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RESEARCH-IN-BRIEF

The role of similarity in exemplification effects

Die Rolle von Ähnlichkeit bei Fallbeispieleffekten

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Abstract: Exemplification research has consistently shown that after reading news reports including individual cases, people tend to base their judgments on these so-called exemplars. Until today, it is not entirely clear why exemplars are so powerful in shaping recipients' perception of public opinion and why they sometimes fail to influence personal opinion. Based on prior research, we assume that the influence of exemplars on both types of judgments is due to similarity effects: While similarity between recipients and exemplars should moderate effects on recipients' personal opinion, the similarity between exemplars and "the public" should be responsible for effects on the perceived public opinion. Conducting a 2x2x2-web-based experiment, we find that the similarity between exemplars and the target population influences public opinion estimates; we find only partial support for an effect of similarity between exemplars and recipients on personal opinion.

Keywords: Exemplification, public opinion perception, similarity, opinion formation

Zusammenfassung: Studien im Bereich der Fallbeispielforschung haben gezeigt, dass sich Rezipienten bei der Urteilsbildung stark an in den Medien präsentierten Einzelfällen orientieren. Bis dato ist allerdings nicht abschließend geklärt, warum diese Fallbeispiele einen starken Einfluss auf die wahrgenommene Bevölkerungsmeinung ausüben, die eigene Meinung der Rezipienten davon aber oft unberührt bleibt. Die vorliegende Studie greift auf das Ähnlichkeitskonzept zurück, um Effekte auf beide Urteilsarten zu erklären: Während die Ähnlichkeit zwischen Fallbeispiel und Rezipient Einflüsse auf die eigene Meinung moderieren sollte, dürfte die Ähnlichkeit zwischen Fallbeispiel und Bevölkerung die Einflüsse auf die wahrgenommene Bevölkerungsmeinung moderieren. Diese Annahmen wurden im Rahmen eines web-basierten 2x2x2-Experiments überprüft. Die Ergebnisse bestätigen einen moderierenden Effekt auf die Wahrnehmung der Bevölkerungsmeinung, allerdings finden sich nur eingeschränkte Hinweise auf die Rolle von Ähnlichkeit bei Fallbeispieleffekten auf die eigene Meinung der Rezipienten.

Schlagwörter: Fallbeispiele, Meinungsklimawahrnehmung, Ähnlichkeit, Meinungsbildung

1. Introduction

Exemplification research has consistently shown that after reading news reports portraying individual opinions on an issue, people tend to base their judgments on these so-called exemplars, while ignoring more valid base-rate information (e.g., Brosius & Bathlet, 1994; Zillmann et al., 1992, 1996). However, until today, it is not entirely clear why exemplars strongly impact people's perception of public opinion. In addition, there are mixed findings regarding exemplar effects on people's personal opinions (for an overview see Krämer, 2015). One explanation for exemplars' persuasive effects, put forward by Brosius (1999), is the similarity between exemplars and recipients. In most experimental studies, similarity between participants and exemplars was per se high as both groups have been students. According to social learning theory (Bandura, 1969), the similarity between a model and the individual increases the likelihood that the behavior of the model is imitated and attitudes are adapted. Furthermore, research on social comparison suggests that when evaluating their own opinions, people turn to other individuals similar to them for orientation (Festinger, 1954; Goethals & Darley, 1977; Suls, Gaes, & Gastorf, 1979; Buunk et al., 2000). Consequently, if we want to know whether our opinion on a given issue is appropriate, we "seek out someone who ought to have, by virtue of similarity to us on attributes related to the opinion issue, a similar opinion" (Wheeler et al., 1969, p. 231). As research has shown, especially sociodemographic variables, such as gender or age, are relevant attributes for the choice of a comparison target

(e.g., Goethals & Darley, 1977; Wheeler et al., 1969). Several studies in persuasive communication confirmed that communicators similar to the audience are more persuasive (Feldman, 1984; Mills & Kimble, 1973; Berkowitz, Simons, & Moyer, 1970). Consequently, *we predict that in a news report, exemplars similar to the recipient will have stronger effects on recipients' personal opinions than dissimilar exemplars (H1).*

However, this does not explain why exemplars strongly shape recipients' perception of public opinion. We argue that this effect is moderated by a second type of similarity that is present in most exemplification studies: The similarity between exemplars and the target population whose opinion is estimated. Daschmann (2001), for example, showed student participants exemplars of students commenting on the library service and then asked for the perceived percentage of students that is satisfied with the library service; this similarity between exemplars and target population may have been responsible for the effect on the estimation of students' satisfaction with the library service.

From a theoretical point of view, Zillmann and Brosius (2000) already pointed out that exemplification effects may vary according to the degree of similarity between the exemplar and the exemplified (pp. 1–2). Their assumptions regarding the role of similarity in exemplification effects are based on the works of Tversky (1977), who stated that if the correspondence between an object and the attributes of a class of objects stored in memory is sufficiently high, the object is considered a member of that class. Hence, people's tendency to generalize from exemplars to larger populations should increase the more

similar they are (i.e. the more features they share). Thus, the effect of student exemplars should be stronger if recipients estimate opinion for student populations (as it has been the case in several exemplification studies, e.g. Brosius & Bathelt, 1994; Daschmann, 2001) compared to other subpopulations or the population in general. Consequently, *we predict that exemplars similar to the target population will have stronger effects on the perceived opinion distribution in the corresponding target population compared to dissimilar exemplars (H2).*

2. Method

We recruited 146 students (70.9 % female; age: *M* = 23.7 years, *SD* = 4.9) through a university-based e-mail distribution list (undergraduate level). Participation was voluntary and unpaid. We told participants that the survey is about a public recreation area in their home city. After some initial questions, participants read an online article about a planned restriction of that public recreation area. The article stated that due to massive problems with waste left behind each weekend, the city council considers restricting access to the area by raising entrance fees in order to pay for waste disposal and to install public bathrooms. The article was accompanied by four exemplars (two male, two female) expressing their opinion on the planned restriction. Each exemplar was presented using a picture of the person, his/her name and his/her opinion on the issue. In an experimental 2x2x2-mixed design, we varied (1) the distribution of exemplars (three out of four exemplars pro vs. contra restriction), (2) the type of exemplars (young citizens as similar to participants vs. elderly citizens as

dissimilar to participants) and (3) the type of target population (estimation of young citizens' opinion vs. elderly citizens' opinion on the restriction; within-subject factor).

We measured *participants' personal opinion* via five items on a five-point Likert scale ranging from 1 = "strongly disagree" to 5 = "strongly agree" (e.g., "The restriction of the public area is a good idea", *M* = 2.49, *SD* = 1.00, α = .87). Furthermore, we assessed the *perceived opinion distribution in the population* of young and elderly citizens as well as for all citizens; participants should estimate the share of the respective population in favor of the restriction (e.g., "What do you think, what percentage of citizens favors the restriction?"). Answers were given on a slider from 0 to 100% (estimates for young citizens: *M* = 25.46, *SD* = 17.11; elderly citizens: *M* = 64.29, *SD* = 21.15; all citizens: *M* = 39.06, *SD* = 16.75).

3. Results

To test our first hypothesis, we performed a two-way analysis of variance with participants' personal opinion as dependent variable and the distribution of exemplars as well as the type of exemplars as factors. The model revealed no significant interaction, $F(1, 144) = 2.20$, $p = .14$, $\eta^2 = .02$ (Figure 1), so hypothesis 1 is rejected. Looking at the different groups in Figure 1, it becomes apparent that the absence of a significant interaction is due to the fact that there is no difference in personal opinions between participants who saw young or elderly citizen exemplars arguing against a restriction. However, when exemplars supported a restriction, participants expressed a significantly more favorable opinion towards

the restriction when reading similar (student) exemplars (M = 2.69, SD = 1.06) compared to dissimilar (elderly) exemplars (M = 2.20, SD = 0.91), $t(69)$ = 2.08, $p < .05$, $d = .50$.

In a second step, we looked at the exemplars' effects on the perceived distribution of opinions. We calculated a three-way mixed analysis of variance with perceived distribution of opinion as dependent variable, distribution and type of exemplars as between-subject factors and type of target population as within-subject factor. Results reveal a main effect for type of target population, $F(1, 137) = 165.58$, $p < .001$, Wilk's $\lambda = .29$, $\eta^2 = .70$: While for young citizens, participants perceived only a minority to support the restriction of the public area (M = 25.46, SD = 17.11), for elderly citizens they believed the majority to support the restriction (M = 64.29, SD = 21.15). The estimate for all citizens was in between, but somewhat closer to the perception of the peer group opinion (M = 39.06, SD = 16.75). These differences between the different target population estimates were also observed at the individual level, as we find rather strong correlations between participants' personal opinion and estimates of young citizens' opinion ($r(143) = .46$, $p < .001$) and all citizens' opinion ($r(146) = .46$, $p < .001$), but only a small correlation between participants' personal opinion and their estimates of elderly citizens' opinion ($r(145) = .17$, $p < .05$). Both correlations being significant indicates projection effects of participants' personal opinion.

In addition, we find a significant three-way-interaction, $F(1, 138) = 5.76$, $p < .01$, $\eta^2 = .04$, that confirms hypothesis 2. When participants estimated the percentage of young citizens in favor of the restriction, those who read articles with young exemplars relied on these exemplars, whereas there was no difference for participants reading an article with elderly exemplars (Figure 2). The same holds true for the perceived distribution of elderly citizens' opinion: When estimating their opinion on the issue, participants tended to rely more on elderly exemplars, and less on young exemplars (Figure 3). For opinion estimates regarding the whole population no interaction effect between the distribution and type of exemplars was found, meaning that in this case, participants relied on both young and elderly exemplars (Figure 4).

4. Discussion

The present study tried to gain insight in how exemplars affect people's judgments and how similarity of exemplars might moderate these effects. The idea that similarity between exemplars and recipients might play a role in the persuasion process has already been put forward almost twenty years ago (Brosius, 1999), it has not been thoroughly tested yet. Regarding personal opinion, we found differences between similar and dissimilar exemplars only when exemplars supported a restriction of the recreation area. A possible interpretation for this finding is the fact that participants' overall opinion towards the planned restriction seemed to be rather negative in the first place, as the recreation area is especially popular among young people (overall M = 2.49, SD = 1.00). When participants were confronted with an opposing opinion (meaning exemplars supporting the restriction), they were significantly more supportive of the restriction in the case of similar exemplars (students) compared to dis-

similar exemplars (elderly citizens). There are two possible explanations for this effect: On the one hand, the similarity between communicator and participant could have increased the persuasive effect of the exemplars (e.g., Feldman, 1984). On the other hand, dissimilar communicators, like the elderly people in our study, may have caused a boomerang effect resulting less support of the restriction, e.g. due to reactance (Berscheid, 1966; Byrne & Hart, 2009). Admittedly, these interpretations cannot be tested empirically as we did not measure prior attitudes in the experiment. To further investigate this effect, subsequent research on similarity in exemplification effects needs to include corresponding judgments.

Regarding the perception of public opinion, we found that participants behave at least in part rationally: They do not rely on just any single opinion that is presented in the media to infer public opinion, but realize when exemplars and the people whose opinion should be estimated do not match (see Zerback & Fawzi, 2016, for similar results). Correspondingly, they use their own opinion to infer opinion of populations they are part of (student and all citizens' opinions), but not so much for other populations (elderly citizens in our study). However, these results do not mean that people see through the non-representativeness of exemplars being used in the media; in our study, both types of exemplars were used to infer the opinions of all citizens – although, neither the four elderly nor the four younger citizens are representative of the particular population. It seems that, as soon as exemplars are part of the population whose opinion should be estimated, people rely on them to some extent. Future studies are in order to investigate the limits of this "irrationality."

5. References

Bandura, A. (1969). Social learning theory of identificatory processes. In D. A. Goslin (Eds.), *Handbook of socialization theory and research* (pp. 213–262). Chicago: Rand McNally.

Berscheid, E. (1966). Opinion change and communicator-communicatee similarity and dissimilarity. *Journal of Personality and Social Psychology*, 4, 670–680.

Brosius, H.-B. (1999). The influence of exemplars on recipients' judgements: the part played by similarity between exemplar and recipient. *European Journal of Communication, 14*, 213–224.

Brosius, H.-B., & Bathelt, A. (1994). The utility of exemplars in persuasive communication. *Communication Research, 21*, 48–78.

Buunk, A. P., & Gibbons, F. X. (2007). Social comparison. The end of a theory and the emergence of a field. *Organizational Behavior and Human Decision Processes, 102*, 3–21.

Byrne, S., & Hart, P. S. (2009). The "boomerang" effect: A synthesis of findings and a preliminary theoretical framework. In C. Beck (Ed.), *Communication Yearbook 33* (pp. 3–38). Mahwah, NJ: Lawrence Erlbaum.

Daschmann, G. (2001). *Der Einfluß von Fallbeispielen auf Leserurteile. Experimentelle Untersuchungen zur Medienwirkung* [The influence of exemplars on readers´ judgments. Experimental studies on media effects]. Konstanz: UVK Verlagsgesellschaft.

Feldman, R. H. (1984, April). The influence of communicator characteristics on the nutrition attitudes and behavior of high school students. *Journal of School Health, 54*, 149–151.

Festinger, L. (1954). A theory of social comparison processes. *Human Relations, 7,* 117–140.

Goethals, G. R., & Darley, J. M. (1977). Social comparison theory. An attributional approach. In J. M. Suls & R. L. Miller (Eds.), *Social comparison processes: Theoretical and empirical perspectives* (pp. 259–278). Washington: Halsted-Wiley.

Krämer, B. (2015). *Fallbeispieleffekte* [Exemplification effects]. Baden-Baden: Nomos.

Mills, J., & Kimble, C. E. (1973). Opinion changes as a function of perceived similarity of the communicator and subjectivity of the issue. *Bulletin of the Psychonomic Society, 2,* 35–36.

Simons, H. W., Berkowitz, N. N., & Moyer, R. J. (1970). Similarity, credibility, and attitude change: A review and a theory. *Psychological Bulletin, 73,* 1–16.

Tversky, A. (1977). Features of similarity. *Psychological Review, 84,* 327–352.

Wheeler, L. (1966). Motivation as a determinant of upward comparison. *Journal of Experimental Psychology, 1,* 27–31.

Zerback, T., & Fawzi, N. (2016). Can online exemplars trigger a spiral of silence? Examining the effects of exemplar opinions on perceptions of public opinion and speaking out. *New Media & Society.* Advance online publication. doi: 10.1177/1461444815625942

Zillmann, D., & Brosius, H.-B. (2000). *Exemplification in communication.* Mahwah: Erlbaum Associates.

Zillmann, D., Gibson, R., Sundar, S. S., & Perkins, J. W. (1996). Effects of exemplifications in news reports on perception of social issues. *Journalism and Mass Communication Quarterly, 73,* 427–444.

Zillmann, D., Perkins, J. W., & Sundar, S. S. (1992). Impression-formation effects of printed news varying in descriptive precision and exemplification. *Medienpsychologie, 4,* 168–185.
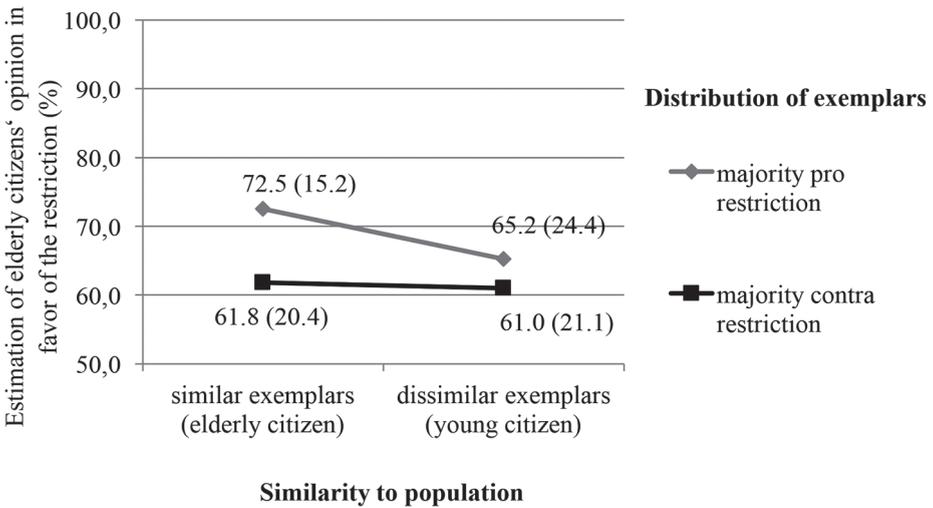
Appendix

Figure 1. Means and standard deviations for the distribution of exemplars and similarity between exemplars and participants on participants' personal opinion
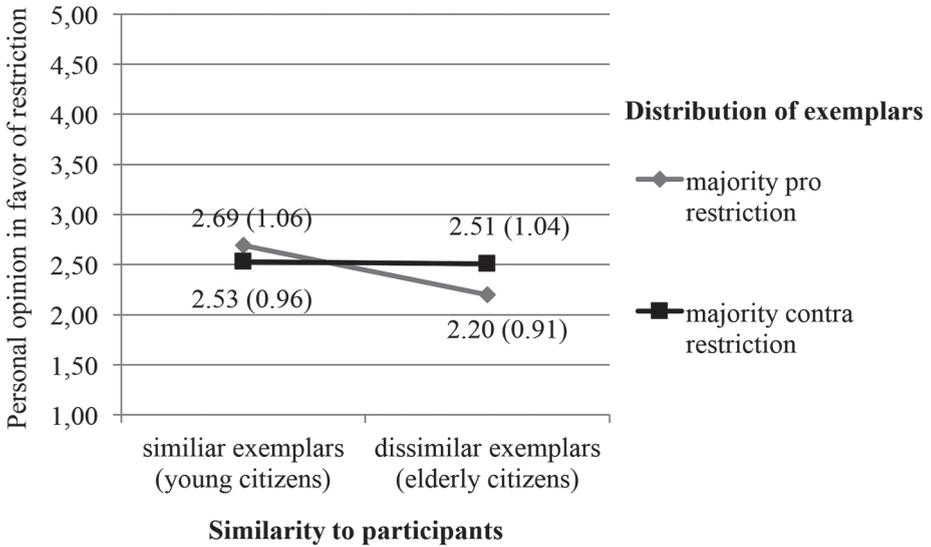
Figure 2. Means and standard deviations for the distribution of exemplars and similarity between exemplars and target population on participants' estimation of young citizens' opinion
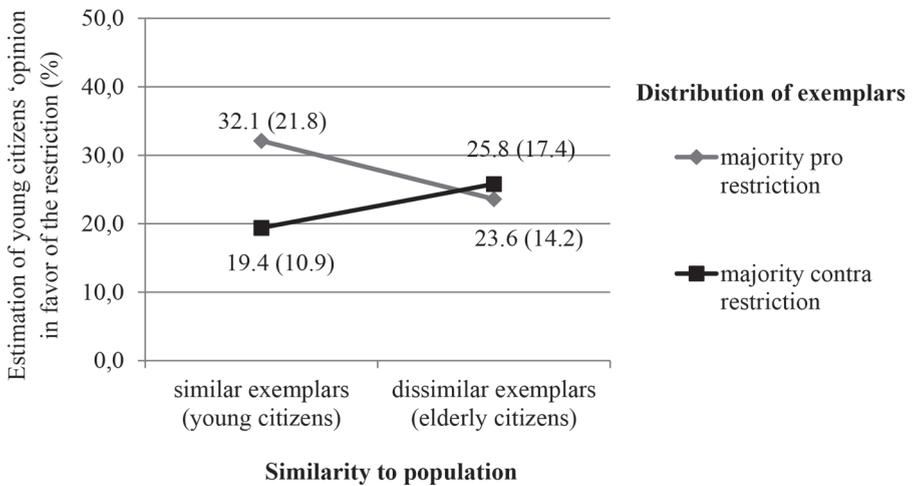
Figure 3. Means and standard deviations for the distribution of exemplars and similarity between exemplars and target population on participants' estimation of elderly citizens' opinion

Similarity to population

Figure 4. Means and standard deviations for the distribution of exemplars and similarity between exemplars and target population on participants' estimation of all citizens' opinion

Type of exemplars