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Discrimination and mental health in Germany– Evidence from a comparative cross-sectional study

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Abstract

Background:

Discrimination constitutes a chronic psychosocial stressor in racialized individuals and can also occur in mental health care settings leading to access barriers and unfair treatment. Along with direct and obvious discrimination, racialized individuals can also experience more subtle, ambiguous slights conceptualized as racial microaggressions. While the impact of racism on mental health is well-documented internationally, German research on this topic remains scarce.

Methods:

The present study investigated experiences of racial discrimination and microaggressions in relation to depression, anxiety, social anxiety, somatic symptoms, loneliness, and sleep disturbances as well as discriminatory treatment in everyday life and different mental health care settings. Data were collected via an online survey between June and July 2025. Multiple regression analyses and independent samples t-test were conducted to compare racialized and (potentially) non-racialized groups (*N* = 2,500).

Results:

Experiences of everyday discrimination, racial microaggressions, and discrimination within mental health care settings are common in Germany and consistently associated with poorer mental health. Racialized individuals experienced substantially higher levels of discrimination and reported worse mental health than the control group.

Conclusion:

These findings confirm international evidence while extending it to the German context and emphasize that racism constitutes an important social determinant of mental health. The outcome highlights the need for both structural and clinical interventions aimed at reducing racial discrimination and promoting equitable mental health care.

Introduction

Racial discrimination is increasingly recognized as a major social determinant of health and a significant contributor to mental health inequalities worldwide. Rather than being reduced to only isolated interpersonal incidents, it encompasses structural, institutional, and internalized forms of discrimination that systematically disadvantage racialized individuals (1). A more subtle form of racism are racial microaggressions characterized by intentional or unintentional racial slights transported verbally or nonverbally that can be ambiguous and difficult to identify. Racial microaggressions can occur

interpersonally or through the environment including, for instance, color blindness, exoticizing, and underrepresentation of racialized groups (2,3). Additionally, racialized individuals commonly experience restricted access to mental health care and may encounter discrimination within medical settings, including clinics, hospitals, and psychotherapeutic settings (4). A substantial body of research from the U.S. has demonstrated that both experiences of racial discrimination and microaggressions are associated with, among others, sleep disturbances, feelings of loneliness, depression, (social) anxiety, somatic symptoms, racial trauma, and posttraumatic stress disorder (PTSD) (5,6).

Compared with the extensive literature from English speaking countries, research on racism and mental health remains considerably less developed in Europe including Germany (5). A disparity that reflects deeper conceptual and historical differences than a simple lack in research activity. Germany in particular possesses its own distinct history of racism shaped by National Socialism and historical ignorance of its colonial past, leading to social discourses that rather try to deny racism and treat it as an external phenomenon (7,8). This has translated directly into research practice with German studies predominantly examining migration experience as a predictor of mental health (9–11), neglecting individuals without a migration experience who are nonetheless racialized. Along with this, the terminology used to study different racialized groups introduces challenges, as terms such as “race” or “ethnicity” commonly used in the English language have no direct equivalent in the German scientific discourse. Measurements developed in the English language must therefore be translated and adapted which leaves many existing scales not or only partially validated for the German context (1,5). Despite this, German racism research expanded recently, extending international findings regarding the impairing effects of racial discrimination and microaggressions on mental health and its presence in mental health care (12–14). Qualitative evidence further illustrates how racism can cause feelings of otherness, diminished self-esteem, and self-doubt (15). Besides these important contributions, comprehensive data examining the occurrence of racial discrimination in a larger diverse sample and alongside multiple indicators of mental health is still missing. Many studies have rather focused on specific groups and psychological outcomes or smaller samples (e.g., 16–18). The present study addresses this research gap by examining experiences of racial discrimination and microaggressions in relation to the mental health outcomes depression, general anxiety disorder, social anxiety, somatic symptoms, loneliness, and sleep disturbances in Germany. Additionally, the study aims to investigate differences in the aforementioned mental health outcomes and in discriminatory treatment in everyday life and different mental health care settings between a racialized and (potentially) non-racialized participant group.

H1: Individuals experience racial microaggressions and discrimination in everyday life and different mental health care settings in Germany.

H2: Racialized individuals experience racial microaggressions, discrimination in everyday life and in different mental health care settings more frequently than (potentially) non-racialized individuals.

H3: Racial discrimination and microaggressions are positively associated with depressiveness, general anxiety disorder, social anxiety, somatic symptoms, loneliness, and sleep disturbances across the total, racialized, and (potentially) non racialized sample.

H4: Racialized participants show higher levels of depressiveness, general anxiety disorder, social anxiety, somatic symptoms, loneliness, and sleep disturbances than (potentially) non-racialized participants.

Methods

The present study was conducted within the scope of the mixed-methods project Racial Discrimination in the Context of Mental Health Care (RaDiGe). RaDiGe is a joint project of the University Medical Center Mainz, Johannes Gutenberg-University Mainz and the University of Applied Sciences Jena and is funded by the Federal Ministry of Research, Technology, and Space. Qualitative, quantitative, and experimental approaches are applied to assess the relationship between experiences of racial discrimination and mental health, as well as access to and experiences in psychotherapeutic care for racialized individuals in Germany. The present study draws data from the quantitative online survey. The project is supported by four practice organizations: Magazine of Color, Islamic Association for Social and Educational Professions (IASE), Information and Documentation Center for Antiracism Work (IDA), and Institute for the Promotion of Education and Integration (INBI). They provide anti-racist guidance throughout the entire course of the project. For the present study, they advised on recruitment and sampling strategies, selection and translation of items as well as questionnaires for the online survey, and preparation of publications.

Procedure

Data collection was conducted by the market research institute Mindline between June and July 2025. Invitations were sent out strategically based on quota requirements and in several waves. Quota cells or subgroups that have been proven to be more difficult to fill were prioritized and invited first. Invitations were sent out via various channels, mainly by email, but also via the panel website or the mobile app of the panel. The response rate was 10.0%. The average survey length was 15.5 minutes. The overall sample was controlled regarding gender (information provided at birth), age, and region. An incidental ratio was first collected (case number n = 1,454) then the distribution of the quota characteristics (gender, age, and region) was read off. This data was used as basis for reaching the target sample size of 2,500 participants. Slight deviations were compensated for by weighting. To assign participants to the sample groups racialized and (potentially) non-racialized, the survey asked for self-identification regarding group identity. Those who described themselves solely as White and/ or German without a migration background were assigned to the (potentially) non-racialized group since they are not racialized in Germany. Considering that racialized features could nonetheless be attributed to them externally, the group description contains “(potentially)”. Participants self-identifying as not White/

German with a migration background (e.g., Muslim, Eastern European, Black etc.) were assigned to the racialized group since they are racialized in Germany and thus, potentially experience racial discrimination.

The project was approved by the ethics committee of the State Chamber of Physicians of Rhineland-Palatinate (No. 2023–17106) and the study was conducted in according with the Declaration of Helsinki. All respondents were required to be at least 18 years old and consent to their participation. The participants were informed about their right to withdraw from the study at any time. The voluntary nature and purpose of the study were indicated before the start of the survey.

Participants

In total, 10,038 individuals took part in the online survey of whom 7,538 were excluded due to non-completion of the survey and quality reasons, for example, indiscriminate answers to multiple statement batteries or nonsensical responses. For the present study, three sample groups were extracted. The total sample contains the remaining 2,500 respondents while 669 of 2,500 participants were assigned to the racialized group and 1,831 of 2,500 to the (potentially) non-racialized group based on their self-identification (see above). Age ranged from 18–75 years. Further sociodemographic characteristics of all three sample groups are presented in Tables 1 and 2.

>>>>>> Table 1 here <<<<<<<

Table 1

Sociodemographic characteristics of the total sample, racialized, and (potentially) non-racialized group

	Total sample (*N* = 2,500)	**Racialized (*N* = 669)**	**(Potentially) non-racialized (*N* = 1,831)**
	N (%)	***N (%)***	***N (%)***
Gender			
Woman	1,216 (48.7)	331 (49.5)	894 (48.8)
Man	1,265 (50.6)	334 (49.9)	922 (50.4)
Non-binary	10 (0.4)	2 (0.3)	8 (0.4)
Other (e.g., trans*)	9 (0.3)	2 (0.2)	7 (0.4)
Sexual orientation			
Heterosexual	1,275 (87.7)	555 (83.0)	1,580 (86.8)
Homosexual	52 (3.6)	37 (5.5)	85 (4.6)
Bisexual	54 (3.7)	39 (5.8)	74 (4.0)
Other (e.g., pansexual)	7 (0.5)	2 (0.3)	10 (0.5)
Religion			
Christian	1,187 (47.5)	216 (32.3)	967 (53.1)
Muslim	209 (8.3)	199 (29.7)	5 (0.3)
Other (e.g., Jewish, Buddhist)	173 (6.9)	76 (11.4)	17 (0.9)
No confession	932 (37.3)	142 (21.2)	788 (43.3)
Country of birth			
Germany	2,241 (89.6)	439 (65.6)	1,791 (98.4)
Other	259 (10.4)	230 (34.4)	30 (1.6)
Education			
High	769 (30.7)	296 (44.3)	468 (25.6)
Middle	1,465 (58.6)	311 (46.5)	1,161 (63.4)
Low	267 (10.6)	62 (9.3)	202 (11.0)
Employment			
Employed	1,483 (59.3)	405 (60.5)	1,077 (59.1)

	Total sample (***N*** **= 2,500)**	**Racialized** (***N*** **= 669)**	**(Potentially) non-racialized** (***N*** **= 1,831)**
	N (%)	***N (%)***	***N (%)***
Pension	379 (15.2)	31 (4.6)	349 (19.1)
Unemployed	220 (8.8)	74 (11.1)	191 (10.4)
Other (e.g., school, informal caregiving)	418 (16.7)	159 (23.8)	203 (11.1)
	M (SD)	*M (SD)*	*M (SD)*
Age	44.93 (15.41)	36.88 (12.65)	48.18 (15.09)
Equivalence income	2,167.73 (2,029.41)[a]	2,081.34 (1,395.58)[b]	2,202.12 (2,526.65)[c]

Note. High education = Bachelor, Master, PhD, or comparable education; middle education = completed apprenticeship, A-level school degree, or comparable education; low education = no school degree, low school degree, or no apprenticeship (derived from Hoffmeyer-Zlotnik et al., 2024). [a]523 missing values, [b]155 missing values, [c]368 missing values.

Table 2
Self-identification of participants

	Total sample (*N* = 2,500)	**Racialized (*N* = 669)**	**(Potentially) non-racialized (*N* = 1,831)**
	N (%)	***N (%)***	***N(%)***
Muslim	204 (8.2)	199 (29.7)	-
Jewish	26 (1.0)	26 (3.9)	-
Sinti and Roma	16 (0.6)	15 (2.2)	-
Eastern European	127 (5.1)	126 (18.8)	-
Asian	54 (2.2)	52 (7.8)	-
Turkish	87 (3.5)	86 (12.9)	-
Black	32 (1.3)	31 (4.6)	-
Person of Color (POC)	31 (1.2)	30 (4.5)	-
White	1,007 (40.3)	138 (20.6)	866 (47.6)
German (without migration background)	1,599 (64.0)	39 (5.8)	1,560 (85.7)
German (with migration background)	243 (9.7)	241 (36.0)	-
Foreign	139 (5.5)	136 (20.3)	-

Note. Multiple selection was possible. Participants choosing the self-identification groups White or German without migration background were still included in the racialized group when they also indicated another self-identification besides those two.

Materials

For the present study, a subset of scales and items measuring racial discrimination and microaggressions as well as mental health was analyzed.

Self-identification

To explore how participants self-describe their group identity and to assign them to the sample groups racialized and (potentially) non-racialized, the following item was developed: “People can belong to various groups. How does this apply to you? Please list all the groups to which you feel you belong. The groups listed are just a few examples of possible groups. Please also use the free-text fields if any

groups you belong to are not listed." There were 12 preset answer possibilities which are displayed in Table 2. Additionally, participants could use up to four free-text fields to describe self-identification(s) other than the specified. Unlimited multiple selection was possible.

Everyday Discrimination Scale (EDS)

The German version of the EDS (13) was applied (ω = .916, [95% CI = .911, .921]). The EDS measures experiences of discrimination with seven items on a 6-point Likert scale (0 = never to 5 = daily). One additional item asks for perceived reasons for discrimination with 16 preset responses such as name, weight, religion, and an open text field. An example item is: "Someone is acting as if he or she is afraid of you".

Racial Microaggression Scale (RMAS)

The original English version of the RMAS (20) measures experiences of racial microaggression with 21 items across the six subscales Invisibility, Criminality, Low-Achieving/ Undesirable Culture, Sexualization, Foreigner/ Not Belonging, and Environmental Invalidation on a 4-point Likert scale (0 = never to 3 = frequently). For the present study, the scale was back and forth translated by the research team in consultation with the practice organizations. To shorten the scale, two items were selected from the subscale Environmental Invalidation and one from all other subscales respectively. To adapt the scale to the German context, the term "race" was replaced with the participants' self-identification for two items that measure representation of the own self-identification group among authority persons as well as in media. An example item is: "I've noticed that on TV, in books, and in magazines, there are very few people who are part of this group". The remaining five items analyze racist treatment by others, therefore the information how participants think others would describe them regarding their group identity was used (Example: "Because I am perceived as [group identity], others treat me as a criminal"). The total adapted scale consisted of seven items (ω = .892, [95% CI = .885, .899]). The translated and adapted version is depicted in the Appendix (Table A).

Online racism

Two self-developed items measure online racism on a 6-point scale ranging from never (1) to daily (6) by asking whether racist posts appeared and whether racist comments or messages are received on social media platforms.

Discrimination in mental health care

To analyze experiences of discrimination in the mental health care system one self-developed item asks "How often have you been treated more unfairly or worse than other individuals in the following situations?". The situations were outpatient psychotherapy, psychiatric clinic, psychosomatic clinic, and

psychological rehabilitation clinic. Participants could answer on a 5-point scale from never (0) to every time (4) for every situation. Further possible responses were “I have never been in this situation” and “I avoided this situation because I was afraid of being treated unfairly”.

Patient Health Questionnaire-9 (PHQ-9)

The PHQ-9 consisting of nine items was used to measure depressive symptoms on a 4-point scale from not at all (0) to nearly every day (3) (ω = .907, [95% CI = .902, .913]) (21, 22).

General Anxiety Disorder Scale (GAD-2)

To analyze anxiety, the GAD-2 (short version of GAD-7) including two items was applied ranging on a 4-point Likert scale from not at all (0) to nearly every day (3) (23). The GAD-2 shows similar diagnostic accuracy as the 7-item version GAD7 (24, 25).

Mini Social Phobia Inventory (Mini-SPIN)

To measure social anxiety, the three-item Mini-SPIN (26) ranging from not at all (0) to extremely (5) on a 5-point Likert scale was used (ω = .842, [95% CI = .829, .851]).

Somatic Symptoms Scale-8 (SSS-8)

The SSS-8 analyzes somatic symptoms with eight items on a 5-point Likert scale (0 = not at all to 4 = very much) (ω = .887, [95% CI = .882, .895]) (27).

Jenkins Sleep Scale – 4 (JSS-4)

Sleep disturbances during the past month were analyzed with the JSS-4 including four items on a 6-point scale ranging from zero (not ar all) to five (22–31 days) (ω = .882, [95% CI = .874, .889]) (28).

Loneliness

To measure feelings of loneliness, three items derived from the UCLA Loneliness Scale ranging on a 5-point Likert scale (0 = never to 4 = very often) were employed (ω = .854, [95% CI = .838, .858]). The Three-Item Loneliness Scale was developed by Hughes et al. (2004) and validated in a German sample (30).

Data analysis

Data were analyzed using IBM SPSS Statistics (version 29.0; IBM Corp., 2022) and R (version 4.4.1; R Foundation for Statistical Computing, 2024). Missing values accounted for less than 5% and were classified as missing at random. These were imputed using scale means, given that at least half of the values for a scale were available for each participant. If a case did not meet this criterion, it was excluded from the analysis (listwise deletion).

For the EDS, the total sum was calculated after grouping the responses from zero to six into three categories: 0 = never, 1 = sometimes (rarely/several times a year), 2 = often (at least once a month/at

least once a week/daily) (DeZIM, 2023). Higher sum scores indicate more frequent and varying discrimination experiences with a maximum score of 14 points. A mean of zero shows no discrimination experience, below seven seldom experience, and above seven frequent experience. For the RMAS, the mean value was computed across all seven items. A higher mean indicates higher subjection to racial microaggressions. Sum scores were computed for the GAD-2, PHQ-9, Mini-SPIN, JSS-4, and the SSS-8. The sum scores of the PHQ-9 were categorized in five levels with the following cutoff points: < 5 minimal, < 10 mild, 10–14 moderate, 15–19 moderately severe, 20–27 severe. The sum scores of the GAD-2 were dichotomized: 0–2 healthy, 3–6 burden. The Mini-SPIN was dichotomized as well: 0–5 no social anxiety, 6–12 social anxiety. The SSS-8 was categorized in five levels: 0–3 minimal, 4–7 low, 8-11middle, 12–15 high, 16–32 very high. Mean values were computed for the Three-Item loneliness scale and then dichotomized: ≤ 3 no increased loneliness, > 3 increased loneliness.

Internal consistency for all analyzed scales was evaluated computing McDonald's omega (ω) in R. The cutoff point for an acceptable internal consistency was set at ω >0.7 (31)

An independent-samples t-test with the means of PHQ-9, GAD-2, Mini-SPIN, SSS-8, JSS-4, and Three-Item loneliness scale was computed to analyze the differences between mental health outcomes in the racialized and (potentially) non-racialized group. An independent-samples t-test was conducted with the means of each of the four mental health care settings (outpatient psychotherapy, psychiatric clinic, psychosomatic clinic, and psychological rehabilitation clinic), the EDS, and RMAS to examine differences in discrimination frequency between the two sample groups.

To examine whether experiences of racial discrimination and microaggressions are connected with various mental health outcomes, several multiple regression analyses were conducted in SPSS. The EDS and RMAS functioned as the independent variables while the PHQ-9, GAD2, MiniSpin, SSS8, Three-Item loneliness scale, and JSS-4 were the dependent variables. Control variables were age, gender (woman), and education (low). Prior to the analysis all assumptions were tested. The coefficient of determination was analyzed according to Cohen (1988).

Results

The results of the total sample (*N* = 2,500) reveal that most participants (71.3%) had experienced some form of discrimination before, while 30.6% reported racist reasons for discrimination (see Table 4, multiple responses were possible). Overall, the average participant reported discrimination to occur seldomly. Regarding racial microaggressions, 62.5% of the participants indicated having experienced at least one type of racial microaggression once. Underrepresentation in media (61.6%) and in authority positions (62.5%) were most frequent. However, the mean score suggested that such experiences occurred less frequently than seldom on average. More than half of the participants (62.2%) reported having encountered racist posts (e.g., text, images, or videos) on social media at least seldom, whereas approximately 37.2% had received racist comments or messages at least seldom. On average, both exposure to racist posts and receipt of racist comments or messages occurred seldom, indicating that

although many participants had encountered online racism, these experiences were generally infrequent. All together, even though 26.6% of the total sample were assigned to the racialized group based on their self-identification, a considerably higher amount reports experiences of racial discrimination and perception of online racism. Consequently, those results support H1 indicating that individuals experience racial microaggressions and discrimination in everyday life.

Racialized group

Among the racialized participants (*N* = 669), experiences of everyday discrimination were widespread with 84.5% of participants reporting to have experienced at least one type of discriminatory treatment before. The most common experiences were being treated with less respect than others (84.3%), not being taken seriously (84.5%), and receiving poorer service than others (79.1%). The most frequently reported racial microaggression was being asked where one was from and being assumed to not belong (76.9%). About 79.0% of participants reported seeing racist posts on social media at least occasionally and 32.9% reported to encounter such content at least weekly. Furthermore, 64.1% stated having received racist comments or messages online at least occasionally.

(Potentially) non-racialized group

Among the (potentially) non-racialized participants (*N* = 1,831), 66.5% reported to have experienced one kind of everyday discrimination before. Racial microaggressions were comparatively uncommon (*M* = .51). Most participants reported to never experience these incidents, although 24.0% had at least occasionally been told they needed to work harder to disprove stereotypes. More than half of the respondents (55.9%) reported having seen racist posts at least occasionally, whereas 42.9% indicated that they had never encountered such content. In contrast, direct experiences with racist comments or messages were considerably less frequent, with 71.8% reporting that they had never received racist comments or messages online. Further results of discrimination experiences for all sample groups are presented in Table 3.

The independent-samples t-tests show that the racialized group reported substantially higher levels of everyday discrimination, $t(1112.05) = -14.78$, $p < .001$, $d = -0.70$, and racial microaggressions, $t(1025.35) = -25.22$, $p < .001$, $d = -1.25$. This supports H2, stating that racialized individuals experience racial microaggressions and discrimination in everyday life more frequently as (potentially) non-racialized individuals.

Table 3

Everyday discrimination, racial microaggressions, and discrimination within the German health care system

	Total sample (*N* = 2,500)	**Racialized (*N* = 669)**	**(Potentially) non-racialized (*N* = 1,831)**
	M (SD)	***M (SD)***	***M (SD)***
EDS	4.85 (4.02)	6.79 (4.14)	4.12 (3.71)
RMAS	.73 (.74)	1.32 (.75)	.51 (.61)
Outpatient psychotherapy	.70 (1.08)	1.02 (1.21)	.56 (.98)
Psychiatric clinic	.69 (1.09)	.93 (1.18)	.57 (1.02)
Psychosomatic clinic	.72 (1.11)	1.00 (1.23)	.58 (1.02)
Psychosomatic rehabilitation clinic	.68 (1.10)	.95 (1.23)	.58 (1.01)
Seeing racist posts on social media	2.66 (1.68)	3.39 (1.73)	2.39 (1.58)
Receiving racist comments or messages on social media	1.87 (1.37)	2.55 (1.56)	1.61 (1.20)

Note. Means and standard deviations are weighted for age, gender, and region.

Table 4
Reasons for discrimination reported by the total sample (N = 2,500)

Others do not perceive me as German	***N***	**%**
	372	**14.9**
German language proficiency	194	7.7
Headscarf	74	2.9
Name	231	9.2
Skin color	204	8.1
Religion	224	8.9
Psychological disorder	206	8.3
Disability/ chronic illness	213	8.5
Unemployment	134	5.3
Low income	261	10.4
Education	134	5.3
Weight	375	15.0
Height	176	67.0
Gender	399	16.0
Age	390	15.6

Note. Multiple selection was possible.

Experiences of racism in the German health care system

To the question “How often have you been treated more unfairly or worse than other persons in the following situations?”, 17.7% of the total sample reported that this has happened to them in outpatient psychotherapy, 14.3% in a psychiatric clinic, 14.2% in a psychosomatic clinic, and 15.1% in a psychosomatic rehabilitation clinic, while1.6% indicated to avoid a treatment due to being afraid of unfair treatment. This supports H1, that individuals experience discrimination in different mental health care settings in Germany. The means for all mental health care institutions indicate that participants experience discrmination seldom.

Racialized group

Of the racialized group, 28.6% reported discrimination in outpatient psychotherapy, 21,3% in a psychiatric clinic, 22,2% in a psychosomatic clinic, and 21,2% in a psychosomatic rehabilitation clinic, 1.6% indicated

to avoid a treatment due to being afraid of unfair treatment. The means for all mental health care institutions indicate that participants experience discrimination sometimes.

(Potentially) non-racialized group

Of the (potentially) non-racialized group, 9.9% reported discrimination in outpatient psychotherapy, 7.5% in a psychiatric clinic, 8.1% in a psychosomatic clinic, and 8.6% in a psychosomatic rehabilitation clinic, 1.5% indicated to avoid mental health care due to being afraid of unfair treatment. The means for all mental health care institutions indicate that participants experience discrmination seldom. Further results regarding measurements of discrimination are presented in Table 3.

An independent-samples t-test, comparing experiences in the mental health care system between the racialized and (potentially) non-racialized group, reveals that the racialized group reported significantly more negative experiences within the mental health care system $t(630.45) = -5.95$, $p < .001$, $d = -0.39$. This supports H2, stating that racialized individuals experience racial microaggressions and discrimination more frequently in different mental health care settings than (potentially) non-racialized individuals.

Racism and mental health

The descriptive analysis indicates that the total sample reported, on average, mild depressive symptoms and mild anxiety symptoms with the mean GAD-2 score remaining below the recommended screening cutoff of three. The average somatic symptom burden was middle, while participants reported mild levels of loneliness below the recommended cutoff value of three for increased loneliness. The average score of social anxiety symptoms was below the screening cutoff of six for clinically relevant social anxiety. Finally, participants reported lower levels of sleep disturbances (Table 5).

Table 5

Descriptive Analysis of Psychological Outcomes Sorted by Participant Group

PHQ-9	**Total sample**	**Racialized**	**(Potentially) non-racialized**
	M (SD)	***M (SD)***	***M (SD)***
	7.17 (5.93)	**9.03 (6.26)**	**6.85 (5.81)**
GAD-2	1.62 (1.69)	2.11 (1.77)	1.54 (1.66)
SSS-8	9.54 (6.89)	11.38 (7.60)	9.22 (6.71)
UCLA-LS	2.44 (1.04)	2.74 (1.07)	2.38 (1.03)
Mini-SPIN	3.84 (3.17)	4.86 (3.20)	3.67 (3.13)
JSS-4	1.79 (1.42)	1.89 (1.33)	1.77 (1.43)

Note. Means and standard deviations are weighted for age, gender, and region.

Multiple linear regression analyses were conducted to examine whether everyday discrimination (EDS) and racial microaggressions (RMAS) predicted mental health outcomes in the total sample. Across all six outcomes, both RMAS and EDS emerged as significant independent predictors and explained variances strongly in depressiveness, moderately in anxiety, somatic symptoms, social anxiety, as well as loneliness, and weakly in sleep disturbances. The strongest EDS effect was observed for depressive symptoms, the strongest RMAS effect for loneliness. Regarding covariates, lower education and female gender were consistently associated with higher symptom burden across all six outcomes. Higher age was associated with less loneliness, depressive symptoms, anxiety, and social anxiety but with more sleep disturbances, and was unrelated to somatic symptom burden. Further regression results are presented in Table 6. Results including covariates are depicted in the appendix (Table B).

Table 6

Multiple Regression Analyses Predicting Psychological Outcomes From Discrimination Experiences (RMAS, EDS): Total Sample

Outcome	Predictor	B	SE	β	t	p	95% CI LL	95% CI UL
Loneliness Scale								
R^2 = .231, adjusted R^2 = .230, F(5, 2484) = 149.61, p < .001								
	RMAS	.337	.037	.234	9.18	< .001	.265	.409
	EDS	.068	.007	.255	9.93	< .001	.054	.081
PHQ-9								
R^2 = .273, adjusted R^2 = .271, F(5, 2475) = 185.63, p < .001								
	RMAS	1.592	.208	.191	7.66	< .001	1.184	1.999
	EDS	0.477	.039	.309	12.35	< .001	.401	.553
GAD-2								
R^2 = .210, adjusted R^2 = .209, F(5, 2451) = 130.66, p < .001								
	RMAS	.465	.061	.199	7.62	< .001	0.345	.584
	EDS	.101	.011	.234	8.95	< .001	0.079	.123
Mini-SPIN								
R^2 = .254, adjusted R^2 = .252, F(5, 2476) = 168.52, p < .001								
	RMAS	.874	.109	.202	8.01	< .001	.660	1.088
	EDS	.183	.020	.229	9.02	< .001	.143	.223
SSS-8								
R^2 = .243, adjusted R^2 = .241, F(5, 2484) = 159.27, p < .001								
	RMAS	2.150	.247	.221	8.72	< .001	1.667	2.634
	EDS	.540	.046	.300	11.78	< .001	.451	.630
JSS-4								
R^2 = .067, adjusted R^2 = .065, F(5, 2483) = 35.85, p < .001								
	RMAS	.488	.215	.064	2.28	.023	.068	.068
	EDS	.263	.040	.187	6.60	< .001	.185	.342

Note. B = unstandardized regression coefficient; SE = standard error; β = standardized regression coefficient; CI = confidence, LL = lower limit, UL = upper limit. Collinearity diagnostics were unremarkable across all six models (VIF < 2.14, tolerance > .46 for RMAS and EDS; VIF < 1.20 for all covariates).

Racialized group

Participants in the racialized group reported, on average, mild but almost moderate depressive symptoms and higher levels of anxiety symptoms than the total sample, although the mean GAD-2 score remained below the recommended screening cutoff of 3. The average somatic symptom burden was in the medium range but almost high. Participants also reported levels of loneliness below the cutoff of three for increased loneliness. Mean social anxiety symptoms were higher than in the other sample groups but remained below the Mini-SPIN screening cutoff of 6. Finally, participants reported lower levels of sleep disturbances (Table 5).

All regression models were statistically significant. Both everyday discrimination and racial microaggressions were significant positive predictors of depressiveness, anxiety, somatic symptoms, loneliness, social anxiety, and sleep disturbances. Everyday discrimination and racial microaggressions together explained variances strongly in social anxiety, moderately in somatic symptoms, depressiveness, anxiety, loneliness, and weakly in sleep disturbances. Whereas everyday discrimination was the stronger predictor of depressive and somatic symptoms, racial microaggressions showed stronger associations with loneliness and slightly stronger associations with anxiety, social anxiety, and sleep disturbances. Regarding covariates, low education was not related to all six outcomes. Gender only reached significance for somatic symptoms and sleep disturbances. Age was significantly negatively associated with depressiveness, anxiety, social anxiety, and somatic symptom severity but not with loneliness and sleep disturbances. Further results are shown in Table 7, regression results including covariates are depicted in the Appendix (Table C).

Table 7

Multiple Regression Analyses Predicting Psychological Outcomes From Discrimination Experiences (RMAS, EDS): Racialized Group

Outcome	Predictor	B	SE	β	t	p	95% CI	
							LL	UL
Loneliness Scale								
R^2 = .234, adjusted R^2 = .228, F(5, 663) = 40.45, p < .001								
	RMAS	.454	.066	.321	6.90	< .001	.324	.583
	EDS	.046	.012	.181	3.81	< .001	.022	.070
PHQ-9								
R^2 = .260, adjusted R^2 = .254, F(5, 659) = 46.33, p < .001								
	RMAS	1.613	.382	.194	4.22	< .001	0.862	2.363
	EDS	.448	.071	.297	6.34	< .001	0.309	.587
GAD-2								
R^2 = .198, adjusted R^2 = .192, F(5, 646) = 31.88, p < .001								
	RMAS	.483	.114	.206	4.22	< .001	.258	.707
	EDS	.101	.021	.238	4.81	< .001	.060	.142
Mini-SPIN								
R^2 = .288, adjusted R^2 = .283, F(5, 660) = 53.49, p < .001								
	RMAS	1.034	.193	.243	5.36	< .001	.655	1.412
	EDS	.190	.036	.246	5.33	< .001	.120	.260
SSS-8								
R^2 = .249, adjusted R^2 = .243, F(5, 663) = 43.88, p < .001								
	RMAS	1.589	.451	.162	3.52	< .001	.702	2.475
	EDS	.617	.084	.347	7.38	< .001	.452	.781
JSS-4								
R^2 = .065, adjusted R^2 = .058, F(5, 662) = 9.16, p < .001								
	RMAS	.970	.359	.139	2.70	.007	.266	1.675
	EDS	.162	.066	.128	2.43	.015	.031	.292

Note. B = unstandardized regression coefficient; SE = standard error; β = standardized regression coefficient; CI = confidence; LL = lower limit; UL = upper limit. Collinearity diagnostics were unremarkable across all six models (VIF < 1.98 for RMAS and EDS; VIF < 1.09 for all covariates).

(Potentially) non-racialized group

Participants in the (potentially) non-racialized group reported, on average, mild depressive and anxiety symptoms, with the mean GAD-2 score remaining below the recommended screening cutoff of 3. The average somatic symptom burden was middle. Participants further reported loneliness but on average results were below the cutoff of three for increased loneliness. Mean social anxiety symptoms were lower, with the average score below the screening cutoff of 6. Finally, participants reported averagely lower levels of sleep disturbances (Table 5).

Multiple linear regression analyses showed that everyday discrimination was a significant positive predictor across all outcomes. Racial microaggressions also significantly predicted depressive and somatic symptoms, anxiety, loneliness, and social anxiety but not sleep disturbances. Everyday discrimination and racial microaggressions explained variances moderately in depressiveness, somatic symptoms, loneliness, social anxiety, anxiety symptoms, and weakly in sleep disturbances. Lower education and female gender were associated with increased symptom burden across all six outcomes. Higher age was associated with lower loneliness, depressive symptoms, anxiety, and social anxiety but with more sleep disturbances and was unrelated to somatic symptom severity. Overall, standardized effects for EDS were generally comparable to or somewhat larger than those for RMAS with the largest EDS effect observed for depressive symptoms and the largest RMAS effect for somatic symptom severity. Further results are presented in Table 8, regression results for covariates are depicted in the appendix (Table D). Taken together, those results confirm H3 stating that racial discrimination and microaggressions are positively associated with depressiveness, symptoms of general anxiety disorder, social anxiety, somatic symptoms, loneliness, and sleep disturbances across the total, racialized, and (potentially) non-racialized samples.

Table 8

Multiple Regression Analyses Predicting Psychological Outcomes From Discrimination Experiences (RMAS, EDS): (Potentially) Non-Racialized Group

Outcome	Predictor	B	SE	β	t	p	95% CI	
							LL	UL
Loneliness Scale								
R^2 = .210, adjusted R^2 = .208, F(5, 1815) = 96.59, p < .001								
	RMAS	.354	.050	.204	7.01	< .001	.255	.452
	EDS	.073	.008	.259	8.74	< .001	.057	.089
PHQ-9								
R^2 = .251, adjusted R^2 = .249, F(5, 1810) = 121.29, p < .001								
	RMAS	2.012	.283	.202	7.12	< .001	1.458	2.566
	EDS	.460	.047	.283	9.83	< .001	.368	.552
GAD-2								
R^2 = .196, adjusted R^2 = .194, F(5, 1799) = 87.77, p < .001								
	RMAS	.588	.082	.211	7.14	< .001	.426	.749
	EDS	.092	.014	.202	6.74	< .001	.065	.119
Mini-SPIN								
R^2 = .229, adjusted R^2 = .227, F(5, 1810) = 107.48, p < .001								
	RMAS	1.167	.150	.224	7.77	< .001	.873	1.462
	EDS	.158	.025	.186	6.34	< .001	.109	.207
SSS-8								
R^2 = .237, adjusted R^2 = .235, F(5, 1815) = 112.75, p < .001								
	RMAS	3.193	.334	.274	9.56	< .001	2.538	3.849
	EDS	.453	.055	.238	8.18	< .001	.344	.561
JSS-4								
R^2 = .073, adjusted R^2 = .071, F(5, 1815) = 28.79, p < .001								
	RMAS	.557	.302	.058	1.85	.065	− .035	1.150
	EDS	.289	.050	.185	5.77	< .001	.191	.387

Note. B = unstandardized regression coefficient; SE = standard error; β = standardized regression coefficient; CI = confidence interval, LL = lower limit, UL = upper limit. Collinearity diagnostics were unremarkable across all six models (VIF < 2.02 for RMAS and EDS; VIF < 1.10 for all covariates).

To further compare mental health outcomes between the racialized and (potentially) non-racialized group, independent-samples t-tests were conducted with the means of the analyzed psychological scales. The racialized group reported significantly higher levels of depressive symptoms, $t(2487) = -9.37$, $p < .001$, $d = -.42$, anxiety, $t(2461) = -7.94$, $p < .001$, $d = -.36$, somatic symptom burden, $t(2498) = -7.03$, $p < .001$, $d = -.32$, loneliness, $t(2498) = -8.66$, $p < .001$, $d = -.39$, social anxiety, $t(2487) = -7.91$, $p < .001$, $d = -.36$, and sleep disturbances $t(1329.19) = -2.11$, $p = .035$, $d = -.09$. This confirms H4 indicating that racialized individuals show higher levels of psychological symptoms than (potentially) non-racialized individuals.

Discussion

The present study examined racial discrimination, microaggressions, and experiences of discrimination within different mental health care settings in Germany. It further examined the association of racism experiences with the mental health outcomes depression, general anxiety disorder, social anxiety, somatic symptoms, loneliness, and sleep disturbances with three comparison groups characterized as total sample, racialized and (potentially) non-racialized. Four main findings emerged. First, experiences of discrimination in everyday life, within mental health care settings, and racial microaggressions were common across the total sample, although they occurred rather infrequently on average. Second, racialized participants reported substantially more racial microaggressions, discriminating experiences in everyday life and within mental health care settings than (potentially) non-racialized participants. Also, everyday discrimination and racial microaggressions were consistently associated with elevated symptoms of depression, (social) anxiety, somatic burden, loneliness, and sleep disturbances across all groups. Lastly, the racialized group showed poorer mental health than the (potentially) non-racialized group across all analyzed domains.

Experiences of discrimination in Germany

The first hypothesis, stating that individuals in the total sample experience racial microaggressions as well as discrimination in everyday life and within mental health care settings, was largely supported. Experiences of discrimination due to racist reasons were reported by 30.6% of the total sample, showing that a considerable amount of individuals face racial discrimination in their daily life in Germany. More than half stated having experienced at least one racial microaggression seldom. In fact, underrepresentation in authority positions and in media were most frequently reported. The high number of participants reporting racial microaggressions is in contrast to the significantly smaller amount of racialized participants and number of reported discrimination experiences due to racist reasons in the total sample. A possible explanation might be that underrepresentation in authority positions and in

media did not specifically refer to racism. Thus, participants could have perceived underrepresentation irrespective of racist reasons. This is also reflected in over two thirds of the total sample reporting everyday discrimination but often attributing it to other than racist reasons for example, age, gender, and weight. However, irrespective of discrimination reason or frequency, that this many participants perceive racial microaggressions and face discrimination in everyday life is a meaningful result. Important to consider is also the frequent experience of online racism which contributes to the spread of racist aggressions and increases exposure of racialized individuals. These findings also resonate with discrimination experiences within health care settings where poor treatment was also reported. A small amount even indicated to avoid mental health care due to being afraid of unfair treatment.

When comparing both subgroups, the racialized group shows notably higher levels of discrimination in everyday life including online racism, mental health care settings, and particularly large differences observed for racial microaggressions, confirming the second hypothesis. These findings closely mirror international evidence demonstrating that racialized individuals are disproportionately exposed to both overt and subtle forms of racial discrimination (Hettich-Damm et al., 2026; Paradies et al., 2015). The most frequently reported experience of racial microaggressions among racialized participants was being asked “where they were from suggesting they do not belong”. This finding reflects processes of othering that have repeatedly been described in, among others, Germany, Europe, and North America, where national belonging is often implicitly linked to whiteness (7, 8). Such experiences can reinforce feelings of exclusion and social devaluation (2, 3) and confirm that racism is not restricted to overt discriminatory events but is also often subtle and difficult to identify. This distinction between everyday racial discrimination and microaggressions has been highlighted, with racial microaggressions often occurring in ambiguous instances which can go unnoticed for not affected individuals and might be dismissed as isolated incidents and attributed to exaggeration or being “too sensitive”, despite the frequent occurrence and cumulative psychological impact (2, 3).

Regarding discrimination in the mental health care system, nearly one third of the racialized participants reported having experienced unfair treatment. These findings are consistent with recent German evidence indicating that racialized patients commonly encounter barriers to equitable mental health care, including discriminatory interactions with health care professionals and poorer treatment in general (DeZIM, 2023; Hallmann-Perez et al., 2025; Savas et al., 2024). Given that mental health care relies heavily on therapeutic alliance and trust (14), even subtle discriminatory experiences may reduce treatment engagement and contribute to existing disparities in mental health care utilization and outcomes. Also noteworthy is, that racialized participants used mental health care services considerably more often than the comparison group. This underscores the burden of being in need of therapeutic service but at the same time facing racist structures in the mental health care system. Hereby, anti-racist training of mental health professionals is one intervention to provide adequate service.

Racism and mental health

Following on from that, the third hypothesis, that everyday discrimination and racial microaggressions are associated with poorer mental health, was also supported. Across the total sample, experiences of discrimination and racial microaggressions significantly predicted depressive symptoms, anxiety, loneliness, social anxiety, sleep disturbances, and somatic symptoms. These findings are also consistent with international and previous German evidence identifying racism as a chronic psychosocial stressor that contributes to decreased psychological well-being (Aichberger et al., 2015; DeZIM, 2023; Hettich-Damm et al., 2026; Lazaridou & Yeboah, 2024; Paradies et al., 2015). Everyday discrimination generally emerged as stronger predictor of the mental health outcomes than racial microaggressions in the total sample, particularly of depressive and somatic symptoms. The EDS captures more direct experiences of discrimination that might be likely to represent stressors with immediate psychological consequences (34). Also, whereas the EDS measures a broad range of discriminating factors allowing to capture intersectional discrimination, racial microaggressions are more specifically relatable for the racialized group which was comparably smaller in the total sample which could explain the smaller effect.

The fourth hypothesis was likewise confirmed. The racialized group reported significantly higher levels of depressiveness, anxiety, social anxiety, somatic symptoms, loneliness, and sleep disturbances. Interestingly, everyday discrimination emerged as the stronger predictor of depressiveness and somatic symptoms, whereas racial microaggressions showed stronger associations with loneliness and slightly stronger associations with anxiety, social anxiety, and sleep disturbances in this group. This pattern suggests that both are important factors for mental well-being but may affect it through partially distinct mechanisms. Again, everyday discrimination reflects repeated experiences of overt unfair treatment, which may constitute stressors that contribute directly to depressiveness and physiological responses (34). In contrast, racial microaggressions frequently communicate messages of invalidation as well as non-belonging and are more ambiguous and more difficult to interpret, possibly increasing anticipatory anxiety and social self-monitoring. This potentially makes them particularly relevant for loneliness and social anxiety (3, 34).

The comparatively decreased mental health observed among racialized participants is unlikely to reflect individual vulnerability alone but rather the cumulative consequences of repeated exposure to discrimination across multiple contexts. The observed associations can be interpreted within the framework of the social stress theory, which posits that health is shaped not only by biological or individual factors but also by social conditions (35). Individuals who occupy disadvantaged social positions are disproportionately exposed to chronic stressors which accumulate over time and increase their risk for poor mental health. Within this framework, racism can be conceptualized as a chronic social stressor through repeated exposure to discriminatory experiences (35, 36). This emphasizes again to recognize racism as a serious determinant of mental health.

Overall, the present findings provide important evidence for the negative association of racial discrimination and mental health within the German context. Whereas previous German research has frequently relied on migration status as a substitute for experiences of racism, the present study directly

assessed experiences of discrimination and racial microaggressions. This approach acknowledges that racism is not synonymous with migration status and can affect individuals irrespective of whether they themselves have migrated. The findings therefore contribute to a growing body of German research demonstrating that racism represents an independent social determinant of health whose effects cannot be adequately captured through migration-related variables alone.

Strengths and limitations

The present study has several strengths. It is one of the first to investigate experiences of everyday discrimination, racial microaggressions, discrimination within mental health care settings, and multiple indicators of mental health simultaneously in a larger diverse German sample. The analyzation of the total sample in comparison to the racialized and (potentially) non-racialized group allows to estimate the occurance of discrimination experiences in Germany beyond selected racialized groups. It also shows that racialized individuals are significantly more affected than the control sample. Using participants' self-identification rather than migration status or surnames as grouping variable allows to avoid terms such as race or ethnicity and missclassification bias of surnames which prevents external categorization and attributions, focusing on how individuals position themselves within society. The simultaneous assessment of several mental health outcomes also provides a more comprehensive picture of the psychological correlates of racism and contributes to new evidence in German research.

However, some limitations should be considered. The use of self-identification as grouping variable is a novel approach and may not reflect all individuals experiencing racism. Reasons for discrimination (EDS) or another item directly related to racism experiences could function as a control item in future studies adopting this approach to ensure that all racialized individuals are taken into account. Regarding sample sizes, the racialized group was considerably smaller than the (potentially) non-racialized. Also, the size of different self-identification groups varied meaningfully which did not allow for subgroup comparisons.

Clinical and public health implications

The present findings have important implications for mental health care and public health. The consistent associations between discrimination and the mental health outcomes depressiveness, (social) anxiety, somatic symptoms, loneliness, and sleep disturbances underscore that racism should be regarded as a social determinant of mental health rather than merely an interpersonal experience. Mental health professionals should therefore routinely consider experiences of discrimination and racism during assessment and treatment. Increasing awareness of racial discrimination and anti-racism training among health care professionals as well as institutional strategies to identify and reduce discriminatory practices would improve treatment experience and reduce access barriers. Furthermore, the prevalence of online racism suggests that prevention efforts should highly extend to digital environments.

Future research

Future studies with large representative samples are needed to explore the present results in greater depth and generalize them to the German population. Additionally, clinical samples should be used to measure experiences in mental health care more thoroughly. Studies should also include equally sized self-identification groups to allow for subgroup comparisons. Another important implication is the validation and standardization of questionnaires evaluating racism experiences that are translated and adapted to the German context. Self-identification measures should also be refined and standardized. Both are essential to facilitate cross-study comparability.

Conclusion

The present study provides evidence that experiences of everyday discrimination, racial microaggressions, and discrimination within mental health care settings are common in Germany and are consistently associated with poorer mental health. Racialized individuals experienced substantially higher levels of discrimination and reported worse mental health outcomes than (potentially) non-racialized individuals. This confirms international evidence while extending it to the German context. The results emphasize that racism constitutes an important social determinant of mental health and highlight the need for both structural and clinical interventions aiming to reduce racial discrimination and promote equitable mental health care.

Declarations

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Competing Interests

There are no competing interests of the authors.

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Ethics Approval

The project was approved by the ethics committee of the State Chamber of Physicians of Rhineland-Palatinate (No. 2023-17106). The study was conducted in accordance with the Declaration of Helsinki.

Consent to Participate

All respondents were required to be at least 18 years old and provided consent to their participation. The participants were informed about their right to withdraw from the study at any time. The voluntary nature and purpose of the study were stated before the start of the questionnaire.

Declaration of Generative AI Use.

The authors report generative AI was not used in their research or preparation of this manuscript.

Author Contributions

This study is part of a project and researcher group from different sites and disciplines who worked together continuously in a process to discuss and drive forward the preparation and elaboration of the manuscript. All authors were involved in the design of the quantitative study and interpretation of data for the addressed issue, as well as drafting and revising the article, giving final approval, and are accountable for the content.

Data Statement

The data used in the present study is currently not available for sharing in a publicly accessible data bank. The research team is currently debating whether data sharing is possible under different modalities in the future.

References

1. Schouler-Ocak M, Bhugra D, Kastrup MC, Dom G, Heinz A, Küey L, et al. Racism and mental health and the role of mental health professionals. Eur Psychiatr. 2021;64(1):e42. 10.1192/j.eurpsy.2021.2216.
2. Sue DW, Capodilupo CM, Torino GC, Bucceri JM, Holder AMB, Nadal KL, et al. Racial microaggressions in everyday life: Implications for clinical practice. Am Psychol. 2007;62(4):271–86. 10.1037/0003-066X.62.4.271.
3. Sue DW, Alsaidi S, Awad MN, Glaeser E, Calle CZ, Mendez N. Disarming racial microaggressions: Microintervention strategies for targets, White allies, and bystanders. Am Psychol. 2019;74(1):128–42. 10.1037/amp0000296.
4. Savas ST, Knipper M, Duclos D, Sharma E, Ugarte-Gurrutxaga MI, Blanchet K. Migrant-sensitive healthcare in Europe: advancing health equity through accessibility, acceptability, quality, and trust. Lancet Reg Health - Europe. 2024;41:100805. 10.1016/j.lanepe.2023.100805.

5. Hettich-Damm N, Nicolai M, Dieterle H, Siegert C, Kliem S, Banerjee M, et al. How is Racial Discrimination Assessed in Quantitative Health Research? A Systematic Review from a European Perspective. J Racial Ethnic Health Disparities. 2026 Mar;20. 10.1007/s40615-026-02913-3.
6. Paradies Y, Ben J, Denson N, Elias A, Priest N, Pieterse A et al. Racism as a Determinant of Health: A Systematic Review and Meta-Analysis. Hills RK, editor. PLoS ONE. 2015;10(9):e0138511. 10.1371/journal.pone.0138511
7. Givens T. The roots of racism: the politics of white supremacy in the US and Europe. Bristol, UK: Bristol University; 2022. p. 1.
8. Roig E. Uttering race in colorblind France and post-racial Germany. In: Fereidooni K, El M, editors. Rassismuskritik und Widerstandsformen [Internet]. Wiesbaden: Springer Fachmedien Wiesbaden; 2017 [cited 2026 Aug 31]. pp. 613–27. Available from: http://link.springer.com/10.1007/978-3-658-14721-1_36 doi:10.1007/978-3-658-14721-1_36.
9. Bermejo I, Mayninger E, Kriston L, Härter M. Psychische Störungen bei Menschen mit Migrationshintergrund im Vergleich zur deutschen Allgemeinbevölkerung. Psychiatrische Praxis - PSYCHIAT PRAX. 2010;37:225–32. 10.1055/s-0029-1223513.
10. Heredia Montesinos A, Bromand Z, Aichberger M, Temur-Erman S, Yesil-Jürgens R, Rapp M et al. Suizid und suizidales Verhalten bei Frauen mit türkischem Migrationshintergrund. Zeitschrift Fur Psychiatrie Psychologie Und Psychotherapie - Z PSYCHIATR PSYCHOL PSYCHOTHE. 2010;58:173–97. 10.1024/1661-4747.a000025
11. Makowski AC, von dem Knesebeck O. Depression stigma and migration—Results of a survey from Germany. BMC Psychiatry. 2017;17. Located at: APA PsycInfo; 2017-54025-001. 10.1186/s12888-017-1549-y
12. Aikins MA, Bremberger T, Aikins JK, Gyamerah D, Yildirim-Caliman D, Afrozensus. 2020: Perspektiven, Anti-Schwarze Rassismuserfahrungen und Engagement Schwarzer, afrikanischer und afrodiasporischer Menschen in Deutschland [Internet]. Berlin; 2021. Available from: http://www.afrozensus.de/
13. Deutsches Zentrum für Integrations- und Migrationsforschung (DeZIM). Rassismus und seine Symptome: Bericht des Nationalen Diskriminierungs- und Rassismusmonitors. 2023.
14. Hallmann-Perez C, Gerlach AL, Slotta T. Racial Microaggressions in Psychotherapy Dyads: Addressing Subtle Forms of Racism Mitigates Their Negative Relation With Working Alliance and Improvement. Z Psychol. 2025;233(3):182–92. 10.1027/2151-2604/a000588.
15. Lazaridou FB, Schubert SJ, Ringeisen T, Kaminski J, Heinz A, Kluge U. Racism and psychosis: an umbrella review and qualitative analysis of the mental health consequences of racism. Eur Arch Psychiatry Clin Neurosci. 2022 Aug;24. 10.1007/s00406-022-01468-8.
16. Aichberger MC, Bromand Z, Rapp MA, Yesil R, Montesinos AH, Temur-Erman S, et al. Perceived ethnic discrimination, acculturation, and psychological distress in women of Turkish origin in Germany. Soc Psychiatry Psychiatr Epidemiol. 2015;50(11):1691–700. 10.1007/s00127-015-1105-3.

17. Kluge U, Rapp MA, Mehran N, Jumaa J, Aichberger MC. Armut, Migration und psychische Gesundheit. Nervenarzt. 2019;90(11):1103–8. 10.1007/s00115-019-00790-2.
18. Lazaridou FB, Yeboah A. Black Women at the Intersection of Mental Health, Stigma, Genderism, Racism & Classism in Germany. In: Akkan B, Hahmann J, Hunner-Kreisel C, Kuhn M, editors. Overlapping Inequalities in the Welfare State [Internet]. Cham: Springer International Publishing; 2024 [cited 2026 Jul 11]. pp. 219–32. Available from: https://link.springer.com/10.1007/978-3-031-52227-7_14 doi:10.1007/978-3-031-52227-7_14.
19. Hoffmeyer-Zlotnik JHP, Beckmann K, Czajka S, Glemser A, Heckel C, Klumpe B, et al. Demographische Standards: Ausgabe 2024. GESIS-Schriftenreihe. Volume 31, 7th ed. Köln: GESIS – Leibniz-Institut für Sozialwissenschaften; 2024. p. 110. https://doi.org/10.21241/ssoar.94099.
20. Torres-Harding SR, Andrade AL, Romero Diaz CE. The Racial Microaggressions Scale (RMAS): A new scale to measure experiences of racial microaggressions in people of color. Cult Divers Ethnic Minor Psychol. 2012;18(2):153–64. 10.1037/a0027658.
21. Kliem S, Sachser C, Lohmann A, Baier D, Brähler E, Gündel H, et al. Psychometric evaluation and community norms of the PHQ-9, based on a representative German sample. Front Psychiatry. 2024;15:1483782. 10.3389/fpsyt.2024.1483782.
22. Kocalevent RD, Hinz A, Brähler E. Standardization of the depression screener Patient Health Questionnaire (PHQ-9) in the general population. Gen Hosp Psychiatry. 2013;35(5):551–5. 10.1016/j.genhosppsych.2013.04.006.
23. Wild B, Eckl A, Herzog W, Niehoff D, Lechner S, Maatouk I, et al. Assessing Generalized Anxiety Disorder in Elderly People Using the GAD-7 and GAD-2 Scales: Results of a Validation Study. Am J Geriatric Psychiatry. 2014;22(10):1029–38. 10.1016/j.jagp.2013.01.076.
24. Aktürk Z, Hapfelmeier A, Fomenko A, Dümmler D, Eck S, Olm M, et al. Generalized Anxiety Disorder 7-item (GAD-7) and 2-item (GAD-2) scales for detecting anxiety disorders in adults. Cochrane Cent Editorial Service editor Cochrane Database Syst Reviews. 2025;2025(3). 10.1002/14651858.CD015455.
25. Löwe B, Wahl I, Rose M, Spitzer C, Glaesmer H, Wingenfeld K, et al. A 4-item measure of depression and anxiety: validation and standardization of the Patient Health Questionnaire-4 (PHQ-4) in the general population. J Affect Disord. 2010;122(1–2):86–95. 10.1016/j.jad.2009.06. .019 PubMed PMID: 19616305.
26. Wiltink J, Kliem S, Michal M, Subic-Wrana C, Reiner I, Beutel ME, et al. Mini - social phobia inventory (mini-SPIN): psychometric properties and population based norms of the German version. BMC Psychiatry. 2017;17(1):377. 10.1186/s12888-017-1545-2.
27. Kliem S, Lohmann A, Fischer S, Zenger M, Baier D, Kruse J, et al. Psychometric evaluation and community norms of the Somatic Symptom Scale-8 based on a representative German sample. Front Psychiatry. 2026;17:1851921. 10.3389/fpsyt.2026.1851921.
28. Tibubos AN, Zenger M, Schmalbach B, Beutel ME, Brähler E. Measurement invariance, validation and normative data of the Jenkins Sleep Scale-4 (JSS-4) in the German general population across the

life span. J Psychosom Res. 2020;130:109933. 10.1016/j.jpsychores.2020.109933.

29. Hughes ME, Waite LJ, Hawkley LC, Cacioppo JT. A Short Scale for Measuring Loneliness in Large Surveys: Results From Two Population-Based Studies. Res Aging. 2004;26(6):655–72. 10.1177/0164027504268574.
30. Klein EM, Zenger M, Tibubos AN, Ernst M, Reiner I, Schmalbach B, et al. Loneliness and its relation to mental health in the general population: Validation and norm values of a brief measure. J Affect Disorders Rep. 2021;4:100120. 10.1016/j.jadr.2021.100120.
31. Dunn TJ, Baguley T, Brunsden V. From alpha to omega: A practical solution to the pervasive problem of internal consistency estimation. Br J Psychol. 2014;105(3):399–412. 10.1111/bjop.12046.
32. Cohen J. Statistical power analysis for the behavioral sciences. Hillside, NJ: Lawrence Erlbaum Associates; 1988.
33. Paradies Y, Ben J, Denson N, Elias A, Priest N, Pieterse A et al. Racism as a Determinant of Health: A Systematic Review and Meta-Analysis. Hills RK, editor. PLoS ONE. 2015;10(9):e0138511. 10.1371/journal.pone.0138511
34. Rastogi R, Woolverton GA, Lee RM, Yip T, Stevens C, Chen JA, et al. Microaggression and discrimination exposure on young adult anxiety, depression, and sleep. J Affect Disord. 2024;363:141–51. 10.1016/j.jad.2024.07.083 . PubMed PMID: 39029681; PubMed Central PMCID: PMC11343644.
35. Thomas Tobin CS, Erving CL, Barve A. Race and SES Differences in Psychosocial Resources: Implications for Social Stress Theory. Soc Psychol Q. 2021;84(1):1–25. 10.1177/0190272520961379.
36. Anderson KF. Diagnosing Discrimination: Stress from Perceived Racism and the Mental and Physical Health Effects*. Sociol Inq. 2013;83(1):55–81. 10.1111/j.1475-682X.2012.00433.x.

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