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Guilt over success, impostor phenomenon, and self-sabotaging behaviors

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Abstract
Impostor phenomenon refers to the psychological feeling of intellectual phoniness. It can favor failures and support a scarce perception of one's own competence in order to protect social relations. The aim of this study was to investigate, with a longitudinal design, the contribution of fear of success and guilt over success in the experience of impostor phenomenon and its connections to maladaptive behaviors, such as submission and self-handicapping tendency. We assumed that impostor phenomenon would mediate the relationship between fear of success, guilt over success, and distress related to it, on one hand, and self-handicapping and submissive behavior on the other. Moreover, several personality variables were tested as potential predictors and protection factors against impostor phenomenon. As expected, we found a positive relationship between fear of success, guilt over success, and impostor phenomenon, and a positive relationship between impostor phenomenon and a tendency toward submitting and self-handicapping. Our findings suggest that the tendency to experience guilt and distress about success and the preoccupation with the impact of one's own success on our important relationship predicted, both directly and with the mediation of impostor phenomenon, the tendency to submit and self-handicap.

Keywords Impostor phenomenon · Interpersonal guilt · Fear of success · Sociotropy

Introduction

Impostor phenomenon, described for the first time by Clance (1985), refers to the internal experience of intellectual phoniness. It has been attested in women and men within different professional settings and in different ethnic groups (Bravata et al., 2020). Several studies show its relationship with perfectionism (see Pannhausen et al., 2022), an excessive fear of making mistakes, and less satisfaction regarding performance (Thompson et al., 2000).

Despite the fear of being negatively evaluated (Chrisman et al., 1995), people who experience impostor feelings tend to assume self-devaluing behaviors. It has been suggested that these behaviors may reflect interpersonal strategies of self-presentation as a way to appear more modest and to keep others' expectations low (see Leonhardt et al., 2017). Several studies show that impostor phenomenon correlates with depression (Bernard et al., 2002), low self-esteem (see Schubert & Bowker, 2019), and anxiety (Leonhardt et al., 2017), and it predicts lower work satisfaction (Hutchins et al., 2018), lower career planning, and a low motivation to assume leadership roles (Neureiter & Traut-Mattausch, 2016).

Predictors and protection factors of impostor phenomenon

Findings from Ross et al. (2001) show that impostor phenomenon is best predicted by *fear of failure*, while other studies stress also the role of *guilt over being successful* (Neureiter and Traut-Mattausch, 2016). Research in social psychology has demonstrated that superior status can potentially be both desirable and undesirable (see Parrott & Rodriguez Mosquera, 2008), especially if people think that their higher status can damage relationships with others (White et al., 2002).

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Control-Mastery Theory (CMT; Gazzillo, 2021; Silberschatz, 2005; Weiss, 1993; Weiss et al., 1986), an integrative and relational cognitive-dynamic theory of mental functioning, psychopathology, and psychotherapeutic process, conceptualizes *survivor guilt*, a negative feeling that people experience when they believe they have something more (or are somehow better) than their significant others, as if this would mean to hurt the other or humiliate him (Fimiani et al., 2021a). Therefore, like "impostors," they feel that they do not deserve the things they have and that they have no right to enjoy them. Similar to "impostors," they may avoid any attempts at self-enhancement, may engage in self-destructive behaviors in order to punish themselves, and may adopt self-lowering strategies (Fimiani et al., 2021b, p. 34).

Moreover, Control-Mastery Theory conceptualizes a *self-hate* that stems from the idea that one is inherently wrong, bad, and inadequate (Gazzillo, 2021). For people suffering from self-hate, success may be felt as something they simply do not deserve. They may develop the idea that they have achieved something only because they fooled other people, and that sooner or later they will be discovered. One study found that people with a higher presence of impostor phenomenon also showed higher scores for self-hate and survivor guilt as well as higher depression and anxiety scores (Fimiani et al., 2021b).

Empathy represents a fundamental ingredient of guilt (Hoffman, 2001), and recent studies (e.g., Faccini et al., 2020) have found positive correlations between survivor guilt and empathy. Moreover, several studies have indicated that people with high sociotropy (an excessive preoccupation with pleasing others; see Robins et al., 1994) experience a higher preoccupation with the negative responses of those they outperform and higher distress in those situations, and they are more likely to carry out behaviors aimed at placating those they believe are hurt by their success (e.g., Exline et al., 2012). In contrast, other research has suggested that narcissism is a predictor of positive emotions in response to having a better performance than others (Exline & Zell, 2012).

Moreover, several studies have suggested a positive relationship between impostor phenomenon and self-handicapping tendencies (Ferrari & Thompson, 2006; Ross et al., 2001), meaning creating obstacles in order to make a good performance less likely to occur (Berglas & Jones, 1978). Finally, submissive behavior refers to the tendency to respond to conflictual situations by inhibiting self-affirmation (Gilbert, 1992). Previous studies have found a positive relationship between survivor guilt and submissive behavior (O'Connor et al., 2000), suggesting that it may be employed to placate those who are thought to be hurt by one's success (Fimiani et al., 2021b).

Hypotheses

The aim of this study was to investigate the role of fear of success and of guilt over being successful in contributing to the experience of impostor phenomenon. In line with previous research (Fimiani et al. 2021b), we hypothesized:

1) A positive relationship between impostor phenomenon, fear of success, survivor guilt, self-hate, distress related to being the target of an upward comparison, empathy, and sociotropy.
2) A negative relationship between impostor phenomenon and narcissism.
3) A positive relationship between a self-handicapping tendency and submissive behavior.
4) That impostor phenomenon could mediate the relationship between fear of success, survivor guilt, self-hate, sociotropy and distress related to being the target of an upward comparison, on one hand, and self-handicapping and submissive behavior, on the other.

Materials and methods

Sample

The sample was recruited from college psychology students in Rome, along with their friends and relatives, through a snowball effect, in addition to the employment of social media posts to raise awareness about the study. The participants were told that the study was about the investigation of personal beliefs and emotions related to success, that the study required participants to fill out some questionnaires at three different times, that participation was completely anonymous and voluntary, and that they would have been free to stop at any moment. Moreover, no fees was provided. Inclusion criteria for participation included being over 18 years old with no addictions, psychotic syndromes or symptoms, and no history of significant neurological illness or brain injury.

Our sample was composed of 146 subjects. The average age was 28.90 years ($SD = 9.10$; ranging from 18 to 63 years); 76% were female, and 24% were male. One person (0.7%) had completed junior high school, 39.7% had completed high school, 34.9% had completed college, and 24.7% had received a postgraduate education. Moreover, 28.8% reported having a low socio-economic status, 56.2% reported having a medium socio-economic status, and 15.1% reported having a high socio-economic status. Regarding occupation, 44.5% were students, 28.8% were self-employed, 19.2% were employed, and 7.5% were

unemployed. Finally, 34.2% were receiving psychotherapy, while 65.8% were not.

Measures

The revised socio-demographic schedule (Gazzillo & Faccini, 2019) is a brief, ad hoc self-report tool comprising 11 forced choice questions designed to collect data about age, gender, education, socio-economic status, employment status, presence or absence of physical and mental disease of any kind, and the presence of traumas in early childhood. We also asked whether the person was currently receiving psychotherapy.

The Clance Imposter Phenomenon Scale (CIPS; Clance, 1985) is a 20-item self-report rating scale used to assess impostor phenomenon. Items are rated on a 5-point Likert scale ranging from 1 (*not at all true*) to 5 (*very true*). The CIPS has been shown to reliably differentiate impostors from non-impostors (Holmes et al., 1993), and it has a high level of internal consistency with reported α values ranging from 0.84 to 0.96 (Chrisman et al., 1995). Studies comparing scores on this measure with similar impostor scales have suggested that Clance's scale has appropriate construct validity (e.g., Chrisman et al., 1995). Examples of items are "I can give the impression that I'm more competent than I really am" and "I avoid evaluations if possible and have a dread of others evaluating me."

The Interpersonal Guilt Rating Scale-15 self-report (IGRS-15s; Faccini et al., 2020; Gazzillo et al., 2018) is a self-report instrument assessing interpersonal guilt as conceived according to Control-Mastery Theory. The scale comprises 15 items and is composed of three subscales differentiating different types of interpersonal guilt: survivor guilt, omnipotence guilt (related to the idea that one has the duty and the power to take care of others and to focus on others' needs instead of their own; see Gazzillo, 2021), and self-hate. Each item is assessed on a 5-point rating scale that ranges from 1 (*not representative at all*) to 5 (*completely representative*). Confirmatory factor analysis conducted on a different Italian sample supported the expected three-factor structure. The internal consistency of the three guilt factors (Cronbach's α values) was acceptable to good: survivor guilt = .82, omnipotence guilt = .73, and self-hate = .78. The α level of the overall scale was good (.83). The test-retest reliability at 4 weeks was good, ranging from $r = 0.70$ to $r = 0.76$ (Faccini et al., 2020). Examples of items: "I feel uncomfortable feeling better off than other people'' and "I believe I have tricked other people into liking me."

Fear of Success Scale (FOSS; Zuckerman & Allison, 1976) is a 27-item self-report rating scale assessing individual differences in the motive to avoid success. The statements describe the benefits of success (e.g., "When you are on top, everyone looks up to you"), its costs (e.g., "I believe that successful people are often sad and lonely"), and the respondent's attitudes toward success when compared to other alternatives (e.g., "The rewards of successful competition are greater than those received from cooperation"). Items are rated on a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The scale showed an internal consistency reliability coefficient of 0.69 among males and 0.73 among females. Moreover, it has been positively related to Horner's (1972) projective measure of fear of success and negatively related to Mehrabian's (1968) measure of achievement motivation.

The Test of Responses to Outperforming Others (TROO; Exline & Zell, 2012) is a scenario-based measure of emotional responses to outperformance. We translated 15 scenarios involving situations in which participants outperformed others in different domains and adapted them to the Italian population. Several scenarios involved hostile remarks by outperformed persons. Some relationships were portrayed as close, whereas others were distant. After each scenario, participants had to list, on a scale from 0 (*not at all*) to 10 (*extremely*), the extent to which they would likely experience different emotions. Four items tapped positive emotions (pride, happiness, satisfaction, and gratitude), and three tapped distress (sadness, anxiety, and guilt). An anger item was also included, but it was analyzed separately from the distress measures. After rating their emotional responses, participants also answered the following questions: ''How often have you been in situations similar to this one?'' ''How easy is it for you to imagine being in this sort of situation?'' and ''To what extent can you relate to the situation presented here?'' When collapsed across the 15 scenarios, maximum likelihood analysis with varimax rotation suggested two factors: positive emotion (eigenvalue = 4.1, 59% of variance) and distress (eigenvalue = 1.9, 27% of variance).

The Narcissistic Admiration and Rivalry Questionnaire (NARQ; Back et al., 2013), specifically the version validated in Italy (Vecchione et al., 2018), is a self-report instrument developed for the assessment of narcissism in the general, nonclinical population. It comprises 18 items that are rated on a 6-point Likert scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*), with half assessing the dimension of admiration (like having a grandiose view of the self and exhibiting charming behavior) and the other half assessing the dimension of rivalry (e.g., tendencies to devalue others and affirm one's own superiority; for a more detailed review, see Back et al., 2013). Confirmatory factor analysis supported the expected two-factor structure. Internal consistencies were adequate. Cronbach's alpha reliability coefficients were 0.84 for the overall scale score, 0.83 for Admiration, and 0.81 for Rivalry. Examples of items: "I am great" and "Other people are worth nothing."

The Basic Empathy Scale (BES; Jolliffe & Farrington, 2006), in the version validated in Italy (Albiero et al.,

2009), comprises 20 items and is composed of two subscales that identify different components of empathic responsiveness: the Affective Empathy subscale (11 items), which measures emotional congruence with others' emotions, and the Cognitive Empathy subscale (9 items), which measures the ability to understand another person's emotions. Each item asks participants to express their own degree of agreement on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Confirmatory factor analysis supported the expected two-factor structure. Internal consistencies were adequate. Cronbach's alpha reliability coefficients were 0.87 for the total score, 0.74 for Cognitive Empathy, and 0.86 for Affective Empathy. Examples of items: "When someone is feeling 'down,' I can usually understand how they feel" and "I get caught up in other people's feelings easily."

Sociotropy—participants completed the 24-item Personal Style Inventory II (Robins et al., 1994). The measure contains three sociotropy subscales (Concern about What Others Think, Dependency, and Pleasing Others). Each item asks participants to express their own degree of agreement on a 6-point Likert scale, ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). Satisfactory internal consistency was found for sociotropy subscales, given that the global scale α coefficient was 0.90, while test-retest reliability over a 5- to 13-week period was good ($r = 0.80$). Examples of items are "I often put other people's needs before my own'' and "I am very sensitive to criticism by others."

The Self-Handicapping Scale—Short Form (SHS; Strube, 1986) is a 10-item self-report rating scale assessing the tendency to use self-handicapping strategies, that is, to engage in behaviors that create impediments to successful performance, such as the use of drugs, alcohol, lack of practice, physical symptoms, and reduced effort. Exploratory principal component analysis (PCA) showed that a singular solution was the best description of the data. The internal consistency of the scale was adequate being α coefficient of 0.70. Examples of items are "I tend to put things off until the last moment" and "I sometimes enjoy being mildly ill for a day or two."

The Submissive Behaviour Scale (SBS; Allan & Gilbert, 1997), developed from the work of Buss and Craik (1986), is a 16-item self-report rating scale designed to measure the frequencies of typical submissive behaviors. Participants responded by giving their estimated frequency of these behaviors on a five-point Likert scale ranging from 0 (*never*) to 4 (*always*). Exploratory principal component analysis (PCA) conducted on a clinical and nonclinical sample showed that a singular solution was the best description of the data, although it did not produce a very strong factor. The Cronbach's alpha for the 16-item scale was 0.82, and test-retest reliability (4-month time interval) was good ($r = 0.84$; Gilbert et al., 1995). Examples of items are "I agree that I am wrong, even though I know I'm not" and "I do what is expected of me, even when I don't want to."

Procedure

The study was carried out in three stages. At Time 1, the participants completed (1) the Interpersonal Guilt Rating Scale-15s; (2) the Fear of Success Scale; (3) the Test of Responses to Outperforming Others; (4) the Narcissistic Admiration and Rivalry Questionnaire; (5) the Basic Empathy Scale; and (6) the Sociotropy scale. At Time 2, one week later, the participants completed the Clance Imposter Phenomenon Scale. Finally, at Time 3, after another week, participants completed (1) the Self-Handicapping Scale and (2) the Submissive Behaviour Scale.

Google Forms was used as a platform for questionnaire administration. No personal identifying information was collected because the participants were identified by a nickname.

The first step was completed by 282 subjects, 190 completed the second step, and only 146 completed all three steps. No significant difference was found in any sociodemographic or psychological variable between people who completed all the steps and people who completed only the Step 1 or the first 2 steps of the study.

Statistical analyses

A series of descriptive statistics was estimated for all variables included in the study. To illustrate the relationships among the variables, a multiple stepwise regression model was performed. We then performed an exploratory factor analysis (unweighted least score with promax rotation) of the variables that predicted impostor phenomenon. A mediation model was then carried out to evaluate whether impostor phenomenon mediates the relationship between fear of success, survivor guilt, self-hate, distress related to being the target of an upward comparison, and sociotropy, on the one hand, and the tendency toward self-handicapping and submissive behavior on the other. All of these analyses were performed using SPPS.22 and JASP 0.17.10.

Results

Table 1 shows the descriptive statistics.

We conducted a series of Spearman's correlation analyses and found that many variables were correlated with each other (see Table 2).

As can be seen in Table 3, Hypothesis 1 (a positive relationship between impostor phenomenon, fear of success, survivor guilt, self-hate, distress related to being the target of an upward comparison, empathy, and sociotropy)

Table 1 Descriptive statistics

	Mean	St. Deviation	Skewness	St. Error of Skewness	Kurtosis	St. Error of Kurtosis	Minimum	Maximum
1. Impostor phenomenon	61.76	14.92	0.22	0.20	−0.54	0.40	32.00	96.00
2. Survivor guilt	14.05	4.78	0.25	0.20	−0.89	0.40	5.00	25.00
3. Omnipotence guilt	19.61	5.60	0.21	0.20	−0.32	0.40	8.00	34.00
4. Self-Hate guilt	5.23	2.65	1.17	0.20	0.45	0.40	3.00	13.00
5. Positive emotion about success	3.98	1.88	0.42	0.20	−0.45	0.40	1.05	9.45
6. Distress about success	3.55	1.72	0.71	0.20	0.03	0.40	1.02	8.59
7. Rage about success	2.73	1.42	1.50	0.20	2.41	0.40	1.00	8.13
8. Familiarity with TROO scenarios	5.91	1.54	−0.09	0.20	−0.41	0.40	2.20	9.69
9. Empathy	80.55	7.86	−0.05	0.20	−0.43	0.40	60.00	97.00
10. Narcissism (total NARQ score)	44.84	11.46	0.25	0.20	−0.43	0.40	21.00	72.00
11. Self-Handicapping	22.21	7.99	0.17	0.20	−0.62	0.40	3.00	40.00
12. Submissiveness	24.32	10.24	0.70	0.20	0.71	0.40	4.00	57.00

was also confirmed by the regression model, with the only exception being the positive relationship between empathy, measured at Time 1, and impostor phenomenon, measured at Time 2. Impostor phenomenon could, in fact, be predicted by taking into account self-hate, sociotropy, survivor guilt, fear of success, and distress over success, with the single best predictor being self-hate.

Hypothesis 2 (a negative relation between impostor phenomenon and narcissism) was not confirmed because, when considered with the other variables, narcissism did not appear to significantly add any predictive power to the regression models.

The positive and statistically significant correlation between the self-handicapping scale total score and the submissive behavior scale total score also confirmed Hypothesis 3 (a positive relationship between a self-handicapping tendency and submissive behavior).

In order to test Hypothesis 4 (that impostor phenomenon could mediate the relationship between fear of success, survivor guilt, self-hate, sociotropy, and distress related to being the target of an upward comparison, on one hand, and self-handicapping and submissive behavior, on the other), we performed an exploratory factor analysis (unweighted least score with promax rotation) of the variables that, assessed at Time 1, were predictive of impostor phenomenon assessed at Time 2, i.e., self-hate, sociotropy, survivor guilt, fear of success, and distress about success.

This factor analysis yielded a two-factor solution, explaining 46.93% of the variance. As can be seen, in the first factor, there was the fear of success, while in the second, we found all the other variables, describing feelings of guilt and distress about success associated with self-deprecation and preoccupation with one's own relationship with other people (see Table 4).

We then aggregated the scores of the tendency toward submission and self-handicapping, assessed at Time 3, to yield a single composite measure. We subsequently performed a mediation analysis using the first two factors as predictors, impostor phenomenon as a mediator, and the submission and self-handicapping scale as the outcome. The mediation analysis showed how the factor assessing guilt and distress over success predicted the tendency toward self-handicapping and submissiveness, both directly and with the mediation of impostor phenomenon (see Fig. 1), confirming our hypothesis only partially. The total effect of guilt and distress over success on submissiveness and self-handicapping was in fact statistically significant (estimate 6.113, $p < 0.001$). Moreover, we found a positive, statistically significant indirect effect of guilt and distress over success on submissiveness and self-handicapping with the mediation of impostor phenomenon (estimate 1.675, $p = 0.007$), and a statistically significant positive direct effect of guilt and distress over success on submission and self-handicapping (estimate 4.439, $p < 0.001$).

Regarding the effects of fear of success, we only found a slightly statistically significant indirect effect of this factor on submissiveness and self-handicapping with the mediation of impostor phenomenon (estimate 0.340, $p = 0.052$), while the other effects did not reach statistical significance (see Fig. 2).

Discussion

Our data suggest that feelings of self-deprecation and feelings of guilt associated with one's own success, together with the need to preserve positive relationships with important others, may contribute to both experiencing

Table 2 Spearman correlations between the variables ($N = 146$)

	Impostor Phenomenon	Omnipotence	Self-Hate	Survivor	Empathy	Narcisissm	Sociotropy	Fear of Success	Positive Emotion About Success	Distress About Success	Rage	Familiarity	Self-Handicapping	Submissiveness
Impostor Phenomenon	1.00	0.38**	0.56**	0.47**	0.15	−0.08	0.53**	0.38**	−0.14	0.31**	0.07	−0.02	0.48**	0.58**
Omnipotence	0.38**	1.00	0.31**	0.47**	0.37**	−0.06	0.56**	0.22**	−0.16	0.13	0.09	0.07	0.27**	0.35**
Self-Hate	0.56**	0.31**	1.00	0.40**	−0.06	0.02	0.33**	0.30**	−0.14	0.21*	0.04	0.01	0.45**	0.41**
Survivor	0.47**	0.47**	0.40**	1.00	0.09	−0.19*	0.28**	0.46**	−0.25**	0.20*	0.04	−0.08	0.29**	0.39**
Empathy	0.15	0.37**	−0.06	0.09	1.00	−0.10	0.31**	−0.02	−0.01	0.23**	0.28**	0.19*	0.06	0.03
Narcisissm	−0.08	−0.06	0.02	−0.19*	−0.10	1.00	0.07	−0.36**	0.15	−0.04	0.08	0.15	0.11	−0.14
Sociotropy	0.53**	0.56**	0.33**	0.28**	0.31**	0.07	1.00	0.07	−0.09	0.26**	0.06	−0.06	0.48**	0.53**
Fear of Success	0.38**	0.22**	0.30**	0.46**	−0.02	−0.36**	0.07	1.00	−0.26**	0.02	−0.11	−0.11	0.27**	0.33**
Positive Emotion About Success	−0.14	−0.16	−0.14	−0.25**	−0.01	0.15	−0.09	−0.26**	1.00	0.49**	0.48**	0.19*	−0.08	−0.03
Distress About Success	0.31**	0.13	0.21*	0.20*	0.23**	−0.04	0.26**	0.02	0.49**	1.00	0.73**	0.09	0.17*	0.29**
Rage	0.07	0.09	0.04	0.04	0.28**	0.08	0.06	−0.11	0.48**	0.73**	1.00	0.18*	0.02	0.10
Familiarity	−0.02	0.07	0.01	−0.08	0.19*	0.15	−0.06	−0.11	0.19*	0.09	0.18*	1.00	−0.03	−0.13
Self-Handicapping	0.48**	0.27**	0.45**	0.29**	0.06	0.11	0.48**	0.27**	−0.08	0.17*	0.02	−0.03	1.00	0.58**
Submissiveness	0.58**	0.35**	0.41**	0.39**	0.03	−0.14	0.53**	0.33**	−0.03	0.29**	0.10	−0.13	0.58**	1.00

* $p \leq 0.05$ (two-tailed); ** $p \leq 0.01$ (two-tailed)

Table 3 Relationship between impostor phenomenon, interpersonal guilt, fear of success, distress over success, sociotropy, empathy, and narcissism

	Model	R	R^2	Adjusted R^2	RMSE	R^2 Change	F Change	df1	df2	p
Model summary - Impostor										
1	(Intercept)	0.000	0.000	0.000	14.920	0.000		0	145	
2	(Intercept) Self-hate	0.550	0.303	0.298	12.501	0.303	62.562	1	144	< 0.001
3	(Intercept) Self-hate Sociotropy	0.677	0.459	0.451	11.051	0.156	41.255	1	143	< 0.001
4	(Intercept) Self-hate Sociotropy Survivor Guilt	0.720	0.518	0.508	10.468	0.059	17.380	1	142	< 0.001
5	(Intercept) Self-hate Sociotropy Survivor guilt Fear of success	0.735	0.541	0.528	10.253	0.023	7.020	1	141	0.009
6	(Intercept) Self-hate Sociotropy Survivor guilt Fear of success Distress over success	0.745	0.556	0.540	10.122	0.015	4.659	1	140	0.033

The following covariates were considered but not included: omnipotence responsibility guilt, positive emotion about success, anger about success, familiarity with the TROO scenarios, and total NARQ score

Table 4 Factor analysis

Model matrix[a]	Factor	
	1	2
Fear of success	1.033	
Sociotropy		0.577
Distress over success		0.544
Self-hate guilt		0.536
Survivor guilt		0.444

Extraction method: unweighted least score; rotation method: promax with Kaiser normalization; [a] convergence rotation performed in three interactions; the correlation between these two factors was 0.35 ($p = 0.001$)

impostor phenomenon and the tendency toward self-handicapping and submissiveness. Therefore, according to this perspective, neither the fear of success nor impostor phenomenon per se can explain the tendency to avoid situations in which one is in the foreground or able to show one's capacities. These results, beyond being in line with the hypotheses of Control-Mastery Theory (Fimiani et al., 2021a, b; Gazzillo, 2021), are compatible with findings from social psychology that state the potentially negative interpersonal consequences of success (e.g., Parrott & Rodriguez Mosquera, 2008), which can lead people to experience distress when they gain a superior status (White et al., 2002) and to prevent possible relationship ruptures by strategically employing self-devaluing behaviors (Leonhardt et al., 2017; O'Connor et al., 2000). These findings, in other words, support the idea that some people, being highly concerned about hurting others with their successes (Exline et al., 2012), or believing that they are intrinsecally worthless and undeserving, can experience strong feelings of guilt that can lead them not only to try to placate others but also to carry out behaviors that are submissive (O'Connor et al., 2000) and, ultimately, self-sabotaging, preventing them from pursuing goals that are normal and adaptive in nature. In therapy, then, it will become crucial for clinicians to work toward helping clients feel less guilty about wanting to achieve success and less of an imposter if they achieve it, with all the well-established negative consequences of these kinds of feelings.

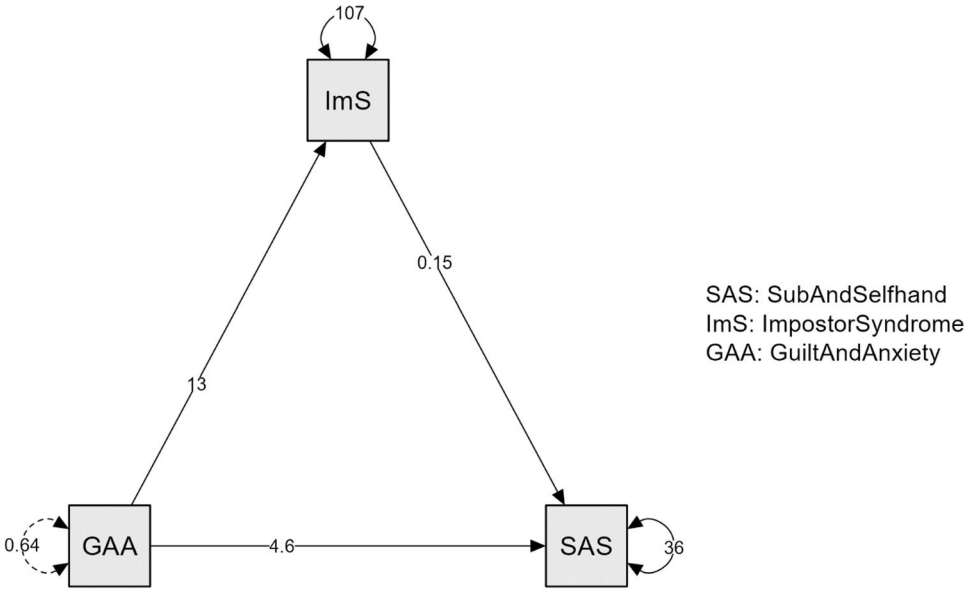

Fig. 1 Mediation analysis - path plot (Guilt and distress over success as predictor). *Note*: SAS = Submissiveness and self-handicapping; GAA = Guilt and anxiety; ImS = impostor phenomenon

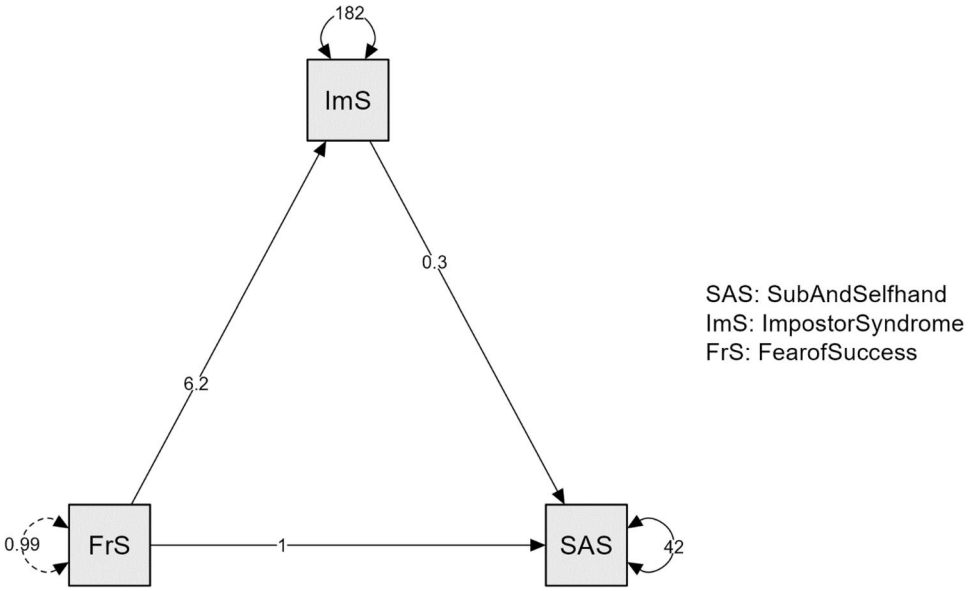

Fig. 2 Mediation analysis – path plot (Fear of success as predictor). *Note*: SAS = Submissiveness and self-handicapping; FrS = Fear of Success ; ImS = impostor phenomenon

Limitations

Our study is not free from limitations. First, the sample size was small, and the mortality rate was quite high. When comparing the means of the subjects who completed all three steps with those of the subjects who stopped at Step 1 or Step 2, we did not find any significant differences pertaining to socio-demographic variables, the levels of interpersonal feelings of guilt, fear of success, narcissism, empathy, sociotropy, and emotion in response to success. The longitudinal nature of the study may have contributed to some participants' decisions not to continue with the research. The first step, in fact, was the longest, as many questionnaires were administrated, which may have discouraged some people from continuing. This was also the reason why we did not administer all the questionnaires to the participants within every step, as we were concerned about the fact that doing so would have made the procedure more time-consuming, thus leading to even more people dropping out. Future research with a larger sample size is needed to replicate our findings and eventually strengthen their implications.

Moreover, our study was carried out in Italian, but not all of the measures we employed had been validated in Italian by the time we utilized them, and for the Test of Responses

to Outperforming Others, specifically, no piloting was done before using the version we adapted.

Therefore, future studies that will employ measurements that have already been validated in the targeted language, should they replicate our findings, will contribute to giving them more solidity.

Finally, as our study was longitudinal, we were not able to draw causal conclusions. More studies are needed to better clarify the path that ties our variables of interest. Nevertheless, we can state that our study supports hypotheses that have already received some support both within clinical and empirical literature, and should other studies continue to better clarify them, the resulting information will be useful to both clinicians and researchers.

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Data availability The datasets generated and analyzed during the current study are available from the corresponding author on reasonable request.

Declarations

Ethical approval The study was conducted in accordance with the 1964 Helsinki declaration and was approved by the Local Ethics Committee of the Department of Dynamic and Clinical Psychology and Health Studies, Sapienza University of Rome (protocol number: 0000800).

Conflict of interest No potential conflict of interest was reported by the author(s).

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