Supplemental Information

Method

German Speaking Countries (DACH)

All study materials and procedures were approved by respective institutional review boards prior to data collection (details removed for peer review).

Recruitment

Details regarding the recruitment of the German-speaking sample are reported in Siegel et al. (2022). Data were collected online through a shared survey for all participating countries via the platform SoSci Survey from July 12, 2021 to October 13, 2021. Participants were recruited online across Austria, Germany, and Switzerland using various methods and channels. First, participants were recruited through LGBTIQA+ organizations and stakeholders (e.g., community leaders) that served as survey multipliers on social media (Facebook, Twitter, Instagram) and their organizations' own listservs or newsletters. To this end, a shared email account for all study sites as well as study flyers and recruitment texts were created in various formats to be used by the organizations and stakeholders. Organizations and other stakeholders were identified through the researchers' professional networks as well as web searches. In all, 70+ organizations and stakeholders engaged in advocacy, social groups, and sports and recreation groups for LGBTIQA+ people were contacted across countries. A reminder was sent approximately two weeks to one month after the initial contact.

Second, participants were recruited from relevant university and professional listservs. Participants were given the opportunity to participate in a gift raffle after completion of the survey. Prizes included gift cards from primarily LGBTIQA+ friendly businesses (e.g., bookstores), with varying amounts depending on study site (Austria: 2 × 200 €, 2 × 50 €, 16 × 20 €; Germany: 10 × 50 €; Switzerland: 5 × 50 CHF). Email addresses were stored separately

from study data.

Participation was voluntary and anonymous, with e-mail addresses (collected for gift raffles, requests for study results, or interest in future studies) being stored separately from the data. Participants gave their informed consent after positive screening of eligibility.

Participants

Across all German-speaking study sites (Austria, Germany, Switzerland), a total of 2,725 participants accessed the survey. Based on screening criteria (i.e., being at least 18 years of age, identifying as a sexual or gender minority, residing in Austria, Germany, or Switzerland), 203 participants were ineligible and 1,230 did not complete the survey. In all, 1,292 eligible participants from all three countries completed the survey (Austria: 266, Germany: 799, Switzerland: 227). Of those, 21 participants completed the survey in under 10 minutes (Austria: 4, Germany: 13, Switzerland: 4), which had been established as the minimum time required for a native German-speaking participant to complete the survey; 23 participants completed the survey in over 24 hours (Austria: 1, Germany: 19, Switzerland: 3). Further, 163 participants (Austria: 33, Germany: 99, Switzerland: 31) responded "Yes" or "I don't know" when asked if their partner also completed the survey. Those participants (four participants ineligible in more than one category) were removed. In all, 1,089 participants were eligible and provided valid data according to our criteria (Austria: 229, Germany: 671, Switzerland: 189).

From the 1,089 participants (including singles) that completed the German-speaking version of the survey within a reasonable completion time, we further restricted our sample to participants who (i) did not identify as heterosexual, asexual, or demisexual (83 cases excluded; Austria: 7, Germany: 57, Switzerland: 19), (ii) indicated being in a same-gender relationship at time of data collection (604 cases excluded; Austria: 117, Germany: 383, Switzerland: 104), and (iii) gave valid responses to all DCI-SMS items (55 cases excluded;

Austria: 11, Germany: 35, Switzerland: 9). Our final analytic sample size for the total German-speaking area was $N = 347$ (Austria: $n = 94$, Germany: $n = 196$, Switzerland: $n = 57$).

For further information on race/ethnicity, education, and income in the German speaking countries, please refer to Supplemental Table S1.

Measures

All measures were administered in German. The German version of the survey questionnaire can be obtained from the authors upon request. First, screening questions were administered to determine eligibility for participation (i.e., 18 years or age or older, self-identified as a gender and/or sexual minority individual and residing in Austria, Germany, or Switzerland). If eligible, participants were directed to country-specific informed consent materials and, if informed consent was provided, to the research survey.

A 27-item German version of the DCI-SMS was developed by translating and adapting the original German version of the DCI (Bodenmann, 2008) to incorporate instances of minority stress, in an analogous way as the English version of the DCI-SMS was adapted from the English DCI (Randall et al., 2016; author citation). Thus, adaptions in both languages stayed close to their language's parent measure while being consistent across languages. The German version of the DCI was developed jointly and in an iterative fashion within the research team from all three study sites, drawing on the extensive experience of two of the co-authors in validating and using the DCI. The PRQC (Fletcher et al., 2000) was administered in a German translation taken from a validation study (Seigel et al., 2022). Translations of the CRI (Sanford et al., 2016) and the MOGS (Lewis et al., 2002; see Cooper et al., 2020) were created for the purpose of this study. Specifically, measures were translated by one German-speaking study site and translations were then doublechecked by another. Discrepancies were resolved by discussion or arbitration by the third study site. The German version of the 21-item DASS-21 (Nilges & Essau, 2015) was used to assess psychological

distress.

Italy

Institutional Review Board approval was obtained from the (removed for peer review) on April 27, 2021. Data collection took place from June 14, 2021, to September 30, 2021, via Qualtrics.

Recruitment

Participants were recruited across Italy through a) direct contact with LGBTQ+ community organizations, b) snowball techniques, c) flyers publication on major social media (e.g., Facebook, Instagram), and d) platforms for participants recruiting (e.g., Prolific).

Participants

The initial sample was composed of 468 participants. One hundred and twenty-one participants were removed from the dataset as they did not meet eligibility criteria (i.e., their partner's identified as heterosexual), leaving a total of 347 participants. In reviewing responses regarding gender identity, participants were labeled "woman" if they selected cisgender woman or transgender woman, and as a "man" if they selected cisgender man or transgender man identity. Fifty participants were coded as "other relationship type" because one or both partners did not identify themselves as woman or man (e.g., non-binary, agender, gender fluid, genderqueer), 23 participants were coded as "mixed-gender relationship", and 274 participants were coded as "same-gender relationship". The authors considered that the number of participants coded as "other relationship" and "mixed-gender relationship" was insufficient to have meaningful and representative interpretations of these group's experiences, so these groups were removed from analysis. The final sample consisted of 258 participants. Of them, 99.2% (*n*=256) identified as Caucasic/European, 0.4% (*n*=1) as Asiatic, and 0.4% (*n*=1) as Multiethnic. Most participants 38% (*n*=98) had a high school degree, 29.1% (*n*=75) had a master's degree, 21.3% (*n*=55) had a bachelor's degree, 9.7% (*n*=25) had

a Specialization degree or a Ph.D., 1.2% (*n*=3) had finished middle school, and 0.8% (*n*=2) had other forms of certifications (i.e., unspecified by the participants). Sixty-three participants (24.4%) reported an annual income ranging from 0€ to 5,000€, 25.6% (*n*=66) reported an annual income ranging from 5,001€ to 15,000€, (*n*=63), 28.3% (*n*=73) reported an annual income ranging from 15,001€ to 28,000€, 15.1% (*n*=39) reported an annual income ranging from 28,001€ to 55,000€, 3.5% (*n*=9) reported an annual income ranging from 55,001€ to75,000€, and 3,1% (*n*=8) reported an annual income of more than 75,001€.

Measures

All measures were administered in Italian. First, screening questions were administered to determine eligibility for participation (i.e., 18 years of age or older, self-identified as gender and/or sexual minority individual and residing in Italy). If eligible, participants were directed to the research survey. With the help of a native English speaker, a translation and back-translation process has been applied to the DCI-SMS (author citation), the PRCQ (Fletcher, 2000), the CRI (Sanford et al., 2016), and the MOGS (Lewis et al., 2002). The Italian version of the DASS-21 (Bottesi et al. 2015) was used to measure psychological distress.

Measurement Invariance

Supplemental Table S3 summarizes measurement invariance tests for each of the 10, single-factor subscales of the DCI-SMS. Please email the first author to obtain the files (.txt) containing fit measures for each test.

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Supplementary Table S1

Demographic Factors for DACH Sample

Characteristic	Overall	By Country		
	N = 347	Austria N = 94	Germany N = 196	Switzerland N = 57
Race/Ethnicity				
Person of color	2 (0.6%)	1 (1.1%)	0 (0%)	1 (1.8%)
Not white	3 (0.9%)	0 (0%)	2 (1.0%)	1 (1.8%)
White	182 (53%)	54 (58%)	104 (54%)	24 (43%)
No label	134 (39%)	32 (34%)	78 (40%)	24 (43%)
Other	5 (1.5%)	0 (0%)	3 (1.5%)	2 (3.6%)
Multiple identities	17 (5.0%)	6 (6.5%)	7 (3.6%)	4 (7.1%)
Missing values	4	1	2	1
Education				
Compulsory education	5 (1.4%)	2 (2.1%)	0 (0%)	3 (5.3%)
National vocational qualification	46 (13%)	4 (4.3%)	25 (13%)	17 (30%)
High-school or nursing diploma	96 (28%)	21 (22%)	56 (29%)	19 (33%)
University degree	190 (55%)	61 (65%)	112 (57%)	17 (30%)
Other	10 (2.9%)	6 (6.4%)	3 (1.5%)	1 (1.8%)
Income				
0-12.499 €/0-24.999 CHF	52 (15%)	6 (6.5%)	35 (18%)	11 (20%)
12.500-24.999 €/25.000-49.999 CHF	58 (17%)	18 (20%)	32 (16%)	8 (14%)
25.000-49.999 €/50.000-74.999 CHF	128 (37%)	45 (49%)	67 (34%)	16 (29%)
50.000-74.999 €/75.000-99.999 CHF	77 (22%)	21 (23%)	45 (23%)	11 (20%)
75.000-99.999 €/100.000-149.999 CHF	19 (5.5%)	1 (1.1%)	8 (4.1%)	10 (18%)
100.000 € or more/150.000 CHF or more	9 (2.6%)	1 (1.1%)	8 (4.1%)	0 (0%)
Missing values	4	2	1	1

Supplemental Table S2

Reports of Data Screening Numbers

	missing	PTC	LSI	screened sum
Austria	0	4	18	22
Germany	1	12	27	39
Italy	0	3	24	27
Switzerland	1	3	7	11

Note. PTC = Person-Total Correlation index; LSI = Long String Index; missing = missing cases > 25%; screened sum = number of total screened cases.

Table S3

Measurement Invariance for Individual Subscales of DCI-SMS

Subscale	Metric MI	Scalar MI	Strict MI
Stress communication - Self	N/A	No	No
Emotion-focused DC - Self	N/A	Yes	Yes
Problem-focused DC - Self	N/A	No	No
Negative DC - Self	Yes	No	No
Stress DC - Partner	N/A	Yes	Yes
Supportive DC - Partner	Yes	No	No
Negative DC - Partner	Yes	Yes	No
Emotion focused common DC	N/A	No	No
Problem-focused common DC	No	No	No
Evaluation of DC	N/A	No	No

Note. DC = dyadic coping. Eight of the 11 factors had only two indicators, so metric and configural models were identical. Moreover, metric models were saturated so comparing scalar to metric fit in this context is an extremely stringent tests MI, which may have led most subscales to fail tests for scalar invariance.