



Exploring preservice teachers' social domination orientation and prejudice toward Syrian refugees: the mediation of empathy

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Received: 26 September 2023 / Accepted: 1 July 2024 / Published online: 18 September 2024
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Abstract

With the global increase in refugees, understanding and improving the educational experiences of refugees has received more attention in academic research. This study aims to investigate the perspective of preservice teachers (PSTs) towards Syrian refugees, who are one of the largest groups of refugees in Turkey. The study explores the relationship between PSTs' empathy, their social dominance orientation (SDO), and prejudice against Syrian refugees. The aim is to understand how PSTs' perspectives on refugees can help prevent discrimination in education and develop targeted interventions and educational strategies. The study analyzed data from 726 PSTs using structural equation modelling. The findings show that there is a positive correlation between SDO and prejudice, and empathy partially mediates this relationship. Moreover, socioeconomic status and ethnicity significantly predict prejudice against refugees. The results are discussed in relation to the understanding of the bases and relations of prejudice, SDO, and empathy. The study suggests some practical implications for those working with PSTs and policymakers.

Keywords Refugee · Education · Prejudice · Empathy · Social dominance orientation

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1 Introduction

Throughout history, human beings voluntarily or forcibly migrated from one place to another for various reasons, such as political, social, or economic ones. 82.4 million people were displaced globally at the end of 2020 (UN Refugee Agency [UNHCR], 2022a). The Covid-19 pandemic restrictions did not affect these displacements. They continued and even have grown (Mcauliffe & Triandafyllidou, 2021). With 3.7 million refugees and 0.4 million asylum seekers, the majority of whom were Syrians, Turkey has been the leading host country in the world for the past five years, and it is the second-largest migration corridor - from the Syrian Arab Republic to Turkey (UNHCR, 2022a). Since the outbreak of the Syrian civil war in 2011, thousands of Syrians have been forced to flee and have migrated to Turkey. Turkey has become the country that accepts the most refugees in the world since 2015 by acting with a humanitarian aid reflex and an “open border policy.”

The coexistence of societies of different nationalities brings with it many problems. The interaction between the newcomers and the host or dominant culture involves a complex political, social, and psychological process. Many studies show that migrants are frequently the target of negative attitudes such as prejudice and discrimination (e.g., Allport, 1954; Akrami et al., 2009; Anderson & Ferguson, 2018; Deslandes & Anderson, 2019). Recent studies in Turkey also point to negative attitudes towards Syrian refugees¹ (Aktas et al., 2021; Aktas, 2018; Erdogan, 2015; Istanbul Politik Araştırmalar Enstitüsü [IstanPol], 2020; Yitmen & Verkuyten, 2018). Although Turkish people approached Syrian refugees with a humanitarian and tolerant tendency, especially at the beginning of the civil war (Erdogan, 2015), they now mostly feel discomfort, threat (Tasdemir, 2018), and social discrimination (Demir & Ozgul, 2019; Icduygu, 2015; Yitmen & Verkuyten, 2018) due to the reasons such as insufficient economic opportunities, unemployment, and increase in house rentals on the Syrian border. Most of them think that the Syrians should go back to their homeland when the war in Syria is over (Demir & Yilmaz, 2020; Erdogan, 2015).

In all this political, social, and psychological turmoil, education is a significant phenomenon. Education is a universal human right, and several international agreements safeguard the right to education for refugees (e.g., the 1951 Refugee Convention; United Nations Convention on the Rights of the Child, 1989; New York Declaration for Refugees and Migrants, 2016). Turkey has ratified the 1989 Convention on the Rights of the Child and the 1951 Convention but with certain reservations. The latest declaration, the New York Declaration for Refugees and Migrants (UN General Assembly, 2016), emphasizes access to quality education. According to this right, which applies to all refugees, refugees must be treated equally with the

¹ Syrian nationals who have fled the conflict in Syria are not officially recognized as refugee, a subgroup of migrants, in Turkey. They are rather under temporary protection and seeking refugee status. The temporary protection status granted by the Turkish government allows Syrian nationals to reside and receive support services in the country while their situation is being assessed and a durable solution, such as resettlement in another country or return to their home country, is being sought (UNHCR, 2023). However, Syrian migrants are mostly hosted as refugees around the world, and this is mentioned so in the literature. For this reason, in the current study, we preferred to use the term “refugee” to describe Syrians who are temporarily protected in Turkey.

citizens of the country they are residing in, including access to education. Importance of education has been well established in documents, but there are some gaps regarding effective implementation. Most of the refugees—75%—live in low- and middle-income countries (UNHCR, 2024), and although all refugee children have the right to a decent education, this may not always be possible due to a lack of capacity and infrastructure problems for nations with large refugee influxes (Richardson et al., 2018). In practice, many face barriers to accessing education. Teachers, without doubt, have a crucial role in meeting refugee children's learning, social and emotional needs, and integration. Many studies show that teachers are the most critical component in students' success and learning outcomes (Darling-Hammond, 2000; UNHCR, 2022b). And the role of teachers in refugee education is very significant (Richardson et al., 2018; Dryden-Peterson, 2017).

Social dominance orientation (SDO) is an integral framework influencing individuals' inclination toward asserting dominance over perceived inferior groups (Sidanius & Pratto, 1999). This orientation is closely linked with endorsing negative stereotypes and prejudicial attitudes (Pratto et al., 2006; Sidanius et al., 2016). The interplay between SDO and prejudice can differ within the educational environment, where unequal power dynamics exist (Pratto et al., 2013; Tesi et al., 2019). SDO could lead to many challenges in educational environments. For instance, teachers may approach some students and parents differently by prioritizing their social position and group. The current study focuses on Turkish preservice teachers (PSTs)' empathy in the relationship between SDO and prejudice toward Syrian refugees and posits that PSTs might display inversely correlated empathy and prejudice levels, resulting in favorable attitudes toward outgroups. In addition, this study seeks to gather insights on preparing PSTs for the educational needs of various migrant groups such as refugees. This exploration would also help identify gaps in their preservice and in-service training that may need attention.

The study differs and gains importance as studies in the Turkish context have mostly been about Syrian students' adaptation to school, various problems they experience in the education process, their academic success, and the attitudes of Turkish students and teachers towards them (e.g., Sozer & Isiker, 2021; Turnuklu et al., 2020; Yigit et al., 2021). Relatively little is known about Turkish PSTs' attitudes towards Syrian refugees. Additionally, to our knowledge, no study has explored Turkish PSTs' attitudes toward Syrian refugees through empathy moderation. Analyzing PSTs' views regarding Syrian refugees is crucial because it could provide insight into how future teachers would feel about multiculturalism and inclusion within the educational environment. These could affect how PSTs work with and instruct students from different communities, including Syrian refugees. The study also provides practical implications to improve the current situation and enable refugees to lead more satisfying lives.

2 Conceptual background

For many years, the consequences of intergroup interaction and the dynamics of different cultures, nations, and religions togetherness have been a constant and significant research issue. And prejudice has been an essential component in the studies (e.g., Allport, 1954; Cowling et al., 2019; Fiske et al., 2016). Prejudice has also been a popular concept due to the recent influx of refugees to the Northern and Western world. People are more likely to see an outsider as a threat, and it promotes prejudice (Stephan et al., 2005, 2015).

Early theorists tended to define prejudice according to its affective basis, and prejudice was seen as a feeling or expression of hostility derived from inaccurate information (Allport, 1954). Over time, researchers began to view prejudice more as a negative evaluation of another stimulus and as an attitude having cognitive, affective, and behavioral components (Dovidio et al., 1996; Duckitt, 1992; Nelson & Olson, 2024). Prejudice could also be positive and favorable (Carver et al., 1978); however, as we considered in this study, most studies concentrate on negative prejudice (Nelson & Olson, 2024). Prejudice in this regard could be defined as negative attitudes toward members of an outgroup (Aronson, 2012; Duckitt, 1992; Fiske, 1998).

2.1 Social dominance orientation basis of prejudice

Many empirical results in literature (e.g., Rokeach, 1973; Inglehart & Baker, 2000) indicated the existence of two separate ideological attitude dimensions, represented mainly by the concepts of right-wing authoritarianism (RWO) and SDO, which convey two categories of motivational objectives or values (Duckitt & Sibley, 2010). The dual-process motivational (DPM) model of Duckitt and Sibley (2010) reflects these distinct sets of goals, and SDO is at the one pole that captures the motivational goals of power, hierarchy, and inequality. SDO reveals intergroup dominance and inequality (Sidanius & Pratto, 1999; Kteily et al., 2011), and it is a powerful predictor of attitudes in intergroup in many aspects (Bratt et al., 2016; Pratto et al., 2006; Sidanius et al., 2016; Sidanius & Pratto, 1999). People with high SDO usually view different social groups as belonging to a hierarchy of superiority or inferiority, which leads to a negative attitude such as prejudice toward outgroup members (Ekehammar & Akrami, 2003). Regardless of the social standing of one's group, SDO is the need to create and sustain vertically organized intergroup ties (Sidanius et al., 2016). Members of the dominant ingroup could use prejudice to uphold the current situation and rationalize the inequality between ingroup and outgroup members (Sidanius & Pratto, 1999). Therefore, intergroup attitudes that increase hierarchies, such as racism, sexism, and conservatism are strongly predicted by SDO (Altemeyer, 1998; Pratto et al., 2006; Sidanius et al., 2016); whereas they are negatively associated with ideologies such as feminism and socialism that reduce hierarchy (Sidanius & Pratto, 1999).

People with a high SDO have power, supremacy, and domination tendency, as well as they are primarily anti-egalitarian and anti-humanist (Sibley & Duckitt, 2010). These individuals try to retain their privileged societal position and legitimize it through myths (Sidanius & Pratto, 1999). They usually use stereotypes and

prejudices to justify inequalities, therefore, SDO, as an ideological variable in attitudes towards asylum seekers (Anderson & Ferguson, 2018), could predict prejudice towards refugees, asylum seekers and minorities (Sidanius & Pratto, 1999; Kteily et al., 2011).

2.2 Empathy and prejudicial attitudes

The concept of empathy, which plays an active role in intergroup relations, has many definitions. According to the American Psychological Association (2022), empathy is understanding someone from their perspective rather than your own or experiencing their feelings and views through a third party. Today psychologists analyze empathy in two basic types: affective or cognitive empathy (Batson & Ahmad, 2009). The senses we experience in response to other people's feelings are known as affective empathy, and it is about experiencing very identical or related emotional responses to the same situation. Cognitive empathy is the ability to identify and comprehend the emotions of another (Batson & Ahmad, 2009).

Dividing people as an ingroup or an outgroup member affects how we interact or respond to them. We may behave differently and more cruelly to an outgroup member (Tarrant et al., 2009; Vanman, 2016). Although there might be several reasons for this, feeling empathy plays a significant role (Vanman, 2016). Berthold and colleagues (2013) conducted three studies on empathy and observed the empathy level. As the empathy level increased, individuals perceived their ingroups less as prototypes, and they perceived the outgroup more positively. Sidanius and colleagues (2013) investigated the mutual association between SDO and empathy and found that empathy feeling might have a mediator role in relationships against outgroups. In a study, they presented that SDO's impact on empathy feeling was more robust over a longer time (Kteily et al., 2011).

In the research of Pedersen and Thomas (2013), the prejudice was reduced when participants could see the similarities and shared things with the asylum-seekers. They felt empathy and were more tolerant. Nicol and Rounding (2013) searched for the mediator role of empathy between SDO and prejudice using racism and sexism as criteria and found that empathy was a mediator for sexism. People owning high levels of SDO tend to have more prejudice and less empathy for outgroups. If there is more contact with the outgroup, the prejudice lessens, and empathy rises (Burke et al., 2015).

2.3 The current study

Studies have demonstrated that modelling SDO as a social attitude explains the data well, with SDO mediating most or all the effects of prejudice (Duckitt & Sibley, 2010). In their meta-analytic review, Anderson and Ferguson (2018) also suggested that the factors in Duckitt and Sibley's (2010) DPM of prejudice could best account for prejudice towards refugees. For these reasons, in this study, we aimed to reveal SDO that may be related to PSTs' prejudices against Syrian refugees. In this direction, we formulated the first hypothesis (H1): There is a positive relationship between SDO and prejudice against refugees.

As seen in the literature, studying the mediating effect of empathy in the relationship between SDO and prejudice against refugees is significant because empathy could play a crucial role in reducing prejudice and promoting intergroup understanding and harmony. Empathy helps people comprehend and empathize with others, which may decrease the negative consequences of SDO. Empathy could also be used as a technique to promote intergroup understanding (Stephan & Finlay, 1999). In these respects, the second hypothesis of the current study is (H2): Empathy has a mediator effect in the relationship between SDO and prejudice towards refugees.

Related literature has shown that demographic factors predict attitudes towards refugees. Several meta-analytical studies (e.g., Anderson & Ferguson, 2018; Cowling et al., 2019; Fischer et al., 2012) have highlighted that participants' demographic variables are associated with negative attitudes, such as SDO and prejudice. For instance, men tend to be more socially dominance-oriented than women (Pratto et al., 1994) and hold more negative attitudes toward refugees (Anderson, 2018b; Anderson & Ferguson, 2018). Factors such as high national identity (Anderson & Ferguson, 2018; Nickerson & Louis, 2008), political conservatism (Anderson & Ferguson, 2018), religious affiliation (Anderson & Ferguson, 2018; Deslandes & Anderson, 2019), and lower income (Carvacho et al., 2013) are also linked to negative attitudes. At the broader societal level, higher income levels and women empowerment are linked to higher SDO (Fischer et al., 2012). The quality and quantity of interactions have also been found to impact attitudes toward outer groups. For example, in their meta-analysis, Pettigrew and Tropp (2006) revealed that increased contact significantly reduced prejudice. In another study investigating immigrants, positive outgroup contact led to positive attitudes (Fuochi et al., 2020). Conversely, negative outgroup contact could reinforce negative attitudes toward Syrian refugees (Bagci et al., 2023). Additionally, those interacting with immigrants regularly tend to be more welcoming (Coninck et al., 2021; Laurence & Bentley, 2018). These findings suggest that demographic variables are essential in understanding individuals' attitudes toward other social groups. Thus, the current study explored the role of PSTs' demographic variables of gender, ethnic origin, family socioeconomic status (SES), and their frequency of seeing refugees in attitudes toward Syrian refugees. In this regard, the third hypothesis is as follows (H3): Gender, ethnic origin, SES of the family, and frequency of seeing refugees have a linear relationship to the prejudice against refugees.

3 Method

3.1 Research design

This study examined the mediation role of empathy in the relationship between SDO and prejudice against refugees. The study also investigated the predictive relationship of certain demographic variables on feeling prejudice towards refugees. The research is a correlational research model, a research design investigating the relationship, direction, and strength of the association among a few variables. Regression analysis studies also fall under correlational studies (Field, 2018). As presented in Fig. 1, we

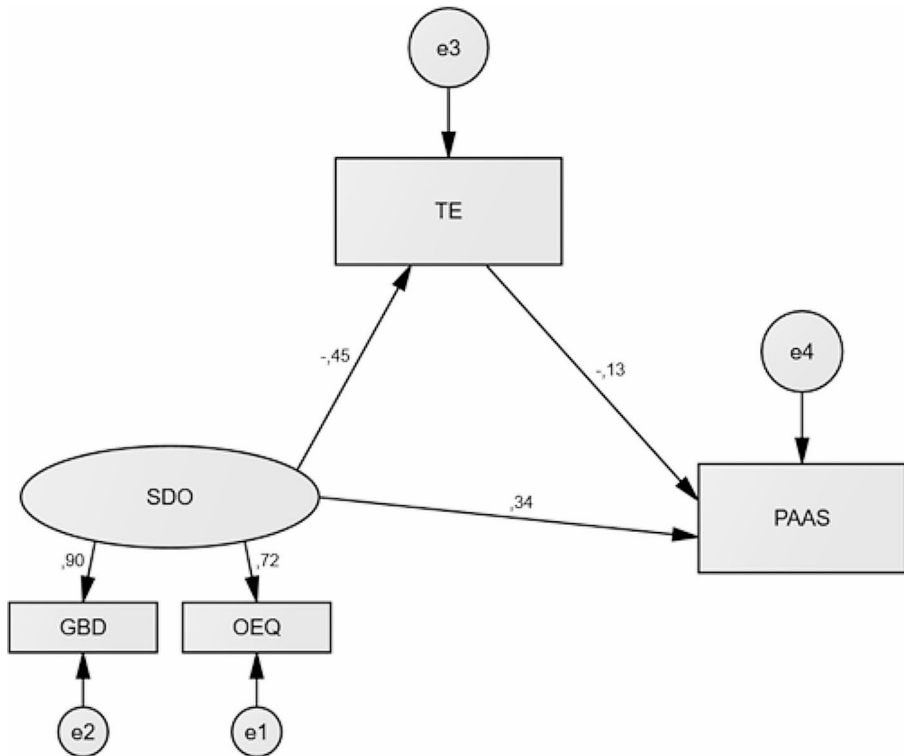


Fig. 1 Modelling the mediator role of empathy between SDO and prejudice against refugees

formulated the hypotheses to identify the mediating role of empathy in the relationship between the SDO and prejudice towards Syrian refugees.

3.2 Procedure and data collection

Data was collected among PSTs through a comprehensive procedure that included several processes. First, we created an online survey form consisting of demographic questions and the PAAS, SDO, and TEQ scales. At the outset of the survey, the general purpose of the research, which was to explore PSTs' attitudes towards Syrian refugees across different variables, was stated, and voluntary participation was asked for. Additionally, we assured the participants that we would not request any information that could reveal their identities, and they were free to quit the survey at any point.

We conducted a convenience sampling strategy and shared the online survey form with the familiar professors of eight different faculties of education- four located in the Marmara, two in Eastern Anatolia, and two in the Aegean region- and collected data online through their assistance. These professors distributed the survey links to approximately 1350 PSTs through WhatsApp groups. About a week after the initial distribution, reminder notices were sent through the same WhatsApp groups, urging participants to complete the survey. This data collection process spanned about three

months. After excluding the data of 20 participants due to incomplete responses, the analysis proceeded with a final sample size of 726 participants ($N=726$).

3.3 Instruments

In this study, we used a form for demographic variables, the SDO Scale (Pratto et al., 1994), the Prejudice Against Asylum Seekers Scale (Anderson, 2018a), and the Toronto Empathy Questionnaire (Spreng et al., 2009). Demographic variables are information about gender, ethnicity, the SES of the family, and the frequency of seeing asylum seekers. The scales used in the study had been adapted to Turkish by different researchers. Below are the details about these scales:

Social Dominance Orientation Scale Pratto et al. (1994) developed the scale, and Akbas (2010) adapted it to the Turkish language and culture. They collected the data used in the adaptation process from university students. The scale consists of eight items for the group-based dominance (GBD) and eight for the opposition to equality (OEQ) subscales, accounting for 54.13% of the variance. In the adaptation study, Cronbach's alpha values for the GBD and OEQ subscales were 0.81 and 0.91, respectively. The scale validity and reliability (Cronbach's alpha) values were re-analyzed in this study because Akbas did not provide the exploratory and confirmatory factor analysis results. The EFA analysis showed no change in the number of items and subscales. The item loadings of the eight items in the GBD subscale ranged from 0.396 to 0.692, while those of the eight items in the OEQ subscale ranged from 0.630 to 0.794. The CFA analysis resulted in fit indices of $\chi^2/df=4.3$, GFI=0.91, CFI=0.90, NFI=0.88, TLI=0.88, and RMSEA=0.07, indicating that the structure of the scale had a satisfactory level of fit. The scale was applied as a 5-point Likert scale. Finally, in this study, Cronbach's alpha values for the GBD, OEQ, and whole scale were 0.78, 0.89, and 0.88, respectively. Three example items are "Some groups of people are just more worthy than others," "We should do what we can to equalize conditions for different groups," and "No group should dominate in society".

Prejudice against Asylum Seekers Scale (PAAS) This scale was developed by Anderson (2018a) and adapted to Turkish culture by Kirisci-Sarikaya and Guner (2021). In the adaptation study, they collected data on university students. The scale, which authentically had 16 items and two sub-dimensions, has 11 items and one dimension in the Turkish adaptation version. The item loads of the 11-item and one-dimensional scale, which explained 47% of the variance, are between 0.489 and 0.788. According to the confirmatory factor analysis results, adequate fit index values are $\chi^2/df=4.7$, GFI=0.92, CFI=0.92, NFI=0.90, TLI=0.90, RMSEA=0.08, and the Cronbach alpha value is 0.88 in the Turkish adaptation. In this study, the scale was applied as a 5-point Likert. Cronbach's alpha value of the Prejudice Against Asylum Seekers Scale is 0.86. Three example items are "Asylum seekers need to go back to where they came from," "Asylum seekers are too dangerous to have in our country," "Asylum seekers should return to their country once safe to do so".

Toronto Empathy Questionnaire (TEQ) This scale is a comprehensive single-factor measure reflecting the most inclusive aspect of empathy in general, as Spreng and colleagues (2009) argued. Consisting of 16 items and developed as a one-dimensional measure by Spreng et al. (2009), it was adapted into Turkish as a 13-item one-dimensional scale by Totan et al. (2012). In the adaptation study, they collected data from university students, and the total explained variance was 29%. Item loadings ranged from 0.40 to 0.67. The fit indices in the adaptation study were $\chi^2/df=3.67$, GFI=0.94, CFI=0.94, NFI=0.91, TLI=0.91, RFI=0.90, and RMSEA=0.067. Cronbach's alpha value in the adaptation study was 0.79. In this study, the scale was applied as a 5-point Likert scale, and Cronbach's alpha value is also 0.79. Three examples include "I have tender, concerned feelings for people less fortunate than me," "I am not really interested in how other people feel," "When I see someone being treated unfairly, I do not feel very much pity for them."

3.4 Sample

The sample consists of 746 undergraduate students of the Faculty of Education who voluntarily participated from eight universities in Turkey. Demographic information for these 726 PSTs is in Table 1.

G*Power 3.1.9.7 version was utilized to calculate the sample size in the study. As a result of the analysis made with the values of small effect size $f^2 = 0.02$ (using Cohen's (1988) criteria), significance criterion of $\alpha=0.05$, and power $(1-\beta)=0.95$, it was found that the number of samples $N=652$ was sufficient. The sample size of the current study was $N=726$.

3.5 Data analysis

We used the SPSS program for data analysis. Before the analysis process, we examined the normality, outliers, and missing data. We analyzed the normality of continuous data using skewness and kurtosis values. We evaluated the outliers using Cook's distance and found that the proportion of outliers was less than 1%.

Table 1 The frequency and percentage of participant demographics

Variables	Groups	<i>n</i>	%
Gender	Female	515	70,9
	Male	211	29,1
Socioeconomic status (SES)	Low	186	25,6
	Middle	455	62,7
	High	85	11,7
Ethnicity	Turkish	311	42,8
	Kurdish	350	48,2
	Others	65	9,0
Frequency of Seeing Refugees Living in Neighbourhood	Rare	69	9,5
	Sometimes	334	46,0
	Often	323	44,5

After confirming the suitability of the data, mediator analysis was performed with AMOS. As stated in the research hypotheses, we searched for the mediator role of empathy in the relationship between *SDO* and *PAAS*.

We analyzed the relationship between categorical data and *PAAS* by simple regression analysis. For this process, we converted the categorical data into dummy data. We coded the reference variables in categorical data as “0” and the variable to be checked for effect as “1”. After the analysis, we presented the findings in the appropriate order.

4 Results

We began analyzing the collected data by providing mean and correlation information about the scales used in the study. Table 2 indicates that the participants tended to harbor prejudices against refugees. *SDO* average score suggests that the participants did not see themselves as dominant over other groups. Finally, according to the mean value of the *TEQ* scale, the *PSTs* who participated in the study had high levels of empathy.

According to Table 2, all scales used in the study exhibited a normal distribution. Upon analyzing the correlation relationships among the scales in Table 2, it is observed that all correlation values are significant. The findings from these analyses suggest that the variables were suitable for mediator role analysis.

We investigated the mediator role of empathy between social dominance and prejudice against refugees with the AMOS program. As seen in Fig. 1, the fit indices of the model were obtained at sufficient levels ($\chi^2/SD=3.483$; $RMSEA=0.059$; $GFI=0.998$; $AGFI=0.976$; $CFI=0.996$; $IFI=0.996$; $TLI=0.977$). The standardized direct and indirect effects in the model are in Table 3.

As seen in Table 3, we have found significant relationships between the variables in the mediator role modeling. From the values in the SEM modeling, we see that empathy has a negative relationship with social dominance and prejudice against refugees. And there is a positive relationship between *SDO* and prejudice against refugees. Hence, participants with a tendency towards social dominance are more likely to approach refugees with prejudice. Conversely, those with high empathy scores tend to have lower *SDO* and are less likely to exhibit prejudice against refugees.

When we analyze Fig. 1; Table 3 together, the total effect of the *SDO* variable on the *PAAS* variable is at the level of $\beta=0.398$ ($p<.001$). Considering that the direct effect of the *SDO* variable on the *PAAS* variable is $\beta=0.340$ ($p<.001$), we could say

Table 2 The inter-variables correlation, Normality Assessment of scales, and arithmetic averages for the variables

Variables	<i>N</i>	<i>M</i> (<i>SD</i>)	Skewness	<i>SE</i>	Kurtosis	<i>SE</i>	1	2	3
<i>PAAS</i> Scale	726	3.23 (0.72)	0.275	0.571	-0.243	0.421	1		
<i>SDO</i> Scale	726	2.04 (0.60)	0.250	0.571	0.099	0.421	0.366**	1	
<i>TEQ</i>	726	4.28 (0.47)	-0.804	0.571	0.700	0.421	-0.281**	-0.398**	1

Note. *PAAS*=Prejudice Against Asylum Seekers, *SDO*=Social Dominance Orientation, *TEQ*=Toronto Empathy Questionnaire, ** $p<.001$

Table 3 Bootstrapping results for Mediation models of Empathy on SDO and PAAS

Effect	Estimate	SE	C.R.	95% Bootstrap CI	
				LL	UL
Standardised Direct Effects					
TEQ→ PAAS	-0.128*	0.039	-3.197	-0.206	-0.051
SDO→ TEQ	-0.451**	0.036	-11.117	-0.521	-0.378
SDO→ PAAS	0.340**	0.040	7.542	0.261	0.419
Standardised Total Indirect Effects					
SDO→ PAAS	0.058*	0.018	3.152	0.022	0.094
Standardised Total Effects					
SDO→ PAAS	0.398**	0.034	9.694	0.330	0.464

Note. 2,000 bootstrapped samples. CI=confidence interval, PAAS=Prejudice Against Asylum Seekers, SDO=Social Dominance Orientation, TEQ=Toronto Empathy Questionnaire, * $p < .01$. ** $p < .001$

Table 4 Coefficients table of simple Linear Regression^a

Model	Unstandardized Coefficients		Standardized Coefficients		<i>t</i>	<i>p</i>	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²
	<i>b</i>	SE	β						
SES of Students' Families	Constant	21.421	0.354		60.491	<0.001	0.123	0.015	0.014
	Middle	-1.495	0.447	-0.123	-3.343	0.001			
	(Constant)	20.248	0.231		87.803	<0.001	0.110	0.012	0.011
Ethnicity	High	2.011	0.674	0.110	2.984	0.003			
	(Constant)	19.680	0.285		69.119	<0.001	0.158	0.025	0.024
	Turkish	1.877	0.435	0.158	4.314	<0.001			
	(Constant)	21.101	0.301		70.072	<0.001	0.109	0.012	0.011
	Kurdish	-1.281	0.434	-0.109	-2.954	0.003			

^a Dependent Variable: Prejudice Against Asylum Seekers (PAAS)

that some parts of the effect occur through the mediator role of the empathy variable. As seen in the table, although $\beta = 0.058$ ($p < .001$) on the PAAS variable is very low, the SDO variable has a positive and significant effect on the mediator role of empathy. In this case, we understand that 15% (0.058/0.398) of the effect of the SDO variable on the PAAS variable is indirectly through the empathy variable, and the remaining 85% is in the form of a direct effect.

After examining the mediator model, we searched for the predictive/associate effect of the demographic variables on the PAAS variable with simple linear regression. Only the significant regression results are in Table 4. In the regression analysis performed by transforming the data into Dummy coding, women ($F(1,724) = 0.007$, $p = .934$, $f^2 < 0.001$), men ($F(1,724) = 0.007$, $p = .934$, $f^2 < 0.001$), low SES ($F(1,724) = 2.232$, $p = .136$, $f^2 = 0.003$), seeing refugees rarely ($F(1,724) = 0.156$, $p = .693$, $f^2 < 0.001$), seeing refugees occasionally ($F(1,724) = 0.214$, $p = .644$, $f^2 < 0.001$) and seeing refugees frequently ($F(1,724) = 0.486$, $p = .486$, $f^2 = 0.001$) variables have not significant ANOVA values in predicting prejudice against refugees. As known, models applied in the regression analyses without significant ANOVA values are inconsistent.

Variables with significant ANOVA values (Middle SES ($F(1,724)=8.475, p<.01, f^2=0.015$), High SES ($F(1,724)=7.783, p<.01, f^2=0.012$), Turkish ($F(1,724)=20.020, p<.001, f^2=0.026$), Kurdish ($F(1,724)=7.660, p<.01, f^2=0.012$)) can be seen in Table 4. In Table 4, we significantly predict that students whose families have middle SES feel prejudice against refugees ($b=-1.495; p<.01$). Similarly, we see that students whose families have high SES show a significant prediction of prejudice against refugees ($b=2.011; p<.01$).

According to ethnic origin, the participants are substantially Kurdish or Turkish. We searched for the prejudice of both ethnic origins against refugees by simple regression analysis. As a result, we have understood from the data in Table 4 that variables of Turkish or Kurdish ethnic origin significantly predict prejudice against refugees ($b_{\text{Turkish}}=1.877; p<.001$ and $b_{\text{Kurdish}}=-1.281; p<.01$).

5 Discussion and implications

As a result of the analyses, the participant PSTs tended to be prejudiced toward refugees. Studies conducted in various countries had similar results (Danilewicz, 2020; Schweitzer et al., 2005; Scotta & Safdarb, 2017; Vallejo-Martín et al., 2020). Notably, several studies in the Turkish context addressed prejudice against Syrians (e.g., Aydin & Kaya, 2017; Diker & Karan, 2021; Icduygu, 2015; Yitmen & Verkuyten, 2018). The discourses of political parties as they would send refugees home, the increase in house rents due to the growing population of migrants and the duration of their stay, and difficulties in finding a job fed negative attitudes (Icduygu, 2015; Istanbul, 2020; Stephan et al., 2015). Participants expressed low SDO and high empathy. A few studies conducted in Turkey also found low SDO in society and high or moderate empathy (Aktas et al., 2021; Erdogan, 2015; Istanbul, 2020). In addition, research examining Turkish teachers' attitudes toward refugees and immigrants showed that positive emotions and empathy were common (Boru & Boyaci, 2016; Saritas et al., 2016; Topkaya & Akdag, 2016). Accordingly, it appears that the participants exhibited high empathy and did not view themselves as socially dominant over Syrian refugees. Nevertheless, they still tended to express prejudice. One of the reasons could be that the problems arising from refugees are increasing (Diker & Karan, 2021; Icduygu, 2015; Istanbul, 2020; Yitmen & Verkuyten, 2018), and this situation could cause unrest and reaction in society. Political and media rhetoric (Devran & Ozcan, 2016; Triandafyllidou, 2018) could also affect and worsen social attitudes. It is, therefore, essential to address the underlying circumstances (e.g., economic and social insecurity and political polarization) that lead Turkish PSTs to express prejudice towards Syrian refugees.

Regarding the correlation results between the variables, although relatively low and moderate, they were in the expected direction. Empathy varied negatively with prejudice and SDO, as expected. Many studies similarly displayed that empathy had a negative relationship with conservatism, prejudice, and SDO (Aktas et al., 2021; Berthold et al., 2013; Burke et al., 2015; Sidanius et al., 2013). The association between empathy and attitudes toward Syrian refugees has been the subject of various research. According to these findings, empathy could help to lessen preju-

dice and foster a more welcoming attitude toward migrants. Other-oriented empathy (empathic care) indicated more vital social intimacy and better attitudes toward Syrian refugees (Pawlicka et al., 2019). In the Syrian refugee context in Turkey, humanitarian concerns and empathy were interrelated to positive attitudes toward Syrian refugees (Yitmen & Verkuyten, 2018); prejudice declined when paired with empathy feeling, and authoritarianism significantly affected the prejudice levels (Uysal & Aydin-Cakir, 2020). Students with a high level of empathy had a significantly more favorable view toward refugees (Yelpaze & Guler, 2018). High empathy and low SDO of Turkish PSTs could indicate that they are more likely to be inclusive, tolerant, and open-minded toward outgroups in their careers, which is hopeful.

In the current study, PAAS and SDO also showed a positive correlation contrary to empathy. Seeing different social groups unequal and prejudice against them are two interrelated situations. SDO predicted prejudice in many studies (e.g., Altemeyer, 1998; Pratto & Lemieux, 2001; Snellman & Ekehammar, 2005). A few studies also supported the hypothesis that those with high SDO cherish superiority and power (Sibley & Duckitt, 2010). Burke and colleagues (2015), Sidanius and colleagues (2016), and Sidanius and Pratto (1999) also indicated evidence for this in their studies. People with a high SDO frequently excuse injustices using stereotypes and prejudice, and they tend to be more prejudiced. However, our findings demonstrated that PSTs did not subscribe to an ideology that favored and perpetuated current power structures and dominance relationships. In other words, they tended not to see Syrian refugees as a risk to their control or community dominance. Nevertheless, they still tended to express prejudice toward Syrian refugees. It could be inferred from this result that PSTs are open-minded and tolerant of different cultures, are not far from inclusive education, and appreciate cultural diversity, all of which are the fundamental elements of quality education. However, the fact that they still expressed slight prejudice against Syrian refugees led us to infer other factors that could cause this. One of the reasons for this situation could be that in Turkey, Syrian migrants are still under temporary protection status (UNHCR, 2023). This situation leads to various uncertainties in social and educational policies, and thus, educational planning and coordination for Syrian refugee students could not be carried out effectively, as studies (e.g., Gencer, 2017; Sozer & Isiker, 2021) revealed. In this sense, we could imply that the introduction of permanent policies and regulations regarding Syrian refugees seems to play a critical role in solving many problems, including educational ones.

The mediator modeling of the current study showed sufficient fit values. Accordingly, empathy showed a small but significant mediator effect between SDO and prejudice against refugees. As a result, SDO significantly predicted prejudice against refugees and highlighted the importance of empathy in reducing prejudice (Batson et al., 2002). The studies of Snellman and Ekehammar (2005) and Visintin and Rullo (2021) also showed that ethnic and cultural humility effectively mediated the relationship between SDO and prejudice. All these studies shed light on the need to reveal SDO's role in raising prejudice against refugees and understanding policies and regulations for creating a more equal and inclusive society.

We conducted an analysis using Dummy coding and simple regressions to investigate how various demographic variables could predict prejudice against refugees. Our analysis revealed that two variables, namely SES and ethnicity, significantly

predicted prejudice against refugees. Findings indicated that PSTs from families with middle and high-SES tended to exhibit prejudice against refugees. Furthermore, based on the prediction scores, participants from middle-SES backgrounds tended to be slightly more prejudiced against refugees than those from high-SES backgrounds. According to the intergroup contact framework of Allport (1954) interpersonal communication and friendships might lessen prejudice. Therefore, it could be inferred that PSTs from middle and high-SES backgrounds viewed refugees as an outgroup. In contrast, PSTs from low-SES backgrounds were more likely to encounter Syrian refugees in their everyday lives, establish more contacts, and reside in the same neighborhoods as them. This situation could lead to more social contact, ultimately reducing prejudice.

Similar to the SES, being a member of Turks or Kurds, the two largest ethnic groups living in Turkey, also predicted prejudice towards refugees. Considering the prediction scores, Turkish ethnicity holders were slightly more prejudiced against refugees than Kurdish ethnicity holders. Perry and Sibley (2011) indicated that the salience of different social identities moderated the relationship between SDO and prejudice. In their research, Sidanius and Pratto (1999) claimed that those who felt like members of a group or ethnicity could feel social dominance over the other groups. Kurds are one of the ethnic minority groups in Turkey, and the conflict between Turks and Kurds has a long socio-political history (Yilmaz et al., 2018). Studies showed that Turks had little trust toward Kurds, were suspicious and prejudiced, and had negative attitudes (Sarigil & Karakoc, 2017; Yilmaz et al., 2018). Kurds had similar ideas and stated that they experienced discrimination (Duman, 2013). PSTs of Kurdish ethnicity could perceive themselves as disadvantaged as Syrian refugees, and this could be a reason why they were less prejudiced compared to PSTs of Turkish ethnicity.

PST training is a crucial phase in which future teachers are prepared for the profession in many aspects. During this period, they need to cultivate an inclusive approach towards teaching, become conscious of any prejudices they might hold, and significantly broaden their experiences through targeted interventions. Accordingly, this study emphasizes the development of future teachers' knowledge, skills, and attitudes toward other societies and groups, ensuring that they are more tolerant, understanding, inclusive, and culturally responsive. Several studies (Warren, 2015, 2018; Whitford & Emerson, 2019) demonstrated that empathy training in undergraduate years positively impacted teachers in cultivating an inclusive understanding in their professional lives. Providing PSTs with training in culturally responsive teaching and encouraging them to participate in community service projects could be another successful strategy for reducing prejudice (Walker, 2023; Wilcoxon et al., 2021). In addition, providing PSTs with opportunities to explore various cultures, faiths, and histories could foster respect and empathy toward diverse cultures. It is also essential to reconsider and update PST training programs accordingly.

6 Limitations and future directions

This study acknowledges certain limitations and assumptions which must be considered. First, it explored prejudice and its association with SDO and empathy alongside demographic variables such as SES and ethnic background. Further studies could explore other variables (e.g., symbolic and realistic threat, right-wing authoritarianism, educational level) of PSTs, which previous literature (e.g., Cowling et al., 2019) has identified as correlated with prejudice. Second, we utilized TEQ to comprehensively measure empathy in general and assumed that the participants responded to the questions, keeping Syrian refugees in mind. Since empathy is crucial for understanding others' emotions and promoting prosocial behavior, we also assumed that assessing empathy in general provides essential insights into empathy towards Syrian refugees. Third, the study focused on a sample of 726 PSTs from eight universities across three regions, predominantly characterized by their limited age range. Therefore, future investigations involving in-service teachers could provide additional valuable insights for more effective professional development incentives targeted to inclusive classrooms.

Fourth, research could benefit from data collected in areas with a high concentration of Syrian refugees, offering a more nuanced perspective. Fifth, the study specifically concentrated on Syrian refugees due to their significant presence in Turkey. Subsequent research could delve into the SDO, empathy, and prejudice of Syrian refugees towards Turkish citizens.

Finally, numerous studies (e.g., Pawlicka et al., 2019; Warren, 2018; Yitmen & Verkuyten, 2018) have demonstrated the effectiveness of empathy interventions in raising awareness and reducing prejudice. Therefore, future studies could delve deeper into empathy and its potential to reduce prejudice toward refugees in PST education programs.

7 Conclusion

Our study revealed critical findings to explain the mediation role of empathy in the association between SDO and prejudice toward Syrian refugees in the context of Turkish PSTs. With a large sample group ($N=726$), this study proved a positive correlation between SDO and prejudice, and empathy showed a small but significant mediation effect on this relationship. PSTs, although they felt low SDO and high empathy towards Syrian refugees, tended to express prejudice. In addition, SES and ethnicity significantly predicted prejudice against Syrian refugees. This study underscores the value of knowing PSTs' attitudes toward Syrian refugees to avoid future interpersonal or intergroup misunderstandings and develop more evidence-based teacher training policies.

Author contributions Both authors have accepted responsibility for the entire content of this manuscript and approved its submission.

Funding Open access funding provided by the Scientific and Technological Research Council of Türkiye (TÜBİTAK). Authors state no funding involved.

Data Availability The datasets generated during and/or analyzed during the current study are available at <https://figshare.com/s/eace0a605a8298663f13> (Reserved <https://doi.org/10.6084/m9.figshare.24188967>).

Declarations

Conflict of interest Authors state no conflict of interest.

Informed consent Informed consent has been obtained from all individuals included in this study.

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