Are we looking for positivity or similarity in a partner's outlook on life? Similarity predicts perceptions of social attractiveness and relationship quality

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Are we looking for positivity or similarity in a partner’s outlook on life?
Similarity predicts perceptions of social attractiveness and relationship quality

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Previous research has shown that people with an optimistic life orientation are perceived as socially more attractive than pessimists. However, following the similarity-attraction hypothesis, we assumed that both the perceiver’s and the target’s life orientation affects perceptions of social attractiveness. Moreover, we were interested in how the composition of romantic partners' life orientation (similar vs. dissimilar) affects perceived relationship quality. The results of an experimental online study (N = 316) confirmed previous findings: Overall, optimists were perceived as socially more attractive than pessimists. Furthermore, perceivers’ life orientation moderated that effect, which was larger with optimistic than with pessimistic perceivers. Moreover, with respect to ongoing relationships optimistic participants indicated higher relationship quality if they perceived their partners as similarly optimistic. The findings are in line with the similarity-attraction hypothesis. They are discussed with regard to the benefits of optimism in social interactions and relationships.

Keywords: optimism; pessimism; social perception; relationships; similarity; attractiveness

Introduction

More than 100 years ago, the American philosopher and writer Ralph W. Trine described benefits of being optimistic in his bestseller *In Tune with the Infinite*: ‘Pessimism leads to weakness. Optimism leads to power.’ (Trine, 1897/2006, p. 148). Recent research has supported this view and has portrayed optimists as better off than pessimists in various fields (for an overview, see e.g., Carver & Scheier, 2005; Peterson, 2000). Moreover, previous research has provided first evidence that optimists are perceived as socially more attractive than pessimists (e.g., Vollman, Renner, & Weber, 2007). However, social perceptions are the result of transactional relations in that the interacting partners, both perceiver and target, have a mutual influence on each other (e.g., Kenny, 1994; Rummel, 1976). Therefore, social attractiveness perceptions may differ between optimistic and pessimistic targets, and between optimistic and pessimistic perceivers. We examined this assumption and were interested in both the social attractiveness of optimistic and pessimistic targets per se, and the influence of perceivers’ life orientation on perceptions of targets’ social attractiveness. Furthermore, we investigated the influence of (dis)similarity in a couple’s life orientation on perceptions of relationship quality.

The benefits of being an optimist

Dispositional optimism has been linked to various positive outcomes, for instance to positive mood and high morale (Segerstrom, Taylor, Kemeny, & Fahey, 1998), effective problem solving (e.g., Segerstrom, 2001), effective coping (e.g., Segerstrom & Nes, 2006), life satisfaction (e.g., Bailey, Eng, Frisch, & Snyder, 2007), good health (Fitzgerald, Tennen, Affleck, & Pransky, 1993), and achievements in different contexts, for instance entrepreneurial success (Crane & Crane, 2007).

Recent studies have concentrated on the relationship between peoples’ social attractiveness and their life orientation. Optimists are viewed more favorably than pessimists (Vollmann et al., 2007), they receive more social support from friends (Park & Folkman, 1997), and have longer-lasting friendships (Geers, Reilley, & Dember, 1998). Furthermore, Carver, Kus, and Scheier (1994) found that college students were more willing to interact with optimists than with pessimists when their own mood was neutral.

As optimists are also more successful (Crane & Crane, 2007) and success is generally considered a positive feature, it is, however, possible that the positive evaluations they receive are not due to their outlook per se but due to their past success.
To disentangle these two factors both success and optimism should be manipulated in studies evaluating target evaluations. In line with previous findings and the reasoning elaborated above, we developed the following hypothesis:

**H1.** We expect that optimists are perceived as more socially attractive than pessimists (irrespective of past success).

**Similarity-attraction**

Beyond the influence of the affective value (positive or negative) of targets’ personality traits on other persons’ perceptions of social attractiveness (Ajzen, 1974), similarity between perceiver and target has also been shown to be a relevant factor in judgments of attraction. The similarity-attraction hypothesis assumes that attraction towards a person is positively related to the proportion of attitudes that are similar between perceiver and target (law of attraction; e.g., Byrne & Griffitt, 1966; Byrne, London, & Reeves, 1968). This hypothesis has been tested and supported under various conditions and in different domains, for instance in romantic relationships (Burleson & Denton, 1992), in voting behavior (Quist & Crano, 2003), and in occupational contexts (Orphen, 1984). Positive perceptions of social attractiveness have been predicted by similarity in attitudes, but also by similarity in personality. For instance, it has been shown that people desire romantic partners who are similar to themselves with regard to agreeableness, conscientiousness, extraversion, emotional stability, and openness to experience (Botwin, Buss, & Shackelford, 1997). A recent meta-analysis revealed that the relation between actual similarity and interpersonal attraction is particularly strong in no-interaction and short-interaction studies (Montoya, Horton, & Kirchner, 2008). However, social attraction on the basis of (actual) similarity between perceiver and target has not yet been studied with respect to optimism and pessimism. Following the similarity-attraction hypothesis, we developed our second hypothesis:

**H2.** We expect that optimists perceive optimistic targets as socially more attractive than pessimists do, and pessimists perceive pessimistic targets as more socially attractive than optimists do.

**Life orientation and romantic relationships**

Hypothesis 2 focuses on the interactive influence of perceivers’ and the targets’ life orientation on perceptions of social attractiveness at first sight (zero-acquaintance paradigm, e.g., Norman & Goldberg, 1966). However, we were also interested in the question of how both romantic partners’ life orientation affects the long-term quality of their romantic relationship. Prior research showed that optimists have relationships that are more satisfying. In particular, it has been shown that optimists (and their partners) have more satisfying relationships because they perceive their partners as being more supportive (Srivastava, McGonigal, Richards, Butler, & Gross, 2006), and because they are more likely to engage in cooperative problem-solving in response to difficulties within the relationship (Assad, Donnellan, & Conger, 2007). The method of analysis that was used in these studies controlled for effects due to partners’ similarity in life orientation. However, we were especially interested in the effects of similarity or dissimilarity of partners’ life orientation on their relationship quality. In other words, how does similarity (both optimistic or both pessimistic) relative to dissimilarity (optimistic and pessimistic) of partners’ life orientation affect relationship quality?

Whereas several individual difference variables have proved to be relevant predictors of relationship quality per se (e.g., Karney & Bradbury, 1995; Robins, Caspi, & Moffitt, 2000), there is relatively little research on how partners’ personality trait similarity relates to relationship quality. Recently, it has been shown that friends’ similarity as well as partners’ similarity is an important predictor of friendship quality and relationship quality respectively, for both actual similarity (e.g., Barelds & Barelds-Dijkstra, 2007) and perceived similarity (e.g., Linden-Andersen, Markiewicz, & Doyle, 2009; Watson, Hubbard, & Wiese, 2000). There is support that perceived similarity (i.e., similarity between individuals as perceived by one individual) might be a stronger predictor of friendship intensity and attraction in (existing) relationships than actual similarity (e.g., Montoya et al., 2008; Selhout, Denissen, Branje, & Meeus, 2009). However, it has not yet been examined how partners’ perceived (dis)similarity with respect to their life orientation influences relationship quality. We expect that as has been shown with other personality traits, perceived similarity could lead to harmony and perceived dissimilarity to disagreement and quarrel (e.g., Acitelli, Kenny, & Weiner, 2001). If persons perceive their partners as having an opposing outlook on life, this may be a source of conflicts within the relationship and therefore lead to low perceived relationship quality. Following the argument that partners’ perceived similarity has a positive effect on a relationship’s harmony, we developed our third hypothesis:

**H3.** We expect that partners with perceived similar life orientation will experience higher relationship quality than partners with perceived dissimilar life orientation.
Method

Participants

A total of N = 316 persons participated in an adaptive online-questionnaire that had been distributed through the web experiment list at the University of Zurich (Reips, 2001). Additionally, the study was advertised at Chemnitz University of Technology. Students received partial course credit for participation. There was no payment for participation. About 65% (204) of the participants were students from Chemnitz University or people who had been recruited through the students (acquaintances, friends, relatives, or partners). Other participants were from all over Germany and the German-speaking part of Switzerland. Age of participants ranged from 15 to 65 years with a mean age of M = 26.2 years (SD = 8.60). The majority of the participants were female (71%). There was a dropout rate of almost 22% during different stages of the completion of the questionnaire, 248 participants finished the questionnaire completely (but only 69% of them completed the relationship part because the remaining participants were single). Thus, the dropout rate was comparable to the one in previous web experiments (e.g., Frick, Bächiger, & Reips, 2001; Musch & Reips, 2000). Moreover, dropout did not seem to be systematic: Participants who dropped out and participants who finished did not differ with respect to age, gender, or the perception of targets in the first section of the questionnaire.

Procedure

The questionnaire started with demographic questions followed by a section with randomly ordered vignettes describing four persons whose sex was opposite to the participant’s. A question on relationship status was next. If the participants indicated that they currently had a romantic relationship, there was another section with questions regarding the respective partner and the perceived relationship quality. All other participants were guided straight to the final section. In that section participants completed a German translation of the Life Orientation Test-Revised (LOT-R; Scheier, Carver, & Bridges, 1994). Altogether, the questionnaire took 15–25 min to complete. All measures are described in detail below.

Measures

Vignettes

Each participant received four vignettes describing young adults of the opposite sex. Each target was identified by a first name (male/female). The names had been pre-tested and did not differ in their associations about age, attractiveness, and intelligence (Rudolph, Böhme, & Lummer, 2007). In a within-subjects design (random order of presentation) the vignettes varied systematically in how the targets were described with respect to general life orientation (‘target optimism’: vignette describing an optimistic vs. a pessimistic target) and general success in the past (‘target success’: vignette describing a successful vs. an unsuccessful target). The description of optimistic versus pessimistic life orientation was manipulated by redrafting the critical LOT-R items (Scheier et al., 1994) to personal descriptions of highly optimistic versus highly pessimistic targets (Table 1).

As a manipulation-check, participants answered questions about how they perceive the targets’ life orientation on a 5-point bipolar scale (‘perceived target optimism’, −2 = very pessimistic to 2 = very optimistic). Then participants indicated how much they would like to have the target as a romantic partner (‘target attractiveness’, −2 = not at all to 2 = very much). Finally, participants who currently had a romantic relationship rated on a 6-point bipolar scale how similar they perceive the target to be to their partner (‘perceived partner similarity’, 1 = not at all similar to 6 = very similar).

Relationship quality

If the participants currently had a romantic relationship, they answered six items on a 4-point rating scale from the marital interaction questionnaire (PFB; Hahlweg, 1979). These questions concerned the perceived quality of their relationship (e.g. ‘If we start fighting, it is hard to stop’, ‘He/she tells me that he/she is happy, when we are together’, 1 = never to 4 = very often). From the answers, an overall index of ‘relationship quality’ was aggregated (Cronbach’s α = 0.75).

Participants’ life orientation

To assess participants’ life orientation we used a German translation of the LOT-R (Scheier et al., 1994). This instrument is a 6-item measure (plus four filler items) of individual differences in dispositional optimism and pessimism. Responses were made on a 5-point scale (participant optimism’, 1 = strongly disagree to 4 = strongly agree, Cronbach’s α = 0.72).

Results

Due to the within-subjects manipulation of target’s optimism and success, observations were nested within participants and might therefore be interdependent. To address this nested data structure, we conducted multilevel analyses (multilevel random coefficient modeling, MRCM; Raudenbush & Bryk, 2002) with the software HLM6 (Raudenbush, Bryk, & Congdon, 2005) to predict perceived target optimism and target
attractiveness. In this study, we considered two levels: observations on level 1 and participants on level 2. At level 1, predictors were dummy coded (target optimism: 0 = pessimistic, 1 = optimistic; target success: 0 = unsuccessful, 1 = successful; the interaction term was computed as the product between the two predictors). At level 2, participants’ life orientation (LOT-R) was entered as a predictor. Prior to analyses, LOT-R scores were $z$-standardized to compare their effects and reduce potential multicollinearity. For all analyses, we considered random-slopes models; when a random effect revealed no meaningful variance, we treated the variable as fixed. Analyses revealed neither main effects of participants’ age or sex and targets’ sex, nor were there significant interactions involving those three variables in the subsequent analyses. Thus, these variables were not included in the reported models.

As a manipulation-check, we predicted perceived target optimism of all four vignettes by target optimism at level 1. As intended, targets of the optimistic vignettes were perceived as being more optimistic than targets of the pessimistic vignettes ($\beta = 3.08$, $t = 47.35$, $p < 0.001$). In other words, target optimism was a significant predictor of target attractiveness even when controlling for target success. The interaction term of target optimism and target success was not significant ($\beta = 0.13$, $t = 0.88$, $p = 0.381$).

Moreover, supporting Hypothesis 2, participant optimism significantly moderated the relationship between target optimism and target attractiveness ($\gamma = 0.37$, $t = 3.92$, $p < 0.001$). Consistent with Hypothesis 2, participants with high LOT-scores rated optimistic targets as more attractive and pessimistic targets as less attractive than participants with low LOT-scores did. Within-person equations for this cross-level interaction effect (consisting of an intercept and the slope for target optimism) were estimated for people at the mean on participants’ optimism, 1 SD above the mean, and 1 SD below the mean on participants’ optimism (Huguet et al., 2009). As Figure 1 shows, the effect of target optimism on target attractiveness was

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**Table 1. Vignettes.**

<table>
<thead>
<tr>
<th>Life orientation</th>
<th>Successful (unsuccessful)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optimistic</td>
<td>In X’s life most things go right (wrong). X generally expects the best for the future. X manages mostly (rarely) what he/she is going to do. Apart from that, X is always looking forward positively. Because (despite) of his/her predominately positive (negative) experiences, X thinks, futurities will turn out well. Because (despite) of the past, he/she believes that more good things will happen to her/him than bad things.</td>
</tr>
<tr>
<td>Pessimistic</td>
<td>In X’s life most things go right (wrong). X generally expects the worst for the future. X manages mostly (rarely) what he/she is going to do. Apart from that, X is always looking forward negatively. Despite (because) of his/her predominately positive (negative) experiences, X thinks, futurities will turn out bad. Despite (because) of the past, he/she believes that more bad things will happen to her/him than good things.</td>
</tr>
</tbody>
</table>
stronger with highly optimistic participants ($\beta = 1.98$) than with highly pessimistic participants ($\beta = 1.24$).

**Composition of partners’ life orientations and relationship quality**

Finally, we were interested in the interactive influence of partners’ life orientation on relationship quality. We aggregated the perceived similarity ratings of the two optimistic targets to the participant’s partner and the (inverted) perceived similarity of the two pessimistic targets to the partner as a measure of perceived partner’s life orientation (‘perceived partner optimism’). Participant optimism and perceived partner optimism were positively related ($r(157) = .45$, $p < .001$).

Following Cohen, Cohen, West, and Aiken’s (2003) guidelines, we performed a moderated regression analysis to examine whether life orientation of both romantic partners (similar or dissimilar) relates to relationship quality. Participant optimism, perceived partner optimism (both mean-centered in order to reduce potential multicollinearity; Aiken & West, 1991), and the interaction term of participant optimism $\times$ perceived partner optimism were used to predict perceived relationship quality simultaneously. Neither participant optimism ($b = -0.002$, $SE = 0.013$, $t(156) = -0.15$, $p = 0.880$), nor perceived partner optimism ($b = 0.030$, $SE = 0.017$, $t(156) = 1.83$, $p = 0.070$) predicted relationship quality significantly. However, the interaction term of participant optimism and perceived partner optimism became a significant predictor of relationship quality ($b = 0.009$, $SE = 0.004$, $t(156) = 2.40$, $p = 0.018$; there was a significant $\Delta R^2 = 0.035$, $p = 0.018$ for the whole model when the interaction term was included in addition to the two single predictors). To explore this interaction effect, we tested simple slopes of perceived partner optimism at values one standard deviation above and below the mean of participant optimism following Cohen and Cohen (1983) (Figure 2). Supporting Hypothesis 3, the results showed that among highly optimistic participants, higher perceived partner optimism was associated with higher relationship quality ($b = 0.197$, $SE = 0.117$, $t(156) = 3.03$, $p = 0.003$). However, among highly pessimistic participants there was no difference in relationship quality relative to perceived partner optimism ($b = -0.021$, $SE = 0.122$, $t(156) = -0.31$, $p = 0.758$).

**Discussion**

The present study demonstrates that optimists are perceived as socially attractive (Hypothesis 1), but also that this perception differs with regard to the perceivers’ own life orientation (Hypothesis 2). Additionally, we found first evidence that perceived similarity in partners’ life orientations has a positive effect on the perceived relationship quality (Hypothesis 3).

On the one hand – and supporting previous research – we found that optimistic targets were perceived as socially more attractive than pessimistic targets (e.g., Vollmann et al., 2007). This effect was independent of targets’ past success, supporting the assumption that it is a person’s life orientation per se that is attractive to perceivers. On the other hand, perceivers’ own life orientation moderated that effect. The effect indicates that optimists perceive optimistic targets as more socially attractive than pessimists do and pessimists perceive pessimistic targets as more socially attractive than optimists do. Such a similarity-attraction effect has been shown to be characteristic in the field of attitudes. The similarity-attraction hypothesis claims that people tend to perceive others who are similar to themselves as more attractive than dissimilar others (e.g., Byrne & Griffitt, 1966; Byrne et al., 1968). Although this principle has been well supported in other areas, there have been some doubts about its unlimited generalizability in the field of social attractiveness (e.g., Walster, 1970). Our results supported the similarity-attraction hypothesis with regard to social attractiveness perceptions of optimists and pessimists. This specifies the general notion of dispositional optimism as an unrestricted beneficial personality variable (e.g., Peterson, 2000). Although optimism per se is perceived as socially attractive, this perception is partly qualified by perceivers’ life orientation.

Moreover, this matching effect was not restricted to mere perceptions of social attractiveness, but remained significant when we looked at how the composition of life orientation in romantic couples affects perceived relationship quality. In line with our assumption,
optimists who perceived their partners as similarly optimistic indicated higher relationship quality than optimists who perceived their partners as dissimilar, i.e., as pessimistic. To explain this finding we argue that optimists may perceive a pessimistic partner as a burden, which may in turn affect their perceptions of relationship quality negatively. Interestingly, this was not the case for pessimists, who reported the same levels of relationship quality regardless of whether they perceived their partners as pessimistic or as optimistic. This leads us to the conclusion that optimism per se may be a resource for relationships (see also Assad et al., 2007; Srivastava et al., 2006). Therefore, a dissimilar, i.e., optimistic, partner does not necessarily reduce the pessimists’ perceived relationship quality relative to a similar, i.e., a pessimistic, partner – even if dissimilarity of life orientations per se is prone to bring certain disruptions into a relationship. Our study contributes to the literature by showing that perceived similarity seems to be an important predictor of attraction in existing relationships (e.g., Montoya et al., 2008; Selfhout et al., 2009). One should, however, note that results may not only be an indicator of a similarity-attraction effect, but could also be attributed to an attraction-similarity effect. It has been shown that the association between similarity and attraction is bidirectional, particularly in existing relationships (e.g., Morry, 2005; Selfhout et al., 2009). This study was not designed to distinguish between these two causal pathways and we have to leave this question to future investigations.

Limitations
We were able to assess the life orientation of one partner of a romantic relationship only. Therefore, the (other) partner’s life orientation was measured indirectly based on participants’ statements of how similar their partners were to the (optimistic or pessimistic) targets. Indirect measurement can be problematic with regard to validity. As noted earlier, there was a positive relation of participant optimism and perceived partner optimism \( (r = .45) \), which is somewhat higher than previous correlations reported by Srivastava et al. (2006; \( r = .12 \)), or Assad et al. (2007; \( r = .20 \)). This interdependence might be one reason why we do not find independent effects of participant optimism (actor effect) and partner optimism (partner effect) on relationship quality when using both predictors at the same time (in contrast, see Assad et al., 2007; Srivastava et al., 2006). The fact that we find an interaction but no main effects also suggests that the results cannot be attributed to perceptual biases on the basis of participants’ life orientation. Nevertheless, only tentative conclusions can be drawn from perceived partner optimism to actual partner optimism (Montoya et al., 2008). Future research has to show whether the matching effect on relationship quality is restricted to perceptions of partners’ life orientation or holds true when life orientation of both partners is assessed directly, that is when actual similarity is measured. Finally, it is worth mentioning that we collected data from a relatively heterogeneous online sample. Clearly, despite the advantages of such a data collection, one has less control of possibly confounding factors.

Conclusions
Previous research investigated the impact of life orientation on social perception of others (e.g., social attractiveness). Still, those studies neglected the interactive influence of perceivers and targets’ life orientation. The results of our study strengthen the importance of taking perceivers’ as well as targets’ life orientation into account – as both may qualify social perceptions. There were consistent effects with respect to social attraction: in a zero-acquaintance paradigm similarity of perceivers’ and targets’ life orientation resulted in higher ratings of social attractiveness. With respect to ongoing romantic relationships, similarity of (perceived) life orientation in a couple was associated with higher ratings of relationship quality. Our study provides evidence that the widespread notion of unlimited benefits of optimism in social interactions is qualified by the fact whether partners have a (dis)similar life orientation. When focusing on the benefits and drawbacks of life orientation in social relationships and interactions, future research should therefore consider both interaction partners’ life orientation.

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Notes
1. There were only three participants who completed the questionnaire and stated that their partner had also participated in the questionnaire. Thus, the data points can be considered fairly independent.
2. Adding the location from where people participated (Chemnitz University or not) as an additional factor revealed no differences in all the analyses.
3. Beta-coefficients refer to unstandardized level 1 coefficients from multilevel analyses. It has become a convention in the literature on MRCMs to label the coefficients that are reported as ‘beta-coefficients’, although unstandardized coefficients are estimated. As dummy coded predictors were used, it seemed appropriate to label the coefficients that were reported ‘betas’.
4. Participants who were currently in a relationship did not differ from participants who were single with respect to attractiveness ratings of targets, F(1, 254) < 1.
5. Gamma-coefficients refer to unstandardized level 2 coefficients from multilevel analyses.
6. We thank an anonymous reviewer for this suggestion.

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