

RESEARCH-IN-BRIEF

Identification with similar others sharing their experience of coping with depression and its effects on stigmatization and prosocial intentions

Identifikation mit ähnlichen Personen, die ihre Erfahrungen mit Depression teilen, und ihre Wirkung auf Stigmatisierung und prosoziale Verhaltensintentionen

*Freya Sukalla, Ina Krack, Daniel Seibert, Ludwig Paeth, Olga Frank,
Ronja Preißler & Philip Matias Block*

Freya Sukalla (Dr.), Leipzig University, Institute of Communication and Media Studies, Nikolaistr. 27–29, 04109 Leipzig, Germany. Contact: [freya.sukalla\(at\)uni-leipzig.de](mailto:freya.sukalla(at)uni-leipzig.de). ORCID: <https://orcid.org/0000-0002-4611-3647>

Ina Krack (M.A.), Leipzig University, Institute of Communication and Media Studies, Nikolaistr. 27–29, 04109 Leipzig, Germany. Contact: [ina.krack\(at\)uni-leipzig.de](mailto:ina.krack(at)uni-leipzig.de).

Daniel Seibert (M.A.), Leipzig University, Institute of Communication and Media Studies, Nikolaistr. 27–29, 04109 Leipzig, Germany. Contact: [daniel.seibert\(at\)uni-leipzig.de](mailto:daniel.seibert(at)uni-leipzig.de).

Ludwig Paeth (M.A.), Leipzig University, Institute of Communication and Media Studies, Nikolaistr. 27–29, 04109 Leipzig, Germany. Contact: [lp65puno\(at\)studserv.uni-leipzig.de](mailto:lp65puno(at)studserv.uni-leipzig.de).

Olga Frank (M.A.), Leipzig University, Institute of Communication and Media Studies, Nikolaistr. 27–29, 04109 Leipzig, Germany. Contact: [olga_frank\(at\)ymail.com](mailto:olga_frank(at)ymail.com).

Ronja Preißler (M.A.), Leipzig University, Institute of Communication and Media Studies, Nikolaistr. 27–29, 04109 Leipzig, Germany. Contact: [ronja-preissler\(at\)gmx.de](mailto:ronja-preissler(at)gmx.de)

Philip Matias Block (M.A.), Leipzig University, Institute of Communication and Media Studies, Nikolaistr. 27–29, 04109 Leipzig, Germany. Contact: [pmb\(at\)outlook.de](mailto:pmb(at)outlook.de).



© Freya Sukalla, Ina Krack, Daniel Seibert, Ludwig Paeth, Olga Frank ,
Ronja Preißler, Philip Matias Block

RESEARCH-IN-BRIEF

Identification with similar others sharing their experience of coping with depression and its effects on stigmatization and prosocial intentions

Identifikation mit ähnlichen Personen, die ihre Erfahrungen mit Depression teilen, und ihre Wirkung auf Stigmatisierung und prosoziale Verhaltensintentionen

Freya Sukalla, Ina Krack, Daniel Seibert, Ludwig Paeth, Olga Frank, Ronja Preißler & Philip Matias Block

Abstract: Addressing the high prevalence of depression among university students and the need to motivate professional help seeking, we examine whether recovery stories featuring a *similar* – compared to a *dissimilar* – person sharing their personal experience of coping with depression will reduce stigmatization (attitudes, social distance, prosocial intentions) and the self-stigma of help seeking as mediated by perceived similarity and identification. We conducted a one-factorial between-subject experiment to test the effects of lifestyle similarity on stigmatization and self-stigma of help seeking. 169 students (74.6% female; $M_{\text{age}} = 23.5$, $SD = 3.5$) were randomly assigned to read either a recovery story about a similar or dissimilar author's reflections on their experience of coping with depression or a control story. Contrary to expectations, recovery stories did not reduce stigmatization nor the self-stigma of help seeking, irrespective of whether they were told by a similar or dissimilar person. However, a significant indirect effect on prosocial intentions through perceived similarity and identification as well as several interesting exploratory results point to potential beneficial and detrimental effects of recovery stories and similarity that should be explored in future research.

Keywords: Similarity, identification, mental health, stigmatization, depression, recovery story.

Zusammenfassung: In Anbetracht der hohen Prävalenz von Depressionen unter Studierenden und der Notwendigkeit, zur Inanspruchnahme professioneller Hilfe zu motivieren, untersuchen wir, ob Recovery Stories, in denen eine *ähnliche* – im Vergleich zu einer *unähnlichen* – Person, die ihre persönlichen Erfahrungen bei der Bewältigung von Depressionen schildert, die Stigmatisierung (Einstellungen, soziale Distanz, prosoziale Absichten) und das Selbststigma bei der Inanspruchnahme von Hilfe verringern, wobei die wahrgenommene Ähnlichkeit und Identifikation als Mediatoren fungieren. Zu diesem Zweck haben wir ein einfaktorielles Experiment durchgeführt. 169 Student:innen (74,6 % weiblich; $M_{\text{Alter}} = 23.5$, $SD = 3.5$) wurden randomisiert gebeten, entweder eine von zwei Recovery Stories, in der eine ähnliche oder unähnliche Person über ihre Erfahrungen bei der Bewältigung von Depressionen berichtet, oder eine Kontrollgeschichte zu lesen. Entgegen den Erwartungen verringerten Recovery Stories weder die Stigmatisierung noch das Selbststigma der Hilfesuchenden, unabhängig davon, ob

sie von einer ähnlichen oder unähnlichen Person erzählt wurden. Ein signifikanter indirekter Effekt auf prosoziale Absichten durch wahrgenommene Ähnlichkeit und Identifikation sowie mehrere interessante explorative Ergebnisse deuten jedoch auf mögliche positive und negative Auswirkungen von Recovery Stories und Ähnlichkeit hin, die in zukünftiger Forschung untersucht werden sollten.

Schlagwörter: Ähnlichkeit, Identifikation, psychische Gesundheit, Stigmatisierung, Depression, Recovery Story.

1. Identification with similar others sharing their experience of coping with depression and its effects on stigmatization and prosocial intentions

Depression is one of the most common mental illnesses among college students worldwide (Auerbach et al., 2018). Given that many mental disorders' likely onset happens at this age (Auerbach et al., 2018), it is of high importance that students seek professional help when needed. However, as depression is still stigmatized in society – involving negative stereotypes and exclusion or discrimination (Major & O'Brian, 2005) – affected individuals are often reluctant to seek help, particularly if they have internalized the public stigma (Schomerus et al., 2009). This seems to be especially true among the student population (Ebert et al., 2019). In this study, we therefore examine whether recovery stories featuring a *similar* – compared to a *dissimilar* – person sharing their personal experience of coping with depression will reduce students' stigmatization of individuals with depression and, more importantly, their self-stigmatization of help seeking.

Media are a major source of information about mental illnesses such as depression, especially for those with no personal or direct experience (Mirnezami et al., 2016; Reavley et al., 2011). However, media portrayals have been

shown to paint a rather negative image of individuals with depression: They are often represented as a homogeneous group whose members are characterized as being weak, lacking motivation, violent, or suicidal (e.g., Klin & Lemish, 2008; Wang, 2020). While there have been improvements over the years – including less stigmatizing and more informative social media portrayals (Ma, 2017), stories about successful treatment and recovery are still rarely found (e.g., Gaus et al., 2021; Hildersley et al., 2020; Whitley & Wang, 2017). By drawing an incomplete and sometimes inaccurate picture of depression, media contribute to perpetuating the stigma of depression (Goepfert et al., 2019; Ross et al., 2019). On the other hand, appropriate media portrayals may also have a destigmatizing effect: Corrigan and colleagues (2013), for example, found that a newspaper story about recovery resulted in reduced stigma and greater acceptance of people with mental illness. Research also suggests that stories portraying individuals constructively coping with mental illness can benefit those at risk (Niederkrotenthaler & Till, 2020). Further, Romer and Bock (2008) showed in their study that young people had fewer negative stereotypical expectations after being exposed to information about a successfully treated person than those who were exposed to an untreated person.

According to Social Cognitive Theory (Bandura, 1986, 2009), individuals are capable of acquiring new knowledge, values, and behavior by observing others. This is possible because of the human capacity for symbolization, vicarious experience, self-regulation, and self-reflection. An experience does not have to be lived through by oneself, but can take place vicariously. Thus, in addition to people from one's personal environment, people from the symbolic environment of the mass media can function as role models (Bandura, 2009). Here, especially the portrayal of individuals with mental illness seeking professional help and successfully managing or recovering from their illness, may shape media users' perceptions of mental illness and help seeking. Consequently, we propose the following hypothesis.

H1: Compared to an irrelevant control story, a recovery story by a person coping with depression will reduce (a) stigmatization and (b) the self-stigma of help seeking.

Research in narrative persuasion has shown that narrative forms of media content have strong persuasive effects (e.g., Braddock & Dillard, 2016; Green & Brock, 2005); even more so, when individuals identify with the role models (e.g., de Graaf et al., 2012; Slater & Rouner, 2002). Identification is understood as a reception process in which self-perception is reduced while media users take on the role of a narrative character, cognitively and affectively empathizing with her or him, and thus experience the events from within the character's perspective (Cohen, 2001; Tal-Or & Cohen, 2010). Through identification, narratives can contribute to the transfer of knowledge, the acquisition of new values and behavioral

change (Moyer-Gusé, 2008; Slater & Rouner, 2002). In the context of mental illness, prior research has shown that identifying with a person suffering from depression reduces stigma and increases supportive behaviors (e.g., Caputo & Rouner, 2011). One way to facilitate identification can be to increase media users' perceived similarity to the person portrayed (e.g., Hoeken et al., 2016). Similarity or homophily to a character can relate to sociodemographic characteristics, such as gender or age, as well as personality, attitudes, similar life circumstances or shared experiences (Hoffner & Cantor, 1991). In the context of health communication, McKeever (2015) found that recipients who read an article about a similar student, i.e. from the same university, who had been diagnosed with depression expressed greater empathic concern for people with depression in general, which in turn had positive effects on the attitudes toward people with this mental illness. Furthermore, the study demonstrated that positive attitudes toward individuals with depression led to a greater willingness to engage in helping behaviors. While similarity manipulations' effects on perceived similarity have been confirmed in a meta-analysis (Tukachinsky, 2014), research findings concerning the relationship between (perceived) similarity and identification are more heterogeneous (e.g., Cohen et al., 2018). However, a few studies indicate that similarity based on attributes, role or situation seems to be more effective than demographic similarity in increasing identification (Hoeken et al., 2016; van Krieken & Sanders, 2017). Therefore, we will examine whether lifestyle similarity will strengthen the effect of recovery stories in reducing stigmatization and the self-stigma of help seek-

ing through identification. Based on the presented research in narrative persuasion, we formulate hypotheses 2 and 3.

H2: A recovery story told by a person whose life situation is more similar to the media user compared to a story by a person whose life situation is dissimilar will result in less (a) stigmatization and (b) a lower self-stigma of help seeking.

H3: The effect will be serially mediated by perceived similarity and identification.

2. Method

2.1 Design

We conducted a one-factorial between-subject online experiment to test the effects of lifestyle similarity on stigmatization and help seeking self-stigma. Student participants were assigned to read either a blog post about a (1) similar, in terms of lifestyle, or (2) dissimilar person's reflections on their experience with depression or (3) an unrelated post. Before exposure participants were advised to not continue the study if they were in an acute phase of mental illness. In addition, care was taken to debrief participants and provide additional resources about depression.

2.2 Sample

201 people participated in the study. Of those, 32 had to be excluded, because they only clicked through the questionnaire ($n = 2$), did not identify themselves as students ($n = 15$), or spent less than 40s on the blog post ($n = 15$). This resulted in a final sample of $N = 169$ stu-

dents, of which 74.6 percent are women. Mean age is 23.5 years ($SD = 3.2$) and ranges from 18 to 39 years. 20.1 percent reported personal experience with depression, 70.4 percent know someone with depression in their close circle, i.e. friends or family, 83.4 percent know someone with depression in their wider circle of acquaintances. Only seven participants do not have any experience with depression.

2.3 Stimulus material

Two versions of a blog post by an author reflecting on his or her experience with depression were created as stimulus material. The posts were modeled after personal stories commonly found on websites by mental health organizations. The recovery story, identical in all versions, included the first realization of being sick with the discovery of first symptoms, the struggle to seek and accept help, and the ongoing successful coping with the illness. Lifestyle similarity was manipulated by making a student (*Anna* or *Tom*) with concerns of exams, roommates, and part-time job the author of the post in the similar condition (732 words), whereas in the dissimilar one the author was a middle-aged banker (*Harald* or *Effi*) with issues of work, taking care of kids and house renovation (644 words). The two similarity versions are depicted in the Supplementary Materials (S1). To control for gender effects on similarity, women were assigned posts by female authors and men by male authors. Names and pronouns in the stimulus versions were changed accordingly. Everything else remained the same. To add external validity, CC licensed neutral portraits were added to each post. An unrelated post about the new trend of *Plogging*, which

stands for collecting trash while jogging, was used in the control condition.

2.4 Measures

All constructs were assessed using 7-pt. scales from 1 – *completely disagree* to 7 – *completely agree*. Items for all scale measures are provided in the Supplementary Materials (S2).

2.4.1 Perceived similarity

To assess perceived similarity, we asked participants to what extent they perceive themselves as similar to the blog author in terms of lifestyle, personality, and values (Wang, 2018). The items achieved acceptable reliability, Cronbach's $\alpha = .70$, and were combined into a mean index ($M = 3.84$, $SD = 1.23$).

2.4.2 Identification

Participants' degree of identification with the blog authors was measured with the five items suggested by Tal-Or and Cohen (2010) and a mean index was created (Cronbach's $\alpha = .85$; $M = 4.61$, $SD = 1.29$).

2.4.3 Stigmatization

To assess the multifaceted nature of stigma, we used three common indicators (Fox et al., 2018) to represent participant's level of stigmatization of individuals with depression.

Stigmatizing attitudes. We used the nine personal stigma items from the Depression Stigma Scale (Griffiths et al., 2004) to measure stigmatizing attitudes. An exploratory factor analysis (PAF, $KMO = .748$) confirmed the one-dimensional structure of the scale; however,

two items¹ had to be excluded because of very low communalities ($b^2 < .05$) and factor loadings below .20. The remaining items formed one factor explaining 34.27 percent of variance and were combined into a mean index (Cronbach's $\alpha = .77$; $M = 1.97$, $SD = 0.82$).

Desired social distance. To assess desired social distance we adapted a measure by Hoffner and Cohen (2012) and asked participants to indicate the extent to which they can imagine to spend time, be friends, and work with someone who has depression. A mean index of the reversed items was created so that higher values represent larger desired social distance (Cronbach's $\alpha = .93$, $M = 2.10$, $SD = 1.43$).

Prosocial intentions. Regarding prosocial intentions, participants were asked about the likelihood that they would donate money for campaigns or support petitions to support persons with depression, talk to friends and family or share media content about issues concerning persons with depression (Peng et al., 2010). A mean index of the four items was created (Cronbach's $\alpha = .76$; $M = 4.87$, $SD = 1.26$).

2.4.4 Self-stigma help seeking

We adapted the Self-Stigma of Seeking Help Scale (Vogel et al., 2006) to measure the self-stigma of help seeking stigma with eight items. Reliability was good (Cronbach's $\alpha = .79$) and items were combined into a mean index ($M = 2.89$, $SD = 1.09$).

1 "People with depression could snap out of it if they wanted" and "If I had depression I would not tell anyone."

2.4.5 Everyday Relevance of Depression

In addition to our main variables participants also reported how relevant the issue of depression currently is in their everyday life on a 7-pt. scale from 1 – *not at all relevant* to 7 – *extremely relevant* ($M = 4.09, SD = 1.75$).

3. Results

To test hypotheses one and two we conducted a one-factorial ANOVA with the condition (control group, low lifestyle similarity recovery story, high lifestyle similarity recovery story) as independent variable for each dependent variable, i.e. stigmatizing attitudes, social distance, prosocial intentions, and self-stigma of help seeking. We compared each version of the recovery story with the control group for testing hypothesis one that postulated a general effect of recovery stories. There were no effects on stigma-

tizing attitudes, prosocial intentions, nor the self-stigma of help seeking. Contrary to our hypothesis, the low similarity recovery story ($M = 2.48, SD = 1.87$) increased participants’ desired social distance compared to the control post ($M = 1.77, SD = 1.00, p = .044, d = .47$; Welch’s $F(2, 99.31) = 3.55, p = .032, est. \omega^2 = .03$). Thus, hypothesis one was not supported: The recovery stories did not lead to less stigmatization or self-stigma compared to an unrelated post (H1), on the contrary, they hint at potential detrimental effects regarding desired social distance. Comparing low and high lifestyle similarity versions (H2), we did not find any significant effects either, thus no support for hypothesis two either. Descriptives and test statistics are provided in Table 1.

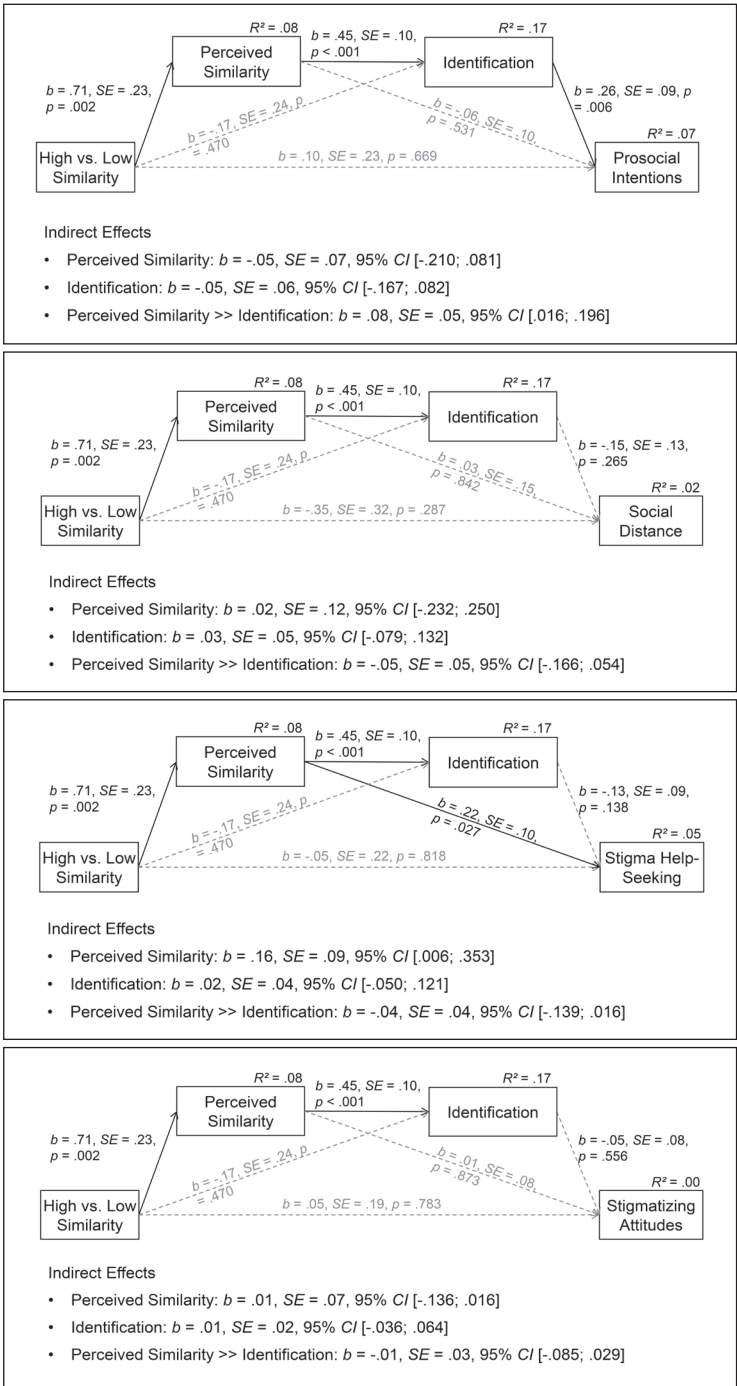
The lifestyle similarity manipulation had the anticipated effect on perceived similarity, $t(106) = -3.13, p = .002, d = .60$, with the high similarity condition

Table 1. Group comparisons for mediating and dependent variables

| | Control Group | Lifestyle Similarity | | Test Statistics |
|--------------------------|--------------------------------|---------------------------------------|--|--|
| | <i>M (SD)</i> <i>n</i> = 61 | Low <i>M (SD)</i> <i>n</i> = 51 | High <i>M (SD)</i> <i>n</i> = 57 | |
| Perceived Similarity | - | 3.46 (1.17) | 4.18 (1.19) | $t = -3.13, df = 106, p = .002, d = .60$ |
| Identification | - | 4.54 (1.29) | 4.68 (1.29) | $t = -0.59, df = 106, p = .555, d = .11$ |
| Stigmatizing Attitudes | 1.84 (0.63) | 2.01 (0.93) | 2.06 (0.90) | $F(2, 101.99) = 1.41, p = .248, est. \omega^2 = .01$ |
| Social Distance | 1.77 ^a (1.00) | 2.48 ^a (1.87) | 2.13 (1.32) | $F(2, 99.31) = 3.55, p = .032, est. \omega^2 = .03$ |
| Prosocial Intentions | 4.84 (1.43) | 4.84 (1.21) | 4.93 (1.13) | $F(2, 166) = 0.10, p = .905, \eta_p^2 = .00$ |
| Self-Stigma Help seeking | 2.73 (1.05) | 2.93 (1.07) | 3.02 (1.13) | $F(2, 166) = 1.08, p = .343, \eta_p^2 = .00$ |

Note: Based on a Games-Howell-Post Hoc Test means with the same superscript differ at $p = .044, d = .47$.

Figure 1. Serial mediation results



Note: $N = 108$; PROCESS mod. 6, 95% CI based on 10.000 bootstrap samples (Hayes, 2018).

leading to higher perceived similarity ($M = 4.18, SD = 1.19$) than the low similarity one ($M = 3.46, SD = 1.17$). There was no total effect of the manipulation on identification; however, using PROCESS macro model 6 with 10,000 bootstrap samples (Hayes, 2018), we did find the expected indirect effect on identification with increased perceived similarity leading to higher identification, $b = .32, SE = .13, 95\% CI [.096, .607]$. The hypothesized serial mediation effects on the outcome variables, however, were only significant for prosocial intentions, $b = .08, SE = .05, 95\% CI [.016, .196]$, not for stigmatizing attitudes, social distance, nor the self-stigma of help seeking. Unexpectedly, a significant indirect effect of lifestyle similarity on the self-stigma of help seeking through perceived similarity emerged, $b = .16, SE =$

.09, 95% $CI [.006, .353]$. Instead of reducing the self-stigma, perceived similarity evoked by the similar recovery story actually related positively to the self-stigma of help seeking (s. Figure 1 for all mediation results).

In order to investigate whether gender or prior experience in terms of current everyday relevance of depression have an impact on the relationships we conducted additional exploratory analyses. Two-factorial ANOVAs with condition and gender as independent variables and relevance as covariate resulted in significant interactions on perceived similarity, $F(1, 103) = 4.13, p = .045, \eta_p^2 = .03$, and stigmatizing attitudes, $F(2, 162) = 3.99, p = .020, \eta_p^2 = .03$ (s. Table 2). In particular, the lifestyle similarity condition had the intended effect on perceived similarity only for women,

Table 2. Group comparisons for mediating and dependent variables split by gender

| | Control Group | | Lifestyle Similarity | | | |
|--------------------------|---|---|---|---|---|---|
| | Men (<i>n</i> = 17) <i>M</i> (<i>SD</i>) | Women (<i>n</i> = 44) <i>M</i> (<i>SD</i>) | Low | | High | |
| | | | Men (<i>n</i> = 10) <i>M</i> (<i>SD</i>) | Women (<i>n</i> = 41) <i>M</i> (<i>SD</i>) | Men (<i>n</i> = 16) <i>M</i> (<i>SD</i>) | Women (<i>n</i> = 41) <i>M</i> (<i>SD</i>) |
| Perceived Similarity | - | - | 4.00 (1.50) | 3.33 ^a (1.05) | 3.96 (0.97) | 4.26 ^a (1.27) |
| Identification | - | - | 4.38 (1.46) | 4.58 (1.26) | 4.60 (0.91) | 4.72 (1.42) |
| Stigmatizing Attitudes | 1.97 ^{bc} (0.75) | 1.79 (0.58) | 2.87 ^b (0.98) | 1.80 (0.80) | 2.68 ^c (1.17) | 1.82 (0.64) |
| Social Distance | 1.84 (0.89) | 1.73 (1.05) | 2.33 (1.50) | 2.51 (1.96) | 2.08 (1.43) | 2.15 (1.29) |
| Prosocial Intentions | 4.65 (1.05) | 4.91 (1.55) | 3.53 (0.87) | 5.16 (1.06) | 4.55 (1.44) | 5.09 (0.97) |
| Self-Stigma Help seeking | 2.93 (0.90) | 2.66 (1.11) | 3.51 (0.69) | 2.79 (1.11) | 3.14 (0.79) | 2.97 (1.25) |

Note: Two-way analyses of variance with Bonferroni corrections.

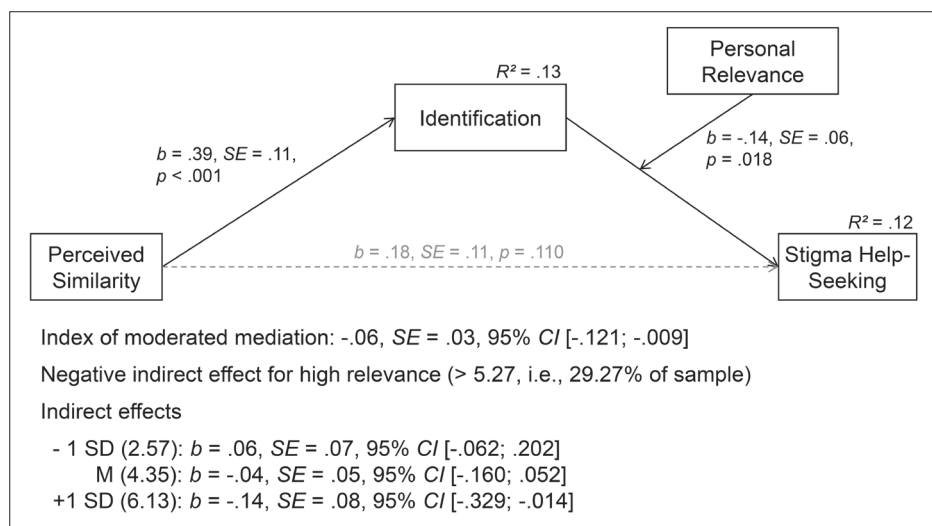
^a $F(1, 103) = 13.40, p < .001, \eta_p^2 = .11$.

^{bc} $F(2, 162) = 5.86, p = .003, \eta_p^2 = .06$, ^b $p = .012, d = 1.11$, ^c $p = .015, d = .75$.

$F(1, 103) = 13.40, p < .001, \eta_p^2 = .11$, yet not for men, $F(1, 103) = 0.11, p = .747, \eta_p^2 = .00$. At the same time, both versions of the recovery story increased stigmatizing attitudes for men, $F(2, 162) = 5.86, p = .003, \eta_p^2 = .06$, but not for women, $F(2, 162) = 0.04, p = .965, \eta_p^2 = .00$.

moderated mediation = $-.06, SE = .03, 95\% CI [-.121; -.009]$. Specifically, for high everyday relevance of depression, i.e. Johnson-Neyman value greater than 5.27 (about 29.27 percent of the sample), higher perceived similarity reduces the self-stigma of help seeking through identification (s. Figure 2).

Figure 2. Exploratory results women subsample: Moderated mediation for the self-stigma of help seeking



Note: $N = 82$; PROCESS mod. 14, 95% CI based on 10.000 bootstrap samples (Hayes, 2018).

In light of these differences and the small group sizes for men, ranging from 10 to 17, we proceeded with the women subsample to examine the influence of depression's everyday relevance. While most results mirror those for the entire sample, using PROCESS model 14 with perceived similarity as independent variable, identification as mediator, self-stigma of help seeking as dependent variable, and relevance as moderator of the relationship between identification and the self-stigma of help seeking, a significant moderated mediation effect emerged, index of

4. Discussion

Contrary to our expectations, recovery stories did not reduce stigmatization nor the self-stigma of help seeking, irrespective of whether they were told by a person with similar or dissimilar life context. Instead, low lifestyle similarity recovery stories resulted even in an increase in desired social distance. One possible explanation for this unexpected result for social distance might be methodological. It is easily conceivable that participants in the low similarity condition used the

middle-aged exemplars with a very different life context as an anchor for their judgement of the extent to which they can imagine spending time, being friends, or working with a person with depression. Consequently, it would be necessary in similar studies to adapt the measure of desired social distance so that it does not reflect the differences in social context between the participant and the exemplar. At the same time, this effect needs to be investigated further, because it would be very detrimental if depression experiences by dissimilar individuals contribute to an increase in desired social distance.

Concerning the overall lack of total effects of recovery stories and the lifestyle similarity manipulation, the main explanation for these results may be found in the characteristics of our sample: Participants reported a high degree of direct experience with depression and very low levels of stigmatization. Further limitations include the small sample size and the high number of women. In a sense, then, our sample prevents the investigation of the theoretical relationships in the relevant target group of young adults with less direct experiences and/or higher degrees of (self-)stigmatization. At the same time, even in our sample the highest means were observed for the self-stigma of help seeking illustrating the relevance of anti-stigma efforts for this age group. Future studies should aim for more diverse samples, especially in terms of prior experience and levels of stigmatization. In addition, a closer look at characteristics of recovery stories might be warranted. We created our stimulus material based on existing online narratives by persons with depression in mental health blogs and included the entire journey from experiencing symptoms, illness awareness and

acceptance, help seeking and successful coping. However, certain elements might be more relevant for specific outcomes, so that future studies should investigate systematically those characteristics of recovery stories that make them more effective in which contexts.

Besides the lack of main effects on the dependent variables, we did observe the hypothesized effect of the lifestyle similarity manipulation on perceived similarity and the indirect effect on prosocial intentions through perceived similarity and identification. While this result should not be over-interpreted, it does add evidence to research on similarity and identification in narrative persuasion (e.g., Cohen et al., 2018; Hoeken et al., 2016) and hints at a potential contribution of recovery stories by similar individuals to anti-stigma efforts. This potential is further signified by the results of the exploratory analyses for the female subsample. For women with high experience with depression a recovery story by a similar person reduced the help seeking stigma through perceived similarity and identification. These results also underline the relevance of examining the role of prior experience (Vyncke & Gorp, 2018). On the other hand, the gender differences, albeit based on a very small subsample of men, illustrate the potential risks of detrimental effects of similarity. Future studies are needed to disentangle the beneficial and detrimental effects of similarity (in the context of recovery stories) on stigmatization for different target groups. Overall, our study offers valuable insights and even more inspiration for future mental health stigma research.

References

- Auerbach, R. P., Mortier, P., Bruffaerts, R., Alonso, J., Benjet, C., Cuijpers, P., Demyttenaere, K., Ebert, D. D., Green, J. G., Hasking, P., Murray, E., Nock, M. K., Pinder-Amaker, S., Sampson, N. A., Stein, D. J., Vilagut, G., Zaslavsky, A. M., & Kessler, R. C. (2018). The WHO World Mental Health Survey's international college student project: Prevalence and distribution of mental disorders. *Journal of Abnormal Psychology*, 127(7), 623–638. <https://doi.org/10.1037/abn0000362>
- Bandura, A. (1986). *Social foundations of thought and action. A social cognitive theory*. Prentice Hall.
- Bandura, A. (2009). Social cognitive theory of mass communication. In J. Bryant & M. B. Oliver (Eds.), *Media effects: Advances in theory and research* (pp. 94–124). Erlbaum.
- Braddock, K., & Dillard, J. P. (2016). Meta-analytic evidence for the persuasive effect of narratives on beliefs, attitudes, intentions, and behaviors. *Communication Monographs*, 83(4), 446–467. <https://doi.org/10.1080/03637751.2015.1128555>
- Caputo, N. M., & Rouner, D. (2011). Narrative processing of entertainment media and mental illness stigma. *Health Communication*, 26(7), 595–604. <https://doi.org/10.1080/10410236.2011.560787>
- Cohen, J. (2001). Defining identification: A theoretical look at the identification of audiences with media characters. *Mass Communication & Society*, 4(3), 245–264. https://doi.org/10.1207/S15327825MCS0403_01
- Cohen, J., Weimann-Saks, D., & Mazor-Tregerman, M. (2018). Does character similarity increase identification and persuasion? *Media Psychology*, 21(3), 506–528. <https://doi.org/10.1080/15213269.2017.1302344>
- Corrigan, P. W., Powell, K. J., & Michaels, P. J. (2013). The effects of news stories on the stigma of mental illness: *The Journal of Nervous and Mental Disease*, 201(3), 179–182. <https://doi.org/10.1097/NMD.0b013e3182848c24>
- de Graaf, A., Hoeken, H., Sanders, J., & Beentjes, J. W. J. (2012). Identification as a mechanism of narrative persuasion. *Communication Research*, 39(6), 802–823. <https://doi.org/10.1177/0093650211408594>
- Ebert, D. D., Mortier, P., Kahlke, F., Bruffaerts, R., Baumeister, H., Auerbach, R. P., Alonso, J., Vilagut, G., Martínez, K. U., Lochner, C., Cuijpers, P., Kuechler, A.-M., Green, J., Hasking, P., Lapsley, C., Sampson, N. A., Kessler, R. C., & WHO World Mental Health-International College Student Initiative collaborators (2019). Barriers of mental health treatment utilization among first-year college students: First cross-national results from the WHO World Mental Health International College Student Initiative. *International Journal of Methods in Psychiatric Research*, 28(2), e1782. <https://doi.org/10.1002/mpr.1782>
- Fox, A. B., Earnshaw, V. A., Taverna, E. C., & Vogt, D. (2018). Conceptualizing and measuring mental illness stigma: The mental illness stigma framework and critical review of measures. *Stigma and health*, 3(4), 348–376. <https://doi.org/10.1037/sah0000104>
- Gaus, Q., Jolliff, A., & Moreno, M. A. (2021). A content analysis of YouTube depression personal account videos and their comments. *Computers in Human Behavior Reports*, 3, 100050. <https://doi.org/10.1016/j.chbr.2020.100050>
- Goepfert, N. C., von Heydendorff, S. C., Drefsing, H., & Bailer, J. (2019). Effects of stigmatizing media coverage on stigma measures, self-esteem, and affectivity in persons with depression – an experimental controlled trial. *BMC Psychiatry*,

- 19(1), 138. <https://doi.org/10.1186/s12888-019-2123-6>
- Green, M. C., & Brock, T. C. (2005). Persuasiveness of narratives. In T. C. Brock & M. C. Green (Eds.), *Persuasion: Psychological insights and perspectives* (pp. 117–142). Sage.
- Griffiths, K. M., Christensen, H., Jorm, A. F., Evans, K., & Groves, C. (2004). Effect of web-based depression literacy and cognitive-behavioural therapy interventions on stigmatising attitudes to depression: Randomised controlled trial. *The British Journal of Psychiatry: The Journal of Mental Science*, 185, 342–349. <https://doi.org/10.1192/bjp.185.4.342>
- Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford Press.
- Hildersley, R., Potts, L., Anderson, C., & Henderson, C. (2020). Improvement for most, but not all: Changes in newspaper coverage of mental illness from 2008 to 2019 in England. *Epidemiology and Psychiatric Sciences*, 29. <https://doi.org/10.1017/S204579602000089X>
- Hoeken, H., Kolthoff, M., & Sanders, J. (2016). Story perspective and character similarity as drivers of identification and narrative persuasion. *Human Communication Research*, 42(2), 292–311. <https://doi.org/10.1111/hcre.12076>
- Hoffner, C., & Cantor, J. (1991). Perceiving and responding to mass media characters. In J. Bryant & D. Zillmann (Eds.), *Responding to the screen: Reception and reaction processes* (pp. 63–101). Lawrence Erlbaum.
- Hoffner, C., & Cohen, E. L. (2012). Responses to obsessive compulsive disorder on monk among series fans: Parasocial relations, presumed media influence, and behavioral outcomes. *Journal of Broadcasting & Electronic Media*, 56(4), 650–668. <https://doi.org/10.1080/08838151.2012.732136>
- Klin, A., & Lemish, D. (2008). Mental disorders stigma in the media: Review of studies on production, content, and influences. *Journal of Health Communication*, 13(5), 434–449. <https://doi.org/10.1080/10810730802198813>
- Ma, Z. (2017). How the media cover mental illnesses: A review. *Health Education*, 117(1), 90–109. <https://doi.org/10.1108/HE-01-2016-0004>
- Major, B., & O'Brien, L. T. (2005). The social psychology of stigma. *Annual Review of Psychology*, 56(1), 393–421. <https://doi.org/10.1146/annurev.psych.56.091103.070137>
- McKeever, R. (2015). Vicarious experience: Experimentally testing the effects of empathy for media characters with severe depression and the intervening role of perceived similarity. *Health Communication*, 30(11), 1122–1134. <https://doi.org/10.1080/10410236.2014.921969>
- Mirnezami, H. F., Jacobsson, L., & Edin-Liljegren, A. (2016). Changes in attitudes towards mental disorders and psychiatric treatment 1976–2014 in a Swedish population. *Nordic Journal of Psychiatry*, 70(1), 38–44. <https://doi.org/10.3109/08039488.2015.1046916>
- Moyer-Gusé, E. (2008). Toward a theory of entertainment persuasion: Explaining the persuasive effects of entertainment-Education messages. *Communication Theory*, 18(3), 407–425. <https://doi.org/10.1111/j.1468-2885.2008.00328.x>
- Niederkrotenthaler, T., & Till, B. (2020). Effects of suicide awareness materials on individuals with recent suicidal ideation or attempt: Online randomised controlled trial. *The British Journal of Psychiatry*, 217(6), 693–700. <https://doi.org/10.1192/bjp.2019.259>
- Peng, W., Lee, M., & Heeter, C. (2010). The effects of a serious game on role-taking

- and willingness to help. *Journal of Communication*, 60(4), 723–742. <https://doi.org/10.1111/j.1460-2466.2010.01511.x>
- Reavley, N. J., Cvetkovski, S., & Jorm, A. F. (2011). Sources of information about mental health and links to help seeking: Findings from the 2007 Australian National Survey of Mental Health and Well-being. *Social Psychiatry and Psychiatric Epidemiology*, 46(12), 1267–1274. <https://doi.org/10.1007/s00127-010-0301-4>
- Romer, D., & Bock, M. (2008). Reducing the stigma of mental illness among adolescents and young adults: The effects of treatment information. *Journal of Health Communication*, 13(8), 742–758. <https://doi.org/10.1080/10810730802487406>
- Ross, A. M., Morgan, A. J., Jorm, A. F., & Reavley, N. J. (2019). A systematic review of the impact of media reports of severe mental illness on stigma and discrimination, and interventions that aim to mitigate any adverse impact. *Social Psychiatry and Psychiatric Epidemiology*, 54(1), 11–31. <https://doi.org/10.1007/s00127-018-1608-9>
- Schomerus, G., Matschinger, H., & Angermeyer, M. C. (2009). The stigma of psychiatric treatment and help seeking intentions for depression. *European Archives of Psychiatry and Clinical Neuroscience*, 259(5), 298–306. <https://doi.org/10.1007/s00406-009-0870-y>
- Slater, M. D., & Rouner, D. (2002). Entertainment-education and elaboration likelihood: Understanding the processing of narrative persuasion. *Communication Theory*, 12(2), 173–191. <https://doi.org/10.1111/j.1468-2885.2002.tb00265.x>
- Tal-Or, N., & Cohen, J. (2010). Understanding audience involvement: Conceptualizing and manipulating identification and transportation. *Poetics*, 38(4), 402–418. <https://doi.org/10.1016/j.poetic.2010.05.004>
- Tukachinsky, R. (2014). Experimental manipulation of psychological involvement with media. *Communication Methods and Measures*, 8(1), 1–33. <https://doi.org/10.1080/19312458.2013.873777>
- van Krieken, K., & Sanders, J. (2017). Health communicationl engaging doctors and depressed patients: Effects of referential viewpoint and role similarity in health narratives. *International Journal of Communication*, 11, 19. Retrieved from <https://ijoc.org/index.php/ijoc/article/view/6276>
- Vogel, D. L., Wade, N. G., & Haake, S. (2006). Measuring the self-stigma associated with seeking psychological help. *Journal of Counseling Psychology*, 53(3), 325–337. <https://doi.org/10.1037/0022-0167.53.3.325>
- Vyncke, B., & van Gorp, B. (2018). An experimental examination of the effectiveness of framing strategies to reduce mental health stigma. *Journal of Health Communication*, 23(10–11), 899–908. <https://doi.org/10.1080/10810730.2018.1538272>
- Wang, W. (2020). Exemplification and stigmatization of the depressed: Depression as the main topic versus an incidental topic in national US news coverage. *Health Communication*, 35(8), 1033–1041. <https://doi.org/10.1080/10410236.2019.1606874>
- Wang, X. (2018). Responses to HIV public service announcements: The mediating role of attitude toward the ad and source identification. *Intercultural Communication Studies*, 27(1), 114–124.
- Whitley, R., & Wang, J. (2017). Good news? A longitudinal analysis of newspaper portrayals of mental illness in Canada 2005 to 2015. *The Canadian Journal of Psychiatry*, 62(4), 278–285. <https://doi.org/10.1177/0706743716675856>

Supplementary Materials

S1. Low and High Lifestyle Similarity Versions of the Recovery Story

Das Studium ist angeblich die schönste Zeit im Leben. Aber für immer mehr Studierende wird es zur strengen Belastung. Jeder sechste Studierende leidet inzwischen unter einer psychischen Erkrankung, zum Beispiel unter Depressionen oder Panikattacken.



Tom, 24, Student, erzählt in einem Blogbeitrag von seinen Erfahrungen.

Die meisten Leute glauben mir nicht, dass ich eine Depression habe, weil ich ein sehr offener und fröhlicher Mensch bin. Ich bin zum Studium ausgezogen. Die Veränderung und der Stress in der Uni haben mich dann aus der Bahn geworfen. Eigentlich musste ich mir um mein Studium und die Prüfungen keine Sorgen machen. Die ersten beiden Semester liefen super. Doch je näher die Prüfungsphase im dritten Semester rückte, desto mehr wuchs in mir das Gefühl, diesmal zu versagen.

Ich habe mich gefragt, ob das Studium das Richtige für mich ist, wo mein Platz in dieser Gesellschaft ist, wie ich mich finanziere und wie ich alles unter einen Hut bringe. Das macht mich unsicher, was meine Zukunft angeht. Denn wenn ich etwas finde, das ich machen möchte, dann gibt es eine kleine Stimme in meinem Hinterkopf, die mir sagt, dass ich das gar nicht erst versuchen muss, weil ich es sowieso nicht schaffe.

Alles setzte mich unter Druck

Ich musste ein Paket von der Post holen, hatte am selben Morgen einen Termin beim Zahnarzt, war abends in der WG mit Kochen dran – es kam mir unerschaffbar vor. Ich brach häufig ohne ersichtlichen Grund in Tränen aus, wachte früh am Morgen auf, wurde immer unzufriedener mit mir selbst und war an manchen Tagen so erschöpft, dass ich fast nicht aus dem Bett kam. Irgendwann war ich sogar an einem Punkt, an dem ich mir einen Unfall oder

eine Krankheit herbeiwünschte, um nur nicht aufstehen zu müssen. Ich schaffte es nicht mehr, Zähne zu putzen und abzuwaschen, vergaß zu duschen und Hunger hatte ich auch nicht. Ich besuchte auch keine Vorlesungen mehr. Nicht, weil mich das Thema nicht interessierte, sondern weil die Depression es nicht zuließ. Die Vorstellung, im Hörsaal zu sitzen, nahm mir die Luft zum Atmen.

Es gab auch eine Situation, in der ich abends weinend nach Hause kam, weil ich es nach einem Tag in der Uni nicht mehr geschafft hatte, einzukaufen. Mein Mitbewohner verstand meine Reaktion nicht, machte mir etwas zu essen und sagte, dass ich am nächsten Tag einkaufen könne. Ich schaffte es nicht mal mehr, mich mit meinen Freunden zu treffen und erford ständig Ausreden, um abzusagen. Ingeheim wünschte ich mir jedoch, dass mich jemand aus meinem Tief holt und bei mir ist.

Die Scham überwo

Es gelang mir nicht, meinen eigenen Ansprüchen zu entsprechen und den Anforderungen, die von unterschiedlichen Seiten an mich gestellt wurden. Zu den psychischen Symptomen kamen physische: Schlafmangel, häufige Erkältungen, Engegefühl, Kopfschmerzen. Auch heute ist es vor allem nachts manchmal schwer. Tagsüber lenke ich mich mit Aufgaben ab, aber nachts habe ich nichts, was mich beschäftigt, und dann fangen diese Gedankenspiralen an. Dann laufen die Tränen und ich kann nicht mehr richtig atmen, bekomme Panik und Schweißausbrüche.

Irgendwann hatte ich das Gefühl, mir selbst nicht mehr helfen zu können. Dass es Hilfsangebote gibt, wusste ich noch aus den Einführungsveranstaltungen im ersten Semester. Zum Arzt oder zur psychologischen Beratungsstelle der Universität bin ich damals trotzdem nicht gegangen – ein Fehler, wie ich heute weiß. Doch das Gefühl der Scham überwo. Auf keinen Fall wollte ich den Stempel "psychisch krank" aufgedrückt bekommen. Zuerst war es mein Geheimnis, aber nach und nach verstand ich, dass ich professionelle Hilfe benötigte. Bislang war ich immer nur an dem Brett mit den Hilfsangeboten für Studierende vorbei gegangen und hätte nie gedacht, dass ich jemals einen Zettel abreißen würde. Irgendwann tat ich es doch.

Dank der professionellen Hilfe verstand ich, dass ich immer wieder phasenweise depressive Episoden habe, die mal schlimmer, mal weniger schlimm sind. Gegen den Drang, den ganzen Tag im Bett zu bleiben, half anfangs nur, sofort aufzustehen und laufen zu gehen. Nach und nach entwickelte ich Strategien gegen die depressiven Symptome. Ich habe gelernt, mit meiner psychischen Erkrankung zu leben und sie als einen Teil von mir zu akzeptieren. Auch mit meiner Familie und meinen engsten Freunden rede ich mittlerweile offen über meine psychische Erkrankung. Sie stehen mir immer zur Seite und wissen: Mich zeichnet mehr aus als diese Krankheit. Ich weiß nicht einmal genau, was sie machen. Wahrscheinlich hilft es, dass sie einfach stur versuchen, mich abzulernen und mich auf positive Gedanken zu bringen.

Depressionen gehören zu den häufigsten und am meisten unterschätzten Erkrankungen. Jeder fünfte Bundesbürger erkrankt einmal in seinem Leben an einer Depression. Das Krankheitsbild zieht sich durch alle Berufsgruppen: vom Manager über den Lehrer bis hin zum Erwerbslosen.



Effi, 60, Bankkauffrau, erzählt in einem Blogbeitrag von ihren Erfahrungen.

Anfang 1996 merkte ich, dass mit mir etwas nicht stimmt. Es zog mir den Boden unter den Füßen weg. Eigentlich bin ich ein fröhlicher Mensch, das sagt auch meine Familie. Ich weiß, was ich will, schlafe in der Regel gut und habe viel Freude an der Natur. Doch plötzlich war alles anders. Stress auf der Arbeit, Überstunden, zwei Kinder im Teenager-Alter und der Ausbau unseres Hauses haben mich aus der Bahn geworfen. Eigentlich musste ich mir um meine Arbeit keine Sorgen machen. Ich war gerade erst befördert worden und fühlte mich in meiner Abteilung wohl. Trotzdem hatte ich zunehmend das Gefühl, zu versagen und nicht mehr alles unter einen Hut bringen zu können.

Angst kroch meinen Rücken hoch. Ich konnte keine Entscheidungen mehr treffen, konnte mich schwer konzentrieren, hatte Schlafstörungen, war appetitlos – nicht bereitete mir mehr Freude. Ich war unfähig, Kleinigkeiten des Alltags zu erledigen und konnte mich schließlich nicht einmal mehr selbst versorgen. Schlaflosigkeit, überall Schmerzen, immer wieder erschienen die Tage zerknüllt wie eine alte Zeitung. Ich wusste nicht, was mit mir los war.

Was tun?

Mein Glück war und ist, dass ich einen sehr guten Hausarzt habe. Dort fiel zum ersten Mal das Wort Depression. Ich hatte das Gefühl, alles zu verlieren. Zu diesem Zeitpunkt war von einem geregelten Alltag nicht mehr die Rede. Die Kinder waren 12 und 17 Jahre alt und nichts ging

mehr. Das Schlimmste: Ich konnte nicht mehr denken! Ich wollte das alles nicht, ich stampfte auf, suchte nach einem Ausweg.

Da las ich den Satz: *Patienten mit Krankheitsbewusstsein genesen viel besser!* Sofort hatte ich ein Krankheitsbewusstsein. Ich begann, mich mit dem Thema zu befassen. Soweit es in meinem Zustand eben ging.

Ich erinnerte mich an die Worte der Sprechstundenhilfe und ihren Rat, laufen zu gehen. Ich lief und lief und lief. Erleichterung brachte die Arbeit am Haus. Sich körperlich erschöpfen, erst mal nichts denken... Tagsüber lenkte ich mich mit diesen Aufgaben ab, aber nachts hatte ich nichts, was mich beschäftigte und dann fingen diese Gedankenspiralen an. Ich bekam häufig Panik und Schweißausbrüche.

In dieser Zeit war meine Mutter ganz wichtig für mich. Sie kannte Depressionen aus alten Arztbüchern und sie sagte immer wieder nur den einen Satz: „Das heilt wieder. Hab Geduld mein Mädchen, das dauert.“

Mein Umgang mit der Krankheit

Was mir half, war die professionelle Hilfe durch meinen Arzt. Ich war nicht mehr allein mit meiner Krankheit. Ich verstand, dass ich immer wieder phasenweise depressive Episoden habe, die mal schlimmer, mal weniger schlimm sind. Nach und nach habe ich gelernt, mit meiner psychischen Erkrankung zu leben und sie als einen Teil von mir zu akzeptieren. Auch mit meiner Familie und meinen Freunden rede ich mittlerweile offen über meine psychische Erkrankung. Sie stehen mir immer zur Seite und wissen: Mich zeichnet mehr aus als diese Krankheit.

Anfangs zögerte ich, meinem Chef von meiner Depression zu erzählen. Das Gefühl der Scham überwo und auf keinen Fall wollte ich den Stempel "psychisch krank" aufgedrückt bekommen. Ich hatte Angst, meinen Job zu verlieren. Doch weil mich meine Depression auch im beruflichen Alltag begleitete, erzählte ich meinem Chef von meinem Umgang damit. Er war beeindruckt von meinem Mut und sagte, dass die Krankheit keine Auswirkungen auf meine Anstellung hat. Das hat mich sehr erleichtert.

Die größte Hilfe in meinem Leben sind Menschen, die mich als Person samt meiner Depression annehmen. Die nicht versuchen, mir die Krankheit ausreden. Gut gemeinte Ratschläge, wie „Du musst nur“ oder „Du hast doch alles“ haben meine Krankheit nur erschwert. Heute weiß ich, was mir guttut und zu jedem Klassentreffen wird mir bestätigt, dass ich immer noch die Alte bin.

Note: Similar version with male author (top) and dissimilar version with female author (bottom).

S2. Overview of the Scale Items Used in the Experiment

Perceived Similarity

To what extent do you perceive yourself as similar to the blog author regarding the following aspects?

- lifestyle,
- personality
- values

Identification

1. I think I understand [name] well.
2. I understood the events in the story the way [name] understood them.
3. While reading, I felt what [name] felt.
4. During reading, I could really „get inside“ [name]’s head.
5. I tend to understand why [name] did what s/he did.

Stigmatizing Attitudes

1. Depression is a sign of personal weakness.
2. Depression is not a real medical illness.
3. People with depression are dangerous.
4. It is best to avoid people with depression so you don’t become depressed yourself.
5. People with depression are unpredictable.
6. I would not employ someone if I knew they had been depressed.
7. I would not vote for a politician if I knew they had been depressed.

Social Distance

I can imagine to...

- spend time with a person with depression
- be friends with a person with depression
- work with a person with depression
- be in a romantic relationship with a person with depression

Self-Stigma Help Seeking

1. I would feel inadequate if I went to a therapist for psychological help.
2. My self-confidence would NOT be threatened if I sought professional help. (-)
3. Seeking psychological help would make me feel less intelligent.
4. My self-esteem would increase if I talked to a therapist.(-)
5. My view of myself would not change just because I made the choice to see a therapist. (-)
6. It would make me feel inferior to ask a therapist for help.
7. I would feel okay about myself if I made the choice to seek professional help. (-)
8. If I went to a therapist, I would be less satisfied with myself.

Prosocial Intentions

How likely is it that you...

- donate money to help fund crucial awareness and advocacy programs that support people with depression?
 - sign a petition to build political pressure needed to support people with depression?
 - discuss problems that concern people with depression with friends or family?
 - forward media content about depression to your friends?
-