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Help, I am not a stereotype!

Discrepancies in self-description and perceived gender norms might enhance impostor feelings

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Abstract

The Imposter phenomenon as well as gender stereotypes have high impact on individuals work life. Even though there are connecting elements, there is few research combining these two topics. The aim of our study was to investigate the impact of communal self-description on impostor feelings, as well as the impact of discrepancies in self-ascribed and perceived ideal communal and agentic traits for women and men on impostor feelings. Further we wanted to explore the impact of the gender type of a job as a moderator variable. For this aim we conducted an online questionnaire and received a final sample of 525 participants. Contrary to previous assumptions we found that lower levels of self-ascribed communion in women were connected to higher levels of impostor feelings, while no effects were found for men. Additionally, in an explorative analysis, we found that lower levels of self-ascribed agency were connected to higher levels of impostor feelings in women and men. As suspected, we could show that higher discrepancies between self-ascribed and perceived ideal traits, communal as well as agentic, were connected to higher levels of impostor feelings in both women and men. Contrary to our assumptions we could not find any moderating effect of the job type. Overall, our results indicate an influence of gender stereotypes on the impostor phenomenon and the need for further research.

Keywords: Impostor phenomenon, gender stereotypes, prescriptive stereotypes, discrepancies, job type.

Zusammenfassung

Das Imposter Phänomen sowie Geschlechterstereotype haben einen hohen Einfluss auf das Arbeitsleben von Personen. Obwohl es verbindende Elemente zwischen den beiden gibt, gibt es bisher nur wenige Forschung, die diese beiden Themen kombiniert. Ziel unserer Studie war es, den Einfluss von selbstzugeschriebenen femininen Eigenschaften auf Impostor-Gefühle, sowie den Einfluss von Diskrepanzen in selbst zugeschriebenen und wahrgenommenen idealen femininen und maskulinen Eigenschaften für Frauen und Männer auf Impostor-Gefühle zu untersuchen. Des Weiteren wollten wir den Einfluss des Geschlechtstyps eines Jobs als Moderatorvariable untersuchen. Zu diesem Zweck haben wir einen Online-Fragebogen, mit einer finalen Stichprobe von 525 Teilnehmern, durchgeführt. Im Widerspruch zu früheren Annahmen stellten wir fest, dass ein geringeres Maß an selbstzugeschriebenen femininen Eigenschaften bei Frauen mit einem höheren Maß an Impostor-Gefühlen verbunden war. Wir konnten jedoch keine Auswirkungen auf Männer feststellen. In einer explorativen Analyse stellten wir zudem fest, dass ein geringeres Maß an selbstzugeschriebenen maskulinen Eigenschaften mit einem höheren Maß an Impostor-Gefühlen bei Frauen und Männern verbunden war. Wie vermutet, konnten wir zeigen, dass höhere Diskrepanzen zwischen selbst zugeschriebenen und wahrgenommenen idealen Eigenschaften, sowohl femininen als auch maskulinen, mit höheren Impostor-Gefühlen sowohl bei Frauen als auch bei Männern verbunden waren. Entgegen unserer Vermutung konnten wir keinen moderierenden Effekt des Jobtyps feststellen. Insgesamt deuten unsere Ergebnisse auf einen Einfluss von Geschlechterstereotypen auf das Impostor Phänomen hin, sowie die Notwendigkeit von weiter Forschung.

Schlüsselworte: Impostor Phänomen, Geschlechterstereotype, präskriptive Stereotype, Diskrepanzen, Jobtyp.

Introduction

The impostor phenomenon (IP) is more relevant than ever. Briefly, the IP describes the fear of individuals to be discovered as a fraud, despite lacking objective reasons or evidence for this fear (Clance, 1985). After the first description of the phenomenon (Clance, 1972), research interest on the subject has increased dramatically, especially in the Germanspeaking countries. For example, a query in the database PSYNDEX, which provides German-language articles, revealed that all 13 articles found with the keyword *impostor phenomenon* were published during the last seven years (accessed on the 10.04.2019). Even in the German-language media, the impostor phenomenon has shown to be a popular topic (e.g., "Waiting for the moment, it will be discovered", Güngör, 2018). Plenty additional newspaper articles have been published regarding this topic in the last year (e.g. Gelitz, 2018; Güngör, 2018; Holzki, 2018). Furthermore, in 2018 alone, three German-language books about the impostor phenomenon were published (Magnet, 2018; Mount & Tardnico, 2018; Rohrmann, 2018). The fear of being a fraud seems to address a broad range of people throughout all social strata and is noticeable in different aspects of the everyday life.

Nevertheless, the focus of research, articles and media regarding the impostor phenomenon so far has been primarily on women (e.g. Clance, Dingman, Reviere & Stober, 1995). This may be due to the circumstance, that a lot of constructs correlating with the IP, for example neuroticism (Bernard, Dollinger, & Ramaniah, 2002), perfectionism, and anxiety (Rohrmann, Bechtholdt & Leonardt, 2016), are more prevalent in women (Weisberg, DeYoung, & Hirsh, 2011; Raspopovic, 2015).

Although the IP was first described exclusively as a women's issue, later studies also frequently described the phenomenon in men (e.g., Ferrari & Thompson, 2006; Lester & Moderski, 1995).

In this study, we will examine the impact of gender stereotypes, rather than the impact of gender on impostor feelings. Specifically, we will investigate how stereotypical self-descriptions (as typically female or male) and their relations to perceived ideals of femininity and masculinity impact impostor feelings. In addition, we will examine whether job type (male, female, neutral) mediates these relations.

Following, we will first present previous research on the impostor phenomenon, and gender stereotypes, then we will describe how effects of gender stereotypes and impostor feelings may be intertwined.

Impostor phenomenon

The impostor phenomenon (IP) describes strong negative feelings in an individual who is regarded successful by external standards but thinks that their performance is undeserved and is therefore afraid of being exposed as fraud (Clance & Imes, 1978). Early on the impostor phenomenon was seen as a women's issue. The term was originally described by Clance and Imes (1978) in a clinical setting and was "used to designate an internal experience of intellectual phoniness which appears to be particularly prevalent and intense among a select sample of high achieving women" (Clance & Imes, 1978, p.241). Individuals with Impostor feelings often show high levels of anxiety, depression and general dissatisfaction in life.

Clance (1985) described six different components of the IP. The first component is the Impostor Cycle. It starts with an achievement-related task which is followed by anxiety, selfdoubt or worry. There are two ways a person experiencing the IP may react - over-preparation or procrastination. With the accomplishment of the task comes a feeling of relief. When receiving positive feedback, the impostor who over-prepared will ascribe it to the effort while the imposter who procrastinated will ascribe it to luck. This means they both discount the positive feedback. Subsequently, this leads to a perceived feeling of fraudulence, increased self-doubt, depression and anxiety from which the impostor cycle starts over again. The second component is the need to feel special compared to other people, which is common among Impostors. The third component, the so-called "Superwoman/ Superman aspects" (Clance, 1985, p. 26), involves a tendency for perfection. The fourth component is a fear of failure, which often leads impostors to go to great and often costly lengths to prevent themselves from failing. The fifth component entails the denial of one's own competence and the discounting of praise from others. Impostors tend to ascribe success to external factors such as luck or hard work. Moreover, Impostors do not only deny but actively look for evidence that they do not deserve praise. The sixth component includes fear and guilt regarding their own success. Even though a lot of impostors aim for success, they often fear the consequences that come along with it at the same time (Clance, 1985).

There are different approaches to explain the development of IP, including individual differences in perfectionism, individual differences in attributional pattern, or a person's family environment (Clance,1985). Looking at attributional patterns reveals that some individuals with impostor feelings have difficulties internalizing their success (Clance, 1985). Such attributional patterns are more common in women and girls (e.g. Dickhäuser & Meyer,

2006). However, IP also occurred in men, particular those who appear to be more in touch with their "feminine" qualities" (Clance & Imes, 1978, p.241).

A lot of research studied the IP within the work context, as it seems to have large effects in work life and academic careers (e. g. Neureiter, 2016; Klinkhammer, 2009; Fried-Buchalter, 1997). For example, Harvey and Katz (1985) reported that people who perceived their profession as atypical for their gender tend to experience higher levels of impostor feelings.

Gender stereotypes

Generally, "stereotypes are generalizations about groups that are applied to individual group members simply because they belong to that group." (Heilman, 2012, p.114) By extension, "gender stereotypes are generalizations about the attributes of men and women" (Heilman, 2012, p.114). There are two types of gender stereotypes: descriptive and prescriptive. Descriptive gender stereotypes are characterizations, these stereotypes refer to what women and men *are* like. Prescriptive gender stereotypes are requirements, they refer to what women and men *should be* or what they should not be like (Heilman, 2012). For both types of stereotypes, we can distinguish between attributes typical for women and attributes typical for men. For the female stereotype, communality is often seen as the defining characterization (e.g., care for others, emotional sensitivity), while for the male stereotype agency is viewed as the defining characterization (e.g., achievement-orientation, rationality) (Heilman, 2012). If the displayed behavior by an individual does not meet these expectations, social norms are violated, which often results in penalizations, a phenomenon also called the *backlash effect* (Heilman, Wallen, Fuchs & Tamkins, 2004; Rudman & Glick, 2001).

Obituaries studies showed that descriptive stereotypes have changed, while prescriptive stereotypes might not have changed over time (Zehnter, Olsen & Kirchler, 2018). Consequently, there might be discrepancies in individuals between descriptive and prescriptive gender stereotypes today. Likely, the self-descriptions of people regarding their communal and agentic traits have changed in accordance with social changes in descriptive gender stereotypes.

Individuals likely are aware of their own female and male characteristics; at the same time, individuals are certainly aware of how women and men should conform to gender norms and how they should behave as a representative of their gender group. Discrepancies between the perceived own characteristics and perceived ideals could lead to cognitive dissonances.

According to the *cognitive dissonance theory* (Festinger, 1978) a situation involving conflicting attitudes or behavior produces a feeling of discomfort (cognitive dissonance) and individuals aspire to consistency. Therefore, individuals attempt to reduce those feelings by gathering information that supports their view, reevaluating existing thoughts and beliefs or by changing their behavior. However, a resolution of the dissonance is not guaranteed. Even though there appears to be no current literature on this topic, there could be a link to the IP, insofar as dissonance between self-description and a perceived ideal can cause discomfort. Because of that discomfort, the person might feel the desire to produce consistency. To feel like an impostor could be one way to achieve consistency. To give an example within in the context of gender stereotypes; a woman with perceived atypical traits for a woman might not be as successful in certain areas of life, as life or job, as women with perceived typical traits. If the woman sees herself as an impostor, and therefore not as successful, her discomfort regarding the dissonance to the stereotype might be reduced.

In line with the notions of dissonances and discrepancies, Heilman (1983, 2001) postulated the *Lack of Fit Model*. It describes why a person is expected to be successful or unsuccessful in a job based on gender bias. More precisely, the model describes the (lack of) fit between the perceived requirements for the job and the perceived attributes of a person. Attributes could be communal traits, which are perceived as typical for women, and agentic traits which are perceived as typical for men. So, for example, a person in a male-type job with communal attributes should be expected to be unsuccessful in this particular job.

Looking at the work-related context, there are connecting elements between the impostor phenomenon and gender stereotypes. Heilman (1983) linked perceptions of gender stereotypes to expectations of success or failure in the Lack of Fit Model. Dodson and Borders (2006) highlighted the connection between gender stereotypes and job satisfaction. Similar links have been found regarding research on the impostor phenomenon. Neureiter and Traut-Mattausch (2016a) for example showed that there are significant connections between the impostor phenomenon and career satisfaction, as well as job satisfaction and salary. Neureiter and Traut-Mattausch (2016b) also found significant correlations between the impostor phenomenon and fear of success, in addition to fear of failure and the motivation to lead.

Yet there is very little research which has studied the relationship between gender stereotypes and impostor feelings.

Goals and Hypotheses

The aim of our study was to examine the impact of gender stereotypes, rather than the impact of gender on impostor feelings.

One goal of this study was to examine the relationship between stereotypical feminine characteristics, in the form of the self-ascribed communal traits, and impostor feelings in women and men. Such a relationship has already been proposed by Clance and Imes (1978) but has not been studied systematically.

H1: The more individuals (women and men) describe themselves with communal traits, the more impostor feelings they experience.

Next, we examined whether job-type moderated the effect of self-ascribed communality and self-ascribed agency on impostor feelings.

H2:

- a. The relation between communal self-description and levels of impostor feelings will be moderated by the job type.
- b. The relation between agentic self-description and levels of impostor feelings will be moderated by the job type.

Furthermore, we examined the effect of discrepancies in self-ascribed and perceived ideal traits on impostor feelings.

- H3: Higher discrepancies between self-description and perceived prescriptive gender stereotypes lead to higher levels of impostor feelings.
- a. Higher discrepancies between levels of self-ascribed communion and perceived ideal levels of communion lead to higher levels of impostor feelings.
- b. Higher discrepancies between levels self-ascribed agency and perceived ideal levels of agency lead to higher levels of impostor feelings.

Next, we examined whether job-type moderated the effect of discrepancies in self-ascribed and perceived ideal agentic and communal traits on impostor feelings (see figure 1).

H4: The levels of impostor feelings caused by discrepancies in self-description and perceived prescriptive gender stereotypes is moderated through job type.

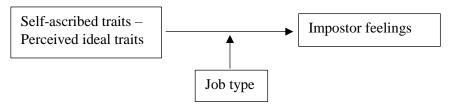


Figure 1. Relations between the variables of the fourth Hypothesis.

Methods

Participants

Participants had to be aged 18 years or older, and they had to be German native speakers. The final sample included 525 participants. 734 participants started the questionnaire with 537 (73 %) participants going on to complete the questionnaire. The dropout rate is in line with similar studies (e.g. Patzak, Kollmayer & Schober, 2017). Of the 537 participants, 12 participants were excluded because they were under the age of 18. The most important sociodemographic data is summarized in Table 1.

Table 1
Sociodemographic data of the sample

Variable	n	%
Female	253	48,2
Male	161	30,7
n.a.	111	21,1
Residence		
Austria	122	23,2
Germany	396	75,4
Other	7	1,3
Occupation ^a		
Student	75	14,29
Working	392	74,67
Pensioner	46	8,76
Other	43	8,19

Note. *N*= 525. ^aMultiple choices possible.

Procedure

The study was conducted as an online questionnaire via the online platform SoSci Survey (Leiner, 2018; see Appendix). We used a convenience sample which was gathered through a combination of a snowball-sampling, personal acquaintances, friends and family. The link to the online questionnaire was sent to the participants via personal messages or email, most of them after an initial personal contact and were asked to pass the link to the study on to other acquaintances.

On the first page of the questionnaire the participants were told that the aim of the study was to investigate self-description and description of others, in the context of a master thesis.

At the beginning of the questionnaire, we asked participants to indicate their place of residence. This question allowed us to tailor the subsequent questions to the participants respective context, e.g., Austria, Germany. First, we asked participants to describe themselves in terms of several characteristics. Then we asked the participants to describe an ideal woman and an ideal man based on the same characteristics as with the self-description. The order in which the participants were asked about ideal women or ideal men was randomized. After the questions regarding ideal women and men, questions about impostor feelings were posed.

The order of the items within each scale was randomised for each participant. In the end we asked the participants for their demographic data, such as age, gender, nationality and occupation.

On the last page the participants were informed about the constructs underlying this study, as they were gender stereotypes and the impostor phenomenon.

Material

Self-description and gender stereotypes.

For the questions about self-description and gender stereotypes we used a list of traits based on Prentice and Carranza (2002) to create the items. To simplify this questionnaire, we selected 17 intensified prescriptive and proscriptive characteristics for women and men that were most appropriate for our study. The traits used for the self-description and the description of ideal men and women included characteristics viewed as positive as well as characteristics viewed as negative.

The positively viewed communal characteristics were: warm & kind, sensitive, friendly, cheerful, polite, expresses emotion and cooperative. The negatively viewed characteristics were: controlling and arrogant.

The positively viewed agentic characteristics were: leadership ability, self-reliant, assertive, rational, competitive, business sense and willing to take risks. The negatively viewed characteristic was: emotional.

The questions and traits used for the self-description and gender stereotypes were translated into German via forward-backward translation.

Self-description.

To measure self-ascribed agency and communality, we used items based on the communal and agentic characteristics mentioned before.

The question for the self-description was "how well each of the following traits describes you" (see Appendix A3). The participants then had to rate the 17 items on a 9-point Likert scale with regards to how characteristic they are for them (1=very uncharacteristic to 9=very characteristic). The Cronbach's alpha for communal traits was .76. The Cronbach's alpha for agentic traits was .67.

Prescriptive gender stereotypes.

To measure prescriptive female gender stereotypes, we asked participants to indicate the desirability of several characteristics for an ideal woman in their society. The question was tailored to the participants indicated place of residence. The question for female gender stereotypes (ideal women) was "how desirable is it for a *woman* in *German/Austrian/your* society to possess each of these characteristics" (see Appendix A4). Participants had to rate the characteristics of the 17 items for their desirability for women on a 9-point scale (1 = very undesirable to 9 = very desirable). The Cronbach's alpha for communal traits was .80, while the Cronbach's alpha for agentic traits was .85.

The question for male gender stereotypes (ideal men) was "how desirable is it for a man in German/Austrian/your society to possess each of these characteristics" (see Appendix A5). The scale was a 9-point Likert scale from 1 (very undesirable) to 9 (very desirable). The Cronbach's alpha for communal traits was .88. The Cronbach's alpha for agentic traits was .86.

Impostor phenomenon.

To measure the impostor phenomenon, we used the 20-item German-language Clance Impostor Phenomenon Scale (GCIPS; Clance, 1988), validated by Brauer and Wolf (2016). Example items include "I can give the impression that I'm more competent than I really am." and "I'm afraid people important to me may find out that I'm not as capable as they think I am." (see Appendix A6). Participants could respond on a 5-point Likert scale (1=never to 5=always). Originally Clance (1985) aggregated the participants' response into four levels of impostor experience (few, moderate, frequent and intense), the higher the score, the higher the impostor experience. However, we did not apply the cut-off values in this study, instead the

values were treated as a metric scale in order to use the data more comprehensively. The Cronbach's alpha was .90.

Profession.

To measure the impact of profession on the impostor phenomenon, we asked the participants who indicated to be working about their profession. We aggregated the information on profession into the categories: typical female, typical male or neutral professions. The categorization was based on the newest statistics from the German Federal Employment Agency on gender distribution in occupations (Bundesagentur für Arbeit Statistik, 2018). In accordance with other studies (e.g. Hausmann & Kleinert, 2014) occupations with >70% women were rated as typically female and occupations with <30% women were rated as typically male.

Results

In the following section, we will first present the results based on the tests of the hypotheses of this study. Then, we will present additional explorative analyses.

Hypotheses Tests

The central variables were impostor feelings, self-ascribed communion (SD communion) and agency (SD agency), perceived ideal communion and agency in women, perceived ideal communion and agency in men and job type. The mean scores of the individual variables by gender are summarized in Table 2 and 3, and Figures 2 and 3. We found three outliers in the variable self-ascribed communion, which were excluded from our analyses.

Table 2

Mean values of the main variables

	Women	Men
	Mean (SD)	Mean (SD)
Impostor score	52.27 (12.05)	51.42 (11.07)
SD communion	6.70 (0.86)	6.49 (0.93)
SD agency	5.41 (1.02)	5.84 (0.90)
Communion in ideal women	7.29 (0.90)	7.12 (1.01)
Agency in ideal women	5.85 (1.34)	5.40 (1.26)
Communion in ideal men	6.67 (1.31)	6.39 (1.30)
Agency in ideal men	6.74 (1.13)	6.43 (1.21)

Notes. Women n=250, men n=161.

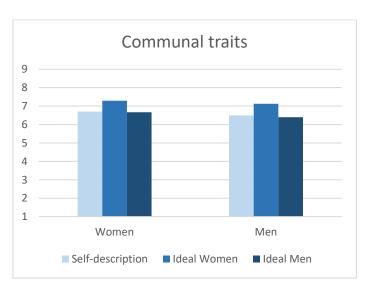


Figure 2. Mean values of communal traits across the three questions for self-ascribed traits and perceived ideal traits for women and men, separated by gender. N = 411.

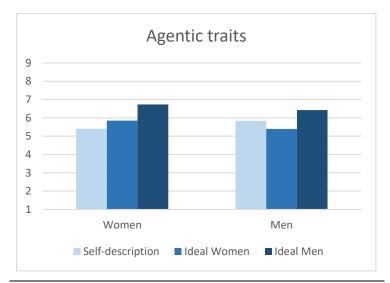


Figure 3. Mean values of agentic traits across the three questions for self-ascribed traits and perceived ideal traits for women and men, separated by gender. N = 411.

Table 3
Frequencies sex type of the job

	In total	Women	Men
Female job type	140	83	17
Male job type	127	51	50
Neutral job type	100	50	30

Notes. N=367, women n=250, men n=161.

Impact of communal self-description on impostor feelings.

To investigate whether, communal self-description had an impact on impostor feelings, we conducted a simple linear regression. The assumptions of linear regressions, normal distribution of the residuals, homoscedasticity and a lack of autocorrelations were met. Communal self-description significantly predicted impostor feelings (b = -1.36, SE = 0.57, p = .018) with an $R^2 = .01$ (F(1, 520) = 5.59, p = .018). We explored the regression by gender and found that communal self-description had an significant impact on impostor feelings in women (b = -2.42, SE = 0.88, p = .006; $R^2 = .03$, F(1, 248) = 7.60, p = .006) but not in men (b = -0.94, SE = 0.94, p = .319; $R^2 = .01$, F(1, 159) = 0.99, p = .319). In sum, our results suggest that, contrary to our hypotheses, women who reported lower communal self-description showed higher levels of impostor feelings. However, the results only explain a small part of the variance.

Impact of self-description on impostor feelings moderated by the job type.

To examine whether the effect of self-description on impostor feelings was moderated by job type, we performed two multiple regression analyses. The assumptions of multiple regressions, normal distribution residuals, homoscedasticity, a lack of autocorrelations and a lack of multicollinearity were met for both.

In the first multiple regression we calculated the extent of impostor feelings based on the self-ascribed communion and the job type. The regression was calculated in two steps. In model 1 we regressed self-ascribed communion, job type, and gender on impostor feelings. Results of the multiple linear regression indicated that there was no significant effect between self-ascribed communion, job type, gender, and impostor feelings (F(3, 197) = 1.67, p = .174,

 R^2 = .03). We examined the individual predictors further and found that self-ascribed communion (t = -1.98, p = .049) was a significant predictor in the model.

In model 2 we added the two-way interactions and the three-way interactions of these variables to the regression equation. Results of the multiple linear regression indicated that there was no significant effect between those variables (F(7, 193) = 1.53, p = .158, $R^2 = .06$). We examined the individual predictors further and found that self-ascribed communion (t = 2.99, p = .003) was a significant predictor in the model. As can be seen in Table 3, no significant effect was found for the other individual predictors.

In the second multiple regression we calculated extent of impostor feelings based on the self-ascribed agency and the job type. The regression was calculated in two steps. In model 1 we regressed self-ascribed agency, job type, and gender on impostor feelings. Results of the multiple linear regression indicated a significant effect for the overall model between self-ascribed agency, job type, gender, and impostor feelings (F(3, 197) = 5.02, p = .002, $R^2 = .07$). We examined the individual predictors further and found that self-ascribed agency (t = -3.73, p < .001) was a significant predictor in the model.

In model 2 we added the two-way interactions and the three-way interactions of these variables to the regression equation. Results of the multiple linear regression indicated a significant effect for the overall model between those variables ($F(7, 193) = 2.67, p = .012, R^2 = .09$). We examined the individual predictors further and found that self-ascribed agency (t = -3.25, p = .001) was a significant predictor in the model. As can be seen in Table 4, no significant effect was found for the other individual predictors.

In sum, even though we were able to find an effect on the variables for self-ascribed communion and agency, no effect was found with job type as a moderator.

Table 4. Multiple linear regression for self-ascribed communion, job type and impostor feelings

	Impostor Score										
-		Model	1								
	b	SE b	β	p	b	SE b	β	p			
Intercept	63.77	5.97		<.001	79.08	9.12		<.001			
SD communion	-1.74	0.88	-0.14	.049	-4.03	1.35	-0.33	.003			
Job type	-1.50	1.68	-0.07	.374	-24.13	15.34	-1.08	.117			
Gender	-0.49	1.79	-0.02	.784	-39.63	20.88	-1.67	.059			
SD communion					3.40	2.27	1.02	.136			
x job type											
SD communion					6.08	3.22	1.69	.061			
x gender											
Job type					36.79	26.80	1.42	.171			
x gender											
SD communion					-5.73	4.08	-1.47	.162			
x gender											
x job type											
R^2		.0)3			.05					

Table 5. Multiple linear regression for self-ascribed agency, job type and impostor feelings

	Impostor Score										
-		Model 1			Model 2						
	<i>b</i>	SE b	β	p	b	SE b	β	p			
Intercept	69.27	4.73		<.001	74.23	6.93		<.001			
SD agency	-3.22	0.86	-0.27	<.001	-4.19	1.29	-0.35	.001			
Job type	0.35	1.72	0.02	.838	-20.91	12.85	-0.93	.105			
Gender	-0.12	1.74	-0.01	.944	-5.88	17.41	-0.25	.736			
SD					3.75	2.21	1.01	.091			
communion x											
job type											
SD					1.29	3.16	0.32	.684			
communion x											
gender											
Job type					28.68	23.17	1.11	.217			
x gender											
SD					-5.25	4.06	-1.21	.198			
communion x											
gender											
x job type											
R^2		.07				.09					

Impact of discrepancies between self-description and prescriptive gender stereotypes on impostor feelings.

To test for the impact of discrepancies between the self-description and perceived prescriptive stereotypes on impostor feelings, four simple linear regressions were conducted. First, four new variables were calculated to investigate the discrepancies. For this purpose, the means of the communal and agentic traits in the self-description were subtracted from the means of the communal and agentic traits for ideal women and ideal men, which resulted in four variables of positive as well as negative values. Because only absolute differences were

important, the negative values were multiplied by -1. The regressions were then conducted separately based on gender, to compare for example only women with ideal women. The assumptions of a linear regression normal distribution, residuals, homoscedasticity and no autocorrelation were met.

First, we regressed the difference between communal traits in self-description and ideal women among women on impostor feelings. The results indicated a significant impact on impostor feelings (b = 2.79, SE = 0.97, p = .004 $R^2 = .03$, F(1, 247) = 8.28, p = .004).

In our second regression we regressed the difference between communal traits in self-description and ideal men among men on impostor feelings. The results indicated a significant impact on impostor feelings (b = 2.07, SE = 0.98, p = .037; $R^2 = .03$, F(1, 159) = 4.41, p = .037).

In our third regression we regressed the difference between agentic traits in self-description and ideal women among women on impostor feelings. The results indicated a significant impact on impostor feelings (b = 1.99, SE = 0.84, p = .018; $R^2 = .02$, F(1, 247) = 5.66, p = .018).

In our fourth regression we regressed the difference between agentic traits in self-description and ideal men among men on impostor feelings. The results indicated a significant impact on impostor feelings (b = 2.17, SE = 0.99, p = .029; $R^2 = .03$, F(1, 159) = 4.84, p = .029).

In summary our results indicate that the higher the reported discrepancy the higher the level of impostor feelings.

Impact of discrepancies between self-description and prescriptive gender stereotypes on impostor feelings moderated by job type.

To predict the extent of impostor feelings based on the differences between self-ascribed and ideal traits, and the job type, we performed four multiple regression analyses. The assumptions of multiple regressions, normal distribution residuals, homoscedasticity, a lack of autocorrelations and a lack of multicollinearity were met for all four.

In the first multiple regression we calculated the extent of impostor feelings based on the differences between self-ascribed communion and ideal communion for women and the job type. The regression was calculated in two steps. In model 1 we regressed differences in communion, job type, and gender on impostor feelings. Results of the multiple linear regression indicated that there was no significant effect between self-ascribed communion, job type, gender, and impostor feelings (F(3, 197) = 1.07, p = .361, $R^2 = .02$).

In model 2 we added the two-way interactions and the three-way interactions of these variables to the regression equation. Results of the multiple linear regression indicated that there was no significant effect between those variables (F(7, 193) = 0.55, p = .793, $R^2 = .02$). As can be seen in Table 5 no significant effect was found for the individual predictors.

In the second multiple regression we calculated the extent of impostor feelings based on the differences between self-ascribed communion and ideal communion for men and the job type. The regression was calculated in two steps. In model 1 we regressed differences in communion, job type, and gender on impostor feelings. Results of the multiple linear regression indicated that there was no significant effect between self-ascribed communion, job type, gender, and impostor feelings (F(3, 197) = 0.65, p = .586, $R^2 = .01$).

In model 2 we added the two-way interactions and the three-way interactions of these variables to the regression equation. Results of the multiple linear regression indicated that there was no significant effect between those variables $(F(7, 193) = 0.96, p = .466, R^2 = .03)$. As can be seen in Table 6 no significant effect was found for the individual predictors.

In the third multiple regression we calculated the extent of impostor feelings based on the differences between self-ascribed agency and ideal agency for women and the job type. The regression was calculated in two steps. In model 1 we regressed differences in agency, job type, and gender on impostor feelings. Results of the multiple linear regression indicated there was no significant effect for the overall model between differences in agency, job type, gender, and impostor feelings (F(3, 197) = 1.34, p = .264, $R^2 = .02$).

In model 2 we added the two-way interactions and the three-way interactions of these variables to the regression equation. Results of the multiple linear regression indicated that there was no significant effect for the overall model between those variables (F(7, 193) = 0.85, p = .545, $R^2 = .03$). As can be seen in Table 7 no significant effect was found for the individual predictors.

In the fourth multiple regression we calculated the extent of impostor feelings based on the differences between self-ascribed agency and ideal agency for men and the job type. The regression was calculated in two steps. In model 1 we regressed differences in agency, job type, and gender on impostor feelings. Results of the multiple linear regression indicated there was no significant effect for the overall model between differences in agency, job type, gender, and impostor feelings (F(3, 197) = 1.36, p = .257, $R^2 = .02$).

In model 2 we added the two-way interactions and the three-way interactions of these variables to the regression equation. Results of the multiple linear regression indicated that

there was no significant effect for the overall model between those variables (F(7, 193) = 0.99, p = .440, $R^2 = .04$). As can be seen in Table 8 no significant effect was found for the individual predictors as well.

In sum, we could not find any effect of differences between self-ascribed and ideal traits on impostor feeling with the job type as a moderator variable.

Table 6. Multiple linear regression for the difference between self-ascribed communion and communion in prescriptive stereotypes for women, job type and impostor feelings

	Impostor Score								
		Model	1			Model 2			
	b	SE b	β	p	b $\overline{}$	SE b	β	p	
Intercept	50.84	1.47		<.001	50.61	2.09		<.001	
Difference self-	1.56	1.07	0.10	.145	1.62	1.88	0.11	.391	
description and ideal									
women in communion									
Job type	-1.83	1.70	-0.08	.281	-1.65	3.07	-0.07	.592	
Gender	-0.13	1.79	-0.01	.941	3.35	4.90	0.14	.495	
Job type					-3.89	6.08	-0.15	.523	
x gender									
Difference self-					0.31	2.58	0.02	.904	
description and ideal									
women in communion									
x job type									
Difference self-					-4.22	6.34	-0.23	.507	
description and ideal									
women in communion									
x gender									
Difference self-					3.99	6.92	0.21	.565	
description and ideal									
women in communion									
x gender									
x job type									
R^2		.02				.02			

Table 7. Multiple linear regression for the difference between self-ascribed communion and communion in prescriptive stereotypes for men, job type and impostor feelings

_				Impo	ostor Score			
		Model 1				Model	2	
	b	SE b	β	p	b	SE b	β	p
Intercept	51.30	1.52		<.001	50.23	2.13		<.001
Difference self-								
description and ideal	0.77	0.91	0.06	.398	1.73	1.64	0.14	.292
men in communion								
Job type	-1.83	1.70	-0.08	.285	1.98	3.24	0.09	.543
Gender	0.09	1.80	0.01	.962	-4.25	5.08	-0.18	.404
Job type					1.21	6.11	0.05	.844
x gender					1.21	0.11	0.03	.044
Difference self-								
description and ideal					-3.20	2.27	-0.25	.162
men in communion					-3.20	2.21	-0.23	.102
x job type								
Difference self-						3.92		
description and ideal					4.49	3.92	0.29	.253
men in communion					4.49		0.29	.233
x gender								
Difference self-								.667
description and ideal								.007
men in communion					-1.96	4.55	0.11	
x gender								
x job type								
R^2		.01				.03		

Table 8. Multiple linear regression for the difference between self-ascribed agency and agency in prescriptive stereotypes for women, job type and impostor feelings

-	Impostor Score							
-		Mode	1 1	Model 2				
	b	SE b	β	p	b	SE b	β	p
Intercept	50.34	1.57		<.001	49.89	1.98		<.001
Difference self-description	1 44	0.94	0.12	000	1 71	1 22	0.14	160
and ideal women in agency	1.44	0.84	0.12	.089	1.71	1.22	0.14	.162
Job type	-1.49	1.69	-0.07	.379	-1.99	3.41	-0.09	.561
Gender	-0.03	1.79	-0.01	.986	-1.53	4.92	-0.07	.756
Job type					4.29	6.16	0.17	.487
x gender					4.29	0.10	0.17	.467
Difference self-description								
and ideal women in agency					0.70	2.31	0.05	.762
x job type								
Difference self-description								
and ideal women in agency					1.93	3.39	0.13	.571
x gender								
Difference self-description								
and ideal women in agency					-4.70	4.26	-0.29	.272
x gender					-4.70	4.20	-0.29	.212
x job type								
R^2		.01				.03		

Table 9. Multiple linear regression for the difference between self-ascribed agency and agency in prescriptive stereotypes for men, job type and impostor feelings

		Impostor Score								
		Model				Model				
		1				2				
	b	SE b	β	p	b	SE b	- β	p		
Intercept	50.14	1.65		<.001	50.40	1.88		<.001		
Difference self-										
description and ideal	1.40	0.81	0.12	.086	1.15	0.99	0.10	.416		
men in agency										
Job type	-1.16	1.70	-0.05	.498	-1.62	2.62	-0.07	.556		
Gender	-0.21	1.79	-0.01	.907	-5.03	4.88	-0.21	.290		
Job type					c 40	5.76	0.25	255		
x gender					6.49	5.76	0.25	.255		
Difference self-										
description and ideal					0.54	1 27	0.04	700		
men in agency					0.54	1.37	0.04	.708		
x job type										
Difference self-										
description and ideal					2.62	2.61	0.26	150		
men in agency					3.63	2.61	0.26	.159		
x gender										
Difference self-										
description and ideal										
men in agency					-5.29	3.19	-0.31	.120		
x gender										
x job type										
R^2		.02				.04				

Explorative Tests

Agentic Self-description and Impostor feelings.

We conducted a simple linear regression to explore the impact of agentic self-description on impostor feelings, in reference to the analyzed relationship between communal self-description and impostor feelings. The assumptions of a linear regression, normal distribution of the residuals, homoscedasticity and a lack of autocorrelations were met. Agentic self-description was found to significantly predict impostor feelings (b= -2.84, SE=0.50, p<.001) with an R²=.06 (F(1,520)=32.04, p<.001). Conducting the calculation separately for women and men showed a significant impact of agentic self-description for women (b=-2.99, SE=0.73, p<.001; R²=.06, F(1,248)=16.95, p<.001) and for men (b=-4.54, SE=0.91, p<.001; R²=.14, F(1,159)=24.96, p<.001). The less agentic the self-description was, the higher the levels of impostor feelings were. This effect seems much stronger in men than in women.

Gender and Impostor feelings.

Since the topic was often addressed in the past, a Pearson correlation was conducted to investigate the relationship between gender and impostor feelings. No significant correlation was found (r=-.03, p=.470).

Discussion

The goals of this study were to investigate whether (a) self-ascribed communion and agency and (b) discrepancies between self-ascribed and perceived ideal communion and self-ascribed and perceived ideal agency had an impact on the experienced levels of impostor feelings. We also investigated whether (c) these relationships were moderated by female, male or neutral job type.

Surprisingly, self-ascribed communion had a negative relationship with impostor feelings; individuals with lower self-ascribed communion experienced higher levels of impostor feelings. Explorative analyses showed that this was the case for women but not for men. These results were inconsistent with previous theorizing. Clance and Imes (1978) suggested that individuals, and especially men, which were more feminine, i.e. more communal tend to have higher levels of impostor feelings. Patzak, Kollmayer and Schober (2017) also found higher levels of impostor feelings in feminine individuals, than in masculine or androgynous individuals, regardless their gender.

An explanation could be, that based on the perceived prescriptive stereotypes women are expected to have higher levels of communion. If they describe themselves as less communal, there is a discrepancy, which in turn leads to higher levels of impostor feelings.

Additional to our analyses about the impact of self-ascribed communion on impostor feelings, we wanted to explore the impact of self-ascribed agency on impostor feelings. Our results showed that individuals with lower self-ascribed agency likewise experienced higher levels of impostor feelings, this was the case in women as well as in men. Our findings showed, that women and men described themselves as less agentic than they perceived ideal for them.

The findings that a less agentic self-description leads to higher levels of impostor feelings also may be explained by Hofstede's cultural dimensions (Hofstede, Hofstede & Minkov, 2010). One of the dimensions is masculinity, which indicates the values a country is driven by. Higher scores in masculinity mean, that agentic traits are more important in a country. Austria, as well as Germany both received higher scores in masculinity compared to the United States of America (Hofstede et al., 2010). Accordingly, low levels in agency are in discrepancy with the overall highly esteemed value of agentic traits in German and Austrian society. One consequence of this could be that individual levels of agency don't match the agentic values of these societies anymore, which may promote self-doubt in the individuals.

Moreover, more and more women have become employed (Achatz, 2008), which explains changes in women's roles and an increasing gender similarity in agentic traits and therefore, in line with the *Social Role Theory* (Eagly, 1987), might have led to changes in descriptive stereotypes. This could also be an explanation why men as well as women are more conscious of discrepancies if they describe themselves as less agentic, and therefore experience higher levels of impostor feelings.

Consistent with the previous argument the results showed that both, discrepancies in self-ascribed communion and perceived ideal communion as well as discrepancies in self-ascribed agency and perceived ideal agency, led to higher levels of impostor feelings in women and men. This is consistent with our assumption that stereotypes impact impostor feelings.

Overall, job type – male-typed, female-typed, or neutral – did not play a role in the experience of impostor feelings.

In contrast to our expectations and prior research (Harvey & Katz, 1985) we could not find any interactions between self-ascribed communal and agentic traits and impostor

feelings, or between discrepancies in self-description and gender stereotypes, and impostor feelings, with the job type as a moderator variable in our calculations.

This could be due to a number of different reasons. It could be that job type did not have enough statistical power in our study, because some of the subsample groups in the job type were quite small.

It is also possible that there are more variables important in the relationship regarding impostor feelings, since there are other work-related variables correlating with the impostor phenomenon as job satisfaction and career satisfaction (Neureiter & Traut-Mattausch, 2016b).

There could be also other constructs underlying the job type, which might play a role. For example, it is possible that the masculinity contest plays a role. Glick, Berdahl and Alonso (2018) showed that individuals, which indicated their workplace rates high on masculinity contests, reported lower well-being and lower job-satisfaction. These are in turn related to the impostor phenomenon (Neureiter & Traut-Mattausch, 2016b; September, McCarrey, Baranowsky, Parent, & Schindler, 2001).

While we controlled for the covariates of gender and age in our study, there might nevertheless be more covariates influencing the relationship between self-description in agency and communion traits, prescriptive gender stereotypes and impostor feelings. Patzak et al. (2017) for example found self-compassion as a mediator in the relationship between gender role orientation and the impostor phenomenon.

Limitations

The present study has several limitations. Data collected from a convenience sample have some limitations, such as that generalizations beyond the sample are almost impossible, primarily due to the lack of independent sampling units, as well as the lack of controlled variability (Acharya, Prakash, Saxena, & Nigam, 2013). For example, we gathered data from a relatively large subsample of librarians., with German university libraries especially paying attention to gender stereotypes and its influences. The Hannover Technical Information Library for example won repeated prizes for their gender equality (Technische Informationsbibliothek, 2016). Therefore, even though librarian is still a female typed job, there might be less influences from gender stereotypes.

Furthermore, most participants worked in gender-typical jobs. Despite the large sample there were only 17 (10.6%) male participants working in professions dominated by women. Thus, resulting cells for individuals working in gender atypical jobs were rather small and had low test power.

A representative randomized sample would be important. For our research a sample which is evenly distributed between the job types would be particularly advantageous, in order to achieve better comparability and should therefore be strived for in further research.

From the final sample of 525 participants a total of 111 (21,1%) did not indicate their gender, and thus could not be included in most of our analysis. This could be due to the open question format of the question assessing gender even though the approach seems to be an appropriate way of asking with regards to the discourse about how to ask for participants gender (e.g, American Psychological Association, 2016).

Despite the thorough forward-backward translation, some of the participants indicated that the questions for the prescriptive gender stereotypes were somehow unclear for them. More precisely, they were not sure if it asked for their personal opinion of women and men or for the general opinion of their society. This could be a reason for smaller effects in calculations with the prescriptive stereotypes as a variable.

Conclusion

In the present study, self-ascribed communal and agentic traits as well as discrepancies in self-ascribed traits and perceived ideals enhance impostor feelings. Generally, this indicated that gender stereotypes have an impact on the impostor phenomenon.

In sum, this raises the question of whether discrepancies in self-descriptions and perceived ideal traits and values, could not only lead to higher impostor feelings but could impact other aspects of the work life and employee's well-being in further consequence, such as organizational citizenship behavior and career paths (Neureiter & Traut-Mattausch, 2016a, 2016b, 2016c). As such, the way organizations handle gender stereotypes could have farreaching consequences on the development of a company.

Future Research

Further research could investigate if there are any differences between different kinds of professions, such as creative jobs or jobs in administration, since Harvey and Katz (1985) suggested the impostor phenomenon could be more intense in creative jobs. It would also be conceivable to compare the occupational groups of students, working people and pensioners. So far, most research only focused on students, or workings individuals, while pensioners were seemingly ignored (e.g., Clance & Imes, 1978; Neureiter & Traut-Mattausch, 2016a; Patzak et al., 2017). It would be interesting to look at those occupational groups and their relationship with gender stereotypes and impostor feelings.

In our study we showed the influence of discrepancies in self-descriptions and perceived prescriptive gender stereotypes on the impostor phenomenon. Further research should investigate other possible influences of these discrepancies on individuals and how they could affect individuals' lives. A basis for this could be the study of Zehnter et al. (2018) which found changes in likability of leaders along with differences in descriptive and prescriptive gender stereotypes.

All in all, there is still a lot of potential for further research in this field.

References

- Acharya, A. S., Prakash, A., Saxena, P., & Nigam, A. (2013). Sampling: why and how of it? *Indian Journal of Medical Specialities*, 4(2). doi:10.7713/ijms.2013.0032
- Achatz, J. (2008). Die Integration von Frauen in Arbeitsmärkten und Organisationen. In S. M. Wilz (Eds.), Geschlechterdifferenzen Geschlechterdifferenzierungen: Ein Überblick über gesellschaftliche Entwicklungen und theoretische Positionen (p. 105–138). doi:10.1007/978-3-531-90831-1_4
- American Psychological Association. (2016). *Resolution on Data about Sexual Orientation and Gender Identity*. Retrieved from: http://www.apa.org/about/policy/data-sexual-orientation.aspx
- Bernard, N. S., Dollinger, S. J., & Ramaniah, N. V. (2002). Applying the Big Five Personality Factors to the Impostor Phenomenon. *Journal of Personality Assessment*, 78(2), 321–333. doi:10.1207/S15327752JPA7802_07
- Brauer, K., & Wolf, A. (2016). Validation of the German-language Clance Impostor Phenomenon Scale (GCIPS). *Personality and Individual Differences*. *102*, 153–158.
- Bundesagentur für Arbeit Statistik. (2018). Beschäftigte nach Berufen (KldB 2010)

 (Quartalszahlen). Retrieved from

 https://statistik.arbeitsagentur.de/nn_31966/SiteGlobals/Forms/Rubrikensuche/Rubrikensuche

 _Form.html?view=processForm&pageLocale=de&topicId=746716
- Clance, P. R. (1985). *The Impostor Phenomenon: Overcoming the fear that haunts your success*. Atanta, GA, USA: Peachtree.
- Clance, P. R. (1988). *Erfolgreiche Versager. Das Hochstapler-Phänomen*. Munich, Germany: Heyne.
- Clance, P. R., Dingman, D., Reviere, S. L., & Stober, D. R. (1995). Impostor phenomenon in an interpersonal/social context: Origins and treatment. *Women & Therapy; London*, *16*(4), 79-96.
- Clance, P. R., & Imes, S. A. (1978). The imposter phenomenon in high achieving women:

 Dynamics and therapeutic intervention. *Psychotherapy: Theory, Research & Practice*, 15(3), 241–247. doi:10.1037/h0086006
- Dickhauser, O., & Meyer, W. (2006). Gender differences in young children's math ability attributions. *Psychology Science*, 48(1), 3-16.

- Dodson, T. A., & Borders, L. A. (2006). Men in Traditional and Nontraditional Careers: Gender Role Attitudes, Gender Role Conflict, and Job Satisfaction. *The Career Development Quarterly*, 54(4), 283–296. doi:10.1002/j.2161-0045.2006.tb00194.x
- Eagly, A. H. (1987). Sex differences in social behavior: a social-role interpretation. Hillsdale, NJ, USA: Erlbaum.
- Ferrari, J. R., & Thompson, T. (2006). Impostor fears: Links with self-presentational concerns and self-handicapping behaviours. *Personality and Individual Differences*, 40(2), 341–352. doi:10.1016/j.paid.2005.07.012
- Festinger, L. (1978). *Theorie der kognitiven Dissonanz* (M. Irle & V. Möntmann, Eds.). Bern, Switzerland: Verlag Hans Huber.
- Fried-Buchalter, S. (1997). Fear of success, fear of failure, and the imposter phenomenon among male and female marketing managers. *Sex Roles*, *37*(11–12), 847–859. doi:10.1007/BF02936343
- Gelitz, C. (2018, August 15). Leistungsbereitschaft: So wirkt sich das Impostor-Syndrom aus. *Spektrum*. Retrieved from https://www.spektrum.de/news/so-wirkt-sich-das-impostor-syndrom-aus/1585174
- Glick, P., Berdahl, J. L., & Alonso, N. M. (2018). Development and Validation of the Masculinity Contest Culture Scale. *Journal of Social Issues*, 74(3), 449–476. doi:10.1111/josi.12280
- Güngör, D. (2018, July 16). Warten auf den Moment, in dem es auffliegt. Zeit. Retrieved from https://www.zeit.de/kultur/2018-07/hochstapler-syndrom-gesellschaftliche-minderheiten-psychologie
- Harvey, J. C., & Katz, C. (1985). *If I'm so successful, why do I feel like a fake? The Impostor Phenomenon*. New York, NY, USA: St. Martin's Press.
- Hausmann, A.-C., & Kleinert, C. (2014). *Berufliche Segregation auf dem Arbeitsmarkt: Männer-und Frauendomänen kaum verändert*. Retrieved from: https://www.econstor.eu/handle/10419/158430
- Heilman, M. E. (1983). Sex bias in work settings: The Lack of Fit model. *Research in Organizational Behavior*, *5*, 269–298.

- Heilman, M. E. (2001). Description and Prescription: How Gender Stereotypes Prevent Women's Ascent Up the Organizational Ladder. *Journal of Social Issues*, *57*(4), 657–674. doi:10.1111/0022-4537.00234
- Heilman, M. E. (2012). Gender stereotypes and workplace bias. *Research in Organizational Behavior*, *32*, 113–135. doi:10.1016/j.riob.2012.11.003
- Heilman, M. E., Wallen, A. S., Fuchs, D., & Tamkins, M. M. (2004). Penalties for Success: Reactions to Women Who Succeed at Male Gender-Typed Tasks. *Journal of Applied Psychology*, 89(3), 416–427. doi:10.1037/0021-9010.89.3.416
- Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and organizations: software of the mind: intercultural cooperation and its importance for survival*. New York, NY, USA: McGraw-Hill.
- Holzki, L. (2018, July 20). Bis einer merkt, dass Sie nur Glück hatten. *Süddeutsche Zeitung*. Retrieved from https://www.sueddeutsche.de/karriere/hochstapler-syndrom-bis-einer-merkt-dass-sie-nur-glueck-hatten-1.3899098
- Klinkhammer. (2009). Das Hochstaplersyndrom in der Wissenschaft. *Organisationsberatung, Supervision, Coaching, 16*(2), 165–182.
- Leiner, D. J. (2018). SoSci Survey (Version 2.5.00). Retrieved from https://www.soscisurvey.de
- Lester, D., & Moderski, T. (1995). The Impostor Phenomenon in Adolescents. *Psychological Reports*, 76(2), 466–466. doi:10.2466/pr0.1995.76.2.466
- Magnet, S. (2018). *Und was, wenn alle merken, dass ich gar nichts kann? Über die Angst, nicht gut genug zu sein.* München, Germany: mvg Verlag.
- Mount, P., & Tardnico, S. (2018). Das Hochstapler Syndrom überwinden. n. p.: CCL Press.
- Neureiter, M., & Traut-Mattausch, E. (2016a). An inner barrier to career development:

 Preconditions of the impostor phenomenon and consequences for career development.

 Frontiers in Psychology, 7:48. doi:10.3389/fpsyg.2016.00048
- Neureiter, M., & Traut-Mattausch, E. (2016b). Inspecting the dangers of feeling like a fake: An empirical investigation of the impostor phenomenon in the world of work. *Frontiers in Psychology*, 7:1445. doi:10.3389/fpsyg.2016.01445

- Neureiter, M., & Traut-Mattausch, E. (2016c). Two sides of the career resources coin: Career adaptability resources and the impostor phenomenon. *Journal of vocational behavior*, 98, 56-69.
- Patzak, A., Kollmayer, M., & Schober, B. (2017). Buffering Impostor Feelings with Kindness: The Mediating Role of Self-compassion between Gender-Role Orientation and the Impostor Phenomenon. *Frontiers in Psychology*, 8:1289. doi:10.3389/fpsyg.2017.01289
- Prentice, D. A., & Carranza, E. (2002). What Women and Men Should Be, Shouldn't be, are Allowed to be, and don't Have to Be: The Contents of Prescriptive Gender Stereotypes. *Psychology of Women Quarterly*, 26(4), 269–281. doi:10.1111/1471-6402.t01-1-00066
- Raspopovic, M. (2015). The connection between perfectionism and anxiety in university students. *SANAMED*, *10*(3), 199–203. doi:10.5937/sanamed1503199R
- Rohrmann, S. (2018). Wenn große Leistungen zu großen Selbstzweifeln führen: Das Hochstapler–Selbstkonzept und seine Auswirkungen (1. Aufl.). Bern, Switzerland: Hogrefe AG.
- Rohrmann, S., Bechtoldt, M. N., & Leonhardt, M. (2016). Validation of the Impostor Phenomenon among Managers. *Frontiers in Psychology*, 7:821. doi:10.3389/fpsyg.2016.00821
- Rudman, L. A., & Fairchild, K. (2004). Reactions to Counterstereotypic Behavior: The Role of Backlash in Cultural Stereotype Maintenance. *Journal of Personality and Social Psychology*, 87(2), 157–176. doi:10.1037/0022-3514.87.2.157
- September, A. N., McCarrey, M., Baranowsky, A., Parent, C., & Schindler, D. (2001). The Relation Between Well-Being, Impostor Feelings, and Gender Role Orientation Among Canadian University Students. *The Journal of Social Psychology*, *141*(2), 218–232. doi:10.1080/00224540109600548
- Technische Informationsbibliothek. (2016). Jahresbericht 2016 Zahlen, Daten, Fakten aus der TIB. Retrieved from https://www.tib.eu/fileadmin/Daten/presse/dokumente/tib-jahresbericht-2016.pdf
- Weisberg, Y. J., DeYoung, C. G., & Hirsh, J. B. (2011). Gender Differences in Personality across the Ten Aspects of the Big Five. Frontiers in Psychology, 2:178. doi:10.3389/fpsyg.2011.00178

Zehnter, M. K., Olsen, J., & Kirchler, E. (2018). Obituaries of Female and Male Leaders From 1974 to 2016 Suggest Change in Descriptive but Stability of Prescriptive Gender Stereotypes. *Frontiers in Psychology*, 9:2286. doi:10.3389/fpsyg.2018.02286

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Appendix

Online Questionnaire

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Sehr geehrte Damen und Herren,

vielen Dank, dass Sie bereit sind, an dieser Studie teilzunehmen.

In der Studie geht es um die Selbst- und Fremdbeschreibung von Menschen. Diese Studie wird im Rahmen meiner Masterarbeit an der Universität Wien durchgeführt.

Der Fragebogen wird in etwa 5-10 Minuten Ihrer Zeit in Anspruch nehmen.

Selbstverständlich werden alle Angaben, die Sie machen, streng **vertraulich** behandelt und **anonym** ausgewertet. Die gewonnenen Daten dienen ausschließlich wissenschaftlichen Zwecken. Natürlich können Sie die Studie jederzeit ohne Angabe von Gründen abbrechen.

Durch das Klicken auf "Weiter" bestätigen Sie, dass Sie die vorliegende Information gelesen und verstanden haben. Sie erklären sich mit der Teilnahme an dieser Studie und der Analyse der Daten (ausschließlich wie oben angeführt) einverstanden.

Sollten Sie den Fragebogen an Ihrem Smartphone ausfüllen, verwenden Sie bitte das Querformat.

Weiter

Figure A1. Introduction.

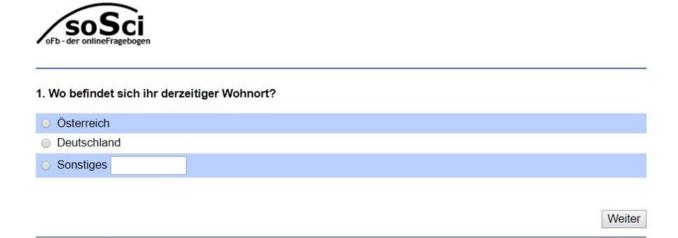


Figure A2. Place of residence.



2. Bitte geben Sie an, wie gut die folgenden Merkmale Sie beschreiben.

Es ist wichtig, dass Sie spontan und ohne lange nachzudenken antworten. Es gibt keine richtigen oder falschen Antworten, da es um Ihre persönlichen Einschätzungen geht.

	gar nic charakteri	ht stisch	1					char	sehr akteristisch
	1	2	3	4	5	6	7	8	9
warmherzig	0	0	0	0	0	0	0	0	0
wetteifernd						0			
kontrollierend	0	0	0	0	0	0	0	0	0
freundlich				0				0	
geduldig	0	0	0	0	0	0	0	0	0
einfühlsam	0								
bereit Risiken einzugehen	0	0	0	0	0	0	0	0	0
emotional							0		
höflich	0	0	0	0	0	0	0	0	0
fröhlich		0							
Führungsfähigkeit	0	0	0	0	0	0	0	0	0
arrogant									0
kooperativ	0	0	0	0	0	0	0	0	0
selbstständig			0		0		0		0
Geschäftssinn	0	0	0	0	0	0	0	0	0
durchsetzungsfähig		0				0	0		
rational	0	0	0	0	0	0	0	0	0
									Weiter

Figure A3. Self-description.



3. Bitte geben Sie an, wie wünschenswert die folgenden Eigenschaften für eine Frau in der österreichischen Gesellschaft sind.

Es ist wichtig, dass Sie spontan und ohne lange nachzudenken antworten.

	gar nici wünschen:							wū	sehr nschenswert
	1	2	3	4	5	6	7	8	9
warmherzig	0	0	0	0	0	0	0	0	0
freundlich									
wetteifernd	0	0	0	0	0	0	0	0	0
fröhlich									
emotional	0	0	0	0	0	0	0	0	0
risikofreudig									
rational	0	0	0	0	0	0	0	0	0
höflich									
selbstständig	0	0	0	0	0	0	0	0	0
Führungsfähigkeit								0	
kooperativ	0	0	0	0	0	0	0	0	0
durchsetzungsfähig				0					
Geschäftssinn	0	0	0	0	0	0	0	0	0
geduldig						0			
einfühlsam	0	0	0	0	0	0	0	0	0
arrogant						0			
kontrollierend	0	0	0	0	0	0	0	0	0

Weiter

Figure A4. Perceived prescriptive gender stereotypes for women in Austria.

Weiter



4. Bitte geben Sie an, wie wünschenswert die folgenden Eigenschaften für einen Mann in der österreichischen Gesellschaft sind.

Es ist wichtig, dass Sie spontan und ohne lange nachzudenken antworten.

	gar nic wünscher	cht nswert						wü	sehr nschenswert
	1	2	3	4	5	6	7	8	9
selbstständig	0	0	0	0	0	0	0	0	0
geduldig			0		0	0	0		
durchsetzungsfähig	0	0	0	0	0	0	0	0	0
kontrollierend									
fröhlich	0	0	0	0	0	0	0	0	0
rational	0			0		0		0	
einfühlsam	0	0	0	0	0	0	0	0	0
höflich	0								
arrogant	0	0	0	0	0	0	0	0	0
freundlich									
risikofreudig	0	0	0	0	0	0	0	0	0
wetteifernd	0					0			
Geschäftssinn	0	0	0	0	0	0	0	0	0
kooperativ					0		0		
emotional	0	0	0	0	0	0	0	0	0
Führungsfähigkeit				0		0			
warmherzig	0	0	0	0	0	0	0	0	0

Figure A5. Perceived prescriptive gender stereotypes for men in Austria.

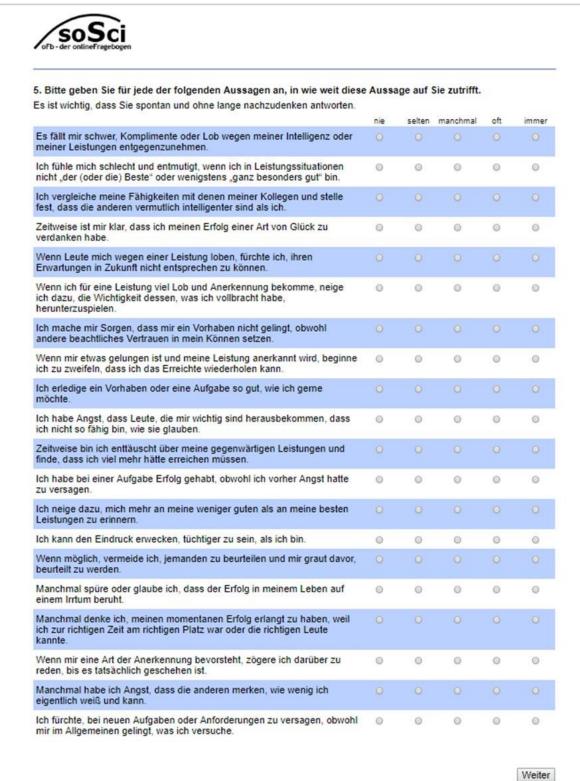


Figure A6. Impostor phenomenon, German-language Clance Impostor Phenomenon Scale.

i. Wie alt sind Sie?	
ch bin Jahre alt	
. Welches Geschlecht haben Sie?	
<i>h</i>	
Welcher Nationalität gehören Sie an? Österreich	
C Deute abland	
Deutschland Sonstiges	
○ Sonstiges	
Sonstiges . Welcher Tätigkeit gehen Sie derzeit nach?	

Figure A7. Demographic data.



Figure A8. Profession.



Figure A9. Comment section.



Vielen Dank für Ihre Teilnahme!

Ich möchte mich herzlich bei Ihnen für Ihre Teilnahme bedanken!

In dieser Studie werden die Zusammenhänge zwischen Selbstbeschreibungen, Geschlechterstereotypen und der Bewertung der eigenen Leistung im Kontext des Impostor Phänomens untersucht.

Sollten Sie Fragen zu der Studie haben, kontaktieren Sie mich bitte unter a1202203@unet.univie.ac.at

Ihre Antworten wurden gespeichert, Sie können das Browser-Fenster nun schließen.

Figure A10. Final page: Elucidation regarding the experiment.