Optimism, gender and success:

The effect of optimism on achieving life goals

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Abstract

The relation between optimism and success is thoroughly studied and addressed in the literature. However, the definition and operationalization of success widely varies across studies and mostly entails a career-related approach. The present study introduced the achievement of life goals as an alternative operationalization of success and investigated its relation to gender and optimism. In light of this approach, a positive correlation between optimism and goal achievement was expected. Moreover, it was hypothesized that no gender differences in optimism and goal achievement would appear, as well as no moderation effect of gender on the relationship between optimism and goal achievement. Participants (N = 148, 63% female, mean age 42 years) completed self-report questionnaires on all variables. The outcomes supported the hypotheses by showing that optimism and goal achievement were related, but no moderation effect of gender was present. The findings imply that alternative approaches to success may erase the perceived gender gap in success and support the association between optimism and success. However, future studies should study and discuss this approach to gender and success more in-depth. Implications and methodological shortcomings of the present study are discussed.

Keywords: Optimism, gender, success, achievement of life goals

Optimism, gender and success: The effect of optimism on achieving life goals

Dispositional optimism is defined as a generalized positive outcome expectancy that is consistent in different times and situations (Scheier & Carver, 1985). It is generally perceived as a favorable trait that is associated with numerous positive outcomes, such as higher social support (e.g., Carver et al., 2010), greater relationship satisfaction (e.g., Srivastrava et al., 2006) and better physical and mental well being (e.g., Carver & Scheier, 2014). Likewise, it has repeatedly been found that optimism is associated with more success, including higher academic achievement and having a professional career (Bortolotti, 2018; Smith & Hoy, 2007; Yates, 2002). This association has gained attention from a large body of research, where optimism was found to have beneficial effects in various domains regarding success. For instance, it appears that optimists have a greater likelihood of completing college (Nes et al., 2009), engage in more efficient career planning (Creed et al., 2004) and perform better at work (Luthans & Lebsack, 2008; Medlin & Green, 2009).

In accordance with that, optimism appears to be beneficial with regard to financial success. According to Segerstrom (2006), optimists are more adept at acquiring financial resources. In her study, law students with high levels of optimism had a higher income 10 years after completing college, indicating long-term benefits of optimism on financial success. Furthermore, it appears that this relationship between optimism and success is reciprocal, as individuals with a higher income are more likely to be optimistic. Heinonen et al. (2006) found that high socioeconomic status in childhood was related to higher levels of dispositional optimism 21 years follow-up. These findings are supported by other studies, relating SES with dispositional optimism later in life (Robb et al., 2009). This further supports the widely found link between optimism and success.

According to Carver and Scheier (2014), dispositional optimism is related to numerous beneficial traits, which may add to a greater prospect of being successful. For instance, optimism is associated with more career planning and career exploration, as well as more decisiveness about career decisions, possibly increasing the likelihood of being successful later in life (Creed et al., 2004). Moreover, optimists are more likely to display active coping strategies and approach tendencies, which may function as advantageous skills in a working environment (Nes & Segerstrom, 2006). Furthermore, studies suggest that optimistic individuals tend to display a higher work performance, which may add to greater success (Youseff & Luthans, 2007).

Despite the large amount of evidence pointing at this link between optimism and success, few studies look at potential gender differences in this association. However, looking at sociological research regarding gender differences and success, men appear to have more success than women. For instance, men more often get hired for well-paid jobs (Gobillon et al., 2015), have higher positions in companies and more often receive a job promotion compared to women (Pema & Mehay, 2010). Most strikingly, men overall have a higher income than women, indicating a gender difference in success (Blau & Kahn, 2017).

This raises the question whether gender differences in optimism may contribute to gender differences in success. Only few studies looked at gender differences in optimism yet. Some studies found that men tend to be more optimistic than women (Jacobsen et al., 2014; Puskar et al., 2010), whereas other studies found no gender difference in optimism (Hinz et al., 2017). Most of these studies did not primarily look at the gender differences in optimism, but found these effects incidentally. Therefore, due to mostly circumstantial evidence, no inferences can be drawn from the literature regarding gender differences in optimism. Hence, it cannot be inferred that gender differences in optimism contribute to gender differences in success.

Therefore, the question remains why men tend to be more successful than women. Sociological studies suggest various reasons for this gender difference, particularly regarding gender differences in income. For instance, studies point at the gender pay-gap, showing that women earn considerably less than men despite doing the same job (Fortin et al. 2017). Blau et al. (2017) and Cundiff and Vescio (2016) explain this gender difference by looking at conservative gender roles. According to them, women work on average less than men, resulting in a lower average income for women. In other words, following conservative norms and values women more often look after children and household, whereas men more often work full-time and focus on their career (Heilman, 2012; Lommerud et al., 2015). This may be an explanation for the difference in success between men and women (Cundiff & Vescio, 2016; Lommerud et al., 2015).

However, looking at this gender difference from a psychological perspective, another explanation can be given. That is, from a societal point of view, success is predominantly defined by career related matters, specifically academic achievement, high income, job position and material possessions (e.g. Van der Lee & Ellemers, 2015). However, the societal perspective of being successful may differ from an individual's personal idea of success (Kirkwood, 2016). Namely, on the individual level success may rather entail attaining selfdetermined life goals than fulfilling society's interpretation of success. Looking at the definition of success, it is broadly described as "the accomplishment of one's goals" (Dictionary.com, 2020). Thus, operationalizing success by only looking at the achievement of a high income, good job position or college degree may be insufficient and may rather be assessed by the achievement of one's personal life goals.

Given this perspective on success, it is questionable whether the gender differences in success remain. Men may overall appear to be more successful, as they have advantages in the domains that are operationalized as success, e.g. income (Blau & Kahn, 2017). However, they may not necessarily be more successful in achieving their goals. Dyke and Murphy (2006) argue that our interpretation of success explains the different attainments of women and men in our society. In their study, they found that women and men have different views on being successful (Dyke & Murphy, 2006). In accordance with that, Kirkwood (2016) investigated personal and relational success factors next to traditional career-related success

factors and found no significant gender differences. Therefore, the operationalization of success appears to play a significant role in determining whether men and women are equally successful.

This issue may also play a role in research on optimism and success. The literature on the association between optimism and success mainly focuses on the traditional approach to success (e.g., Forgeard & Seligman, 2012). With regard to success, it is largely examined whether optimism has positive effects on e.g. academic achievement, career prospects or salary (e.g., Crane & Crane, 2007). However, optimism may rather be beneficial in attaining one's goals in general, instead of only in career related domains. Accordingly, studies show that optimism is related to more goal-directed behavior and a greater engagement in high priority goals (Carver & Scheier, 2014). Moreover, a study by Bortolotti (2018) indicates that optimism is positively related to goal fulfillment. High goal engagement generates increased motivation, a greater sense of self-mastery and higher efforts in attaining goals (Carver et al., 2010; Schueller & Seligman, 2008). Bortolotti (2018) argues that optimistic beliefs contribute to goal attainment, as they sustain our motivation to act in pursuit of our goals. However, Bortolotti (2018) and related studies perceive the association between goal attainment and optimism as a mechanism for the relation between optimism and success, instead of viewing goal attainment as success in itself.

It is relevant to address this incongruity in the literature, as it has implications for the approach of gender and success. Success is overall perceived to be male-dominated, however, the different approach to success by goal achievement may challenge this perspective. Furthermore, relevant implications could be drawn for the literature on optimism and success. Possibly, research on optimism and success should increase its focus to goal attainment when investigating the benefits of optimism.

This study aims to look at this incongruity by examining the relationship between optimism, gender and success. Hereby, success will be operationalized as the achievement of

one's personal life goals. It will be investigated whether optimism is associated with the achievement of personal life goals. This association is expected to be positive. Furthermore, it is tested whether there are gender differences in optimism and achievement of life goals. No gender differences are expected in either of the variables. Moreover, it will be examined whether the relationship between optimism and achievement of life goals is moderated by gender. It is hypothesized that gender does not have a moderating effect on the relation, as it would be hypothesized in the traditional approach to success. Thereby, the study aims to show that gender does not play a role in the relationship between optimism and success, indicating that men and women are equally successful in attaining their goals.

Method

Procedure

In this cross-sectional survey study, data were collected with the web-based survey tool "Qualtrics". Questionnaires were handed out via social media and email in December 2020. In order to ensure an equal age distribution, participants of different age groups were approached for participation. Respondents were drawn from acquaintances and relatives, using convenient sampling. Moreover, an email was sent to a large group of people, asking to spread the questionnaires. All participants signed an informed consent form and the study was approved by the Ethical Committee of the Faculty of Social and Behavioral Sciences.

Participants

Of the total of 204 participants, 148 fully completed the questionnaires (72.5 %). The remaining participants were excluded from the analyses due to missing values. The respondents were aged 18 years and older (range = 18-73) and the overall mean age was 42.14. The sample included 93 women (62.8 %) and 55 men (37.2 %). The participants were German-speaking, as the respondents were recruited in Germany and the questionnaires were handed out in German.

Measures

To gain background information, the participants were asked to indicate their age and gender.

Dispositional Optimism

The Revised Life Orientation Test (LOT-R) was used to measure dispositional optimism (Scheier et al., 1994). The LOT-R consists of 10 items, whereby 4 items are filler items only. The remaining 6 items are summed, in order to obtain an overall score. Thereby, item 3, 7 and 9 are reversed in coding, as they are negatively stated items (e.g. "if something can go wrong for me, it will"). The remaining items are phrased positively (e.g. "I'm always optimistic about my future"). The respondents were asked to indicate how well the given statements applied to them on a 5-point Likert-type scale, ranging from 0 (= strongly disagree) to 4 (= strongly agree). The LOT-R is a widely used questionnaire, which measures dispositional optimism validly and reliably. Previous studies indicate a Cronbach's alpha for the LOT-R of .75 (Gustems-Garnicer et al., 2017). Because the sample consisted of German speaking respondents, the German version of the LOT-R was used (Glaesmer et al., 2008). This version shows a sufficient internal consistency as well (Cronbach's alpha = .69; Glaesmer et al., 2008). In the present study, a Cronbach's alpha of .75 was found.

Achievement of Life Goals

To assess the achievement of personal life goals, the respondents were asked to reflect on their life goals in two steps. After a short introductory sentence ("the following five questions concern your personal life goals"), the respondents indicated in an open-ended question what they defined as one of their personal life goals ("Please state something that you consider as an important goal in your life"). Afterwards, the respondents were asked to demonstrate to what extent they have already achieved that goal ("How far are you in the process of achieving your goal?"). Here, the answers were given on a 5-point Likert-scale, including the following answer options: "not achieved", "barely achieved", "somewhat achieved", "mostly achieved" and "achieved". These two questions were repeated five times to assess five personal life goals and their achievement. The open-ended questions about life goals were not considered for the analyses, as they only aimed at giving the respondents the freedom to indicate their own determined life goals. Sum scores of the quantitative measure about goal achievement were used for the analyses.

Statistical Analyses

The statistical analyses were conducted by using IBM SPSS statistics (version 24). Two-sided hypothesis testing was used for all statistical analyses. Descriptive statistics were computed for all variables.

First, the data were checked for missing values and normality of distribution. Thereafter, independent samples t-tests were conducted to examine whether there were significant differences in age, optimism and achievement of life goals between men and women. Moreover, bivariate correlations between age, optimism and goal achievement were computed for males and females.

Next, in order to investigate whether gender influenced the relationship between optimism and achievement of life goals when controlling for age, a moderation analysis was conducted, using multiple regression analysis. Thereby, optimism served as the independent variable, achievement of life goals as the dependent variable and gender as the moderator. Age was included as a covariate. Before the regression analysis was performed, the necessary assumptions were checked. The data were checked for normal distribution and independent residuals and it was checked for problems with multicollinearity and homoscedasticity. In the first step of the regression analysis, it was tested whether gender and optimism predicted scores in achievement of life goals. In the second step, age was included as a covariate. In the third step, an interaction term of gender and optimism was added, to test whether a moderation was present. Because gender is a dichotomous categorical variable, it was coded for the analysis as following: 1 = women, 2 = men.

Finally, as an additional exploratory analysis, the moderation analysis was repeated with a second level interaction of gender, optimism and age. This was done, in order to test whether the effect of gender and optimism on the achievement of life goals was different for individuals of different age.

Results

The total mean of optimism in the sample was 23.41 (SD = 3.8) and 13.6 (SD = 2.9) for goal achievement. In line with the hypothesis, there was no significant difference in optimism between men and women. Moreover, there were no significant gender differences in goal achievement. Men were on average older than women in the sample. The results and descriptive statistics are presented in Table 1.

Table 1.

Descriptives of variables under study for women (=93) and men (=55)

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		Mean	SD	t	р	d			
Age	Women	39.76	16.72	-2.24	.027	.38			
	Men	46.15	16.81						
Optimism	Women	23.26	4.09	-0.67	.500	.11			
	Men	23.67	3.28						
Goal achievement	Women	13.65	3.05	0.24	.814	.04			
	Men	13.53	2.76						

Looking at the content of the indicated life goals, no gender differences were apparent. Women and men both indicated life goals with regard to relationship and career-related domains. Generally, the content of life goals was very divers and included very specific goals (e.g. "learning how to play the piano" or "finding a new apartment") to more general goals (e.g. "being happy" or "self-acceptance"). However, differences in life goals between different age groups were evident. Younger participants more often indicated specific futureoriented goals (e.g. "finishing my studies" or "starting a family"), whereas older individuals more often mentioned stable and durable goals (e.g. "health" or "serenity"). Overall, the goal "satisfaction" was strikingly often mentioned by men and women and among all age groups.

Optimism and goal achievement were positively related and of medium size, r(148) = .329, p < .000. Furthermore, a significant positive and medium size correlation was found between age and goal achievement, r(148) = .329, p < .001. Age and optimism showed a marginally insignificant correlation, r(148) = .151, p = .067. Moreover, bivariate correlations between optimism and goal achievement were computed for males and females separately. A significant but small positive correlation between optimism and goal achievement was found for women, r(93) = .299, p = .004. For males, a medium and positive correlation was found, r(55) = .406, p = .002.

Moderation

A multiple regression analysis was performed to test whether the relationship between optimism on goal achievement differed for men and women. Moreover, it was tested whether age served as a covariate. Preliminary analyses ensured that no violation of the assumptions of normality, linearity, homoscedasticity and multicollinearity were present. The results are presented in Table 2. The outcomes revealed that there was no moderation effect of gender on the effect of optimism on goal achievement when controlling for age, B = .067, t(144) = .509, p = .611. However, the two predictors age and optimism explained a significant but small amount of the variance in goal achievement, $R^2 = .196$, F(5, 145) = 11.668, p < .001, indicating that higher age and higher levels in optimism predict higher scores in goal achievement.

Table 2.

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Goal achievement	В	SE	t	р	ΔR^2	F	df	р		
(N = 148)										
Step 1										
Gender	224	.475	471	.638	.110	8.923	2	<.001		
Optimism	.255	.061	4.217	<.001	.110	8.923	2	<.001		
Step 2										
Gender	542	.460	-1.18	.240	.196	11.668	3	<.001		
Optimism	.222	.058	3.810	<.001	.196	11.668	3	<.001		
Age	.052	.013	3.923	<.001	.196	11.668	3	<.001		
Step 3										
Gender*Optimism	.067	.131	.509	.611	.197	8.771	4	<.001		
		· · ·	0							
Moderation with Second-Level Interaction of										
Gender, Age, Optimism and Goal Achievement										
Step 1										
Gender	542	.460	-1.18	.240	.196	11.668	3	<.001		
Optimism	.222	.058	3.810	<.001	.196	11.668	3	<.001		
Age	.052	.013	3.923	<.001	.196	11.668	3	<.001		
Step 2										
Gender*Age*	.000	.001	331	.741	.196	8.724	4	<.001		
Optimism										

Moderation Analysis with Gender, Optimism and Goal Achievement controlled for Age

Note: Gender: women = 1, men = 2

Exploratory analyses

To investigate whether the results of the moderation analysis differed when including age in the interaction, additional exploratory analyses were performed. Given that younger individuals did not have the same time and opportunities to fulfill their life goals as older individuals, differences in the results may have appeared when including age in the moderation analysis. Thus, the moderation analysis was repeated with a second level interaction term including gender, age and optimism.

The results revealed that there was no two-way interaction of gender, age and on goal achievement, B = .000, t(144) = -.331, p = .741. All outcomes of the exploratory moderation analysis can be found above in Table 2.

Discussion

The aim of the present study was to investigate the relationship between optimism, gender and success. The results confirmed the expected positive association between optimism and the achievement of personal life goals. Moreover, age was positively related to goal achievement. No gender differences in optimism and achievement of life goals were found in the sample. In line with the hypothesis, no moderating effect of gender was found in the relation between optimism and achievement of life goals when controlling for age. Optimism was positively related to goal achievement in both, men and women. The same accounted for the exploratory analysis, where gender did not moderate the association between optimism and goal achievement, even when age was included in the moderation analysis. Thus, age did not appear to play a role in the results of the moderation analyses.

The findings of the study support the assumption that optimistic individuals have a greater likelihood to be successful in attaining their life goals. This is in line with previous research showing that optimism is related to more goal-directed behavior, goal fulfillment and greater engagement in high priority goals (Carver & Scheier, 2014; Bortolotti, 2018). If the achievement of personal life goals is perceived as an operationalization of success, the current findings also support the idea of previous findings that optimism is related to success (e.g., Bortolotti, 2018; Segerstrom, 2006). Thus, optimism appears to not only have beneficial effects in career related domains of success, such as academic achievement and income (Forgeard & Seligman, 2012), but it also seems to have positive effects on the achievement of one's overall personal life goals.

Furthermore, the results are in line with the hypothesis that there are no significant differences in optimism between men and women. Given that previous studies do not have a clear proposition to potential gender differences in optimism, the current findings cannot be embedded in the conclusion of existing literature. However, in the current study these results indicate that men and women are equally optimistic.

Following the idea that goal achievement can be regarded as an operationalization of success (Dictionary.com, 2020), the current findings support the assumption that men and women are equally successful. This is opposed to the prevalent view that men are more successful than women (e.g., Blau & Kahn, 2017; Cundiff & Vescio, 2016).

Accordingly, the results of the moderation analysis underpin this hypothesis by showing that gender does not have an effect on the relationship between optimism and goal achievement. Supposing that men were more successful than women, similar scores in optimism in men and women should have led to higher scores in goal achievement in men. However, given that there was no moderation effect, the findings indicate that women and men are equally successful in attaining their goals. Thus, the common perception that success is rather male-dominated is challenged by these results. This is congruent with the perception of Dyke and Murphy (2006) and Kirkwood (2016), who argue that the interpretation of success explains the different achievements of women and men in our society.

However, the outcomes of the present study also show that age appears to play a role in success, given that older individuals had more often achieved their life goals than younger individuals. This is not unexpected, given the fact that older individuals had more time and opportunities to fulfill their goals. However, according to the results, age does not influence the relation between optimism, gender and success.

Even though the findings are in line with the hypotheses, several alternative explanations should be considered. First of all, the association between optimism and goal achievement may be explained by the optimist's own self-report bias. Due to their optimism, optimistic individuals may be more likely to perceive a goal as achieved in comparison to less optimistic individuals (Monzani et al., 2015). Optimists may not necessarily be more successful in attaining their goals, but merely perceive themselves as more successful due to their positivity bias, which may influence the strength of the correlation. Furthermore, studies indicate that men have a tendency to be overconfident with their skills and abilities, whereas women tend to be more modest (Wigfield et al., 1994). With regard to the study results, it implies that women may set smaller life goals that may be easier to achieve because of their tendency to underrate their abilities. Conversely, men may have more confidence in achieving their goals and therefore state more challenging goals. In accordance with this, studies show that men tend to have more self-efficacy beliefs, meaning that their confidence in achieving something tends to be higher (Pajares, 2002). This may have influenced the answers on the life goals questionnaire. However, looking at the content of the indicated life goals, such differences in the qualitative data were not observed. Future qualitative studies should nevertheless pay attention to this potential issue.

The present study has several limitations. First, it made use of self-report, which is susceptible to biases. For instance, numerous studies show that optimistic individuals have the tendency to have unrealistically high expectations and to overestimate the likelihood of positive events to happen, also described as the optimism bias (e.g., Sharot, 2011). In this study, optimistic individuals may have indicated more unrealistic life goals in the questionnaire, which they are less likely to achieve. Optimists may therefore fulfill less of their self-indicated life goals, because these goals are more difficult to achieve.

Self-report biases may have also played a role in the questionnaire about the achievement of life goals. Given that the participants could freely indicate their life goals and their achievements, differences in the responses to the questionnaire occurred. Looking at the content of life goals in this sample, large differences were present. As some individuals indicated more general life goals (e.g., "being happy", "health"), the achievement score of these individuals may have been influenced, given that these goals are unlikely to be rated as entirely fulfilled. In turn, smaller and more specific goals (e.g., "finishing my studies", "finding a new apartment") could more easily be considered as entirely achieved. This may have led to different scores on the achievement scale and potentially resulted in distortions of

the results. Overall, many participants indicated favorable conditions they would like to experience more often in their future (e.g., "satisfaction", "self-acceptance"), rather than concrete goals. Given that these differences were especially apparent between younger and older participants, future research should consider this constrainment.

Even though the questionnaire aimed to measure "life goals", which includes all large goals in a person's life (achieved and not yet achieved), participants may have interpreted the term differently. That is, the term "goal" in itself already entails that the given matter is not attained yet. Thus, participants may have merely indicated life goals that still have to be fulfilled in the future. This could have influenced the achievement scores of the participants in the questionnaire. Longitudinal designs could for instance be a solution to this limitation.

Furthermore, the amount of life goals that could be indicated in the questionnaire was restricted to five goals in this study. However, if all goals of the participants would have been considered, the results may have differed. Restricting the amount of life goals to a certain amount could limit the variance and variability of indicated goals (Manzoni et al., 2015). Thus, future research could give participants more room to choose the amount of life goal themselves.

Overall, the term "life goals" gave much room for interpretation, which allowed the participants to reflect on their goals without external influence. Thereby, potential gender stereotyping and social desirability biases were avoided. Such biases can influence the participant's response on self-report measures (e.g., Grimm, 2015). This can be considered as strength of the study. However, this freedom for interpretation may on the other hand cause significant disparities in the outcomes. Therefore, future studies should define the term "life goals" in their studies or give clear instructions to the participants, without inflicting biases. However, the difficulty of obtaining an objective measure of personal goals is a common issue that has also been reported by other studies and is challenging to resolve (Manzoni et al., 2015).

Some limitations with regard to the sample are of importance. First, the study had an unequal gender distribution, as far more women participated than men. Moreover, men were significantly older than women. The age distribution was overall varying in the sample because the group of middle-aged individuals (40-60 years) was underrepresented. Thus, distortions in the outcomes may have appeared due to these limitations. Lastly, the sample consisted solely of white, German-speaking individuals, i.e. individuals from an individualistic culture. Therefore, no inferences can be drawn from the results about the relation between optimism, gender and goal achievement in collectivistic cultures.

Moreover, except for age, confounding variables were not included in the analyses. However, other variables (e.g., level of education) may have influenced the outcomes. Future studies about optimism, gender and success should consider such confounding variables. Overall, different study designs are needed to explore the research question more in depth and to make inferences about causality. For instance, qualitative studies may give additional insights into the gender and age differences in life goals.

Even though the outcomes of this study suggest similar levels of success in men and women, they do give inferences about social inequalities with regard to gender. The gender pay gap, gender roles and other factors may nevertheless influence women's possibilities to achieve their goals (e.g., Blau et al., 2017; Fortin et al. 2017). Hence, this study did not aim to downplay the effects of existing gender inequalities, but to underline women's capacity to be equally successful as men if the same conditions are given.

In conclusion, the current study questions the prevalent approach to gender and success in the existing literature, by indicating that men and women are equally successful in reaching their life goals. Moreover, the findings highlight that optimism is generally beneficial in attaining one's goals, instead of merely in the career-related domain. Future studies should bear this in mind and attempt to gain more insight into the qualitative nature of individuals' personal life goals, while concurrently considering gender and generational differences. Understanding the actual impact of gender and optimism on success may be relevant for psychological and sociological theory and practice.

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