaluate their technological infrastructure and employees' adaptation to these technologies before integrating AI into their existing systems. For this conversion, the compatibility of existing systems with AI, data quality, organizational hardware, and software requirements should be reviewed in detail. To increase the knowledge and skills of employees, training programs should be organized for users, and management strategies should be adapted before the implementation of AI applications to avoid any due problems. Therefore, comprehensive preparation should be carried out by taking organizational culture, ethical concerns, and the compatibility of AI-support systems with organizational strategic goals into account. These steps ensure that AI-capable systems' integration is successful and it provides the maximum expected benefits.

Considering the ethical dimensions and potential risks of AI applications, it is thought that these technologies should be included in a balanced manner in management processes. Issues such as data privacy, algorithmic neutrality, and employee job security are critical for the ethical and social use of these technologies. Additionally, problems such as the risk of AI systems making wrong decisions and lack of transparency should be managed with human supervision and oversight. AI should be integrated into the organizational grid in a balanced way as a supporting tool, without the exclusion of organizational, ethical, and human factors.

We must be cognizant that AI is one of the modern technological sciences that aims to understand the nature of human intelligence and simulate intelligent human behavior through computer programs.

AI plays an important role in increasing the effectiveness of the decision-making process by deconstructing and analyzing problems to find solutions and choosing the optimal solution. The decision-making process is the basis, axis, and essence of the decision-making process through which all activities can be accomplished, and the success of this process requires reliance on advanced systems, namely AI.

Prior to the implementation or integration of AI-capable systems within organizations, it is essential to ensure a sufficient level of readiness

among employees regarding the adoption of artificial intelligence technologies. This readiness is crucial, as AI has the potential to enhance organizational efficiency and foster strategic thinking.

The decision-makers must pay attention to the distinguished mental capabilities possessed by the employees, who are described as the intellectual capital of the organization. After all, they are the ones contributing to organizational excellence and creativity, by applying the aforementioned AI-supported systems.

Recommendations

After a thorough investigation of benefits, challenges, and ethical considerations for the use of AI-supported systems and applications in strategic management areas, the following recommendations are advised:

- It is recommended that before the digitalization of organizations and the use of AI applications, investment in a viable training program for all of the involved would eliminate, or minimize the potential complications.
- Before any organizational change, consideration of ethical issues and rectification of these potential issues must be considered and appropriate measures must be put in place.
- A transitional period must be planned before a full conversion or use of AI-supported systems, tapping a hybrid approach of human expertise and AI-driven application solutions working together.

Following the adaptation of an AI-driven decision-making system, a continuous performance evaluation and monitoring period must be implemented to assess accuracy, efficiency, and avoidance of any said biases to ensure a smooth transition and trouble-free operation.

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The Problem of the Century: Brain Rot

Ayşe Müge Yazgan[1]

[1] Assoc. Prof. Dr., Marmara University, Communication Faculty, Department of Public Relations and Publicity, Istanbul/Türkiye
ORCID: 0000-0002-5909-5791
E-Mail:
muge@marmara.edu.tr

Abstract

The term "brain rot" has gained prominence recently, particularly in 2024, when it was named Oxford's Word of the Year. This study aims to reveal the causes of brain decay, the problem people face today The method of the research is systematic compilation (meta-synthesis). Within the scope of the research, a systematic scan of internationally valid clinical research and published studies on "brain decay" was conducted. The studies are limited due to the relatively new as subject. The studies were evaluated, and their results were synthesized and combined. Answers were sought to the question of whether people are exposed to the erosion of thought that is called "brain decay" while new communication systems offer life in better conditions besides the increase in information exchange. In this context, 11 studies were examined. The articles were evaluated according to the keywords determined by the researcher, the size of the data importance, and the basic empirical findings. According to the results obtained, social media use causes anxiety, depression, and loneliness, especially among adolescents, and eight of them seem appropriate. The importance of "like" numbers and the increased popularity competition cause adolescents to experience internal conflict regarding self-confidence. Being constantly compared to others in the media negatively affects health and cognitive structure. Perfectionism leads to a feeling of inadequacy and loss of self-confidence. It is considered that this research will contribute to the field due to its examined thoughts and ideas and due to its suggestions.

Keywords: *Brain Rot, Anxiety, Cognition, Loneliness, Systematic Review*

Öz

"Beyin çürümesi" terimi, özellikle 2024 yılında Oxford Yılın Kelimesi seçilmesiyle son yıllarda ön plana çıkmıştır. Bu çalışma, günümüz insanlarının içinde bulunduğu sorun olan beyin çürümesinin nedenlerini ortaya koymayı amaçlamaktadır. Araştırmanın yöntemi sistematik derlemedir (meta-sentez). Araştırmanın amacı kapsamında "beyin çürümesi" üzerine uluslararası geçerliliği olan klinik araştırmaların ve yayımlanmış çalışmaların sistemli taraması yapılmıştır. Çalışmalar, konunun oldukça yeni olması nedeni ile kısıtlıdır. Çalışmalar değerlendirilerek, sonuçları sentezlenerek birleştirilmiştir. Yeni iletişim sistemleri, bilgi alışverişinin artmasının yanı sıra daha iyi koşullarda yaşam sunarken, insanların "beyin çürümesi" olarak adlandırılan düşünce erozyonuna maruz kalıp kalmadıkları sorusuna cevap aranmıştır. Bu bağlamda 11 araştırma incelenmiştir. İncelenen çalışmalar araştırmacı tarafından belirlenen anahtar kelime, veri önem büyüklüğü, ampirik temel bulgulara göre değerlendirilmiştir. Bütün bu değerlere göre sekiz araştırma uygun görülmüştür. Elde edilen sonuçlara göre, sosyal medya kullanımı özellikle ergenlerde kaygı, depresyon ve yalnızlığa neden olmaktadır. "Beğeni" sayılarının önemi ve popülerlik rekabetinin artması, ergenlerin özgüven konusunda içsel çatışma yaşamasına neden olmaktadır. Medyada sürekli olarak başkalarıyla karşılaştırılmak, sağlığı ve bilişsel yapıyı olumsuz etkilemektedir. Mükemmeliyetçilik, yetersizlik duygusuna ve özgüven kaybına yol açmaktadır. Bu araştırmanın, incelenen düşünce ve fikirler ile öneriler getirmesi nedeniyle alana katkı sağlayacağı düşünülmektedir.

Anahtar Kelimeler: *Beyin Çürümesi, Kaygı, Biliş, Yalnızlık, Sistematik Derleme*

Introduction

The 21st century is a time when the importance of knowledge has increased. The limitlessness that comes with globalization causes the world to remain awake and variable 24 hours a day. While the East is sleeping, the West is awake. While the West is sleeping, the East is awake. This dynamic has increased the importance of accessing knowledge. Knowledge is a concept related to thoughts and data the human mind has grasped and internalized (Headrick, 2002). Information and skills acquired through experience or education, the theoretical or practical understanding of a subject realized, are facts.

Operating systems that started with writing have reached their peak with digitalization. Information systems that enable social mass communication have gained momentum with the widespread use of computers. In the 21st century, the importance and ease of access to information is spreading to all of humanity, as Mc Luhan said (2001). The virtual reality created in this way leads the majority of society to the computer ahead. People wake up daily and deal with the dense digital information network throughout the day. The masters of new technology are holding the power and authority. The captivating world of the internet absorbs humanity inside. The communication network, which has become cheaper with the internet, is uncensored and is integrated with other communication media, appealing to newspaper, radio, and TV audiences (Güçdemir, 2015). Before the digital transformation, the transition to industrial society between 1760 and 1840 as Industry 1.0 increased productivity and caused rapid growth in living standards. Pre-industrial agricultural production and labor were intensive at that time. With the industrial revolution, the establishment of factories replaced manual labor with machines. From a social perspective, urbanization, poverty, child labor, and unemployment emerged (Jensen, 1993). The 1840s brought new inventions. The telephone, internal combustion engines, radio, telegraph, and light bulb were the inventions that came with high-speed consumer packaging (Günay, 2002). After the invention of TV and then internet, technological innovation in the 20th century passed so rapidly. The period that started in the mid-20th century

continued until 2011, the beginning of the 21st. The early beginnings of the 21st century were the year of mobile phones, artificial intelligence, and electric cars (Ege Bölgesi Sanayi Odası, 2015). When the "4th Industrial Revolution" as a term was uttered by The Federal Ministry of Education and Research of the German Government in 2006, the idea made good sense. At the 2020 Action Plan conference (Lydon, 2014), the ignited idea was put forward by the Industry Science Research Alliance communication advocates group Under the "digital transformation" heading. The three factors and the link among them are important. The first of these is digitalization. The second is the integration of products and services. The last is the development of new models (Zezulka, 2016).

The Conceptual Framework

Digitalization represents the world. It records our ideas, thoughts, and information. A group of people performs these actions. The duty of the people who use the paradigms and techniques of digital media is to make others understand the transformation journey of the media. As Manovich (2007) said, examining the work of this group who use the paradigms and techniques of computer will enable us to understand the transformation journey of the media. Digitalization has dramatically expanded the comfort zones of producers and consumers. While media companies reach readers more easily and faster with digital books, consumers are able to listen to music, watch movies, and take photographs in any area they want by using the comfort of these places, which has made life much easier. Digital files, which Kay calls "magic paper," (Kay, 1990) are software. It provides the opportunity to work in different ways. That every new item that comes to the media improves the old one is a fact. Every new feature that designers put in leads to development. This process will continue until a new invention like electricity or artificial intelligence emerges. New media today provides humanity with one more step ahead of convenience. Nowadays, software is open to change in ways while industrially produced physical objects are not. This openness prevents the user from starting

over with every innovation, taking him one step further.

Horkheimer and Adorno's "Culture Industry" is a critical theory that takes society over through cultural ideas and by taking advantage of economic and political structures (Horkheimer, 1996). Imprisoning the individuals of society produces passive mass formations for the production of needs. Today, the media is ahead of us as "crop monopolies" that transform the individuals of society. Habermas (1989) defines this situation as an invasion of the living universe. While the media is being tried to be controlled on the one hand, the public is being controlled by using the entertainment element on the other. Chomsky (2005) approaches the issue with "control of public mind". He also places public control in the entertainment element. Tabloid news and other entertainment elements usually provide fire to the public. Sensational and fashion news are always on the agenda. Light is the neglected side because it brings illumination and provides integrity by informing the subjects.

Capitalism operates more intensively in the digital environment. Those who use the digital environment contribute to the digital environment working area without being aware of it (Symthe, 2006, p.256). They receive program materials, watch and digest advertisements without paying anything. Nonetheless, they are sold to advertisers while creating their profiles in the digital environment, uploading their photos and videos, and commenting on social networks. The most important attribution that the digital environment provides is that the internet audience is active. They produce content. This makes them become different from other media audiences. Audiences that engage in multiple communications are commodified, exploited, and profited from (Fuchs, 2010, pp.190-196). This situation, which can be called colonialism, is the exploitation of the workforce in a different way (Andersson, 2012, pp.752-764).

Today, virtual reality has surrounded humanity. The virtual world looks and acts realistic. Sensory data is blocked (Witmer, 1998, p.225-240). Individuals are subject to intense information bombardment (Heim, 1993, p.7). Technology and society are getting integrated with each other. They live the past and the future at the same time. The adventure journey that started with TV has peaked with social media. People have become addicted to it. Although they are more active, stronger, and more decisive as viewers, technological access unfortunately brings more loneliness. Viewers who are active in new media channels are egoistic. Speed is important now. Being fast brings impatience. Sharing the news first, being ahead everywhere, doing things perfectly, and being different from others leads to loneliness. (Özsoy, 2011, p. 264).

Technology gets people to become dependent. Problematic interactive media use, PIMU is an international health problem worldwide. The uncontrolled use of the media affects people's cognition, especially the young. The time used up on the screen should be spent well. New skills should be acquired in the precious time-consuming. Time spent in front of the screen does not provide focusing. Excessive use of technology causes mental fatigue. If there is no concentration, it means time is wasted (Şirin, 2024, p.6). Those who have the technology today are the feudal lords of the past. Antoine Destutt de Tracy (1754-1836) (Wikipedia, 2024), who lived during the Napoleon era, had the idea of saving society from wrong beliefs and thoughts in his education system.

Technological developments have brought comfort to humanity. While optimists say that technology is taking humanity to a bright place, pessimists say that technology is destroying humanity and what belongs to them. Max Weber, who does not look favorably on positivist thought, talks about the need to interpret the world. With modernity, there is a loss of magic. With alienation, people feel like they are in an iron cage (Tükel, 2012).

Digital transformation has surrounded the person with a virtual world (Sherman, 2003, p. 7). This world responds to the reactions of the user (Brooks, 1999, p. 16-22). It is a situmilation that reacts to the inputs coming from the user. In this world where an unreal virtual environment surrounds individuals, it blocks sense.

The term "brain rot" has gained prominence in recent years, particularly in 2024 when it was named Oxford's Word of the Year. It describes the perceived deterioration of mental and intellectual

hazards due to excessive consumption of online content (OUP, 2024).

The term brain rot was first used in 1854 in Henry David Thoreau's book "Walden" (Thoreau, 2009) The book is about the narrator's living in solitude in a cabin by a lake. He lived in a shack he built on the shores of Walden Pond near Boston for two years. He was concerned about European potato rot and expressed his concerns about rotting brains in his book. Henry David Thoreau recommends leading a simple, minimal life. He describes the beauty of nature; and is against invalid materialism. The main message to be taken from the book he wrote is that a person should live simply and wisely. According to Thoreau, spending money means spending life. He sees the return to nature as a hope.

In our age, brain decay is defined as mental fatigue. It is stated as getting lost in deep thinking in front of the screen, getting away from problem-solving. Research indicates that prolonged screen exposure, especially during nighttime, can adversely affect cognitive abilities. A study published in 2024 (Shalash, 2024, p.2093-2104) found that young adults with higher night screen exposure exhibited lower cognitive scores in areas such as information processing speed, working memory, calculation, and attention. The study emphasized the importance of establishing screen time guidelines to preserve cognitive function and reduce future risks of neurodegenerative diseases. The study emphasized the relationship between screen time and cognitive performance. Nearly 97% of the young have one electronic device in their bedroom. Children spend long hours in front of the screen. Screen time directly affects cognitive function. It adversely affects attention skills, memory functions, and analytical thinking abilities. The study explains the negative results of night-time screen exposure. This affects the sleep quality which is vital for learning, attention, and memory (Schoeni, 2015).

Further studies have linked excessive screen time to structural changes in the brain. For instance, research (Lejtenyi, 2021) has shown that individuals with internet addiction display structural brain changes. These alterations are associated with impairments in cognitive functions, including attention, and memory. Excessive internet usage causes abuse problems. Internet addiction leads to poor academic performance, anxiety, and depression. On the other hand, dopamine is released as a hormone. Dopamine is a hormone that gives a sense of pleasure (Wikipedia, 2025). The activation of reward in the brain through dopamine secretion increases motivation. It is the reward system of the brain. Playing video games, wasting long hours in front of screen increase dopamine release (Carrion, 2007).

Addiction Problems and Differences between Screen Addiction and Substance Addiction

On behalf of the rewards offered in the media, individuals who are more addicted to media content are looking for a sense of satisfaction, which means the act of fulfilling a need, desire, or appetite, or the feeling gained from such fulfillment (Vocabulary, 2025). It distinguishes itself from other addictions by not running out of content on the screen and constantly providing content. Screen addiction, often referred to as problematic screen use, involves excessive engagement with digital devices such as smartphones, computers, and televisions, leading to negative impacts on daily life, health, and relationships. It prevents the brain from being filled with more efficient information (Luker, 2022). After a while, the brain begins to decay. This form of behavioral addiction shares similarities with substance addictions, including the activation of the brain's reward system through the release of dopamine, which reinforces the compulsive behavior. Both can interfere with personal relationships, work, academic performance, and physical health. However, there are some differences between these two addictions (Donnison, 2023). Substance addictions often involve physical dependence, where the body adapts to the substance, leading to tolerance and withdrawal symptoms upon cessation. Screen addiction typically lacks this physical dependency component. While screen addiction can lead to issues like eye strain, sleep disturbances, and mental health concerns, substance addictions can result in severe physical health problems, including organ damage and an increased

risk of infectious diseases. Screens are integral to modern life, and used for work, education, and socialization, making it challenging to avoid or limit use.

The effort people put into tying us to the screen by spending billions of dollars is incredible. In the face of this effort, it is difficult for people who are in front of the screen as if they are separated from their atoms to cope with screen addiction without social unity (Dewey, 1954, p.97-98). The interactions between people have become more impersonal and indirect. Life is taken under the control of the unknown. By steam and electricity, no community could occur, only the Great Society appears. Dewey's view has been transferred to the mobile phone screen today. Living constantly on the phone and scrolling weaken human relationships. The most affected are adolescents. Spending too much time in front of the screen during adolescence causes them to be unable to maintain peer relationships.

Aim

This study aims to reveal the causes of brain decay, the problem people face today. The research conducted with systematic compilation (meta-synthesis) will be beneficial to the field since there is a limited number of studies. With systematic review, all relevant published studies, documents, statistical findings addressing the research question are comprehensively and systematically investigated. This study aims to make an integrated presentation through the characteristics of the research results and the findings obtained. The purpose of the research is to ensure that the evidence in the field is followed, to ensure evidence-based practice, and to produce stronger evidence (Yannoscoli & al., 2013). The study has reached the results through systematic review, discussions, and suggestions.

Problem Status

When the media and communication fields are examined, it is realized that the exploitation that comes through the media also causes the colonization of the world of life. As analyzing the literature,

it becomes evident that there are very limited studies addressing brain rot problems. Document analysis to be done on the post-modern society that is being tried to be created by being stuck between reality and virtual reality can provide valuable insights for future research and practices. The research starts with the question of whether people are exposed to the erosion of thought that is called "brain decay" while new communication systems offer life in better conditions besides the increase in information exchange. The research also seeks answers to the following sub-questions:

- Are new skills acquired during the time spent in front of the screen to develop our cognition?
- In What way does the screen motivate us?
- Are the better living conditions offered by new communication systems dragging humanity into brain decay?

Method

The universe of this research consists of systematic review. Written documents containing information about the subject of the research were scanned in detail and a new integrity was created (Creswell, 2002). Since brain decay is a new concept, the data obtained in the data collection step was supported and verified by analyzing documents obtained from different sources. The facts obtained from many data have increased the validity and reliability of the findings. Eleven documents related to the subject were accessed and eight of them were examined with a qualitative analysis within the scope of the study. This study determines the research question, understands the inclusion and exclusion parameters, conducts a literature review, identifies the studies to be examined, collects and analyzes data, and interprets and writes the results (Gough, D., & al., 2012). This study were carried out by considering all steps by the researcher.

Restriction

Documents representing the views discussed within the scope of the research were examined

and analyzed. The results obtained from the eight research documents constitute data but also constitute a limitation for the entire research universe.

Procedure

Data Collection Process

In this section, the research study criteria provided ease in accessing the findings. The publication year, the keywords, study subjects, concept covered, sample type, research method, and basic findings, which were considered as the criteria for examining the studies, provided ease in concluding.

Data Analysis

The analysis of the studies is presented in tables. The tables prepared according to the distribution of studies by year, the distribution of studies by keywords, the distribution of studies by coding and categorization, the basic findings obtained in empirical studies and finally the basic findings obtained in non-empirical studies are presented below.

Distribution of studies by year

Table 1 demonstrates the distribution of studies by year. The publication year range of the articles is between 2019 and 2024. The highest number of studies was in 2024 with four publications. The lowest number of articles was in 2021 and 2023, with one publication. There were two studies in 2019.

Table 1. Distribution of studies by year

No	Resources	Year	Month / Day
1	(Ruder, 2019)	2019	June 19
2	(Moshel, 2024)	2023	September 1
3	(Firth, 2019)	2019	May 6
4	(Zhang, 2023)	2023	May 25
5	(Rich, 2024)	2024	December 3
6	(North, 2024)	2024	September 5
7	(Descourouez, 2024)	2024	May 30
8	(Bulut, 2021)	2021	January 28

Findings About Keywords Used in Studies

Table 2 gives the keywords and their repetition frequencies in the studies. It is seen that the words social media and addiction come to the fore. Five studies include addiction and social media.

Table 2. Findings About Keywords Used in Studies

No	Resources	Key Words
1	(Ruder, 2019)	Screen time Digital Devices Social Media
2	(Moshel, 2024)	Internet Addiction Disorder Attention and Focus Addiction gaming Order Internet Gaming Disorder Cognitive Testing Executive Function
3	(Firth, 2019)	Internet Memory Cognition Addiction Attention Memory Social Structures Social Media Virtuality Reality
4	(Zhang, 2023)	Social Media Addiction Sleep Quality Executive Functioning Emotional Disturbance Young Adults
5	(Rich, 2024)	Addiction Social Media Cyber Bullying Smart Phones
6	(North, 2024)	Phone Addiction Brain Rot
7	(Descourouez, 2024)	Screen Time Memory Harm Phone Scrolling
8	(Bulut, 2021)	Children and Television Children and Social Media Use of Social Media Harmful Effects of Social Media

Findings on Coding and Category in Studies

The time spent uncontrolled on the internet especially affects the cognitive structure of children and young people. Common categories in the documents examined are memory disorders, separation from social life, sleep problems, and eating disorders. As a result of these, anxiety, stress, and depression are experienced. Table 3 below describes categories within their coding.

Table 3. Findings on Coding and Category in Studies

No	Resources	Analyzed Insights	Coding	Category
1	(Ruder, 2019)	The study highlights that there is a high connection between neural system and digital media use. Digital platforms activate the brain's reward system.	Sleep problems Memory disorders Dopamin	Stress Anxiety Depression
2	(Moshel, 2024)	A meta-analysis study found a clear link between disordered screen use and lower cognitive functioning. These findings suggest caution before advocating for increased screen time, especially in contexts that introduce screens into more aspects of daily life.	Separation from social life Poor cognitive performance	Stress Anxiety Depression
3	(Firth, 2019)	Research has demonstrated the accurate alterations in cognition related to attention and memory.	Memory disorders	Stress Anxiety Depression Reduced attention
4	(Zhang, 2023)	This study researched 1,051 young adults between 18 and 27 years old. The study has found out that excessive use of social media harms memory disorders, decision-making, organization, and analytical thinking.	Memory disorders	Stress Anxiety Depression Reduced attention
5	(Rich, 2024)	The interview is about the cognitive decline due to excessive zombie scrolling, video gaming, doom-scrolling, following social media platforms	Memory disorders	Stress Anxiety Depression Reduced attention
6	(North, 2024)	The study tells that brain rot is effective on kids born between 2010 and 2024. Teachers of these pupils complain about their lack of attention and their inability to read and write.	Memory disorders	Stress Anxiety Depression Reduced attention
7	(Descourouez, 2024)	This study highlighted that adults who watched television for five hours or more per day had an increased risk of developing brain-related diseases such as dementia, stroke, or Parkinson's. This underscores the potential long-term cognitive risks associated with excessive screen exposure.	Memory disorders Separation from social life	Anxiety Stress Depression
8	(Bulut, 2021)	The study mentions the widespread use of social media and its addiction as a result of the use of mobile phones at a young age. It focuses on the negative effects of violent scenes in TV series and movies on young people and perception management.	Sleep problems Eating disorders	Anxiety Stress Depression

Main Findings Obtained in the Studies

There are general explanations and evaluations made based on the studies. In the document review, studies on excessive media use were taken as a starting point, and findings were collected. Table 4 presents the basic findings obtained in these studies in detail.

Table 4. Main Findings Obtained in the Studies

No	Resources	Main Findings
1	(Ruder, 2019)	People who use technology need to take control of technological devices and play a rational role in their choices. It is better to find answers to questions about cognition, social life, and emotional development. The Growing up Digital Study (GUD) still continues in Canada. The study will enlarge all six continents over 10 years to find out the impact of digital technology on youth's physical development, mental improvement, and social well-being.
2	(Moshel, 2024)	In the study, the results obtained from systematic review and meta analysis inform about the negative results of cognitive abilities. Attention is the one which is affected adversely.
3	(Firth, 2019)	Excessive use of internet use over 3 years in Children is adversely effective on verbal intelligence. However, for older adults, it is a new source of positive stimulation. It is helpful to get rid of the negative effects of isolation.
4	(Zhang, 2023)	According to the study, a higher level of Social Media Addiction, which is related to emotional disturbance, poorer sleep quality, and poorer executive functioning, affects mental health and cognitive functions adversely. These negative results lead to a loss of self-control resources.
5	(Rich, 2024)	Rich, director of the Center on Media and Child Health at Boston Children's Hospital, associate professor of pediatrics at HMS, and associate professor of social and behavioral sciences at the Harvard T.H. Chan School of Public Health, says the growing brain during childhood is not developed well due to overexposure to the screen. Blue light-emitting screens prevent children from sleeping well due to suppressing the secretion of the hormone melatonin. People, especially children, need regular sleep for their brain development.
6	(North, 2024)	North, senior correspondent for Vox tells that the study on Gen Alphas in nursing homes demonstrates their inability to read and write. The survey result is worrying. 38 percent of teens deal with their smart phones, think nothing else.
7	(Descourouez, 2024)	Descourouez, M.G. from Stanford University, as a Lifestyle Medicine team member, says that the negative effects of excessive use of phones damage learning, memory, and mental health. It has a potential risk of neurodegeneration. The study she performed shows that the students aged between 18 and 25, who spend excessive time in front of the screen, have excessively thinner cerebral cortexes than the others.

8	(Bulut, 2021)	As a result of research by the American Pediatric Association, it was determined that children between the ages of 8 and 10 spend 8 hours on different media platforms, and even older adolescents spend 11 hours on social media. Research continues on how excessive media use leads children to aggression, excessive weight gain, and substance abuse.

Discussion, Result, and Suggestions

The research aims to conceptually examine whether people are exposed to the erosion of thought that is called "brain decay" while new communication systems offer life in better conditions besides the increase in information exchange. At the end of the research, adult and youth group output connections were seen to be different in terms of cognitive, social and emotional development. While excessive use of the internet harms little kids, it is helpful for the old since they do not feel isolated. Every new invention has brought convenience to humanity. The comfort it has brought has also been the beginning of other problems for humanity. Electricity was a great discovery for the sake of the public. It has given a big comfort, and it is the starting point of technological innovations. However, it is also very dangerous since it can hurt or kill as well.

Brain decay is the popular name for a general picture that develops due to the decline of intellectual functions and human relations as a result of excessive use of social media along with constant scrolling.

The answer to the hypothesis was received both quantitatively and qualitatively. Social media use causes anxiety, depression, and loneliness, especially among adolescents. The importance of "like" numbers and the increase in popularity competition cause adolescents to experience internal conflict regarding self-confidence. Being constantly compared to others in the media negatively affects health and cognitive structure. Perfectionism leads to a feeling of inadequacy and loss of self-confidence.

It is a fact that social media is not good for real-life relationships. As face-to-face communication decreases, people have difficulty empathizing with each other. This situation increases the feeling of loneliness even more. It traps people in an isolated life (Uludüz, 2024). According to the (Genç Aslan, 2023) research, the intensive use of social media in adolescents highlights the desire to achieve unrealistic goals. Since the development of self-perception and identity is incomplete, the young person develops a negative self-perception. Demirtürk (2024) determines that there should be an age limit on social media. This is an important limit for developmental needs and digital skill level. Hastürk (2024) observes brain decay as excessive use of social media which results in memory confusion and a decline in interpersonal relationships. Many countries have been taking precautions to protect their future generations from the bad effects of screen. In Norway, the government wants to raise the age limit for social media use to 15. In France, in 2023 a law was passed requiring parental consent for people under the age of 15 to use social media. In Germany, kids are allowed to use social media only if their parents give permission. In Italy, smartphones are not allowed to use at schools. In Ireland, there is a public debate about using phones under the age of 16. In Greece, pupils are not allowed to take their phones out of their bags at school (Dolma, 2024).

This study as a document analysis of many thoughts and ideas, provides a conceptual framework for brain decay as a problem of the century. This study has scanned the general status of studies on brain decay in national and international literature. Quantitative and qualitative methods were used in the studies according to the analysis findings of the research method used. The results obtained from a systematic review and meta-analysis inform about the negative results of cognitive abilities. Attention is the one that is affected adversely. Common findings include that social media addiction negatively affects brain development due to insomnia that begins in childhood, causes memory impairment, and leads to stress, anxiety, and depression. Consequently, anxiety, stress, depression, and reduced attention are diagnostic results. With digitalization, the online environment has become an integral part of daily life, and in particular, the long hours spent in this environment have led to cognitive problems. One problem is explained by the concept of 'brain rot'. This study addresses a recent and important issue in this regard. Although the sample size is not sufficient, given the novelty of the concept and the quantitative lack

of studies in the literature, the study is considered an important contribution to the literature.

As a suggestion, there must be an age limit for mobile phone use. Screen-free meals are recommended. Planning how to spend time and making organizations on different activities seem wonderful. Discussion about things watched can be helpful for analytical thinking. Limiting screen time makes a person feel better after some time. Following positive content can inspire a person. Some spare times can be filled with activities such as; playing an instrument, writing in a journal, exercising, practicing yoga, or meditating. Sharpening the mind is vital. Doing puzzles is helpful in this context. Doing a digital detox can be helpful for mental well-being. In this way, it is easy to be aware of the thoughts, perceptions, and habits.

Future research could build upon these findings by exploring several avenues: Long-term Effects: Examine the long-term effects of brain decay on social, emotional, and moral development by following up with the youth over several years. Family Dynamics: Examine the role of family dynamics, including parental education levels, socioeconomic status, and home environment in moderating or increasing the impact on children's social development. Realizing how family factors contribute to technological devices can support the target. As a result, technological developments will improve or deteriorate social skills and emotional development either positively or negatively, depending on the time spent on the screen.

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RESEARCH ARTICLE

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Journal of Society Research

Women's Access to Public Space in the Late Ottoman, Early Republican Period: Istanbul Through a Woman Painter's Diary

Ceren Lordoğlu[1]

[1] Dr., Mimar Sinan Fine Arts University, Istanbul/Türkiye
ORCID: 0000-0002-2709-7661
E-Mail:
ceren.lordoglu@msgsu.edu.tr

Abstract

This study examines women's experiences in public spaces and the restrictions they faced in late Ottoman and early Republican Istanbul. It aims to make visible the boundaries imposed on women in public spaces, despite the privileged positions of different social groups. Utilizing the methodologies offered by feminist history and geography, the study provides a gendered reinterpretation of urban history and analyzes the connections between related publications. The study focuses on the biography of painter Sabiha Bozcalı, based on her 1941 diary and personal archive, to explore how women experienced public spaces and mobility in early Republican Istanbul. It investigates how women's everyday lives were shaped by the complex interactions between gender norms, space, and social change. In this context, the study examines the opportunities and obstacles women encountered in urban spaces and analyzes the evolving and persistent aspects of these experiences throughout history. It evaluates how women living in different parts of Istanbul were constrained by spatial arrangements and social dynamics or created new spaces of movement. By adopting a historical perspective, this study aims to reveal the gendered structure of public spaces and the role of women in the city.

Keywords: *Public Space, Late Ottoman- Early Republican Istanbul, Gender and Space Relations, Sabiha Rüştü Bozcalı*

Öz

Bu çalışma, Geç Osmanlı ve Erken Cumhuriyet dönemi İstanbul'unda kadınların kamusal alan deneyimlerini ve karşılaştıkları kısıtlamaları incelemektedir. Toplumsal yapının farklı kesimlerinin ayrıcalıklı konumlarına rağmen, kadınların kamusal alandaki sınırlarını görünür kılmayı amaçlamaktadır. Feminist tarih ve coğrafyanın sunduğu yöntemlerle kent tarihi cinsiyet perspektifinden yeniden okunmakta, bu bağlamda yapılan yayınlar arasındaki ilişkiler analiz edilmektedir. Çalışmada, ressam Sabiha Bozcalı'nın 1941 yılı günlüğü ve kişisel arşivi temel alınarak, Erken Cumhuriyet döneminde İstanbul'da kadınların kamusal alanı nasıl deneyimlediği ve hareketliliklerinin nasıl şekillendiği ele alınmaktadır. Kadınların gündelik hayatlarının, toplumsal cinsiyet normları, mekân ve toplumsal değişim arasındaki etkileşimle nasıl belirlendiği araştırılmaktadır. Bu bağlamda, kadınların kentsel mekânda karşılaştıkları fırsatlar ve engeller ele alınarak, tarihsel süreçte bu deneyimlerin değişen ve değişmeyen yönleri analiz edilmektedir. İstanbul'un farklı bölgelerinde yaşayan kadınların, mekânsal düzenlemeler ve toplumsal dinamiklerle nasıl sınırlandığı veya nasıl yeni hareket alanları oluşturduğu değerlendirilmektedir. Çalışma, kadınların kent içerisindeki varlığını tarihsel bir perspektifle ele alarak, kamusal alanın cinsiyetli yapısını ortaya koymayı amaçlamaktadır.

Anahtar Kelimeler: *Kamusal Alan, Sabiha Rüştü Bozcalı, Geç Osmanlı- Erken Cumhuriyet Dönemi İstanbulu, Cinsiyet Mekan İlişkileri*

Introduction

Research into the constrained visibility of women in public spaces during the Late Ottoman and Early Republican eras in Istanbul is a significant field that necessitates a historical analysis of gender, class, and spatial relationships. This investigation seeks to explore the obstacles women encountered in accessing urban public spaces during these periods and the societal, political, and cultural factors behind these impediments. This study examines the personal archive and 1941 diary of Sabiha Bozcalı (1904 – 1998) a painter from the Early Republican Period and explores her relationship to the public sphere. Additionally, it aims to enhance the ongoing discussion about how women's restrictions in the public sphere persist in current times, albeit in altered forms.

In social sciences, for a long time, space has been treated only as a physical space, and its significant impacts on people's everyday lives have been ignored. This situation resulted in a lack in spatial studies, expressed as "social spatial blindness." Despite numerous theorists addressing the significance of social space (Lefebvre, 1991; De Certeau, 1980; Massey, 2005; Bourdieu, 1998), it is remarkable that limited studies in urban historiography highlights the constraints on women's access to public space. Conversely, scholars in feminist historiography and feminist geography significantly contribute to this subject.

Historiography, when viewed through a feminist lens, goes beyond mere analysis. Feminism stands for a political movement aimed at enacting change, which encompasses social transformations. "It seeks to create a basis for new social relations in the context of everyday relations. Change gradually as new patterns are realized and reproduced. As a result, the impact of feminism is often invisible, but at the same time unstoppable." (Mackenzie, 2002, p.21) According to Joan Scott, feminist historiography "will reveal a history in which old questions are asked anew to be answered in new terms, a history that will make women visible by identifying them as active agents, and a history that will create an analytical distance between the seemingly fixed language of the past and our own terminology." (Scott, 2013, p.96) Furthermore, this new history will open up new avenues for thinking about feminist political strategies in the present and future because it suggests that gender must be redefined and reconfigured, along with a vision of political and social equality that includes not only gender but also class and race (Scott, 2013, p.97). Scott's proposal, which elucidates the relationship between feminist historiography and the concept of gender, might be linked with the intersectionality approach.

Collins and Bilge (2016) claim that intersectionality transcends the comprehension of various identities, necessitating consideration of social inequality, power relations, relationality, social context, complexity, and social justice (2016, p.29). In this context, comprehending the diverse experiences of women in public space over a specific timeframe might be accomplished through the various categories offered by intersectionality (Valentine, 2007). Nevertheless, an understanding of everyday life is essential for grasping the social context and complexities.

Lefebvre argues that everyday life defines a primary realm of meaning, serving as both a field and an intermediate station. It transcends mere conceptualisation and can be used as a key to comprehend the society (Lefebvre, 1998). The sociology of everyday life seeks to identify a coherence in the study of individuals within their environmental context and everyday social interactions. By analysing attitudes and behaviours in routine settings, it aims to illustrate the framework of social order and structure (Adler et al., 1987, p.219). Feminist scholars in the 1970s and 1980s questioned the narrow approach of historiography, which acknowledges the experiences of men while ignoring women (Caine, 2019, p.90). The emergence of new historiography enabled the writing of biographies to acquire a distinct significance alongside the significance of women's history and the history of everyday life.

Since the 1980s, feminist geographers have conducted extensive research on the social construction of space and its role in reflecting and reinforcing gendered inequalities. One of the main goals of feminist geography is to make visible and problematize the relationships between gender and spatial distinctions (McDowell and Sharp, 1997,

p.91). "Previous research in feminist urban geography has documented that women's experiences of urban space, employment opportunities, and the use and access to urban services are often different from those of men (for a review, see Pratt, 1990; McDowell, 1993). In their article, Liz Bondi and Mona Domosh (1998) focused on the experiences of three women from different historical periods (Early Modern England, 19th century New York, and late 20th century Edinburgh) to discuss how public and private space has changed in relation to gender and class in terms of women's access (Bondi and Domosh, 1998, p.283). In the article, they highlight that while women have faced restrictions in accessing the public sphere throughout history, these constraints have evolved and taken different forms over time.

This article seeks to investigate the relations between women's experiences and public space in Istanbul throughout the Late Ottoman and Early Republican periods. After outlining the study's methodology in the first section, the second section will explore conceptual ideas and the distinctions between the public sphere and urban public space. The subsequent discussion will focus on the relationship between women and public space in late Ottoman Istanbul, followed by an exploration of public space experiences in Istanbul through the life of Sabiha Rüştü Bozcalı, an Early Republican Period painter, utilising her personal archive and diary from 1941. The discussion part will ultimately examine the alterations and continuities in women's relationship with public space today.

Method and Methodology

Micro-historical studies reveal substantial information about everyday life, details obscured in grand narratives. In this regard, biographies serve as crucial sources due to their capacity to unveil otherwise unattainable facets and details about the environments in which individuals lived. In contrast to conventional biography, feminist biography examines the subject not as an isolated person but in relation with the social context and the others who interact with them. Both what the subject of the investigation does and does not do in their everyday existence and how they do it are taken into account (Ware, 2010, p.417). This is consistent with the concept of intersectionality, which highlights the importance of social context. This study employs a feminist methodology, as highlighted by feminist historiography and geography, positioning women as subjects and rendering their difficulties visible, while allowing the analysis of dynamic and multiple categories.

A primary concern in biographical writing is the scrutiny of the researcher's neutrality, as highlighted by feminist methodology (Harding, 1995). Currently, biographies are written not to provide unvarnished facts, but rather to reflect the author's subjective view, interpretation, and the emotional response they seek to get from the reader (Gökpınar, 2015, p.37). The information from personal archives is both multifaceted and constrained.

Prior to writing the current work with an emphasis and focus on public space, I wrote a biography of Bozcalı and examine her life (Lordoğlu, 2022). In examining Bozcalı's life, I attempted to interpret the analysed material not as a representation of the women of the era, but in relation to Bozcalı's life and the characteristics of her time, emphasising the social context, a feature of intersectionality highlighted by Collins and Bilge (2016). In a geography where access to personal historical materials is notably challenging, Bozcalı's personal archive and diaries hold significant value, particularly for researchers employing feminist methodologies. Bridget Brereton states that diaries encompass the activities, feelings, and relationships considered significant by women; they serve as a repository of experiential content (Brereton, 1998, p.146). Thus, the passages and the information provided from the diary ought to be regarded as an attempt to comprehend Bozcalı's imprints within the public sphere. Instead of trying to generalise the relationship between women and public space in Bozcalı's time through her diary, I concentrated on examining how she interacted with Istanbul and developed relationships within her social context of the period.

While examining Bozcalı's life, I used her personal archive at SALT, documents about her at Taha Toros Archive, published interviews and an interview that I conducted with one her relatives.

In her personal archive at SALT there is a range of documents, including account notes, drawings, photographs, diaries, museum entrance cards, newspaper clippings, letters, and cards of her family and herself. The archive at SALT contains just the diaries regarding the years 1941, 1985, 1986, and 1990. She had routinely kept her 1941 year diary within these diaries. Moreover, there is a consistency in her writing discipline, form, and style pointing out that she had a long-standing practice of keeping a diary.

The diary's narrative approach is similar to agenda notes than to emotional expression, intellectual discourse, or narrative storytelling. The reason behind this remains ambiguous; it could either be a strategy to prevent her diary from being read or linked to her unique style of diary writing. Therefore, you may notice some incomplete sentences or merely notes. The notebook is presented in an agenda format as well. It is very interesting that she did not sketch in her diary. In her diary, she occasionally used old Turkish words alongside terms from Western languages.

As a result, a part of this article attempts to explain the experiences of the public sphere and urban public space as obtained in her archive and diary from 1941.

Women's Trials with Public Space

Although the concepts of public sphere and public space are often used synonymously, they have different meanings. While the public sphere refers to a collective set of meanings and the production process of these meanings, it is also sometimes used to describe the physical spaces where this meaning production occurs (Özbek, 2004, p.40). Although the term "public space" is generally preferred in the context of physical space, the concept of "public sphere" comes to the fore again to express the collectivity formed by the effect of space. This article will use the term "public space" to refer exclusively to physical space, while "public sphere" will denote contexts that highlight collective meaning and experience.

In many parts of the world, urban public space is regarded as an essential component of citizens' everyday lives, facilitating interactions with strangers and serving as an important venue for civic expression and participatory democracy. Urban public spaces, including parks, plazas, squares, marketplaces, and streets, have traditionally served as places for collective identity and belonging. In these areas, citizens have articulated solidarity and resistance, redefined their notions of citizenship, and asserted their demands for rights (Peake, 2020, p.289). Urban spaces such as parks, plazas, squares, marketplaces, and streets have historically been spaces of collective identity and belonging where citizens have expressed solidarity and resistance, reshaped their definitions of citizenship, and voiced their demands for rights (Peake, 2020, p.289). Feminist researchers have highlighted the restricted access of marginalised groups, such as women, the poor, the mentally ill, and the homeless, to these spaces, emphasizing the absence of a homogenous public sphere (Wilson, 1992; Fraser, 2004).

The gendered division of labour and gender roles restrict women's ability to participate in public life, with the majority of caregiving carried out at home. This not only excludes women from political activities and decision-making processes but also reproduces wider social inequality. The idea of "the personal is political," promoted by second-wave feminism, demonstrates that private relations and roles within the home are linked to the public sphere and are not independent of power relations (Okin, 1998, p.124). Feminist theorists emphasize that the public-private distinction is based on patriarchal cultural and social practices and that the patriarchal order cannot end without changing this distinction (Bondi and Rose, 2003; Fraser, 2004). In this context, women's access to the public sphere and their demands for the shift of gender roles hold significant importance.

Elizabeth Wilson's The Sphinx in the City (1992) has a foundational position in feminist analyses of urban public space. Wilson argued that cities have historically been designed to control women's lives and freedom. This study presents the question of who the public sphere is intended for and who it excludes, highlighting the ways in which urban space may be both liberating and oppressive for women. Wilson emphasizes the differences in the use of public space by women of different classes,

especially by addressing the changes in the public space experiences of middle- and working-class women in the 19th century. While Wilson does not explicitly employ the term intersectionality, her work points out the importance of examining women through several categories, recognising the relevance of social context, and addressing this complexity by intersectionality.

In light of the mutually constitutive relationship between social and space, we should also consider the potential for bringing together multiple categories to think about women's experiences in the public sphere. According to Selda Tuncer (2018) "It is instead necessary to develop a more comprehensive understanding that highlights the mutually constitutive processes of constructing gendered identities and spaces without neglecting the materiality and particularity of urban space. This requires that socio-spatial formations of gender, class, race, etc. are considered. Such a perspective would enable an exploration not only of the different ways women are situated in urban public space but also more importantly how they participate in urban public life and culture through everyday practice" (2018, p.23) The emancipation of women during the Early Republican Period serves as a notable example regarding education and employment, alongside the persistence of social control in their lives (Tuncer, 2018, p.28).

Women's access to urban public space encounters different obstacles, depending on historical and geographical contexts. Today, in different geographies, women's presence in public space is constrained by factors including fear of male violence, inadequate transportation, gender role-related care labour responsibilities, and economic limitations (Kern, 2020). In Turkey, in addition to these, women's need to justify the time they spend outside the home, moral questioning and cultural patriarchal norms make it even more difficult for them to access public space (Lordoğlu, 2018; Çelik & Sayan, 2023; Geniş & Akkirman, 2020).

Women's presence in public space can be analyzed through two key contexts: first, their demands for rights in the public sphere, including education, political participation, and legal equality; and second, their relations with urban public space, the constraints they encounter, and their

struggles to overcome these constraints. Public sphere is a space of contested meanings, symbols and identities. It is constituted by difference and fluidity, which by its very nature is not fixed. Everyday life practices provide an important foundation for examining the public sphere. In the following sections of this study, women's relationship with public space in Istanbul during the Late Ottoman and Early Republican periods and the differentiation of this relationship will be evaluated from the perspective of gender and space. The changes in Istanbul's social history are crucial for comprehending the interrelationship between women's everyday lives and their presence in urban public space.

Women's relationship to the public sphere in late Ottoman Istanbul

The presentation of women in the public sphere during the Late Ottoman and Early Republican eras has been predominantly fragmented and constrained in scholarly works. Therefore, it is difficult to create a holistic image. As Uğur Tanyeli points out, one reason for this may be that a holistic narrative in the historiography of Istanbul is often treated with a nostalgic or generalizing approach (Tanyeli, 2010). On the other hand, the everyday lives of women, especially women from different classes, has not been adequately addressed in historiography for a long time. However, details of everyday life have been extensively examined since the 1980s with the advent of the new historiographical approach. Thanks to the efforts of social and feminist historians, greater insights into women's everyday experiences in the public space have emerged (İleri, 2016; Telci, 2012; Balsoy, 2015; Maksudyan, 2014, Tuncer 2018). Personal archives and periodicals are important sources for understanding women's relationships with the public sphere in this period.

From the mid-19th century, the declaration of the Tanzimat Edict, the conclusion of the Crimean War, and heightened engagement with Western nations caused significant changes within Ottoman society, particularly in Istanbul (Tekeli, 2009; Toprak, 1999). Ottoman intellectuals and bureau-

crats, influenced by social changes in the West, began discussions regarding the position of women in society. However, in late Ottoman society, women's issues were still determined by Islamic law, which was dominated by Sharia and complemented by the customary law of the sultan (Berktay, 2011, p.30). According to Fatmagül Berktay, discriminatory laws on issues such as family, property, inheritance, marriage and divorce; spatial regulations enforcing gender segregation; and rules regulating women's presence in the public sphere were key factors shaping social life (Berktay, 2011, pp.30-31).

During this period, women's demands for their rights in the public sphere became partially heard with the support of male intellectuals, and women's initiatives in education, work, and organization became evident. After the Second Constitutional Monarchy, women sought to broaden their educational opportunities by challenging the restrictions of the Islamic law, engaging in the labour market, and enhancing their presence in the public sphere (Berktay, 2011, p.32). Women's associations and magazines served as both the platform and the memory of these struggles. As an important source of light on the feminist movements of the period, Kadın magazine, like the White Conferences, conveys an organized struggle for women's rights (Kasap, 2020, p.27). These conferences, attended by approximately 300 women, aimed to raise awareness regarding women's roles in social life, motherhood, and family dynamics, as well as issues related to male-dominated society and politics, women's rights to education, visibility in the public sphere, and acts of rebellion. The events took place in a mansion. Due of its continued relevance, I choose to share a portion of Fatma Nesibe Hanım's speech:

"First of all, there is a serious mistake in our upbringing: We think that silence and endurance in the face of these miserable rapes is a requirement of honor; we think that men's immorality is a right and our silence is a duty. No, ladies, the current generation of future mothers will consider this mentality to be nothing more than idiocy. We are obliged to defend our law with our fortitude and defend rape with our fists. Why should

our silence be the duty of honor? Why should our womanhood be insulted and we are obliged to endure it? We are not in the mountains, ladies!" (Kasap, 2020, p.30)

Women's Everyday Life and Public Space

Women's use of public space was constrained by the social and cultural norms of that period. Promenades, public baths, boat trips, and neighbour visits are the main activities that take place in these constrained areas. But rather than going alone, women would go there with their families or other relatives. Houses in which women predominantly occupied were locations where a spatial gender divide was most distinctly evident. The architectural design of the houses, characterised by doors facing the street and window lattices, symbolically and physically delineated the boundaries women created with the outside world. (Işın 1995, p.89). Since women in the late Ottoman period were not part of a working life as we know it in modern times, sharp spatial gender segregation was observed in the city (Berktay, 2011, p.31). However women have established various out-of-home spaces and strategies to assert their presence in the public space of the city (Ambros et al. 2016; Maksudyan, 2014). Some of the public spaces throughout the city where women may establish a place for themselves are marketplaces, houses of worship, promenades, and public baths. Moreover, considering multiple categories reveals that the boundaries of public space in the city are influenced by class differences. Women engaged in various professions, including merchants, midwives, artisans, teachers, and factory workers, alongside those from wealthy families involved in charitable organisations (Ianeva, 2016).

The neighbourhood was utilised as a significant socialising space for women. Neighbour visits enhanced relationships and reinforced social support. Women would often go to each other's houses with small gifts or food, spend time together, and discuss their current events. These gatherings strengthened community ties and provided a space for women to share their everday lives and concerns (Fleet & Boyar, 2016). However, women's presence on the streets at night, even in their own neighborhoods, required certain precautions to be

taken. For instance, they were able to move more easily on the street by pretending as elderly women or carrying bundles with them at night (İleri, 2016). These tactics highlight women's concerns regarding safety in public spaces, particularly during nighttime, as well as the precautions they adopt within their own neighbourhoods.

Münevver Ay's statement, who born in 1888, helps us to imagine the neighborhood in the late Ottoman period:

"...all the inhabitants of a neighborhood, a district, from every stratum, every class, poor, rich, middle class, tradesmen, clerks, officers, were each other's neighbors." (Sezer and Özyalçıner, 2005, p.34).

This expression points to a period when modern and traditional structures had not yet differentiated significantly, new social classes were in the process of formation, and this situation was not reflected in class differentiation in residential areas (Tekeli 2009; Toprak 1999). It has been observed that these structures have changed over time, with differentiation and segregation processes emerging alongside social dynamics.

Promenade, Hammams, Boat Trips

The promenade served as public space where women could strengthen their social ties and meet individuals from different social segments. Sezer and Özyalçıner express that these places were differentiated for different social classes with the following words: "These wretches, most of whom made a living as cooks, would wear their beads and gold, and come there wearing their clean abayas, colorful abayas, halva, and dolma. Adorning the meadow like flowers, these Arabs in red abaya would leave the impression of poppy flowers with their bright black eyes peeking through the white abaya" (Sezer and Özyalçıner, 2005, p.259). However, even the use of these places was occasionally restricted to women by regulations and prohibitions. A regulation dated 1752 prohibited women from going to distant promenades and stated that those who violated these prohibitions would be banished from Istanbul (Sezer & Özyalçıner, 2005, p.150).

Hammams was another important place in which women socialized in the neighborhood. For women in Istanbul, the hammam was much more than just a place to clean (Boyar and Fleet 2014, p.273). In addition to functioning as a hairdresser or beauty salon, it also plays an important role as a treatment center, a place to meet friends and have a pleasant time, and a place to host celebrations and invitations. Moreover, the hammam is also a platform for women to display their financial status and neatness, and to show off their social status. It also stands out as a place for the selection of prospective brides. Moreover, according to Reşat Ekrem Koçu, during the reign of Abdülhamid II, "morning baths", which were used not only for cleaning but also for shelter and remained open until the morning, became a place where the poor of the period, who had housing problems, stayed overnight (Sezer and Özyalçıner, 2005, pp.124-131).

In Abdülhak Şinasi Hisar's Bosphorus Yalıları Past Time Mansions (1997), it is possible to come across striking details about the places where women and men encounter each other on the Bosphorus, especially about boat rides where women from the privileged class are visible outside the home. Borned in 1887, Hisar's observations reflect the period of his childhood and youth. During this period, boats belonging to men and women were designed in different colors and with a distinct aesthetic understanding. Şinasi describes how women create a visual feast while participating in these excursions with the following words:

"...Before the ladies take off their velvet or atlas abayas, their white abayas, and the colorful shawls like peacock tails hanging from the back of their boats into the water disappear, before the rowers let go of their oars and the boats disappear from the water, the market boats..." (Şinasi, 1997, p.12).

Women's presence in public space was not only limited to the physical sphere; their clothes were also regulated and restricted. In addition to being a sign of identity, clothing has been used as a tool for social control. The fabrics and shapes of the feracas that women wore when going out were controlled by strict rules, and both the women who did

not comply with these rules and the tailors who sewed them were punished (Sezer and Özyalçıner, 2005, pp.53-58).

In the late Ottoman period, women's presence in public space was shaped by gender, class, and cultural norms, and these spaces were tightly controlled. The increasing mobility of women in the following decades reflects not only changes in the social context but also the transformation of urban space. The late Ottoman period exhibited women's presence in public spaces significantly influenced by a complex interplay of gender roles, social class distinctions, and cultural expectations. The interplay of these factors established a system in which women held significant control over public spaces, successfully creating territories for themselves amid the wider societal constraints. This control was often subtle but powerful, with women establishing and maintaining social norms that governed behavior in these spaces. The nature and extent of this control varied depending on the specific urban context, the social standing of the women involved, and the public space in question.

As the Ottoman Empire moved into the modern era, there was a gradual yet notable change in women's mobility within public spaces. This change was not just a reflection of shifting social attitudes regarding gender roles; it was also a consequence of the physical and functional transformation of urban spaces themselves. Cities started to evolve, introducing new forms of public spaces while rethinking the existing ones. This urban transformation allowed women to explore and move into public spaces in manners that were once inaccessible or regarded socially inappropriate. The increasing presence of women in diverse public settings - from parks and markets to educational institutions and workplaces - both reflected and contributed to broader societal changes, marking a shift in the relationship between gender, space, and urban life in the late-Ottoman period.

İstanbul through a women's diary of the Early Republican Era

The Early Republican Era signified starting point of swift changes and distinctions in the everyday lives of women. The primary factor driving this transformation was the recognition of women as citizens with rights to education, political participation, and employment in the public sphere (Berktay 2011, p.35). During the late Ottoman period, daughters of elite families experienced specific privileges. These young women had the chance to receive private education at home and access various opportunities; however, they were not able to freely use urban public spaces. In this section, I focus on Sabiha Rüştü Bozcalı's presence in the public sphere and her relationship with urban space based on her personal documents in the SALT Archive, especially her diary from 1941 (Lordoğlu, 2022).

The involvement of women in the public sphere was considered as a significant sign of Westernisation and modernisation. During the Early Republican Era, women like Sabiha Rüştü Bozcalı emerged as prominent figures in social life. It is important to note that women across different societal segments experience various situations. Kandiyoti asserts that urban bourgeois women were the primary beneficiaries of Kemalist reforms (Kandiyoti, 1987, p.322). Gülhan Balsoy's research on working women in the Ottoman Empire highlights the varied experiences of women across different social classes during this period, presenting a significant finding as follows: *"While middle-class professionals saw work as a duty toward the nation and emphasized their passion for their occupations, the lower-class manual workers were more expressive of the conditions that necessitated them to work and the class differences they were subject to." (2024, p.810).* However, in order to understand the nuances of the time, it is crucial to address what these privileged women made achievable in the urban public sphere and in which areas they were restricted. It is essential to recognise and analyse the public space experiences of a figure such as Bozcalı through her personal archive.

One of the main issues to be emphasized about the Early Republican Era is that it was no longer only religion or tradition that determined the correct behavioral patterns for women, but to a significant extent, the nation-state itself. Therefore, the nation-state's projects regulating women's lives have become an important component of state loyalty and official ideology (Berktay, 2011,p.35). The

pulling down of spatial walls is balanced by the pulling up of spiritual walls, which is called nation-state patriarchy (Berktay, 2011, p.38).

Bozcalı grew up during the First World War, the Committee of Union and Progress, and the Ottoman era of the Second Constitutional Monarchy. Born in 1903 in Kuruçeşme, Bozcalı was raised in a household of Ottoman military bureaucrats. From the early 1910s onwards, she lived with her family in the Memduh Pasha Mansion, named as after her grandfather, in Kireçburnu. During this period, the Bosphorus districts of Istanbul were at the center of the Ottoman elite's social life. Bozcalı's childhood and youth years were spent in such a privileged environment.

The photographs and postcards sent by Sabiha Bozcalı's mother Handan Hanım from her travels in Europe between 1912 and 1913 reveal that she was often abroad with her husband and that she resembled a Western woman in clothing style. In the early 1900s, the consumption patterns, entertainment, and daily routines of some circles in Istanbul mirrored the Westernisation movement, which had a growing impact on the Ottoman social structure with Tanzimat. In Istanbul, the capital of the Empire, a privileged and elite stratum trying to adapt to the innovations, while the poverty of the people deepened due to ongoing wars. Being one of the elite groups in Istanbul at the time, the Bozcalı family led a prosperous existence. Their social milieu and lifestyle closely resemble Abdülhak Şinasi Hisar's descriptions of Bosphorus neighbourhoods and their inhabitants. While the Bosphorus stood out as the center of wealth and privileged life at the time, the picture was different in other parts of Istanbul. There was a severe housing crisis for the middle and lower classes as a result of the fires that destroyed the housing stock and the surge of immigrants into the city following the war (Kaynar, 2012:99). This circumstance resulted in every enclosed area being considered as a possible residence. Among the interviews compiled in Suat Derviş's book Collapsing Istanbul (2021), especially "Where Do the People of Istanbul Live?", published between May 25 and June 9, 1935, is an important interview series on housing problems in

Istanbul, revealing the living conditions of people in a striking way. The Bozcalı family was affected by the crisis, like many other families with similar profiles, their economic situation changed, and everything was sold and consumed over time. The family's Kireçburnu residence was sold, and at the last period of her life Sabiha Bozcalı lived in a tiny rental flat that she said she "could not fit" with her paintings.

Her talent and interest in art were motivated by her mother's love of painting, and she began taking private painting classes at home at an early age. Bozcalı, like her older brother, was sent to study in Europe at the age of 15-16, disregarding societal expectations of girls. This indicates her family's inclination towards modernisation as well as dedication to education. Sabiha Bozcalı took her painting studies in Germany during the early 1920s, continued in France throughout the 1930s, and furthered her education in Italy in the latter half of the 1940s, working in the studios of notable artists of that era. The educational opportunities she obtained during these decades had a significant effect on her artistic career, allowing her to identify as a "oil portrait painter" in interviews (Özberki, 1984).

An important effect of being in the public sphere was that women and girls could receive formal education. With the proclamation of Tanzimat and Westernization, secondary schools opened for girls, followed by the girls' teacher's school founded in 1870 and the Academy of Fine Arts, which was first exclusively for women and then became co-educational. It has become possible for art education to become public for women. Sabiha Bozcalı has photographs of the Academy's workshops and docks from the years 1929-1930. The notes in her diary reveal that she remained friends with the names in these photographs.

Over time, Sabiha Rüştü Bozcalı's career shifted from oil portrait painting to advertising graphics and newspaper illustrators, and traces of the drawings she made in the advertising sector before 1950 were found only after her personal archive became accessible[1]. This is also due to the absence of her signature on most of these works. Thanks to the

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[1] https://archives.saltresearch.org/handle/123456789/2565?locale=tr

documents in the Salt Archive and exhibitions organized in parallel to this archive, Bozcalı was revealed to be one of Turkey's first graphic designers (Durmaz, 2016). Bozcalı participated in the advertising sector in the 1930s after being invited by her cousin, Memduh Moran, a pioneer in the field. Her art education and talents enabled Bozcalı to find a place for herself in different fields of work and take advantage of the opportunities available.

In the 1950s, Bozcalı worked as a newspaper illustrator for many newspapers, such as Yeni Sabah, Milliyet, Hergün, Havadis, and Ulus. During this period, she met Reşat Ekrem Koçu through Ali Naci Karacan, the founder of Milliyet newspaper. When Bozcalı was suggested that she draw for the Istanbul Encyclopedia, Koçu initially displayed a clear prejudice by saying "I do not work with women", but Bozcalı ignored this negative reaction and continued to draw for the encyclopedia and Koçu's other publications for nearly 22 years. Although women's presence in working life was legally recognized, social norms did not change at the same pace, and this incident shows Bozcalı's determination and motivation to work in different fields.

In the next part of the article, it becomes possible to imagine public spaces in Istanbul based on Sabiha Rüştü Bozcalı's diary from 1941. This diary reveals in detail how Sabiha moved from place to place, with intense mobility in the city for a year. Several locations were documented in her journal, including meetings with friends and relatives, visits to the Academy, films, restaurants, tailors, and exhibitions of the time, as well as shopping and professional meetings. Beyoğlu is one of the neighborhoods that Bozcalı visited most frequently. She was around Eminönü and Sirkeci for her official business and frequently visited official institutions, such as the Ministry of Finance, Land Registry Office, and Treasurer's Office. Although infrequently, she visited Kadıköy and Caddebostan and made visits to the Princess Islands where her friends and relatives lived. Apart from this, during her stay in Kireçburnu, she took care of small errands and walked around Tarabya, Sarıyer, and Büyükdere.

Which means of transportation did she use for this mobility? Although Bozcalı's family owned an automobile, it was observed that she used this vehicle only on special occasions, such as holidays and patient visits during her time in Kireçburnu. She generally preferred public transportation in her daily life. Early in the morning, she would take the ferry to the city center, and on her way back, she would sometimes take the bus back to Kireçburnu. These details allow us to understand both the transportation habits in Istanbul during the period and how Bozcalı used public spaces.

"This morning, we went to Istanbul with my brother-in-law on the 8-10 ferry, and from there to Heybeli Island to have lunch with Nazlı and [Fatma Zehra] Aunt. We left at 5 and returned home. With my brother-in-law." (May 15)

"This morning I went to the city by bus to Tokatlıyan, to Fahrünnisa (Zeid). We had lunch at the hotel. I took the painting equipment to her and left her at 7. I came home at quarter past 8. Daddy came from Antakya." (September 2)

A significant development enabling women from various social strata to engage more actively in the public realm was the diversification of public transportation. In particular, new means of transportation, such as trams and ferries, enabled women to meet men outside the promenades and gain more space in the public space. However, it is clear that these encounters were not happened in sudden or direct changes. In public transportation vehicles and public spaces, such as cinemas, separate places were reserved for men and women as a continuation of the haremlik-selamlik order at home. This separation was even concretized with physical barriers such as curtains, boards or screens (Kaynar, 2012, pp.63-64). An exception to these practices was the presence and flexibility of non-Muslim and foreign women in the public space. Over time, these distinctions disappeared and public transportation not only increased women's presence in the public sphere, but also had the effect of transforming the social structure and relations between men and women in the city. Women's mobility increased their visibility in the public space and triggered changes in gender relations (Kaynar 2012, p.55).

Going to cinema was one of Sabiha Hanım's frequent activities in the city. Sometimes she went to

cinema with her friends, most of the time alone. Almost all of the cinemas mentioned in the diary were in Beyoğlu: Sümen Cinema, Etoile Cinema, Tulip Cinema, Artistik Cinema (Osmanbey), Saray Cinema, Elhamra, Luxembourg Cinema, Sümer, Küçük Cinema, Eclair. She sometimes wrote short notes about the movies she went to.

"I went to the city this morning. Abravayaya pose 7, I saw a very nice movie[2] of Mary Stuart, Sarah Leander, at Old Luxemburg cinema. I bought the painter Fahri Arkunlar m." (May 24)

"Ali Nurcuk went to Ankara. I landed in Istanbul this morning with the children. They gave me my second Calendar job at İnhisar. Lunch. I visited apartment buildings with my mother. We went to the Sumer movie theater. It was bad. Meeting at half past 5 with painters in Taksim, rainy weather at night. Night at Fulik." (September 15)

Hakan Kaynar mentioned that cinema creates an important venue for women to get out of the house and be visible and seen in the public spaces of the city (2012, p.167).

Sabiha Hanım sleeps over evenings at her friends' houses. Both the fact that Kireçburnu was not a central neighborhood and the fact that public transportation was incomparably less frequent and the types of vehicles were fewer than today must have been effective in this regard. However, can one also think of the uneasiness and uncanny feelings of returning home late at night? Was Sabiha Bozcalı on the streets for her profession in addition to her daily life? Although we have a significant idea from the Salt Archive, we do not have holistic knowledge of where and who owns Bozcalı's works. Therefore, we do not have a detailed answer to the question of how much and how she was found on the street in her paintings. As a woman painter, was she able to paint on the street in different parts of Istanbul? In one of her interviews, we learn that her mother accompanied her on some days when she was drawing on the street (Özberki, 1984). This points to the possibilities of a woman artist painting on the street in her own

time, although not alone, but it does not provide comprehensive information.

Conclusion and Discussion

This study aimed to compare women's experiences of public space in different historical periods of Istanbul and examine the changing and unchanging features. For this purpose, urban public space where women were visible in the Late Ottoman and Early Republican Periods, which are prominent in the existing literature, were examined. Women's relationship to public space changed from the Late Ottoman to Early Republican era, with increased access to education, employment, and political participation. However, social norms and state control continued to shape and constrain women's presence in public. Additionally, an increasing amount of research by feminist historians emphasizes the active roles of women, depicting them not just as victims or passive figures, but also as activists and agents of change.

Initially, this study attempted to summarize discussions on two distinct contexts regarding women's relationships with public space. The first examines women's advocacy for equal rights in the public sphere, while the second addresses their access to urban public spaces. Secondly, the focus shifted to women's relation with urban public space in the late Ottoman period. The third section of the study investigates Sabiha Bozcalı's mobility and relations within Istanbul's public space during the Early Republican Era, with a particular emphasis on her 1941 diary, through an analysis of personal archival materials.

Sabiha Bozcalı's education and her subsequent interest in another branch of painting, and her choice to earn a living from it, led her into a fast-paced and intense working life. The intensity continues to persist alongside the acceleration and mobility within the city's public space. At this point 1941 was undoubtedly a year filled with movement for Bozcalı, both personally and professionally. Bozcalı's activities in 1941 can be traced

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[2] *The movie the two artists starred in together in those years was probably Das Herz der Königin, https://www.kino.de/film/das-herz-der-koenigin-1940/*

through her diary, which details her regular use of public transit, interactions with colleagues, professional visits for her works in progress, going to the cinema, and mealtimes at restaurants. The growing utilisation of public space is observed alongside the intensity of her interactions within her social environment, her professional connections, and her aspiration to leverage social opportunities in the city.

What is striking and worthy of discussion at this point is the lack of assertiveness and invisibility of Bozcalı's, which does not parallel her important network of personal relations, education, and career. Despite her talent and hard work, Bozcalı maintained an invisible presence in the field of advertising and newspaper illustrations for years.

Upon analyzing women's access to the public sphere across diverse backgrounds today, it is evident that a singular categorization for women is insufficient. Current research highlights two major issues that restrict women's access to public spaces: the burden of care labour and fear of male violence (IPA, 2025). As women, today we are more numerous in many different areas, such as work, education, politics, and the use of urban public space. However, there are still constraints in the use of urban public space, and we have internalized borders of the city for ourselves. The persistent burden of care labour remains disproportionately on women, who continue to engage in unpaid domestic and caregiving tasks. This heavy workload restricts their ability to leave the home, and even when they do, care labour remains their primary obligation (Geniş and Akkirman, 2020). In instances where privileged groups acquire care services, the responsibility of arranging such tasks is once more assigned to women. Currently, the other significant factor constraining women's participation in the public space is the matter of security. It is obvious where and when women should be or should not be due to the fear of male violence. Urban public space still has restrictions for women from different social stratums. As Lelie Kern states for male violence "For most of us, however, the message comes in the form of a serum, slowly accumulating in our system until it is totally in our blood. It is now natural, rational, and immanent." (Kern, 2020, p.163) We must continue to conduct

new studies with various discipline to ensure that the possibilities of thinking in relation to space and gender do not fall off the agenda of public and feminist politics.

By examining archives akin to Bozcalı's personal collection, researchers from various fields will identify both commonalities and differences in the experiences of women during the same era. This analysis will help reveal previously overlooked insights about these periods through a feminist lens. This approach allows for a rewriting of history, positioning women as active participants while bridging the knowledge of the past with the present.

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RESEARCH ARTICLE

Gendered Representations of Urban Life in Late Ottoman and Early Republican Turkish Novels

Şeyma Ayyıldız[1], Ebrar Öztürk[2]

[1] Asist. Prof., Bogazici University, Science and Art Faculty, Sociology Department, İstanbul /Türkiye
ORCID: 0000-0003-4125-1175
E-Mail:
seyma.ayyildiz@bogazici.edu.tr

[2] Undergraduate Student, Science and Art Faculty, Turkish Language and Literature, İstanbul/Türkiye
ORCID: 0009-0001-5415-4334
E-Mail:
ebrar.ozturk@std.bogazici.edu.tr

Corresponding Author:
Şeyma Ayyıldız

Abstract

The transformation of gender-based relations is one of the issues that late Ottoman and early Republican novels focus on in the context of Turkish modernization. The difference and contribution of this study is that it discusses gender relations with an intersectional approach by including the transformation of urban spatiality that progresses parallel to the history of modernization. By synthesizing literary and sociological perspectives, it explores how gender roles and identities were shaped by modernization in terms of sharing urban spaces. Using qualitative thematic analysis, this study focuses on four novels written between 1874 and 1931—Taaşşuk-ı Talat ve Fitnat, Araba Sevdası, Çalıkuşu, and Fatih-Harbiye—where the sense of urban space is a central theme. Findings indicate that in the Republican period, women developed a stronger sense of identity and belonging in urban spaces, reflecting broader social transformations. Key aspects include shifts in traditional gender roles, a small opportunity to experience the city, walking safely on the street, and lastly the feeling of belonging in the city. This study highlights that women's engagement with the city extends beyond a simple male-female dichotomy, requiring an intersectional discussion of social backgrounds. By combining gender studies, literary analysis, and urban sociology, this research offers a nuanced understanding of gender, spatiality, and modernization in Turkish literature and history.

Keywords: *Urban sociology, Urban identity, Turkish modernization, Turkish novels, Gender-based spatialities*
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Öz

Cinsiyet temelli ilişkilerin dönüşümü Osmanlı son dönem ve Cumhuriyet ilk dönem romanlarının Türk modernleşmesi ekseninde odaklandığı konulardan biridir. Bu çalışmanın farkı ve katkısı ise modernleşme tarihiyle paralel ilerleyen kentsel mekanın dönüşümünü de araştırmaya dahil ederek toplumsal cinsiyet ilişkilerini kesişimsel bir yaklaşımla tartışmasıdır. Bir başka deyişle bu çalışma edebi ve sosyolojik perspektifleri sentezleyerek toplumsal cinsiyet kimliklerinin kentsel mekânların paylaşımı açısından modernleşme tarafından nasıl şekillendirildiğini araştırır. Çalışmanın yöntemi niteliksel tematik analiz olup, kapsamı ise 1874-1931 yılları arasında yazılan, kentsel mekan duygusunun merkezi bir tema olduğu Taaşşuk-ı Talat ve Fitnat, Araba Sevdası, Çalıkuşu, Fatih-Harbiye romanlarıdır. Bulgular, Cumhuriyet döneminde kadınların, modernleşme projeleriyle yönlendirilen daha geniş toplumsal değişimleri yansıtan, kentsel mekanlara bağlı daha güçlü bir kimlik ve aidiyet duygusu geliştirmeye başladığını ortaya koymaktadır. Geleneksel toplumsal cinsiyet rollerini, şehri deneyimlemek için küçük bir fırsatı, sokakta güvenli bir şekilde yürümeyi ve son olarak şehirde aidiyet duygusunu vurgulayan temel bulgular, Osmanlı İmparatorluğu'nun son döneminden Cumhuriyet'in ilk dönemine kadar kentsel mekanlarda kadınların temsili açısından kademeli dönüşümleri göstermektedir. Bu geçiş süreci kentle geliştirilen ilişkinin basit bir kadın-erkek ayrımından daha fazlasını içerdiğini ve kesişimsel bir yaklaşımla kadınların toplumsal arkaplanlarının tartışmaya dahil edilmesi gerektiğini bize göstermektedir. Bu çalışma kadın çalışmalarını, edebi analizi ve kentsel yaşama ilişkin sosyolojik perspektifleri birleştirerek, toplumsal cinsiyet, mekansallık ve modernleşme konusunda nüanslı bir anlayış sunmaktadır.

Anahtar Kelimeler: *Kent sosyolojisi, Kentsel kimlik, Türk modernleşmesi, Türk romanı, Cinsiyet temelli mekânsallıklar*

Introduction

Modernization period novels and gender analyses have often been subjected to sociological analysis in Turkish literature. The difference and contribution of this study is to develop the historical, sociological, and literary analysis of urban space and identity by looking at modernization and gender issues with an interdisciplinary approach. Urban identity is blended with different identity processes of individuals. It is a unique, dynamic, and open-to-change-and-transformative identity. In the literature, urban identity is defined as "place identity," "locality," "character of a place," "image of a place," "sense of place," and "spirituality of place," all of which belong to urban identity as the concept of "distinctiveness.". All these justified definitions express places as distinguishable from each other (Crang & Thrift, 2000; Crysler, 2003; Lynch, 1960 as cited in Cheshmehzangi, 2015, p.395). However, the formation of this urban identity is possible with the interaction of different identities. The combination of different identities of individuals or communities, such as age, gender, class, family, and education, forms the basis of their communication with the city and the identity they produce about the city. For this reason, in this study, we find it more meaningful to use the concept of *sense of space* when talking about urban identity. This understanding, which requires an intersectional approach, accepts that individuals' different backgrounds will bring different understandings about the city, while at the same time it accepts that structural relations such as patriarchy transform these identities. For this reason, it questions urban identity and the relationship with the city by including both the structure and the agent.

Both the structural transformations such as urbanization and modernization experienced in the historical process and the identity changes related to them have changed the perceptions and relationships of women and men towards the city. Although this change was not rapid, it was visibly effective. The best places to analyse this change are Turkish novels because the history of modernization is very parallel to the history of the novel. For this reason, four different novels (Taaşşuk-ı Talat ve Fitnat, Araba Sevdası, Çalıkuşu, Fatih-Harbiye)

from the late Ottoman period and the early Republican period, when the modernization process began to be effective, will be analysed.

These four novels—*Taaşşuk-ı Talat ve Fitnat*, *Araba Sevdası*, *Çalıkuşu*, and *Fatih-Harbiye*—offer significant insights into modernization, the transformation in the sense of urban space, and gender relations in late Ottoman and early Republican Turkish literature. Each novel presents a different perspective on how modernization transforms societal structures, particularly regarding gender roles and urban experiences. *Taaşşuk-ı Talat ve Fitnat* (1874) is one of the first Ottoman novels, reflecting early modernization debates. It highlights traditional gender norms and restrictions on women's mobility, particularly within domestic spaces. The novel critiques arranged marriages and the limited agency of women in a transitioning society. *Araba Sevdası* (1898) portrays the superficial adoption of Westernization in Istanbul's urban elite. The protagonist, Bihruz Bey, embodies a failed modernization attempt, while women in the novel navigate both traditional and emerging social roles, reflecting the gendered impacts of modernization. *Çalıkuşu* (1922) explores the contrast between urban and rural modernization through Feride's journey. Her experiences in Istanbul and Anatolia reveal how women's roles shift with education and work, emphasizing urban spaces as sites of both freedom and restriction. Moreover, Çalıkuşu discusses the relation between public and private spaces. *Fatih-Harbiye* (1931) directly contrasts traditional and modern urban lifestyles, using two Istanbul districts as metaphors for societal transformation. The protagonist, Neriman, struggles between conservative and modern gender expectations, illustrating the impact of urban spaces on women's identity and agency.

Together, these novels depict the intersection of modernization, urban spatiality, and gender, showing how cities serve as both catalysts and barriers for social change. As a result of the thematic analysis, which is a qualitative method, four different findings were discussed, and their effects were combined with a sociological perspective. These findings—stressing traditional gender roles, a small opportunity to experience the city, walking

safely on the street, and lastly the feeling of belonging in the city—showed that there was a transformation with the transition from the Ottoman period to the Republic of Turkey, but this transformation cannot be understood only with a simple distinction between women and men in the study. The different backgrounds of women's identities produce the main distinction, and also it is seen that as the heterogeneity in the city increases, a distinction is made in the sense of the city.

Literature Review: Urban Spaces During Turkish Modernization Process

The modernization process, which began in Europe in the 17th century and spread throughout the world in the twentieth century, first with the "Enlightenment" and subsequently with the "Industrial Revolution," resulted in social, political, and economic reorganization of society (Jones, 2016). As the modernization practices and innovative policies attempted to be implemented in the last period of the Ottoman Empire were reflected in society, the urban population living within the borders of the Ottoman Empire, in particular, underwent social and cultural change (Samourkasidou & Kalergis, 2021). Although women did not undergo revolutionary transformations, they were also granted limited freedoms and began to engage in social activities. Sancar (1994) explains the importance of this urban population, which is at the centre of our subject, by saying that the aristocratic-orientated elite, upper class, and women, most of whom came from the families of palace or state administrators, made significant contributions to this process with the associations they founded and the journals they published in the 19th century. The common idea of the various ideologies that produced solutions to save the country from this period until the declaration of the Republic was that the society would take shape in the hands of educated, enlightened, modern mothers. The approach of modernising or being modernised of the mothers of the new society became an issue adopted by women writers. This attitude determined the modern woman type in the wide period from 1877, when the first women's novel was published, to 1923 (Coşkun, 2010, p. 932). Coşkun mentions in her study (2010) that there are 4 different types of women by considering the measure of modernization. She states that the first women's novels generally bring about common types because they are structured around women's issues. These types are traditional, western, western snob, and foreign women.

The difference and importance of our study is not to categorise women or gender roles during the modernization process but to analyse the relationship between women and men and urban identity by taking these categories into account. Each gender structure directly affects the interaction with space, and gender, which is an important part of our identity, plays a decisive role in the production of urban space and the relationships with the space (Karameşe, 2023a). It is also a reality that the use of the city by women and men has changed over time from the late Ottoman Empire to the early Turkish Republic with the effect of increasing policies based on modernization projects. In the early Republican period, women's issues became the new regime's top priority, and the identity of modern Turkish women was presented as a "cultural indicator" that demonstrated Turkish national and modern identity to the world, rather than an equal citizenship status (Dönmez, 2018).

The basis for choosing novels to conduct these analyses is that novels are sociological, historical, and literary phenomena. For this reason, it is possible to understand the historical and social dynamics of the period in which they were written by analysing the content of the novels. According to Şeker (2017), the plot and characters of the novel are naturally affected by the change in social conditions. Just as the Western novel made its real big leap with industrial capitalism, the Turkish novel, although it has a history, was also influenced by the West and was able to gain an identity with the Tanzimat process. Because the Tanzimat implemented important social regulations regarding the social structure. In this process of social change, the subjects of the novels changed, and the female novel characters also received their share of this. According to Mardin (1991), Ottoman literature is a rarely used source when examining Turkish modernization. However, it is possible to find very

valuable observations and information about Istanbul and the Ottoman Empire in the novels. These novels also provide the opportunity to observe the difficulties caused by the social transformation experienced with the Tanzimat in the 19th century. These novels generally focus on two subjects: the place of women in society and the Westernization of upper-class men. For instance, the novel Araba Sevdası, which is one of the fundamental novels discussed in our study, was examined by Mardin. It was discussed how neighborhoods like Beyoğlu (Pera) produced a different sense of space during the modernization process of upper-class men.

In the meantime, no concessions were made to carry the representations of women within the gender hierarchy constructed by the society into the novel. After the War of Independence, the reflections of the establishment of the Republic and the social reforms created by the Kemalist cadres on the individual and society were transferred to the pages of the novel, while the social structure was processed with the theses of "nationalization" in a different way from the Tanzimat period. For the Ottoman Empire, the 19th century was a period when urbanization became especially important. When we look at the population structure of the period, we see that there were striking increases in the demographic structure of the country. With the opening of the country to foreign markets and the development of transportation technology in the 19th century, the rate of urbanization also increased (Tekeli, 1985). In this period, due to the rapid population growth, the diversity within the city has also increased. With factors such as transportation and trade centres, bourgeois and immigrant neighbourhoods, and military barracks, city life has not only grown but also entered a process of change (Aktüre, 1978, p. 220). However, the urbanization of the Ottoman Empire in the 19th century differed significantly from Western urbanization in several ways. First, Ottoman cities experienced a rapid influx of rural populations, which led to a transformation in urban demographics and social structures, whereas Western cities generally evolved over a longer period of time through industrialization and migration from rural areas (Ar-

naud, 2008). This divergence shows that the Turkish urbanization process differs from the Western typology. In particular, we see the phenomenon of intense industrialization and urbanization after 1950 in the Turkish context (Erman, 2004). For this reason, this discussion does not see the history of modernization and urbanization as identical, but examines how the modernization process transformed the usage of urban space, especially in terms of gender.

In the process of modernization, Istanbul takes the lead in the formation of urban identity with its heterogeneous structure. However, due to this heterogeneous structure of Istanbul, it is not right to talk about a single urban identity. Beyoğlu, which is frequently mentioned in Turkish novels, attracts attention as an urban space in Istanbul. Beyoğlu's space identity has evolved significantly over time, characterized by its fluid and often ambiguous boundaries, particularly in relation to its historical counterpart, Pera. Historically, Beyoğlu has served as a melting pot of cultures and communities, with its name reflecting the influence of various groups. The region's development was propelled by its role as a commercial hub, attracting foreign merchants and diplomats, which facilitated a blend of Western and Ottoman lifestyles. The 19th century marked a period of modernization and urbanization in Beyoğlu, as reforms and increased foreign presence transformed it into a vibrant center of social and economic activity. Today, Beyoğlu continues to embody a unique space identity that juxtaposes its historical roots with contemporary urban life, reflecting a rich tapestry of cultural influences and ongoing development (Demircan, 2023, pp. 14-17).

Nevertheless, when looking at gender-based urban spaces, which is the main focus of this study, it is understood that the literature is more limited. As in each traditional construction, private places like houses were meeting places for women, and public spaces were designed for men (Kamla, 2014); however, in the age of the late Ottoman Empire, with the effect of modernization, paces for men and women can be found. The public's interest in recreational areas began in the Tulip Era (1718-1730). These areas were socialization areas. People went to these recreational areas for various

reasons, such as getting fresh air, walking, resting, and having fun. However, conservative writers of the period criticised the fact that recreational areas deviated from their original purpose and became meeting places for men and women (Bayram, 2017). While there was a transformation in urban areas in terms of man and woman relationships, the significant change has been seen with the foundation of the of the Turkish Republic, as it is clarified before.

The Republican period is a period in which social and political change took place in a more radical and widespread manner, and in parallel, changed society. In this period, writers undertook a mission to announce and have the activities of the new regime adopted by the masses (Oguzhan, 2007, p. 120). In this sense, novels, which are products of westernization, serve as an important tool. Although in the novels still women have been represented as passive victims to some extent, it has been seen that as mothers they were expected to grow new generations parallel to modernization values (Oğuzhan, 2007, p. 121). In this regard, in the Turkish Republic era, women seem to have gained more opportunity to experience the city more.

As a result, modern novels that entered Turkish literature in the 19th century were selected for analysis in order to understand the transformation in gender representations in urban areas. They convey daily city life, which we rarely see in previous literary texts. Nevertheless, the most important aspect of these novels is that they are set in Istanbul and feature female characters who come from a variety of backgrounds and identities. In other words, in this research, the novels will be examined chronologically to show how the use of the city spaces by men and women differed in the two periods. However, the reason for choosing the novels that are the subject of this theme analysis is that they focus on women and do not portray them as a single group. A classification method was chosen that would allow for the understanding of class, education and family differences among women. For this reason, these novels aim to develop a nuanced understanding based on the use of urban space and modernization process by women and men. Since all the texts are romance novels, male

and female roles provide more opportunities to analyse their representations in urban areas.

Method: Thematic Analysis

The main research question in this research is that how the representation of man and woman urban identities has transformed from the late Ottoman Empire to the early Turkish Republican Period with the effect of the modernization process in Turkish novels.

To answer this research question, four novels have been analysed in the light of men's and women's city experiences and their use of the city. *Taaşşuk-ı Talat ve Fitnat* and *Araba Sevdası* belong to the late Ottoman Empire era, and *Çalıkuşu* and *Fatih-Harbiye* belong to the early Turkish Republic Era. All these novels were found to be very influential in their ages, and also, they were chosen as cases for this study to analyse clearly the changes of urban in terms of men and women by comparing late Ottoman and early Turkish Republican. These four novels reflect the social and historical dynamics of their respective periods, addressing themes such as urban life, female representation, and modernization projects. *Taaşşuk-ı Talat ve Fitnat* (1872), recognised as the first Turkish novel, reflects the cultural transformations of the Tanzimat Era. While it does not directly focus on urban life, it explores early modernization's impact on relationships and social values. Fitnat represents the tension between traditional gender roles and emerging modern influences, offering insights into women's constrained roles within a changing society. Similarly, *Araba Sevdası* (1896), written towards the end of the Tanzimat period, provides a critical portrayal of Istanbul's affluent neighbourhoods and satirises the superficial aspects of modernization and Westernization. The novel indirectly highlights women's societal roles through its critique of materialism and appearances.

In *Çalıkuşu* (1922), the novel portrays Istanbul as both a space of opportunity and restriction for women. Feride, an educated woman, navigates urban spaces while struggling with societal expectations. Her experiences reflect how modernization shaped gender roles and how women's mobility in the city was regulated by social norms. The novel

also contrasts urban and rural life. Feride's departure from Istanbul to Anatolia highlights the differences in modernization across regions. While Istanbul represents changing gender dynamics, rural areas reinforce traditional roles, revealing how urbanization influences gender relations. This contrast helps examine how space and geography shape women's experiences. Additionally, *Çalıkuşu* explores the division between public and private spaces. Feride's movements between homes, schools, and streets illustrate the limitations on women's access to the city. However, her role as a teacher in an urban setting demonstrates a shifting sense of agency. The novel ultimately offers a rich perspective on how women's roles, identities, and urban experiences evolved during the late Ottoman and early Republican periods, making it highly relevant for an urban and gender-based analysis. Finally, *Fatih-Harbiye* (1931) juxtaposes Istanbul's traditional Fatih neighbourhood with the modern Harbiye district, symbolising the tension between tradition and modernity. Neriman, caught between these two worlds, represents the challenges faced by women during the early Republican period as they negotiated their identities in an evolving urban landscape.

As a result, together, these novels illustrate the evolution of urban identity and gender roles in Turkey, particularly the increasing representation of women in urban spaces as agents of change. They offer a rich interdisciplinary perspective by connecting literature, sociology, and the history of modernization, making them invaluable resources for understanding the complex interplay of gender, urban life, and societal transformation.

We chose thematic analysis as a method because it would be easier to extract and analyse common themes about the gender, urban and transitions because these novels were written in similar periods and were part of the modernization process. Thematic analysis is a qualitative data analysis technique that involves exploring a data set for, analysing, and reporting recurring patterns. This method can be used as an analytic method on its own or as the foundation for additional qualitative research methods (Braun & Clarke, 2006). A theme is a more abstract entity that involves integrating

and integrating data, unlike categories that provide description and organization. Researchers can identify themes irrespective of the frequency of a particular idea or item related to that theme. The importance of a theme is not necessarily reflective of its frequency. Researchers have flexibility in identifying themes but should aim to identify those that provide important insights that address the research question (Kiger & Varpio, 2020).

The most important advantages of thematic analysis are providing researchers with flexibility in addressing research questions, examining data types, analysing volume, choosing a theoretical framework, and analysing data using either an inductive or deductive approach (Clarke & Braun, 2013). By regarding all these advantages of this method, we have used Clark and Braun's thematic analysis steps that are becoming familiar with the data, generating initial codes, searching for themes, reviewing themes, defining themes, and finally writing up the process (Braun & Clarke, 2006). After determining the novels according to the historical process and suitability of the subject, they were read in more than one way to answer the research question, and initial codes were determined, and then themes were defined. Research enquiries regarding the process of creating urban identity, urban space, gender dynamics, and power relations between men and women formed the basis of the thematic framework.

Findings

In this section, we have analysed four novels that we selected while considering historical transformations. The main findings involve the move from traditional gender relations to the public space, in which women are increasingly represented, and the increasing sense of space that women develop towards the city.

Taaşşuk-ı Talât ve Fitnat: Stressing Traditional Gender Roles

Taaşşuk-ı Talât ve Fitnat, written by Şemseddin Sami, began to be serialised in the Hadika newspaper in 1872 and was first published in book form in 1874. Fitnat and Talat's love story takes place in a

lower middle class neighborhood in Istanbul (Gawrych, 2010). Talat, a young and well-educated man, falls in love with Fitnat, a beautiful and virtuous young woman he often sees from his window. Due to the societal norms and gender segregation of the time, Talat cannot openly approach Fitnat, so he disguises himself as a woman to gain access to her home. Fitnat is raised by her stepfather, who plans to marry her off to a much older and wealthy man, Ali Bey, against her will. She harbours feelings for Talat but is unaware of his true identity when he visits her disguised as a woman. Then, Fitnat is forced to marry Ali Bey by her stepfather and the people around her. In the end, she overcomes despair upon learning the truth and is unable to reunite with Talat; Fitnat takes her own life. Talat, devastated by her death, also dies shortly afterward. Ali Bey becomes insane and is found dead in his house.

Fitnat, as a young woman, has no city experience since she was not allowed to go out after she graduated primary school when she was 8. She stays home all day and tambours alone or with an old lady, Şerife Kadın, who mainly accompanies her and teaches her how to tambour. On the other hand, Talat, who completed his education and goes to his job every day, has more chances to interact with the city. While commuting to work, he had the opportunity to experience Istanbul, which was only known as Suriçi at the time. He leaves his home in Aksaray in the mornings for his work in Şehzadebaşı, and when he returns after work, he interacts with people on the way.

"Everyday life can become understood as the mediator of rights underpinning the usage of urban space to its fullest extent" (Beebeejaun, 2017, p. 327). Being outside at the start and end of work hours can be counted as a part of everyday life. It is understood that only men benefitted from this right at that time; however, since women did not have the opportunity to get a regular job during this period, they were deprived of this experience. In this case, Fitnat's situation should be understood in this way. The reason why Fitnat stays at home is that domestic relationships are designed for women (Kamla, 2014), and therefore she is excluded from daily city life. As a result, it is understood clearly that she does not have city experience

as much as Talat because she does not have an opportunity to go out as much as Talat. There are still a number of gender inequalities and injustices in urban areas today that restrict their participation in the labour market and educational opportunities and hinder the development of talents among young women. These include urban mobility, personal safety and security, and representation in the city. It is clear from the novel that these inequalities were more acute, accepted, and unquestioned at the time (Chant, 2013). It is understood from the novel that reasons such as girls' limited education and lack of job opportunities make them more invisible in the city, and their opportunities to be a part of daily life decrease.

Additionally, the situation of Talat and Fitnat reinforced patriarchal systems by limiting women's access to education, economic opportunities, and public participation, perpetuating gender inequality. This is directly related to the separation between public and private spaces that were discussed before. "Men were associated with public, productive spheres, including paid work outside the home, while women were associated with private, reproductive spheres." (Maksudyan, 2014, p. 1). There is a strict line between Talat and Fitnat. Talat is linked with public spaces, as he is well-educated, has work to do every day, and gained economic independence thanks to his job. In this way, he can quickly get the opportunity to experience the city and attain daily life in the city. Yet, Fitnat is linked with private spaces, as she is uneducated and utterly dependent on her stepfather. She does not even know where she lives in the city since she cannot go out after she finishes primary school.

The book contains the following statements about the stepfather's attitude towards Fitnat:

"He never lets his daughter out of his house. Is it because of bigotry? Is it because of jealousy or fear, I don't know" (Şemseddin Sami, [1874] 2021, p. 54).

The writer uses bigotry here as the opposite of the theme of modern and brings the understanding that bigotry is parallel to the exclusion of women from urban life. Moreover, it is seen that establishing gender roles in this way makes patriarchy stronger, which eventually shapes the city. The visibility of men and the invisibility of women in the

city are related to patriarchal powers. In this urban landscape, the city transforms into a stage for social interaction (Mumford, ([1937] 2011)., yet it is an arena predominantly reserved for men.

Talat's criticism of this situation is remarkable:

"Oh, how poor women suffer!... We prevent them from walking freely and comfortably on the streets.... We depress their spirits to amuse ourselves. We prevent them from walking freely, watching and having fun" (Şemseddin Sami, [1874] 2021, p. 73).

With this quotation we discuss the relationships of the main themes, which are urban space and gender dynamics. It is seen how the rigid boundary separating private and public realms effectively marginalises women, reducing their presence and participation in the city's vibrant social life compared to their male counterparts. This division reinforces traditional gender roles, limiting women's opportunities to engage fully in the collective experiences that the city offers. In this regard, the principles of patriarchy and exclusion of women from daily urban life should be understood together because they foster each other in urban-based discussions. Patriarchal relations and women's exclusion from the public sphere are also related to consumption and entertainment relations. Koyuncu & Tiltay (2017, pp. 13–14), who use the concepts of modernization and Westernization interchangeably, talk about the difference between traditional and Western consumption patterns. While telling and listening to fairy tales, embroidery appears in the works as traditional entertainment and relaxation activities; going to the opera or spending time in a European café are among the common consumption elements discussed in the works. However, what is striking here in terms of our study is that while traditional consumption is identified with women and housework relationships, men are depicted with consumption patterns identified with the public sphere. The authors also expand our discussion by emphasizing that these consumption patterns are class-based. While the situation of Fitnat, who belongs to the lower-middle class, is confined to domestic family relations, Western-modern values are combined with the male-centred perception of urban space use.

As a result, modernization efforts have led to the growing significance of urban space and men-women relations. In his novel, where he describes Istanbul with rich descriptions, Şemseddin Sami critiques traditional perspectives by taking into account the gains of modernization. By criticizing gender relations in the context of Istanbul, he talks about the consequences of keeping women locked up in homes (private places) as subjects of ignorance (Solmaz, 2015). As Kaplan (2004, p. 79) also argues, the novel Taaşşuk-ı Talat ve Fitnat expresses a protest against the oppression of old customs and traditions and the dominance of the family over the youth. In short, urban spaces, which are the main areas of this conflict between the traditional and the modern, are also depicted as areas of power relations between men and women. In other words, the novel portrays a period in which power relations and traditional roles were overemphasised, and women were unable to exist in urban spaces under these roles. Here, the weak position of women (uneducated) in power relations results in their inability to show themselves in urban spaces. Although the historical conditions of this novel, which fall very close to the begining of modernity attempts, lead to this result, we can still see it as a critique of traditional roles.

Araba Sevdası: A Small Opportunity to Experience the City

The novel, written by Recaizade Mahmut Ekrem, was serialised in the Servet-i Fünun magazine in 1896 and published in 1898. The story follows Bihruz Bey, a young man from an affluent Ottoman family. Obsessed with European fashion and lifestyle, Bihruz strives to project an image of sophistication and wealth despite his lack of genuine substance or understanding of Western culture. His life revolves around showy appearances, such as dressing in fine clothes, frequenting high-society events, and flaunting his elegant phaeton (a type of carriage), which symbolises his vanity and superficiality. According to Mardin (1991), the Westernization attempt has been symbolised in social life by the gap between the Pera (Beyoğlu) area of Istanbul, which allows for all kinds of sins and

is packed with foreigners, and the Muslim neigh-bourhoods. Although we see a parallelism be-tween upper-class men's Westernization efforts (Mardin, 1991) and a sense developed in response to the new urban space, we also see that Pera, the public area where socialization occurs, still exists with a dominant male representation and that women are not visibly represented in the public area.

However, Bihruz becomes infatuated with Periveş, a woman he encounters in a public park, Çamlıca Park. Mistaking her modest charm for high-class European sophistication, he begins a ro-mantic pursuit, idealising her without knowing much about her accurate background or character. His love is more about the image he has created of her than genuine affection. As the story unfolds, Bihruz learns that Periveş is not the noble lady he imagined but a middle-class woman with no inter-est in him. His illusions are shattered, exposing the emptiness of his aspirations and his failure to un-derstand the culture he idolises.

In the book, Çamlıca Park, as a public space, is a range and an encounter place for men and women in the city. As mentioned, public spaces were linked with men, and private places were re-lated to women in the city. Çamlıca Park may be an exception to this separation. Here, men and women can enjoy and spend time outside the re-stricted gender roles since women can walk around outside private places such as their homes. According to Bayram (2017), in the Tulip Era, peo-ple were going to these recreational areas for vari-ous reasons such as getting fresh air, walking, rest-ing, and having fun.

"Many men and women walked in groups of three or five around the garden, while others sat on couches listening to musicians perform pieces from the fashionable opera "Bel Elen" in Istanbul" (Recaizade Mahmud Ekrem, [1898] 2021, p. 23).

So, "majority" consists of men and women, and women have a chance to use the city in this way.

"When the ladies left home, their decision was to walk down to Samatya, then take the railway to Bakırköy and then to Sakızağacı recreational area" (Recaizade Mahmud Ekrem, [1898] 2021, pp. 58-59)

However, from this quote, we see that the pub-lic urban space where women started to leave home was an alternative, but it was shaped around a boundary and rule. Women drew a safe route for themselves and the point they arrived at was usu-ally a recreational area. What women do in the park (mostly walking) is crucial since it provides an alternate, more fluid sense of urban space (Bee-beejaun, 2017, p. 327). Women often navigate the city cautiously, unable to fully immerse them-selves in its vibrancy and energy. Rather than en-joying the streets and surroundings, their experi-ence is tinted by a sense of restraint. While they may be unable to access all public spaces or explore every part of the city, Çamlıca Park gives them a sense of urban life to some degree. On the other hand, men have more chances to walk in the city and Çamlıca Park since they are a part of daily city life. In the book, Bihruz only sees Periveş at Çam-lıca Park, which becomes their meeting place. In Is-tanbul, Bihruz graces every public space, bringing a vibrant presence to parks, squares, and bustling streets. In contrast, Perives dwells in more intimate settings, often in homes and the serene surround-ings of Çamlıca Park. In this sense, Bihruz has a more urban feel than Periveş since walking, as an everyday activity, demands a fuller interpretation of women's spatial and temporal experiences of the city (Beebeejaun, 2017, p. 327).

Periveş's suggestion to her friend next to her, "They really praise Çamlıca Park. I wonder what it would be like if we went there?"(2021, p. 59) shows that women have a tendency to explore urban spaces, but the effort they later put in to get there also opens the door to a class discussion. In other words, even though Çamlıca Park is a public space where people get together, this togetherness be-longs to certain economic classes. Çamlıca Park is far away from the city centre, so insufficient public transportation prevents people from going to Çamlıca Park. People need a ride to go there. To go to Çamlıca Park, you need a phaeton, a charioteer, which you can provide only if you are in the high or middle class. Additionally, an entry fee is charged. Therefore, Çamlıca Park gives women less opportunity to experience the city, as they do not use the whole city, just a part of it; women from the lower class even lack this Çamlıca Park experi-ence. Economic opportunities are essential for women's engagement with the city. Middle-class

women, like Periveş, can stroll in Çamlıca Park, which is just a part of the overall city experience. This can be explained as semi-public space that refers to space between private and public space (Ergun & Kulkul, 2019). Although these spaces are public spaces, they are enclosed areas that produce social segregation for upper middle-class women and produce social segregation still. In that sense, Araba Sevdası depicts a small opportunity for women to experience the city twenty years later from the novel Taaşşuk-ı Talât ve Fitnat. The difference of Araba Sevdası from it is giving more space to women in urban space, even if it is under semi-public space conditions and specific to upper- and middle-class women.

Walking safely on the street in *Çalıkuşu*

Çalıkuşu, written by Reşat Nuri Güntekin, was first serialised in Vatan newspaper in 1922 and later published as a book in 1923. It belongs to the early Turkish Republic era, which reflects modern Republic State values. The transition from the previous two novels to Çalıkuşu has two main motivations. Çalıkuşu is the most effective of the early Republican novels, featuring a female protagonist from a different background who is educated and in the public arena. This novel will provide a more complicated framework for modernity, urban location, and gender roles by shifting from a monotonous concept of women to a female protagonist with multiple identities.

It tells the story of Feride, a spirited orphan who becomes a teacher in Anatolia after discovering her fiancé Kamran's infidelity. Through her journey, the novel explores independence, societal challenges, and the importance of education. Written in the form of Feride's diary, the book provides an intimate glimpse into her struggles and growth as she faces hardships, prejudices, and personal sacrifices.

Feride is a well-educated woman and a teacher. She has to wander the streets at night with fear and anxiety when she leaves her home after her fiancé's betrayal. As she leaves her home at night, she is alone in the city.

"I would stop in shock if I saw a shadow in the dark or heard a footstep. Who wouldn't be suspicious of a woman wandering alone on a deserted country road at night?" (Güntekin, [1922] 1962, p.100).

Feride thinks it is "suspicious" to be out in the city at night. This demonstrates the lack of trust in the city, which requires trust to sustain social order among its members and foster new growth (Wu, 2015, p. 107). If a man accompanied her, would she still think that way? Trust is something that the city should produce (Wu, 2015, p. 107). The establishment of trust within a city should be rooted not only in the relationships among its residents but also in the thoughtful design of the urban environment itself. A well-designed city can foster connections, enhance safety, and promote a sense of belonging, ultimately creating a stronger foundation for community trust. Deserted roads in the city, as Feride encounters, are unsuitable for this production, as they instill fear and anxiety in a woman walking alone at night. "Female fear," like sexual assault, arises from actual and perceived risk, restricting women's equal and full access to public urban spaces at night (Day, 1999). This is still a valid discussion in the usage of urban spaces, so at the beginning of the modernization project and the Turkish Republic, questioning of women's concerns at night is very remarkable and understandable. In addition to the women's freedom and acquisitions, asking questions about the limits of women's freedom in urban life is a continuing debate currently.

However, when we compare Feride's situation with Fitnat and Periveş, it can be said that Feride has more opportunities to experience the city. Except for the problem mentioned, she walks around the city, goes to the Ministry of Education, and awaits an appointment to start her job. After her appointment, she taught independently in different regions of Anatolia. As an economically independent woman, she has lived in other cities and experienced them besides Istanbul.

"The old man scratched his neck and said:

A place as big as the palm of your hand. Where would you find Istanbul, whose stones and soil I am devoted to? If it were there, no one would care. There is a lot of gossip here... My advice to you: Be

perfect, be well-behaved. Don't just walk around the market (streets) with your face uncovered." (Güntekin, [1922] 1962, p.122)

Although the above-mentioned distinction is made between Istanbul and other Anatolian cities in the novel in terms of the usage of urban spaces and the effects of modernization process, we see that Feride, as an educated woman, can stay away from traditional patriarchal relationship and this kind of space-based constructions. Fitnat and Periveş had a very different city perspective than Feride. The reasons for this lie behind their backgrounds. Feride is a teacher from a wealthy and intellectual family who lived in the middle of the collapse of the Ottoman Empire and the young Turkish Republic. On the other hand, Fitnat cannot go out after she finishes primary school, so she does not have a profession and entirely depends on her stepfather in every aspect. Feride knows the city; she knows where to go after she leaves her home and how to get out of the town to do her job, while Fitnat does not have the opportunity to realise she lives in which part of the city.

Periveş is a middle-class and uneducated woman who does not come from an intellectual family and goes to Çamlıca Park in a fancy phaeton. Çamlıca Park can be seen as a part of the city, and it can be said that Perives had the chance to experience the city. Yet, this is a minimal experience when compared to Feride. Feride can walk in the city independently, but Periveş has to rent a car with a friend and go to Çamlıca Park. In all three books, women experience the city differently according to their education, class, and family. So education, class, work life, and family backgrounds of women are very influential and matter in urban life. However, men are not exposed to the same situation as women. Men often traverse the city with a sense of autonomy and confidence, moving freely between its bustling streets and vibrant neighbourhoods. In contrast, women frequently experience a heightened sense of apprehension and fear, which can reflect broader societal issues related to safety. It could be argued that the position of women is more sensitive to the social positionalities in the urban sphere. This discrepancy in experiences highlights the need for a deeper understanding of urban dynamics and the importance of fostering a welcoming atmosphere where all individuals can navigate their surroundings without anxiety.

Fatih-Harbiye: The Feeling of Belonging in the City

Fatih-Harbiye is a notable novel by Peyami Safa, a prominent Turkish author known for exploring psychological and sociological themes in early 20th-century Turkish literature. The book, published in 1931, delves into Turkey's cultural and social transformations during the Republican era, focusing on the tension between tradition and modernity. Fatih-Harbiye is an allegory of Turkey's transformation during the early Republican period, reflecting the societal conflict between preserving traditional values and embracing Western influences through Neriman's journey. Fatih represents traditional, conservative values, while Harbiye symbolises Westernization, modernity, and progress. Neriman is engaged to Şinasi, a man who embodies the traditional values of Fatih. However, she becomes fascinated by Macit, a cosmopolitan and modern man from Harbiye. Torn between these two men and the values they represent, Neriman's journey reflects her internal struggle to reconcile her roots with her desire for a different life. Neriman's experience and perspective of the city become crucial to Fatih, Harbiye, and eventually Şinasi and Macit.

The book begins with these sentences:

"Neriman and Şinasi left Daru'l-Elhan together and walked together to Vezneciler. Neriman, who was late for a friend's invitation in Beyazıt, was running, leaving Şinasi a little behind." (Safa, [1931] 2000, p.7)

Neriman's city experience is almost equal to Şinasi's. Both live in Fatih, study in Daru'l-Elhan [Music house, conservatory; general name of Istanbul Municipal Conservatory], and mostly hang out in different parts of Fatih, such as Vezneciler, Süleymaniye, and Beyazıt, the conservative side of İstanbul. At the beginning of the book, Neriman's city experience in Fatih is not pleasant for her. She can stroll through the lively streets of Fatih, immersing herself in the vibrant atmosphere of the

neighbourhood. As she wanders, she can discover the city's rich history and culture, surrounded by the bustling crowd that breathes life into the area. However, she is not entirely comfortable in the city while walking around, and she complains about men sitting in coffeehouses in the square, watching people passing by, and being unable to walk comfortably on the street. Although she has a better chance than Fitnat, Periveş, and Feride to experience the city due to its modernization, she cannot entirely take advantage of it. On the other hand, she feels more comfortable on the other side of the city, Taksim, Tünel, and Galatasaray, which is related to modernization theme in the book.

"The neighborhood I live in, the house I live in, the people I talk to really get on my nerves. When I pass by Fatih Square, there are so many unemployed people sitting in the square's cafes... A person can't even walk on the road comfortably... Yesterday I looked at the shops from Tünel to Galatasaray. Even the shopkeepers have taste. Then the people are completely different. They don't look back. They know how to walk and dress." (Safa, [1931] 2000, p.26).

This situation relates to restricting women's rights in public and private spaces, which limits their feelings of belonging. (Babeejoon, 2017, p. 327) Neriman's positive feelings and thoughts towards Harbiye are linked to her feeling of belonging. She moves gracefully through the streets, her demeanour radiating a sense of ease as she navigates the vibrant atmosphere of Harbiye. Unlike the more traditional and crowded neighbourhood of Fatih, here she feels a kind of freedom, shielded from the intrusive stares of passers-by. The lively energy of Harbiye envelops her, reinforcing her sense of belonging in this modern and diverse locale. At this point, it is understood that in the later periods of the Republic, the city began to be adopted by different groups, and an urban identity began to form according to the districts as diversity increased. Instead of a single and holistic urban identity under the identity of Istanbul, this analysis leads us to a discussion of the integrative identity of spaces. Karameşe (2023b) argued that while the identity of Fatih refers to more conservative relations, spaces like Taksim are seen as more integrated places in Istanbul. Moreover, Amin (2006)

adds that if the places of a city provide more relationships and connections, we can talk about a good city. At this point, we now see the representation of women in urban life, and in addition to this, we see that women specifically choose certain places in the city and tend to go to places where they feel more comfortable.

This perspective opens the door to the concept of women's right to the city in the future and seeks an answer to one of the biggest debates of modernization: who has the right to the city? (Purcell, 2014). Unfortunately, the right to city literature pays little attention to women specifically (Franck & Paxson, 1989). At the same time, it is understood that women's right to the city is more complicated than it seems and includes many social positions. For this reason, it is impossible to analyse the urbanization and modernization process in terms of gender without discussions of education, class, and family background and also without understanding the spatial identity differences produced within the city. As a result, of these four novels, where the themes of modernization, urban space and gender are examined, we can talk about a more egalitarian city sharing in Fatih Harbiye the most. This last novel, where modernization efforts begin to bear fruit and women begin to use urban spaces much more, gives us more information in terms of gender equality. The fact that women are also selective and begin to construct a sense of space according to their own different identities further expands the discussion. This is one of the biggest motivations for choosing the Fatih Harbiye Novel.

Conclusion

Gender-based differences in terms of the usage of urban spaces are widely discussed in the literature. However, this research expands the discussion by referring to modernization period novels from the late Ottoman Empire to the early Republican period. Men and women experience the city differently, but this is not the only dimension. Gender differences in the use of urban spaces have been widely discussed in the literature. However, this research expands the discussion by referring to

modernization period novels from the late Ottoman Empire to the early Republican period. The reason behind choosing these four novels discussed above is that they depict differences and transitions in the themes of modernity, urban space and gender. However, more importantly, these novels are centred in Istanbul and feature female protagonists with different backgrounds and identities. Our findings show that in addition to differences between men and women, the sense of space was under the effect of different social positionalities and space-based identities. The main findings show that there is a gradual transformation from stressing the patriarchal relations that design domestic spaces for women and public spaces for men to the feeling of being an integrated part of the urban environment. Instead of discussing issue diversity between men and women, we also found that women's education, class, and family backgrounds are effective with the construction and relation to the city. Furthermore, the cosmopolitan character of Istanbul that provides opportunities for heterogeneity makes it possible to understand diversities in the same city. Instead of understanding the issue with the holistic identity of Istanbul city, novels open space for micro geographies and different senses of urban spaces within the same city.

In this regard, our study questioned the right to the city from a gender-based perspective, which is a less discussed issue in the literature. From this perspective, this research may open new windows for further researchers to understand right-to-city discussions from literature and sociological perspectives and also intersectional approaches. Different positionalities give the opportunity to make deep analyses by regarding differences in the society. Additionally, this interdisciplinary perspective integrated into this paper will be effective in understanding transitions in society within historical continuity in different researches.

This study has certain limitations because it only looks at four different novels from the modernization period. Although it contributes to a better understanding in urban space during that time period, more comprehensive research is required,

and gaps in the literature must be addressed. In addition, our research was limited to Istanbul. Istanbul has a heterogeneous structure due to its distinctive form, yet there is still a gap in the study of how Turkish modernization was perceived in other cities during that time. This was highlighted in order to make room for future and comparative studies.

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RESEARCH ARTICLE

Turkish Immigrants in Italy: On Migration and Living Together*

Mustafa Demirtaş¹

¹ Assoc. Prof. Dr., Uşak University, Department of Sociology, Faculty of Humanities and Social Sciences, Uşak/Türkiye
ORCID: 0000-0001-6384-662
E-Mail:
mustafademirtas35@gmail.com

Abstract

This article, which focuses on the experiences of Turkish immigrants living in Italy, examines how the migration process paves the way for living together with differences and for cultural, social and economic change. As part of a qualitative study, data was collected through interviews with 50 Turkish immigrants using a snowball sample and participant observation. The results show how Turkish immigrants maintain their differences in Italy and how these differences are maintained in an intertwined environment that is mutually beneficial. Immigrants do not tend to suppress other identities in order to prove their identity. On the contrary, they enrich the social structure by passing on their cultural values. This situation allows both the immigrants to express themselves and the natives to learn about other cultures. The interaction between Turkish and Italian society breaks down prejudices and strengthens the sense of common life. This article shows how living together with differences strengthens the common life and how it contributes to the immigrants' adaptation processes to the new way of life.

Keywords: *Migration, Difference, Turks, Culture, Italy*

Öz

İtalya'da yaşayan Türk göçmenlerin deneyimlerini ele alan bu çalışma, göç sürecinin kültürel, sosyal ve ekonomik dönüşümlerle birlikte nasıl farklılıklarla bir arada yaşama yolunu açtığını incelemektedir. Nitel bir araştırma olarak, kartopu örneklemiyle 50 Türkiyeli göçmenle yapılan görüşmeler ve katılımcı gözlem yoluyla veri toplanmıştır. Bulgular, Türk göçmenlerin, İtalya'da farklılıklarını muhafaza ederek, bu farklılıkların birbirini besleyen bir iç içe geçmişlik içinde nasıl sürdürüldüğünü göstermektedir. Göçmenler, kimliklerini kanıtlama adına öteki kimlikleri baskı altına alma eğiliminde değildir. Aksine, kültürel değerlerini paylaşarak toplumsal yapıyı zenginleştirirler. Bu durum, hem göçmenlerin kendilerini ifade etmelerine hem de yerel halkın farklı kültürleri tanımasına olanak tanır. Türk ve İtalyan toplumu arasındaki etkileşim, önyargıları azaltarak ortak yaşam duygusunun güçlenmesini sağlar. Bu makale, farklılıklarla birlikte yaşamanın birlikte, ortak bir yaşamı nasıl güçlendirdiğini ve göçmenlerin yeni yaşam biçimlerine uyum sağlama süreçlerine ne şekilde katkı sağladığını ortaya koymaktadır.

Anahtar Kelimeler: *Göç, Farklılık, Türkler, Kültür, İtalya*

Introduction

Migration is a complex phenomenon that goes beyond a displacement movement and has various social, political and economic consequences. It is not only an individual experience, but also a dynamic part of social change (De Haan, 2000). This phenomenon, which cannot be explained by a single theoretical approach and involves many elements, is moving in the world in which we live, together with the question of "how to ensure coexistence in a complex society." The harmonious relationship between immigrants, who have different cultural values from the local people, and the host society is mortgaged, as if there were always a price to pay. Welcoming newly arrived immigrants and sharing time and space with them comes with the expectation that immigrants will take on certain obligations from the outset, even if they do not want to. Do the immigrants really have a relationship with the local people that must be accepted? How do they carry on their daily lives in an environment that is different from their own culture? To what extent can they preserve their differences in this new environment? To what extent do they develop their relationships with the local people? This article aims to show the process that Turkish immigrants living in Italy go through in overcoming cultural boundaries and creating a common life with their differences.

According to Gordon Marshall's definition, "migration is the permanent movement of individuals or groups across symbolic or political boundaries into new settlements and societies" (1999, p. 685). At a time when anti-immigrant sentiment was on the rise across Europe and the coexistence of different people within a society was becoming increasingly difficult (Bauman, 2017), these permanent relationships of movement that the immigrants who went from Turkey to Italy entered into with the Italian population show how different lifestyles create an experience of coexistence. When the migration process is considered within an understanding that gives more importance to the voices of Turkish immigrants' life practices and is more useful for realizing the possibility of living together with differences, focusing on immigrants' lifestyles based on differences prepares the ground for discussions on new ways that allow them to be considered a legitimate and equal part of the society in which they live. It opens up productive perspectives on the phenomenon of migration and the way immigrants exist in the country they go to.

Looking at the idea of living together with differences with Turkish immigrants living in Italy can give an insight into how and under what specific conditions a common life can be created with the Other, the Other who always tries to remain different as a person. This insight can give immigrants more space and enable them to exist as equals in this society. If we try to focus on the question of how conditions can be created that allow Turkish immigrants to develop their own differences in the best possible way, the following questions can be traced: How can a common, equal life of Turkish immigrants living in Italy be maintained despite their differences? Which relationships that are forged in everyday life are defined as dependent on difference? How can different cultures, with their differences, live together in a common society? This article examines the answers to these questions through the experiences of Turkish immigrants in Italy. Their lifestyle and their tendency to build relationships with the local people show the possibility of establishing a life that respects diversity and difference in daily practice. As Claude Lévi-Strauss said, "the diversity of cultures depends not so much on the isolation of human societies from one another, but on the relationships that bind them together." (2022, p.26). The real contribution of Turkish and Italian cultures to each other lies not in the enumeration of their particular inventions, but in the unifying differences they offer each other.

Even today, thousands of immigrants continue to immigrate to Italy and other European countries, and those who immigrated before continue to live in Italy and other European countries. At a time when the relationship between immigrants and local people has evolved into an "enemy" one, and the efforts of nation states to maintain their claim to purity by seeking new forms of security such as protective walls (Brown, 2017) the question arises as to how people can continue to live together in peace in the same geography and how they can get out of the position of being "wasted lives" (Bauman, 2016, p.42; 2003, p.87). In order to

find a modest answer to this question and thus overcome the limitations of the concept of "assimilation" as an immigration policy" (Göker and Meşe, 2011, p.70), which dates back to the last century and no longer works in modern times, this article examines the experiences of Turkish immigrants living together with their differences, especially in Italy. It aims to make a theoretical and practical contribution to the debates on migration within the framework of an understanding in which immigrants become more visible in the public sphere, the voice of their life practices becomes more meaningful and the possibility of living together becomes more useful. Thus, this article contributes to identifying the changing structure of migration through everyday relationships and highlighting its unique aspects by conducting an analysis of Turkish migrants' coexistence with the local people in Italy, where they have migrated to.

Theoretical Framework: Living with Differences and Social Belonging

The phenomenon of migration is not just a process of people moving between physical spaces; it is a multi-layered social reality in which cultural identities are reshaped, new relationships to socio-spatial structures emerge and the boundaries between the 'self' and the 'other' are redrawn (Nail, 2015; Castles & Miller, 2013). The migration process involves immigrants' efforts both to adapt to a new social structure and to preserve the cultural codes from which they originate. This dual process plays a crucial role in the construction of immigrants' identities and their relationships with the local society. Especially in countries that have received relatively new immigrants, such as Italy in the European Mediterranean belt, the experience of living together with different ethnic groups offers unique examples of immigrants' social adaptation practices.

The concept of cultural integration, as proposed in J. W. Berry's (1992) model, refers to immigrants preserving their own culture while interacting with the local society. According to Berry, cultural integration goes beyond one-way strategies such as assimilation or separation; it is a "two-way" process in which immigrants both preserve their own

identity and build healthy relationships with the local society. This situation can also be clearly seen in the example of Turkish immigrants in Italy. As the research has shown, Turkish immigrants continue to strive to integrate into Italian society while maintaining their cultural identity and embracing the practice of living together with their differences.

In this context, the concept of "difference" points to a critical point in understanding the phenomenon of migration and the processes of social belonging. Viewing difference not as a threat or an element of conflict, but as a source of social wealth, creates a positive framework for mutual interactions between immigrants and the local society (Bauman, 2016). This study also shows how differences are transformed into opportunities for coexistence and how a mutual "learning" and "exchange" process is constructed through the daily practices of Turkish immigrants in Italy.

In this context, Stuart Hall's (1992) theory of "identity" is also an important conceptual point of reference. According to Hall, identity is not a static and unchanging structure, but a process that is reshaped through historical processes and encounters. Using the example of Turkish immigrants in Italy, it can be observed that the identities of immigrants become flexible and change when they come into contact with Italian culture. While immigrants are nourished by their culture of origin, they also construct a hybrid identity by adopting elements of the Italian lifestyle. Everyday practices such as the incorporation of the Italian tradition of "coffee and croissant" into Turkish breakfast habits are concrete examples of this cultural hybridity.

Cultural differences are often a touchstone for the coexistence of immigrants. In the case of Italy, however, it can be observed that Turkish immigrants both preserve their own cultural practices and develop a lifestyle that is compatible with Italian culture. The friendly relations that immigrants establish with Italians prove that differences become a factor that strengthens coexistence. In this way, immigrants find a way to be "different and common at the same time" on an individual and social level.

On the other hand, it is found that class and space-related factors also play an important role in

the process of Turkish immigrants living together with their differences in Italy. In particular, the research data shows that Turkish immigrants are economically strong in the central and northern cities of Italy and live in the city centers and in close proximity to Italians. According to Loïc Wacquant's (2008) theory of "social exclusion," the displacement of immigrants to the periphery of the city deepens social exclusion, while integration into the city center facilitates social adjustment processes. The fact that Turkish immigrants live spatially in the same neighborhoods as Italians can be seen as a factor that facilitates living with the differences.

Finally, Zygmunt Bauman's concept of "living together" supports the main axis of this article. According to Bauman, one of the most fundamental problems of modern societies is how differences can live together (Bauman, 2003). The visibility of immigrants in the public space, contributing to the local society without giving up their own cultural practices, prevents the weakening of social ties and creates a "bridge" between differences. The experience of Turkish immigrants living in Italy can also be considered in this context, as these groups, despite having different cultural codes, enable "coexistence with differences" by developing harmonious relations with Italian society.

According to Bauman, the coexistence of differences is inevitable in modern societies, and the question is how to deal with these differences. Bauman emphasizes the dynamic structure of immigrants' experiences, especially with the concept of "liquid modernity" (2000, 2005), which is associated with uncertainties and transience. As Turkish immigrants in Italy began to settle permanently in Italy, which they initially regarded as a "transit country," they began to build more permanent ties with local society and stabilize this fluid process.

There is also a growing literature on the migration experiences of Turkish immigrants in Italy (Çakırer, 2010; Ihlamur-Öner, 2012; Purkis & Güngör, 2015; Purkis, 2019; Beqo, 2018; Beqo, 2019; Beqo & Ambrosini, 2022). Studies on the experiences of Turkish immigrants in Italy provide findings that support this theoretical framework. Çakırer (2010) and Purkis & Güngör (2015) exam-

ined the efforts of Turkish immigrants to both preserve their own culture and integrate into Italian society. Purkis (2019) discusses how immigrants strengthen their social ties while preserving their cultural differences and how their cultural identities are shaped to gain social acceptance. Beqo (2019, 2022) examines the differences in Turkish immigrants' social relationships as an expression of social integration and belonging. These studies show how Turkish immigrants develop their cultural identities and social ties by integrating them into the fabric of both their own and the local society.

As a result, this theoretical framework shows that the processes of migration, cultural differences and coexistence interact in a multidimensional way, especially for Turkish immigrants in Italy. The social relations and cultural interactions that immigrants enter into with Italian society transform cohabitation from a purely economic necessity into a cultural project of coexistence. In this context, it becomes clear that immigrants maintain their own cultural practices while creating a livable common space with the local society, which is also the aim of the study. This study, developed within the framework of migration and cultural differences, will contribute to the understanding of the social adaptation practices of Turkish immigrants in Italy.

A Brief Assessment of the Migration from Turkey to Italy

Italy differs from other European countries in its history of migration. It began to receive a large influx of migrants from the late 1970s (Moralli, Musarò and Parmiggiani, 2023, p.566). This situation continued after the 1980s, and in these years Italy's transition from a country of emigration to a country of immigration became evident in the public sphere (Ambrosini, 2013, p.177; Salomoni 2012). Flows to Italy have also increased due to the lack of an immigration policy (Bettin & Cela, 2014, p.48). Italy sometimes served as a destination country for immigrants and sometimes as a transit country for immigration to northern European countries (Purkis and Güngör, 2015; Çakırer, 2010; Sirkeci, 2006). Immigrants generally work in low-

value and labor-intensive jobs in the labor market that local people are reluctant to do, even if they are unemployed (Mingione, 1999; Quassoli, 1999). These jobs are no longer filled by local people, but by foreign immigrants, especially immigrants from countries outside the European Union. International immigrants are becoming the most important source of labor for the economy (Schierup et al., 2006). Deprived of their means of livelihood, immigrants flock to regions where capital accumulation is faster and capital movement are more frequent in order to sustain their lives (Purkis, 2018). In this context, most immigrants are concentrated in the northern and central regions of Italy (Ambrosini, 2012, p.4). We must say that Italy offers them more blue-collar jobs in these regions (Fullin, 2016).

The migration of Turkish immigrants to Italy can be considered a relatively new wave compared to the waves of migration to other European countries. This wave has been observed since the second half of the 1980s and has increased continuously (Beqo, 2019a, p.75). Italy was used as a bridge for Turkish immigrants to other European countries, especially until the early 2000s. As it was more difficult to get from Turkey to European countries such as France, Germany and England in the 1980s, Turkish immigrants first came to Italy and then moved on from there to other European countries. From the 1980s to the early 1990s, Italy was considered a transit country for immigrants compared to other European countries (Beqo, 2019b, p.532; Beqo and Ambrosini, 2022, p.485). The migration of Turkish immigrants did not originally take place with the intention of settling here in the long term, after arriving in Italy, they tried to leave Italy by various ways (Schuster, 2005, p.768). In fact, this situation changed in the early 2000s, and from that time until today, immigrants no longer use Italy as a bridge, but prefer to live here for many years. If we look at the results of the interviews conducted with Turkish immigrants living in Italy, we can see that since the early 2000s, almost all immigrants from Turkey wanted to come to Italy first. They no longer use Italy as a transit country to another country. In addition, most immigrants believe that this country is a safe country for them.

If we look at the number of Turkish immigrants living in Italy today, we see that this number has reached around 20,000 in the last five years. In 2019, there were 18,780, 10,619 men and 8,161 women. In 2020, there were 19,168, 10,847 men and 8,321 women. In 2021, there were 20,999, 11,863 men and 9,136 women. In 2022, there were 18,930, 10,972 men and 7,958 women. In 2023 there were 20,080, 11,587 men and 8,493 women (I.STAT, 2024).

Table 1. Turkish immigrants living in Italy

Years	Women	Men	Total
2019	8,161	10,619	18,780
2020	8,312	10,847	19,168
2021	9,136	11,863	20,999
2022	7,958	10,972	18,930
2023	8,493	11,587	20,080

It can be said that the number of Turkish immigrants in Italy has changed to some extent over the last five years, both upwards and downwards. However, it is noticeable in the data that the numbers of female and male immigrants are quite close to each other. The vast majority of Turkish immigrants live in the north of Italy. In other words, they are concentrated in the northern regions, the most developed parts of Italy, as is the case with other immigrant groups. Although their numbers are small compared to immigrants from other countries and they are a relatively new immigrant group in Italy, they live in many cities in northern Italy. In these cities, they work in various sectors, such as carpet weaving, construction, market management, teaching, office assistance, customer service, logistics, jewelry, waitressing, translation, bar management, truck driving, cryptocurrency consulting, project management, tourism business, real estate, etc. Nevertheless, it can be said that the best-known sector is kebab sector. Kebab stores, which offer the opportunity to work on their own account and do not require large capital, are at the top of the list of businesses established mainly by Turkish immigrants. These kebab stores, usually family businesses with little capital, can be seen as a catalyst that allows them to integrate into the Italian system through economic life.

In Italy, some of the Turkish immigrants interviewed work in fields such as jewelry, teaching, office assistance, college lecturers, cryptocurrency

consultants, real estate agents or project managers, suggesting that they are increasingly finding a place in sectors that require expertise. Those who have come here in the recent past are mostly middle class. The number of those who are financially well off in Turkey but prefer to live in Italy for various reasons is quite high. In addition to those who come for business reasons, education, family and political reasons are also among the obvious reasons for migrating from Turkey to Italy.

The integration processes of Turkish immigrants in Italy show differences, especially between the groups that immigrated after the 1980s and in the 2000s. Turkish immigrants who came to Italy in the 1980s were generally employed in the industrial areas in the north of the country and worked mostly in low-skilled jobs, especially in factories and the construction sector. The economic integration of immigrants during this period took place mainly in labour-intensive sectors, and their social integration was largely characterised by working life. The immigrants who came to Italy in the 2000s, on the other hand, are more heterogeneously structured and are made up of people with different levels of education and immigrants from different occupational groups. Their integration processes go beyond working life and extend to all areas of life, from education to social and cultural life.

It is clear that gender plays a crucial role in the integration processes of Turkish immigrants in Italy. Immigrant women have different experiences of integration than men, due to both traditional family structures and social norms in Italy. Turkish immigrant women in particular were mostly limited to roles within the family and remained in the background compared to men in social life. The fact that women have to work as domestic workers or in low-paid care and cleaning jobs, combined with the restrictions imposed by gender roles, has made the integration process more difficult. This situation has resulted in migrant women having a lower socio-economic status and encountering more difficulties in the integration process. However, it can be said that the situation of Turkish women's participation in the labour force, especially in the 2000s, has developed more positively compared to the 1980s. Turkish women who immigrated after the 2000s have started to work in more skilled occupations such as teachers, office workers, engineers, translators and project managers. Although the increase in these occupations indicates an improvement in the socio-economic situation of women, it is important to remember that women have fewer economic opportunities compared to male immigrants and face barriers in accessing these opportunities. These gender differences are an important factor influencing the role of immigrants in social life and their coexistence with the native society. The more active participation of women in social life is an element that can facilitate not only their individual integration, but also the integration of the immigrant community as a whole.

The social adaptation processes of immigrant groups in Italy are not limited to economic integration. Cultural adaptation processes are also an important part of this integration process. Immigrants from Turkey have more difficulties than other immigrant groups in terms of linguistic, cultural and religious differences. This situation affects both the social adaptation of immigrants and their coexistence with the local society. Although Albanian and Ukrainian immigrants came to Italy under similar economic conditions, their integration processes developed differently as they were more similar in terms of culture and religion. Albanians and Ukrainians had an easier time adapting to the social structure in Italy as they had closer ties in terms of culture and religion. For Turkish immigrants, on the other hand, the lack of Italian language skills was a major obstacle. The cultural diversity and multi-religious structure of Turkey affected the social dynamics within this immigrant group and made the integration process a little more difficult. Therefore, the cultural obstacles faced by immigrants from Turkey are more complex and multidimensional compared to other immigrant groups.

The migration adventure of Turkish immigrants in Italy is different from the migration adventures in other European countries. First of all, Italy was primarily a transit country for them and not a country of arrival. While many European

countries have used recruitment programs to encourage migration from Turkey since the 1960s, Italy has had no such program. On the contrary, the first migration from Turkey to Italy in the 1990s was characterized by irregular flows of mainly low-skilled Turkish migrants and Kurdish asylum seekers and refugees. Over time, the profile and motivations of these migration flows have changed and today, for example, Italian universities are accepting a growing number of students from Turkey (Carignani & Rosina & Beqo, 2022). It should also be noted that the number of middle and upper class Turkish immigrants here is considerable. Although one of the most important reasons for migrating from one place to another is generally considered to be material deprivation, it can be stated that material deprivation is not the most important factor for their migration adventure in Italy, at least not today. Even though the economic situation in Italy worsened in the following ten years as a result of the 2008 economic crisis (Ambrosini, 2018), it can generally be said that Turkish immigrants who are already middle class and have a good job in Turkey come here for personal, social and political reasons and work here in skilled jobs as they would in Turkey.

Method

This research, started in 2024, is based on data from semi-structured interviews conducted with 50 Turkish immigrants (26 women, 24 men) in central and northern Italian cities (Rome, Milan, Bologna, Verona, Padova, Pisa, Trento, Florence, Brescia, Bergamo, Ferrara, Vicenza, Modena, Trieste, Genoa, Venice, Parma and Turin) until early 2025. These cities, which are among the most economically, socially and culturally developed places in Italy in terms of the presence of formal and informal sectors such as industry, agriculture, services and construction, as well as in areas such as health, education, artistic activities, fashion and design, can be considered places where immigrants can realize their "dreams". Turkish immigrants live in these Italian cities in large numbers. In this article, Turkish immigrants who have been living in Italy for at least one year are included in the research group. In order to better understand the particularities of

their everyday life practices and to determine the meaning of the migration experience, it was deemed appropriate to conduct field research among Turkish immigrants who have lived in Italy for at least one year.

The participants are single, married, married with children, and over 18 years of age. It can be observed that these immigrants, who immigrated to Italy from different cities in Turkey (Istanbul, Izmir, Ankara, Adiyaman, Malatya, Antalya, Hatay, Kahramanmaras, Adana), live in different regions in different cities in Italy. The vast majority of immigrants live in the same settlements, neighborhoods or apartments as the Italians in the city centers. There are no Turkish neighborhoods in Italy as there are in Germany. Most Turkish immigrants do not live in slums or suburbs near train stations. They live in the city centers scattered with Italians. One of the most important factors ensuring this is that the Turkish immigrants who have come here in the recent past are mostly middle class and work in professions that bring good financial returns. Although rents are high in the centers of most central and northern Italian cities, Turkish immigrants live in the centers because they have relatively good jobs there or are financially well off. An effect that reinforces "social exclusion," as Loïc Wacquant puts it, is not noticeable in spatial terms (Wacquant, 2008).

The sample of this study, which attempts to analyze the relationship between the phenomenon of migration and the coexistence of differences in the above-mentioned cities in central and northern Italy, was selected with the snowball sampling. Snowball sampling was chosen as a particularly suitable sampling for reaching a specific target group to be addressed with the research. This sampling allows researchers direct access to the targeted group by expanding the sample group through a few initial participants. However, the potential limitations of snowball sampling should also be considered. Since this sampling usually relies on other people known to the participants, the sampling may be limited to the social networks of the initially selected individuals. This may result in a particular segment being over-represented and the sampling therefore having a limited ability to reflect the general population. However, it would

be misleading to claim that the limited social networks of the snowball sampling always prevent it from reflecting the general population. In this study, people who have lived in Italy for many years and have a certain level of experience and knowledge were initially selected. Thanks to these characteristics, the sampling was increasingly diversified and deepened with the people they suggested. This sampling was particularly effective with hard-to-reach people such as housewives abroad. As a result, the snowball sampling was successful in reaching often hard-to-reach communities and the research was conducted with a greater diversity of participants.

In this context, three groups of migrants can be mentioned at the most basic level. The first group is the first immigrants who arrived after 1980. The first immigrants are those who generally build the memory of migration with their life practices aimed at not causing "problems" to the local society. The second group are the immigrants who came to Italy in the 2000s. This generation, which is in the middle in terms of cultural affiliation, has rather distant relations with local society compared to the first generation. Furthermore, it is a group that tends to settle down to a certain extent over a longer period of time and set up its own business. The third group consists of those born in Italy, referred to as "children of immigrant families," who have no problems speaking the language and mastering Italian cultural codes. A total of 50 people of different ages, at different stages of life and from different socio-economic backgrounds living in different parts of Italy were interviewed. In this way, it is possible to look at the migration process of Turks in Italy, which is complexly related to class, gender, generation and other social differences, with a comprehensive and relational analysis from a theoretical and practical point of view.

Although qualitative studies can be ethically challenging for both participants and researchers, they are an important source of in-depth analysis of sensitive issues in people's lives. Moreover, qualitative studies are of particular importance for uncovering the complex, contextual and multi-layered dimensions of immigrants' migration dynamics (Zapata-Barrero & Yalaz, 2019, p.2). It should be recognized that the empirical findings in this research are based on qualitative rather than quantitative data. An attempt was made to take a more qualitative approach (which of course does not mean that a quantitative approach was completely neglected). Qualitative research and participant observation are effective methods to gather the results in the field. It is assumed that the qualitative research method is suitable to understand what cannot be expressed numerically and to capture the experiences and stories of immigrants. In addition, semi-structured interviews were used to gather information about the immigrants' living conditions, their working lives, their identity affiliations and their relationships with local society and, in particular, their daily living practices.

To increase the reliability of the research, expert opinions were sought on the prepared semi-structured interview questions, and the interview questions were adapted according to the suggestions received. The researcher was in the same environment as the participants during the research process so that accurate and complete answers were possible. Conducting face-to-face interviews of at least one hour with each participant ensured that the research process was traceable and clearly documented. Participants were informed of the research prior to the study and told that their views would be sought on a voluntary basis afterwards. A separate interview was arranged with each participant to obtain detailed responses. In this research, the validity criterion of the research was strengthened by including the participants' statements to a large extent and focusing on their experiences. Before participating in the research, all participants were informed about the research and their consent was obtained. In addition, ethical approval was obtained from the Ethics Committee for Scientific Research and Publication of the University of Uşak prior to the research. The collected data were described, explained and interpreted, and the results were presented.

Findings

The first question asked of Turkish immigrants regarding social affiliation was a question about citizenship. The aim was to find out what effects the

acquisition of Italian citizenship has on social relationships and identity. 5 apart from the Turkish immigrants who have Italian citizenship, the Turkish immigrants were asked the question: Would anything change in your social relationships if you were granted Italian citizenship? Although the answers varied in terms of personal experiences, it is possible to draw a general conclusion.

Table 2. Social Relationships

Question: Would anything change in your social relationships if you were granted Italian citizenship?	
Nothing would change in my social relationships	40
There would be differences in my social relationships	5
Total	45

In general, people who want to acquire Italian citizenship see this situation as a strengthening of legal and economic rights. Italian citizenship offers advantages, in particular the privilege of holding EU citizenship, access to the labor market and freedom to travel. In addition, the right to claim social benefits in Italy offers another important contribution. In terms of social relations, however, Turkish immigrants do not believe that acquiring Italian citizenship brings about significant changes in their social relations.

When the second question was put to the Turkish immigrants in Italy: "To what extent do the differences in your lifestyle (which of course also depend on the economy) contribute to building social and spatial relationships with the local people, or do they create obstacles? They explained that it's good to be multicultural, that Italians see diversity positively and in some cases they even want to get to know you because of it. Turks in Italy argue that the differences in social relations with local people are an enriching experience thanks to mutual interaction and understanding.

In fact, the efforts of Turkish immigrants to survive in Italian society go hand in hand with the desire to preserve and cultivate their own cultural identity. The relationships they establish with Italians do not lead them to isolate themselves completely from their own culture. They try to build a life in Italy while preserving their own differences. However, they do not lead a closed lifestyle. They

try to understand Italian culture and build a connection to it. They try to build a cultural bond with the Italians without losing their own differences. This type of bond helps the immigrants to preserve their own culture and at the same time show that they are changing their lifestyle. Because differences can be used to forge a common bond. 18-year-old Gül, who has been living in Milan as a student since 2022, says the following: "I have to preserve my culture here. I have lived with my differences since the day I arrived. But there are also things that I have integrated into my lifestyle. I eat things here that are not part of breakfast in our country, like coffee and croissants. Of course, there is a limit to what I have absorbed from the Italian lifestyle." The fact that Turkish immigrants continue their lives here with their differences by integrating some aspects of the Italian lifestyle into their own has a positive effect on their social relationships with Italians. This is because, for most Turkish immigrants, Italians appreciate the differences, and the immigrants' efforts to do the same do not seem to interest them much. The similarities between Italians and Turkish immigrants seem to be that they try to understand differences instead of judging them and engaging in cultural interactions. 45-year-old Sinem, who has lived in Milan since 1998 and works in the logistics sector, emphasizes that Italians are interested in differences: "There are Italians who are curious about my language, there are Italians who are curious about our TV series. This leads to an exchange of information. A friendly conversation develops. Some of these friendships can then develop into a strong friendship." 36-year-old Duygu, who has lived in Bologna since 2010 and works as a translator, also emphasizes the importance of the differences for both groups in everyday life: "I think my differences are interesting for them. I don't have to try to be culturally like the Italians or do anything for that matter. For example, I cook Turkish food for them. It's as if they are attracted to the difference." It can be said that one of the main similarities between Turkish immigrants and Italians is that they respect each other's differences.

Another question asked of Turkish immigrants living in Italy was: "Who do you have more to do with in your social life?"

Table 3. Social life

Only Italians	21
Only Turks	5
Turks and Italians	24
Total	50

When evaluating this question, a number of cultural, economic and social factors must be taken into account. In Italian society, social relationships are largely characterised by local communities, family ties and business relationships. Immigrants generally tend to establish closer social relationships initially with people from similar cultural backgrounds. In the case of Turkish immigrants, these relationships are usually limited to other Turkish immigrants and family members. However, as their social and economic life progresses, their interactions with the Italian population increase. Especially in the workplace and at school, immigrants tend to build more relationships with local people. They build deeper social ties with the local people. While the social relationships of Turkish immigrants may initially be limited to ethnic and cultural groups, over time they spread to more diverse social circles thanks to economic opportunities and cultural adaptation processes. Therefore, the differences between the lifestyles of Turkish immigrants and Italians are not an obstacle for them to establish social relationships or partnerships.

When asked the question "Do you see a difference between the Turkish and Italian lifestyles? If so, what kind of difference do you see?" Turks believe that there are no major differences in lifestyle between them and Italians. While the Turkish lifestyle is mainly characterized by traditional family structures and community-oriented values, the Italian lifestyle is based on a more individualistic and free spirit. In Turkey, family ties are strong and social relationships are focused on family, relatives and friends. In Italian society, the family is important, but individual freedom and personal space are more strongly emphasized. In addition, hospitality plays an important role in the Turkish lifestyle and social events are usually held at home or in crowded, family-oriented establishments. According to 35-year-old Elif, who has been living in Pisa since 2008 and is working on her PhD, "Turks are more hospitable. Turks are more considerate

than Italians when it comes to hospitality." In Italy, social life tends to take the form of outdoor socializing, cafés and restaurants. However, food culture is a strong unifying element in both societies, but Turkish cuisine is more ethnically and regionally diverse, while Italian cuisine is more homogeneous, mainly due to regional differences. These differences affect the daily lifestyle, social relations and cultural norms of the two societies. Furthermore, according to 25-year-old Utku who lives in Bologna in 2023 and works in a kebab store, "Italians do their best to make the day as pleasant as possible. Turks, on the other hand, work all the time." Italians love to attend social events and take an active part in social life. They try to strengthen their social ties in an enjoyable way by meeting up at activities such as local festivals, concerts and food events.

The relations between Turkish immigrants in Italy and the local people are close. When asked the question Turkish immigrants living in Italy: "What kind of relationship do you have with the local people in Italy?", the majority of immigrants answer that they have good relations with the local people. In this context, 60-year-old Hasan, for example, who has lived in Verona since 1986 and works in the carpet trade, says: "My children go to the same schools as Italian children. I also see Italians and Turks getting married. I can say that there are good relations between the Turkish and Italian populations," and points to the positive interactions between the two peoples. The influence of Italian culture does not pose a threat to Turkish immigrants. When Turkish immigrants were asked: "Do you see the interaction and differences between Turkish and Italian families as a threat to the traditional Turkish family structure?", almost all immigrants answered "No"

Table 4. Turkish and Italian families

Yes	1
No	49
Total	50

The influence of Italian culture is not perceived by Turkish immigrants as a threat, but as a contribution to increasing their cultural wealth. The different perspectives offered by Italian culture enable individuals to adopt an equal life. The coming

together of different cultures deepens social bonds. Different lifestyles help people to get to know each other and support each other in difficult times. Where there are differences, a common unity can be created that forms a certain unity of solidarity in every situation. The ability to exist in this society with differences, not to make radical changes in lifestyle and to maintain solidary relationships on a common basis are important factors that enable Turkish immigrants to stay in Italy for a long time.

An individual's sense of belonging to a society is closely linked to their lifestyle and social acceptance. If some immigrants find a good job, this can give them a sense of being a legitimate part of the new society in which they live. However, the sense of belonging is not limited to professional status. A person's sense of belonging to a society is also measured by the extent to which they have internalized the culture (Wells 1994: 43), values and lifestyle that comprise the skills, beliefs and behaviors acquired by the people who make up that society. For example, belonging to the Italian culture, mastering the language, participating in local activities and building social relationships all contribute to the individual being seen as a legitimate part of this society. At the same time, people rallying around a common goal or value and supporting each other helps them feel like a legitimate part of that society. It should therefore be emphasized that acceptance as a legitimate part of a society is not only measured by economic status, but that living with differences plays an important role in strengthening social belonging and ensuring that people come together and build a strong bond based on shared values and goals. In this context, Turkish immigrants were asked: "Do you feel that you belong to Italian society? If you don't feel you belong, what is the criterion for being accepted as a legitimate part of Italian society?" In response to this question, they do not mention the economy as the only criterion for being accepted as a legitimate part of society. They state that knowledge of the language and adaptation to Italian culture are important criteria. They believe that cultural and professional training, such as language courses and vocational training, help to convey these. For this reason, they call for the efficiency and diversity of institutional organizations to be strengthened. The

experiences of Turkish immigrants living together with their differences with Italians are important factors that enable them to stay in Italy.

When Turkish immigrants living in Italy were asked another question: "Do you believe that you are socially excluded from the upper, middle or lower classes of the country in which you have settled?", all immigrants answered no. In this context, Turkish immigrants responded to the last question: "Do you see a secure future for yourself here or are you preparing to migrate again?" the majority of Turkish migrants responded that they see a secure future here.

Table 5. A secure future

Yes	48
No	2
Total	50

From the early 1970s to the early 2000s, Italy was considered a transit country for Turkish immigrants to reach other countries, but today it is seen as a place to stay for many years in differences. The life of Turkish immigrants in this place helps to rethink the definition and limits of different ways of life through daily relationships.

Discussions and Conclusion

It is important to see how immigrants from Turkey to Italy organise their daily lives in the face of the difficulties of living in a different cultural environment. This understanding plays an important role in our efforts to get to know each other and create a common living space. The coming together of different cultures, thoughts and experiences strengthens the bonds of living together with differences and reinforces social cohesion.

The life of Turkish immigrants in Italy is a complex experience, both on an individual and social level. This is because the migration process not only leads to a physical change of location, but also to cultural, social and economic changes. A process that involves many variables, such as migration, cannot be static and cannot be explained by a single reason. The act of migration should not be seen as a one-way movement and immigrants should not be seen as individuals acting only according to

economic needs. The social relationships that immigrants establish in their daily lives are important variables for understanding this act. Viewing migration only as a result of international demand for labor or as a rational decision by individuals to maximize individual income is a very limited approach to understanding the migration experience. Immigrants are not beings free of social ties and relationships and acting out of economic motives, but rather relational beings involved in various social interactions in the society in which they live.

The Turkish immigrants try to build a life in Italy with their differences within these interactions. Their differences do not see another difference as an enemy. On the contrary, the differences live in a reinforcing interrelatedness. Thus, Turkish immigrants in Italy find conditions that allow them to develop their own uniqueness. In general, people in Italy do not tend to suppress other identities in order to prove their own identity. They lead their lives in a framework in which differences are respected and living together with other identities does not lead to a feeling of restriction in the individual's life. They enrich the social fabric in Italy by sharing their cultural values. This situation allows immigrants to express themselves and helps the native society to learn about other cultures. The mutual interaction between immigrants and local people breaks down prejudices by building a bridge between the two cultures and strengthens the sense of common life in society.

This study makes an important contribution to the literature on migration and living together with differences. Focusing on the transformations of immigrants not only in spatial but also in cultural, social and economic planes, this research analyzes the experiences of Turkish immigrants living in Italy in a local context and addresses the phenomenon of migration in a multi-layered structure. The study, which reveals that in the relations established by immigrants with the local people, differences are not an obstacle but rather an element that strengthens social harmony and togetherness, shows how common life practices can be developed by preserving differences. The ways in which Turkish immigrants interact with Italian society while preserving their identities in daily life reveal that cultural diversity is not a threat but a source of social enrichment in terms of immigrant studies and in this context, it offers a perspective that goes beyond traditional approaches such as "assimilation." In this respect, the study adds a new dimension to the discussions on migration and social belonging and provides a concrete and current example of how differences are an element that strengthens living together.

In conclusion, this study examined the experiences of Turkish immigrants in Italy in terms of social belonging and social relations. The results show that Turkish immigrants try to adapt by preserving their cultural differences in their relationships with Italian society. It was emphasized that Italian citizenship is generally associated with a strengthening of legal and economic rights, but does not bring about significant changes in social relations. Turkish immigrants have established positive social relations with the native population by respecting the Italian culture and adopting some elements of the lifestyle. Cultural interaction and mutual understanding have led to an enriching experience for both communities. The immigrants associate their sense of coexistence with their differences not only with economic success, but also with learning the language and cultural adaptation. Italy, which was initially seen as a transit country, has developed into a long-term living space with friendly and supportive relations. It has been noted that Turkish immigrants see a secure future here and do not suffer from socio-spatial exclusion. It can be said that the life of Turkish immigrants in Italy is an experience that strengthens cultural diversity and social ties.

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RESEARCH ARTICLE

Comparison of Psychometric Properties of Turkish as a Foreign Language Listening Tests Composed of Independent and Common-Stem Items[*]

Ceren Tunaboylu Demir[1], Havva Gökçe Çavdar Paksoy[2], Duygu Anıl[3]

[1] PhD. Candidate, Hacettepe University, Ankara/Türkiye
ORCID: 0000-0001-8090-8913
E-Mail:
cerentunaboylu@gmail.com

[2] PhD. Candidate, Bolu Abant İzzet Baysal University, Bolu/Türkiye
ORCID: 0000-0003-1813-2725
E-Mail:
gkccavdar@gmail.com

[3] Prof. Dr., Hacettepe University, Ankara/Türkiye
ORCID: 0000-0002-1745-4071
E-Mail:
duygu.anil73@gmail.com

Corresponding Author:
Ceren Tunaboylu Demir

Abstract

This study comparatively examined the psychometric properties of Turkish listening tests composed of independent and common-stem multiple-choice items that measure the same construct in the context of teaching Turkish as a foreign language. Additionally, students' perceptions of these two different item formats were evaluated. The research was designed as a descriptive study using a relational survey model. The study group consisted of 201 international students enrolled at the B1 level in Turkish Language Teaching Centers during the 2024–2025 academic year. The assessment tools were developed on the Concerto platform, and the tests were administered online in a single session across three stages. According to the findings, comparisons of item difficulty indices revealed statistically significant differences and moderate to large effect sizes in some item pairs, indicating that item format may influence student performance. Similarly, item discrimination indices showed significant differences in several item pairs, although both tests overall consisted of highly discriminative items. Analysis of test mean scores showed that the independent item test yielded significantly higher performance at the 0.05 level. The reliability coefficients of both tests were high, with no statistically significant difference between them. Based on students' perceptions, the independent item test was found to be more advantageous in terms of time management and online usability. In contrast, the common-stem item format was perceived as more cognitively demanding. Both item types received similarly positive feedback regarding item clarity and ease of answering listening questions. These results suggest that in teaching Turkish as a foreign language, independent items may contribute to higher student achievement and improved item discrimination in listening assessments.

Keywords: *Turkish as a foreign language, listening skills test, independent item, common-root item, psychometric properties*

Öz

*Bu araştırmada, yabancı dil olarak Türkçe öğretiminde, aynı özelliği ölçen, çoktan seçmeli madde türünde bağımsız ve ortak köklü maddelerden oluşan Türkçe dinleme testlerinin psikometrik özellikleri karşılaştırmalı olarak incelenmiştir. Ayrıca, öğrencilerin bu iki farklı madde yapısına yönelik algıları da değerlendirilmiştir. Araştırma, betimsel araştırma türünde, ilişkisel tarama modelinde tasarlanmıştır. Araştırmanın çalışma grubunu, 2024-2025 eğitim-öğretim yılında Türkçe Öğretim Merkezlerinde B1 düzeyinde öğrenim gören 201 yabancı uyruklu öğrenci oluşturmaktadır. Ölçme araçları, Concerto platformu üzerine inşa edilmiş ve test uygulaması çevrimiçi ortamda, tek oturumda ve üç aşamalı olarak gerçekleştirilmiştir. Araştırma bulgularına göre, madde güçlük indeksleri karşılaştırıldığında, bazı madde çiftlerinde madde formatına bağlı anlamlı farklılıklar ve orta ile büyük düzeyde etki büyüklükleri saptanmış, bu durum madde formatının öğrenci başarısını etkileyebileceğini ortaya koymuştur. Madde ayırt edicilik indeksleri incelendiğinde de benzer şekilde bazı madde çiftlerinde anlamlı farklar görülmüş; her iki testin genel olarak yüksek ayırt ediciliğe sahip maddelerden oluştuğu belirlenmiştir. Test puan ortalamaları incelendiğinde, bağımsız madde testi, öğrenciler tarafından 0,05 hata düzeyinde anlamlı olarak daha yüksek b**a**şarı ile tamamlandığı görülmüştür. Her iki test puanlarının güvenirlik katsayıları yüksek bulunmuş ve aralarında istatistiksel olarak anlamlı bir fark tespit edilmemiştir. Madde yapısına yönelik öğrenci algılarına göre, bağımsız madde testi süre yönetimi ve çevrimiçi uygulama açısından daha avantajlı bulunmuştur. Buna karşılık, ortak köklü madde testi madde formatının zorlayıcılığı daha fazla algılanmıştır. Her iki madde formatı da soru anlaşılırlığı ve dinleme sorularını yanıtlama kolaylığı açısından benzer düzeyde olumlu geri bildirim almıştır. Bu sonuçlar, yabancı dil olarak Türkçe öğretiminde dinleme becerilerini ölçmeye yönelik testlerde bağımsız madde yapısının, öğrencilerin daha yüksek başarı elde etmesine ve madde ayırt ediciliğinin artmasına katkı sağlayabileceğini göstermektedir.*

Anahtar Kelimeler: *Yabancı dil olarak Türkçe, dinleme becerisi testi, bağımsız madde, ortak köklü madde, psikometrik özellikler.*

Introduction

As a social being, humans learn languages by nature to interact with their environment. The realization of communication in language learning depends on the development of listening, speaking, reading, and writing skills. Listening and reading skills are classified as receptive language skills, while speaking and writing skills are categorized as productive language skills (MEB, 2013). Receptive skills enable internalization, whereas productive skills ensure effectiveness in communication. Among the four language skills in both native and foreign language acquisition, listening, which serves as the initial and fundamental step of communication, plays a critical role in the development of other skills in language learning. As one of the cornerstones of the language learning process, listening enables individuals to make sense of messages from their surroundings and to communicate effectively. In the Turkish Ministry of National Education (MoNE)'s Foreign Language Teaching Program, listening is defined as "one of the fundamental ways of communication and learning, involving the ability to accurately comprehend, interpret, and evaluate a given message." Listening is the ability to correctly understand the message that the speaker intends to convey and to respond accordingly (Demirel, 2021). The listener first perceives the spoken text. The perception stage refers to the mental processing of sounds and the act of hearing. The second stage involves the cognitive process of meaning-making. These perception and meaning-making stages do not occur sequentially but simultaneously. Field (2008) described the perception of spoken text as lower-level skills within the framework of listening skills, whereas the meaning-making process is considered an advanced skill. Listening is a complex process that goes beyond mere hearing, involving comprehension and interpretation. In this context, listening serves as a fundamental component in language learning, integrating the simultaneous processes of perception and meaning-making and supporting the development of other language skills.

In the language learning process, there is a need for the balanced development of all four language skills. Monitoring this development and the progress of individuals' skill levels in a reliable manner requires the use of effective and accurate assessment tools. The accurate evaluation of skills is directly related to the quality of the assessment instruments used. In measuring listening skills, it is essential for the stimulus to be conveyed correctly and for the individual to respond accurately to the stimulus. The proper development and use of listening materials are crucial in assessing listening skills. Every stage, from preparing listening texts in accordance with grammatical structures to ensuring high-quality audio recordings, must be carefully planned and presented.

The multiple-choice item format stands out as a widely used assessment method, particularly in foreign language teaching, due to its objectivity and its ability to comprehensively assess language skills. In this context, how multiple-choice items are constructed, especially in content-based areas such as listening, becomes a crucial factor that directly affects the quality of assessment. In the following section, after outlining the fundamental characteristics of the multiple-choice item format, explanations are provided regarding the independent and common-stem item types, which constitute the focus of this study.

Multiple-Choice Items

The multiple-choice item format is widely used to assess various levels of cognitive skills, such as recall, comprehension, and application (Haladyna & Downing, 1989). It is a frequently preferred assessment tool due to its practical applicability and the possibility of objective scoring (Rodriguez, 2005). However, to enhance its validity and reliability, careful item design is essential. This item format consists of four well-structured fundamental components: the stem, options, the correct answer, and distractors. The stem forms the main part of the question and provides information to the student. It should be written in clear and comprehensible language. The stem generally consists of two elements: the situation and the prompt. The situation provides the necessary background information for the skill being assessed and may include a scenario, graph, table, or visual aid. The prompt explicitly defines the expected response from the student.

The options include both the correct answer and the distractors. Each option should be clear and unambiguous. The correct answer represents the only accurate response and should be easily identifiable by high-performing students while minimizing the likelihood of random guessing by low-performing students. Distractors, which are incorrect answer choices, directly influence the validity and reliability of the test. High-quality distractors reduce the probability of guessing and mitigate the impact of random responses (Haladyna, 2004). Additionally, distractors should effectively distinguish between knowledgeable and unknowledgeable students (i.e., high- and low-performing groups) and attract lower-performing individuals in a balanced manner. Distractors that are easily eliminated can compromise item quality and should therefore be carefully constructed.

Multiple-choice items are a widely preferred tool in measurement and evaluation. Objective scoring systems simplify both the administration and scoring processes while specifically minimizing human-induced scoring errors. This item type can be applied at all educational levels and offers advantages such as the ability to assess large groups within a short period. Additionally, the high content validity of multiple-choice items allows for a broad range of knowledge to be assessed. However, there are also some limitations. Multiple-choice items may be insufficient in assessing higher-order cognitive skills such as analytical thinking. Individual differences in reading speed can negatively impact test validity. Moreover, the development of multiple-choice items is a complex process that requires expertise. Another limitation is the influence of guessing, as responses are selected from given options. Considering all these factors, the effectiveness of multiple-choice items as an assessment tool depends on their proper construction and appropriate application.

Multiple-choice items can be classified based on their structural characteristics. In general, they are categorized according to the type of correct answer (items with an absolute correct answer, items requiring the most accurate response, items requiring composite answers, and items that conceal the correct answer), the format of the stem (question-based stems, incomplete sentence stems, and negatively worded stems), and the organization of the items (common-stem items and common-option items) (Haladyna, 2004; Turgut & Baykul, 2012). This study compares independent items and common-stem items.

Independent items

Independent items are multiple-choice questions that are completely separate from one another and must be evaluated within their own context. In the literature, this item format is also referred to as a traditional multiple-choice item without a common stem (Turgut & Baykul, 2012) and as a "stand-alone item" (Haladyna, Downing & Rodriguez, 2002). These items are typically based on a short paragraph, dialogue, or passage, requiring students to respond to a single question based on the given context. In other words, one text corresponds to one question, and one listening passage corresponds to one question. Independent items measure students' ability to comprehend and recall specific, isolated pieces of information. Since each question evaluates an independent unit of knowledge, independent items allow for item-by-item assessment of student performance (Haladyna et al., 2002). This item type is particularly preferred when assessing individual knowledge components and covering a broad range of topics within a test (Haladyna, 2004). Independent items require recalling specific information rather than interpreting a general context. They offer the advantage of focusing on different topics and knowledge domains within each section of a test while making it more difficult for test-takers to guess answers by ensuring that each question has only one correct response (Rodriguez, 2005). These items are commonly used in general knowledge tests, proficiency exams, and various knowledge assessments.

An example of an independent item is presented in Figure 1. Although the listening texts are provided in written form in the given example, in actual test applications, only the audio recordings of the listening texts are available.

Figure 1. Example of an Independent Item

Common-stem items

Common-stem items are a type of multiple-choice question in which multiple items are based on a single context or passage (Turgut & Baykul, 2012). These items consist of a series of questions that follow the same context or passage. They are structured around a text, graph, table, or any piece of information and include multiple questions referencing this context. Common-stem items assess how students access and comprehend information within a given context. Students are expected to answer multiple questions using the same contextual information.

Common-stem items offer advantages such as efficient use of test time and the ability to assess reading comprehension skills in an integrated manner (Wainer & Thissen, 1993). They enable tests to contain more information, allowing for a more comprehensive evaluation (Bridgeman, 1992). This item type is particularly common in reading comprehension assessments, mathematical problem-solving, and situational evaluations. Additionally, common-stem items are effective in assessing students' ability to organize information within a text and derive meaning from the context.

An example of a common-stem item is presented in Figure 2. Although the listening texts are provided in written form in the given example, in actual test applications, only the audio recordings of the listening texts are available. Additionally, the common stem and the related questions for each item are displayed on the same page without requiring page transitions.

Figure 2. Example of a Common-Stem Item

Multiple-choice tests are widely preferred in foreign language education due to their practicality, objectivity, and adaptability to digital platforms. With the increasing prevalence of computer-based and individualized test applications, it has become essential to evaluate assessment tools not only in terms of validity and reliability but also with respect to variables such as time management, cognitive load, and learner perception. The item format used in these tests directly affects the measurement power, usability, and user experience of the assessment. In particular, independent and common-stem item structures represent two distinct approaches in the design of multiple-choice tests, each with its own advantages and limitations. Common-stem items generally involve longer texts, which can increase cognitive load in listening assessments by placing excessive demands on memory, thereby negatively affecting student performance (Tozlu, 2017).

A review of the literature reveals numerous studies comparing the psychometric properties of different item types, their impact on student performance, and their role in the assessment process. Many of these studies focus on how multiple-choice, open-ended, fill-in-the-blank, matching,

and mixed-format items differ in terms of item difficulty, discrimination, test mean scores, response time, and overall reliability (Kan & Kayapınar, 2006; Akyıldız & Karadağ, 2018; Öksüz & Demir, 2019; Öney, 2023; Sayın & Orbay, 2024; Koçdar, Karadağ & Şahin, 2017). Some studies indicate that mixed-format tests, which incorporate more than one item type, yield balanced results in terms of item difficulty and discrimination, thereby offering more comprehensive assessment opportunities for students with varying skill levels (Gültekin, 2011; Eren, 2015; Gürdil Ege & Demir, 2020). Others show that the way in which item formats are perceived by students and the cognitive levels they target can lead to performance differences, particularly in item types requiring higher-order thinking such as text-highlighting (Taşkıran, 2022; Demirkol & Karagöz, 2023). Similarly, international research has demonstrated that test performance can be significantly influenced by item format (Kobayashi, 2002; In'nami & Koizumi, 2009; Buck, 2001; Ghonsooly & Fatemi, 2013). However, most of these studies have been conducted in the context of English language education, and research focusing on learners of Turkish as a foreign language remains limited. Furthermore, other variables such as the use of visual elements (Özsu & Can, 2020) or scoring methods (Özdemir, 2004) have also been found to affect test psychometrics. In addition, recent literature emphasizes that item formats should be evaluated not only in terms of technical validity, but also in terms of user experience and practical applicability (Fulcher, 2010; Wilson, 2005; Boone, 2022). Nonetheless, there is a significant gap in the literature regarding empirical studies that systematically compare item formats from both technical and experiential perspectives, especially in the context of Turkish as a foreign language.

This study aims to fill this gap by comparing independent and common-stem item formats used in listening comprehension tests administered to learners of Turkish as a foreign language, focusing on both psychometric properties (item difficulty, item discrimination, test mean scores, reliability) and learner perceptions. In addition, evaluating students' experiences and perceptions of both item formats will provide a descriptive perspective on how item structure impacts test-takers. In this regard, the study aims to contribute to the development of more qualified assessments in the field of teaching Turkish as a foreign language, while also offering deeper insight into the strengths and limitations of different item formats. The findings are expected to provide practical recommendations for both test developers and practitioners working in Turkish language education.

Research Aim

This study aims to compare the psychometric properties of Turkish listening tests consisting of multiple-choice items in independent and common-stem formats, which are designed to measure the same construct in the context of teaching Turkish as a foreign language. Additionally, it seeks to examine student perceptions regarding these two test types. For this purpose, B1-level listening tests were administered simultaneously, and it was analyzed whether there were statistically significant differences between the tests in terms of item difficulty indices, item discrimination indices, test score means, and test reliability. Furthermore, student perceptions related to independent and common-stem item structures were descriptively examined.

Research Question

Is there a significant difference in test and item statistics between two multiple-choice tests—one composed of independent items and the other of common-stem items—designed to assess the same competencies? How do student perceptions differ in relation to these two types of test formats?

1. What are the descriptive statistics of the independent-item test and the common-stem-item test, both designed to assess the same competencies?
2. Do the independent-item test and the common-stem-item test show significant differences in:
   i. Item difficulty indices
   ii. Item discrimination indices
3. Do the test scores obtained from the independent-item test and the common-stem-

item test show significant differences in:
  i. Total test score means
  ii. Test reliability
4. How do student perceptions differ in terms of independent and common-stem item formats?

Method

Research Design

This study was designed within the framework of a descriptive research approach and employed a correlational survey model. In the correlational survey model, the presence and degree of co-variation between two or more variables are examined (Karasar, 2011). In this study, the psychometric properties of the independent item test and the common stem item test were compared, and the relationships between these tests were analyzed. In addition, a questionnaire was administered to identify students' perceptions regarding independent and common-stem item formats. In this respect, the study also carries a descriptive nature.

Study Group

The study group consists of 201 foreign students enrolled at Turkish Language Teaching Centers at the B1 level during the 2024-2025 academic year. The sample was selected using the convenience sampling method, one of the purposive sampling techniques. This method allows researchers to collect data from individuals or groups that are easily accessible (Yıldırım & Şimşek, 2006; Creswell & Poth, 2018). Participation in the study was voluntary, and students accessed the test online via turkcetest.net/test/b1.

Data Collection Instruments

In this study, two different listening tests developed at the B1 level for teaching Turkish as a foreign language (the Independent Item Test and the Common-Stem Item Test), along with a questionnaire designed to assess students' perceptions of these item formats, were used as data collection instruments. The listening skill tests were developed based on the "Turkish Language Teaching Program for Foreigners" by the Turkish MoNE. This program, which follows the Common European Framework of Reference for Languages, is designed for learners studying Turkish in formal and non-formal educational settings both in Turkey and abroad (MEB, 2020). The test items were developed in line with the action-oriented approach, in which the student is considered a language user as a social actor.

For the purpose of this research, two listening tests containing independent and common-stem items—both measuring the same construct—were designed by the researchers based on five main learning objectives. Independent items consist of individual, self-contained questions following a one text, one question format, while common-stem items consist of one text followed by three questions, forming a sequence of interrelated items within the same context. Both tests included parallel items that served as alternatives to one another.

In terms of cognitive level, the test items were designed based on Bloom's Revised Taxonomy and were limited to the comprehension level. Table 1 presents the structure of the listening tests used in the study according to learning objectives.

According to Table 1, the independent-item test consists of 15 short listening passages, with each passage corresponding to one independent item (a total of 15 items). In contrast, the common-stem-item test consists of 5 long listening passages, each of which contains three items, resulting in a total of 15 items. The independent and common stem items have entirely different text content; however, they exhibit parallelism in question structures and the traits being measured. The item numbers indicate the sequence within the test. The narration speed of the listening passages was adjusted to be suitable for B1-level learners, ensuring clarity and familiarity in accent and pronunciation. The duration of the listening passages in the independent-item test ranges from 20 to 57 seconds, whereas in the common-stem-item test, it ranges from 54 to 153 seconds.

Table 1. Framework of Listening Skills Learning Outcomes at the B1 Level

Learning Outcome	Independet Item Test	Common-Stem Item Test
B1.D.63.Selects the required information from what is listened to or watched.	- Squirrels (M5) - Tarantella Dance (M6) - Mauritania Train (M8) - Borrowed Book (M15)	- Charlie Chaplin (M2) - Unforgettable Moments of the Olympics (M6) - University of Oxford (M9) - The Genius Who Solved the Millennium Problem (M10)
B1.D.20.Identifies the main idea and supporting ideas in what is listened to or watched.	- What Will Happen? (M2) - Our Dear Friends (M4) - Mehmet Kuşman (M10) - The One Who Sleeps Wins (M12)	- Charlie Chaplin (M3) - Unforgettable Moments of the Olympics (M4) - The Genius Who Solved the Millennium Problem (M11) - Jules Verne (M15)
B1.D.30.Recognizes statements that include observations and impressions.	- 42,000-Year-Old Foal (M3) - Flamingo Birds (M11) - Travel Tour (M14)	- Unforgettable Moments of the Olympics (M5) - The Genius Who Solved the Millennium Problem (M12) - Jules Verne (M14)
B1.D.45.Identifies key words in texts.	- Lazuli (M1) - Pomegranate Mother (M7)	- University of Oxford (M7) - Jules Verne (M13)
B1.D.1.Understands texts/conversations related to needs and situations in social life contexts.	- Adana Flavor Festival (M9) - Grand Bazaar (M13)	- Charlie Chaplin (M1) - University of Oxford (M8)
Total	15	15

All test items were designed in the multiple-choice format, with five answer choices per item.

In order to ensure content and face validity of the items, expert opinions were obtained from five subject-matter experts in Turkish language education and four experts in measurement and evaluation. Experts were asked to evaluate each item based on three main criteria: (1) alignment with the intended learning outcome, (2) appropriateness for the cognitive level, and (3) linguistic clarity. The evaluations were carried out using the options "appropriate," "inappropriate," and "needs revision," and were supported with open-ended comments. Additionally, experts were asked to evaluate whether the independent and common-stem item formats measured the same underlying competence. Based on the feedback received, certain items were revised for linguistic simplicity, instructions were clarified, and some items were modified or rewritten to better align with the intended outcomes. Experts indicated that both types of items—independent and common-stem—measured the B1-level listening outcomes with similar cognitive demands and based on the same underlying construct. As a result, the necessary structural consistency between the two item formats was achieved, and the assessment instrument was finalized accordingly.

The final section of the data collection instrument includes a five-item questionnaire designed to evaluate students' perceptions of independent and common-stem item formats. The questionnaire was developed to allow students to compare and reflect on their experiences with the two different test types. It covers five dimensions: time management, clarity of the question format, cognitive challenge of the question format, applicability in an online environment, and ease of answering listening questions. For each item, participants were asked to choose one of the following options: "Independent Item Test," "Common-Stem Item Test," "Both," or "Neither." This questionnaire aims to contribute to a comparative evaluation of the two test formats based on students' perspectives and to provide insight into their perceptions regarding the structure of the tests.

The data collection tool was implemented using the Concerto Platform (concertoplatform.com), an open-source software developed by the Psychometrics Centre at the University of Cambridge. The Concerto Platform, with its user-friendly interface, enables the development and administration of

online tests without requiring coding skills. Students participating in the study accessed the tests voluntarily via the online link provided (turk-cetest.net/test/b1).

Data Collection Process

The test administrations, including the Independent Item Test, the Common-Stem Item Test, and the questionnaire, were completed in a single session across three stages. Participants who did not complete the entire test administration were excluded from the analysis; however, no restrictions were applied to the questionnaire responses. In the Turkish listening comprehension tests, students were allowed to listen to each passage twice. The total test duration varied between 50 to 70 minutes, depending on the participants' individual pace.

Data Analysis

In this study, the Independent-Item Test and the Common-Stem-Item Test were analyzed comparatively based on Classical Test Theory. Within this framework, item and test statistics were examined in detail. For both tests, item means, standard deviations, number of items, skewness, and kurtosis values were calculated. The normality of data distribution was assessed based on descriptive statistics by examining skewness and kurtosis values. Skewness indicates whether the distribution of scores is concentrated in lower or higher score ranges, whereas kurtosis (peakedness) evaluates whether the distribution is more or less clustered around the center compared to a normal distribution (Özçelik, 2013).

Item difficulty refers to the proportion of test-takers who correctly answer an item. Item difficulty indices (pj) were calculated for each item, and a Z-test for the difference between two proportions was conducted to determine whether there was a significant difference between the difficulty indices of the Independent-Item Test and the Common-Stem-Item Test. Effect size was interpreted using Cohen's h. Item difficulty is a fundamental measure used to determine how easy or difficult a test item is. According to Crocker and Algina (1986), items with a difficulty index between 0.00

and 0.20 are classified as "very difficult", meaning they are typically only answered correctly by high-ability individuals. Items with a difficulty index between 0.20 and 0.40 are considered "difficult", indicating that a relatively small number of test-takers answer them correctly. Items with a difficulty index between 0.40 and 0.60 are classified as "moderately difficult" and can differentiate between high- and low-performing individuals. Items with a difficulty index between 0.60 and 0.80 are classified as "easy", meaning most test-takers answer them correctly. Finally, items with a difficulty index between 0.80 and 1.00 are considered "very easy", as nearly all participants answer them correctly.

A range of item difficulties is important for detecting individual differences and accurately measuring targeted abilities. Therefore, achievement tests should be structured to include a wide distribution of difficulty levels to cover all skill levels effectively. This classification is essential in creating a balanced test that includes items of varying difficulty levels in the test development process.

The item discrimination index represents the correlation between item scores and total test scores. In this study, point-biserial correlation values were calculated as the discrimination index for test items. The significance of the differences between correlation coefficients was assessed using a Z-test, and effect size was interpreted using Cohen's h. Item discrimination values are a crucial measure for determining how well an item assesses success on the test. According to Ebel (1972), if the discrimination index falls between -1.00 and -0.20, the item is considered negatively discriminating and should be removed from the test. If the discrimination index is between -0.19 and 0.19, the item does not differentiate between high- and low-performing students and fails to adequately measure the intended skill; therefore, such items should also be excluded from the test. A discrimination index between 0.20 and 0.29 indicates a partially discriminating (valid) item, which requires revision before inclusion in the test. If the discrimination index falls between 0.30 and 0.39, the item is moderately discriminating and may be included in the test with minor modifications. Finally, a discrimination index between 0.40 and 1.00 suggests that

the item is highly discriminating, requiring no modifications, and should be included in the test as it significantly contributes to overall performance. The effect size for differences in item difficulty and item discrimination indices was calculated using Cohen's h, which measures the magnitude of differences between proportions (Cohen, 1988).

According to Table 2, the skewness and kurtosis values of both the Independent-Item Test and the Common-Stem-Item Test fall within the range of -1.5 to +1.5. Based on Tabachnick & Fidell (2013), this suggests that the data follow a normal distribution.

Table 2. Descriptive Statistics of the Independent-Item Test and the Common-Stem-Item Test

	N	Min	Mak.	$\bar{X}$	Std. Dev.	Variance	Skewness	Kurtosis
Independent Item Test	201	1	15	8,53	0,29	17,13	-0,04	-1,43
Common-Stem-Item Test	201	0	15	6,82	3,68	13,57	0,18	-1,21

According to Cohen (1988), a small effect size (h ≈ 0.2) suggests that the difference between two groups is minimal or insignificant. A medium effect size (h ≈ 0.5) indicates a meaningful difference between groups, although not a strong one. Such differences are generally considered important in practical applications. Finally, a large effect size (h ≈ 0.8) represents a substantial and strong difference between groups, implying that the effect is significant and should be taken into account in practical applications. The reliability coefficients for both test applications were calculated using the KR-20 (Kuder-Richardson Formula 20) reliability coefficient. The significance of the differences between reliability coefficients was analyzed using Fisher's Z-transformation and the Z-test. Additionally, the mean scores of the Independent-Item Test and the Common-Stem-Item Test were compared using a paired-samples t-test to assess statistical significance. Student feedback on the usability of the tests was analyzed using descriptive statistics, including frequency and percentage calculations. All statistical analyses were conducted using Microsoft Excel Office and SPSS 20 software.

Findings

This section presents the findings obtained from the data analyses conducted in line with the research questions.

Descriptive Statistics

The descriptive statistics of the Independent-Item Test and the Common-Stem-Item Test, both designed to assess the same competencies, are presented in Table 2.

Comparison of Item Difficulty Indices

The differences in item difficulty indices between the test types and item formats were analyzed using the Z-test, while effect sizes were interpreted using Cohen's h coefficient. The results are presented in Table 3.

Examining Table 3, the item difficulty indices for the Independent-Item Test range between 0.38 and 0.77, suggesting that the test does not contain very easy or very difficult items but consists of items of moderate difficulty. The item difficulty indices for the Common-Stem-Item Test range between 0.38 and 0.67, indicating that the test includes both difficult and moderately difficult items. The mean difficulty index for the Independent-Item Test is 0.57, whereas for the Common-Stem-Item Test, it is 0.45. This suggests that both tests have similar levels of difficulty, with an overall moderate difficulty level.

The Z-test was conducted to examine whether there were significant differences in item difficulty indices between the Independent-Item Test and the Common-Stem-Item Test, and the effect sizes were assessed using Cohen's h coefficient.

The analyses revealed that for the M4-M4, M3-M5, M14-M14, M7-M13, and M9-M1 item pairs, no significant differences were found. However, for the remaining item pairs, significant differences were detected at the 0.01 significance level, indicating that the item difficulty indices varied significantly between the two test formats.

Table 3. Item Difficulty Indices of the Independent-Item Test and the Common-Stem-Item Test

Item No	Independent Item No	Common Stem Item No	$P_{independent}$	$P_{commonstem}$	Z	Cohen's h
1	M5	M2	0,56	0,43	2,61**	0,37
2	M6	M6	0,38	0,56	-3,62**	0,52
3	M8	M9	0,65	0,23	8,48**	1,32
4	M15	M10	0,65	0,36	5,81**	0,86
5	M2	M3	0,52	0,47	1,00**	0,14
6	M4	M4	0,58	0,37	4,22	0,61
7	M10	M11	0,68	0,38	6,03**	0,89
8	M12	M15	0,49	0,50	-0,20**	0,03
9	M3	M5	0,77	0,45	6,58	0,98
10	M11	M12	0,56	0,56	0,00**	0,00
11	M14	M14	0,57	0,12	9,49	1,52
12	M1	M7	0,49	0,53	-0,80**	0,11
13	M7	M13	0,51	0,52	-0,20	0,03
14	M9	M1	0,72	0,74	-0,45	0,06
15	M13	M8	0,42	0,59	-3,41**	0,49

Note: Independent and common stem items are different items targeting the same content. The item numbers indicate the sequence within the test.
*p<0.05; **p<0.01

In terms of effect size, the differences in M8-M9, M15-M10, M10-M11, and M14-M14 pairs were found to be very large, suggesting that these items show substantial differences depending on the test format. Moderate effect sizes were observed for the M5-M2, M6-M6, M4-M4, and M13-M8 item pairs, indicating that their difficulty levels varied significantly based on the test format, though the differences were not exceptionally large. For item pairs with small effect sizes, the differences can be considered negligible in practical terms.

As a result, these findings suggest that the format of multiple-choice items (independent vs. common-stem) may influence students' success rates, indicating that test design choices could impact performance outcomes.

Comparison of Item Discrimination Indices

The differences in item discrimination indices between the test types and item formats were analyzed using the Z-test, while effect sizes were interpreted using Cohen's h coefficient. The results are presented in Table 4.

Examining Table 4, the item discrimination indices for the Independent-Item Test range between 0.38 and 0.67, indicating that the test consists of discriminating and highly discriminating items.

Similarly, the item discrimination indices for the Common-Stem-Item Test range between 0.35 and 0.72, suggesting that this test also contains discriminating and highly discriminating items. However, the M2 and M14 items in the Common-Stem-Item Test were found to have insufficient discrimination indices and were therefore removed from the test. For the same reason, the M5-M2 and M14-M14 item pairs were excluded from the evaluation.

Table 4. Item Discrimination Indices of the Independent-Item Test and the Common-Stem-Item Test

Item No	Independent Item No	Common Stem Item No	$r_{pb-independent}$	$r_{pb-commonstem}$	Z	Cohen's h
1	M5	M2	0,63	0,14	10,10**	1,65
2	M6	M6	0,38	0,42	-0,82	0,12
3	M8	M9	0,62	0,35	5,42**	0,79
4	M15	M10	0,67	0,65	0,42	0,06
5	M2	M3	0,64	0,63	0,21	0,03
6	M4	M4	0,43	0,61	-3,61*	0,52
7	M10	M11	0,49	0,45	0,80	0,11
8	M12	M15	0,57	0,58	-0,20	0,03
9	M3	M5	0,51	0,55	-0,80	0,11
10	M11	M12	0,61	0,71	-2,12	0,30
11	M14	M14	0,58	0,13	9,43*	1,51
12	M1	M7	0,49	0,72	-4,72**	0,68
13	M7	M13	0,64	0,68	-0,85**	0,12
14	M9	M1	0,64	0,52	2,44*	0,35
15	M13	M8	0,56	0,44	2,41*	0,34

Note: Independent and common stem items are different items targeting the same content. The item numbers indicate the sequence within the test.
*p<0.05; **p<0.01

The Z-test was conducted to examine whether there were significant differences in item discrimination indices between the Independent-Item Test and the Common-Stem-Item Test, and the effect sizes were assessed using Cohen's h coefficient. The analysis results indicate that there was a significant difference in favor of the Independent-Item Test for the M8-M9, M7-M13, M9-M1, and M13-M8 item pairs at the 0.01 significance level. Additionally, a significant difference in favor of the Common-Stem-Item Test was found for the M4-M4 and M1-M7 item pairs at the 0.05 significance level.

In terms of effect size, large effect sizes were observed particularly in the M5-M2 and M14-M14 item pairs, where the discrimination indices were low, and removal from the test was deemed appropriate. Moderate effect sizes were found in M8-M9,

M4-M4, and M1-M7 item pairs, which showed significant differences. While some other item pairs exhibited statistically significant differences, their effect sizes were generally small or negligible in practical terms.

The mean item discrimination index for the Independent-Item Test was calculated as 0.56, whereas for the Common-Stem-Item Test, it was 0.51. The fact that the mean discrimination indices for both tests exceed 0.40 suggests that the items are highly discriminating, demonstrating that both tests have a strong capacity to differentiate individual differences among students.

t-Test for the Comparison of Test Means

A paired-samples t-test was conducted to determine whether there was a significant difference between the mean scores of students on the Independent-Item Test and the Common-Stem-Item Test. The results are presented in Table 5.

Table 5. t-Test for the Comparison of Test Means

	N	$\bar{X}$	S	SD	t	p
Independent Item Test	201	8,53	4,14			
Common Stem Item Test	201	6,82	3,68	200	9,950	0,00**

**p < 0.01

According to Table 5, there is a statistically significant difference between the mean scores of the Independent-Item Test and the Common-Stem-Item Test at the 0.01 significance level. The mean score of students in the Independent-Item Test was calculated as 8.53, while the mean score in the Common-Stem-Item Test was 6.82. This finding indicates that students performed significantly better on the Independent-Item Test, suggesting that item format influences students' test performance. Accordingly, students achieved higher success in the Independent-Item Test.

Test Reliability

The reliability levels of the Independent-Item Test and the Common-Stem-Item Test were calculated using the KR-20 reliability coefficient. The reliability coefficients of both tests were compared using Fisher's Z transformation, and the significance of the difference between them was evaluated using the Z-test. The results are presented in Table 6.

Table 6. Test Reliability and Z-Test Results

	N	K	KR-20	Z
Independent Item Test	201	15	0,85	1,58
Common-Stem Item Test	201	15	0,80	

Examining Table 6, the KR-20 reliability coefficient was calculated as 0.85 for the Independent-Item Test and 0.80 for the Common-Stem-Item Test. In achievement tests, a minimum reliability value of 0.70 is expected (Fraenkel & Wallen, 1993; Kline, 2000). According to Cohen, Swerdlik, and Sturman (2013), KR-20 reliability coefficients within the range of 0.80 to 0.89 indicate high reliability. Based on this, both tests can be considered to have high reliability. Furthermore, the Z-test results indicate that there is no statistically significant difference in reliability levels between the two tests at the 0.01 significance level. This finding suggests that the reliability of the test results is not affected by item format, confirming that both tests provide reliable measurements.

Students' Perception of Independent and Common-Stem Item Formats

A questionnaire was administered to evaluate students' perceptions regarding independent and common-stem item formats. A total of 201 students participated in the test application; however, 11 of them chose not to respond to the questionnaire. Therefore, the findings are based on the responses of 190 participants. Descriptive statistics related to the results are presented in Table 7.

Findings from Table 7 indicate that students' perceptions regarding independent and common-stem item formats differ across dimensions such as time management, clarity of the question format, and practicality of administration on an online platform. In terms of time management, 53.7% of the students found the independent item test more practical, while 16.8% indicated that the common-stem item test was more advantageous. Additionally, 20.5% of the students stated that both tests were equally practical, whereas 8.9% believed that

neither test had an advantage in terms of time management. Regarding the clarity of the question format, 27.9% of the students found the independent item test easier to understand, while 16.3% preferred the common-stem item test in this respect. However, nearly half of the participants (47.9%) reported that both tests were equally clear. When asked which test had a more challenging question format, 58.4% of the students reported the common-stem item test as more challenging. The proportion of students who found the independent item test more challenging was 13.7%. Concerning ease of administration on an online platform, 49.5% of the students considered the independent item test easier to administer, while 17.4% favored the common-stem item test in this regard.

Discussion, Conclusion and Recommendations

This study compared the psychometric properties and student perceptions of independent and common-stem item formats used in B1-level Turkish listening tests designed for learners of Turkish as a foreign language. The findings revealed that the independent item test was more advantageous in terms of item difficulty and discrimination, suggesting a more favorable impact on student performance. This result aligns with Haladyna's (2004) assertion that independent items are more effective in assessing discrete pieces of knowledge. It also parallels the findings of Koçdar et al. (2017), who emphasized that item types may significantly influence item difficulty and discrimination indices.

Table 7. Students' Perceptions of Independent and Common-Stem Item Formats

		Independent Item Test		Common Stem Item Test		Both		None	
		f	%	f	%	f	%	f	%
1	Which test was more practical in terms of time management?	102	53,7	32	16,8	39	20,5	17	8,9
2	In which test was it easier to understand the question format?	53	27,9	31	16,3	91	47,9	15	7,9
3	Which test had a more challenging question format?	26	13,7	111	58,4	28	14,7	25	13,2
4	Which test was eaier to administer in an online platform?	94	49,5	33	17,4	42	22,1	21	11,1
5	Which test's question format made it easier for you to answer the listening questions?	46	24,2	30	15,8	96	50,5	18	9,5

Finally, 50.5% of the students stated that both test formats similarly facilitated answering the listening questions, while 24.2% perceived the independent item test and 15.8% the common-stem item test as more advantageous in this respect. Overall, students perceived the independent item test as more advantageous in terms of time management and ease of administration on an online platform, whereas the common-stem item test was considered more challenging in terms of question format.

However, both test formats received similarly positive feedback regarding the clarity of the questions and their role in facilitating responses to listening tasks.

Students perceived the independent-item format as easier, clearer, and more manageable. This is consistent with Tezel's (2020) view that long listening passages may increase cognitive load and hinder comprehension. Similarly, Tozlu (2017) argued that such long texts may measure memory retention rather than actual listening skills, thereby reducing construct validity in common-stem item formats. The findings of this study support these concerns, suggesting that the shorter and more focused structure of independent items reduces cognitive burden.

These results are also in line with studies conducted in other language teaching contexts. Kobayashi (2002) and In'nami & Koizumi (2009) reported significant performance differences based on item format in reading and listening tests. Buck (2001) and Ghonsooly & Fatemi (2013) likewise

emphasized the critical role of item format in listening assessment. Moreover, Fulcher (2010), Wilson (2005), and Boone (2022) highlighted the need to evaluate test formats not only in terms of psychometric features but also with regard to learner experience, time management, and usability.

Within this context, the findings indicate that the independent item format offers greater usability, particularly in computer-based and individualized testing environments. The ability to present each item with a separate audio file enhances focus and allows for more flexible technical implementation.

Although both tests in this study demonstrated high reliability, no statistically significant difference was observed in reliability indices. This suggests that test format may not directly influence reliability; however, it can play a decisive role in determining item difficulty and discrimination (Akyıldız & Karadağ, 2018; Öksüz & Demir, 2019). Additionally, findings based on student perceptions indicated that common-stem items required more effort, were harder to understand, and posed challenges in time management. These findings are consistent with Tezel's (2020) identification of psychological and language-level-related factors—such as lack of concentration, fatigue, and comprehension difficulties—that negatively affect listening performance.

Overall, the results emphasize the importance of selecting appropriate item formats based on the purpose of the test, the test environment, and the characteristics of the target group. Independent items, particularly when accompanied by short and focused audio prompts, appear to be a more suitable alternative for computer-based listening assessments due to their reduced cognitive load and ease of administration. This study contributes to the limited body of research comparing item formats in the context of Turkish as a foreign language and provides context-specific empirical evidence to inform test design.

In an effort to enhance test development and language assessment practices, several recommendations can be made for relevant stakeholders. Test developers are encouraged to place greater emphasis on independent item formats in listening assessments, particularly considering factors such as

passage length and cognitive load. Independent items offer notable technical and pedagogical advantages in computer-based environments, whereas common-stem formats may be more appropriate for measuring integrative comprehension skills that require contextual continuity. For practitioners, employing assessment tools that account for student perceptions may contribute to increased motivation and reduced test anxiety. Therefore, it is advisable to gather post-test feedback from students and integrate this data into future test design processes. For researchers, it is important to conduct similar comparative studies across different language skills, such as reading and speaking, and at varying proficiency levels ranging from A1 to C1. In addition, deeper investigation is needed into how item formats relate to learners' cognitive processes, test-taking strategies, and motivation. Longitudinal research should also be undertaken to examine the long-term impact of item types on learning outcomes.

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The Silent Echoes of War: Parenting and Trauma Transmission in Bosnia and Herzegovina

Lejla Hasandedic-Dapo [1], Hüdayar Cihan [2]

[1] Researcher, Ankara Yıldırım Beyazıt University, Faculty of Human and Social Science, Psychology Department Ankara /Türkiye
ORCID: 0000-0002-5900-5012
E-Mail:
l.hasandedic@gmail.com

[2] Prof. Dr., Ankara Yıldırım Beyazıt University, Faculty of Human and Social Science, Psychology Department Ankara /Türkiye
ORCID: 0000-0002-3734-7601
E-Mail:
hudayarcihan@aybu.edu.tr

Corresponding Author:
Lejla Hasandedic-Dapo

Abstract

This study examines the relationship between war-related trauma experienced by mothers in Bosnian families, their parenting styles, and the intergenerational transmission of trauma. The data were collected from a sample of 146 mother-child pairs, consisting of mothers who were directly exposed to the 1992–1995 Bosnian War and their children born after the war. The findings revealed that maternal trauma was significantly associated with control-oriented parenting practices (r = .17, p < .05), but showed no significant relationship with acceptance levels (r = -.07, p > .05). Multivariate analysis indicated that there were no statistically significant differences in parenting styles among mothers with low, moderate, and high levels of trauma exposure. Mediation analysis further demonstrated that maternal trauma partially influenced secondary trauma symptoms in children through control-oriented parenting behaviors. This partial mediation was supported by a reduction in the direct effect from β = .18 to β = .15. Overall, the results highlight the critical role of parenting behaviors in the intergenerational transmission of trauma. These findings underscore the need for trauma-informed interventions that also address parenting practices in families affected by war, in order to mitigate long-term psychological consequences in post-conflict societies.

Keywords: *war trauma, parenting styles, transgenerational transmission, Bosnia and Herzegovina, mediation analysis*
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Öz

Bu çalışma, Bosna-Hersek'teki ailelerde annelerin savaşla ilişkili yaşadıkları travmaların, benimsedikleri ebeveynlik stilleri üzerindeki etkisini ve bu etkilerin çocuklara aktarılan nesiller arası travma ile olan ilişkisini incelemektedir. Araştırma kapsamında, 1992-1995 yılları arasında gerçekleşen Bosna Savaşı'na doğrudan maruz kalan anneler ile savaş sonrasında dünyaya gelen çocuklarından oluşan toplam 146 anne-çocuk çiftiyle veri toplanmıştır. Elde edilen bulgular, annelerin savaş travmasının özellikle kontrol odaklı ebeveynlik uygulamaları ile anlamlı bir ilişki gösterdiğini (r = .17, p < .05), ancak kabul düzeyi ile istatistiksel olarak anlamlı bir ilişki içinde olmadığını (r = -.07, p > .05) ortaya koymuştur. Uygulanan çok değişkenli analiz sonuçlarına göre, annelerin travmaya düşük, orta veya yüksek düzeyde maruz kalma durumları ile ebeveynlik stilleri arasında anlamlı bir farklılık gözlenmemiştir. Aracılık analizi ise, annelerin travmatik yaşantılarının çocuklardaki ikincil travma semptomlarını, kontrol odaklı ebeveynlik uygulamaları aracılığıyla kısmen etkilediğini ortaya koymuştur; doğrudan etkinin β = .18'den β = .15'e düşmesiyle bu kısmi aracılık etkisi istatistiksel olarak anlamlı bulunmuştur. Çalışmanın genel sonuçları, ebeveynlik davranışlarının nesiller arası travma aktarımında önemli bir rol oynadığını göstermekte ve özellikle savaştan etkilenen toplumlarda, travma sonrası ruh sağlığı desteklerinin ebeveynlik süreçlerini de kapsayacak şekilde planlanmasının gerekliliğini vurgulamaktadır.

Anahtar Kelimeler: *savaş travması, ebeveynlik stilleri, nesiller arası aktarım, Bosna-Hersek, aracılık analizi*

Introduction

In the wake of prolonged conflict and social upheaval in Bosnia and Herzegovina, the lingering impact of historical violence continues to shape both individual lives and community dynamics. While considerable research has examined the immediate effects of war trauma, there remains a critical gap in understanding how such experiences influence family structures and parenting practices across generations. This study seeks to address that gap by exploring the relationship between maternal war-related trauma and the parenting styles perceived by offspring, as well as the mediating role these practices play in transmitting secondary trauma.

War trauma

Trauma is derived from the Greek word for "wound," and it describes a variety of circumstances that are too much for an individual to cope with and have a lasting effect on their bodily and emotional well-being (Merriam-Webster, 2024). The Diagnostic and Statistical Manual of Mental Disorders (DSM-5) defines trauma as an experience of sexual violence, actual or threatened death, or serious injury, followed by symptoms of avoidance, intrusion, negative changes in mood and cognition, and changes in arousal and reactivity (APA, 2021). An extremely upsetting experience that deviates from the typical range of human cognition is presented by the traumatic event (Van Der Kolk et al., 2012).

When large populations see the horrors of war, as was the case in the former Yugoslavia and during the 1992–1995 conflict in Bosnia and Herzegovina (B&H), the impacts of war become more pronounced and intricate, extending beyond the battlefield. Everyone in Bosnia and Herzegovina has endured a significant deal of pain; nobody has been spared the atrocities of war (Nelson, 2003). Over 2 million people were forcibly displaced and 103,000 people were killed during the conflict in Bosnia and Herzegovina, according to data from the United Nations High Commissioner for Refugees (UNHCR, 2012).

Studies conducted on refugees from different conflict areas, such as Bosnia and Herzegovina, have shown that organized violence, such as war, causes widespread trauma (Klaric et al., 2007). Impregnation, incarceration, losing a family member, deportations, and living in exile can all have short- and long-term effects on survivors' mental health (Lončar et al., 2006). Additionally, another study (Comteße et al., 2019) demonstrated that over ten years after the war and displacement, the cumulative impact of war trauma on mental distress remained.

Transgenerational transmission of trauma

The theory of transgenerational trauma transmission was established in response to horrific personal losses and their significant consequences on the Jewish community during the Holocaust and World War II (Bar-On, 1995). This phrase refers to the transmission of traumatic effects from parents to their children who were born subsequent to the traumatic experiences of their parents. Different generations undergo this transmission (Kellerman, 2001).

Research with children whose parents were first responders and evacuees at the World Trade Center (WTC) following the September 11 terrorist attacks revealed significant mental suffering in these children that is related to their parents' exposure to trauma, despite the fact that most studies on trauma transmission have been done on Holocaust survivors (Hoven et al., 2009). Similarly, Felsen (2018) found that Holocaust survivors' parenting styles were characterized by high levels of control and emotional distance, which contributed to higher rates of anxiety and depression among offspring. And Dozio et al. (2020) showed that maternal PTSD following terror attacks led to insecure

The core, war trauma is one of the various forms of trauma and traumatic experiences that exist. At its core, war trauma is an assault on one's feeling of security, unity, and purpose in life. The fabric of the human experience has been severely torn apart. Regardless of whether they are brought on by direct combat, seeing atrocities, or losing loved ones, the psychological impacts of war can linger and impact every aspect of a person's life for a long time (Hunt, 2010).

attachment patterns and emotional distress in infants, suggesting that early caregiving behavior is a key factor in trauma transmission.

Also, Yehuda and Bierer (2009) explored the biological basis of trauma transmission, highlighting how epigenetic changes in cortisol regulation among Holocaust survivors and their offspring suggest a physiological mechanism underlying trauma inheritance. While, Yehuda and Lehrner (2018) further investigated the role of epigenetics in trauma transmission, emphasizing how cultural trauma and societal context contribute to psychological inheritance. Their findings underscore the complex interaction between biology and social environment in shaping trauma responses across generations.

However, it's crucial to comprehend how this transfer occurs. Traumatic events can be transmitted to subsequent generations in two ways, according to Kellerman (2001): "indirect and general" and "direct and specific." According to the theory of direct transmission, children are influenced by survivor parents right away and absorb the thought and behavior patterns of the traumatized parent. On the other hand, indirect transmission occurs when parenting, communication, and family dynamics cause youngsters to feel generally deprived.

A few models of trauma transmission exist as well. According to the relational and psychodynamic models of transmission, the second generation inherits feelings that the first generation was unable to consciously experience. As a result, identification occurs unconsciously and self-object differentiation is not achieved (Kellermann, 2001). Conversely, sociocultural and socialization models of transmission emphasize how parents' childrearing practices shape their children's perceptions. They emphasize direct and conscious learning from parents, which is different from the psychodynamic models (Heller, 1982).

Family systems and communication models of transmission are also important to highlight because all of these occur in the family setting. According to Danieli (1985), Holocaust survivors typically raise their children in close-knit families, therefore it is somewhat expected that they will struggle with attachment, individuation, and separation. Nonetheless, it appears that an integrated perspective on trauma transmission, which considers the multifaceted and intricate nature of trauma and its transmission, may be a preferred model (Kellermann, 2001).

Parenting styles

Parenting styles were defined by Steinberg et al. (1994) as an emotional setting where a parent's actions are manifested. As part of their parenting style, they convey a constellation of attitudes toward their child, which creates this environment. According to Kooraneh and Amirsardari (2015), a parenting style helps parents teach their children and set a good example for them while simultaneously upholding the rules and regulations.

There are many different parenting philosophies because each person is unique. However, three parenting philosophies were put forth by Baumrind (1967): permissive, authoritative, and authoritarian. In the authoritative approach, parental demands are realistic and met at high levels (Kuhar, 2010). Both the child and the parents have the freedom to speak and think for themselves, and there is a high level of warmth and friendly interaction between them. They establish the groundwork for their children's future growth and give them the opportunity to express their thoughts (Mussen, 1990). On the other hand, stringent rules, heartlessness, a lack of emotional support, and a disregard for the child's developmental needs are characteristics of an authoritarian parenting style. According to Rhee et al. (2006), this type is associated with characteristics like high control and limited admission, which can result in underlying problems like violence, low self-esteem, and poor social skills. Laxity in social attitudes, discipline, and customs, as well as a lack of parental control, result in underlying problems like aggressiveness, poor self-control, carelessness, emotional difficulties, school dropout, and a propensity towards drugs and crime (Steinberg, 2008). Finally, children raised by permissive parents are not held to high standards.

Maccoby and Martin (1983) distinguished two essential components of child-rearing—responsiveness (or sensitiveness) and demandingness—

in their examination of Baumrind's (1967) authoritarian, authoritative, and permissive approaches. The ability of parents to foster their child's uniqueness and self-assertion through warmth, understanding and meeting their needs, and logical communication is a prerequisite for responsiveness. On the other hand, demandingness refers to how parents use direct confrontation, behavior management, maturity demands (behavioral control), and observation or supervision of their everyday activities to force their children to integrate into society.

Trauma and parenting

There is evidence to suggest that mothers' traumatic experiences influence their parenting. More specifically, Henry and colleagues (2004) found that parental controls were tightened, and parental supervision increased following the terrorist attacks of September 11. Parental attitudes and behaviors changed soon after the September 11 terrorist attacks compared to their pre-trauma state, according to another study (Updegraff et al., 2008). It was found that the parents valued caring for their children, protecting them from harm, loving and bonding with them, and being more aware of their needs. Further supporting the influence, Fischer et al. (2010) found that salient cues associated with terrorism threats had a notable impact on authoritarian parenting approaches.

Additionally, there is proof that attachment type is impacted by parental trauma. Therefore, children of Holocaust survivors said that their early years were characterized by difficulties with individuation and familial separation, according to research on survivors and their parent-child connections (Bar-On et al., 1998). In addition to being less able to initiate distinct activities, the parents of these children were too preoccupied with grieving and reliving previous separations to adequately attend to their children's needs for individuation and separation. In addition, members of the second generation were trying to please their parents and protect them from the struggles they were going through (Greenblatt-Kimron et al., 2021).

It is more difficult for parents who are preoccupied with the past to see their child's needs and feelings objectively and respond to them correctly. As a result of trying to highlight the necessity of their presence while simultaneously pushing for independence in an effort to call attention to their situation and feelings, the child subsequently experiences ambiguous attachment (Liotti, 2004). Another study (Sagi-Schwartz et al., 2003) found that Holocaust survivors exhibited less secure connection representations than the control group, which supported this finding.

Negative effect of war are still present among people in Bosnia and Herzegovina and there is an existing gap in research that tries to understand relation between transgenerational transmission of trauma and influence of parenting styles. Therefore, the aim of this study is to investigate the relationship between maternal war-related trauma experiences and the parenting styles perceived by offspring, and how these parenting styles may mediate the transmission of secondary trauma to the offspring.

According to the study aim following hypotheses were formulated:

Hypothesis 1: Maternal war-related trauma experience is significantly correlated with the perceived acceptance and strict control practices of parenting styles.

Hypothesis 2: Offspring perceived parental styles (acceptance and strictness) differ according to the maternal levels of war-related trauma experiences (low, moderate, high).

Hypothesis 3: Parenting styles (acceptance and strictness) mediate the relationship between maternal war-related trauma experience and offspring symptomatology.

Methods

This study employed a cross-sectional correlational design to investigate the relationships between maternal war-related trauma, parenting styles and offspring secondary trauma. A cross-sectional approach was chosen because it allows for the examination of the strength and direction of these associations at a single point in time, which is suitable for exploring trauma transmission patterns and parenting outcomes.

Sample

The sample was selected using a snowball sampling technique due to the sensitive nature of the research and the difficulty in accessing war-affected individuals. Snowball sampling is a non-probability method of sample selection commonly used to locate rare or difficult-to-find populations (Johnson, 2014).

Table 1. Mothers demographic information descriptive data

Variables	N	%
Age (M=47.2; SD=9.5)		
Place of living		
Urban area	112	77%
Rural area	34	23%
Marital status		
Married	89	61%
Divorced	25	17%
Widow	32	22%
Number of children (M=1.94)		
Raising children with husband		
Yes	97	66%
No	49	34%
Education		
Elementary school	16	11%
Secondary school	69	47%
Bachelor degree	36	25%
Master degree	17	12%
PhD	8	5%
Employment status		
Part time employed	33	23%
Full time employed	62	42%
Unemployed	39	27%
Retired	12	8%
Income level		
Low	36	25%
Middle	89	61%
High	21	14%
Age at the beginning of war (M=20.5; SD=9.5)		
Refugee internally displaced person status during the war		
Yes	58	40%
No	88	60%
Injured during the war		
Yes	36	25%
No	110	75%
Lost close family member or friend during the war		
Yes	38	26%
No	108	74%
Psychiatric diagnosis		
Yes	21	14%
No	125	86%

The sample size for the study was calculated using Cohen's d (0.03) to achieve a statistical power of 90% with a 5% Type I error rate. Based on this calculation, a sample size of at least 287 participants was required, allowing for a ±5% deviation from the target values (calculated using G*Power 3.1.9.7). Therefore, the final sample consisted of 150 pairs of mothers and their children (a total of 300 participants).

Table 2. Children demographic information descriptive data

Variables	N	%
Age (M=19.1; SD=4.9)		
Gender		
Female	93	64%
Male	53	36%
Place of living		
Urban area	121	83%
Rural area	25	17%
Marital status		
Single	98	67%
Living with the partner	16	11%
Married	25	17%
Divorced	7	5%
Widow	0	0%
Have children		
Yes	21	14%
No	125	86%
Education		
Elementary school	24	17%
Secondary school	79	54%
Bachelor degree	34	23%
Master degree	9	6%
PhD	0	0%
Employment status		
Part time employed	17	12%
Full time employed	26	18%
Unemployed	103	70%
Retired	0	0%
Income level		
Low	34	23%
Middle	95	65%
High	17	12%
Psychiatric diagnosis		
Yes	11	8%
No	135	92%

Pairs of mothers and one of their children from Bosnia and Herzegovina were the research participants. Mothers who were living in Bosnia and Herzegovina during the war (1992–1995) and who were still residing there at the time of data collection were eligible to participate in the study. The existence of any illness that could impair memory and brain function, such as dementia, was an exclusion criterion. Alternatively, their children had to be born after the war, be at least 16 years old at the time of data collection, and reside in Bosnia and

Herzegovina in order to be eligible. The 16-year age criterion was chosen because cognitive maturity and emotional awareness are generally well-developed by mid-adolescence (Steinberg, 2005). At this age, participants are more capable of reflecting on and reporting their perceived parenting experiences and psychological states with sufficient accuracy and insight.

However, after analysing collected data, 4 pairs withdraw from the study because questionnaire were uncompleted with missing data and at the end there were 146 pairs or 292 participants (see Table 1 and Table 2).

Instruments

A separate set of questionnaires was created for mothers and their children. Mother questionnaire set include demographic information form, Harvard trauma questionnaire (HTQ), and The Brief Symptom Inventory (BSI).

Demographic Information Form for mothers consists of 13 questions that ask mothers to share information about their age, place of living, marital status, number of children, did they raised children with husband, education level, employment status, level of income, how old they were during the war, were they refugees, were they injured during the war and did their family member or friend died during the war.

The Harvard Trauma Questionnaire (HTQ) is a self-report scale, and it consists of four sections: trauma events, personal description of one's most traumatic experience, head injury, and trauma symptoms. This instrument is translated and adapted for the B&H population by the Harvard Program in Refugee Trauma (Mollica et al., 2004). The HTQ conducted on the Bosnian sample, on general population, showed strong reliability (α = 0.89) (Oruc et al., 2008). The Cronbach's alpha in the current sample was 0.85, indicating good internal consistency.

In addition to reliability, the HTQ has shown strong validity across different populations. Construct validity has been confirmed through factor analysis, which consistently identifies symptom clusters aligning with the diagnostic criteria for post-traumatic stress disorder (PTSD) outlined in the DSM-IV and DSM-5 (Mollica et al., 1992). The scale demonstrates high sensitivity and specificity for PTSD diagnosis, with studies showing sensitivity values above 0.85 and specificity above 0.80 when compared to clinical interviews (Mollica et al., 1992).

The HTQ has also demonstrated convergent validity with other trauma-related measures, including the Posttraumatic Diagnostic Scale (PDS) and the Impact of Event Scale (IES), with correlation coefficients ranging between 0.70 and 0.80 (Mollica et al., 2004). The Bosnian version of the HTQ maintains the original factor structure and internal consistency observed in other populations, confirming its cultural relevance and measurement accuracy.

The Brief Symptom Inventory (BSI) consists of 53 items, which cover nine dimensions of symptoms: somatization, obsession-compulsion, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism. (Derogatis, 1993). Participants rank items on 5-point Likert-type scale from 0 (not at all) to 4 (extremely).

The BSI was used in this study to assess both maternal and offspring psychological distress. Mothers completed the BSI to measure the psychological impact of their war-related trauma, while offspring completed the same inventory to assess their symptomatology related to secondary trauma.

BSI Serbian version was used in this study, and it also has good internal consistency reliability ranging from α=0.64 psychoticism to α=0.86 on somatization (Injac Stevović et al., 2019).

In the current study, Cronbach's alpha coefficients for the subscales were as follows: somatization α = 0.69; obsession-compulsion α = 0.75; interpersonal sensitivity α = 0.73; depression α = 0.84, anxiety α = 0.78, hostility α = 0.77, phobic anxiety α = 0.72, paranoid ideation α = 0.74; psychoticism α = 0.69, with an overall internal consistency coefficient of 0.91. These results indicate that the BSI demonstrated strong internal consistency and reliable measurement across all symptom dimensions in the current sample.

On the other side child questionnaires set include demographic information form, The Brief Symptom Inventory (BSI), and Steinberg Parenting Scale.

Demographic Information Form for child consists of 10 questions that ask children to share information about their age, gender, place of living, marital status, do they have children, number of children, education level, employment status and level of income.

Steinberg Parenting Styles Scale is a 26-item scale in which questions are divided into three clusters that identify the primary facets of parenting: parental strictness-supervision (8 items), psychological autonomy-granting (9 items), and acceptance-involvement (9 items). (Lamborn et al., 1991).

The Bosnian version of the scale also shows fair internal consistency reliability for acceptance-involvement α=0.75, psychological autonomy-granting α=0.74, and behavioral strictness-supervision α=0.72 (Hasanagić & Leto, 2020). However, in the current study Cronbach's alpha coefficients were for acceptance-involvement α=0.76, psychological autonomy-granting α=0.71, and behavioral strictness-supervision α=0.74.

The scale has shown strong construct validity in previous studies. Confirmatory factor analysis (CFA) has consistently supported the three-factor structure of the scale across different cultural contexts (Steinberg et al., 1994; Lamborn et al., 1991). Factor loadings for the three parenting dimensions have typically ranged between 0.60 and 0.80, indicating good structural integrity of the scale.

The scale also demonstrates good convergent validity. Studies have shown significant correlations between high parental involvement and positive psychological outcomes, such as higher academic performance, self-esteem, and emotional regulation in adolescents (González-Cámara et al., 2019; McCurdy et al., 2020; Steinberg et al., 1994;). High parental control (strictness-supervision) has been linked to lower rates of risky behavior and delinquency, while psychological autonomy-granting is associated with higher levels of independent decision-making and lower levels of psychological distress (Gray & Steinberg, 1999; Soenens et al., 2007).

The Bosnian version maintains the original factor structure and internal consistency observed in other cultural adaptations. Cross-cultural studies have confirmed that the scale captures culturally specific parenting patterns while preserving its core structure and reliability (Hasanagić & Leto, 2020).

Procedures

This study was reviewed and approved by the Association of Psychologist in Federation of Bosnia and Herzegovina Ethic Committee (ID 1-3/2022). All procedures followed ethical guidelines and informed consent was obtained from all participants, ensuring confidentiality and the right to withdraw at any time.

The mother and child were asked to form a pair, and the mother was informed that she could only create a pair with one of her children. All questionnaires were administered in one of three official local languages in Bosnia and Herzegovina (Bosnian, Croatian, or Serbian). It was requested that mothers and their children fill out questionnaires separately. Participants completed the questionnaires independently, in a quiet, comfortable environment.

Before conducting the study, the Harvard Trauma Questionnaire (HTQ), Brief Symptom Inventory (BSI), and Steinberg Parenting Styles Scale had already been translated and validated for use in the Balkan context in previous research (e.g., Mollica et al., 2004; Injac Stevović et al., 2019; Hasanagić & Leto, 2020). To further ensure the appropriateness of these instruments for the present study, a group of experts in clinical psychology and trauma research reviewed the scales for cultural and contextual relevance. A preliminary pilot study was conducted with a sample of 20 mother-child pairs to confirm the clarity and relevance of the items in the current population. The final versions demonstrated high internal consistency and construct validity in the study sample.

Recruitment began by contacting local associations and non-governmental organizations

(NGOs) that provide support and services to individuals who experienced war trauma in Bosnia and Herzegovina. These organizations helped to identify and introduce potential participants, particularly mothers who survived the war and their offspring. In parallel, the researcher reached out to university students whose families had been affected by the war. University of Sarajevo staff and student organizations facilitated this process by distributing information about the study and encouraging eligible students to participate. Once an initial pool of participants was established, the researcher employed snowball sampling by asking participating mothers and students to recommend other individuals who met the study's inclusion criteria. This method allowed the sample size to grow organically and enabled the researcher to reach individuals who might have been hesitant to participate without a personal connection or recommendation.

Considering the potentially distressing nature of the survey content, special care was taken to minimize psychological discomfort. Participants were explicitly informed that if they experienced any emotional distress or discomfort during or after completing the survey, they would be offered access to free psychological support. The researchers established a referral pathway to qualified mental health professionals who were available to provide counseling and emotional support if needed. Moreover, participants were encouraged to contact the research if they had any concerns or needed further clarification about the study after participation. By implementing these measures, the study maintained high ethical standards while safeguarding the mental health of participants.

Data analysis

IBM SPSS Statistics version 26 was used for statistical analysis. Before conducting main analysis, data cleaning procedures (Tabachnick & Fidell, 2007) were followed in terms of data accuracy, missingness, univariate and multivariate outliers, normality, linearity, homoscedasticity and multicollinearity and singularity. At the end of these procedures, 8 (4 pairs) cases with 5 % and more missing values were deleted.

Firstly, descriptives for demographic variables were examined. Then, reliability analyses were conducted for all scales. Following this, the correlations of all variables were inspected. Before the main regression analyses, a multivariate analysis of variance (MANOVA), for levels of mother's war-trauma exposure on two perceived parenting styles was conducted. After that, the regression analyses were conducted and mediations were tested.

For all mediation analyses, Baron and Kenny's (1986) four conditions were considered. First of these four conditions requires the predictor variable to be related with the dependent variable. As a second condition, the predictor variable needs to be related to the mediator. Third, when the effect of mediator is controlled, the effect of the predictor variable on the dependent variable must decrease. Finally, as the fourth condition, after controlling the effect of the mediator, if the effect of the predictor is reduced to a non-significant level, then this proves a full mediation; whereas when its effect declines but still remains significant, this might indicate a partial mediation.

Findings

As a first step the correlations of the related variables were examined (see Table 3). Maternal war related trauma experience was significantly related with only strict control practices of parenting styles (r= .17, p< .05). Also, there was negative significant correlation between acceptance and control parenting styles (r= -.39, p<.01).

Table 3. Correlation between Harvard Trauma Questionnaire trauma events and parenting styles (acceptance & control)

Variables	1	2	3
1.Maternal war-related trauma experience		-.07	.17*
2. Acceptance			.39**
3. Control			

*** p < .01, * p < .05*

So, as a second step in order to test whether this correlation supports the idea that maternal trauma have some difference on the perception of mother's parenting styles, a MANOVA was conducted. For this purposes, mother's scores for war related

trauma experience were divided into three categories called "mother's low-level war-trauma experience" (42.5 %, N=62), "mother's moderate level war-trauma experience" (30.1%, N=44) and "mother's high-level war-trauma experience" (27.4%, N=40).

To test how two different parenting styles (acceptance and control) differ according to three levels of maternal war-trauma experience (high, moderate, low), a MANOVA was conducted.

Results showed a non-significant difference of maternal war-trauma experience levels on parenting styles (Multivariate F (4, 290) = 1.07, n.s.) (Table 4).

Table 4. MANOVA for maternal war-related trauma experience differences on parenting styles (acceptance & control)

Variables	Multivariate F	df	Wilks' Λ	Multivariate η^2	Univariate F	η^2	p
Maternal war-related trauma experience	1.07	4, 290	.95	.01			.36
Acceptance		2, 146			.91	.01	.41
Control		2, 146			1.63	.02	.20

*** p < .001, ** p < .01, * p < .05*

For mediation analyses, Baron and Kenny's (1986) four conditions were considered as explained in the method section.

Also, to formally test the significance of the mediation effect, the bootstrapping method recommended by Hayes (2009) was applied with 5,000 resamples. This method estimates the indirect effect and generates a 95% confidence interval (CI). If the CI does not include zero, the mediation effect is considered statistically significant. In addition to bootstrapping, a Sobel test was conducted to confirm the mediation effect. The Sobel test evaluates

the significance of the indirect effect based on the product of the paths from the independent variable to the mediator and from the mediator to the outcome variable. Consistent results from both the bootstrapping method and the Sobel test provide strong support for the mediation model.

Regarding these rules for the mediation analyses, before testing the mediation effects of the two parenting styles (acceptance and control), first of all, the relationships of the maternal war-related trauma experience with offspring symptomatology and parenting styles were considered. Since only the control dimension of parenting styles was associated with maternal war-related trauma experience; therefore, the mediation analysis was conducted for only this parenting style.

To be able to test Hypotheses 3 for this possible mediation effect, maternal war-related trauma experience was put into regression analysis as the predictor variable when offspring symptomatology was taken as the dependent variable.

The results confirmed a partial mediation effect of control parenting style in the relationship between maternal war-related trauma experience and offspring symptomatology. In Step 1, maternal trauma significantly predicted offspring symptomatology (β=.18, t= 2.47, p<.01), indicating that higher maternal trauma exposure was associated with higher levels of offspring trauma-related symptoms.

Table 5. Regression analysis of offspring symptomatology for testing the mediation effect of control parenting style

Steps	Variables in set	F Changes	df	t	β	Partial Correlation (pr)	Model R²	95% CI (Bootstrap)
1	Maternal war-related trauma experience	5.16**	1, 146	2.49**	.18	.18	.04	[.04, .22]
2	Parenting styles Control	5.23**	1, 146	2.47**	.18	.18	.07	[.05, .23]
Final step	Maternal war-related trauma experience			2.12*	.15	.15		[.03, .20]
	Parenting styles Control			2.49**	.18	.18		[.06, .24]

** p < .01, * p < .05*

In Step 2, when control parenting style was added as a mediator, the model remained significant (F(1, 146)=5.23, p<.01) with a slightly reduced direct effect of maternal trauma on offspring symptomatology (β=.15, t= 2.12, p<.05). This reduction in the strength of the direct path suggests that control parenting style partially mediated the relationship between maternal trauma and offspring trauma symptoms.

The bootstrapping analysis provided further support for the mediation effect. The 95% confidence intervals (CIs) for the indirect effects did not include zero ([.04, .22] in Step 1 and [.03, .20] in the final model), confirming that the mediation effect was statistically significant. Additionally, the Sobel test (Figure 1) yielded consistent results (p=.02 for Step 1 and p=.03 for the final model), reinforcing the robustness of the mediation effect. The partial mediation effect suggests that while maternal trauma exposure directly influences offspring symptomatology, the effect is also transmitted through increased control parenting practices.
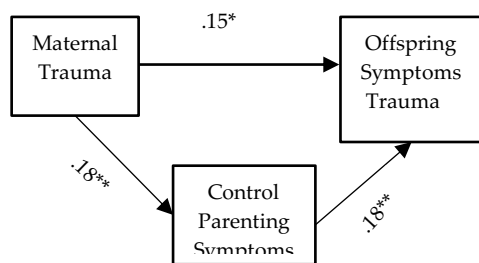

Figure 1. Path Analytic Model with Sobel Test Results

Discussion

The aim of the present study investigated the relationships between maternal war-related trauma experiences, parenting styles (acceptance and control), and offspring secondary trauma.

Maternal trauma and parenting styles

Although the maternal war-related trauma experiences were expected to be related to both of the perceived parenting styles (acceptance and control), this correlation was only significant for control parenting style practices. As the mothers were exposed to the war-related traumatic experiences during the war in Bosnia and Herzegovina, when they became mothers, they seemed to use more discipline and control parenting style on their children. This is expected regarding the information that can be found in the literature since it is evident that mothers increased their monitoring practices

and tended to tighten parental rules following a traumatic experience (Henry et al., 2004). Also, these findings align with previous studies suggesting that trauma exposure may lead parents to adopt stricter or more controlling parenting behaviors, possibly as a maladaptive coping mechanism to maintain a sense of order or protect their children from perceived threats (Van Ee et al., 2015).

Research further supports the link between trauma exposure and increased parental control. Afzal et al. (2022) conducted a systematic review that found parental overprotection and intrusive control were associated with higher levels of post-traumatic stress symptoms in children. Their findings highlight that excessive parental monitoring may inhibit the development of independent coping mechanisms, reinforcing trauma-related stress in offspring. Similarly, Kerbage et al. (2022) observed that trauma-exposed parents frequently resort to increased supervision and restriction of autonomy as coping strategies. While these behaviors may offer short-term protection, they often lead to long-term psychological distress in children. Also, Littleton et al. (2007) conducted a meta-analysis showing that overprotection and control were particularly common following community-wide traumatic events, such as natural disasters and mass violence. They noted that these parenting behaviors reflect an attempt to prevent further harm but can increase anxiety and hypervigilance in children. In addition, Williamson et al. (2016) reported that parental control following trauma exposure is often driven by the parents' own unresolved trauma responses. Their study indicated that parents' distress and hypervigilance are frequently transferred to their children, reinforcing a cycle of trauma transmission. Powell et al. (2021) also noted that trauma-exposed parents are more likely to engage in emotionally restrictive and controlling behaviors, limiting a child's ability to independently process stress and develop adaptive coping mechanisms. This pattern aligns with the theory of intergenerational trauma transmission, where parental attempts to shield children from harm may inadvertently heighten psychological distress and dependency in offspring.

On the other side, the absence of a significant relationship between maternal trauma and acceptance could indicate that maternal trauma impacts specific dimensions of parenting styles rather than universally affecting all parenting behaviors. This selective influence might stem from the complex interplay of emotional and behavioral responses triggered by trauma. For example, while trauma may heighten vigilance and control as protective mechanisms, it may not necessarily diminish a parent's capacity for warmth and acceptance, which are shaped by additional factors such as personality, social support, and resilience (Leen-Feldner et al., 2013).

This is consistent with research showing that trauma-related hypervigilance and emotional dysregulation often co-exist with the capacity for emotional warmth and responsiveness, depending on the mother's level of psychological resilience and social support (Ferguson, 2013; Johnson et al., 2018).

Furthermore, attachment theory provides a framework for understanding these findings. Mothers with unresolved trauma may struggle with emotional availability, leading to inconsistencies in parenting behaviors. Bowlby (1997) suggested that secure attachment depends on a caregiver's capacity to respond sensitively and consistently to a child's emotional needs. Mothers preoccupied with trauma may have difficulty recognizing and responding to their children's emotional cues, leading to heightened control but not necessarily reduced warmth (Bar-On et al., 1998).

Parenting styles across trauma levels

To examine whether parenting styles differ according to levels of maternal trauma, the second hypothesis tested the effects of low, moderate, and high trauma experiences on perceived parenting styles. Contrary to expectations, the MANOVA results indicated no significant differences in parenting styles across the three trauma levels. Although the literature gives some support for the relation between maternal war-related traumatic experience and their parenting styles (Fischer et al., 2010). The levels of maternal war-related trauma experi-

ences (low, moderate, and high) did not significantly differ in the parenting styles (acceptance and control). This finding suggests that the degree of trauma exposure may not play a decisive role in shaping overall perceptions of parenting styles.

One possible explanation for this non-significant finding is the variability in how trauma is processed and expressed. Mothers with high trauma exposure may exhibit both heightened control behaviors and compensatory warmth, resulting in no net difference in perceived parenting styles across trauma levels. This mixed pattern of parenting behavior is supported by research showing that trauma-exposed mothers often adopt protective control strategies while maintaining emotional warmth to foster security and emotional connection with their children (Scheeringa & Zeanah, 2001; Van Ee et al., 2012).

Additionally, cultural norms and expectations surrounding parenting could mediate the impact of trauma, potentially dampening its influence on parenting behaviors in specific contexts (Masten & Narayan, 2011). In Bosnia and Herzegovina, collectivist norms and strong family ties may buffer the impact of trauma on parenting behaviors. Research has shown that in collectivist cultures, parental control is often interpreted as a form of care and protection rather than authoritarianism (Masten, 2013). This may explain why maternal control did not vary significantly across trauma levels, as protective parenting behaviors are culturally reinforced.

Moreover, research on trauma transmission has shown that the nature of the traumatic event (e.g., war-related violence versus interpersonal trauma) and the availability of social and institutional support may shape parental responses (Danieli, 1998). Therefore, the non-significant difference in parenting styles across trauma levels highlights the importance of examining contextual and cultural factors in trauma research.

While this finding challenges the assumption that greater trauma exposure leads to more pronounced shifts in parenting styles, it underscores the importance of considering individual differences in trauma responses. Factors such as the timing of trauma, availability of support systems, and personal coping mechanisms could moderate the

relationship between trauma severity and parenting behaviors.

Mediation of parenting style in transgenerational trauma

When it comes to analyses of the mediator role of parenting styles on offspring secondary trauma understand through offspring symptomatology, this was partially confirmed by conducted analyses.

The maternal war-related trauma experience predicted offspring secondary trauma through the partial mediator role of control parenting style of mothers. So, higher levels of maternal war-related traumatic experiences led to higher levels of control parenting style practices that, in turn, were associated with a higher level of offspring secondary trauma. It seems understandable that higher exposure to adverse war-related traumatic events may make mothers more protective when it comes to their children in order to protect them from experiencing such kinds of negativities in their lives (Henry et al., 2004). However, it did not count the contra-productive effect of this parenting style, which leads to a higher level of offspring symptomatology, which on one side confirms transgenerational transmission of trauma but also highlights the negative effects of the control parenting style.

This result aligns with the theory of transgenerational transmission of trauma proposed by Kellerman (2001), which suggests that trauma can be transmitted across generations through both direct mechanisms (e.g., parental modeling and communication) and indirect mechanisms (e.g., parenting practices and emotional climate). Increased parental control in response to trauma may reflect an unconscious attempt to shield children from future harm, but this protective behavior may paradoxically increase psychological distress in children. Also, Van Ee et al. (2015) found that maternal PTSD symptoms were associated with increased overprotection and intrusive parenting, which in turn were linked to higher levels of anxiety and depression in offspring. Similarly, studies on Holocaust survivors and their offspring have shown that trauma-related parental control and hypervigilance are linked to increased psychological distress in children (Yehuda & Lehrner et al., 2018).

So, this partial mediation highlights the role of control-oriented parenting practices in transmitting trauma-related stress to the next generation. Strict control behaviors, often characterized by heightened demands for compliance and reduced autonomy, may inadvertently contribute to the development of secondary trauma in offspring. These behaviors might amplify stress and anxiety in children, particularly when they are perceived as excessive or inconsistent with the child's developmental needs (Morris & Steinberg, 2013).

Interestingly, acceptance parenting style was not significantly associated with maternal trauma and was therefore excluded from the mediation analysis. This finding suggests that while acceptance plays a critical role in child development, it may not serve as a key pathway for the intergenerational transmission of trauma. Instead, the emphasis on control highlights the importance of addressing behavioral dimensions of parenting in trauma-informed interventions.

Implications and limitations

The findings of this study have important theoretical and practical implications. From a theoretical perspective, the results support the framework of intergenerational trauma transmission, which posits that trauma-related stress can be transmitted to offspring through parenting behaviors (Danieli, 1998). The partial mediation effect of the control parenting style provides empirical support for this framework while highlighting the specific mechanisms involved.

Practically, these findings underscore the need for targeted interventions to support trauma-affected parents. Programs aimed at promoting adaptive parenting practices, such as fostering autonomy-supportive behaviors and reducing overcontrol, could mitigate the risk of secondary trauma in children. Trauma-informed parenting programs should also address the emotional and

psychological needs of parents, helping them process their trauma and develop healthy coping strategies.

Despite its contributions, this study has several limitations. Firstly, the gender of the offspring, education, and income levels of both mothers and children that were not included within the analyses so far may have important roles and impacts on the study results.

Secondly, the instruments used were self-reported, which may influence the quality of the data. In relation to this point, the offspring's report of parenting styles may be congruent with their current mood or satisfaction level rather than reflecting the mother's real parenting practices. Moreover, asking mothers about past traumas may have also resulted in mothers' false memories of past events.

Another limitation is the exclusive focus on maternal trauma. Paternal influences and broader family dynamics were not examined, leaving an incomplete picture of the intergenerational transmission process. Future studies should adopt a family systems perspective to capture the complex interactions among family members.

Conclusion

In summary, this study highlights the complex interplay between maternal trauma, parenting styles, and offspring secondary trauma. While maternal trauma was associated with stricter control behaviors, its impact on overall parenting style perceptions was limited. However, the partial mediation effect of the control parenting style underscores its critical role in the transgenerational transmission of trauma. These findings emphasize the need for trauma-informed parenting interventions that address both emotional and behavioral aspects of parenting. By fostering adaptive parenting practices and supporting trauma-affected parents, we can break the cycle of transgenerational trauma and promote the well-being of future generations.

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Journal of Society Research

RESEARCH ARTICLE

Experiences of Modesty in Sportswear in Türkiye: A Feminist Perspective on Women's Experiences with Physical Activity

Muzaffer Toprak Keskin[1]

[1] Dr, Nevşehir Hacı Bektaş Veli University, Faculty of Sports Science, Nevsehir /Türkiye
ORCID: 0000-0001-9439-0094
E-Mail:
toprakkeskin@nevsehir.edu.tr

Abstract

This study aims to examine the physical activity experiences of women who adopt a closed clothing style and study at the Faculty of Sport Sciences in Türkiye, a Muslim country with a secular state, from the perspective of Islamic feminism. Using a phenomenological research methodology, individual interviews were conducted with eight women studying at the Faculty of Sport Sciences of a Turkish university. Additionally, sentiment analysis using NRC Emotion Lexicon and VADER tools revealed key emotions such as anger, anticipation, joy and sadness, along with positive, negative and subjectivity scores. These findings highlight the emotional intensity and personal perspectives of the challenges faced by hijab-wearing women in sports. The findings from traditional content analysis show that hijab-wearing women face significant challenges related to clothing, social pressures, religious stereotypes and sports marketing. These challenges emphasize the need for a comprehensive approach in sportswear marketing to address the lack of variety, quality and affordability in hijab clothing. The study suggests that sportswear brands should offer more comfortable and accessible options for hijab-wearing women and stresses the importance of addressing these issues to ensure that these women can fully participate in sports free from social and marketing constraints.

Keywords: *Hijab Sportswear, Islamic feminism, Sports economics, Sentiment analysis.*

Öz

Bu çalışma, laik bir devlete sahip Müslüman bir ülke olan Türkiye'de, kapalı giyim tarzını benimseyen ve Spor Bilimleri Fakültesi'nde öğrenim gören kadınların üniversite ortamındaki fiziksel aktivite deneyimlerini İslami feminizm perspektifinden incelemeyi amaçlamaktadır. Fenomenolojik bir araştırma metodolojisi kullanılarak, bir Türk üniversitesinin Spor Bilimleri Fakültesi'nde eğitim gören sekiz kadın ile bireysel görüşmeler gerçekleştirilmiştir. Ayrıca, NRC Emotion Lexicon ve VADER araçlarıyla yapılan duygu analizi, öfke, beklenti, neşe ve üzüntü gibi temel duyguların yanı sıra olumlu, olumsuz ve öznellik skorlarını ortaya koymuştur. Bu bulgular, başörtüsü takan kadınların spor yaparken karşılaştıkları zorlukların duygusal yoğunluğunu ve kişisel bakış açılarını gözler önüne sermektedir. Geleneksel içerik analiziyle elde edilen bulgular, başörtülü kadınların spor yaparken giyim, sosyal baskılar, dini stereotipler ve spor pazarlaması gibi zorluklarla karşılaştığını göstermektedir. Bu zorluklar, spor giyim pazarlamasında başörtüsü giyiminde çeşitlilik, kalite ve uygun fiyat eksikliğini gidermek için kapsamlı bir yaklaşım gerekliliğini vurgulamaktadır. Çalışma, spor giyim markalarının, başörtülü kadınlar için daha rahat ve erişilebilir seçenekler sunması gerektiğini belirtmekte ve bu kadınların spor yaparken sosyal engellerden uzak bir şekilde tam katılım sağlamalarının önemini vurgulamaktadır.

Anahtar Kelimeler: *Tesettür Spor Giyim, İslami Feminizm, Spor Ekonomisi, Duygu Analizi*

Introduction

"Secularism emphasizes not only the separation of religion and state, but also the restatement of religion in proportion to modern sensitivities and forms of government" (Mahmood, 2009, p.837).

Physical activity plays a crucial role in supporting health and well-being, especially for women facing various challenges in their daily lives. However, access to physical activity and opportunities for physical exercise may not be equal for all women due to cultural, religious and social contexts that shape their choices and experiences. One such context is the adoption of hijab, which refers to clothing that covers a significant portion of the body, concealing the skin and shape. Many Muslim women wear hijab as a symbol of modesty and devotion, which is why this style of dress is often associated with Islam (Benn et al., 2013a; Benn et al., 2013b).

The term 'hijab,' which means 'to cover' or 'to conceal,' is often used interchangeably with 'scarf' in English and 'hijab' in Arabic. The headscarf holds different cultural meanings in various Muslim countries (Hassan and Harun, 2016). Among Muslim women, the headscarf represents both a religious and cultural practice, allowing them to express their identity and spiritual beliefs (Galadari, 2012). In an Islamic context, the headscarf is generally understood as a Quranic command that encourages modest dressing for women. Nevertheless, recent research indicates that Muslim women increasingly embrace the headscarf not only as a religious symbol but also as a fashion statement (Hassan and Ara, 2021). This shift has given rise to modest fashion that adheres to hijab guidelines while enhancing the aesthetics of Islamic clothing and symbolizing the wearer's identity. Thus, hijab represents an impressive, fashionable style that goes beyond merely covering private areas, reflecting modernity and the ideal personality of a Muslim woman.

Hijab, serves as a multifaceted symbol for Muslim women, encompassing faith, culture, modesty and identity (El-Bassiouny, 2018; Hassan and Ara, 2021; Sheen et al., 2018). Beyond being a mere garment, it expresses religious beliefs and societal norms (Hassan and Ara, 2021). However, in the face of globalization, it can also be seen as a tool to express freedom and preserve identity (El-Bassiouny, 2018). While some societies perceive it as empowering within patriarchal constraints, others view it as a factor that conceals individuality (Al-Kazi and González, 2018). Research on hijab clothing emphasizes the importance of considering cultural, social and individual factors. The hijab, which evokes multiple layers of meaning encompassing religious rules, societal norms and fashion trends (Almila and Inglis, 2018), plays a role in shaping perceptions of beauty, attractiveness and identity (Wang et al., 2015; Williams and Kamaludeen, 2017). However, this role varies across different countries, reflecting diverse social and cultural norms (Hassan and Ara, 2021; Sheen et al., 2018).

The hijab, a symbol of religious identity, modesty and cultural belonging for Muslim women, varies according to the attitudes and approaches of each country and society. While hijab is compulsory in countries such as Saudi Arabia, Iran and Afghanistan, it is partially compulsory in countries like Pakistan, Egypt and Jordan. On the other hand, in countries such as Syria, Türkiye, Kuwait, UAE, Morocco, Sudan, Indonesia, Malaysia and Tunisia, hijab is optional and women can dress as they wish. Regardless of the region or country, women who wear the hijab face various challenges in sports settings due to their religious appearance and other factors, including socio-cultural, financial, physical and psychological reasons (Walseth, 2015). These challenges often include issues related to clothing style, as well as family, community and gender inequality, causing them to struggle with their identity in educational settings (Hamzeh and Oliver, 2012). Although women participate in many different sports in modern Islamic countries (Marwat et al., 2014), there are numerous barriers that prevent them from fully engaging in sporting activities (Knez et al., 2012). One study showed that a woman who wears a hijab while playing sports challenges the societal norms and values (Walseth, 2006).

Based on the verses of Islam, there are certain dress codes for both men and women (Bah-

rainwala and O'Connor, 2019). However, some societies misinterpret these rules and create very different lifestyles (Benn and Pfister, 2013). It is seen that these rules are imposed only on women, giving more freedom and comfort to men (Stride, 2016). From a feminist perspective, this leads to the separation of women from men (Toffoletti K, Palmer, 2017). In addition, women face various problems due to the identities imposed on women by societies, patriarchal social structures, traditional social judgments, assigned roles and other sexist perspectives (Dagkas et al., 2011a; Dagkas et al., 2011b). As a result of all these, sport is perceived as an activity that requires adherence to masculine gender roles.

It is argued that more research is needed to examine how women from different cultures and backgrounds consume sportswear (Hussain and Cunningham, 2023). In this context, this study aims to investigate the physical activity experiences of students studying at the Faculty of Sport Sciences in Türkiye, a Muslim country, who prefer hijab clothing. In an environment where Islam is prominent for many and religious and spiritual aspects are gaining importance, this study aims to address the challenges faced by female athletes who wear hijab in sport settings in the context of Islamic feminism. The women's experiences are evaluated from a feminist perspective in terms of socio-cultural, educational and sportswear marketing.

Islamic Feminism

Islamic feminism is a movement that aims to promote gender equality and justice within an Islamic framework. Research emphasizes the importance of reinterpreting Islamic texts through a gender-conscious lens to challenge patriarchal interpretations and advocate for women's rights (Keddie, 2009; Koburtay et al., 2022). This approach involves critically examining the Qur'an and Sunnah to offer alternative perspectives based on principles of justice and equity (Rabaan et al., 2021). Aims to advocate for a more comprehensive embrace of women's rights by challenging traditional and post-classical interpretations of Islamic texts (Jawad, 2009; Shahin, 2020).

They draw on the principles of equality in Islam to combat patriarchal interpretations of the faith (Al-Sharmani, 2014). It aims to empower women within the framework of Islam, forgetting past gender-biased studies of Islamic texts and challenging misinterpretations (Rabaan et al., 2021). This movement also focuses on reinterpreting Islamic law to promote gender equality and social justice without rejecting it (Hattab and Abualrob, 2023).

Islamic feminism represents an important and evolving discourse within the broader feminist movement, particularly in the context of Islamic societies. This movement aims to create a common space for both men and women, promoting ideals of equality in both public and private spheres (Rua, 2024; Kabir, 2023). It is argued that Islamic feminism transcends geographical boundaries, shaping itself in different cultural contexts and advocating for women's rights based on interpretations of Islamic texts (Vohra, 2023; Badran, 2001). This global perspective highlights the efforts of Muslim women to redefine their roles in society, while also demonstrating the challenges they face from both secular and traditional patriarchal structures (Lazuardi & Shamsu, 2024; Dalaman, 2021). Islamic feminists assert that, when interpreted from a contemporary perspective, the Quran supports gender equality and justice, challenging historical narratives that legitimize the secondary status of women (Constance, 2023; Bakhshizadeh, 2023).

Islamic feminism comprises a variety of perspectives and strategies rather than presenting a homogeneous structure. For example, some activists focus on legal reforms in Islamic law (fiqh) to ensure the recognition and protection of women's rights (Vatuk, 2008; Abdallah, 2010). Others emphasize the importance of education and empowerment, advocating for women's participation in all areas of society, including politics and religious leadership (Lazuardi & Shamsu, 2024; Wahyu et al., 2023). This multifaceted approach allows Islamic feminists to address the specific challenges faced by women in different cultural and social contexts, making the movement both current and adaptable (Fatima et al., 2017; Fuad & Ramadhan, 2023). Islamic feminism reinterprets Islamic texts

to advocate for women's rights and gender equality, challenging patriarchal interpretations that have historically excluded women (Toktaş & O'Neil, 2015; Kabir, 2023). This reinterpretation enables women to reclaim their subjectivity and voice in both religious and social spheres, fostering a more inclusive understanding of Islam that aligns with contemporary feminist ideals (Constance, 2023; Bakhshizadeh, 2023).

Despite these developments, Islamic feminism in Türkiye continues to face certain challenges. The ongoing tension between secular and Islamic feminist ideologies has led to divisions within the feminist movement. While some women advocate for a secular feminist approach, others emphasize the importance of integrating Islamic principles into feminist activism (Dalaman, 2021; Hesová, 2019). This dilemma reflects broader societal debates in Türkiye regarding the role of religion in the public sphere and the pursuit of gender equality. The current situation of women in Türkiye has been shaped by social, cultural and religious dynamics. Islamic feminism addresses this situation by offering an interpretation based on the rights and roles that Islam provides for women. Islamic feminism, advocating for women's active and equal participation in society, calls for greater opportunities for women in human rights, education and the workforce, drawing on the fundamental teachings of Islam. However, women striving to balance traditional values with the processes of modernization sometimes find themselves caught between religious beliefs and societal expectations. Islamic feminism views women's religious identities and social roles as complementary elements and advocates for their empowerment from this perspective. In this context, the women's movement in Türkiye continues to take steps toward resolving the tension between social equality and religious beliefs.

The understanding of Islamic feminism intersects within the field of sport through various publications exploring the relationship between Islam, gender and sports participation. Studies examining the constraints faced by Pakistani female students in participating in sports suggest measures such as introducing sports activities in schools, providing specialized facilities for women and dispelling misconceptions that Islam is against sports

(Ge et al., 2022). This research challenges the idea that Islam is inherently against women's participation in sport (Laar et al., 2022). However, the discourse of Islamic feminism and sport also extends to the experiences of women in different cultural contexts. For example, another study examined how Iranian women negotiate sports fandom and the status of women fans in the sports arena, challenging traditional gender norms associated with sport and masculinity (Toffoletti, 2012). In addition, research on Omani women's participation in sport highlights the call for gender equality based on Quranic interpretations (2022, السناني). Studies have documented the achievements of female athletes, including the first female Olympic medalist in Iran and shed light on the challenges women face due to cultural attitudes, legal restrictions and social stigmas surrounding women's participation in sport (Ziaee et al., 2022).

This study aims to contribute to the literature by examining the challenges women face in sports environments from an Islamic feminist perspective. It is understood that Islamic feminism supports women's right to participate in sports and seeks solutions to the issues faced in this field. Research indicates that the patriarchal structure in Islam restricts women's freedoms and often places them in a limited position due to the obligation of covering themselves. Therefore, Islamic feminism presents a perspective that takes into account both the teachings of Islam and women's right to participate in sports.

Türkiye, as a country with a society that adheres to Islamic beliefs and a secular state structure, emphasizes the importance of the Islamic feminist perspective for women. In this context, examining the status of women in sports environments in Türkiye is of great significance. Given the need to strike a balance between the social structures shaped by Islamic values and the societal and cultural dynamics created by the secular system, the participation of women in sports and the barriers they face in this area hold particular importance. Islamic feminism aims to address both of these contexts by advocating for respect for women's religious beliefs while also supporting their demands for social equality and freedom. Therefore, studying the status of women in the field of

sports in Türkiye is not only an important issue in terms of gender equality but also an essential research topic for defending women's rights in a way that is compatible with religious and cultural values.

Method

Research Design

In this study, phenomenological research method, one of the qualitative research methods and techniques, was used. Phenomenological research investigates people's experiences with a phenomenon or concept by reducing individual experiences to a universal explanation (Creswell, 2013). Participant experiences on the phenomenon in question, "hijab sportswear", are revealed with the help of descriptive phenomenology. Descriptive phenomenology seeks to directly explain participants' experiences. This method delves into the detailed experiences of individuals wearing hijab in sports environments, revealing how these experiences are lived and perceived.

Research Process

The study involved eight female athletes who are students at a Faculty of Sport Sciences in Türkiye. Although these participants specialize in different sports disciplines, they all take courses related to various branches as part of their academic programs. The diverse hijab experiences of these participants across various sports hold significant importance for data variety. All of the participants wear hijab and their style of dress leans more toward fashion and modern trends rather than traditional hijab attire. This fashion-forward approach encompasses hijab styles seen in some other Muslim countries, influenced by a more secular perspective rather than strict dress codes. Despite their fashionable choices, sportswomen still encounter social criticism, influenced by both religious and cultural factors. Data on hijab-wearing sportswomen were collected through face-to-face interviews, recorded using voice recorders. Subsequently, the interviews were transcribed and ana-

lyzed using traditional content analysis. The findings were evaluated by the author and two experts familiar with qualitative research methods.

Participants

The participants of the study were selected using a purposive sampling method. In this context, data were collected from students who are both enrolled in the Faculty of Sport Sciences and adopt a hijab style of clothing. All eight participants in the study had different experiences of being a female athlete in sports settings while wearing a hijab. The unique experiences of the eight female participants, who are students in the Faculty of Sport Sciences and participate in various courses, shed light on the challenges, responsibilities and requirements faced by women in Türkiye from both a religious and cultural perspective.

Rather than focusing solely on the individual characteristics of the participants in this section, it may be more informative to discuss the broader context of women choosing to sport hijab in Türkiye. Türkiye, as a Republic, has a secular approach compared to other countries with a majority Muslim population. This allows individuals the freedom to dress according to their own preferences. However, conservative norms persist both politically and socially. This dichotomy creates a "in-betweenness" experienced by women in various settings. However, the patriarchal mentality still persists. Female athletes who choose to wear hijab often adapt to sporting environments by blending fashionable styles with their religious requirements rather than strictly adhering to traditional attire. However, this compromise is not without its challenges in sporting settings due to cultural pressures. The detailed findings section explores these complexities.

Moreover, the individual characteristics of the participants are also important because factors such as the sports they prefer and their socio-economic background can create a meaningful context. The number of athletes who wear hijab varies significantly across different sports and this can influence the reactions they encounter. This study aimed to reach a limited number of female students at the Faculty of Sport Sciences at Nevşehir

Hacı Bektaş Veli University who adopt the hijab clothing style. No specific target number was set for participant selection; instead, eight students who agreed to participate were included in the research. The participants are engaged in different sports disciplines. Participant 1 is involved in volleyball and is a first-year student at the Faculty of Sport Sciences. Participant 2 practices taekwondo and is in her second year. Participant 3 is engaged in basketball, wushu, athletics and volleyball and is a third-year student. Participant 4 is involved in volleyball and is in her fourth year. Participant 5 plays volleyball and is a second-year student. Participant 6 participates in skiing and is in her fourth year. Participant 7 is involved in taekwondo and is a fourth-year student. Participant 8 is engaged in volleyball and is also in her fourth year. Since all participants study at the Faculty of Sport Sciences, they have gained experience in various sports through their coursework. However, when considering their individual interests, volleyball appears to be the most commonly preferred sport. From a socio-economic perspective, all participants come from families with an average income level and were raised in environments that align with the traditional Turkish family structure. In this context, both the academic and social backgrounds of the participants provide a valuable framework for understanding the experiences of female athletes who wear the hijab.

Data Collection

Data for this study were collected through semi-structured interviews. The interview questions were developed following a detailed literature review on the topic. The purpose of choosing this data collection method is that the structured nature of semi-structured interviews can improve the quality and informativeness of the data collected, leading to robust research results.

The semi-structured interview form is a valuable tool in qualitative research as it offers a flexible yet systematic approach to data collection. This method struck a balance between open-ended explorations and predefined questions about hijab sportswear, allowing for unexpected insights to emerge from the participants. Participants' unique

perspectives and experiences were recorded with a voice recorder and obtained with necessary permissions. The importance of interview protocols that take ethical considerations into account and prioritize the rights and protection of participants was also explained.

In the semi-structured interview form, participants were asked about their initiation into sports, including how they started and whether any factors encouraged them. Regarding the hijab and sports experience, questions focused on how wearing a hijab influenced their ability to engage in sports, whether it played a role in their choice of sports discipline and how it affected the challenges they encountered. In terms of clothing-related issues, participants were asked about the difficulties they faced regarding sports attire, the availability of suitable clothing for hijabi female athletes and how they adapted their outfits. Under the theme of environmental and societal factors, the study explored how family, friends and society reacted to their participation in sports, whether they experienced discrimination in university or school settings and the general societal perception of hijabi female athletes. Concerning gender discrimination in sports, participants were asked whether they had encountered sexist attitudes, if training alongside male athletes was challenging and whether coaches and instructors adopted a specific approach toward hijabi athletes. Lastly, in the section on recommendations and solutions, participants shared their suggestions for reducing the challenges faced by hijabi female athletes, how federations or universities could support them and whether they used sports hijabs produced by brands, as well as their opinions on the necessity of making such products more widely available.

During data collection, face-to-face interviews were conducted in the office of the academic working at the Faculty of Sports Sciences, who is also mentioned in the article. At this stage, to ensure the participant's comfort, no one else was present in the environment and necessary information was provided to relax the participant. It was explained that the information provided by the participants would remain confidential and that no personal details that could identify the participant would be included in the published article. When reaching

out to the participants, information about the study was shared and interviews were conducted with the participant's consent. Face-to-face individual interviews lasted an average of 50 minutes, were recorded and transcribed. In qualitative research, especially in phenomenology, the use of audio recordings helps to understand participants' life experiences and perceptions (Peter et al., 2024). Audio recordings allow for a detailed examination of the data, helping researchers to capture nuances in participants' responses and experiences.

This process typically involves recording interviews or interactions with participants and then transcribing them for analysis. Accurate transcription of the recordings obtained from participants is crucial to maintain data integrity and facilitate in-depth analysis. For this reason, the interviews on the voice recorder were transcribed verbatim and left for the researcher and two other experts to analyze. In this way, by capturing the voices and narratives of the participants, the essence of their hijab sportswear experiences was captured, providing insight into their subjective realities.

With this method, the patterns, themes and meanings embedded in the audio data of the participants' hijab sportswear perspectives, emotions and the meanings they attributed to their experiences could be identified and an analytical perspective was provided in induction. The names of the participants have been changed to pseudonyms to protect their privacy and are presented in the findings section.

Data Analysis

This study analyzed the data using traditional content analysis method. Traditional content analysis is an important and frequently used research technique in qualitative research. The data obtained from the audio recordings were systematically categorized and thematized after being converted into written form. This process involves identifying patterns and themes by coding, categorizing and thematizing the data (Lapadat and Lindsay, 1999).

In the case of analysing audio recordings, transcription is a crucial step in preparing the data for analysis and enables researchers to work with the written text for coding and categorization (O'Brien et al., 2014). The coding process involves assigning labels or codes to text fragments according to their content, which can then be organized into categories (Neale, 2016). In this study, while coding the interviews in the transcribed word file, synchronization was provided with different coloring tools to create different categories for similar codes. For example, it is seen in the findings section that codes such as "opening headscarf, seing hair, uncomfortable clothess" filled the category "Problems Encountered in Hijab Sportswear and the Search for Solutions". Categorization is the process of grouping coded passages into broader themes or categories and provides a more structured analysis of data (Lapadat and Lindsay, 1999). After the data were categorized, common themes were identified and presented.

Sentiment Analysis

The sentiment analysis process utilized both the NRC Emotion Lexicon and the VADER analysis tool. The NRC Emotion Lexicon provided scores for specific emotional tendencies such as "Anger," "Anticipation," "Disgust," "Fear," "Joy," "Sadness," "Surprise," and "Trust," enabling a detailed analysis of these emotions within the participants' comments.

The VADER analysis tool, known for its effectiveness in measuring emotional tendencies in social media and short texts, was employed to determine the overall emotional tone of Reddit comments. VADER calculated scores for positive, negative, neutral and compound sentiments, along with polarity and subjectivity values for each comment. The compound score represented participants' overall emotional tendency, ranging from negative to positive, while the positive, negative and neutral scores provided a more granular analysis of emotional intensity and orientation. The polarity value indicated the extent to which the comments were positive or negative, while the subjectivity score offered insights into whether participants evaluated their experiences from a personal or objective perspective. The combined use of these two methods enabled a deeper understanding of

the emotional content of the comments and provided a comprehensive perspective on the experiences expressed by the participants.

Results

The findings of this study, which examines the experiences of hijab-clad women studying at the Faculty of Sports Sciences from a feminist perspective in terms of socio-cultural, educational and sports marketing, are organized into five themes. The overview of the themes is presented in Table 1.

Table 1. Themes

Theme	Sum
Challenges of Hijab Sportswear: Overcoming Barriers • *The Burkini Issue: Swimwear Choices and Barriers* • *Clothing Options for Women Playing Sports: Preventing Clothing from Opening During Movement* • *Problems Encountered in Hijab Sportswear and the Search for Solutions*	This theme highlights the challenges that women in hijab face in sports settings and how these challenges affect their performance and overall sporting experience.
Untapped Potential: Hijab Sportswear Market • *More Variety and Affordable Options in Hijab Sportswear for Women* • *Enhancing Inclusivity: Expanding Hijab Sportswear Choices for Women*	In this theme, we discuss the limited availability of affordable and suitable sportswear options for women with hijab sportswear and the opportunity to target this market segment.
Equality in Sportswear: Addressing the Needs of Hijab Sportswear • *The Impact of Limited Sportswear Options on Performance*	The scarcity of options in the sportswear market negatively impacts the comfort and performance of women wearing hijab clothing. This theme highlights the need for more inclusive and tailored solutions.
Breaking Stereotypes: Stories of Women Wearing Hijab in Sport • *Prejudice and Resistance against Women in Sport* • *Hijab Sportswear Preferences and Challenges of Peer Relationships* • *The Grand Triad: The Intersection of Religious Attire, Sports Performance and Social Acceptance*	Here we explore how women face criticism from family, friends and society when playing sports. The theme sheds light on overcoming prejudice and stereotypes.
Gender Bias: Men's Comfort in Hijab Sportswear • *Criticizing Women in Hijab Sportswear and Gender Norms*	Female athletes are often subjected to more criticism than men in sport environments. This theme addresses the inequalities and challenges faced by female athletes.

Challenges of Hijab Sportswear: Overcoming Barriers

Problems Encountered in Hijab Sportswear and the Search for Solutions: Women face various problems related to hijab sportswear. One of these problems is the problem of veil. The hijab issue is a complex problem and there is no easy solution. By understanding these challenges, it is important to create a more inclusive environment for all athletes. women express in various ways the physical and psychological discomfort caused by sportswear that is not appropriate for them. The "risk of wearing a headscarf (i.e. the risk of hair coming out of the hijab)" during sports activities is a constant source of anxiety for women, which negatively affects their performance and prevents them from achieving the success they desire. As participants 1, Participant 2 and Participant 7 noted, the headscarf can be a distraction during sports activities. Participants 1 said that her headscarf was constantly untied, which made it difficult for her to focus on her performance. Participant 2 said that she was often faced with the dilemma of whether to fix her headscarf or meet the incoming ball. Participant 7 said that she felt uncomfortable when her hair came out while doing somersaults:

"My headscarf is always getting opened, so I can't get comfortable" (Participant 1).

"When my headscarf is broken, should I fix my headscarf or receive the incoming ball? So, you don't know what to do. While you fix it, you also produce a solution" (Participant 2).

"I get uncomfortable when my hair comes out while doing somersaults" (Participant 7).

The woman have found solutions to the problems they have experienced regarding the headscarf, based on their experiences. Some women found better comfort by using bandanas or affordable sports bone instead of headscarves. They were aware that this issue was solved by a well-known sports brand, but they had financial barriers in accessing these products. Due to the high cost, women are trying to achieve the comfort they want with sports caps that can be used as an alternative and are more affordable. However, it still emerges from the statements that they cannot solve the problem completely. For example, Participant 3

said that she found a more suitable version of the sports brand's headscarf, but it was still not as good as the original. Participant 4 said that she found bandanas to be more comfortable than headscarves, but she was still worried about them coming off. Participant 8 said that she was always aware of the possibility of her bandana coming off, so she was always thinking about it. These statements suggest that there is still a need for more affordable and comfortable headscarf options for women who participate in sports.

Clothing Options for Women Playing Sports: **Preventing Clothing from Opening During Movement:** Another issue that women face regarding clothing is the risk of their loose-fitting garments coming undone during physical activities. Women who prefer modest clothing often opt for loose-fitting clothes such as tunics over leggings, baggy sweatpants, or loose shorts. However, some physical activities can cause their clothing to loosen, revealing their body contours. The reason behind this is that the clothing style they choose may not be suitable for certain sports. As a result, their performance can be negatively affected. Additionally, ill-fitting attire during specific sports activities can lead to psychological distress. For example, a woman wearing a loose dress might feel uncomfortable if it opens up and exposes her body while performing a somersault. These statements highlight the need for more clothing options for sportswomen who wear hijab. These options should be tailored to different sports and designed to prevent garments from coming undone during movement. The following quotes from participants illustrate these problems:

"My dress can be opened up when I do somersaults at the gym" (Participant 2).

"When I dress loosely, I have a hard time doing the movements because my dress is getting opened." (Participant 8).

The Burkini Issue: Swimwear Choices and Barriers: Another problem is related to the burkini worn in swimming lessons. The woman cannot wear swimsuits, so they use burkini in swimming events. However, they state that burkini hinder their physical activities and they have difficulties.

It is seen that when they wear a burkini, they have difficulties in swimming and even the participants who have just learned to swim have swimming phobias due to this difficulty. As swimming for athletes includes competition that requires high performance, more than just being a hobby, women are saddened by being forced and unsuccessful due to clothing. That's why some women stretch their choices about clothes. They perform physical activities by wearing shorts and t-shirts instead of burkini in order to better demonstrate their performance. For example, Participant 7 continued the lessons with shorts and a t-shirt because she failed the lesson when she wore a burkini. As it can be understood from the statements of woman, burkini are not suitable sportswear for them. However, some women continue to use a burkini because there is no alternative swimming outfit suitable for them and they do not look forward to wearing a different outfit because of their preferences. The following quotes from participants illustrate these problems:

"Other women can swim very comfortably in swimsuits and they can cover distance. We can't move faster than they do and it poses an obstacle for us" (Participant 1).

"In my first year, I could not pass the course because I wore a burkini, the next year I passed it with shorts and a t-shirt" (Participant 7).

"I was wearing something long over tights as it was difficult to swim with burkini" (Participant 6).

"I dress how I feel comfortable" (Participant 3).

"Burkini's bonnet stuck to my face when I got out of the water. I developed a phobia of water and failed" (Participant 2).

"It's a problem for me to wear a bodysuit inside a swimsuit instead of a burkini" (Participant 8).

When evaluated under this theme, it is observed that women face many problems related to their clothing during sports activities. The issues arising from clothing not being compatible with the sports discipline both psychologically disturb women and negatively affect their performance. Therefore, women show flexibility by compromising to perform better and feel better about themselves.

Untapped Potential: Hijab Sportswear Market

More Variety and Affordable Options in Hijab Sportswear for Women: The availability of affordable and suitable hijab sportswear for women is limited. This lack of diversity in hijab sportswear options can be a barrier to women's participation in physical activity. Additionally, the high cost of hijab sportswear can create a financial burden for women. The statements from study participants further emphasize these challenges. For instance, Tugba mentioned, 'Clothing for us is scarcely limited and quite expensive.'. Participant 2 expressed that 'our job would be easier if clothes were designed to suit us.'. Participant 3 pointed out that 'a famous sports brand made it, but the price is too high.'. And Participant 4 highlighted that 'there is no variety and it's expensive because it's limited.' These findings underscore the need for more affordable and inclusive hijab sportswear options for women. Hijab sportswear brands can better support women by designing clothing lines that cater to their needs and making their products more accessible:

"Clothing for us is scarcely limited and quite expensive" (Participant 1).

"You are trying to come up with a solution on your own, but it is a little challenging. Our job would be easier if the appropriate clothes were designed for us. We find a solution on our own and perhaps unintentionally complicate it. You wear it in one lesson, you wear the other in the next lesson, we try to find out which one is suitable" (Participant 2).

"A famous sports brand did this, but the price is too high. Too expensive. There may be more affordable ones, but they are not as beautiful as the original ones… The fabric of the clothes produced by Nike is light. It may cause us to sweat, but it does not show sweat. More comfortable. We can count what Nike has done as support, but the price is too high" (Participant 3).

"There is no variety and it is expensive because it is limited… When it comes to clothes, I don't want to go to fitness. I don't know what to wear. Appearance is very important to me, but there is no variety" (Participant 4).

Enhancing Inclusivity: Expanding Hijab Sportswear Choices for Women: The scarcity of hijab sportswear options available for women is a significant issue. Participants often find themselves making do with athletic clothing that wasn't specifically designed for their needs, or they end up forgoing hijab sportswear altogether. Several factors contribute to this lack of options, including the misguided assumption that only open-dressed athletes can be considered true athletes and the limited market for hijab sportswear tailored to women. To address this, hijab sportswear manufacturers should prioritize inclusivity in their designs and offer a wider range of options for women:

"There are usually sports clothes for athletes who adopt open dressing style. We make combinations with our own means. It's like wearing a bodysuit under a short sleeve t-shirt" (Participant 8).

"According to the open-dressed athlete, there is no clothing for a veiled female athlete. I think it's limited and almost nonexistent. There is a mentality as if only those who dress openly can be athletes. Does a veiled person do sports? Would a closed athlete wear this? That's why it's not produced" (Participant 4).

"I would also like to wear what suits me, but it is not available. Everything is for open-dressed athletes. When it comes to sports, only tights and bustier come to mind. There is no design suitable for veiled female athletes" (Participant 6).

The study findings highlight the need for more affordable and suitable hijab sportswear options for women. Hijab sportswear brands can support women by designing inclusive clothing lines and making their products more accessible. This approach would help break down barriers to physical activity and promote a healthier lifestyle for hijab-dressed women. Additionally, it's crucial to consider cultural and religious factors that influence women's choices regarding hijab sportswear. Some women may prefer full-body coverage, while others may opt for sportswear that allows more skin exposure. Sensitivity to these factors is essential when designing and marketing sportswear for hijab-dressed women.

Equality in Sportswear: Addressing the Needs of Hijab Sportswear

The Impact of Limited Sportswear Options on Performance: The limited availability of sports clothing for women can significantly impact their comfort and performance. Participants have expressed feeling less at ease and restricted when exercising in long sleeves and a headscarf, especially when compared to men or openly-dressed women who can wear shorts or tights. Additionally, they've noticed increased sweating when dressed this way. Women perceive a disadvantage in sports environments due to the lack of suitable clothing, feeling that they cannot move as freely or perform as well as men or openly-dressed women:

"The outfit I wear is not the same as the outfit a man or an openly-dressed woman wears. They are wearing shorts or tights. It is more comfortable. I'm wearing tights and shorts on it. I need to wear something with long sleeves on top. I should cover my head with a headscarf. The sweat I have at that moment is different. The load on me is more than them. They can move more freely" (Participant 6).

"An openly-dressed person does sports more comfortably. Frankly, this doesn't seem fair to me" (Participant 4).

Based on the data within this theme, it is evident that addressing marketing deficiencies is crucial to resolving the challenges women face with clothing. When designing sports apparel, it's essential to prioritize women's needs. The increasing demand for comfortable and stylish options reflects the desire of these women to participate in physical activities without feeling restricted or uncomfortable.

Breaking Stereotypes: Stories of Women Wearing Hijab in Sport

Prejudice and Resistance against Women in Sport: Prejudice against women in sports is a widespread problem. The participants in this study reported experiencing bias from their families when they expressed interest in participating in sports. This prejudice is based on the inaccurate assumption that 'veiled women cannot engage in sports.' Unfortunately, such stereotypes can significantly impact women's lives.

The study participants described how family prejudice made it challenging for them to pursue their athletic interests. They felt compelled to prove themselves, often negotiating their sporting activities with their families. This process sometimes left them feeling exhausted and, in some cases, even led to feelings of resentment or hatred toward their families.

However, their stories also demonstrate resilience. Despite the obstacles, these women worked hard to challenge prejudice and pursue their athletic goals. By finding ways to negotiate with their families and proving their abilities, they showed that it's possible to overcome bias and achieve success, even in the face of adversity:

"I wanted to play volleyball and my family was against it. I continued to ignore what was said. To exercise, I got up early in the morning and did sports while everyone was sleeping. In order to demonstrate my success, I constantly tried to prove myself to my family. I started doing muaythai and they were against it. I continued secretly for a while. But I couldn't take the pressure any longer. I started to have a grudge against my family. I did the training in secret to get into the university. I did sports fasting for four hours just because they said you can't stand it while fasting. They said you can't do it, so I always tried to prove myself that I could do it" (Participant 4).

"They said, what does the veiled girl have to do with sports? Yet I continued. This has nothing to do with it. It can be done any way" (Participant 1).

"You're a veiled girl, you can't do that! Don't wear this! At this age, I still hear such statements from my family." (Participant 6).

Women often face criticism from those around them, including family members, friends and especially those who adhere to a more open style of clothing. This criticism can manifest both verbally and nonverbally, ranging from simple disapproval to outright insults. Unfortunately, these critiques are often underlines that women should not participate in sports or that they should adhere to specific dress codes while doing so.

The impact of this criticism on women's lives is significant. Study participants shared how exposure to criticism made it challenging for them to maintain their athletic interests. They felt self-conscious and uncomfortable, sometimes altering their behavior to avoid further scrutiny. In severe cases, such criticism led women to quit sports altogether. This issue is serious because it prevents women from engaging in an activity that can be beneficial both physically and mentally.

Hijab Sportswear Preferences and Challenges of Peer Relationships: Women are also frequently subjected to bullying by their peers, particularly those who adhere to a more open style of clothing. For instance, Participant 3 experienced differential treatment from her friends due to her clothing choices, feeling unaccepted for who she was. Another participant, Participant 7, expressed discomfort with her friends' interference in her life. She boldly asserted, 'This is my life, my body. You can't make me feel bad.' Participant 7 refused to allow her friends to undermine her choices:

"They said you are wearing a headscarf but wearing shorts. They said you are a destroyer of religion. They said that there is no such way of veiling, it is against the verses, etc. They said you have to dress properly while doing sports" (Participant 3).

"The people around me were very obsessed with my dressing style while doing sports. Does this girl dress like this? Does a veiled person do sports? You are a veiled girl; do you have to do sports? Even though I said I didn't care much, I did care a lot. It was bothering me" (Participant 4).

"They say you are a veiled girl, why are you wearing this? Even my best friend says the same. Those saying such things are usually openly-dressed people. This is my life, my body. You can't make me feel bad" (Participant 6).

"They say you are a veiled girl, is this is making my life difficult? Instead of wearing it, they say, don't wear a headscarf. What I do is none of your business" (Participant 7).

The Grand Triad: The Intersection of Religious Attire, Sports Performance and Social Acceptance: The study participants expressed feeling pressure to conform to specific clothing norms due to their religious beliefs. For instance, Participant 6 felt compelled to wear shorts over her overalls to avoid criticism about not covering her upper body. Participant 7, on the other hand, wears leggings, but they feel too tight; she would prefer sweatpants for better comfort during physical activity. Participants 1 hopes for a normalized environment where she can dress without judgment.

These findings underscore the need for greater understanding and acceptance of religious attire in sports. The pressure to conform can negatively impact both comfort and performance. Creating an inclusive environment where all athletes feel accepted, regardless of their religious beliefs, is essential. Additionally, when they must wear tight clothing due to their academic department or physical activity, they feel uneasy about the reactions they receive. Despite this, they recognize the importance of comfort for better performance, even if they fear judgment from others.

"Overalls are worn for skiing. I used to wear shorts over the overalls so they wouldn't say why you don't wear anything on top of it. In fact, when I wear shorts, they stick to my body, but I always felt like I had to wear those shorts. There is a prejudice that you are a veiled girl and cannot dress openly. I want to wear how I want in classes, but I'm hesitant. I have pressure. This pressure exists in the university as well. I am a sports science student. I don't like being judged on this" (Participant 6).

"I wear leggings but they are too tight. But if I wear sweatpants instead of leggings, I have problems in terms of movement. If you do sports, you have to dress comfortably. I can't come here with something baggy" (Participant 7).

"I want our situation to normalize" (Participant 1).

Prejudice against veiled women in sports is a widespread problem. This bias significantly impacts women's lives, making it challenging for them to pursue their athletic interests. Women often face criticism and bullying from those around them, based on the assumption that they should not participate in sports or that they must adhere to specific dress codes while doing so.

Gender Bias: Men's Comfort in Hijab Sportswear

Criticizing Women in Hijab Sportswear and Gender Norms: Women are frequently criticized for dressing too tightly or revealingly in sports settings. These criticisms often stem from religious and social values. However, men are not subjected to the same dress standards:

"I see a lot of men wearing tights, but nobody says you can't do this" (Participant 6).

"I think I am not equal to men" (Participant 1).

When the data under this theme is examined through a feminist lens, it becomes clear that expectations regarding women's dress and behavior in sports settings are often rooted in outdated sexist views. These views perpetuate the idea that the responsibilities attributed to women do not apply to men. As a result, many women feel uncomfortable in these settings and are subjected to harsher judgments than men. This inequality, where women are held to different standards of dress and behavior, can be seen as a form of gender discrimination. It unfairly restricts women's freedom of expression and their ability to participate fully in sport.

Sentiment Analysis Results

Figure 1 sheds light on the complex emotional experiences of hijab-wearing women participating in sports. Among all participants, the emotions of "anticipation" and "trust" stand out as significantly higher compared to other emotions. Anticipation reflects these women's desire to overcome challenges and achieve better conditions in the future, while trust signifies their faith in their beliefs, inner resilience and the support they receive from their surroundings.

The emotions of "sadness" and "fear" are also commonly observed among participants. These emotions reflect the difficulties they face, such as social pressures, the lack of appropriate sportswear, financial challenges and discomfort experienced during physical activities. Additionally, the presence of "joy" to a certain extent indicates that, despite all the obstacles, these women experience some positive moments and occasionally feel a sense of achievement while engaging in sports.

The heightened emotion of "anger" reveals participants' frustration and disappointment in the face of societal stereotypes, limited support and a lack of marketing efforts. This emotion particularly highlights their reaction to the absence of suitable, functional and affordable sportswear designed for hijab-wearing women.

The emotional reflections of the participants align closely with the findings of the study. This emotional analysis helps to deepen our understanding of the challenges faced by hijab-wearing women in sports, not only in physical but also psychological and social dimensions. In this context, developing inclusive policies, improving the availability of suitable sportswear for hijab-wearing women and reducing societal prejudices could help mitigate emotions like fear and sadness while fostering greater feelings of joy and trust.
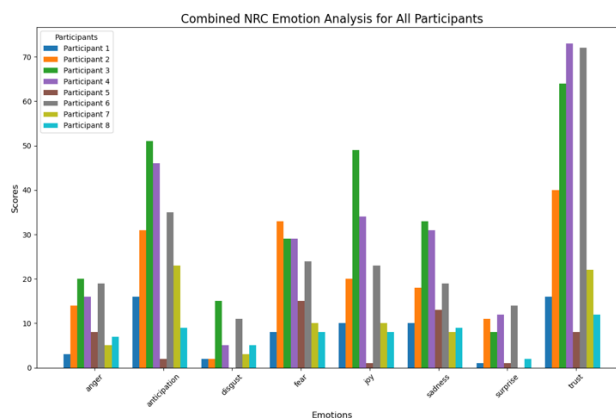

Figure 1. NRC Emotion Analysis Results

The VADER and Subjectivity analysis charts, collectively illustrating the emotional experiences of all participants, reveal a predominant Neutral sentiment across the responses, reflecting a balanced approach to the challenges faced by hijab-wearing women in sports (Figure 2). The high Compound scores highlight the resilience and determination these women display in navigating societal pressures, stereotypes and practical challenges such as the lack of inclusive sportswear. Moderate Positive scores indicate moments of joy and satisfaction, often tied to personal achievements or supportive social environments, as highlighted in the study. On the other hand, the presence of Negative scores underscores the frustrations and emotional toll stemming from systemic

barriers, economic constraints and inadequate sports marketing for hijab-compliant clothing. The Subjectivity scores, consistent across participants, emphasize the deeply personal nature of these experiences, aligning with the study's findings that these challenges are both societal and individual. Together, these emotional patterns reinforce the need for systemic changes to promote inclusivity, such as the development of functional sportswear and policies that support the participation of hijab-wearing women in physical activities.
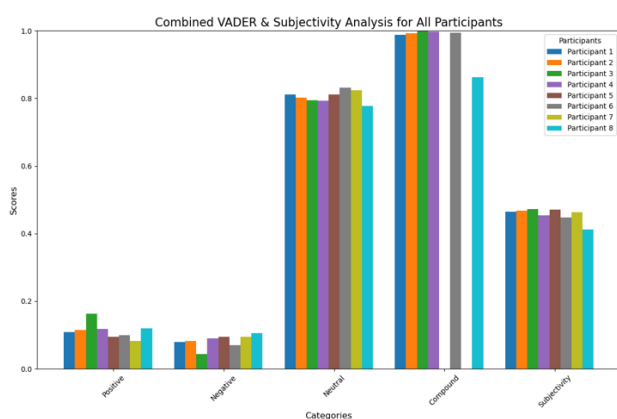

Figure 2. VADER & Subjectivity Analysis Results

Discussions

When examining the distribution of topics in articles related to sports management, it is evident that the most popular subjects include sports marketing, sports consumption, sports participation, sports performance and sports economics (Keskin et al., 2023). However, despite the increasing research on Muslim women and sports, challenges related to culture, religion and clothing persist in sports environments. These difficulties continue to create a dilemma between physical activity and religious commitment, emphasizing the need for further research. Daily modest clothing is not suitable for sports, hindering women's active participation. Studies reveal that Muslim women who embrace their identity often struggle with the conflict between Islamic dress rules and sporting requirements (Senarath and Liyanage, 2020).

The discomfort experienced by sportswomen wearing hijab in sports environments stems from their desire to appear professional and perform well while adhering to their goals (Rose, 2021). The absence of specialized stores for Muslim clothing

necessitates more time and effort for women to find suitable attire for their daily needs (Bachleda et al., 2014). Although some brands have developed comprehensive sportswear for hijab styles, accessibility remains a challenge for women. The lack of a complete alternative in the market means this issue remains unresolved. Research also supports this view, indicating that retailers do not provide a fully compatible hijab that adheres to the fundamental parameters set by Islam. Therefore, there is a need to develop completely compatible hijabs that allow Muslim women to perform better, reduce discomfort and provide appropriate physiological support. This highlights the deficiency in well-known sportswear brands addressing Muslim women (Rose, 2021). Therefore, there is a clear need in sports marketing to address the significant demand for hijab sportswear among Muslim women. Rather than relying on a single brand, multiple brands should engage with this topic to enhance diversity and price options (Segran, 2018). Both religious teachings and sports activities require suitable sportswear for Muslim women (Omar, 2016). The sportswear market has responded by creating products such as hijab swimsuits, hijab tracksuits and hijab leggings. These items are designed with materials and styles that cater to both religious sensitivities and athletic performance (Shafee, 2020). However, this issue remains limited to specific brands and certain sports. The needs of veiled women in sports environments have not been fully met. Sports marketing must address these gaps by making affordable sportswear accessible to veiled women (Keskin and Ulusay, 2023). A study on hijab sportswear found that 34% of participants faced wardrobe challenges (Shafee, 2020).

The fundamental criteria for hijab include covering the entire body except the face, covering the hands and feet, concealing body contours, avoiding imitation of men's clothing codes and maintaining a feminine appearance (Bhuiyan, 2018). However, due to the existing challenges in the hijab sportswear industry and the difficulty in fully addressing women's needs that align with these requirements, female athletes often find their own solutions to integrate into sports environments. To

meet both sports functionality and hijab require-ments, women combine layered combinations of men's and women's sportswear (for example, wearing a hat for sun protection) during sports ac-tivities. This approach is driven by women's con-sideration of not only performance and functional-ity but also affordability when selecting their attire. These factors put women at a disadvantage in sports environments, leading to a demand for hijab sportswear that is both fashionable and adheres to conservative criteria (Rose, 2021). While the Is-lamic product market has seen significant growth, the lack of professionally designed, affordable hi-jab sportswear remains a challenge faced by women.

The data indicates that participants demand a hijab sportswear style that meets their needs while also being practical, functional and suitable for sports activities. This finding is essential for major sports brands to consider. Particularly, under-standing the experiences and requirements of par-ticipants facing issues related to sportswear pro-vides valuable insights. Women who wear hijab of-ten experience physical and psychological discom-fort during sports due to the risk of their head-scarves coming undone. This situation negatively impacts their sports performance, putting them at a disadvantage and hindering their desired achievements. Although there are limited studies supporting these findings in the literature, one re-search study demonstrated that different clothing styles (such as hijab or Shalwar Kameez) can hin-der Muslim women's participation in certain phys-ical activities (Jiwani and Rail, 2010). Another study revealed that some veiled women prefer to avoid swimming or sports centers due to desires to avoid seeing other men and women's bodies, as well as the use of sticky materials and insuffi-ciently loose mandatory clothing. Some have re-solved this issue by purchasing sportswear from sports clubs or visiting Muslim swimming centers, while others continue to avoid swimming or sports clubs (Baharudin et al., 2021). The use of burkinis in swimming is primarily due to the modesty re-quirements for women. However, burkinis can re-strict movement and pose challenges for effective swimming. Some women, despite the differences from traditional swimsuits, prefer wearing shorts

and a t-shirt to enhance their performance rather than using a burkini. Others may develop swim-ming-related phobias due to the limitations im-posed by the burkini. The lack of suitable alterna-tives for swimwear further complicates this situa-tion. Also participants in studies have expressed feeling restricted and less at ease when exercising in long sleeves and a headscarf, especially when compared to men or openly-dressed women who have the freedom to wear shorts or tights. This dis-parity in clothing options leads to increased sweat-ing and a perception of disadvantage in sports en-vironments, where women feel they cannot move as freely or perform as well as others (Wibowo et al., 2018). In light of these findings, sportswear, es-pecially swimsuits, should be developed to align with both Islamic clothing specifications, including modest body shapes and standard requirements for sports attire. To effectively address this issue, the necessity of a broader range of options is em-phasized (Hassan and Harun, 2016).

Problems have arisen in some Muslim coun-tries, such as less participation of women in public swimming pools or communal areas due to inflex-ible dress codes (Senarath and Liyanage, 2020). When the findings of this study are evaluated, it supports this research. Women have had many problems with clothing in sports environments, es-pecially in swimming pools. They solved this prob-lem with the flexible dress approach. They came up with a solution to the problem by dressing in a way that would adapt to the requirements of the sports environment. For example, instead of swim-ming with the burkini in the pool, they were able to perform by swimming in shorts and a t-shirt.

Prejudice against women in sports, especially those who wear hijab, significantly impedes their athletic pursuits. Study participants encountered bias from their families, who believed that veiled women couldn't participate in sports. Despite these challenges, resilient women worked dili-gently to challenge prejudice and showcase their abilities. However, they also faced criticism and bullying from peers who adhered to different clothing norms. To promote gender equality, it is crucial to create an inclusive environment where women are not judged based on their attire. A

study conducted in Oman, a Muslim country, examines the role of Islam in sports science education for women (Bachleda et al., 2014). It is understood that women in Oman receive training separately from men in sports science classes and are not flexible about clothing (Benn et al., 2013a; Benn et al., 2013b). Türkiye, on the other hand, is not subject to the rules of dress according to many countries such as Oman and Iran, as it is governed by a secular state understanding besides being a Muslim country. Therefore, freedom in clothing and a mixed structure in education are valid for Sports Science students. However, this does not mean that women do not have problems. Tensions persist for women who are caught between modernization and the traditional approach (Benn et al., 2013a; Benn et al., 2013b).

Engaging in sports as a Muslim woman is often perceived as a challenge. Therefore, women who play sports are exposed to many sanctions or harassment (Senarath and Liyanage, 2020). In this study, it was determined that women who adopted the closed dressing style were verbally harassed with statements such as "Can the veiled woman do sports", "Can the veiled woman wear this". In fact, these statements were in the form of insults and were seen as defamation such as "religious provocateur".

Research has shown that they are influenced by their families' culture and identity processes with ethnic groups (AbdulRazak et al., 2010). In this study, it is seen that female athletes who adopt hijab sportswear style are criticised by their families, relatives, environment and friends. Ethnic approaches are dominant on the basis of these criticisms. In a study interviewed 21 young Muslim women and said that the women were divided into two groups (Walseth and Strandbu, 2014). While one group is based on their ethnic origins and does not consider doing sports within the framework of a respectable understanding of femininity (Pakistanis), the other group is the group that focuses on the health dimension of Islam, promotes itself beyond ethnic identities and is positive about doing sports (Norwegian). Muslim women's participation in sports differs according to countries, rural

or urban areas and the dominance of understanding such as traditionalism and westernization (Sfeir, 1985).

It is important to see the effects of women who adopt the closed dressing style on their participation in physical activity, sports or Physical Education and Sports Science classes. It is because women face many social, political, educational and economic problems. Especially in Muslim countries, problems may arise due to the struggle between religious and sports requirements for athlete women.

From an Islamic feminist perspective, women's participation in sports holds significant value in light of both Islamic teachings and the promotion of healthy living. The hadith narrated by Ibn Umar, where the Prophet (s.a.w.) advises teaching children swimming, archery and horseback riding, underscores the importance of physical skills and sports. Such activities enhance physical fitness, mental health and spiritual well-being. The Quran and Hadith endorse the values of maintaining physical fitness and developing strength; thus, women are encouraged to engage in sports within the boundaries of Islamic etiquette and morality. The Prophet's (s.a.w.) example of racing with female companions illustrates the support for healthy competition and athletic activities. Moreover, the martial prowess of female companion Khawlah bint al-Azwar in battles demonstrates that developing physical abilities and strength in women is accepted in Islam. The hadith narrated by Abu Huraira, "The strong believer is better and more beloved to Allah than the weak believer", highlights that strength acquired through physical activities is commendable in Islam. The overarching principles of Islam emphasize the preservation and enhancement of health; therefore, women's participation in sports is seen as an action that aligns with Islamic values and strengthens their societal roles.

Conclusions

The presence of women who adopt a closed dressing style in sports environments has given rise to several challenges. These women face pressure from various sources, starting within their families

and extending to relatives, friends and educational settings. Balancing religious requirements with athletic demands, they grapple with societal oppression. While attempting to address this issue through flexible clothing choices to enhance their sports performance, they encounter dilemmas due to criticism from their surroundings. A solution lies in adopting a flexible approach, involving joint decision-making and context-specific policies (Benn et al., 2013a; Benn et al., 2013b). Viewing this issue through the lens of 'Islamic Feminism' provides deeper insights into women's experiences. Interestingly, these criticisms come from other women. Despite societal pressure and religious judgments, women emphasize that criticism is disproportionately directed at them, with little scrutiny of men. They express a desire for freedom from interference, regardless of gender or veiling status.

The study underscores the need for inclusive, affordable and comfortable sportswear options tailored to the specific requirements of women who wear hijab. By addressing these challenges, we can create a more supportive environment for all athletes, allowing them to perform at their best without compromising their comfort or beliefs. The scarcity and high cost of suitable hijab sportswear pose significant barriers, leading some women to resort to non-specific athletic clothing or forgo sportswear altogether. To overcome this, brands should focus on diversity and affordability, rather than relying solely on a single solution.

Promoting a healthier lifestyle and breaking down barriers to physical activity for hijab-dressed women requires hijab sportswear brands to prioritize inclusivity in their designs and make their products more accessible. Understanding and respecting the cultural and religious factors that influence women's choices regarding hijab sportswear is essential. Some women may prefer full-body coverage, while others may opt for sportswear allowing more skin exposure.

The limited availability of suitable sportswear options for women, particularly those who wear hijab, significantly impacts their comfort and performance during physical activities. Addressing the deficiencies in marketing and design is crucial to overcoming the challenges women face with

clothing. Prioritizing women's needs when designing sports apparel is essential. The increasing demand for comfortable and stylish options reflects women's desire to participate in physical activities without feeling restricted or uncomfortable.

In conclusion, the lack of diverse and affordable sportswear options for women, especially those who wear hijab, not only hinders their performance but also affects their overall experience during physical activities. By recognizing and addressing these challenges through inclusive design and marketing strategies, sportswear brands can play a vital role in promoting inclusivity and empowering women to lead active and healthy lifestyles. Additionally, there is a significant gap in sportswear marketing for closed dressing styles and existing brands fall short of meeting this demand, necessitating relevant economic policies.

The current study reflects the experiences of only a limited number of women. A more comprehensive research would be possible through quantitative approaches rather than qualitative methods. Therefore, future studies could attempt to reach a larger sample of women who wear the hijab using a scale to reveal broader findings.

Pratical Implications

This study emphasizes the importance of addressing the challenges faced by women who wear hijab in sports environments. These challenges span from societal and cultural barriers to the lack of appropriate sportswear options, significantly impacting their ability to participate in physical activities. The findings suggest that sportswear brands need to prioritize inclusivity by designing affordable, functional and culturally sensitive apparel tailored to the needs of hijab-wearing women. Such designs can enhance comfort, performance and confidence, enabling these women to engage fully in sports without compromising their beliefs or facing societal judgment.

Moreover, the research highlights the necessity for broader societal and institutional efforts to promote inclusivity in sports. Policies that reduce stereotypes and support the integration of hijab-wearing women into sports can foster equality. Collaboration among policymakers, educators and

sports organizations is crucial to creating a supportive environment that acknowledges and respects the diverse needs of athletes. By addressing these issues, sportswear brands and institutions can contribute to empowering hijab-wearing women, promoting active lifestyles and enriching the sports domain with cultural diversity.

A limitation of this study is the restricted number of participants. Future studies could address this topic with larger participant groups and different universities, leading to more detailed and comprehensive findings.

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