

Research Paper

Perceived Incompetence: A Study of the Impostor Phenomenon among Sport Performers

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ABSTRACT

The impostor phenomenon is a pervasive psychological experience of perceived intellectual and professional fraudulence. It is not a diagnosable condition yet observed in clinical and normal populations. Although the impostor phenomenon (IP) has been noted in several populations, literature is sparse focusing on sport performers. Using a survey design with a quota sample of 31 sport performers, this study found an overall moderate IP experience among sport performers with an overall mean score of 2.9387 (SD = .52721). Further, no significant differences were found in male and female sport performers on the impostor phenomenon. Additional group differences were observed in the levels of the Imposter phenomenon in different family structures (joint, nuclear, and single-parent families). However, the significance of these differences is yet to be explored. Nonetheless, these findings indicate that the nature of family dynamics may have some association with the development of the Imposter phenomenon. Implications and future directions are discussed.

Keywords: Sports, impostor phenomenon, performance, well-being, thriving, sport performers

Sport performers encounter various stressors as part of their involvement in competitive sports. While responding to such stressors an overall powerful effect has been observed on athletes' sport performance and well-being (Jones and Hardy, 1990; Arnold and Fletcher, 2021). Various research in the field of sports has been growing in response to such demands. However, despite the growing research seeking to understand the promotion of both athletic performance and well-being recent media coverage has indicated that there is a relentless need to succeed within the realm of elite sport that now results in prioritizing performance even at the expense of the player's welfare (Brown et al., 2021; Kavanagh et al., 2021). Therefore, the primary interest of sports psychologists is to constantly provide for and maintain an athlete's mental health and well-being in the midst of the stresses of competition and to improve their performance. Thus, there is a high need for scholars and researchers to find ways of enhancing performance while simultaneously optimizing well-being within highly demanding environments in contemporary sports.

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Received: December 02, 2022; Revision Received: January 30, 2023; Accepted: February 05, 2023

Sports psychology as a field of study in India

Even though it is widely accepted that the field of psychology plays a vital role in the enhancement of athletic performance, sport psychology is still relatively new and still evolving in India. Additionally, a negative connotation is also associated with the term 'psychology' which hints at issues related to psychopathology indicating that sport performer has a 'problem' if they seek the consultation of a mental health professional. This perception is difficult to overcome especially in the field of sports wherein the sport performers are displayed as highly active, competent, and healthy individuals leaving no space for mental or emotional vulnerability. Even though sports psychology has been more widely accepted than before, it still carries a stigma in the eyes of many athletes, coaches, and other individuals which further inhibits researchers and scholars to reach out to the stakeholder and bringing improvements through in-depth psychological research and investigations.

Such instances happen due to a lack of awareness about the understanding of sports psychology and the role of sports psychologists. Therefore, the researchers must continue exploring the field of sport and stay up to date with contemporary challenges and targets by sport performers that they strive to achieve. Such findings should be applicable, suitable, and relevant in the context it was primarily conducted in. This interdisciplinary approach will not only minimize the stigma attached to the field but will also normalize the use of psychological interventions and tools for the sport performers that shall help them track and improve their performance and overall well-being (i.e., thriving in sport).

In research, thriving describes the concurrent perception of a high level of performance and experience of high levels of well-being within a specific sporting encounter (Brown et al., 2021) or an overall perception of high levels on both dimensions over a sustained period (Brown, Arnold, Fletcher, & Standage, 2017). However, researchers have adopted various conceptualizations for thriving and have examined thriving as a supplementary variable (Galli & Vealey, 2007; Gucciardi, Jackson, Hodge, Anthony, & Brooke, 2015; Gucciardi & Jones, 2012). As a result, little knowledge has been gleaned on what factors contribute to or hinder this experience. The lack of systematic investigation on thriving in sports is particularly surprising given the importance of the desirable outcomes that can occur when thriving. Recently a group of researchers has initiated to fill this gap and identified personal and contextual facilitators in predicting thriving in athletes (Brown et al., 2017) however the study did not identify personal and contextual barriers which may play an equal role in predicting in-match failure among athletes.

Influential psychosocial variables for thriving

Researchers have identified an abundance of psychosocial variables that may either facilitate or inhibit the thriving of an individual. These variables may be separated broadly into two groups: personal factors (enablers and barriers) and contextual factors (enablers and barriers) (Carver, 1998; Spreitzer et al., 2005). Therefore, the present study aims to provide a brief narrative review of one of the identified psychosocial barriers that have been identified in previous studies where thriving (e.g., performance, well-being, and ultimately thriving) have been the target variable of interest. In order to filter the factors from vast literature two major criteria of factor selection were followed. First, the target factor should be well established in the published literature to have an impact on an individual's mental health or performance. Second, the research with respect to the target factors should be majorly lacking or incomplete in the field of sports. These criteria ensured that the researcher had an opportunity to contribute to filling major loopholes present in the current field of study and

Perceived Incompetence: A Study of the Impostor Phenomenon among Sport Performers

to be able to provide necessary information to the administration engaged with intervention building or management in respective sport institutions.

Personal factors

Personal factors are the cognitions, attitudes, and behaviors of an individual that may or may not help him/her to thrive (Park, 1998). One of the major factors identified in the thriving literature includes, but is not limited to, is impostor phenomenon (Palmer, 2021; Feenstra, Begeny, Ryan, Rink, Stoker, and Jordan, 2020).

Impostor phenomenon

Researchers have identified a number of factors contributing to the emergence of Impostorism, including perfectionism (Clance & Imes, 1978; Clance, 1985; Thompson, Foreman, & Martin, 2000; Ferrari & Thompson, 2006) and family environment (e.g., Bussotti, 1990; Clance, 1985; King & Cooley, 1995; Sonnak & Towell, 2001).

It is common for sport performers to strive for perfectionism in their sport (Koivula, Hassmen, & Fallby, 2002). Additionally, athletes who over-strive for perfectionism also put themselves at risk to experience more levels of negative emotions and heightened levels of anxiety and depression (Koivula, Hassmen, & Fallby, 2002).

The Impostor Phenomenon was first described by Dr. Pauline Clance, from her observations in a clinical setting (Clance, 1985) as the pervasive psychological experience of perceived intellectual and professional fraudulence. As per Peteet, Montgomery, & Weekes (2015) and Sims (2020), the impostor phenomenon is the internal belief that one is not as competent or knowledgeable as others and has a fear or worry that the person will be exposed as a fraud. It is a phenomenon that causes individuals to feel as if they either do not belong in a position that they are in or that they do not deserve the successes they obtain (Thompson, Davis, & Davidson, 1998). Also, individuals with the Impostor Phenomenon experience intense feelings that their achievements are undeserved which causes distress and maladaptive behavior (e.g., Clance, 1985; Harvey & Katz, 1985; Kolligian & Sternberg, 1991; Sonnak & Towell, 2001). Impostor phenomenon is not a diagnosable condition yet observed in clinical and normal populations (Mak, KKL, Kleitman, S., and Abbott, M.J. 2019). Increasingly, the research on the impostor phenomenon has expanded beyond clinical to applied settings.

Impostor Phenomenon (IP) is often comorbid with depression and anxiety and is associated with impaired job performance, job satisfaction, and burnout among the employee population (Keefer et al., 2020). IP has detrimental consequences on individuals' well-being (e.g., Sonnak and Towell, 2001; McGregor et al., 2008) and career advancement (e.g., Kets de Vries, 2005; Vergauwe et al., 2014; Neureiter and Traut-Mattausch, 2016). It affects both genders (e.g., Bussotti, 1990; Langford; Mattie, Gietzen, Davis & Prata, 2008; Prata & Gietzen, 2007), and is present across a range of age groups (Chae, Piedmont, Estadt, & Wicks, 1995), people with different occupations such as college students (Bussotti, 1990; Harvey, 1981; Langford, 1990), academics (Topping, 1983), medical students (Henning et al., 1998), marketing managers (Fried-Buchalter, 1992), and physician assistants (Mattie, Gietzen, Davis & Prata, 2008; Prata & Gietzen, 2007), and different cultures (Clance, Dingman, Reviere, & Stober, 1995). It has been estimated that approximately 9 to 82% of people experience at least one episode of this Impostor Phenomenon in their lives (Gravois, 2007; Keefer, Madhusudhan, Taylor, Clark, Nelson, Cokley, Hagg, 2020). In addition to that, previous research indicates that athletes are at a higher risk of a range of mental health problems (Rice, Purcell, Silva, Mawren, McGorry, Parker, 2016). Therefore, it becomes

Perceived Incompetence: A Study of the Impostor Phenomenon among Sport Performers

important to assess IP among athletes, which if present, may interfere with sport performers' thriving in sports. To date, the studies in sports research lack highlighting the prevalence of the impostor phenomenon and its association or involvement with athletic performance (Swinney, 2020).

Theoretical framework

The Cognitive Behavioral Model (Beck, 1960) focuses on how cognition shapes behavior and vice versa. The third component of the theory are feelings of an individual. CBT explains how thoughts, feelings, and behaviors interact, specifically focusing on how certain thoughts lead to certain feelings which, in turn, lead to certain behavioral responses. The current research recognizes that the impostor phenomenon can be based on this model wherein it's an internal experience of believing that one is not competent as others perceive one to be. Such thoughts and feelings remain despite having objective evidence of such achievements (Bernard et al., 2002; Clance & Imes, 1978; Whitman & Shanine, 2012). Therefore, it is suggestive that having high levels of impostor phenomenon not only interferes with one's well-being but also impacts one's performance (Keefer et al., 2020; Sonnak and Towell, 2001; McGregor et al., 2008; Kets de Vries, 2005; Vergauwe et al., 2014; Neureiter and Traut-Mattausch, 2016).

Issues and Areas of Research

The dynamics of sports culture have been changing rapidly over the years and so it is important for the researchers to update and produce contemporary issues or challenges faced by the athletes that may impact athletes' well-being and eventually sports performance.

Some individuals report feeling inauthentic at work, and fear of being found out as a fake or as someone who does not deserve their status or reputation (Badawy, Gazdag, Bentley, and Brouer, 2018), this pervasive feeling has recently gained attraction and recognition in sports research (Swinney, 2020). However, the researchers' examination of the prevalence of IP and its association with athletic performance and well-being have been insubstantial in the field of sport research.

Previous literature has indicated that the impostor phenomenon (Chrisman, Pieper, Clance, Holland, & Hughes, 1995; Henning, Ey, & Shaw, 1998; Topping, 1983) is a well-known factor that affects an individual's mental health, which in turn, is known to interfere with performance (Rice, Purcell, Silva, Mawren, McGorry, & Parker, 2016). Additionally, even though the impostor phenomenon is said to be prevalent in high-achieving individuals, it has not been investigated among athletes (Clance & Imes, 1978).

Rationale

Even though Brown, Arnold, Fletcher, & Standage (2017) identified personal and contextual facilitators in the prediction of thriving in athletes, the study lacked the identification of personal and contextual barriers that may play an equally important role in predicting in-match failure in athletes.

Lack of updates upon previous research and the addition of new perspectives on human thriving compromises the accuracy in the prediction of in-match success amongst sport performers.

Perceived Incompetence: A Study of the Impostor Phenomenon among Sport Performers

Impostor phenomenon (IP) is a common phenomenon that is prevalent across different populations. Keeping in mind its detrimental consequences on well-being and performance, it is of utmost importance to examine IP amongst sport performers.

Therefore, in order to bridge a gap between the published literature and the current need of athletes for thriving in sports the current study shall investigate the prevalence of the impostor phenomenon (IP) among Indian athletes in phase 1 of the study.

The Present Study

In the present study, we examined the prevalence of the Imposter phenomenon. We posed two questions: First, is the experience of the impostor phenomenon present in athletes? If so, what is the prevalence rate of the impostor phenomenon among them? Second, is there a significant difference in the rate of IP among male and female sport performers? It was hypothesized that the impostor phenomenon will be prevalent among Indian athletes and that there will be a significant difference in the rate of IP in male compared to female sport performers. Therefore, the overarching aim of this study was to add a small body of emerging work by examining the prevalence of the impostor phenomenon among Indian sport performers and examining the group differences (if any) in the levels of the impostor phenomenon among male and female sport performers.

METHODOLOGY

Sample

The participants consisted of Indian sport performers considering the predefined inclusion and exclusion criteria. Quota sampling for quantitative data collection was used for the target participants with respect to the stated characteristics and traits. The population was split into sub-groups and samples were taken from each group to meet an agreed-upon quota. The rationale for using quota sampling is that it is used when the researcher does not have access to the entire population. Likewise, in this case, since the researcher isn't reaching every potential respondent in the population, it's important to ensure there is proper representation through quotas. The selection of participants for research using the quota sampling method increases the effectiveness of the research and can be generalized to the entire population. Additionally, quota sampling allows an easy process to carry out and decipher information once the sampling is done. It also improves the representation of any particular group within the population thereby ensuring that these groups are not over-represented.

The following inclusion criteria were used to the present study: Male and female sport performers with fair communication, reading, understanding, and writing skills in English aged 18 years and above and actively engaged in sports were included. Only those who completed their matriculation were included in the conduction of the study. Additionally, sport performers competing at either state, national, international level, or professional levels from both individual and team sports were included.

Certain exclusion criteria were also defined such as the exclusion of winter and traditional sports. Athletes playing at regional and local levels were excluded. The exclusion was also made for participants with physical disabilities, vision, and/or intellectual impairment participating in parasport. And lastly, participants who had not participated in any sporting encounters (training/competition) over the past month due to injury or non-selection were excluded from the current study.

Perceived Incompetence: A Study of the Impostor Phenomenon among Sport Performers

For quantitative assessment: 385 participants will be targeted for the study (Cochran's formula) for large effect at a 95% confidence level with $\pm 5\%$ precision. In the phase 1, the current pilot study assessed 31 participants.

Instrument

Clance Impostor Phenomenon Scale (CIPS) a 20 items scale by Clance, in 1985 was selected for the present study. The scale was selected based on the appropriateness and suitability of the scale for the current study and targeted population. This 20-item instrument acknowledges the fear of evaluation and feeling less capable than peers. It is also positively worded to minimize social desirability effects.

The participants were asked to rate as not at all true (1), rarely (2), sometimes (3), often (4), and very true (5) in response to each item. Subsequent scores were calculated for each item. Reliability is the measure of the internal consistency of the constructs in the study. A construct is reliable if the Alpha (α) value is greater than .70 (Hair et al., 2013). Construct reliability was assessed using Cronbach's Alpha. The results revealed that the Clance Impostor Phenomenon scale with 20 items ($\alpha = .785$) was found reliable. Reliability results are summarized in Table 1.

Table 1. Cronbach-Alpha of the whole scale Reliability Statistics

Constructs	No. of Items	Alpha (α)
CIP	20	.785

Face validity is most often measured by relying on the knowledge of experts who are familiar with the item being measured (Glen, 2009). In this study, Face validity was checked by consulting experts in the quantitative survey who reviewed the language, sequence & presentation of the Questionnaire. Face validity was done with the help of 4 academicians, 2 counsellors & 2 Experts.

Research Design

The current cross-sectional study used a non-experimental (quantitative) research design. The study followed a descriptive and inferential research design, in which the rate of impostor phenomenon among Indian sport performers was calculated and compared for different categories.

Data collection and procedure

Following institutional approval, participants were invited to participate in the study either through direct correspondence or via their coaches. During this initial contact, participant information sheets were distributed which summarized the purpose and nature of the study and the participants' ethical rights (e.g., anonymity, confidentiality, right to withdraw). Participants were then asked to personally provide informed consent prior to participating. After providing informed consent, participants were given a copy of a multi-section questionnaire, which was available in both written and electronic formats. When responding to the items, participants were asked to reflect on their experiences in demanding competitive sporting encounters over the past month. Participants were excluded from the study if they had not participated in any sporting encounters over the past month due to injury or non-selection.

RESULTS

The data was coded and analyzed through the SPSS (Statistical package for social sciences) Version 23. Prior to the analyses, data were screened to see if they met the assumptions of the t-test. No participants were identified as univariate outliers, as assessed by inspection of a boxplot. All participants were retained for this analysis. Imposter phenomenon scores were normally distributed as assessed through normal Q-Q plots and the Shapiro-Wilk test. The descriptive statistics of the demographic variables are presented in the tables below.

Demographic profile of respondents

Gender

The sample of sport performers consisted of 16 (51.6%) females and 15 (48.4%) male respondents (N=31).

Table 2. Frequency Distribution for Gender

Gender	Frequency	Percent
Female	16	51.6
Male	15	48.4
Total	31	100.0

Age

The average age of sport performers was 21.35 years (SD= 2.6019).

Location

The sample of sport performers consisted of 1 (3.2%) from Bihar, 5 (16.1%) from Delhi, 13 (41.9%) from Haryana, 7 (22.6%) from Mumbai, 1 (3.2%) from Punjab, 3 (9.7%) from Uttar Pradesh, and 1 (3.2%) from Uttarakhand (N=31).

Table 3. Frequency Distribution for Permanent Location

Permanent Residence	Frequency	Percent
Bihar	1	3.2
Delhi	5	16.1
Haryana	13	41.9
Mumbai	7	22.6
Punjab	1	3.2
Uttar Pradesh	3	9.7
Uttarakhand	1	3.2
Total	31	100.0

Family Structure

The sample of sport performers consisted of 11 (35.5%) living in joint families, 11 (35.5%) living in nuclear families, and 09 (29.0%) living in single-parent families.

Table 4. Frequency Distribution for Family Structure

Family Structure	Frequency	Percent
Joint family	11	35.5
Nuclear family	11	35.5
Single-parent family	9	29.0
Total	31	100.0

Individual/team sport category

The sample of sport performers belongs to 11 (35.5%) individual sport category and 20 (64.5%) belong to the team sport category.

Table 5. Frequency Distribution for Individual and Team Sport Category

Sport Category	Frequency	Percent
Individual sports	11	35.5
Team sports	20	64.5
Total	31	100.0

Senior/Junior Category

The sample of sport performers belongs to 04 (12.9%) Junior category and 27 (87.1%) belongs to the senior category.

Table 6. Frequency Distribution for Senior and Junior Sport Category

Sport Category	Frequency	Percent
Junior category	4	12.9
Senior category	27	87.1
Total	31	100.0

Sport Category

The sample of sport performers belongs to 02 (6.5%) Archery, 01 (3.2%) belongs to athletics, 01 (3.2%) belongs to badminton, 02 (6.5%) belongs to Basketball, 01 (3.2%) belongs to Cricket, 16 (51.6%) belongs to Football, 01 (3.2%) belongs to Kho Kho, 04 (12.9%) belongs to Rifle Shooting, and 03 (9.7%) belongs to Weightlifting/ Powerlifting,

Table 7. Frequency Distribution for different Sports

Sport	Frequency	Percent
Archery	2	6.5
Athletics	1	3.2
Badminton	1	3.2
Basketball	2	6.5
Cricket	1	3.2
Football	16	51.6
Kho kho	1	3.2
Rifle shooting	4	12.9
Weightlifting, powerlifting	3	9.7
Total	31	100.0

Regularity in Training sessions

In the sample of sport performers, 09 (29.0%) were engaged in an irregular training session and 22 (71.0%) were engaged in a regular training session.

Table 8. Frequency Distribution for Regular and Irregular training sessions

Regularity in sport training	Frequency	Percent
Irregular training session	9	29.0
Regular training session	22	71.0
Total	31	100.0

Highest level of competition participated in

In the sample of sport performers, 01 (3.2%) are professionals, 05 (16.1%) are international level sport performers, 16 (51.6%) are national level sport performers, and 09 (29.0%) are state-level sport performers.

Table 9. Frequency Distribution for the Highest level of Competition Participated in

Highest level of Competition Participated in	Frequency	Percent
International competition	5	16.1
National competition	16	51.6
Professional level	1	3.2
State competition	9	29.0
Total	31	100.0

Frequency Distribution for the number of years active in sports

The average number of years sport performers were active in sports was 7 years (SD= 2.828).

Imposter Phenomenon

Descriptive statistics for IP reveal an overall mean score of 2.9387 (SD = .52721). This shows overall moderate IP experiences amongst sport performers. IP5 and IP19 had the highest mean value, indicating that the sport performers think that they held their present position or gained present success because they happened to be in the right place at the right time or knew the right people and if the sport performers know that they are going to receive a promotion or gain recognition of some kind, they hesitate to tell others until it is an accomplished fact. Hence, H1 was supported.

Table 10. Descriptive statistics for IP construct

Items	N	Minimum	Maximum	Mean	Std. Deviation
IP1	31	2.0	5.0	3.548	1.0905
IP2	31	1.0	5.0	3.581	1.1768
IP3	31	1.0	5.0	2.484	1.1510
IP4	31	1.0	5.0	2.710	1.2164
IP5	31	1.0	5.0	3.613	1.3584
IP6	31	1.0	5.0	2.323	1.1941
IP7	31	1.0	5.0	3.129	.9217
IP8	31	1.0	5.0	2.806	1.2495
IP9	31	1.0	5.0	2.419	1.2589
IP10	31	1.0	5.0	2.677	1.0128
IP11	31	1.0	4.0	2.194	.9805
IP12	31	1.0	5.0	3.258	1.1538
IP13	31	1.0	5.0	2.742	1.2374
IP14	31	1.0	5.0	2.806	1.1950
IP15	31	1.0	5.0	2.806	1.1950
IP16	31	1.0	5.0	2.548	1.1207
IP17	31	1.0	5.0	3.161	1.3190
IP18	31	1.0	5.0	3.355	1.2793
IP19	31	1.0	5.0	3.613	1.2021
IP20	31	1.0	5.0	3.000	1.3663
IP	31	1.90	4.10	2.9387	.52721

N Sample Size; IP Imposter Phenomenon

Levels of Imposter Phenomenon

In the sample of sport performers, 02 (6.5%) have few impostor characteristics, 17 (54.8%) have moderate impostor phenomenon, 10 (32.3%) have frequent impostor feeling, and 02 (6.5%) have intense impostor phenomenon experience.

Table 11. Frequency Distribution for levels of Imposter Phenomenon

IP Scores	Frequency	Percent
1-40	2	6.5
41-60	17	54.8
61-80	10	32.3
81-200	2	6.5
Total	31	100.0

IP across family structure

The data was collected from sport performers in three different family structures that included joint family (n = 11), the nuclear family (n = 11), and the single-parent family (n = 09). The descriptive statistics show that the mean score on the impostor phenomenon in sport performers in the joint family was 3.09 (SD = .410), for the nuclear family was 2.89 (SD = .573), and for a single-parent family was 2.81 (SD = .605).

Table 12. Mean score on the Imposter Phenomenon across family structure

Family structure	Mean	N	Std. Deviation
Joint family	3.0909	11	.41099
Nuclear family	2.8909	11	.57394
Single-parent family	2.8111	9	.60507
Total	2.9387	31	.52721

N Sample Size

Independent Sample t-test between Male and Female Respondents.

An independent-samples t-test was conducted to compare the Impostor Phenomenon for Male and Female sport performers. There were no significant differences ($t(29) = -1.370$, $p = .181$) in scores for Male ($M = 56.133$, $SD = 10.3016$) and Female ($M = 61.250$, $SD = 10.4785$). The magnitude of the differences in the means (mean difference = -5.1167 , 95% CI: -12.756 to 2.523) was very small. Hence, H2 was not supported.

Table 13. Differences in Impostor phenomenon between Male and Female Sport performers.

DV		Mean	SD	Levene's Test for Equality of Variances		t-test for Equality of Means						
				F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
											Lower	Upper
	Male	56.133	10.3016	.001	.974	-1.370	29	.181	-5.1167	3.7354	-12.7564	2.5231
	Female	61.250	10.4785									

M Mean; SD Standard Deviation

DISCUSSION

The aim of the study was to examine the prevalence of the Impostor phenomenon amongst sport performers. Concomitantly, we were interested in examining the levels of impostor phenomenon in the participants.

Perceived Incompetence: A Study of the Impostor Phenomenon among Sport Performers

While exploring the prevalence of the impostor phenomenon we found a sound prevalence of the impostor phenomenon among sport performers. A systematic review by Bravata, Watts, Keefer, Madhusudhan, Taylor, Clark, Nelson, Cokley, Hagg (2020) included 62 studies of 14,161 participants and concluded similar findings stating that the prevalence rates of the impostor phenomenon vary widely from 9 to 82% largely depending on the screening tool and cut-off used to assess symptoms. This study is consistent with our results manifesting a moderate to high prevalence rate of impostor phenomenon in the target population with 02 (6.5%) sport performers having few impostor characteristics, 17 (54.8%) having moderate impostor phenomenon, 10 (32.3%) having frequent impostor feelings, and 02 (6.5%) having intense impostor phenomenon experience.

Basically, sport performers are prone to stressors, especially those of elite status, it is common to strive for perfectionism in their sport (Koivula, Hassmen, & Fallby, 2002). Research also indicates that athletes who over-strive for perfectionism also put themselves at risk to experience more levels of negative emotions and heightened levels of anxiety and depression (Koivula, Hassmen, & Fallby, 2002). From this, we can infer that since there is a consistent need for sport performers to display a high level of performance within highly demanding environments in contemporary sports, the sport performers are more inclined to strive for perfectionism during training and competitions even at the cost of compromising their well-being in order to stand out from the rest and avoid in-match failure. Along with that, sport players may constantly doubt themselves and worry about their performance after even facing a minor failure or challenge during training for upcoming competitions. This argument derives support from the impostor syndrome theory (Clance, 1985) suggesting that the Impostor Phenomenon is characterized by six potential attributes: the impostor cycle, the need to be special or to be the very best, superman/superwoman aspects; fear of failure, denial of competence and discounting praise, and fear and guilt about success.

Also, a non-significant group difference was found between male and female participants on the impostor phenomenon. Initially, Clance & Imes 1978 stated gender differences. However, in subsequent years of research (Bussotti, 1990; Langford, 1990; Topping, 1983) stated no gender differences stating indicating that the impostor phenomenon has been observed to affect both genders. Thus, the study supported the current findings on gender differences.

Clance impostor phenomenon test has been found reliable on the Indian population with ($\alpha = .785$). Our results are consistent with the study by Terwee et al. (2007) also found reliability between 0.70 and 0.95.

In this study, Face validity was checked by consulting experts in the quantitative survey who reviewed the language, sequence & presentation of the Questionnaire. Face validity was done with the help of 4 academicians, 2 counselors & 2 Experts.

Additional observations were made in the levels of Impostor phenomenon in different family structures. The data was collected from sport performers from three different family structures that included the joint family ($n = 11$), the nuclear family ($n = 11$), and the single-parent family ($n = 09$). The descriptive statistics show that the mean score on the impostor phenomenon in sport performers in the joint family was 3.09 ($SD = .410$) indicating that the respondents living in a joint family frequently has impostor feelings, for the nuclear family the mean score on the impostor phenomenon was 2.89 ($SD = .573$) and for a single-parent family was 2.81 ($SD = .605$) indicating an overall moderate IP experience in respondents

living in a nuclear and single-parent family. Even though we are yet to confirm the significance of the differences found in the levels of impostor phenomenon in participants from different family structures, nonetheless, the current findings are supported by Bussotti (1990), Clance (1985), King & Cooley (1995), Sonnak & Towell (2001) wherein the researchers identified the family environment as a contributing factor to the emergence of Impostorism. These findings indicate that the nature of family dynamics may have some association with the development of the Impostor phenomenon. Such associations will be explored on a large number of participants in line with other psychosocial factors through the next phase of the current study in an effort to generalize current findings and provide recommendations for the prevention or minimizing of the effects of the impostor phenomenon in sport performers.

Implications and Contributions

The overarching mission of the field of psychology is to advance the creation, communication, and application of psychological knowledge to benefit society and improve people's lives (American Psychological Association, 2015). This study has attempted to address the first two of these mission objectives, by providing an empirical foundation for understanding barriers to thrive in sport performers. In doing so, it has also offered an initial grounding to the third objective in developing thriving interventions and their application in sport. Furthermore, when developing such complex interventions researchers are advised to follow published guidelines, and ensure that interventions achieve both intervention effectiveness and intervention efficacy in reducing or preventing impostor phenomenon and enhancing performance and well-being (American Psychological Association Presidential Task Force on Evidence-Based Practice, 2006). Such objectives are achieved through a systematic program of research, and researchers are, therefore, also encouraged to further pursue both practice-based evidence and evidence-based practice (Barkham & Mellor-Clark, 2003; Brown & Fletcher, 2017).

Additionally, the collective findings from the research have made a contribution to knowledge on, and the promotion of, thriving in sport performers by supporting a conceptualization of thriving in sport, identifying the personal barriers (i.e., impostor phenomenon) that may diminish performance and well-being, and predicting in-match failure. These findings shall help sports psychologists, agencies, and training institutes to equip sport performers with quality care and provide focused intervention for both the enhancement of sports performance and the improvement of mental health.

Future Direction

The study focused on revealing the impostor phenomenon amongst sport performers. This is the first systematic investigation to study the phenomenon exclusively among sport performers. It is recommended for the researchers in extending the current work to a larger population and explore the relationship between IP, performance, and well-being among sport performers. It is also recommended that the researchers examine the impostor phenomenon in various sub-groups of sport performers. Furthermore, psychosocial determinants should be explored for IP in sport performers for the development of relevant interventions that may reduce the levels of IP and improve overall performance and well-being in sport performers.

List of Abbreviations

IP Impostor Phenomenon
SPSS Statistical package for social sciences

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Acknowledgement

Amisha Singh is a recipient of the Indian Council of Social Science Research Doctoral Fellowship. Her article is primarily an outcome of her doctoral work sponsored by ICSSR. However, the responsibility for the facts stated, opinions expressed, and the conclusions drawn is entirely that of the author.

Conflict of Interest

The author(s) declared no conflict of interest.

How to cite this article: Singh, A. & Arora, M. (2023). Perceived Incompetence: A Study of the Impostor Phenomenon among Sport Performers. *International Journal of Indian Psychology*, 11(1), 310-326. DIP:18.01.034.20231101, DOI:10.25215/1101.034