

Depression and Anxiety among Low and Middle-Income Turkish Women: The Roles of Coping, and Personal and Environmental Resources

Düşük ve Orta Gelirli Türk Kadınlarında Depresyon ve Anksiyete: Baş Etme ve Kişisel ve Çevresel Kaynakların Rolü

Vahide ULUSOY GÖKÇEK* 

Zahide TEPELİ TEMİZ** 

Abstract

Introduction: Psychosocial theory of mental well-being suggests that coping, socioeconomic status, environmental resources such as perceived and received social support, and personal resources such as self-efficacy can be related to psychological well-being. The current study aims to discuss differences in well-being and psychological resources of Turkish women with low and middle-income. It also aims to examine the differences among lower-income women's well-being according to receiving non-governmental organization (NGO) support. Finally, it studies the link between income level, self-efficacy, perceived social support, ways of coping with stress, depression, and anxiety among Turkish women with different income levels. **Method:** Out of 129 women

* Dr. Clinical Psychologist, Lecturer, Ph.D., İstinye University, Istanbul, Turkey. E-mail: vahideulusoy@gmail.com, orcid.org/0000-0001-8787-9510

** Dr. Clinical Psychologist, Postdoctoral Researcher, Ph.D., The George Washington University, Washington, DC, USA. E-mail: zahide.tepelitemiz@gwu.edu, orcid.org/0000-0001-6980-1226

Cite this article as: Gökçek Ulusoy, V. & Tepeli Temiz, Z. (2023). Düşük ve Orta Gelirli Türk Kadınlarında Depresyon ve Anksiyete: Baş Etme ve Kişisel ve Çevresel Kaynakların Rolü. *KADEM Kadın Araştırmaları Dergisi*, 9(1), 67-92.

This work is licensed under Creative Commons Attribution-NonCommercial 4.0 International License



participated in the study (Mage = 39.12), 60 are with middle-income, and 69 are with low-income. Twenty-eight of those with low income receive NGO support. **Results:** Findings indicates that middle-income women are coping more effectively and have higher perceived social support, while low-income women significantly report more depressive symptoms. Low-income women with NGO support report more symptoms, perceive less social support, and are coping less effectively than women without NGO support. Hierarchical regression analysis reveals that coping styles, self-efficacy, income level, and perceived social support are associated with depression. Moreover, coping styles and perceived social support are related to anxiety. **Conclusion:** Personal resources like coping and self-efficacy seem to be the most significant predictors of depression and anxiety. However, poverty is still a serious environmental risk to well-being.

Keywords: Anxiety, coping, depression, income level, social support, women

Öz

Giriş: Ruhsal iyiliğin psikososyal teorisine göre stresle baş etme, sosyoekonomik durum, çevresel kaynak olan alınan ile algılanan sosyal destek ve kişisel kaynak olan öz yeterlik psikolojik iyi oluşu etkileyebilmektedir. Bu çalışma alt ve orta gelirli Türk kadınlarının iyi oluşları ve psikolojik kaynaklarındaki farklılıklarını incelemeyi amaçlamıştır. Ayrıca sivil toplum kuruluşundan (STK) destek almanın düşük gelirli kadınların psikolojik iyi oluşuyla ilişkisi incelenmiştir. Son olarak, farklı gelir düzeylerine sahip Türk kadınları arasında, gelir düzeyi, öz-yeterlik, algılanan sosyal destek ve stresle başa çıkma tarzlarının depresyon ve anksiyete ile ilişkisi incelenmiştir. **Yöntem:** 129 kişilik örneklemin (Ortyaş = 39.12) 60'ı orta gelirli, 69'u düşük gelirlidir. Ayrıca düşük gelirli kadınların 28'i STK'dan destek almaktadır. **Bulgular:** Bulgular orta gelirli kadınların daha etkili başa çıktığını ve daha fazla sosyal destek algıladığını, düşük gelirli kadınların ise anlamlı düzeyde daha fazla depresif belirti yaşadığını ortaya koymaktadır. Düşük gelirli katılımcılar arasında, bir STK tarafından desteklenen kadınlar, destek almayanlara kıyasla düzeyde daha fazla depresyon ve anksiyete semptomları bildirmiş, daha az sos-

yal destek algılamıő ve daha dűőük dűzeyde etkili baő etme gűs-
termiőtir. Hiyerarőik regresyon analizi stresle baőa ıkma tarzla-
rı, z yeterlik, gelir dűzeyi ve algılanan sosyal desteėin depresyon
ile anlamlı bir Őekilde iliőkili olduėunu, anksiyete belirtilerinin
stresle baőa ıkma tarzları ve algılanan sosyal destekle iliőkili ol-
duėunu ortaya koymaktadır. **Sonu:** Baő etme ve z yeterlik gibi
kiőisel kaynaklar, depresyon ve anksiyeteyi yordayan en belirgin-
faktrler gibi grnmektedir. Bununla birlikte, yoksulluk hl iyi
oluőu engelleyen nemli bir evresel risk faktrdr.

Anahtar kelimeler: Anksiyete, baő etme, depresyon, gelir dűze-
yi, kadın, sosyal destek

Introduction

Given that poverty and social inequality are considered among the most significant social problems in many societies, the relationship between psychological disorders and poverty has become the subject of many studies. According to the psychosocial theory of mental well-being, life stressors such as low socioeconomic status (SES) provoke mental health symptoms (i.e., depression) while personal (i.e., self-efficacy) and environmental resources (i.e., social support), dispositional responses (i.e., coping) and interrelationships between these factors and resources could buffer this relationship (Billings & Moos, 1982, 1985).

Low Socioeconomic Status as Environmental Stressor

Life strain is expected to be more frequent and severe in low-income conditions (Lever, 2008). As a life strain, chronic poverty leads to daily stressors that cause several psychological disorders, such as depression, anxiety and excessive alcohol use (Billings & Moos, 1982, 1985; Palomar-Lever & Victorio-Estrada, 2012; Wadsworth, 2012). Low income is associated with a higher risk of the onset of depression (Kosidou et al., 2011) and an increased incidence of depression (Koster et al., 2006). Although studies reveal inconsistent findings for the relationship between SES and mental health (Frank et al., 2003), some research emphasizes the cumulative effect of low income or low SES, suggesting environmental, county, or social class level measures of poverty to comprehend such relationship (Tirgil & Aygün, 2021; Williams et al., 2011). For example, county-level indices for low-income predict depression among women who are low-wage nursing workers in the U.S. (Muntaner et al., 2006). According to the area-based poverty indices, the low SES group has twice increased odds of depression (Williams et al., 2011). According to a bibliometric study covering 52-year literature, low SES increases the risk of depression, and poor people have significantly less access to mental health services (Panori et al., 2019).

Although poverty threatens both genders, it affects women more (Kavlak et al., 2013). A number of studies show that mothers are at high risk of depression because of their gender and their low socioeconomic status (Hall et al., 1985; Wolff et al., 2008). Moreover, women with low incomes have more depressive symptoms and greater anxiety than women with medium or high incomes (Gourounti et al., 2013). However, Wil-

liams et al. (2011) finds a U shape relation between SES and mood disorders, indicating that low and high SES display significantly increased incidence of a mood disorder in comparison with mid-SES group.

In the Turkish context, there are a few studies on the relationship between mental health status, gender, and income level (Celik et al., 2022; Kose, 2020; Ozcan et al., 2013; Tirgil & Aygün, 2021). Based on the Turkish Health Survey of 2016, Kose (2020) states that women have lower mental health status than men. In Türkiye, the prevalence of depression is higher in women than in men according to OECD (Kose, 2020). Furthermore, women are found more likely than men to report depression based on the report of TurkStats in 2019 (Tirgil & Aygün, 2020). There is a positive relationship between mental health status and household income level (Kose, 2020; Tirgil & Aygün, 2020), which implies decreasing in mental well-being by lower income level.

Conceptualization of Low SES

This study conceptualizes low SES as employment and housing precarity characterized by instability, insecurity, uncertainty, and unpredictability (Bourassa, 2011; Ettlinger, 2007; Waite, 2009). Nonstandard work without social and health insurance, called employment precarity, are a relatively newer conception, and experts of politics, economy, anthropology, and sociology claim it to be a strong indicator of poverty (Das & Randeria, 2015; Ettlinger, 2027; Guyer, 2018; Güler, 2015; Jain & Hassard, 2014; Karadeniz, 2011; Meehan, 2021; Waite, 2009). Moreover, qualitative studies suggest that employment and housing precarity have a deteriorating effect on the quality of life and cause life strain as a new form of poverty in the UK, Portugal, South Africa, and Canada (Carvalho, 2016; Masenya et al., 2017; PEPSO, 2020; Watt, 2020). Also in the Turkish context, employment precarity has been considered as one of the signs of poverty (Erdoğan & Kutlu, 2014; Güler, 2015; Karadeniz, 2011; Ulutaş, 2017; Yılmaz, 2012) indicating unstable and fluctuating payment, impermanence, and lack of insurance because social insurance programs leave atypical workers out of the coverage of the social and health systems (Karadeniz, 2011). Furthermore, the growing body of research into the relationship between precarity and mental health (Dolson, 2015; Nahon et al., 2012; Pazderka et al., 2022; Raifman et al., 2022; Singh et al., 2018; Wojciech et al., 2015) has encouraged us to use the concept of precarity as an indicator of low socioeconomic in

the current study status and has also allowed for hypothesizing a relation between more precarity and increasing psychological symptoms.

Self-Efficacy as a Personal Resource

Self-efficacy is reaching a particular goal and accomplishing a specified activity or task (Bandura, 1977). Low self-efficacy has been associated with a higher level of stress (Dwyer & Cummings, 2001), depression, and anxiety (Albal & Kutlu, 2010; Sharma & Kumra, 2022) and low level of perceived social support (Karademas, 2006; Thompson et al., 2002). Given psychosocial theory suggesting that personal resources could be the characteristics that are global and persistent (Billings & Moos, 1982), the current study conceptualized self-efficacy as a personal resource (Schwarzer, 2014).

Social Support as an Environmental Resource

Social support is one's perception of available resources in social networks (Cohen, 1985; Thompson et al., 2002). Thoits (1995) defined social support as a coping resource that draws on a social fund to handle stressors. As a psychosocial resource, social support is attributed to the various supportive functions of significant others, usually family, friends, and coworkers (Thoits, 1995). Social support is closely related to depression, well-being, self-esteem, coping, and self-efficacy (Major et al., 1990; Thompson et al., 2002). Social support also moderates the adverse psychological effects of stressful life events and life strain on mental health problems (Cohen & Wills, 1985; Hupcey, 1998).

Social support is divided into two categories: perceived and received social support. The first is a general judgment about the availability of support and satisfaction with it; the latter is the quantity of social support (Melrose et al., 2015; Sorias, 1988). As a psychological resource, perceived social support is more influential than received social support for emotional well-being and mental health (Wethington & Kessler, 1986). According to the meta-analysis of Haber et al. (2007), the positive correlation between the two types of social support is relatively mild. However, this relation is more substantial if social support is provided when needed (Melrose et al., 2015).

On the other hand, receiving social support, which could be considered an environmental resource because of phenomenological congruence, also functions to enhance perceived social support (Thoits, 1995).

However, the mental health outcome was related more to recipients' perceptions of social support (Wethington & Kessler, 1986). Although some researchers reveal its positive effect on physical health, the effect of received social support could be positive or negative according to the type of support such as the emotional, instrumental, appraisal, or informational, to the context of support, provider-related circumstances, and especially responsiveness (Maisel & Gabel, 2020; Prati & Pietrantonio, 2010; Uchino et al., 2011). Moreover, Uchino (2004) asserted that receiving social support could be detrimental when "it is not provided in a warm and nurturant manner". Also, when support is much more than one's need, the positive relation between received and perceived social support is detrimental (Melrose et al., 2015). Ang and Malhotra (2016) claimed that mediator factors such as personal mastery suppressed the ameliorating effect of received social support on depressive symptoms. Thus, the types, manner, and amount of received social support and mediators are essential to understand the dynamics of its effect on mental health.

Receiving support from an NGO

In the current study, received social support is operationalized as support from a non-governmental organization (NGO) which boosts the education and social skills of children who work on the streets and provides psychosocial support to their lower-income mothers. Especially in poorer countries or disadvantaged groups in wealthy countries, NGOs may hold structured psychoeducational programs or psychosocial interventions for specific groups such as people with HIV, substance use disorder or depression (Asante et al., 2021; Chacrapani et al., 2022; Rose-Clarke et al., 2020), and refugees (Acarturk et al., 2022; Rawlinson et al., 2020; Sijbrandij et al., 2020). However, there has yet to be any previous research on the role of receiving unstructured, need-based social support, not an intervention, from an NGO on well-being in women with lower income. In the current study, the support from the NGO is long-standing and multifaced. The NGO provides educational support and restricted in-kind aid for children, including stationery items for school, clothes for feasts, and children's transportation fees. For their low-income mothers, the NGO carries out semi-structured psychoeducational and skills training and provides opportunities to cook with the view to selling. In the current study, both perceived and received social support were examined regarding well-being indices.

Due to a hypothesis about the interdependence of social support and coping, many studies have supported the positive relationship between perceived social support and adaptive coping strategies (Valente et al., 2009). Moreover, seeking social support is considered an emotion-focused strategy (Cadigan, 2014; Sanguanklin et al., 2014) that reduces depression and ameliorates the effect of economic stressors (Wadsworth, 2012; Wethington & Kessler, 1986).

Coping

Coping mechanisms are cognitive, emotional, and behavioral efforts to control the stress response and deal with stressors (Farley et al., 2005). As claimed by psychosocial theory (Billings & Moos, 1982) coping may be influenced by environmental stressors like low-income conditions which promote inadequate coping mechanisms making individuals more vulnerable to stress (Lever, 2008; Nelson, 1989; Wadsworth, 2012). On the other hand, some researchers suggest that coping moderates the adverse psychological effects of stressful life events and life strain on mental health problems (Nelson, 1989). Impoverished individuals use specific coping strategies, including seeking emotional coping, social support, denial, self-blame, and reductionism, significantly more than the moderately poor and better-off groups (Lever, 2008). Conversely, this group rarely uses direct strategies like problem-focused coping (Nelson, 1989), which has the best effect on psychological well-being and is negatively associated with depression, postpartum depression, anxiety, and psychological distress (Farley et al., 2005; Lipinska-Grobelny, 2011). As economic stress is positively associated with depressive symptoms, improved coping skills and active control coping are negatively related to depression in women (Wadsworth et al., 2011).

Well-being Indices

Well-being is a complex construct in which different concepts come together, ranging from affective evaluation (positive and negative emotions) to cognitive assessment (global life satisfaction) (Diener, 2000). Three components of well-being that have been mainly researched are life satisfaction, positive affect, and negative affect (Kump Dush et al., 2008). On the other hand, Grossi and Compare (2014) measure general psychological well-being with the following more broader domains: anxiety, depression, positive well-being, self-control, general health, and

vitality. This analysis focuses on depression and anxiety for a broader understanding of the association between coping, social support, self-efficacy, and negative well-being indicators.

The psychosocial theory of mental health suggests that coping may promote mental health and be affected by environmental stressors like poverty and personal and environmental resources separately. Also, environmental stressors may be affected by personal and environmental resources (Billings & Moos, 1982). In line with the theory, we assume that a hierarchical regression model of depression/anxiety may be estimated by coping, economic level, self-efficacy, and social support.

Current Study

Since there are only a few studies examining the relationship between Turkish women's economic conditions and their well-being (Celik et al., 2022; Kose, 2021; Ozcan et al., 2013; Tirgil & Aygul, 2021), this study first examined the role of income level, self-efficacy, coping, perceived social support on depression and anxiety among lower and middle-income Turkish women. We hypothesized that lower-income women displayed worse results than middle-income level. We also hypothesized that coping, economic level, self-efficacy, and social support explained a significant amount of the variable in a hierarchical model of depression and anxiety, separately. The second purpose of this study was to examine differences in self-efficacy, perceived social support, depression, and anxiety levels and coping styles of low-income women based on receiving or not receiving NGO support. We hypothesized that women who received support from an NGO displayed better results than women who were not recipients. As far as is known, this is the first study to reach out to low-income women from impoverished neighborhoods and examine any NGO support's role in their well-being in Türkiye.

Method

Participants and Procedure

Based on the literature, inclusion criteria for low-income level covered precarious work (no social insurance of spouses and only one has an income equivalent to minimum wage), precarious home (being a tenant), and having more than one child besides perceived low socioeconomic level. Inclusion criteria for middle-income level were having a standard job with social insurance and being a homeowner. The data of

lower-income mothers who were NGO support recipients were collected by purposive sampling via an NGO which has given social and educational support to child street sellers and their mothers to strengthen children's readaptation to the national education system. The data of lower-income mothers without support from an NGO was collected by snowball sampling via volunteer NGO-supported mothers who introduced researchers to their neighbors from impoverished areas in Istanbul. The data of mothers with middle-income level status was recruited by convenient sampling via psychology students who studied without a full scholarship in private universities in Istanbul. The sample comprised 129 women of whom 53.5 percent (n=69) had a low SES, and 46.5 percent (n=60) had a medium SES. Only 40.6% of women with lower income (n=28) have received support from an NGO. 28 women received institutional social support. Participants' average marriage duration was 17.18 years (SD=8.39), and the average age was 39.12 years (SD=7.72).

The study was carried out in conformity with the internationally recognized Helsinki Declaration of 1964, the latest revision in 2013, following ethical approval of Fatih Sultan Mehmet Vakıf University Ethics Committee (Approval Date: 26.07.2017), Istanbul, Turkiye. Participants were orally informed about the study and signed an informed consent form before being given the scale battery, including a demographic form and psychometric scales, which are explained above. The survey took approximately 15 minutes, depending on the educational level of the participants.

Table 1. Descriptive Statistics About Participants

Age range		39.12±7.72
Social status	N	%
Low income	69	53.5
Middle income	60	46.5
Total	129	100
NGO-support recipients among low income	28	40.6

Measures

Demographics. The demographic questionnaire included the date of birth, gender, level of education, employment status of women and their husbands, marital status, parental status, social insurance, perceived socioeconomic level of the family, etc.

Ways of Coping with Stress Inventory. The scale was developed by Şahin and Durak (1995) based on the Ways of Coping Inventory, a widely utilized scale by Folkman and Lazarus (1988). The questionnaire comprises 30 items and five subscales (self-confident, optimistic, submissive, helpless styles, and seeking social support). The items of the scale are rated on a 4-point Likert-type scale anchored by 1= 0%, 2= 30%, 3= 70%, and 4= 100%. The possible score range is 0 to 120 for the entire scale. The scale has long been used also into two dimensions called effective (problem-oriented/active) and ineffective (emotion-oriented/passive) after a discriminative analysis, providing a better reliability coefficient (e.g., Bayrak et al., 2018; Şahin et al., 2009; Şahin et al., 2009). Effective coping includes ‘optimistic approach’, ‘self-confident approach’, and ‘receiving social support’. Ineffective coping consists of the ‘helpless approach’ and ‘submissive approach’. The scale indicated good internal consistency ($\alpha = .82$ for effective coping, $\alpha = .78$ for ineffective coping). In the current study, Cronbach’s alpha values are .86 for effective coping and .85 for ineffective coping.

Multidimensional Scale of Perceived Social Support (MSPSS). MSPSS, developed by Zimet et al. (1990), was adapted to Turkish by Eker and Akar (1995). The scale comprises 12 items and three subscales related to the resources of support (family, friends, particular person), with four items for each subscale. The items are rated on a 7-point Likert-type scale from “definitely no” to “definitely yes” The scale gives an overall score varying between 12 and 84. Higher scores indicate greater perceived social support. Turkish adaptation showed good internal consistency ($\alpha = .89$). In this study, Cronbach’s alpha value was .90.

General Self-Efficacy Scale (GSE). GSE, developed by Schwarzer and Jerusalem (1995) and adapted to Turkish by Aypay (2010), has ten items, measured on a 4-point scale anchored by 1= “not at all true”, 2= “hardly true”, 3= “moderately true”, 4= “exactly true” to produce scores that can range from 10 to 40. Higher scores reveal higher self-efficacy. Turkish adaptation showed good internal consistency ($\alpha = .83$). In this study, Cronbach’s alpha value was .88.

Beck Depression Inventory (BDI). The 21-item Beck Depression Inventory was developed by Beck in 1961. Each item reflects a behavioral feature of depression. The total score, measured on a 4-point

Likert scale, can vary between 0 and 63. Higher scores indicate higher depression levels. Reliability and validity analyses of the Turkish version of the BDI were performed by Tegin (1980) and Hisli (1988). The split-half and test-retest reliabilities were significantly high (Hisli, 1988). Cronbach's alpha of .88 was obtained for the scale in this study.

Beck Anxiety Inventory (BAI). The BAI is a 21-item self-report scale measuring the symptoms of anxiety. The total score, measured on a 4-point Likert scale, ranges between 0 to 63, with higher scores indicating more anxiety. Internal consistency of the Turkish version of the inventory, adopted by Ulusoy, Hisli, and Erkmén (1998), is significantly high at .93. Cronbach's alpha for the BAI was .93 in this study.

Design

The current study is descriptive research with a cross-sectional design. The first aim of the study was investigated in two steps: 1. socioeconomic group differences in depression, anxiety, effective coping, ineffective coping, self-efficacy, and perceived social support, 2. the examination of the hierarchical regression model of depression and anxiety with an array of predictors: a) socioeconomic group as dummy variable b) effective and ineffective coping c) self-efficacy (personal resource) and perceived social support (environmental resource). For the second purpose of this study, two groups were generated according to receiving or not receiving support from NGO, and the differences in means of the groups were compared.

Statistical Analysis

The data were analyzed using the Statistical Package for Social Sciences (SPSS) for Windows Version 21.0. In the preliminary analysis, the Pearson correlation test was used for continuous variables, and Spearman's rank correlation test was used for categorical variables. T-test was used for group comparisons. Plots were used for normality assessment for t-tests. Hierarchical regression was carried out to explore whether the predictor variables explained the variance in depression and anxiety. The hierarchical regression model was checked for linearity and normality by Mahalanobis distance and residual plots. Three outlier cases controlled normal distribution were excluded from further analysis. Possible multicollinearity was investigated using tolerance, condition indices, variance inflation factor (VIF) statistics, and

correlation analyses between the independent variables. The results confirmed that multicollinearity was not a problem in this data. $p < .05$ was accepted as a significance level.

Results

Preliminary Analysis

Depression showed a negative correlation with self-efficacy ($r = -.41$, $p < .01$), perceived social support ($r = -.41$, $p < .01$), and socioeconomic status ($r = -.33$, $p < .01$), also a positive correlation with ineffective ($r = .28$, $p < .01$) and negative correlation with effective ($r = -.22$, $p < .05$) coping style. A significant correlation was found between anxiety and ineffective coping ($r = .59$, $p < .01$). Anxiety also correlated with effective coping ($r = .30$, $p < .01$) and self-efficacy ($r = -.18$, $p < .05$). Self-efficacy showed a significant positive correlation with effective coping ($r = .34$, $p < .05$) and perceived social support ($r = .29$, $p < .01$). There was no significant correlation between socioeconomic status and anxiety.

Table 2. Correlation Coefficients Between Coping, Self-Efficacy, Social Support, Depression, and Anxiety

	1	2	3	4	5	6
1. Ineffective coping	1					
2. Effective coping	.42**	1				
3. Anxiety	.59**	.30**	1			
4. Depression	.28**	-.22*	.48**	1		
5. Perceived soical support	-.11	.27**	-.16	-.41**	1	
6. Self-efficacy	-.16	.34**	-.18*	-.41**	.29**	1
7. Socio-economic status	.02	.20	.07	-.33**	.28**	.10

Note. ** $p < .01$, * $p < .05$

Economic Level Groups and Psychological Symptoms

Differences between personal and environmental resources and the well-being of income groups were analyzed with the t-test. According to the results, middle-income women were coping more effectively; $t(127) = -2.49$, $p = .014$. The effect size was moderate; Cohens's $d = .44$. Compared to low-income women, middle-income women have significantly higher levels of perceived social support; $t(127) = -3.32$, $p = .001$. Cohen's $d = .59$ indicated a medium effect size. Low-income women reported significantly more depressive symptoms than middle-income women; $t(127) = 4.09$,

$p=.000$. Cohen's $d=.71$ indicated a strong effect size. Results revealed no other significant results.

Table 3. Group Differences Between Lower-Income and Better-Off Women

Variables	Levene		t	p	Lower-income		Middle-income	
	F	sig.			X	sd	X	sd
Ineffective coping	3.59	.06	-.24	.813	17.28	7.66	17.62	8.67
Effective coping	3.59	.06	-2.49	.014	37.69	7.05	41.14	8.69
Self-efficacy	.15	.70	-1.15	.253	31.54	5.86	32.70	5.55
Perceived social support	3.86	.05	-3.32	.001	57.00	18.49	66.87	14.72
Depression	13.51	.00	4.09	.000	15.96	11.17	9.28	7.19
Anxiety	.05	.83	-.74	.459	18.36	14.24	20.20	13.75

To explain the variance of depression and anxiety, two hierarchical regression analyses were conducted. In the first regression analysis, income level, effective and ineffective coping, self-efficacy, and perceived social support were assessed as predictors of depression. Results showed that the income level predicted depression scores and explained 11% of the variance at the first step. All five variables explained 37% of the total variance of depression scores; $R^2=.37$, $F(4,128)=14.44$, $p=.000$. According to the hierarchical regression parameters, the order of importance of predicting variable was respectively as ineffective coping ($\beta=.30$, $p=.001$), self-efficacy ($\beta=-.23$, $p=.007$), income level ($\beta=.22$, $p=.004$), and perceived social support ($\beta=-.21$, $p=.011$).

Table 4. Hierarchical Regression Results of Predictor Variables for Depression Scores

Steps and Variables	B	SE	β	t	p	Partial r
1st Step SES	6.68	1.68	.33	3.97	.000	.33
%Explained Variance R^2	.11*					
2nd Step SES	5.39	1.56	.27	3.45	.001	.30
Ineffective coping	-.42	.11	-.34	-3.95	.574	-.33
Effective coping	.53	.10	.40	5.15	.300	.42
%Explained Variance R^2	.28*					
3rd Step SES	4.48	1.52	.22	2.95	.004	.26
Ineffective coping	-.20	.12	-.16	-1.72	.089	-.15
Effective coping	.37	.11	.30	3.44	.001	.30
Perceived social support	-.12	.05	-.21	-2.59	.011	-.23
Self-efficacy	-.40	1.45	-.23	-2.75	.007	-.24
%Explained Variance R^2	.37*					

Note. * $p<.05$

The second hierarchical regression model was conducted to explain the variance of anxiety scores. Due to the nonsignificant correlation between socioeconomic status and anxiety, SES was not included in the regression model predicting anxiety. The predictors were effective and ineffective coping, self-efficacy, and perceived social support. All four variables explained 44% of the total variance of depression scores; $R^2 = .44$, $F(4,128) = 24.00$, $p = .000$. Results showed that ineffective and effective coping and perceived social support significantly predicted anxiety.

Table 5. Hierarchical Regression Results of Predictor Variables for Anxiety Scores

Steps and Variables	B	SE	β	t	p	Partial r
1st Step						
Ineffective coping	.78	.12	.53	6.57	.000	.50
Effective coping	.27	.14	.16	1.15	.052	.17
%Explained Variance R^2	.39*					
2nd Step						
Ineffective coping	.63	.13	.43	4.89	.000	.40
Effective coping	.50	.15	.29	3.23	.002	.28
Perceived social support	-.15	.06	-.18	-2.52	.013	-.22
Self-efficacy	-.31	.19	-.13	-1.58	.117	-.14
%Explained Variance R^2	.44*					

Note. * $p < .05$

Groups of NGO-support Recipient

There was a significant negative correlation between perceived social support and support from an NGO ($r = -.33$, $p < .01$) and a positive correlation between depression and support from an NGO ($r = .32$, $p < .01$). Regarding low-income women receiving support from an NGO made a difference in levels of perceived social support, depression and anxiety and effective coping. NGO-support recipients among lower-income women reported significantly more depression and anxiety; respectively, $t(67) = 2.63$, $p = .011$, $t(68) = 2.60$, $p = .011$. Cohen's $d = .80$ indicated a strong effect size for anxiety, and $d = .66$ showed a medium effect size for depression. They also perceived significantly less social support; $t(67) = -2.93$, $p = .005$ and were coping less effectively; $t(67) = -2.98$, $p = .004$. An almost large effect size was found $d = .77-.73$ for perceived social support and effective coping.

Table 6. Group Differences Between Lower-Income Women with and without Support From NGO

Variables	Levene		t	p	Support from an NGO		No support	
	F	Sig.			X	sd	X	sd
Ineffective coping	2.40	.13	1.35	.181	18.92	6.01	16.34	8.38
Effective coping	.50	.48	-2.98	.004	34.52	7.20	39.50	6.37
Self-efficacy	2.95	.09	-1.40	.166	30.24	6.86	32.28	5.15
Perceived social support	3.39	.07	-2.93	.005	48.80	13.12	61.66	19.58
Depression	.00	.97	2.63	.011	20.46	10.56	13.40	10.80
Anxiety	.55	.46	2.60	.011	24.05	12.07	15.13	14.49

Discussion

This study examined the depression and anxiety levels of women with low- and middle-income in terms of coping, environmental stressor (i.e., income level), personal psychological resource (i.e., self-efficacy), and environmental resources (i.e., perceived social support, received social support). Group differences between income groups showed that middle-income women were coping effectively and perceived more social support, and were less depressed congruent with previous research results (Hoebel et al., 2017; Linder et al., 2019; Wojciech et al., 2015). However, the two groups were similar regarding ineffective coping, anxiety, and self-efficacy. Anxiety also was not associated with SES in this study, although a wide range of research reported otherwise (Kosidou et al., 2011; Linder et al., 2019; Mwinyi et al., 2017; Nunes et al., 2022). Anxiety was seen in this sample independently of SES. However, the sample is small to generalize. Considering the relationship between anxiety and SES in the literature, longitudinal studies and cluster analyses with larger samples are needed.

Findings of hierarchical regression revealed a moderate correlation between SES and depression, in line with the findings of previous studies revealing that low income can provoke more depressive symptoms (Aranda & Lincoln, 2011; Hoebel et al., 2017; Linder et al., 2019; Wojciech et al., 2015). As a contributory factor for the life strain, low SES predicted depression among the Turkish women in this study. While the relationship between SES and depression was moderate in this study, ineffective coping and self-efficacy seemed stronger predictors than the economic level in the hierarchical model. Effective coping had a positive relationship, but self-efficacy and perceived social support had a nega-

tive relationship with depression, meaning that depression increases as effective coping increases, and self-efficacy and perceived social support decrease in agreement with the previous studies (Albal & Kutlu, 2010; Cadigan, 2014; Gourounti et al., 2013).

A hierarchical model of effective coping, ineffective coping, perceived social support, and self-efficacy explained 44% of the variance of anxiety. In the model, effective and ineffective coping and social support were significant predictors, while self-efficacy was not. In the literature, anxiety is reported to be related positively to ineffective but negatively to effective coping (Jokela, 2022; Lu et al., 2015; Pozzi et al., 2015; Rogowska et al., 2022; Wijndaele et al., 2006). Unexpectedly, current results showed a positive relationship between anxiety and effective coping, including optimistic, self-confident, and receiving social support in the study. The definition of effective coping by containing social support may lead to unexpected results as people with anxiety seek support at most (Pozzi et al., 2015). This unexpected result has also been explained to be due to cultural differences, different appraisal standards, and different methods as well as different measurement tools used in studies. Although effective coping skills did not provide a useful coping resource in this sample, this finding could not be generalizable to the population. Thus, more longitudinal studies are needed. Nevertheless, the results suggest that psychologists in the field address the on-point personal resources in programs developed to protect low-income women's mental health.

Results showed a mild correlation between receiving support from an NGO and perceived social support, similar to the findings of previous studies (Haber et al., 2007; Melrose et al., 2015). In line with Melrose et al. (2015) and Maisel and Gabel (2020), the mild relationship between received and perceived social support could stem from the responsiveness of support provided by NGO, which contained primarily social and educational support of the participants despite their immediate need of economic support. Group differences showed that low-income women who were not NGO-support recipients had better outcomes regarding effective coping, perceived social support, depression, and anxiety. The results against NGO support could be explained by the amount, perceived responsiveness, and type of the received support, which could promote a detrimental effect on psychological well-being (Maisel & Ga-

bel, 2020; Melrose et al., 2015; Prati & Pietrantonio, 2010; Uchino et al., 2011). Gilman et al. (2013) found that people with severe economic strain benefited more from psychological interventions, but the positive outcomes declined over time, indicating that shorter duration was effective among poorer participants. Also, high levels of social support increased psychological symptoms (Paukert et al., 2015). In the current study, NGO support has been ongoing for a long time (around ten years), which may explain the worse well-being of the support recipients. They also discussed that in the long run, adverse effects of economic strain could outweigh gains in mental well-being. Participants in the current study were also exposed to economic strain for a long time. However, the underlying results of receiving NGO support can be linked to participants' inclination to represent themselves as needier than they were for sustaining the support they were receiving. Nevertheless, more research needs to be conducted to eliminate the diminishing effect of self-efficacy or other possible moderator factors on the receiving social support and well-being, as shown in Ang and Malhotra's study (2016).

Although the qualities of the received support such as type, amount, and perceived responsiveness by recipients, could also change the effect of receiving social support (Maisel & Gabel, 2020; Prati & Pietrantonio, 2010; Uchino et al., 2011), they were not discussed in this study. Despite the adverse effect of the NGO in this study, NGOs may provide valuable opportunities to strengthen the personal resources and well-being of low-income women who cannot reach mental health professionals even if they have social health insurance since the public health system does not cover psychological support programs (i.e., skills training), nor psychotherapy in Türkiye. In this context, systematic reviews and meta-analysis indicated that psychological interventions for depression were effective to ameliorate the symptoms in low SES population (Rojas-Garcia et al., 2015) and in women with low SES (Bellon et al., 2015; van der Waerden et al., 2011).

Limitations and Future Directions

The most important limitation of this study is the sample size. A larger sample of impoverished people who receive support from NGOs could provide more precise results and more models to explain both depression and anxiety via independent variables in the current study. Besides, future research could explore a possible buffering effect of so-

cial support between socioeconomic level and mental health. The current study provides a significant contribution to research into support from NGOs on depressive symptoms of impoverished Turkish women. Future research should target specific skills training and social support programs for low-income women and evaluate their efficacy. Because of personal factors, targeted support could be built around the community to better contribute to reducing the gap between the well-being of women of lower and higher socioeconomic status.

In conclusion, while the personal resource (self-efficacy) seemed to have the most substantial effect on well-being, environmental variables, such as income level and receiving social support, had a contradictory or diminishing effect on well-being. Although present research failed to show any booster effect of NGO support, the results revealed that the women struggling with poverty could protect their mental health against harsh economic conditions by empowering effective coping skills, self-efficacy, and perceived social support. Therefore, it is likely that organizational support targeting boosting the personal resources of disadvantaged women could ameliorate the detrimental effects of poor socioeconomic living conditions.

TeŐekkür: Bulunmamaktadır.

Hakem Deđerlendirmesi: DıŐ bađımsız çift kór hakemli

Çıkar ÇatıŐması: Yazar çıkar çatıŐması bildirmemiŐtir.

Finansal Destek: Yazar bu çalıŐma için finansal destek almadıđını beyan etmiŐtir.

Acknowledgement: N/A.

Peer-review: Externally double-blind peer-reviewed.

Conflict of Interest: The author has no conflict of interest to declare.

Grant Support: The author declared that this study has received no grant support.

Compliance with Ethical Standards

Ethical approval was obtained from Fatih Sultan Mehmet Vakıf University Ethical Committee (Approval Date: 26.07.2017).

References

- Acarturk, C., Uygun, E., Ilk kursun, Z., Carswell, K., Tedeschi, F., Batu, M., ... & Barbui, C. (2022). Effectiveness of a WHO self-help psychological intervention for preventing mental disorders among Syrian refugees in Türkiye: a randomized controlled trial. *World Psychiatry*, 21(1), 88-95.
- Ang, S., & Malhotra, R. (2016). Association of received social support with depressive symptoms among older males and females in Singapore: Is personal mastery an inconsistent mediator? *Social Science & Medicine*, 153, 165-173. doi: 10.1016/j.socscimed.2016.02.019
- Aranda, M. P., & Lincoln, K. D. (2011). Financial strain, negative interaction, coping styles, and mental health among low-income Latinos. *Race and Social Problems*, 3(4), 280-297. doi: 10.1007/s12552-011-9060-4
- Asante, K. O., Asiama-Sampong, E., & Appiah, R. (2021). A qualitative exploration of the role of NGOs in the recovery support for persons with substance use disorders in a low-income African setting. *Substance Abuse Treatment, Prevention, and Policy*, 16(1), 1-10.
- Aypay, A. (2010). The adaptation study of General Self-Efficacy (GSE) Scale to Turkish. *Inonu University Journal of the Faculty of Education (INUJFE)*, 11(2).
- Bayrak, R., Güler, M., & Şahin, N. H. (2018). The mediating role of self-concept and coping strategies on the relationship between attachment styles and perceived stress. *Europe's Journal of Psychology*, 14(4), 897-913. doi: 10.5964/ejop.v14i4.1508
- Bellón, J. Á., Moreno-Peral, P., Motrico, E., Rodríguez-Morejón, A., Fernandez, A., Serrano-Blanco, A., ... & Conejo-Ceron, S. (2015). Effectiveness of psychological and/or educational interventions to prevent the onset of episodes of depression: A systematic review of systematic reviews and meta-analyses. *Preventive medicine*, 76, S22-S32. doi: 10.1016/j.ypmed.2014.11.003
- Billings, A. G., & Moos, R. H. (1982). Stressful life events and symptoms: A longitudinal model. *Health psychology*, 1(2), 99.
- Billings, A. G., & Moos, R. H. (1985). Life stressors and social resources affect post-treatment outcomes among depressed patients. *Journal of Abnormal Psychology*, 94(2), 140.
- Bourassa, C. (2011). Absolute & Relative Poverty. In The Editors of Salem Press (Eds.), *The Effects of Poverty & the Welfare State* (p.24-33). Salem Press.
- Cadigan, R. J., & Skinner, D. (2015). Symptoms of depression and their management among low-income African-American and White mothers in the rural South. *Ethnicity And Health*, 3, 293. doi:10.1080/13557858.2014.921889
- Carvalho, I. S. F. P. D. (2016). Poverty and precarity in Portugal (Doctoral dissertation).
- Çelik, A., Ener, D., & Çetinkaya, F. (2022). Aksaray ilinde meslek edindirme kursuna devam eden kadınlarda depresif belirti görülme sıklığı ve çeşitli faktörlerle ilişkisi. *ESTÜDAM Halk Sağlığı Dergisi*, 7(3), 461-475.
- Chakrapani, V., Kaur, M., Tsai, A. C., Newman, P. A., & Kumar, R. (2022). The impact of a syndemic theory-based intervention on HIV transmission risk behaviour

- among men who have sex with men in India: Pretest-posttest non-equivalent comparison group trial. *Social science & medicine*, 295, 112817.
- Cohen, S., & Wills, T. A. (1985). Stress, social support and the buffering hypothesis. *Psychological Bulletin*, 98(2), 310-357.
- Das, V., & Randeria, S. (2015). Politics of the urban poor: Aesthetics, ethics, volatility, precarity: An introduction to supplement 11. *Current Anthropology*, 56(S11), S3-S14. doi: 10.1086/682353
- Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American Psychologist*, 55(1), 34.
- Dolson, M. S. (2015). Trauma, workfare and the social contingency of precarity and its sufferings: The story of Marius, a street-youth. *Culture, Medicine, and Psychiatry*, 39, 134-161.
- Erdoğan, S., & Kutlu, D. (2014). Dünyada ve Türkiye’de çalışan yoksulluğu: İşgücü piyasası ve sosyal koruma politikaları bağlamında bir değerlendirme. *Çalışma ve Toplum*, 41(2).
- Ettlinger, N. (2007). Precarity unbound. *Alternatives*, 32(3), 319-340. doi:10.1177/030437540703200303
- Farley, T., Galves, A., Dickinson, L. M., & Perez, M. de J. D. (2005). Stress, coping, and health: A comparison of Mexican immigrants, Mexican-Americans, and non-hispanic whites. *Journal of Immigrant Health*, 7(3), 213-220. doi: 10.1007/s10903-005-3678-5
- Folkman, S., & Lazarus, R. S. (1988). Coping as a mediator of emotion. *Journal of Personal and Social Psychology*, 54, 466-75.
- Frank, J. W., Cohen, R., Yen, I., Balfour, J., & Smith, M. (2003). Socioeconomic gradients in health status over 29 years of follow-up after midlife: The Alameda county study. *Social science & medicine*, 57(12), 2305-2323. doi: 10.1016/j.socscimed.2003.08.003
- Grossi, E., and Compare, A. (2014). “Psychological General Well-Being Index (PGWB),” in *Encyclopedia of Quality of Life and Well-Being Research*, 5152–5156. doi: 10.1007/978-94-007-0753-5_2309
- Gourounti, K., Anagnostopoulos, F., & Lykeridou, K. (2013). Coping strategies as psychological risk factor for antenatal anxiety, worries, and depression among Greek women. *Archives Of Women’s Mental Health*, 16(5), 353-361. doi:10.1007/s00737-013- 0338-y.
- Güler, M. A. (2015). Ulusal istihdam stratejisi bağlamında Türkiye’de güvencesiz çalışma. *Çalışma ve Toplum*, 46(3).
- Guyer, J. I. (2018). Pauper, percentile, precarity: Analytics for poverty studies in Africa. *Journal of African History*, 59(3), 437-448. doi:10.1017/S0021853718000427
- Hall, L. A., Williams, C. A., & Greenberg, R. S. (1985). Supports, stressors, and depressive symptoms in low-income mothers of young children. *American Journal of Public Health*, 75(5), 518-522.
- Hisli, N. (1988). Validity, reliability of Beck Depression Inventory. *Journal of Psychology*, 7(23), 3-13. (Turkish)

- Hisli, N. & Durak, A. (1995). Ways of Coping With Stress Inventory: Adaptation for university students. *Psikoloji Dergisi*, 10(34), 56-73.
- Hoebel, J., Maske, U. E., Zeeb, H., & Lampert, T. (2017). Social inequalities and depressive symptoms in adults: the role of objective and subjective socioeconomic status. *PloS one*, 12(1), e0169764.
- Hupcey, J. E. (1998, May 3). Social support: Assessing conceptual coherence. *Qualitative Health Research*, 8(3), 304-318.
- Jain, A., & Hassard, J. (2014). Precarious work: Definitions, workers affected and OSH consequences. Spain: EU-OSHA (European Agency for Safety & Health at Work). Available at: https://oshwiki.eu/wiki/Precarious_work:_definitions,_workers_affected_and_OSH_consequences
- Jokela, M. (2022). Why is cognitive ability associated with psychological distress and well-being? Exploring psychological, biological, and social mechanisms. *Personality and Individual Differences*, 192, 111592.
- Karadeniz, O. (2011). Türkiye’de atipik çalışan kadınlar ve yaygın sosyal güvencesizlik. *Çalışma ve Toplum*, 2(29), 83-127.
- Kamp Dush, C. M., Taylor, M. G., & Kroeger, R. A. (2008). Marital happiness and psychological well-being across the life course. *Family Relations*, 57(2), 211-226.
- Karademas, E. C. (2006). Self-efficacy, social support and well-being: The mediating role of optimism. *Personality and Individual Differences*, 40, 1281-1290.
- Kavlak, O., Atan, S. U., Sirin, A., Sen, E., Guneri, S. E., & Dag, H. Y. (2013). Pregnant Turkish women with low income: Their anxiety, health-promoting lifestyles, and related factors. *International Journal Of Nursing Practice*, 19(5), 507-515. doi:10.1111/ijn.12093
- Kose, T. (2020). Gender, income and mental health: The Turkish case. *PloS one*, 15(4), e0232344. doi:10.1371/journal.pone.0232344
- Kosidou, K., Dalman, C., Lundberg, M., Hallqvist, J., Isacson, G., & Magnusson, C. (2011). Socioeconomic status and risk of psychological distress and depression in the Stockholm Public Health Cohort: A population-based study. *Journal of affective disorders*, 134(1-3), 160-167. doi: 10.1016/j.jad.2011.05.024
- Koster, A., Bosma, H., Kempen, G. I., Penninx, B. W., Beekman, A. T., Deeg, D. J., & van Eijk, J. T. M. (2006). Socioeconomic differences in incident depression in older adults: The role of psychosocial factors, physical health status, and behavioral factors. *Journal of psychosomatic research*, 61(5), 619-627. doi: 10.1016/j.jpsychores.2006.05.009
- Lever, J. P. (2008). Poverty, stressful life events, and coping strategies. *The Spanish Journal of Psychology*, 11(1), 228-249.
- Linder, A., Gerdtham, U. G., Trygg, N., Fritzell, S., & Saha, S. (2020). Inequalities in the economic consequences of depression and anxiety in Europe: a systematic scoping review. *European journal of public health*, 30(4), 767-777.
- Lipinska-Grobelny, A. (2011). Effects of gender role on personal resources and coping with stress. *International Journal of Occupational Medicine and Environmental Health*, 24(1), 18-28. doi: 10.2478/s13382-011-0002-6
- Lu, W., Bian, Q., Song, Y. Y., Ren, J. Y., Xu, X. Y., & Zhao, M. (2015). Prevalence and

- related risk factors of anxiety and depression among Chinese college freshmen. *Journal of Huazhong University of Science and Technology [Medical Sciences]*, 35, 815-822.
- Major, B., Cozzarelli, C., Sciacchitano, A. M., Cooper, M. L., Testa, M., & Mueller, P. M. (1990). Perceived social support, self-efficacy, and adjustment to abortion. *Journal of Personality and Social Psychology*, 59(3), 452-463.
- Meehan, P. (2021). Precarity, poverty and poppy: Encountering development in the uplands of Shan State, Myanmar. *International Journal of Drug Policy*, 89, 103064. doi: 10.1016/j.drugpo.2020.103064
- Muntaner, C., Li, Y., Xue, X., Thompson, T., O'Campo, P., Chung, H., & Eaton, W. W. (2006). County level socioeconomic position, work organization and depression disorder: A repeated measures cross-classified multilevel analysis of low-income nursing home workers. *Health & Place*, 12(4), 688-700. doi: 10.1016/j.healthplace.2005.09.004
- Mwinyi, J., Pisanu, C., Castela, E., Stringhini, S., Preisig, M., & Schiöth, H. B. (2017). Anxiety disorders are associated with low socioeconomic status in women but not in men. *Women's health issues*, 27(3), 302-307.
- Nahon, S., Lahmek, P., Durance, C., Olympie, A., Lesgourgues, B., Colombel, J. F., & Gendre, J. P. (2012). Risk factors of anxiety and depression in inflammatory bowel disease. *Inflammatory bowel diseases*, 18(11), 2086-2091.
- Nelson, G. (1989). Life strains, coping and emotional well-being: A longitudinal study of recently separated and married women. *American Journal Of Community Psychology*, 17(4), 459.
- Nunes, J. C., Carroll, M. K., Mahaffey, K. W., Califf, R. M., Doraiswamy, P. M., Short, S., ... & Hong, D. S. (2022). General Anxiety Disorder-7 Questionnaire as a marker of low socioeconomic status and inequity. *Journal of Affective Disorders*, 317, 287-297.
- Özcan, H., Subaşı, B., Budak, B., Çelik, M., Gürel, Ş. C., & Yıldız, M. (2013). Ergenlik ve genç yetişkinlik dönemindeki kadınlarda benlik saygısı, sosyal görünüş kaygısı, depresyon ve anksiyete ilişkisi. *Journal of Mood Disorders*, 3(3), 107-13.
- Palomar-Lever, J., & Victorio-Estrada, A. (2012). Factors that influence emotional disturbance in adults living in extreme poverty. *Scandinavian Journal Of Psychology*, 53(2), 158-164. doi:10.1111/j. 1467-9450.2011.00921.x
- Panori, A., Mora, L., & Reid, A. (2019). Five decades of research on urban poverty: Main research communities, core knowledge producers, and emerging thematic areas. *Journal of Cleaner Production*, 237, 117850. doi: 10.1016/j.jclepro.2019.117850
- Paukert, A. L., Pettit, J. W., Kunik, M. E., Wilson, N., Novy, D. M., Rhoades, H. M., ... & Stanley, M. A. (2010). The roles of social support and self-efficacy in physical health's impact on depressive and anxiety symptoms in older adults. *Journal of clinical psychology in medical settings*, 17, 387-400.
- Pazderka, H., Shalaby, R., Eboime, E., Mao, W., Obuobi-Donkor, G., Agyapong, B., ... & Agyapong, V. I. (2022). Isolation, Economic Precarity, and Previous Men-

- tal Health Issues as Predictors of PTSD Status in Females Living in Fort McMurray During COVID-19. *Frontiers in Psychiatry*, 13.
- Prati, G., & Pietrantonio, L. (2010). The relation of perceived and received social support to mental health among first responders: A meta-analytic review. *Journal of Community Psychology*, 38(3), 403-417. doi: 10.1002/jcop.20371
- Rawlinson, R., Aslam, R. H. W., Burnside, G., Chiumento, A., Eriksson-Lee, M., Humphreys, A., ... & Dowrick, C. (2020). Lay-therapist-delivered, low-intensity, psychosocial intervention for refugees and asylum seekers (PROSPER): protocol for a pilot randomised controlled trial. *Trials*, 21(1), 1-14.
- Rogowska, A. M., Ochnik, D., & Kuśnierz, C. (2022). Revisiting the multidimensional interaction model of stress, anxiety and coping during the COVID-19 pandemic: a longitudinal study. *BMC psychology*, 10(1), 255.
- Rojas-Garcia, A., Ruiz-Perez, I., Rodriguez-Barranco, M., Bradley, D. C. G., Pastor-Moreno, G., & Ricci-Cabello, I. (2015). Healthcare interventions for depression in low socioeconomic status populations: A systematic review and meta-analysis. *Clinical psychology review*, 38, 65-78. doi: 10.1016/j.cpr.2015.03.001
- Rose-Clarke, K., Pradhan, I., Shrestha, P., BK, P., Magar, J., Luitel, N. P., ... & Verdeli, H. (2020). Culturally and developmentally adapting group interpersonal therapy for adolescents with depression in rural Nepal. *BMC psychology*, 8(1), 1-15.
- Sanguanklin, N., McFarlin, B. L., Finnegan, L., Park, C. G., Giurgescu, C., White-Traut, R., & Engstrom, J. L. (2014). Job strain and psychological distress among employed pregnant Thai women: Role of social support and coping strategies. *Archives of Women's Mental Health*, 17(4), 317-326. doi: 10.1007/s00737-013-0410-7
- Sijbrandij, M., Acarturk, C., Bird, M., Bryant, R. A., Burchert, S., Carswell, K., ... & Cuijpers, P. (2017). Strengthening mental health care systems for Syrian refugees in Europe and the Middle East: integrating scalable psychological interventions in eight countries. *European Journal of Psychotraumatology*, 8(sup2), 1388102.
- Schwarzer, R. (Ed.). (2014). *Self-efficacy: Thought control of action*. Taylor & Francis.
- Schwarzer, R. & Jerusalem, M. (1995). Generalized self-efficacy scale. In J. Weinman, S. Wright, & M. Johnston (Eds.), *Measures in Health Psychology: A User's Portfolio. Causal and Control Beliefs* (pp. 35-37). Windsor, UK: NFER-Nelson.
- Singh, A., Daniel, L., Baker, E., & Bentley, R. (2019). Housing disadvantage and poor mental health: a systematic review. *American journal of preventive medicine*, 57(2), 262-272.
- Sorias, O. (1988). Examination on mental health protective effect of social supports in depressive and healthy controls. *Journal of Ege University Medical Faculty*, 27(3), 1033-1039. (Turkish)
- Şahin, N. H., Batigün, A. D., & Yılmaz, B. (2009). Debriefing with teachers after the Marmara earthquake: An evaluation study 1. *Disasters*, 33(4), 747-761. doi: 10.1111/j.0361-3666.2009.01107.x

- Şahin, N. H., Güler, M., & Basim, H. N. (2009). The Relationship between cognitive intelligence, emotional intelligence, coping and stress symptoms in the context of type a personality pattern. *Turkish Journal of Psychiatry*, 20(3).
- Thoits, P. A. (1995). Stress, coping, and social support processes: Where are we? What next? *Journal of Health and Social Behavior, Extra Issue: Forty Years of Medical*, 35, 53-79.
- Tilgin, A., & Aygün, A.H. (2021). Mental Health Determinants in Turkey: Investigating an Extensive List of Variables. *İnsan ve Toplum [The Journal of Humanity & Society]*, 11, 2, p.47-69. doi: 10.12658/M0618
- Thompson, M. P., Kaslow, N. J., Short, L. M., & Wyckoff, S. (2002). The mediating roles of perceived social support and resources in the self-efficacy suicide attempts relation among African American abused women. *Journal of Consulting and Clinical Psychology*, 70(4), 942-949.
- Uchino, B. N. (2004). *Social support and physical health: Understanding the health consequences of relationships*. Yale University Press: New Haven, CT, US.
- Uchino, B. N., Carlisle, M., Birmingham, W., & Vaughn, A. A. (2011). Social support and the reactivity hypothesis: Conceptual issues in examining the efficacy of received support during acute psychological stress. *Biological psychology*, 86(2), 137-142.
- Ulusoy, M., Sahin, N. H., & Ekmen, H. (1998). Turkish version of the Beck anxiety inventory: Psychometric properties. *Journal of Cognitive Psychotherapy*, 12(2), 163-172
- Ulutaş, Ç. Ü. (2017). Türkiye refah rejiminin dönüşüm sürecinde sosyal yardım sistemi. *Emek Araştırma Dergisi (GEAD)*, 8(12), 27-48.
- Valente, M. A., Ribeiro, J. P., & Jensen, M. P. (2009). Coping, depression, anxiety, self-efficacy and social support: Impact on adjustment to chronic pain. *Escritos de Psicología*, 2(3), 8-17.
- Wadsworth, M. E. (2012). Working with low-income families: Lessons learned from basic and applied research on coping with poverty-related stress. *Journal of Contemporary Psychotherapy*, 42, 17-25. doi: 10.1007/s10879-011-9192-2
- Wadsworth, M. E., Santiago, C. D., Einhorn, L., Etter, E. M., Rienks, S., & Markman, H. (2011). Preliminary efficacy of an intervention to reduce psychosocial stress and improve coping in low-income families. *American Journal of Community Psychology*, 48, 257-271. doi: 10.1007/s10464-010-9384-z
- Waite, L. (2009). A place and space for a critical geography of precarity?. *Geography Compass*, 3(1), 412-433. doi:10.1111/j.1749-8198.2008.00184.x
- van der Waerden, J. E., Hoefnagels, C., & Hosman, C. M. (2011). Psychosocial preventive interventions to reduce depressive symptoms in low-SES women at risk: A meta-analysis. *Journal of Affective Disorders*, 128(1-2), 10-23. doi: 10.1016/j.jad.2010.02.137
- Wijndaele, K., Matton, L., Duvigneaud, N., Lefevre, J., De Bourdeaudhuij, I., Duquet, W., ... & Philippaerts, R. M. (2007). Association between leisure time physical activity and stress, social support and coping: A cluster-analytical approach. *Psychology of Sport and Exercise*, 8(4), 425-440.

- Williams, L. J., Brennan, S. L., Henry, M. J., Berk, M., Jacka, F. N., Nicholson, G. C., ... & Pasco, J. A. (2011). Area-based socioeconomic status and mood disorders: Cross-sectional evidence from a cohort of randomly selected adult women. *Maturitas*, 69(2), 173-178. doi: 10.1016/j.maturitas.2011.03.015
- Wojciech, B., Magdalena, M., Magdalena, K., Elzbieta, D. Z., & Wojciech, D. (2015). Socioeconomic determinants of depressive symptoms in a Polish population. *Mental Health & Prevention*, 3(4), 152-156.
- Wolff, B. C., Santiago, C. D., & Wadsworth, M. E. (2009). Poverty and involuntary engagement stress responses: Examining the link to anxiety and aggression within low- income families. *Anxiety, Stress & Coping*, 22(3), 309-325. doi:10.1080/10615800802430933
- Yılmaz, M. (2012). Küreselleşme ve kentsel yoksulluk: Sosyolojik bir perspektif. *İnsan ve Toplum Bilimleri Araştırmaları Dergisi*, 1(4), 257-287.
- Zimet, G. D., Powell, S. S., Farley, G. K., Werkman, S., & Berkoff, K. A. (1990). Psychometric characteristics of the multidimensional scale of perceived social support. *Journal of Personality Assessment*, 55(3-4), 610-617.