Impostor Phenomenon: Gender Differences and Role of Family Environment

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Abstract

The impostor phenomenon is a relatively less explored phenomenon that is characterized by an internal experience of intellectual phoniness. Despite evidence to the contrary, people with impostor feelings remain convinced that they do not deserve success. This phenomenon is often associated with characteristics such as introversion, anxiety, a non-supportive family background, etc. It is a source of psychological distress and maladaptive behavior, and thus requires more attention. The present study aimed at exploring the gender differences in impostor phenomenon and the relationship of impostor phenomenon with family environment. Three dimensions of family environment were studied: cohesion, competitive framework, and independence. One hundred and twenty six participants (62 males and 64 females) were assessed with two tools: Clance’s Impostor Phenomenon Scale (CIPS; Clance, 1985) and Family Environment Scale (FES; Vohra, 1997). The data obtained were subjected to quantitative methods of analysis. It was found that 30% of the participants had frequent to intense impostor phenomenon experiences and the t-test showed significant gender differences. Correlational analysis found impostor phenomenon experience to be significantly related to family cohesion and competitive framework, but not with independence. Multiple linear regression analysis established the prediction power of the family cohesion and competitive framework on impostor phenomenon. The present findings bespeak the need for the designing of certain intervention programs in organizations and academic settings by emphasizing on enhancing self esteem and self efficacy, and developing cordial family environment that can target the unfounded feelings and thoughts present in impostor phenomenon.

Keywords: Family Environment, Gender, Impostor Phenomenon

Sometimes in life, certain experiences such as self-doubt, feelings of inadequacy, worthlessness, fear of evaluation, etc., impede our upward mobility across many aspects in life. These may persist even in the face of the evidence of a myriad of achievements and accomplishments. When these feelings and cognitions deter one from accepting success or any positive feedback, it is called the Imposter Phenomenon (IP). The term was first used by Clance and Imes in 1978. It has been defined as the “internal experience of intellectual phoniness” in individuals who are outwardly successful but are unable to internalize their success (Clance & Imes, 1978). Rather, they have a constant fear of being exposed as a fraud. Though the concept of IP has not been regarded as a form of disorder that is self-destructive, it is an experience that interferes with a person’s well-being, as it may result in psychological distress and maladaptive behavior (Peteet, Brown, Lige, & Lanaway, 2015).

Leonhardt, Bechtoldt, and Rohrmann (2017) carried out cluster-analytic procedures indicating the existence of two different types of impostors: true impostors and strategic impostors. For the former group of individuals, the impostor feelings and negative self-views are actually incapacitating, while the latter are not as restricted by their self-doubt. Clance (1985) gave the six main components of the IP:

1. The Impostor cycle: The Impostor cycle is a self-perpetuating cycle that explains the typical behavior of an individual with IP when faced with an achievement-related task. In order to cope with the anxiety about results of an upcoming task, the person either over-prepares or procrastinates and prepares in a frenzied manner. If they succeed, they attribute this success to either disproportionate hard work (if preceded by overwork) or to external factors like luck, chance, charm, leniency of evaluation process, etc., and discount positive feedback (if preceded by procrastination).
2. The need to be special, to be the very best: When the high self-imposed standards of people with IP are not met, they feel stupid and ascribe this failure to their perceived incompetence. This shows their tendency to think dichotomously about success.

3. Superman/Superwoman complex: IP tendencies are strongly related to the need for flawless performance or perfectionism.

4. Fear of failure: IP is strongly associated with the fear of failure and most behaviors are anchored around the avoidance of failure.

5. Denial of competence and discounting of praise: The phenomenon is especially marked by a person’s tendency to attribute their success or accomplishments to luck, chance, timing, etc. Likewise, achievements that one might expect to provide ample evidence of superior intellectual functioning fail to make them proud.

6. Fear and guilt about success: Along with trying to invalidate success, persons with IP often fear success and feel guilty about it. The fear is partly due to their belief that achieving success would increase people’s expectations and the guilt is due to their perceived unworthiness.

IP and Gender

It is estimated that 70% of people will experience at least one episode of IP in their lives (Gravois, 2007). IP was initially thought to be an affliction restricted to women. For instance, Clance & Imes (1978), in their classic descriptive study done on 150 highly successful women—those including respected professionals with PhDs, and students with academic excellence, showed that these women failed to feel an internal sense of success and considered themselves “impostors”. Later studies are also consistent with the observation that women are more inclined to develop impostor feelings (e.g. Cusack, Hughes & Nuhu, 2013; Kumar & Jagacinski, 2006; McGregor, Gee & Posey, 2008; Prata & Gietzen, 2007; Villwock, Sobin, Koester, & Harris, 2016). Clance & Imes (1978) suggested that men who had impostor feelings were usually more in touch with their “feminine” qualities. But later research has confirmed that men are as likely to develop IP as women (e.g. McLean & Avella, 2016; Rohrman, Bechtoldt & Leonhardt, 2016). Thus, the question of gender differences in IP remains equivocal (Kaplan, 2009).

IP and Family Environment

Family acts as the nucleus of all other institutions in a person’s life by having the utmost influence on the shaping of an individual. According to Ebert (1978), a healthy family is the one in which the members understand and share feelings, accept individual differences, have a highly developed sense of caring and cooperation, are able to meet the survival and safety needs, engage in non-adversary problem-solving, use humor and have an overall philosophy or some set of values. Various dynamics of family environment can affect the achievement values and behavior of a person and influence how they deal with success and failure (Thompson, 2004). Thus, family environment may act as a catalyst in the development of IP. Clance (1985, as cited in Sakulku & Alexander, 2011) suggested certain characteristics of a family that may result in the development of IP, including the lack of positive reinforcement, the perception of family member that their talents are atypical compared with the others in the family, conveying messages that emphasize the importance of intellectual abilities and that success requires little effort, etc. Recent studies have found antecedents such as extreme parental criticism or extreme approval, opting for different fields to study than those dominant in the family, excessive value placed on achievement by the family, parentification, family control/over protectiveness, lack of cohesion, etc. (Castro, Jones, & Mirsalimi, 2004; King and Cooley, 1995; Sonnak & Towell, 2001; Want & Kleitman, 2006).

Overview of the Study:

The present study has been undertaken with the objectives to study gender differences in IP and the relationship between IP and perceived family environment. The concept of IP is characterized by a slender amount of empirical literature and inconclusive results. For example, researches conducted thus far provide equivocal evidence about whether there are gender differences in IP but it is not yet established in Indian context. Also, though it has been established that family forms the backdrop for impostor feelings by shaping one’s beliefs and attitudes about themselves and others, there is a dearth
of research on IP in the context of family. Researches have focused on parental factors like overprotection, care, control, etc., but the role of family processes has still not received the required attention. It is hoped that this study will shed more light on the dynamics of IP and the role that family environment plays in it in the Indian context.

**Hypotheses**

Hypothesis 1: There will be significant gender differences in IP  
Hypothesis 2: Family environment will have a significant relationship with IP  
Hypothesis 3: Family environment will significantly predict IP

**Method**

**Participants**

The representative sample was selected through purposive sampling technique. The sample mainly comprised college students and working individuals living in Delhi. It consisted of 126 participants (62 males and 64 females), ranging from 18 to 53 years of age. Out of these, they were 62 males and 64 female. A major proportion of participants reported moderate level of IP experiences (62%), followed by 29% of those who reported having frequent IP experiences, 8% with few IP experiences and 1% reported intense IP experiences.

**Measures**

Clance’s IP Scale (CIPS): CIPS was developed by Clance (1985) to assess facets like fear of evaluation, feeling less capable than peers, fear that success cannot be repeated, feelings of inadequacy, and self-monitoring behaviors. It is a 20-item Likert scale with a response range of 1 (not at all true) to 5 (very true). The reliability of the scale in terms of internal consistency has been shown with Cronbach’s alphas of 0.92 (Chrisman, 1994; French, Ullrich-French, & Follman, 2008) to 0.96 (Holmes, Kertay, Adamson, Holland, & Clance, 1993) on American population. In the current study, the calculated Cronbach alpha was found to be 0.84.

Family Environment Scale (FES): FES is based on dimensional theory, where several dimensions measured together gives a complete and comprehensive picture of one’s family environment (Vohra, 1997). It consists of 98 items, each of which has two possible answers. This scale includes dimensions like Competitive Framework (Cf), Cohesion (Co), Expression (Ex), Independence (In), Moral Orientation (Mo), Organization (Or), Recreational Orientation (Ro). For the present study, however, the participants were assessed on three dimensions of the scale: Competitive framework, Cohesion, and Independence. The internal consistency of the subscales has been calculated through Cronbach’s alphas of 0.68 (Cf) to 0.78 (Co, Mo). The test-retest reliability varies in range from 0.78 (In) to 0.89 (Co) and the range for the split half reliability is from 0.81(In) to 0.91 (Co).

**Procedure**

After a brief review of literature, hypotheses were formulated and the present study was designed. Participants were selected among college students in various colleges across Delhi and corporate employees and school teachers based in South West Delhi using a purposive sampling technique. The questionnaires were distributed to the selected participants. They were first made sure that their responses would be kept in confidence and would be used for research purposes only. It was ensured that their participation was completely voluntary. The participants were then made to sign the letter of informed consent, fill the demographic details and fill the questionnaire. The data were collected by administering CIPS, and FES. After the collection of responses, the data was then analyzed quantitatively through SPSS window 16.0 version. The internal consistency reliability, Cronbach’s alpha was calculated before the data were subjected to any quantitative analysis. t-test, Pearson correlation, and Multiple linear regression analysis were used to study the gender differences in IP and the relationship of IP with family environment.
Results

The Cronbach’s alpha reliability, calculated on all 126 participants, was found to be ranging from 0.82-0.84 and its value for the whole test is 0.84. The results of the quantitative analyses have been presented below.

Table 1

<table>
<thead>
<tr>
<th>Gender Differences in IP</th>
<th>Male (n=62)</th>
<th>Female (n=64)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variables</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Imposter Phenomenon</td>
<td>52.00</td>
<td>9.93</td>
</tr>
</tbody>
</table>

As shown in Table 1, the results of an independent sample t-test indicate a significant gender differences in IP scores of the participants, t (126)= 4.24; p<.01, such that the mean IP score of females (M=59.65) is higher than that of males (M=52.00), implying that females face more sense of IP experiences compared to males.

Table 2

<table>
<thead>
<tr>
<th>Correlation Analysis between IP and the Perceived Family Environment</th>
<th>IP</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohesion</td>
<td>-.275**</td>
<td>10.66</td>
<td>1.70</td>
</tr>
<tr>
<td>Competitive framework</td>
<td>.504**</td>
<td>10.46</td>
<td>1.91</td>
</tr>
<tr>
<td>Independence</td>
<td>-.127</td>
<td>10.87</td>
<td>1.23</td>
</tr>
<tr>
<td>M</td>
<td>55.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>10.64</td>
<td></td>
<td></td>
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</tbody>
</table>

Note. **Significant at p<.01 level; df = 124. The mean and standard deviation of IP scores are given in the vertical column and those of the dimensions of family environment in the horizontal rows.

As it can be seen from Table 2, a significant negative correlation was found between IP and family cohesion (r= -0.275; p<.01), showing that there exists an inverse relationship between IP experiences and the perceived cohesion in family. Furthermore, a significant positive correlation was found between IP and competitive framework, showing that there exists a direct relationship between IP experiences and the perceived competitive framework of the family, r=0.504; p<.01. A non-significant negative correlation was, however, found between IP and independence (r=-0.127; p>.01).

Table 3

<table>
<thead>
<tr>
<th>Regression Analysis for IP and Family Environment</th>
<th>Coefficient Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variables</td>
<td>B</td>
</tr>
<tr>
<td>Constant</td>
<td>46.22</td>
</tr>
<tr>
<td>Cf</td>
<td>2.81</td>
</tr>
<tr>
<td>Co</td>
<td>-1.53</td>
</tr>
<tr>
<td>In</td>
<td>-0.28</td>
</tr>
<tr>
<td>Model Summary</td>
<td>0.56</td>
</tr>
<tr>
<td>R</td>
<td>0.31</td>
</tr>
<tr>
<td>Adj R²</td>
<td>0.30</td>
</tr>
<tr>
<td>F</td>
<td>18.82**</td>
</tr>
</tbody>
</table>
As shown in Table 3, the multiple linear regression revealed that family environment explains 30% of the variance in IP scores. The regression coefficient demonstrated that the imposter phenomenon has a positive relationship with competitive framework and negative relationship with cohesion. It suggests that for a unit increase in competitive framework, the IP would increase by 0.28 and a unit increase in cohesion, IP would decrease by 0.15, suggesting both cohesion and competitive framework in a family predict IP. It may also be noted that competitive framework is a better predictor of IP than family cohesion.

Discussion

The present research, with its twofold objectives, attempts to explore the gender differences in IP and the relationship of IP with family environment. The results of the present study showed significantly higher level of IP among females than male. It indicates that females experience more sense of intellectual phoniness and are unable to internalize their accomplishments (Clance, 1985). This finding is consistent with other studies conducted in this regard that have also shown IP to be more prevalent in women as compared to men (Cusack et al., 2013; McGregor et al., 2008; Kumar & Jagacinski, 2006; Prata & Gietzen, 2007; Villwock et al., 2016). The attribution pattern found in IP can also be discussed in the light of the researches showing women to have an external locus of control, while men having a more internal locus of control (e.g. Akhtar & Saxena, 2014). The possible explanation for this finding could be that the notion of success is often associated with and is perceived to be more natural for men, especially in developing countries like India. On the other hand, when a woman succeeds, her success is not perceived in the same way. It is rather considered incongruent with the traditional female role. Also, to shift the attention that she has received, a woman often refrains from taking the credit and imputes it to external factors like luck, chance, god, etc., while devaluing her internal attributes like her potential and grit. Also, women are often considered weaker of the sexes. This idea of women as less than equal has resulted in the gender being categorized and socialized as dependent, nurturing, and emotional, whereas men are viewed as independent, strong, and rational (Studdard, 2011). These stereotypes may lead a woman to feel that she deserves less power and success. According to Clance and Imes (1978), women may be more likely to be fearful to succeed also because they fear that they would look different, which may in turn result in affiliative loss. Also, qualities that are often associated with success such as power and confidence are often ascribed to men, who are also able to find more social support that buffers the negative effects of IP (Clance, Dingman, Reviere, & Stober, 1995). Taken together, these underlying psychosocial factors might help explain the gender difference in IP.

Correlational and regression analysis revealed that two of the three dimensions of the family environment predict IP (namely, cohesion and competitive framework). There was a significant negative correlation was between IP and family cohesion, showing that there exists an inverse relationship between IP experiences and the perceived cohesion in family. Furthermore, a significant positive correlation was found between IP and competitive framework, showing that there exists a direct relationship between IP experiences and the perceived competitive framework of the family. No significant correlation was however found between IP and independence. Cohesive families are characterized by a strong sense of togetherness and support while less cohesive families have more conflicts, where family members are often critical of each other. A possible explanation why cohesion in family might predict IP is that many people consider their family their pillar of strength as it bolsters confidence in their abilities, provides support in times of failure, and continues to believe in them. Therefore, family for most of us acts as a protective factor against our self-deprecating beliefs. This assistance is especially pronounced when a family is highly cohesive. Families in India usually promote cohesion, cooperation, solidarity, and conformity (Chadda & Deb, 2013). This finding is supported by a study conducted on 302 college students by Bussotti (1990), who found that the students’ IP scores were inversely linked to family cohesion and expressiveness and directly linked to
family conflict and control. According to Vohra (1997), families that are achievement oriented put a lot of emphasis on grades, success at work and other areas of life, while families that are not so competitive and have a low need for achievement do not work really hard or rarely worry about grades, promotions, etc. A possible explanation for the present finding could be that placing a high value on achievement makes an individual take competition more seriously than usual and creates in them a greater need to succeed at everything they set out to do. As a result, their self-worth becomes contingent upon their achievement of goals. This finding is consistent with a study conducted by King and Cooley (1995), who found a positive correlation between impostor fears and family’s achievement orientation as well. Though the relationship between IP experiences and independence remains unexplored heretofore, a few studies (e.g. Sonnak & Towell, 2001; Want & Kleitman, 2006), using regression analysis, have found that parents’ overprotectiveness/control predicts IP. A possible explanation for this finding could be that overprotective parents may limit a person’s freedom to grow and generally have a greater control over their lives. This might also act as a hindrance to their independence. However, the study of the direct relationship of IP with independence requires more research. Regression analysis has confirmed that competitive framework is a better predictor of IP than family cohesion.

**Implications of the study**

The present study extends the line of research on IP in three primary ways. First, taking into account the high prevalence of the phenomenon (Gravoirs, 2007), the concept of IP remains under-researched not just in India, but in the West as well. Second, the findings of the present study support the view that females are more likely to have IP experiences as compared to males. And third, the present study has been able to shed light on the specific aspects of one’s family that may play a role in the development of IP. From practical perspective, an important application of the present study could be the designing of certain interventions or counseling programs that can help enhance one’s self-efficacy, cognitive restructuring of dysfunctional cognitions/concepts, help build positive self-talk, help recognize one’s personal contribution in achievements, etc. It is also important for individuals to take personal agency in challenging the self-defeating thoughts and feelings by rewarding oneself and taking pride in one’s achievements. As suggested by previous studies, coaching and training as well as designing of organization-based and university-based programs addressing self-esteem and self-evaluation can help buffer the negative effects of IP (Lige, Peteet, & Brown, 2016; Rohrmann et al., 2016; Vergauwe, Wille, Feys, De Fruyt, & Anseel, 2015). Also, attempting to enhance cohesion in family and releasing excessive focus on achievements and competition can help buffer impostor feelings.

**Limitations and Directions for Future Research**

The present study is not devoid of limitations. First of all, the participants of the sample were not randomly chosen. This may limit the generalizability of the results. Second, studying a greater range of aspects of family environment could have provided a more holistic picture of IP within the context of family. Future research may focus on studying the impact of IP on psychological health and wellbeing, the causes of IP, and the kinds of intervention that might be effective in dealing with such experiences. It is expected that future research focuses on exploring the dynamics of IP in the Indian context with more sophisticated designs.

**Conclusion**

Thus it can be concluded that IP experience is not a rare phenomenon as most of the participants have reported moderate to frequent IP experiences. Females of the have more IP experiences than the males. Also, family cohesion and competitive framework have been found to predict IP. The present findings reflect the need for the designing of certain intervention programs in organizations and academic settings focusing in enhancing women to believe in their potentials and increased their self esteem that can target the unfounded feelings and thoughts present in the IP and also emphasize on maintain cordial family environment.
References


