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The limited impact of adverse experiences on worldviews and ideologies

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The impact of adverse experiences on clinical symptoms has been consistently demonstrated, but their impact on ideologies and worldviews has been rarely tested empirically. It has been long assumed that threatening experiences increase Dangerous World Beliefs (DWB) and Right-Wing Authoritarianism (RWA), whereas scarcity experiences increase Competitive World Beliefs (CWB) and Social Dominance Orientation (SDO). Here we assess whether self-reports of these adverse experiences are associated with clinical symptoms, worldviews and ideologies across two distinct studies ($N_{total} = 1,108$). Study 1 comprised Brazilian youth (13–17 years old) and results indicated that adverse experiences are consistently associated with depression, anxiety and stress but only marginally associated with DWB, RWA, CWB and SDO. Study 2 comprised male prisoners with a higher degree of adverse experiences and similar results were observed, as adverse experiences were mostly unrelated to worldviews and ideologies. Comprehensively, this research challenges the theoretical foundations of worldviews and ideological development, posing questions to the existing models and advocating for new frameworks that promote a shift from models grounded in clinical assumptions to frameworks focusing on social influences.

KEYWORDS

ideology, worldview, Right-Wing Authoritarianism, Social Dominance Orientation, adverse experience

1 Introduction

The impact of adverse experiences on human psychological development has been discussed for more than a century. On the one hand, distinct scholarship as early as Breuer and Freud (1895/2009) pointed out that adverse experiences could lead to the formation of clinical symptoms, increasing depression, anxiety, and stress (e.g., Hughes et al., 2017; Petruccelli et al., 2019; Sahle et al., 2022). On the other hand, distinct scholarship indicated that adverse experiences lead to the formation of certain worldviews and ideologies, usually characterized by the perception of the world as a dangerous place and a bigoted posture toward outgroups (e.g., Fromm, 1941/2013; D'Andrade, 1992). It has thus been long assumed that adverse experiences usually have a significant psychological impact, either clinically or socially.

Although there is extensive evidence indicating that adverse experiences lead to the formation of clinical symptoms—particularly in the trauma literature (e.g., Mayo et al., 2017; Sahle et al., 2022)—, the relationship between adverse experiences, worldviews and ideologies has been mostly assumed theoretically and not tested empirically. These theories could be synthesized in two general approaches that indicate a particular role of

experiences in this process (Clifton, 2020). For instance, the first approach could be labeled the retrospective approach, encompassing theories suggesting that worldviews reflect the content of the experiences people had. In this case, if the past experiences of a person were marked by negligence (e.g., involvement in abusive relationships, constant exposition to emotional blackmail), the person will see the world as mostly negligent. Similarly, if past experiences were marked by threat (e.g., physical, and verbal violence), the person will see the world as mostly threatening. This is the most intuitive approach and the most common among psychological theories, which often posit that experiences in childhood shape the beliefs in adulthood (e.g., Freud, 1900/2008; Young et al., 2003; Beck, 2020).

The second approach, on the other hand, could be labeled interpretive, and it does not indicate that experiences always precede the development of worldviews (Clifton, 2020). Instead, it encompasses theories suggesting that worldviews function as lenses that interpret experiences, so past experiences marked by neglect could have little or no impact in developing beliefs that the world is negligent (e.g., Vernon, 1955; Labianca et al., 2000). According to this approach, most events could not be clearly described as negligent or threatening in themselves, but rather interpreted as such based on prior worldviews. Worldviews thus promote self-reinforcing interpretations, such that those events that do not match our interpretive system are ignored or reinterpreted in a way that fits our previous beliefs (Janoff-Bulman, 1989).

Notably, the development of worldviews and ideologies has been mostly explained through retrospective theories. These theories aimed to unveil the psychological mechanisms behind the endorsement of authoritarian governments and the uncritical acceptance of hierarchical orders. In particular, the psychoanalytic emphasis on adverse experiences as triggers for clinical symptoms and specific formations of the unconscious was used to elucidate support for totalitarian regimes, and it has been asserted that worldviews and ideologies arise from personal unconscious needs shaped by adverse experiences—proposals that will be addressed in the following section.

1.1 The relationship between adverse experiences, worldviews, and ideologies

One of the most overarching and influential proposals on the origins of worldviews and ideologies was provided by Adorno et al. (1950). According to the authors, the "Authoritarian Personality" was one type of personality psychologically predisposed to follow totalitarian movements and bigoted ideologies, mostly stemming from family experiences. Notably, "authoritarians" endorsed worldviews and ideologies characterized by hostility toward minority groups, but paradoxically, most of them never had any contact with minorities. Hence, authoritarians described minorities as essentially bad, sinful, and venal even without any previous concrete negative intergroup contact that could serve as rationale for these attitudes. This paradox thus led Adorno et al. (1950) to propose that the outgroup hostility stems from

personal unconscious needs that arise from adverse experiences within the family.

Similar to how Freud explained the formation of the unconscious based on familial experiences, Adorno et al. (1950) indicated that familial adverse experiences shaped worldviews and ideologies. For instance, the consistent parental application of punishments, numerous obedience requests, and limited expressions of affection toward their children allegedly promote fearful subservience to the demands of the parents, as well as resentment and hatred toward them. This dynamic sets the stage for enduring impacts in adult life, manifested in a tendency for deriving pleasure from obedience and submission to established authorities, alongside a deep-seated animosity toward outgroups—the main characteristics of the Authoritarian Personality.

The proposals of Adorno et al. (1950) about adverse experiences laid the groundwork for scholars to further examine their implications for the development of worldviews and ideologies. While Adorno et al. (1950) specifically delved into childhood experiences within the family, later researchers have shifted their focus to distinct experiences marked by threats in different life stages. Notably, Altemeyer (1988, 1996) indicated that threatening experiences beyond parent-child relationship play a key role in forming worldviews and ideologies. For instance, being constantly warned about kidnappers, tramps and gangs promotes outgroup hostility, adherence to social conventions and submission to authorities, along with a view that the world is a dangerous place. In contrast to the emphasis of Adorno et al. (1950) on the family setting and childhood, Altemeyer (1988, 1996) proposed that the development of worldviews and ideologies is not confined to a specific life phase, as threatening experiences could happen in distinct stages of the lifespan.

Complementing the proposals of Altemeyer (1988, 1996), Duckitt and Sibley (2010) indicated that not only threatening experiences are important for the development of worldviews and ideologies, but also experiences characterized by resource scarcity. For instance, living in a dangerous environment marked by social instability and the constant presence of threats could foster the belief that the world is a dangerous place. This would in turn lead to the ideological endorsement of harsh coercive measures as a way to control the perceived threats, establishing a connection between worldviews and ideologies. Similarly, living in a poor, unequal environment marked by resource scarcity could foster the belief that the world is a competitive jungle, leading to the ideological endorsement of intergroup inequality (Duckitt and Sibley, 2017). The prior conceptualization focused on threat is thus expanded, proposing that experiences marked by threat and resource scarcity are key on the development of worldviews and ideologies, regardless of the stage of life. It is important to highlight this different conceptualization of threat and resource scarcity in comparison to the definitions proposed by other psychological theories such as the Realistic Group Conflict Theory, which considers the competition for resources a form of threat (e.g., Zárate et al., 2004). In the theoretical background proposed by Duckitt and Sibley (2010) and also used in the present work, threat refers to physical and symbolic safety, whereas resource scarcity refers to the lack of enough resources to live properly.

It is worth noting that despite some theoretical differences, the core retrospective assumption initially posited by Adorno et al. (1950) that adverse experiences contribute to the shaping of worldviews and ideologies remains evident in the works of both Altemeyer (1988, 1996) and Duckitt and Sibley (2010, 2017). This alleged centrality of adverse experiences originally derives from Freudian propositions that were formulated based on clinical cases. Notably, Adorno et al. (1950, p. lxiii) emphasized that their proposal was based on the Freudian orthodox clinical work focused on concepts such as the unconscious, repression, Id, ego and superego, and not on sociological work. Therefore, the current retrospective explanations for the origins of worldviews and ideologies are actually based on clinical models stressing the importance of adverse experiences instead of models stressing social influences, which may pose challenges that will be outlined in the following sections.

1.2 Main worldviews and ideologies investigated

Across the social psychological investigations of worldviews and ideologies, two particular worldviews and two distinct ideologies are commonly investigated. First, the worldview describing the world as a dangerous place, where threat is constantly present and promoting instability in society is often assessed, entitled Dangerous World Beliefs (DWB, Altemeyer, 1988; Duckitt, 2001). Accordingly, the social world is seen as always susceptible to disharmony, chaos and abrupt subversion of values, leading people to perceive greater threats in their daily lives. This worldview makes the goals of social control, security and conformity salient, making people endorse Right-Wing Authoritarianism (Altemeyer, 1981; Duckitt et al., 2002; RWA), an ideology characterized by the support of harsher punitive measures, traditional moral values and submission to authority as a way to "normalize" society.

Similarly, another worldview that is commonly investigated is the belief that the world is a competitive place, like a competitive jungle that forces people to ruthlessly struggle for survival. It is entitled Competitive World Beliefs (CWB), characterized by the perception of the social world as a "dog-eat-dog" world where people have to do whatever is necessary to survive (Duckitt et al., 2002). The goals fostered by this worldview are those of power and dominance, providing the belief that the strong and able win, the weak and unfit lose, leading to the endorsement of Social Dominance Orientation (SDO), an ideology indexing the support to establish and maintain hierarchically structured intergroup relations in society (Pratto et al., 1994; Sidanius and Pratto, 1999; Sidanius et al., 2001).

In sum, experiences marked by threat are hypothesized to be associated with increased DWB and RWA, whereas experiences marked by resource scarcity are hypothesized to be associated with increased CWB and SDO. The predicted relationship between experiences marked by threat and scarcity, DWB, CWB, RWA and SDO are depicted in Figure 1.

Empirical studies corroborated the aforementioned associations between worldviews (i.e., DWB and CWB) and ideologies (i.e., RWA and SDO; e.g., Duckitt, 2001; Duckitt et al., 2002; Sibley and Duckitt, 2008; Sibley et al., 2010; Perry et al., 2013; Cantal et al., 2015), but their relationships with adverse experiences have not been extensively tested empirically. For instance, Adorno et al. (1950) assessed the relationship between exploitive parent-child relationship and ideological development mostly through interviews with case studies. They indicated that "prejudiced subjects tend to report a relatively harsh and more threatening type of home discipline which was experienced as arbitrary by the child" (Adorno et al., 1950, p. 385). However, no systematic content analysis technique to assess the interviews was used, relying on limited psychoanalytic projective techniques such as the Thematic Apperception Test (Holt, 1999). Further, this technique is better interpreted as providing evidence of retrospective interpretation than development of ideology. Similarly, Altemeyer (1988, 1996) and Duckitt and Sibley (2010, 2017) did not assess which actual threatening and scarcity experiences may lead to the development of worldviews and ideologies. Their propositions mostly rely on experiments where participants are randomly assigned to fictitious scenarios with varying degrees of threat, and then asked to endorse distinct worldviews and ideologies as if they were living in the fictitious scenario described (e.g., Duckitt and Fisher, 2003).

Seeking to overcome these limitations, the objective of the present work is to assess the impact of retrospective self-reports of adverse experiences on worldviews, ideologies, and clinical symptoms across two distinct studies. As most previous studies did not assess the report of actual past adverse experiences, we analyzed a series of experiences that could allegedly be associated with worldviews and ideologies. Furthermore, as previous studies have consistently reported that adverse experiences predict clinical symptoms, we sought to compare the magnitude of this association with the association between adverse experiences, worldviews and ideologies.

2 Study 1

2.1 Materials and methods

2.1.1 Participants and procedure

A convenience sample of young Brazilians was recruited for this study, with the approval of the Institutional Review Board of the research university to which the first and last authors are affiliated. All data collection procedures, including the fact that the written informed consent of participants' legal guardian was waived, are according to the Institutional Review Board procedures approved under the registration number CAAE 51664121.8.0000.5336. Between January and March 2022, the researchers shared a link to an online survey on attitudes via different profiles of the research group on various social media platforms. Informed consent was obtained from all participants before they began the survey. The sample was not incentivized, as it is legally forbidden to pay for participation in research in Brazil. It is also important to note that this sample is part of a broader project investigating the social attitudes of young Brazilians. The initial sample contained 2,727 participants, but 1,730 were excluded for completing less than 80% of the survey (Schlomer et al., 2010). Additionally, 96 participants were excluded for being 18 years or

FIGURE 1
Illustration of the hypothesized relationships between experiences marked by threat, scarcity, dangerous world beliefs, competitive world beliefs, right-wing authoritarianism and social dominance orientation.

older. This resulted in a final sample of 901 participants (61.3% female) aged between 13 to 17 years (M = 15.59; SD = 1.21). The sociodemographic profile of this sample, including information on education level, ethnicity, socioeconomic status, and political self-categorization, has been previously described by Vilanova et al.[1]

2.1.2 Measures

In addition to the aforementioned sociodemographic questions, the participants completed distinct instruments in the following order: Adverse Life Experiences Scale (Koller et al., 2005), Right-Wing Authoritarianism Scale (RWA, Duckitt et al., 2010), Social Dominance Orientation₇ Scale (SDO₇, Ho et al., 2015), Refined Version of the Competitive World Beliefs Scale (CWB, Perry et al., 2013), Refined Version of the Dangerous World Beliefs Scale (DWB, Perry et al., 2013), and the Depression, Anxiety, and Stress Scale-21 (DASS-21, Lovibond and Lovibond, 1995).

2.1.3 Adverse life experiences scale

Adverse life experiences were measured by an instrument based on the Life Experiences Survey (Sarason et al., 1978), which was modified and adapted to the Brazilian context by Koller et al. (2005) and then used in national youth surveys in Brazil (Liborio and Koller, 2009; Dell'Aglio and Koller, 2011). Participants indicated which of 23 adverse events they had experienced in their lifetime (i.e., 1 = yes or 0 = no), comprising events such as "Someone already broke into my house", "I've been imprisoned", and "I lived on the street". Table 1 shows the mean, standard deviation and agreement rates of the adverse experiences assessed.

2.1.4 Right-Wing Authoritarianism Scale (RWA)

A 12-item version of the Authoritarianism-Conservatism-Traditionalism scale originally proposed by Duckitt et al. (2010), and culturally adapted to the Brazilian context by Vilanova et al. (2023) was used. Items were rated in a five-point agreement scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*), and demonstrated good internal consistency (Cronbach's α = 0.84).

2.1.5 Social Dominance Orientation₇ Scale

Participants completed the 8-item SDO₇ scale originally proposed by Ho et al. (2015) and culturally adapted for the Brazilian context by Vilanova et al. (2022). The agreement rate was indicated by a seven-point scale ranging from 1 (*totally disagree*) to 7 (*totally agree*), and the scale demonstrated good internal consistency (Cronbach's α = 0.84).

2.1.6 Refined competitive—(CWB) and dangerous world beliefs (DWB) scales

The cross-culturally adapted and refined versions of the CWB and DWB scales provided by Perry et al. (2013) were used. Each scale comprises 11 items whose answers could be given on a five-point agreement scale ranging from 1 (*totally disagree*) to 5 (*totally agree*). Internal consistency was adequate in this sample for both CWB (Cronbach's α = 0.76) and DWB (Cronbach's α = 0.71).

2.1.7 Depression, anxiety and stress scale (DASS-21)

Clinical symptoms were measured by the DASS-21 scale, which assesses symptoms of depression, anxiety and stress (Lovibond and Lovibond, 1995). It has been adapted for the Brazilian context by Patias et al. (2016) and comprises 21 symptoms whose frequencies for the last week should be indicated on a scale ranging from 0 (*did not apply to me at all*) to 3 (*applied to me very much or most of the time*). Internal consistency was adequate for depression (Cronbach's α = 0.91), anxiety (Cronbach's α = 0.87) and stress (Cronbach's α = 0.88).

2.1.8 Data analysis

For data analyses, adverse experiences were computed in three distinct forms. First, a total adversity score was computed encompassing the sum of all adverse experiences participants had. As the occurrence of each experience was coded as 1 and the non-occurrence as 0, the total adversity score corresponded to the total amount of experiences each participant had. Hence, total adversity scores ranged from 0 to 12 (M = 3.35; SD = 2.19). Second, a threat score was computed, summing only experiences that clearly indicated threatening experiences according to the judgment of two experts in Social Psychology. This score was computed based on the occurrence of the following experiences: "I was robbed", "Someone already broke into my house" and "I was involved in fights with

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1 Vilanova, F., Almeida-Segundo, D. A., Milfont, T. L., and Costa, A. B. (2024). Further testing a dual process social psychological model of corrupt intention and attitudes toward corrupt people. Manuscript submitted for publication (not yet accepted).

TABLE 1 Mean, standard deviation and agreement rate of adverse life experiences (Study 1).

Experience	M (SD)	Agreement rate (%)
My family's economic status suddenly declined	0.52 (0.50)	51.61
Someone in my household became unemployed	0.51 (0.50)	51.05
My parents got divorced	0.43 (0.49)	43.06
I have been in institutions such as shelters or orphanages	0.01 (0.07)	0.55
I ran away from home	0.05 (0.21)	4.55
I lived on the street	0.00 (0.05)	0.22
I slept on the street	0.01 (0.10)	1.00
I worked on the street	0.02 (0.14)	1.89
Someone in my family has been imprisoned	0.17 (0.37)	16.87
I had a serious accident	0.05 (0.22)	4.99
Someone very important to me died	0.46 (0.50)	46.17
I already starved	0.07 (0.26)	7.21
I was robbed	0.10 (0.30)	9.65
I have already served a juvenile diversion program without deprivation of liberty (without being imprisoned)	0.01 (0.07)	0.55
I've been imprisoned/deprived of my liberty (in a closed institution, like jail)	0.00 (0.00)	0
I've been taken to the guardianship council	0.05 (0.21)	4.66
I had judicial problems	0.02 (0.15)	2.33
I have been in trouble with the police	0.01 (0.35)	1.44
I was kidnapped	0.00 (0.06)	0.33
Someone already broke into my house	0.14 (0.35)	14.21
I was involved in fights with other people	0.24 (0.43)	24.31
I had relatives involved with drugs	0.43 (0.49)	42.73
I had personal content published on the internet by someone else	0.06 (0.23)	5.66

Answers were coded as 0 (did not happen) or 1 (already happened). Agreement rates refer to answers indicating that the event already happened.

other people". Threat scores ranged from 0 to 3 ($M = 0.48$; $SD = 0.70$). Third, a resource scarcity score was computed, summing only experiences that clearly indicated scarcity experiences according to the judgment of the same two experts. This score was computed based on the occurrence of the following experiences: "My family's economic status suddenly declined", "Someone in my household became unemployed" and "I have already starved". Scarcity scores ranged from 0 to 3 ($M = 1.10$; $SD = 0.91$). The items forming the threat and scarcity scores were tested using Confirmatory Factor Analyses and had good fit indices to the data (see Section A of the Supplementary material).

Pearson correlations were then performed for the total adversity score, the threat score, the scarcity score, and mean scores of RWA, SDO, DWB, CWB, depression, anxiety, and stress. Software G*Power 3.1.9.7 indicated that to conduct this analysis with 0.05 α error probability, 0.80 statistical power and an effect size of 0.21 (the mean effect size in Social Psychology according to Richard et al., 2003), at least 173 participants would be required, so the sample fulfills this requirement. Additionally, Pearson correlations between each one of the 23 experiences assessed, RWA, SDO, DWB, CWB, depression, anxiety, and stress were also provided in Section B of the Supplementary material.

Afterward, two path analyses were performed. The first path analysis considered the total adversity score as the predictor of mean scores of RWA, SDO, DWB, CWB, depression, anxiety and stress. The second path analysis considered the differential associations proposed by Duckitt and Sibley (2010, 2017), indicating that threatening experiences predict DWB and RWA, whereas scarcity experiences predict CWB and SDO (see Section C of the Supplementary material for the assessment of these paths using mediational models). Sample size calculations for path analyses using the inverse square root method proposed by Kock and Hadaya (2016) indicated that to conduct these analyses with.05 α error probability,0.80 statistical power and an effect size of.21, at least 141 participants would be required, so the sample fulfills this requirement.
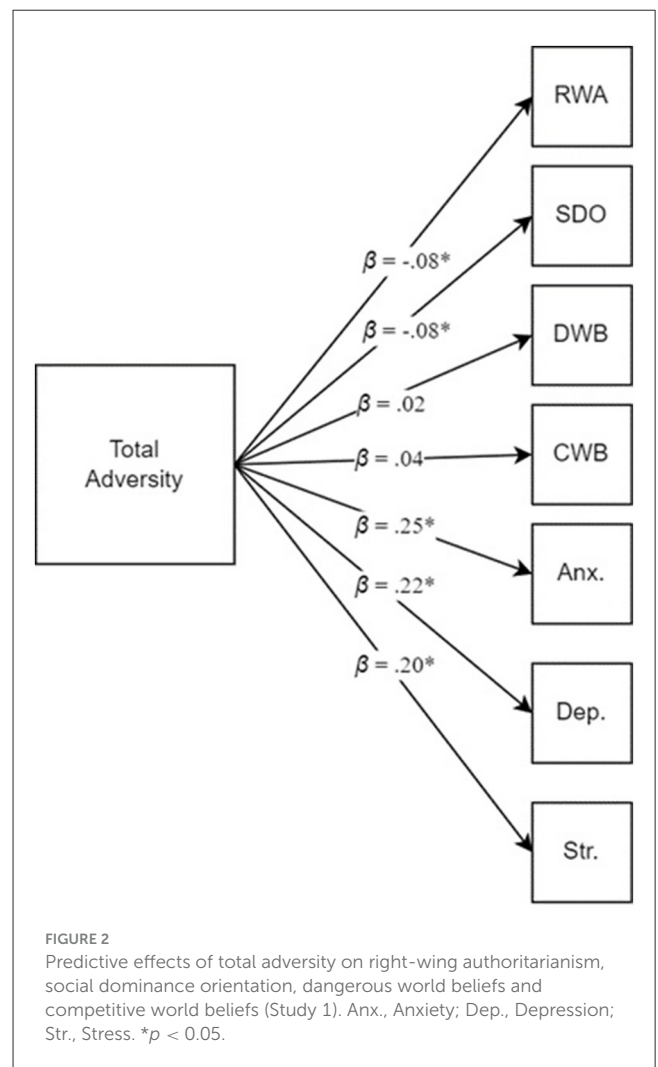
2.2 Results

First, only nonsignificant or small correlations were found between total adversity scores, worldviews and ideologies (see Table 2). For instance, total adversity was not significantly correlated with DWB {$r_{(899)} = 0.02$, $p = 0.62$, C.I. 95% $= [−0.05$,

TABLE 2 Correlation between total adversity, threat, resource scarcity, RWA, SDO, DWB, CWB, depression, anxiety, and stress (Study 1).
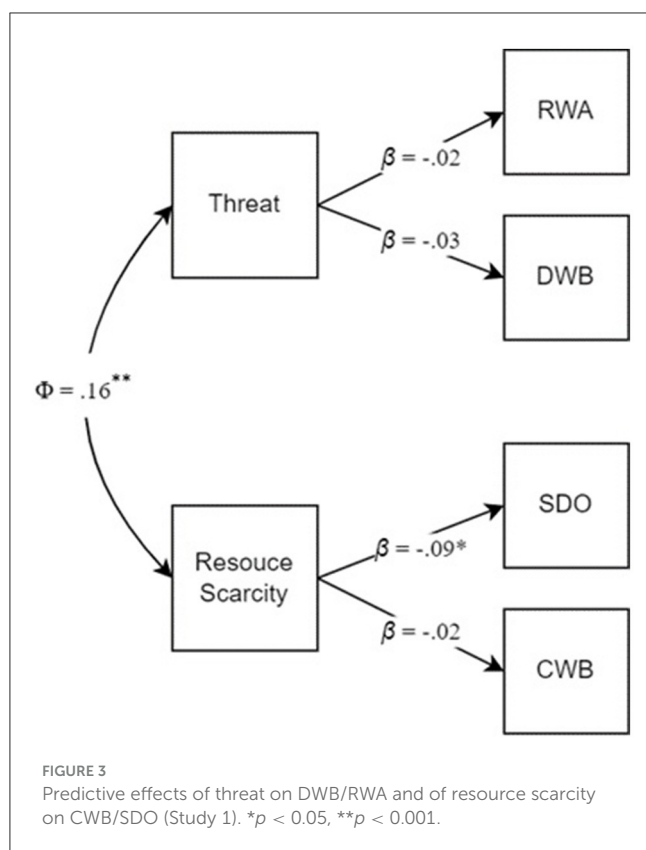
Variable	1	2	3	4	5	6	7	8	9
1. Total Adversity	—								
2. Threat	0.56**	—							
3. Resource Scarcity	0.65**	0.16**	—						
4. RWA	−0.08*	−0.02	−0.05	—					
5. SDO	−0.08*	0.01	−0.12**	0.48**	—				
6. DWB	0.02	−0.02	0.05	0.27**	0.03	—			
7. CWB	0.04	0.09*	−0.02	0.07*	0.26**	0.07*	—		
8. Depression	0.22**	0.13**	0.19**	−0.19**	−0.15**	0.04	0.08*	—	
9. Anxiety	0.25**	0.14**	0.18**	−0.19**	−0.17**	0.05	0.05	0.68**	—
10. Stress	0.20**	0.13**	0.16**	−0.19**	−0.16**	0.03	0.06	0.72**	0.80**

$^*p < 0.05$, $^{**}p < 0.001$.

0.08]} or CWB {$r_{(899)} = 0.04$, $p = 0.19$, C.I. 95% = [−0.02, 0.11]}, and only weakly correlated with RWA {$r_{(888)} = −0.08$, $p = 0.01$, C.I. 95% = [−0.15, −0.02]} and SDO {$r_{(899)} = −0.08$, $p = 0.01$, C.I. 95% = [−0.15, −0.02]}. On the other hand, total adversity scores were significantly associated with clinical symptoms, as moderate positive correlations were found with depression {$r_{(896)} = 0.22$, $p < 0.001$, C.I. 95% = [0.16, 0.28]}, anxiety {$r_{(891)} = 0.25$, $p < 0.001$, C.I. 95% = [0.19, 0.31]}, and stress {$r_{(895)} = 0.20$, $p < 0.001$, C.I. 95% = [0.13, 0.26]}. A similar pattern was found considering threat and scarcity experiences. For instance, threat scores were not significantly correlated with DWB {$r_{(899)} = −0.02$, $p = 0.45$, C.I. 95% = [−0.09, 0.04]}, RWA {$r_{(888)} = −0.02$, $p = 0.51$, C.I. 95% = [−0.09, 0.04]}, or SDO {$r_{(899)} = 0.01$, $p = 0.73$, C.I. 95% = [−0.05, 0.08]}, and only weakly correlated with CWB {$r_{(899)} = 0.09$, $p = 0.006$, C.I. 95% = [0.03, 0.16]}. Similarly, scarcity scores did not significantly correlate with DWB {$r_{(899)} = 0.05$, $p = 0.16$, C.I. 95% = [−0.02, 0.11]}, CWB {$r_{(899)} = −0.02$, $p = 0.49$, C.I. 95% = [−0.09, 0.04]} or RWA {$r_{(888)} = −0.05$, $p = 0.11$, C.I. 95% = [−0.12, 0.01]}, but only with SDO {$r_{(899)} = −0.12$, $p < 0.001$, C.I. 95% = [−0.19, −0.06]}. On the other hand, the correlations between threat and scarcity scores with clinical symptoms were significant and somewhat higher. For instance, threatening experiences were positively correlated with depression {$r_{(896)} = 0.13$, $p < 0.001$, C.I. 95% = [.07, 0.19]}, anxiety {$r_{(891)} = 0.14$, $p < 0.001$, C.I. 95% = [0.07, 0.20]}, and stress {$r_{(895)} = 0.13$, $p < 0.001$, C.I. 95% = [.06, 0.19]}. Similarly, scarcity scores were also positively correlated with depression {$r_{(896)} = 0.19$, $p < 0.001$, C.I. 95% = [.13, 0.26]}, anxiety {$r_{(891)} = 0.18$, $p < 0.001$, C.I. 95% = [0.12, 0.25]}, and stress {$r_{(895)} = 0.16$, $p < 0.001$, C.I. 95% = [0.10, 0.22]}.

Path analyses were then carried out to assess the predictive relationships, and similar patterns to those found in the correlations were observed. Notably, total adversity scores did not significantly predict worldviews and only weakly predicted ideologies (see Figure 2). For instance, total adversity scores did not significantly predict DWB (B = 0.05, 95% CI [−0.15, 0.25], S.E. = 0.10, $\beta = 0.02$, $p = 0.624$) or CWB (B = 0.14, 95% CI [−0.07, 0.35], S.E. = 0.11, $\beta = 0.04$, $p = 0.199$), and only weakly predicted RWA (B = −0.32, 95% CI [−0.58, −0.06], S.E. = 0.13, $\beta = −0.08$, $p =$

FIGURE 2
Predictive effects of total adversity on right-wing authoritarianism, social dominance orientation, dangerous world beliefs and competitive world beliefs (Study 1). Anx., Anxiety; Dep., Depression; Str., Stress. *$p < 0.05$.

0.015) and SDO (B = −0.40, 95% CI [−0.71, −0.08], S.E. = 0.16, $\beta = −0.08$, $p = 0.013$). In contrast, total adversity scores positively predicted clinical symptoms, in particular depression (B = 0.64, 95% CI [0.46, 0.83], S.E. = 0.10, $\beta = 0.22$, $p < 0.001$), anxiety (B =

FIGURE 3
Predictive effects of threat on DWB/RWA and of resource scarcity on CWB/SDO (Study 1). *$p < 0.05$, **$p < 0.001$.

0.68, 95% CI [0.50, 0.86], S.E. $= 0.09$, $\beta = 0.25$, $p < 0.001$) and stress (B $= 0.52$, 95% CI [0.35, 0.69], S.E. $= 0.09$, $\beta = 0.20$, $p < 0.001$).

The lack of robust relationships between adverse experiences, worldviews and ideologies was observed even when exclusively considering the differential predictive effects of threatening and scarcity experiences (see Figure 3). For instance, threat scores did not significantly predict either DWB (B $= -0.29$, 95% CI [-0.88, 0.30], S.E. $= 0.30$, $\beta = -0.03$, $p = 0.334$) or RWA (B $= -0.32$, 95% CI [-1.02, 0.38], S.E. $= 0.36$, $\beta = -0.02$, $p = 0.375$), and scarcity scores did not predict CWB (B $= -0.17$, 95% CI [-0.65, 0.30], S.E. $= 0.24$, $\beta = -0.02$, $p = 0.469$) and only weakly predicted SDO (B $= -1.03$, 95% CI [-1.67, -0.39], S.E. $= 0.33$, $\beta = -0.09$, $p = 0.002$).

3 Study 2

Study 1 assessed the relationship between adverse experiences, worldviews, ideologies and clinical symptoms. In sum, results indicated that adverse experiences are only marginally associated with worldviews and ideologies, and consistently associated with depression, anxiety and stress. However, Study 1 comprised a youth sample obtained through convenience sampling, with varying degrees of adverse experiences. Therefore, in Study 2 we sought to assess the relationship between adverse experiences, worldviews and ideologies in an adult sample with high rates of adverse experiences, so we performed a data collection in a male prison in Southern Brazil.

3.1 Materials and methods

3.1.1 Participants and procedure

Prisoners of a masculine jail in Southern Brazil were recruited for participating in the present study. We were authorized by the jail personnel to invite those who were involved in jail activities (e.g., organizing and distributing clothing to other prisoners, cooking, studying) to participate in the research, so a convenience sample was obtained. Data collection was in-person between May and August 2023, and participants completed the instruments in a paper and pencil format. The study design was approved by the Institutional Review Board of the research university to which the first and last authors are affiliated, as well as the Ethics Committee of the state penitentiary system. Informed consent was obtained from all participants before they began the survey. The sample comprised 207 prisoners, aged between 18 and 70 years old ($M =$ 36.15; $SD = 10.62$). The sociodemographic profile of this sample, including information on education level, ethnicity, and marital status are provided in Table 3 along with the sociodemographic profile of all incarcerated men in this jail when data collection was conducted. All participants completed more than 80% of the survey (Schlomer et al., 2010), and missing data were handled by inputting mean scores.

3.1.2 Measures

Due to time and logistic constraints, shorter versions of the instruments had to be used. Therefore, in addition to the aforementioned sociodemographic questions, participants completed the Adverse Life Experiences Scale (Koller et al., 2005), Refined Version of the Dangerous World Beliefs Scale (DWB, Perry et al., 2013), Refined Version of the Competitive World Beliefs Scale (CWB, Perry et al., 2013), 4-item Short Social Dominance Orientation Scale (Pratto et al., 2013), and the Right-Wing Authoritarianism Scale (RWA, Duckitt et al., 2010).

3.1.3 Adverse life experiences scale

A shorter version of the Adverse Life Experiences Scale used in Study 1 (Koller et al., 2005; Liborio and Koller, 2009; Dell'Aglio and Koller, 2011) was applied to this sample. Seventeen out of the original 23 adverse experiences were assessed, and two main criteria were used for selection: excluding experiences which answers would be affirmative due to the imprisonment (e.g., "I've been imprisoned", "I had judicial problems", "I have been in trouble with the police") and following recommendations of jail personnel suggesting to focus on experiences that would not be related to major offenses that prisoners could have committed. For instance, the original adverse experiences "I was kidnapped" or "Someone already broke into my house" were excluded as these are serious offenses that participants could have committed. After the selection of these experiences, only one threatening experience remained (i.e., "I was robbed") so two other threatening experiences (i.e., "I was already humiliated and threatened within my family", "I was already humiliated and threatened outside my family") were added to achieve the minimum amount of three threatening experiences assessed as in Study 1. Hence, participants indicated which of 19 adverse events they had experienced in their lifetime (i.e., 1 = yes or

TABLE 3 Sociodemographic characterization of sample 2 and the jail where data collection was conducted.

Characteristic	n (%)—Sample 2 Total (N = 207)	n (%)—Jail Total (N = 2,368)
Educational level		
Illiterate	0	53 (2.24)
Literate, no formal education	0	95 (4.01)
Primary School	133 (64.25)	1,583 (66.85)
Secondary School	63 (30.43)	564 (23.82)
University/College	8 (3.86)	67 (2.83)
Not informed	3 (1.45)	6 (0.25)
Ethnicity		
White	103 (51.69)	1,435 (60.60)
Black	46 (22.22)	456 (19.26)
Pardo	46 (22.22)	449 (18.96)
Indigenous	5 (2.41)	13 (0.55)
Asian	1 (0.48)	15 (0.63)
Other	3 (1.45)	0
Not informed	3 (1.45)	0
Marital Status		
Single	112 (54.11)	1,527 (64.48)
Married	59 (28.50)	223 (9.42)
Divorced	7 (3.38)	86 (3.63)
Widowed	10 (4.83)	16 (0.68)
Cohabiting	17 (8.21)	516 (21.79)
Not informed	2 (0.97)	0
Socioeconomic class		
Monthly income equal to or higher than 20 Brazilian minimum wage	1 (0.49)	Information not available
Monthly income from 10 up to 20 Brazilian minimum wages	2 (0.98)	Information not available
Monthly income from 4 up to 10 Brazilian minimum wages	15 (7.32)	Information not available
Monthly family income from 2 up to 4 Brazilian minimum wages	25 (12.20)	Information not available
Monthly family income up to 2 Brazilian minimum wages	81 (39.51)	Information not available
Do not know	81 (39.51)	Information not available

0 = no). Table 4 shows the mean, standard deviation and agreement rates of the adverse experiences assessed.

3.1.4 Refined dangerous—(DWB) and competitive world beliefs (CWB) scales

The 3 top-loading items of the cross-culturally adapted and refined versions of the DWB (i.e., "My knowledge and experience tells me that the social world we live in is basically a dangerous and unpredictable place", "Good, decent and moral people's values and way of life are threatened and disrupted by bad people", "Every day as society become more lawless and bestial, a person's chances of being robbed, assaulted, and even murdered go up and up") and CWB scales (i.e., "One of the most useful skills a person should develop is how to look someone straight in the eye and lie convincingly", "There is really no such thing as 'right' and 'wrong'. It all boils down to what you can get away with", "Honesty is the best policy in all cases" [Reverse-Coded]) provided by Perry et al. (2013) were used. Answers could be given on a three-point agreement scale ranging from 1 (*disagree*) to 3 (*agree*). Considering the low educational level of the sample, emojis of hands were added to the questionnaire to illustrate the range of the answers. Hence, "disagree" was illustrated by the "👎" emoji, "neither agree nor disagree" was illustrated by the "👈 👉" emoji and "agree" was illustrated by the "👍" emoji. Internal consistency was adequate in this sample for DWB

TABLE 4 Mean, standard deviation and agreement rate of adverse life experiences (Study 2).

Experience	M (SD)	Agreement rate (%)
My family's economic status suddenly declined	0.82 (0.38)	82.00
Someone in my household became unemployed	0.91 (0.29)	90.69
My parents got divorced	0.67 (0.47)	67.00
I have been in institutions such as shelters or orphanages	0.14 (0.35)	13.86
I ran away from home	0.37 (0.48)	36.82
I lived on the street	0.23 (0.42)	22.66
I slept on the street	0.38 (0.49)	38.31
I worked on the street	0.68 (0.47)	67.68
Someone in my family has been imprisoned	0.52 (0.50)	52.22
I had a serious accident	0.41 (0.49)	41.00
Someone very important to me died	0.93 (0.26)	92.61
I already starved	0.50 (0.50)	49.75
My father/mother remarried	0.45 (0.50)	45.32
My father/mother had children with other partners	0.53 (0.50)	52.94
I was robbed	0.43 (0.50)	42.86
I have already served a community-based rehabilitation program without deprivation of liberty (without being imprisoned)	0.34 (0.47)	33.82
I've been taken to the guardianship council	0.29 (0.45)	28.92
I was already humiliated and threatened within my family	0.24 (0.43)	24.14
I was already humiliated and threatened outside my family	0.57 (0.50)	57.35

Answers were coded as 0 (did not happen) or 1 (already happened). Agreement rates refer to answers indicating that the event already happened.

(Cronbach's α = 0.60) and inadequate for CWB (Cronbach's α = 0.40)—likely due to the presence of a reverse-coded item in the CWB scale.

3.1.5 Short Social Dominance Orientation Scale

Participants completed the 4-item Short SDO scale (Pratto et al., 2013) comprising the items "In setting priorities, we must consider all groups" [reverse-coded], "We should not push for group equality", "Group equality should be our ideal" [reverse-coded], and "Superior groups should dominate inferior groups". The agreement rate was indicated by the same scale ranging from 1 (disagree) to 3 (agree) as in the DWB and CWB instruments, and the scale demonstrated inadequate internal consistency (Cronbach's α = 0.44)—also likely due to the presence of reverse-coded items.

3.1.6 Right-Wing Authoritarianism Scale (RWA)

The 12-item version of the Authoritarianism-Conservatism-Traditionalism scale introduced by Duckitt et al. (2010), and culturally adapted to the Brazilian context by Vilanova et al. (2023) was used. Items were rated in the same scale ranging from 1 (disagree) to 3 (agree) and demonstrated adequate internal consistency (Cronbach's α = 0.62).

3.1.7 Data analysis

The same statistical plan of Study 1 was conducted. Hence, adverse experiences were computed in three distinct forms. First, a total adversity score was computed encompassing the sum of all adverse experiences participants had, and total adversity scores ranged from 2 to 19 ($M = 9.42$; $SD = 3.41$). Second, a threat score was computed, summing the occurrence of the following experiences: "I was robbed", "I was already humiliated and threatened within my family" and "I was already humiliated and threatened outside my family". Threat scores ranged from 0 to 3 ($M = 1.25$; $SD = 0.97$). Third, a resource scarcity score was computed, summing the occurrence of the same experiences as in Study 1 (i.e., "My family's economic status suddenly declined", "Someone in my household became unemployed" and "I already starved"). Scarcity scores ranged from 0 to 3 ($M = 2.22$; $SD = 0.79$). The threat and scarcity scores were tested using Confirmatory Factor Analyses and had good fit indices to the data (see Section D of the Supplementary material).

Pearson correlations were then performed between the total adversity score, the threat score, the scarcity score, and mean scores of RWA, SDO, DWB, and CWB. Software G*Power 3.1.9.7 indicated that to conduct this analysis with 0.05 α error probability, 0.80 statistical power and an effect size of 0.21 (the mean effect size in Social Psychology according to Richard et al., 2003), at least 173 participants would be required, so our sample fulfills this requirement. Additionally, Pearson correlations between each one

TABLE 5 Correlation between total adversity, threat, resource scarcity, RWA, SDO, DWB and CWB (Study 2).

Variable	1	2	3	4	5	6
1. Total Adversity	—					
2. Threat	0.49**	—				
3. Resource Scarcity	0.55**	0.24**	—			
4. RWA	−0.15*	−0.07	−0.07	—		
5. SDO	0.05	−0.05	−0.01	0.09	—	
6. DWB	0.09	0.18*	0.08	0.13	−0.16*	—
7. CWB	0.09	−0.03	0.02	−0.11	0.24**	0.00

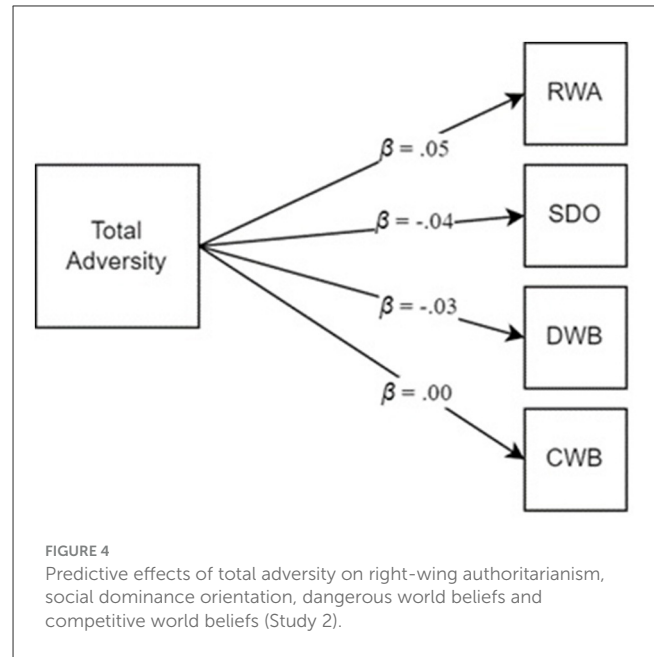*$p < 0.05$, **$p < 0.001$.

FIGURE 4
Predictive effects of total adversity on right-wing authoritarianism, social dominance orientation, dangerous world beliefs and competitive world beliefs (Study 2).

of the 19 experiences assessed, RWA, SDO, DWB, CWB, were also provided in Section E of the Supplementary material.

As in Study 1, two path analyses were performed. The first path analysis considered the total adversity score as the predictor of mean scores of RWA, SDO, DWB, and CWB. The second path analysis considered the differential associations proposed by Duckitt and Sibley (2010, 2017), indicating that threatening experiences predict DWB and RWA, whereas scarcity experiences predict CWB and SDO (see Section F of the Supplementary material for the assessment of these paths using mediational models). Sample size calculations for path analyses using the inverse square root method proposed (Kock and Hadaya, 2016) indicated that to conduct these analyses with 0.05 α error probability, 0.80 statistical power and an effect size of 0.21, at least 141 participants would be required, so the sample also fulfills this requirement.

3.2 Results

As in study 1, mostly nonsignificant or small correlations were found between total adversity scores, worldviews and ideologies (see Table 5). For instance, total adversity was not significantly correlated with DWB {$r_{(205)} = 0.09$, $p = 0.18$, C.I. 95% = [−0.04, 0.23]} or CWB {$r_{(205)} = 0.09$, $p = 0.17$, C.I. 95% = [−0.04, 0.23]} or SDO {$r_{(205)} = 0.05$, $p = 0.51$, C.I. 95% = [−0.09, 0.18]}, and only significantly correlated with RWA {$r_{(205)} = −0.15$, $p = 0.03$, C.I. 95% = [−0.28, −0.01]}. A similar pattern was found considering threat and scarcity experiences. For instance, threatening scores were not significantly correlated with CWB {$r_{(205)} = −0.03$, $p = 0.71$, C.I. 95% = [−0.16, 0.11]}, RWA {$r_{(205)} = −0.07$, $p = 0.30$, C.I. 95% = [−0.20, 0.06]}, or SDO {$r_{(205)} = −0.05$, $p = 0.44$, C.I. 95% = [−0.19, 0.08]}, and only significantly correlated with DWB {$r_{(205)} = 0.18$, $p = 0.007$, C.I. 95% = [.05, 0.31]}. Likewise, scarcity scores did not significantly correlate with any worldview or ideology, in particular DWB {$r_{(205)} = 0.08$, $p = 0.25$, C.I. 95% = [−0.06, 0.21]}, CWB {$r_{(205)} = 0.02$, $p = 0.81$, C.I. 95% = [−0.12, 0.15]}, RWA {$r_{(205)} = −0.07$, $p = 0.30$, C.I. 95% = [−0.21, 0.06]} and SDO {$r_{(205)} = −0.01$, $p = 0.85$, C.I. 95% = [−0.15, 0.12]}.
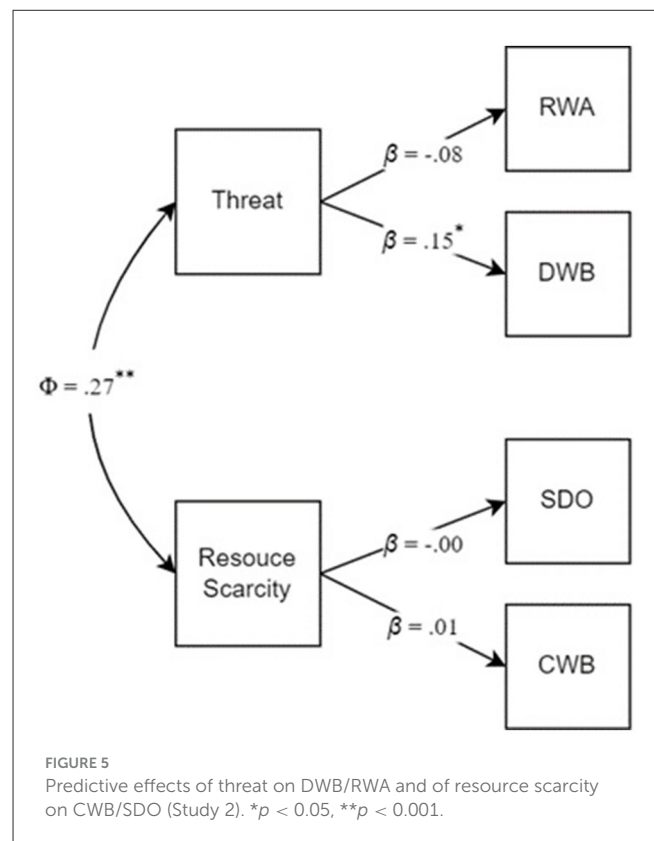
FIGURE 5
Predictive effects of threat on DWB/RWA and of resource scarcity on CWB/SDO (Study 2). *$p < 0.05$, **$p < 0.001$.

Subsequent path analyses indicated the lack of predictive effects of total adversity on worldviews and ideologies (see Figure 4). For instance, total adversity scores did not significantly predict DWB (B = −0.01, 95% CI [−0.05, 0.03], S.E. = 0.02, $\beta = −0.03$, $p = 0.631$), CWB (B = 0.00, 95% CI [−0.03, 0.03], S.E. = 0.02, $\beta = 0.00$, $p = 0.631$), RWA (B = 0.03, 95% CI [−0.05, 0.11], S.E. = 0.04, $\beta = 0.05$, $p = 0.437$) and SDO (B = −0.01, 95% CI [−0.05, 0.03], S.E. =

0.02, $\beta = -0.04$, $p = 0.608$). In a similar manner, threat and scarcity scores did not or only weakly predicted worldviews and ideologies (see Figure 5). For instance, threat scores weakly predicted DWB (B = 0.19, 95% CI [0.01, 0.36], S.E. = 0.09, $\beta = 0.15$, $p = 0.035$) and did not significantly predict RWA (B = -0.22, 95% CI [-0.64, 0.20], S.E. = 0.21, $\beta = -0.08$, $p = 0.304$), whereas scarcity scores did not predict CWB (B = 0.01, 95% CI [-0.16, 0.18], S.E. = 0.09, $\beta = 0.01$, $p = 0.882$) and SDO (B = -0.00, 95% CI [-0.24, 0.23], S.E. = 0.12, $\beta = -0.00$, $p = 0.975$).

4 Discussion

Contrary to common theoretical assumptions, our findings showed mostly weak or non–significant associations between having had adverse experiences and worldviews and ideologies. Notably, two frequently examined worldviews (DWB and CWB) and ideologies (RWA and SDO) were assessed and similar results were found across two studies. In Study 1, negligible or small associations were found between adverse experiences, DWB, CWB, RWA, and SDO among adolescents (13–17 years old). For instance, the total amount of adverse experiences individuals had did not significantly predict DWB ($\beta = 0.02$, $p = 0.624$) or CWB ($\beta = 0.04$, $p = 0.199$), and only weakly predicted RWA ($\beta = -0.08$, $p = 0.015$) and SDO ($\beta = -0.08$, $p = 0.013$). Even the assumption that threatening experiences in particular predict DWB and RWA was challenged, as we found nonsignificant predictive paths for both DWB ($\beta = -0.03$, $p = 0.334$) and RWA ($\beta = -0.02$, $p = 0.375$). Similarly, the assumption that resource scarcity experiences predict CWB and SDO was challenged, as an nonsignificant predictive path was found for CWB ($\beta = -0.02$, $p = 0.469$) and a small relationship was found for SDO ($\beta = -0.09$, $p = 0.002$). Even when focusing on the relationship between intrafamilial adverse experiences, worldviews, and ideologies, analogous outcomes were observed (see Section H of the Supplementary material).

Similar results were found in Study 2, comprising a sample of incarcerated adults (18+ years old) with a higher mean of adverse experiences (i.e., Sample 1 mean = 3.35; Sample 2 mean = 9.42). For instance, the total amount of adverse experiences individuals had did not significantly predict any worldview or ideology, as nonsignificant predictive paths were found for DWB ($\beta = -0.03$, $p = 0.631$), CWB ($\beta = 0.00$, $p = 0.631$), RWA ($\beta = 0.05$, $p = 0.437$), and SDO ($\beta = -0.04$, $p = 0.608$). When considering threatening experiences, a significant predictive relationship was found for DWB ($\beta = 0.15$, $p = 0.035$) and an nonsignificant relationship for RWA ($\beta = -0.08$, $p = 0.304$), similar to resource scarcity experiences, that did not significantly predict CWB ($\beta = 0.01$, $p = 0.882$) and SDO ($\beta = 0.00$, $p = 0.975$). Hence, the associations between adverse experiences, worldviews and ideologies were mostly negligible across two samples with distinct age groups and varying degrees of adverse experiences.

It is worth noting that clinical symptoms were assessed in Study 1 and robust associations with adverse experiences were observed. For instance, the total amount of adverse experiences individuals had significantly predicted depression ($\beta = 0.22$, $p < 0.001$), anxiety ($\beta = 0.25$, $p < 0.001$), and stress ($\beta = 0.20$, $p < 0.001$), in contrast to the weak associations found with worldviews and ideologies. This indicates that the occurrence of the adverse experiences assessed is significantly associated with clinical symptoms, but not the content of worldviews and ideologies. It should also be mentioned that the findings in Study 1 were based on measures that are established in the international literature, adapted to the local context, and had adequate reliability, providing robustness to the comparison of effect sizes. Hence, retrospective theories positing that adverse experiences in childhood shape the beliefs in adulthood may work for the formation of clinical symptoms but not for the formation of worldviews and ideologies.

It is not possible to say that any experience will not be associated with worldviews and ideologies based on our results though. For instance, it has already been shown that events such as the 9/11 attacks on the World Trade Center (Bonanno and Jost, 2006), terrorist attacks against railways in Madrid (Echebarria-Echabe and Fernández-Guede, 2006), the emergence of the COVID-19 pandemic (Azevedo et al., 2023; Zubielevitch et al., 2023), and even national elections changing the political party in power (Liu et al., 2008; Vilanova et al., 2019) significantly change worldviews and ideologies. These events have in common the fact that they are collective, contrary to the experiences we assessed, which are individual. Therefore, experiences that simultaneously affect many people such as terrorist attacks, emergence of pandemic, and national governmental change may significantly impact worldviews and ideologies, whereas individual experiences such as being robbed, starving, or having a serious accident may have limited impact. Future studies could assess the mechanism through which collective events change worldviews and ideologies. Notably, the 9/11 attacks prompted global debates on security, surveillance, and foreign policy, leading to changes in how individuals and nations perceive threats and respond to them. Similarly, the COVID-19 pandemic has prompted discussions on public health, individual liberties, and the role of government in crisis management, likely impacting individuals' perspectives on governance, solidarity, and personal responsibility. Furthermore, national elections signify shifts in political power and policy direction, often accompanied by ideological debates and societal polarization. Maybe the more the collective event is made aware to the public (particularly by the media and political leaders), the more it may foster a change in worldviews and ideologies—a promising avenue for empirical investigation.

The possible differential associations with collective and individual experiences may have been overlooked, possibly because of the theoretical foundation underlying the development of worldviews and ideologies. As mentioned in the introduction, most contemporary theories about the formation of worldviews and ideologies still hold the assumption originally proposed by Adorno et al. (1950) that adverse experiences are key in the formation of worldviews and ideologies. Most adverse experiences pointed out are individual (e.g., exploitive parent-child relationship) and these allegations were explicitly derived from the *clinical* work of Sigmund Freud (Adorno et al., 1950, p. lxiii) instead of theories focusing on social influences. Indeed, our results indicate that these individual experiences are significantly associated with clinical symptoms, but associations with worldviews and ideologies were negligible. Therefore, future studies should propose a new model focusing on how social influences and collective events contribute

to form worldviews and ideologies instead of focusing on individual experiences. This model could also address the potential relationships between positive experiences and worldviews and ideologies. We did not assess the impact of positive experiences such as being the beneficiary of someone's compassion because the literature about the formation of worldviews and ideologies in both the 20th (i.e., Fromm, 1941/2013; Adorno et al., 1950; Altemeyer, 1988, 1996); and 21st centuries (i.e., Duckitt and Sibley, 2017; Clifton, 2020) focuses on adverse experiences, so we decided to test their assumptions. However, future studies should assess whether these positive experiences are related in some way to worldviews and ideologies.

The associations between worldviews and ideologies are also worth noting. For instance, a dissimilar association between DWB and RWA was found across studies, such that a significant association was found in Study 1 ($r = 0.27$, $p < 0.001$) and an nonsignificant association was found in Study 2 ($r = 0.15$, $p = 0.064$). This nonsignificant association between DWB and RWA found in Study 2 may indicate that the perception of the world as a dangerous place may not lead to the endorsement of harsh coercive measures, uncritical submission to authority and traditional moral values among prisoners. Although prisoners could see the world as a dangerous place, it would unlikely lead to the endorsement of harsh coercive measures, as it would ultimately turn against them. Therefore, future studies should seek to disentangle the relationship between worldviews and ideologies in this population.

Remarkably, the correlation between established worldviews and ideologies among adolescents in Study 1 aligns with patterns observed in adult samples, as indicated by previous studies (for a review see Perry et al., 2013). The similar results support the notion that the relationship between worldviews and ideologies crystallizes by adolescence (Sears, 1986; Altemeyer, 1988). However, it has been pointed out that worldviews and ideologies crystallize by "mid to later adolescence" (Duckitt and Sibley, 2017, p. 192) and our sample in Study 1 included individuals as young as 13 years old, so future studies should aim to pinpoint when precisely the relationship between worldviews and ideologies crystallizes. Our results preliminary indicate that although significant relationships between DWB-CWB, and RWA-SDO are found among individuals as early as 13 years old, a greater number of significant relationships emerges as individuals get older (see Section G of the Supplementary material). For instance, the significant association of CWB with SDO was already found among individuals who were 14 years old, whereas the significant association of DWB with RWA was only found among individuals who were 15 years onward. Therefore, although the established associations between CWB-SDO, DWB-RWA may be found among 15-year-olds, the relationships between worldviews and ideologies may unfold at least until 17 years old.

Despite the contributions provided by the present study, limitations should be acknowledged. First, the reliability of CWB (Cronbach's $\alpha = 0.40$) and SDO (Cronbach's $\alpha = 0.44$) in Sample 2 was inadequate. This is likely due to the presence of reverse-coded items in both scales, as well as the low educational level of the sample. Therefore, future studies should aim to use alternative versions of the instruments and replicate our results in another sample of prisoners. Second, the agreement rate with some severe

adverse experiences was <1% in Study 1 (e.g., "I have been in institutions such as shelters or orphanages"; "I lived on the street"; "I was kidnapped") so future studies should seek to replicate our findings among youth that went through these experiences. Third, dissimilar adverse experiences were assessed in Studies 1 and 2 due to logistical constraints. This is especially critical for the items forming the score of threatening experiences, jeopardizing the commensurability of the findings about threat, DWB and RWA across Studies 1 and 2. Future studies should thus seek to replicate our findings using the same set of items as in Study 1. Fourth, we did not assess the intensity of the adverse experiences or when they happened, which could be critical for the associations with worldviews and ideologies. Perhaps threatening or scarcity experiences that are felt as extremely uncomfortable by the individual may increase their DWB, RWA, CWB or SDO levels. Similarly, reoccurring or recent adverse experiences could also be associated with worldviews and ideologies in a way that our measures were not sensitive enough to capture. Therefore, future studies should investigate whether the intensity and time elapsed since the experience moderate their associations with worldviews and ideologies and how long does this association may last. Fifth, we did not assess individual differences that could moderate the relationship between adverse experiences, worldviews and ideologies. Maybe the adverse experiences might lead to specific worldviews or ideologies, but primarily for people who are high in avoidance motivation or those who are especially prevention-focused. Similarly, positive experiences may more likely relate to worldviews and ideologies among those who are high in approach motivation, or those who are more promotion-focused. Future studies should thus assess how individual differences influence the aforementioned relationships. Finally, it is important to note that our assessment focused on actual adversity rather than perceived adversity. While it could be argued that threat perception could be more closely linked to worldviews and ideologies, it begs the question of where such perceptions originate. We evaluated adverse experiences typically deemed severe (e.g., "someone already broke into my house," "I was robbed," "I slept on the street") in two distinct samples with varying agreement rates. However, in neither case did we find robust significant relationships. Consequently, a key challenge for future studies would be to explore the origins of threat perception, especially if they are not linked to experiencing adverse events directly.

In sum, our results indicate that adverse experiences are weakly associated with worldviews and ideologies, but consistently associated with depression, anxiety and stress. It challenges the past and current theoretical foundations of worldviews and ideological development, posing questions to the existing models and advocating for new frameworks that focus on collective experiences instead of individual ones. This approach may promote a shift from models grounded in clinical assumptions to frameworks focusing on social influences, providing new insights into the formation of these constructs.

Data availability statement

Data is available at https://osf.io/46qyb/.

Ethics statement

The studies involving humans were approved by Comitê de Ética em Pesquisa da Pontifícia Universidade Católica do Rio Grande do Sul. The studies were conducted in accordance with the local legislation and institutional requirements. The Ethics Committee/institutional review board waived the requirement of written informed consent for participation from the participants or the participants' legal guardians/next of kin because adolescents could be coerced by their parents to answer according to the political view of their parents if they were aware of the research matter.

Author contributions

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Supplementary material

The Supplementary Material for this article can be found online at: https://www.frontiersin.org/articles/10.3389/frsps.2024. 1375527/full#supplementary-material

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