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## **Predicting Intentions to Read Suicide Awareness Stories: The Role of Depression and Characteristics of the Suicidal Role Model**

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### Abstract

### Background

Research on factors that influence the intention to read suicide awareness material is lacking.

### Aims

To identify how social and state-similarities between the featured protagonist of a suicide awareness story and the audience impact on the intent to read similar stories.

### Methods

Laboratory experiment with n=104 students. Participants were randomly assigned to study groups. In group one, the role model provided his personal story of crisis and was a student. In the second group, the content was identical the model was socially dissimilar. The third group, read about a topic unrelated to suicide. Depression, identification and exposure intent were measured after the experiment. Conditional process analysis was used for analysis.

### Results

In the group featuring a once suicidal role model with high social similarity, depression in the audience increased the intention to read similar material in the future via identification with the role model. 82% of individuals wanted to read similar material in the future, but only 50% in the group featuring a dissimilar person.

### Discussion

Exposure intention increases via identification when role model and audience characteristics align regarding social traits and the experience of depression. These factors are relevant when developing campaigns targeting individuals with stories of recovery.

*Keywords:* lived experience, awareness, identification, suicide, media, laboratory experiment

## **Introduction**

Awareness campaigns using media as a tool to prevent suicide are increasingly used, part of many national suicide prevention programmes, and recommended by international organizations such as the World Health Organization and the U.S. Substance and Mental Health Service Administration (see e.g., National Action Alliance for Suicide Prevention, 2014; Niederkrotenthaler, Reidenberg, Till, & Gould, 2014; Substance and Mental Health Service Administration, 2012; World Health Organization, 2014; see also <http://www.lifelineforattempturvivors.org>). In spite of this, it has been highlighted in the U.S. suicide research recommendations that evaluations of such campaigns are scarce (Niederkrotenthaler et al., 2014). Without additional research, campaigns may be ineffective and not be taken up by the target population (see e.g., Till, Sonneck, Baldauf, Steiner, & Niederkrotenthaler, 2013).

In order to gain a better understanding of how to construct effective media campaigns, it is crucial to learn more about factors increasing the likelihood of reaching the target population. A factor that has been repeatedly discussed as relevant for media impact is identification with the featured role model (Niederkrotenthaler et al., 2009; Stack, 1992; Till, Strauss, Sonneck, & Niederkrotenthaler, in press). Identification with a featured role model has been found to be relevant to both potentially harmful media effects, i.e. copycat effects following sensationalist media reports about completed suicides (Niederkrotenthaler et al., 2009, 2012; Stack, 1992; Till et al., in press), and for positive outcomes of campaigns promoting mental health and medical issues, for example colon cancer screening (Cattan & Tilford, 2006; Dillard & Main, 2013), although it remains unclear if identification with a person who went through a suicidal crisis can actually reduce suicidality (Niederkrotenthaler et al., 2014).

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Research on determinants of identification with a suicidal protagonist is not only relevant with regard the potential effect on suicidality in the audience. Identification is considered by many researchers as an important prerequisite for voluntary media consumption (e.g., Ang, 1983), as it is relevant to the intent of individuals to expose themselves to the message. The intent for media exposure is particularly relevant when it comes to developing suicide awareness material because, different from typical settings in laboratory experiments where participants cannot choose between different media messages (i.e., the stimulus materials are selected by the researcher rather than the participant resulting in a somewhat ‘forced’ exposure with regard to topic and / or content), individuals in the real world normally select the media input based on their voluntary choice from hundreds of different media options. Thus, individuals who do not choose to expose themselves to the awareness materials offered normally per se *cannot* benefit from the material because they will likely not be exposed to the material and may choose not to pay attention to the message if they happen to be exposed against their voluntary choice. This makes factors that increase exposure intentions in the target population a crucial core domain and a *conditio sine qua non* for research on the effectiveness of suicide awareness campaigns.

If the target population of a campaign is depressed or suicidal, which is often the case in suicide awareness campaigns, it is particularly relevant that depressed individuals will choose to expose themselves to the awareness material. Identification may be a relevant agent in this process, but currently, our understanding of who identifies with a suicidal protagonist or a protagonist who managed to cope with adverse circumstances is very limited. Previous research conceptualized potential identification either indirectly as a content related factor (e.g., by focusing on similarities between the featured protagonist and the audience in terms of age and sex; e.g. Fu & Yip, 2009; Niederkrotenthaler et al., 2009), or directly as individual factor, by measuring

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identification in the audience (Till et al., in press; Till, Niederkrotenthaler, Herberth, Vitouch, & Sonneck, 2010; Till, Vitouch, Herberth, Sonneck, & Niederkrotenthaler, 2013). It is still unclear which characteristics of a role model determine if or to what extent an audience identifies with the model (Cohen, 2001). Zillmann (1996) pointed out that members of an audience may identify with different aspects of a protagonist, e.g. with social trait characteristics and state-variables such as his or her health status. e.g. health status. More research on the determinants of identification and its role in the effectiveness of health-related media campaigns is needed (Basil, 1996).

In this study, we investigated how state similarity between the role model and the audience in terms of the experience of depression and suicidality as well as social trait similarity in terms of age and profession impacted on identification with the protagonist and on the intention to read similar stories in the future. Specifically, we hypothesized (I) that state similarity between the audience and the featured role model in terms of the experience of depression increased identification with the role model, and that this effect was stronger if there was social trait similarity between the role model and audience in terms of age and professional status. Furthermore, we hypothesized that (II) identification with the role model will be associated with the readers' intention to expose themselves to similar media stories in the future.

## **Method**

### **Participants**

A total of 112 students enrolled in an introductory course in Communication at the University of Vienna, Austria, participated in the study. Of them, 8 individuals decided not to complete their participation, resulting in a final sample size of 104 individuals. Of these,  $n = 87$

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(83.7%) were female, and  $n = 17$  (16.3%) were male. The age of participants ranged from 18 to 46 years ( $M = 20.47$ ,  $SD = 3.53$ ).

### **Measurement of identification**

Several conceptualizations of identification have been used in the literature on media and suicide. Most of the time, proxies for identification such as similarity between the featured protagonist and the audience have been used (e.g., Fu & Yip, 2009; Niederkrotenthaler et al., 2009; Stack, 1992), particularly in ecologic studies using aggregate data to analyze differences in suicide rates before and after the publication of a news report. Similarity as a proxy for identification is based on the notion that perceived similarity is associated with interpersonal attraction (Hoffner & Cantor, 1991; Hoorn & Konijn, 2003), which is considered to be a requirement for identification and the desire to adopt the behavior of an observed individual (Bandura, 1986; Hoffner & Cantor, 1991). We hereafter refer to this type of conceptualization as ‘content-related’ factor. It is important to note that the conceptualization of identification as a content-related factor such as social similarity of the suicidal protagonist with the audience in terms of variables such as age group or profession has the *potential* to enhance identification with the protagonist, but the individual audience members still need to adopt this potential, which may or may not be the case on an individual level. The conceptualization of identification as a ‘recipient-related factor’ (e.g., Dal Cin, Gibson, Zanna, Shumate, & Fong, 2007), i.e. a variable that directly assesses identification with the featured protagonist in the audience, is scarce in research on suicide and the media. As a recipient-related factor, identification has been measured e.g. as a recipient’s desire to act like or be like the featured protagonist (Hoffner & Buchanan, 2005). The difference of these two concepts of identification was recently demonstrated in a study that showed that social similarity between viewers of a drama film

which culminated with the protagonist's suicide was not associated with individual ("recipient-related") identification (Till, Herberth, Sonneck, Vitouch, & Niederkrotenthaler, 2013).

In the present study, we used both identification as a content-related and as a recipient-related factor in the analysis.

### **Experimental Manipulation**

We conducted an experiment with three study groups. Both intervention groups read printed awareness material featuring a protagonist with lived experience of suicidality who managed to cope with his suicidal crisis with the help from a crisis intervention phone line. The original material that was used for this study had been published by an Austrian newspaper in 2005. The material was titled "Escaped from suicide by a mere hair's breath. Martin is one of the anonymous callers who got help at the crisis help line". The story features the protagonist Martin who became suicidal when he learned that his best friend's wife was pregnant from him. In the article, Martin describes how this affected him personally, that he became depressed and prepared everything for his suicide by carbon-monoxide poisoning. However, in the last second before his suicide, Martin decides to call the crisis help line. The subsequent portion of the article describes how Martin got help from the crisis line. A picture in the article features a counselor at work. The article concludes with Martin's statement that he is grateful for the help received, and that he is glad about his decision to get help and not to die by suicide. Contact details to the crisis hotline are provided at the end of the text (Arendt, Till, & Niederkrotenthaler, in press).

The material presented to the two intervention groups differed solely in terms of social similarity between the audience and the featured protagonist and was otherwise identical. In the first article version (group one), Martin was described as a 24 year-old student in the field of communication to simulate *high social similarity* in terms of age and occupation status with the



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study participants (word count:  $n = 576$ ). In the second version (group two), Martin was described as a 54 years old blue-collar worker, indicating *low social similarity* with the student participants (word count:  $n = 578$ ). For the control group (study group three), we used a text published in the same newspaper and written by the same journalist in order to ensure a similar writing style. The article was also similar with regard to text length (word count:  $n = 531$ ). In this text, the protagonist Martin, who is an engineer of mid-career age (i.e., socially dissimilar), wanted to rebuild a railway track on the shoreline of a lake. The text used the same picture of a person sitting at a desk and taking a call, identical to the other study groups, but the picture was framed and labeled differently, in accordance with the story content. No suicide-related concepts were mentioned in this article.

After reading the material, we asked participants to write a short summary of the story to make sure that the material was understood (see Wittenbrink, Judd, & Park, 2001). All participants provided an accurate summary.

### Measurements

**Identification.** We operationalized identification based on a conceptualization by Cohen (2001) who defined it as an imaginative process through which an audience member assumes the identity, goals, and perspective of a character. Unlike the more distanced mode of mere spectatorship, identification is a mechanism through which readers experience the mediated events “from the inside” (p. 245), as if the events were happening to them. We used the 10-item scale proposed by Cohen (2001) and adapted it for the printed stimulus material by using, for example, the word “reading” instead of “viewing” and “Martin” as the name of the specific character. Participants could indicate their agreement to ten items on a 5-point scale ranging from *I do not agree* (coded as 1) to *I agree* (coded as 5). Example items used included “While

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reading the text, I felt as if I was part of the action”, “I think I have a good understanding of Martin”, “At key moments in the show, I felt I knew exactly what Martin was going through” ( $M = 2.21$ ,  $SD = 0.68$ ,  $\alpha = 0.80$ ).

**Depression.** We used the Erlanger Depression Scale (Lehrl & Gallwitz, 1983) to measure depression. Example items used included “I want to cry”, “I am sad”, “I don’t like myself”, which are rated on a 4-point scale ranging from 0 = *completely wrong* to 4 = *exactly right*. We summed up all items according to Lehrl and Gallwitz (1983). The sample showed a rather low level of depression ( $M = 14.04$ ,  $SD = 4.57$ ,  $\alpha = 0.82$ ).

**Reading intentions.** We asked the participants whether they would actually want to read similar articles during their leisure time. Participants could answer this question with ‘yes’ or ‘no’. Approximately half of the participants indicated that they would read similar articles in their leisure time (53.8%).

### **Procedure**

Participants were invited to the University of Vienna and were placed in individual research cubicles. They were informed about the option to quit the study at any time without any negative consequences. Participants with suicidality scores of  $< 46$  on the Brief Reasons for Living Inventory (Ivanoff, Jang, Smyth, & Linehan, 1994), were informed about their scoring immediately after the experiment and were offered counseling in a separate room by a trained psychologist (BT). Counseling was also offered to all other participants in order to assist them in coping with potential distress due to the experiment. A contact to a local crisis intervention was provided to all participants to help them cope with distress they may experience at a later point in time. All variables (depression, identification, and reading intentions) were measured after

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reading the suicide report in order not to sensitize the participants to the topic or influence their reading process.

### **Statistical analysis**

We used *conditional process analysis* to test the hypotheses (Hayes, 2013). We calculated the predicted mediator model for each experimental condition. We present standardized path coefficients which can be interpreted similar to standardized regression coefficients or correlations. Indirect effects were tested and 95% confidence intervals based on 10,000 bootstrapped samples are provided. A visual depiction of the model is given in figure 1. All analyses were done using Amos (Amos Development Corporation, Meadville, PA, USA).

### **Ethics Statement**

We obtained ethical approval for this study from the Ethics Committee at the Medical University of Vienna (EKR-Number 1446/2013, approval dated 06/18/2013). All participants provided written informed consent to the study.

### **Results**

Identification scores as well as depression scores did not differ significantly between study groups (data not shown).

Hypothesis 1 assumed that depression predicts identification with the protagonist and that this effect is moderated by social similarity: Depression should predict identification most strongly in treatment group one which features the highest level of social similarity to the participants. Increased identification levels should, in turn, predict reading intentions (hypothesis 2). Figure 1 visualizes the results of the analyses.

Analyses showed that depression predicted identification. This effect, however, was only apparent in treatment group one,  $Coeff = 0.48$ ,  $p < .01$ , but neither in treatment group two,  $Coeff$

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= 0.21,  $p = .23$ , nor in the control group (group three),  $Coeff = -0.06$ ,  $p = .70$ . This indicates that the more depressive a participant, the higher he or she identified with the *depressed* protagonist (protagonist-reader trait similarity). Although this effect was restricted to the group with a high level of protagonist-reader's social trait similarity, the direction of estimates was the same in group 2, but not in the control group featuring a non-depressed individual. The effect coefficients significantly differed from each other across groups,  $\chi^2 = 7.05$ ,  $df = 2$ ,  $p = .03$ . These findings support hypothesis 1.

As expected, identification predicted reading intentions, although this effect was only significant in group one,  $Coeff = 0.39$ ,  $p = .03$ . There were neither any effects in treatment group two,  $Coeff = 0.25$ ,  $p = .15$ , nor in group three (control group),  $Coeff = 0.18$ ,  $p = .29$ . Although the latter two effect coefficients did not achieve significance, both coefficients' signs pointed in the predicted direction. Of interest, the three effect coefficients did not differ significantly from each other,  $\chi^2 = 0.17$ ,  $df = 2$ ,  $p = .92$ . These findings partially support hypothesis 2.

Furthermore, we estimated the indirect effects of depression on reading intentions through identification using bootstrapping. Consistent with the analyses reported above, we found a significant indirect effect of depression only in treatment group one,  $Coeff = 0.07$ , 95% CI [0.01, 0.17]. The indirect effect in group 2 was at the borderline of significance,  $Coeff = 0.04$ , 95% CI [-0.001, 0.13], but not significant in group three,  $Coeff = 0.04$ , 95% CI [-0.01, 0.15].

### **Additional Analysis**

Furthermore, we tested whether reading suicide reports with different levels of social trait similarity would directly impact reading intentions. Note, this is a different research approach compared to the theoretical model tested above, where we tested whether the effect of state-depression (and identification) on reading intentions was moderated by the experimental

condition. Experimental conditions acted as a moderator variable. It is, however, also interesting, for campaigners developing suicide awareness materials, to know whether there is a *main effect* of experimental condition on reading intentions. A chi-square statistic was used to investigate whether participants reading the suicide prevention text with high social similarity, low similarity and the text unrelated to crisis and suicidality differed in terms of indicating intentions to read similar awareness reports. There was a substantial difference between the three experimental conditions,  $\chi^2 = 19.18$ ,  $df = 2$ ,  $N = 104$ ,  $\Phi = .43$ ,  $p < .001$ . Whereas only 31% of participants reading the text unrelated to a crisis situation and featuring a non-depressed protagonist indicated voluntary intentions to read similar awareness materials in the future, this proportion was 50% in participants reading the treatment texts featuring a depressed protagonist with *low* social similarity, and 82% in the group reading the treatment text featuring a protagonist with lived experience of depression and with *high* social similarity.

### **Discussion**

We found that reading about an individual who experienced a severe personal crisis but ultimately managed to cope with depression and suicidality was associated with more identification with the protagonist in the audience the more the audience members were depressed themselves, i.e. similar to the featured protagonist in terms of the state-variable lived experience of depression and suicidality. This effect was strongest and only significant when the featured protagonist was also similar with regard to the trait variables age and profession i.e., when there was additional social trait similarity. Higher identification levels in turn increased the intention to voluntarily expose oneself to similar suicide awareness material in the future. In contrast, if the featured protagonist was dissimilar in terms of social factors age and profession, or if the material did not feature a depressed protagonist at all, depressive states in the audience

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were not associated with identification with the depressed protagonist, and identification was not significantly associated with reading intentions in these groups.

The present analysis is consistent with earlier research indicating that identification with the featured protagonist is relevant for the audience's willingness to expose themselves to a media story (Basil, 1996; Dillard & Main, 2013). Because voluntary exposure is the norm when it comes to the decision to expose oneself to a suicide awareness message, i.e. the individual normally selects a media choice from many competing media products and is likely to reject an offer if the stimulus does not meet individual needs, these findings are crucial for tailor-made suicide prevention efforts using media as a tool, particularly if the messages feature individuals with lived experience of suicidality and crisis. Prevention projects that focus on individual stories of hope and recovery are already widely used, and include projects such as [lifelineforsucideattempters.org](http://lifelineforsucideattempters.org), "Now Matters Now" (<http://www.nowmattersnow.org>), "U can cope" (<http://www.connectingwithpeople.org/ucancope>) or, 'it gets better' (<http://www.itgetsbetter.org>), which targets and features specifically LGBT individuals.

Based on these findings, when targeting individuals who experience some degree of depression and / or suicidality, it seems necessary to construct media messages that feature an individual who resembles the audience in the experience of depression or suicidality, and who is similar to the audience on central trait variables such as age and profession.

More research needs to be conducted on the actual effect of these materials. There are currently no evaluations of the above initiatives available, but in an earlier paper of this study group, we could show that the material used for the present study resulted in a decrease in suicidal cognition, which was however restricted to a subgroup of individuals with *lower* identification

with the protagonist (Arendt, Till, & Niederkrotenthaler, in press). We hypothesized that this effect may have been due to a contrast effect, i.e. the story used had a strong focus on the tragic life situation of the featured protagonist, his suicide plans and his psychosocial isolation. A smaller proportion of the material focused on the personal success behind coping with the crisis, and the process of recovery. In their perception of the protagonist of the story, the participants may have predominantly focused on Martin's crisis and the difficult life circumstances and not to the same extent on the recovery and the successful, rewarding life experiences that followed. Based on Festinger's social comparison theory, media consumers are known to compare themselves with protagonists shown in media products (Festinger, 1954; Till et al., 2010), and with regard to Martin who was suicidal but managed to cope with his crisis, study participants who did not identify with Martin may have shown some "contrast effect", i.e. they may have arrived at the conclusion that their own lives were different and better than that of the protagonist, resulting in a decrease of their suicidal cognition. However, in real life, quite different from a laboratory setting like the one used in this experiment, individuals normally select media inputs voluntarily from a wide range of offers. The present findings indicate that individuals who do not identify with the protagonist are unlikely to voluntarily expose themselves to such material. Thus, identification seems to be a necessary prerequisite for *any* effect of a campaign featuring a person with lived experience and targeting suicidal or depressed individuals (Basil, 1996). With regard to the actual effect of these stories on outcomes such as suicidality, more research is needed on the actual story content characteristics that produce the most promising results. For example, with regard to the message used for this study, the suffering during crisis was portrayed in a very comprehensive way, which may have enhanced the observed "contrast effect". *In spite* of the dramatic life situation, the suicidal individual

managed to cope with his adverse circumstances. Future research may analyze the impact of a story with a stronger emphasis on the successful coping and the *better life the followed* after the crisis, which may decrease any contrast effect. Furthermore, more research on the perception of role models in awareness campaigns is necessary because understanding how audiences form impressions of characters can enhance the understanding of audience responses to media campaigns. Impressions and evaluations of role models have implications for various components of attraction, such as liking, perceived similarity, and the desire to be and act like the role model, which has been shown in other research areas to increase the audience's tendency to identify with or take on the perspective of role model, and to attend to and adopt their behaviors (Hoffner & Cantor, 1991). Further research is also warranted regarding the question whether identification with the role model is determined by the outcome of the role model's suicidal crisis. American feature films featuring suicidality frequently suggest that professional treatment does not work. In particular, American movie protagonists who are suicidal and seek help in the movie have been found to have a greater risk of suicide attempt and suicide as compared to suicidal film protagonists who seek help from lovers and friends (Stack & Bowman, 2014). Thus, the cultural definition of suicidality, which appears to be mirrored in these mass media portrayals of suicidality, suggests that professional treatment typically does not work. Identification with a role model may be greatest when the content mirrors such cultural definitions of suicidality, .i.e. suicidal individuals may be most apt to identify with a role model who did not benefit from treatment.

This has to be kept in mind also with regard to the effects of media portrayals on suicidality in the audience. While the present study indicates that the intention to consume a story of a socially similar role model who managed to cope with his suicidality increased via identification the



more depressed the audience was, identification may not always be a beneficial thing. In particular, identification with a role model in an awareness campaign featuring a model who died by suicide or showed other forms of destructive behaviours may particularly add to the risk experienced by depressed individuals. A strong emphasis needs to be put on this consideration when developing awareness material, and further research is necessary to determine the effects of the specific contents of the portrayed crisis or mental illness on suicide risk factors in the audience. Future research could also investigate whether identification is determined by the specific problem or cause of distress portrayed by the role model. For example, previous research suggested that suicide rates increased after the publication of suicides by divorced celebrities (Stack, 1990). Suicidal persons may identify with role models partly based on sharing the same problem or stressor, e.g. individuals experiencing distress, suicidality or depression following a life event such as divorce may benefit from a story featuring the coping with divorce. Further research is warranted to investigate this question.

This study has several limitations. First, the sample size was small. The findings for treatment group two were not significant, which was probably due to the lack of statistical power, but the effect estimates suggested that the effect in this group with low social similarity may be stronger than in group three that featured a situation unrelated to crisis and coping. Larger studies are necessary to investigate this further. Furthermore, reading intentions were measured with one single item only which was answered with *yes* or *no*. Future research should include more questions to get a more comprehensive insight into individual exposure intentions. Another limitation is that social trait similarity was only manipulated for the depressed protagonist (i.e., the protagonist who showed state similarity in terms of the experience of depression at some point of his life), but not for the non-depressed protagonist. We therefore cannot conclude if

social trait similarity in the absence of state similarity would result in identification with the protagonist. Another limitation was that we used a male protagonist in the featured material, although the majority of participants were female. This reduces the social trait similarity between the role model and the participants and should be avoided in future studies and in prevention projects. A gender-specific analysis of the present data suggested that there were no significant differences in the effects of the material in women and men (data not shown). Another limitation was that we focused only on the mode of reading awareness material. Future studies should investigate other modes of message delivery, particularly delivery via video messages, which are increasingly used to convey suicide awareness messages (SAMHSA, 2012). Finally, the present study included a general population sample. Students, younger individuals and women were overrepresented. Further studies are needed with males and older individuals, as well as patients in clinical or other mental healthcare settings who are at risk for suicide.

In conclusion, this study indicates that printed awareness material featuring an individual story of coping with depression and suicidality enhances identification with the protagonist the more depressed the audience members are, and if there is additional trait similarity between the protagonist and audience in terms of age and profession. Identification, in turn, enhances the individual intention to expose oneself to the material. Because voluntary exposure is the norm in everyday life media consumption, organizations developing media messages for suicide prevention need to ensure that their audience can easily identify with the featured role model. At the same time, caution is required to avoid any potential negative effects of such identification on suicide risk factors, which may result from messages conveying inadequate portrayals of crisis and particularly negative crisis outcomes.

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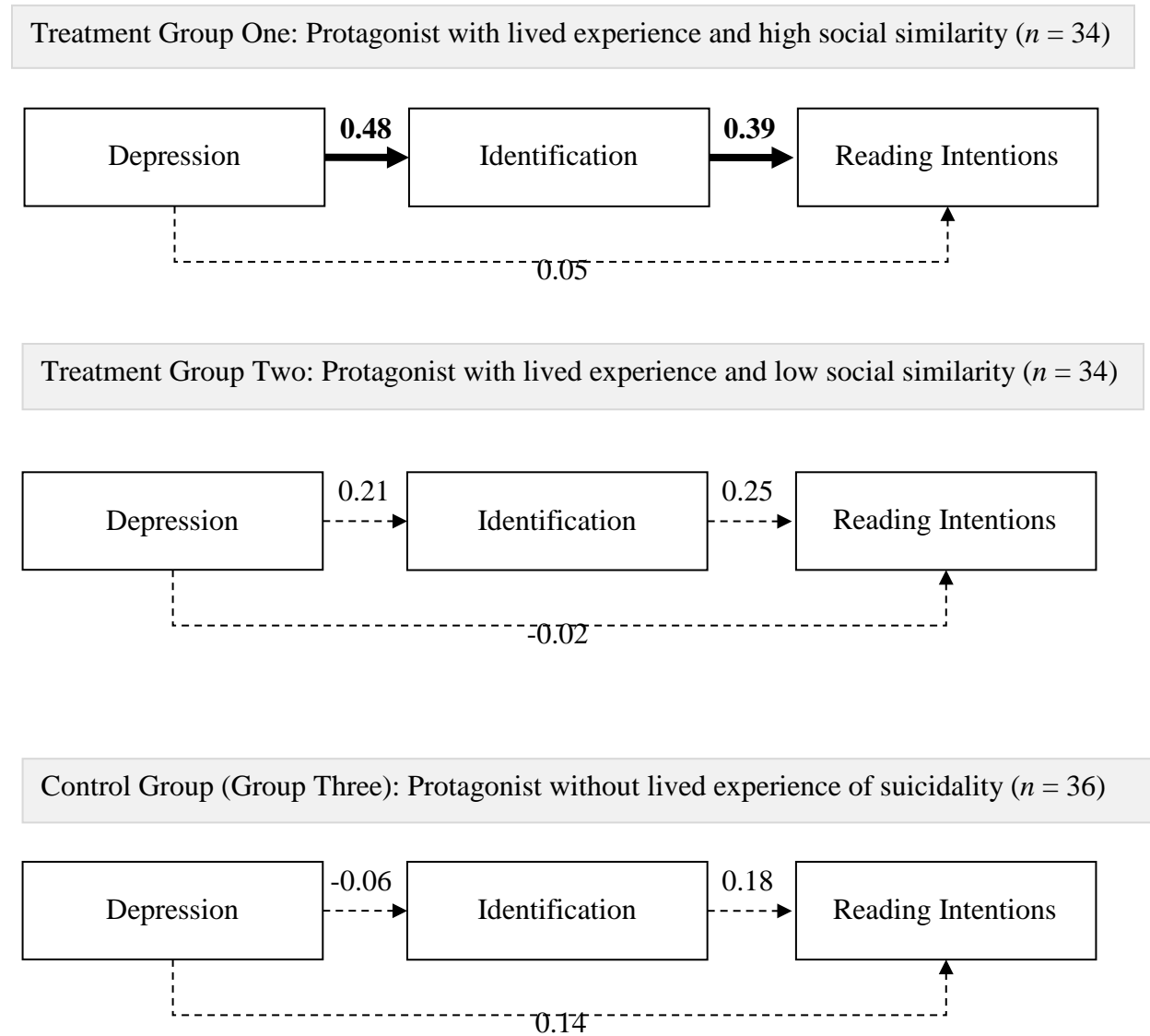
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Table 1

*Chi-square Statistic of Prevalence of Positive Reading Intentions among Participants Reading the Report Including a Protagonist with Lived experience and High Social Similarity (Treatment Group one), a Protagonist with Lived experience and Low Social Similarity (Treatment Group two), and a Protagonist without Lived Experience (Control).*

	<i>n</i>	Intention to Read Similar Suicide Awareness Material in the Future		$\chi^2$	$\Phi$	<i>p</i>
		No	Yes			
Experimental Condition				19.19	.43	< .001
Treatment group 1	34	6	28			
Treatment group 2	34	17	17			
Control	36	25	11			
Totals	104	48	56			



*Figure 1.* Conditional process analysis of the effect of trait-depression on identification with the protagonist and the intention to read similar texts. The three-variable mediator model is analyzed separately for each experimental condition. Bold arrows indicate significant effects. We present standardized path coefficients.



## 24 Stories of recovery / identification / exposure intention

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