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Article

The Impostor Phenomenon: An Empirical Study About its Influence on the Learning of English as a Second Language in Teenagers

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ABSTRACT

Background: The Impostor Phenomenon (IP) is characterised by a strong sense of intellectual fraudulence in talented and successful people. Some of the features presented in this phenomenon are closely related to the affective variables, resulting in the hindrance of learning the English language. As students are one of the risk groups that can suffer extremely from this, this paper aims to analyze the influence of IP on students when learning their second language. **Method:** A descriptive and correlation study was conducted, using a sample of 141 high-school students aged 16-18. Two questionnaires were administered: the Clance Impostor Phenomenon Scale (CIPS) and another questionnaire designed for this study. **Results:** Students presented increasing levels of IP in comparison to previous studies. Related to the English subject, its traits are particularly visible when productive skills (i.e., speaking and writing) come into play, and students feel that their proficiency and academic level are low and refuse to participate in class. **Conclusion:** Despite the paucity of research on the subject, especially in recent years, it is vital to promote interventions that include supportive teaching practices in class and psychopedagogical help for students in need.

El Síndrome del Impostor: Un Estudio Empírico Sobre su Influencia en el Aprendizaje del Inglés como Segunda Lengua en Adolescentes

Palabras clave:
Síndrome del Impostor
Aprendizaje
Variables afectivas
Inglés como segunda lengua
Estudiantes

RESUMEN

Antecedentes: El Síndrome del Impostor (SI) se caracteriza por un gran sentimiento de fraudulencia intelectual que se da en personas talentosas y exitosas. Algunos de los rasgos que caracterizan este fenómeno están estrechamente relacionados con las variables afectivas y pueden suponer un obstáculo en el proceso de aprendizaje de la lengua inglesa. Además, dado que los estudiantes son uno de los grupos de riesgo que más pueden sufrirlo, este trabajo pretende analizar la influencia del SI en ellos a la hora de aprender su segunda lengua. **Método:** Se realizó un estudio cualitativo y descriptivo, tomando una muestra de 141 estudiantes de bachillerato con edades comprendidas entre los 16 y los 18 años. Se administraron dos cuestionarios, el Clance Impostor Phenomenon Scale (CIPS) y otro cuestionario especialmente diseñado para este estudio. **Resultados:** Los estudiantes presentaron niveles crecientes de SI en comparación con estudios anteriores. En relación con la asignatura de inglés, sus rasgos son principalmente visibles cuando trabajan las habilidades productivas (es decir, Speaking y Writing), sintiendo que su competencia y nivel académico es inferior y negándose a participar en clase. **Conclusiones:** A pesar de la escasez de investigaciones sobre el tema, especialmente en los últimos años, es vital promover intervenciones que incluyan prácticas docentes de apoyo en clase y ayuda psicopedagógica para los alumnos que lo necesiten.

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Introduction

The term 'Impostor Phenomenon' was first coined in 1974 by the clinical psychologists Pauline Rose Clance and Suzanne Imes and first developed in their book The Impostor Phenomenon in High Achieving Women: Dynamics and Therapeutic Intervention (1978). It refers to a distortion in the individual's self-concept, associated with the prevalence of intense thoughts and feelings of intellectual and professional fraudulence (Fernández & Bermúdez, 2000). Indeed, IP is prevalent in successful people who, despite their objectively achieved and recognised achievements, fail to internalize them, attributing their results to the influence of external factors. Consequently, as commented by Bravata et al. (2019), they have a persistent insecurity and fear of being "discovered" as frauds by others.

Main Traits of the Impostor Phenomenon

Numerous studies consider IP to be a subjective and distorted perception of the individual's own competence (Cromwell, 1989), who is mired in a toxic cycle of negative emotions, thoughts, and behaviours that control their life. This is a cognitive problem that the author Cromwell (1989) relates to Ellis' Rational Emotive Behavioural Therapy, which states that humans are biologically prone to generate both rational and irrational thoughts. The problem arises when the presence of the latter predominates in the individual, giving rise to an internal dialogue which causes that emotional disorder and is associated with events where their capacity is tested. As a consequence, various symptoms occur, including: generalised anxiety, lack of self-confidence, isolation, insomnia, frustration at the inability to meet their standards, and even depression. Similarly, this "internal experience of intellectual falseness" (Mann, 2019) presents a series of varied traits, which include low self-esteem, maladaptive perfectionism, fear of failure, minimization of praises, guilty feelings, negation of their competence, and maladaptive attributional style.

People who are affected by this IP tend to be rather introverted and to question themselves continuously. Even if they make a good first impression, this is only a mask (Clance, 1985), as behind it, a very low self-esteem and a lack of self-confidence can be found. But not only this, as they also generalize these shortcomings in such a way that they extend them to their entire academic career (Thompson et al., 1998), comparing themselves and extolling the abilities of others, while undervaluing their own abilities.

With respect to perfectionism, it is necessary to distinguish between adaptive and maladaptive perfectionism (Pannhausen et al., 2020). The former refers to "perfectionistic strivings", which are understood as the intention to set ambitious goals and attempt to achieve them; whereas the latter refers to "perfectionistic concerns", which bring together a series of dysfunctional thoughts about an individual's perceived self-efficacy and the image they project. That said, individuals with IP are prone to maladaptive perfectionism. They set extremely high goals and judge themselves harshly if they fail to meet them. Although they recognize that anyone can make mistakes in what they excel at, they are unable to apply the same thoughts to their situation (Clance, 1985). As a result of this psychological self-sabotage, they force themselves to be the brightest and the most productive all the time, aspiring to perfection in every task they perform. However, they feel at the same time that nothing they do is good enough.

Another remarkable trait is the individuals' difficulty in accepting acclaim for one's achievements. These individuals tend to minimize their success with statements such as "I'm not really that smart, I'm just a hard worker" (Edwards, 2019, p.22). However, this produces a paradox, since they are in a constant search for external approval; but when they receive some praise, they do not feel that they deserve it and undervalue their work (Mann, 2019). The way these subjects find to solve this discomfort and diminish their sense of guilt is through the externalisation of their success.

At this point, it is imperative to define the concept of locus of control. According to Parker et al. (2005, p.115), this term refers to "a person's beliefs regarding the consequences of his or her own behavior." In other words, they are those factors to which we attribute the reason for success, and whose dimensions are internality-externality and stability-instability. There can be four basic combinations: internal-stable (intelligence), internal-unstable (effort), external-stable (e.g., type of task or teachers), and external-unstable (luck).

Lastly, in IP, "what prevails is an externalization and active disengagement from achievements" (Fernández & Bermúdez, 2000, p.174) and the internalization of failure. This means that the people who suffer from this syndrome justify their success through external factors. On other occasions, the attribution of achievements to effort may also occur, but as means of supplanting their ability. In either case, it is interesting to state that such individuals exhibit a maladaptive attributional style, since the internal-stable factor is only considered if it is related to failure.

High-school Students as a Risk Group for IP

Regarding people affected by IP, Clance and Imes (1978) began their research based on the belief that it only affected some successful women, but subsequent studies have shown that IP can be experienced by everyone, irrespective of culture, age, or gender (Cromwell, 1989). Interestingly, 80% of people experience it at least once in their lives (Mann, 2019), but they are unable to put a name to what they feel.

Nevertheless, although IP can affect everyone equally, there are certain groups of people who are more likely to suffer from it. These are, among others: high school students, university students, academics, people active in the art world, members of underrepresented groups, or the self-employed (Mann, 2019). In general, Williams (2021) explained that the presence of IP is more frequent in the academic world due to its context and culture of perfectionism and competition.

Concerning high-school students, it is necessary to mention that as they are in adolescence, the great quantity of physical and psychological changes may result in excessive insecurity. This phase is also said to be the "search for personal identity", where teenagers have great difficulty in internalizing their self-perception (Danquah, 2022), and in the worst case, this can lead to an identity crisis and a loss of self-esteem.

Another factor to be considered is the great academic pressure exerted on them due to the fact that today's education system is dominated by an "exam culture" (Mann, 2019, p.125). It would not be correct to claim that this pressure automatically leads to suffering from IP. Yet, it may occur in some cases, particularly in individuals who have always been defined as 'good students', as they feel an additional pressure to maintain that label.

Similarly, as Mann (2019) argues, within this educational context, students find themselves in a situation of constant competition, in which they must prove their academic worth and constantly compare themselves with their peers. Moreover, in teenagers, this natural human tendency of comparison is much more frequent (Chayer and Bouffard, 2010), which follows four patterns: i) identification with overachievers, ii) contrast with overachievers, iii) identification with underachievers, and iv) contrast with underachievers. In the case of those who experience IP, their usual tendencies are the second and third mentioned, feeling less capable and underestimating their achievements since "there will always be someone better".

Likewise, another factor affecting students in their last years of high school is the additional pressure of building an academic and professional future at such a young age (Clance, 1985). It is not only the idea of competition and comparison, but also the personal and academic challenge in which they are immersed from the end of the high-school stage, which gives rise to the belief that whatever they do, it is never enough.

Thus, students experiencing IP may suffer more during adolescence than those who do not experience it. In fact, according to Clance (1985), the higher the academic demand, the greater the presence of this phenomenon. This leads to recurrent nightmares and insomnia in these students, together with excessive worry, self-doubt, and high levels of anxiety (Thompson, et al., 1998). Moreover, as they hide their true thoughts due to the fear of 'being discovered', they live this "impostor experience" alone, causing, as Clance (1985) explained, extreme loneliness.

Factors Influencing the Second Language Learning

Second Language Learning (SLL) refers to the process by which individuals learn another language, in this case, English, in addition to their mother tongue, often within environments where English is the dominant medium of communication. For teenagers, mastering SLL encompasses developing competences in Listening, Speaking, Reading, and Writing, alongside cultural understanding and communicative confidence. However, IP can significantly hinder these competences. Authors like Brauer et al. (2023) indicate that students experiencing IP often exhibit lower self-efficacy and diminished academic self-evaluations, which adversely affect their language acquisition journey. Specifically, IP has been linked to increased communication anxiety and a decreased willingness to communicate in the target language. Furthermore, IP's association with fear of negative evaluation may cause students to avoid language practice opportunities, thereby limiting their exposure and growth.

When learning a second language, thus, the psychological and emotional variables of learners should be considered as both facilitating and hindering factors. Several studies on applied linguistics, such as those conducted by Dewaele (2011) and Gardner and MacIntyre (1993), have demonstrated the relation between the affective variables and indices of second language achievement. As demonstrated by Gardner and MacIntyre (1993), for instance, the students' attitude towards the learning situation and the language anxiety are two of the most influential ones.

In the case of attitude towards the SLL, it has been proved that "emotions are fundamentally important motivators" (MacIntyre et al., 2009, p.47), as they are directly related to the effort students make. Similarly, the subject's development of preferences or disinclinations during their learning path is traced by their previous language learning experiences. It is then the consequence of the learners' memories of "affective reactions to agents, events and objects" (Dewaele, 2011, p.24) that drives their decision-making processes. As Dewaele (2011, p.24) confirms, "emotion is at the basis of any learning or absence of learning."

This leads us to our second main concern, which is language anxiety. Gardner and MacIntyre (1993, p.159) refer to it as the "apprehension experienced by the individual in the language class," caused by either external or internal negative stimuli. With respect to SLL lessons, Dewaele (2011, p.25) stated that students "are typically worried about their linguistic abilities, fearing that others may be more competent (…) than themselves". This makes them observe in silence and try to avoid any embarrassing situation while they experience a general and foreign language anxiety.

The aforementioned variables establish a close relationship with IP. That is because language anxiety plays a main role when the irrational thoughts of lack of aptitudes to learn a second language appear (Sánchez-Carrón, 2013). So, learners experience a major difficulty in interacting, which may come to the perception of the English subject as a great handicap. As a result, as Sánchez-Carrón (2013) explained, their motivation decreases, leading to a blockage in their learning and internalization of the second language.

Addressing IP in SLL learners is therefore essential, as fostering accurate self-assessment and building communicative confidence can enhance their language learning experience and overall academic performance. Consequently, the main objective of this paper is to determine the presence of IP in a sample of high-school students, whether these traits affect their academic development in the subject of English, and which skills or other aspects of the subject (i.e., performance in the exams, participation, and effort) are most affected.

Method

Participants

The participants were high-school students aged from 16 to 18, the total sample of students being 141. They come from 3 different high schools located in a coastal town in the Region of Murcia, Spain, where the socio-economic status tends to be middle class. Yet, as there is no difference in results according to gender or age (Cromwell, 1989; Zanchetta et al., 2020), it was not considered as necessary to specify.

Since they are minors, families were contacted by means of the management team of the students' high schools to obtain their authorizations. They could only participate if they agreed to the conditions of the study.

Instrument

A descriptive and correlation study was conducted. The main instrument used was the CIPS (*Clance Impostor Phenomenon Scale;* Clance, 1985) was used. It is a questionnaire consisting of 20 items presented in the form of affirmations, which are followed by five response options arranged according to a Likert scale, and are assigned a numerical value: 1 = *Not at all true,* 2 = *Rarely,* 3 = *Sometimes,* 4 = *Often,* and 5 = *Very true.*

As the aim of the survey above is the detection of the presence of IP in a person and the extent to which it appears, the numbers of each

response have to be added up, and the total score given (between 20 and 100) would result in the frequency of occurrence. If the score is less than or equal to 40, it indicates that the informant has very few traits associated with IP; if it is between 41 and 60, it means that there is a moderate incidence of traits; if it fluctuates between 61 and 80, it shows that the person repeatedly experiences situations that are associated with IP; and if the total score is above 80, the subject suffers a really intense experience of IP (Clance, 1985).

Furthermore, given the possibility of observing an interesting relationship between this "impostor experience" and Second Language Learning, it was necessary to extend the Clance scale with new items that would be more specific to the research (see Appendix). Thus, seven additional statements were formulated, which also follow the Likert scale explained above. These refer to the following variables: Irrational belief of imperfection in Speaking, Writing, Listening, and Reading; students' belief that their academic success is due to external causes; irrational belief of falseness due to comparison with high standards and its influence on student non-participation, and students' disqualification of their own effort. Besides, these items were analysed to check their reliability through Cronbach's alpha. In this test, the highest theoretical value is 1, so that, as authors such as Oviedo and Campo-Arias (2005) point out, obtaining a value between 0.70 and 0.90 means that the survey is considered acceptable for its function. Our items obtained a value of 0.86, making them reliable and suitable to be used.

Procedure

To conduct this study, different high schools were contacted, as well as the students' families to obtain informed permission. They were informed of the purposes of the present research, and it was explained to them that their participation was voluntary and anonymous. They could only participate if they agreed to the conditions of the study. The research complied with the Declaration of Helsinki guidelines for human subjects (World Medical Association, 2013).

The aforementioned questionnaires were then run through Google Forms. Moreover, for the data analysis, the statistical software SPSS was utilised, with the information collected being dumped into a database and the statistics then applied.

Data Analysis

In terms of the procedure for the analysis, we first classified the results obtained from the CIPS questionnaire into four ranges of IP, that is, no presence, moderate presence, repeated presence, and intense presence. Additionally, the seven extra items (i.e., Speaking, Writing, Listening, Reading, academic success, participation, and perceived effort) were analysed by means of contingency tables. Apart from this, a Chi-square test was created, which is used to check if two categorical variables are related. It compares the observed frequencies in each category to the expected frequencies (assuming no relationship between variables). Hence, if the results of this Chi-square test are less than 0.5, the relationship between variables is statistically significant. This analysis was aimed to examine the relation between the presence of IP and the different variables of SLL.

Results

Results Obtained From the CIPS Questionnaire

The first finding obtained, which is supported by previous studies, is the high prevalence of IP in teenagers. Out of 141 participants, only 17 (12.06%) did not suffer from this "impostor experience" on a larger scale, as the presence of such traits are really low or non-existent. At the other extreme, there are 13 people (9.22%) who suffer from this IP in an intense way, as their scores are among the highest, including some as high as 97 and 98 points. Moreover, we can perceive that more than 75% of the participants suffer from this IP both moderately and repeatedly. In fact, the number of participants does not discern too much between a moderate (53 students) and repeated (58 students) "impostor experience".

Presence of IP During Speaking

Item 21 relates to the irrational belief of imperfection in relation to Speaking. In Table 1, we find that out of the 100% of responses, the majority were *Not true* (32.6%), followed by *Rarely* (21.3%), *Often* (20.6%), *Sometimes* (18.4%), and *Very true* (7.1%).

In Range 1, *Not true* and *Rarely* predominate, which means that those people who do not suffer from IP, or do it very weakly, generally do not experience this belief. Range 2 is dominated by *Not true* and to a lesser extent by *Often* and *Rarely*; this shows the variability of thinking among people with a moderate degree of IP. In Ranges 3 and 4, it can be observed that the percentages tend to be more evenly distributed, with the exception of the response *Very true* in Range 3, which is lower; this shows that those with a higher IP degree tend to experience this belief of imperfection and falseness at a higher level when speaking. Despite these differences, Chi-square test showed a non-statistically significant effect (X^2=19.24; p =.083).

Table 1
Contingency Table for Item 21: "I feel that I am not as Good as Others Think I am and That They Will Find out When it Comes to Speaking"

IP ranges	Not true	Rarely	Sometimes	Often	Very true	Total
1	47.1%	29.4%	17.6%	5.9%	.0%	100%
2	43.4%	18.9%	9.4%	24.5%	3.8%	100%
3	20.7%	22.4%	27.6%	20.7%	8.6%	100%
4	23.1%	15.4%	15.4%	23.1%	23.1%	100%
Total	32.6%	21.3%	18.4%	20.6%	7.1%	100%

Note. The IP (Impostor Phenomenon) ranges refer to the absence of IP (1), a moderate presence (2), a repeated presence (3), and an intense presence (4).

Presence of IP During Writing

The irrational belief of imperfection in relation to Writing is covered in Item 22. Table 2 shows that out of the 100% responses, the majority were *Not true* (31.9%), followed by *Rarely* (24.1%), *Often* (20.6%), *Sometimes* (17%), and *Very true* (6.4%).

In Range 1, more than 90% of the answers were *Not true*, with 0% for *Sometimes* and *Often*; this shows that those people who do not suffer from IP, or do it to a very weak degree, do not experience this belief. Then, in Range 2, the predominance of *Not true* continues, although here we do see 13.2% in *Sometimes*

Table 2
Contingency Table for Item 22: "I Feel That I am not as Good as Others Think I am and That They Will Find out When it Comes to Writing"

IP ranges	Not true	Rarely	Sometimes	Often	Very true	Total
1	64.7%	29.4%	.0%	.0%	5.9%	100%
2	43.4%	28.3%	13.2%	13.2%	1.9%	100%
3	13.8%	20.7%	32.8%	24.1%	8.6%	100%
4	23.1%	15.4%	23.1%	23.1%	15.4%	100%
Total	31.9%	24.1%	20.6%	17%	6.4%	100%

Note. The IP (Impostor Phenomenon) ranges refer to the absence of IP (1), a moderate presence (2), a repeated presence (3), and an intense presence (4)

and *Often*. In Ranges 3 and 4, the same is true as for the Speaking, so we can draw the same conclusions. In terms of the Chi-square test, that is (X^2=33.75; p = .001), there is a statistically significant relation between the IP and the students' thoughts when they face a Writing task.

Presence of IP During Listening

Item 23 also deals with the irrational belief in imperfection but linked with Listening. In Table 3, we find that out of the 100% of the responses, as with the previous two variables, the responses *Not true* (32.6%), *Rarely* (31.9%) and *Often* (22.7%) predominate. *Often* (8.5%) and *Very true* (4.3%) have a lower percentage.

In Range 1, almost all the responses were directed towards *Not true* and *Rarely*, obtaining the same conclusions as in the two previous variables. In Range 2, this is similar to the Writing variable, with *Not true* predominating, although this time the remaining values are more evenly distributed between *Rarely* and *Sometimes*. In Range 3, the most abundant responses were *Rarely* and *Sometimes*; as well as in Range 4, if we also include *Not true* and we take into account the peak of 15.4% in *Very true*. This shows that in receptive skills there is a lower tendency to falseness and imperfection thoughts, especially in Ranges 1, 2 and 3. In this case, Chi-square test was not statistically significant (X^2=20.43; p= .059).

Table 3
Contingency Table for Item 23: "I Feel That I am not as Good as Others Think I am and That They Will Find out When it Comes to Listening"

IP ranges	Not true	Rarely	Sometimes	Often	Very true	Total
1	52.9%	41.2%	5.9%	.0%	.0%	100%
2	43.4%	20.8%	22.6%	9.4%	3.8%	100%
3	19%	39.7%	27.6%	10.3%	3.4%	100%
4	23.1%	30.8%	23.1%	7.7%	15.4%	100%
Total	32.6%	31.9%	22.7%	8.5%	4.3%	100%

Note. The IP (Impostor Phenomenon) ranges refer to the absence of IP (1), a moderate presence (2), a repeated presence (3), and an intense presence (4).

Presence of IP During Reading

Item 24 relates to the irrational belief in imperfection connected to Reading. In Table 4 we see that out of the 100% of responses, the most prevalent is *Rarely* (33.3%), followed by *Not true* (31.9%), *Sometimes* (20.6%), and *Often* (11.3%), and *Very true* (2.8%).

Table 4
Contingency Table for Item 24: "I Feel That I am not as Good as Others Think I am and That They Will Find out When it Comes to Reading"

IP ranges	Not true	Rarely	Sometimes	Often	Very true	Total
1	64.7%	35.3%	.0%	.0%	.0%	100%
2	45.3%	18.9%	18.9%	17%	.0%	100%
3	13.8%	46.6%	27.6%	8.6%	3.4%	100%
4	15.4%	30.8%	23.1%	15.4%	15.4%	100%
Total	31.9%	33.3%	20.6%	11.3%	2.8%	100%

Note. The IP (Impostor Phenomenon) ranges refer to the absence of IP (1), a moderate presence (2), a repeated presence (3), and an intense presence (4).

In Range 1, we see the same response pattern as in the previous two variables, with 100% distributed between *Not true* and *Rarely*. The same occurs in Range 2, with the percentages being more evenly distributed between *Rarely*, *Sometimes* and *Often*. Finally, in Ranges 3 and 4, the majority of responses are concentrated in *Rarely* and *Sometimes*. But what should be highlighted is the 15.4% that can be seen in *Very true* in Range 4. Yet, we can draw the same conclusions as for the Listening, as this is also a receptive skill. Lastly, by applying the Chi-square test, we observed that there is a statistically significant relation between the two variables analysed (X^2=40.44; p <.001).

Presence of IP in Relation to Academic Success

Item 25 is related to students' belief that their academic success is due to external causes. Table 5 shows that out of 100% of the responses, the percentages are mostly divided between *Not true* (30.5%), *Rarely* (30.5%) and *Sometimes* (23.4%). The responses *Often* (12.1%) and *Very true* (3.5%) appear less frequently. One point to note is that, if we look broadly at the table, we can see that as the degree of IP increases, the responses to *Often* and *Very true* are correlatively increasing.

In Ranges 1 and 2, the same occurs as in the previous variables: a high percentage in the responses *Not true* and *Rarely*, and a decrease in these in *Often* and *Sometimes*. However, in *Sometimes*, the percentage is somewhat high, which shows us that even those who do not suffer from IP can even experience this thought. In Range 3, the percentages begin to vary, with *Rarely* and *Sometimes* being the most selected responses. Finally, in Range 4 we see that *Not true* has 0%, while *Rarely* and *Often* are the most frequent ones; besides, *Very true* has a higher percentage (15.4%). In addition,

Table 5
Contingency Table for Item 25: "I Think That my Success in the Exams is due to Reasons Beyond my Control and the Good Level of English I am Said to Have"

IP ranges	Not true	Rarely	Sometimes	Often	Very true	Total
1	52.9%	23.5%	17.6%	5.9%	.0%	100%
2	47.2%	26.4%	18.9%	5.7%	1,9%	100%
3	15.5%	34.5%	32.8%	13.8%	3.4%	100%
4	.0%	38.5%	7.7%	38.5%	15.4%	100%
Total	30.5%	30.5%	23.4%	12.1%	3.5%	100%

Note. The IP (Impostor Phenomenon) ranges refer to the absence of IP (1), a moderate presence (2), a repeated presence (3), and an intense presence (4).

the data obtained from the Chi-square test showed statistically significant relation between IP and the belief that their success is due to external factors (X^2=37.40; $p < .001$).

Relation Between IP and the Students' Participation in the English Class

Item 26 is related to the irrational belief of falseness due to comparison with high standards and its influence on student non-participation. In table 6, we can see that 100% of the responses are evenly spread across almost all the options, with *Very true* being the only one with an uneven percentage (5%).

In Range 1, there is a high frequency of *Not true* and *Rarely* responses, but what stands out is that *Very true* has 5.9% of responses. This means that even if the students do not suffer from IP, they compare themselves with other people. In Range 2, the percentages are evenly distributed among the first three response options. In contrast, the last two were the least selected, with *Very true* having 0%, which shows that people who experience a moderate IP intensity do not tend to compare themselves excessively. In Range 3, we see how the instances of comparison are increasing, with the most repeated option being *Often*. And, in Range 4, there is a really high level of comparison, with more than 50% being distributed between the responses *Often* and *Very true*. Finally, between these two variables, there is also a significant relation between IP and their belief of falseness, as showed by the results of the Chi-square test (X^2=35.56; p= <.001).

Table 6
Contingency Table for Item 26: "I Think it's not Worth Participating in Class Because Anyone Else is Going to do Better Than me, Even Though I've Been Told I'm Very Good at English"

IP ranges	Not true	Rarely	Sometimes	Often	Very true	Total
1	52.9%	35.3%	5.9%	.0%	5.9%	100%
2	39.6%	28.3%	22.6%	9.4%	.0%	100%
3	25.9%	13.8%	22.4%	32.8%	5.2%	100%
4	7.7%	23.1%	15.4%	30.8%	23.1%	100%
Total	32.6%	22.7%	19.9%	19.9%	5%	100%

Note. The IP (Impostor Phenomenon) ranges refer to the absence of IP (1), a moderate presence (2), a repeated presence (3), and an intense presence (4).

Relation Between IP and the Students' Perception of Their own Effort While Learning English

Students' disqualification of their own work is covered in Item 27. In table 7, we see that the total percentage of responses is balanced, as they all range between 15.6% and 24.1%. In addition, we have a fairly expected pattern across the different IP scores.

In Range 1 there is a decrease from 64.7% for *Not true* to 0% for *Very true*, which shows that people with a very low or no level of IP perceive their effort and ability as correlated to their success. In Range 2, we find a more balanced distribution among the first four response options, with *Sometimes* being the most voted, and *Very true* being in the minority. This shows that, although it does not always happen to them, students with a moderate incidence of IP begin to feel a certain level of disqualification towards their own success. In Range 3, the responses *Not true* and *Rarely* become less prominent among the most voted responses, with the percentage of *Very true* rising by far. In Range 4, the total percentage is divided between the answers *Often* and *Very true*, with the latter being the most selected. Having said this, we can conclude that the higher the degree of IP, the higher the perception among students that their ability and effort while learning English is not enough. Last, Chi-square test showed a statistically significant relation between the variables under examination (X^2=60.43; $p < .001$).

Table 7
Contingency Table for Item 27: "No Matter how Hard I try and how Good my Results are, I Feel Like it's Never Enough"

IP ranges	Not true	Rarely	Sometimes	Often	Very true	Total
1	64.7%	17.6%	11.8%	5.9%	.0%	100%
2	22.6%	24.5%	30.2%	20.8%	1.9%	100%
3	10.3%	15.5%	27.6%	22.4%	24.1%	100%
4	.0%	.0%	.0%	46.2%	53.8%	100%
Total	20.6%	17.7%	24.1%	22%	15.6%	100%

Note. The IP (Impostor Phenomenon) ranges refer to the absence of IP (1), a moderate presence (2), a repeated presence (3), and an intense presence (4).

Discussion

The aim of this paper is to investigate the presence of IP in high-school students and its influence on them when learning their second language. Despite the scarcity of recent research in a sample of high-school learners, because it is not considered pathological, we intended to observe whether its main traits (e.g., fear of failure, guilty feelings, negation of their competence, or maladaptive attributional style) hinder learners' academic development, as well as which skills or other aspects of the subject (i.e., performance in the exams, participation, and effort) are most affected. As a matter of fact, our main hypothesis was that IP was present in a small proportion of the student body and, for those who did suffer from it, it negatively affected their learning and academic experience.

At a descriptive level, the results show that both a moderate and repeatedly IP presence is common among students, as already confirmed by studies conducted by Mann (2019) and Zanchetta et al. (2020). This may be because of the constant academic pressure exerted on those who have always been 'good students' to maintain that label. Another reason could be the situation of continuous competition and comparison that they unconsciously experience in the classroom.

We can also observe that IP influences the process of learning English, especially when the intensity of its traits is greater. This may be due to the fact that the "distorted view of a person's own intelligence" is accompanied by symptoms such as generalized anxiety or lack of self-confidence, which may hinder the method par excellence of language learning, that is, communication and constant exchange of information (Sánchez-Carrón, 2013).

This "perceived fraudulence" affects students in their learning of English. Focusing on the skills, students experience the irrational belief of imperfection more frequently in the productive skills (i.e., Speaking and Writing) than in the receptive skills (i.e., Listening and Reading). This influence, which may occur because of the great insecurity they feel about their own intelligence, is

more visible the higher the score range they are in. Thus, those who have repeated or intense IP experiences tend to feel that their academic level is lower than what is objectively demonstrated, thinking that other people will "discover that they are impostors" when working on these skills. Moreover, productive skills are more influenced by this phenomenon since, as Brauer et al. (2023) confirms, IP directly affects students' willingness to communicate, either orally or in writing. On the contrary, in receptive skills, as there is no direct transmission of abundant information, these irrational thoughts tend to be less frequent. Yet, it should be noted that there are some cases of students with a severe level of IP (15.4%) who are also influenced by it when dealing with the receptive skill of Reading.

As expected, the irrational belief that one's academic success is due to external-stable or external-unstable causes increases at higher levels of IP. This is of vital importance as if students greatly suffer from these thoughts, their academic experience and development will be negatively affected (Pannhausen et al., 2020).

Similarly, IP trait of excessive comparison with high standards has a strong influence on students, making them more reluctant to participate in English classes (Edward, 2019). We can observe how those who have repeated or intense IP experiences are more afraid to speak in class because they feel that their ability is lower than that of their classmates, despite having objective evidence to the contrary.

Students seem to be really influenced by this "impostor experience" as far as their view of effort in English is concerned. The data show that there is a strong feeling of disqualification on the part of the students towards themselves, as observed by Pannhausen et al. (2020), as well. Thus, they perceive their effort and ability as insufficient, being unable to accept the good quality of their work and the praise received for it.

Coming back to the affective variables, these "impostor" learners are constantly plagued by irrational thoughts about their lack of language learning skills, fear of failure, excessive comparison with others, and their underestimation and inability to internalize their good performance in the task (Sánchez-Carrón, 2013). As a result, the emotional atmosphere of the English classroom is affected by language anxiety and lack of motivation to learn, considering the SLL process as a negative experience.

The role of the teacher when facing this situation is neither easy nor impossible. As Dewaele (2011, p.27) explained, teachers need to recognize explicit anxiety indicators to identify those affected learners. Nevertheless, most of them are imperceptible and easily confused with shyness, tiredness, or introversion. In order to decrease anxiety levels and increase motivation, several options could be taken into account (Dewaele, 2011), such as i) pedagogical practices to promote group support and solidarity, ii) a focus on the teacher's verbal and non-verbal behaviour to create a safe environment where students can communicate, or iii) broadening the emotional range of the linguistic input (Dewaele, 2011) for students to understand and acquire the ability to communicate their thoughts.

Apart from the teaching implications, after having analyzed the problem of suffering from IP in adolescence, other possible solutions to alleviate these thoughts of intellectual fraudulence and their symptomatic consequences shall be mentioned. According to studies conducted by Cromwell (1989), Bravata et al. (2019), or Filarowska and Schier (2018), the most effective way to help "impostors" is psychotherapy. It has been shown that by validating patients' thoughts and feelings and addressing them individually or in group therapy, these can be significantly reduced.

This paper has been useful to make known the emotional patterns that are present in students who experience IP and their trends of thought during the SLL process. Two reasons must be considered: i) IP is a phenomenon without substantial research because it is not pathologically recognized, and consequently ii) it has not been considered as part of the studies on the affective variables.

In terms of the limitations of this study, we can mention the subsequent ones: firstly, a small, homogeneous sample was used (belonging to a specific town in the Region of Murcia, Spain). Besides, both evaluation instruments and variables for the analysis were not diverse in this study. Therefore, for future research more instruments and variables to observe IP traits in the student body should be considered (e.g., the marks of the students, gender differences, and a wider range of age). Likewise, it is expected to increase the sample size and place of origin, as well as investigate the possibility of including personalized interventions to help learners overcome these "impostor" thoughts. Consequently, the quality of the academic and life experience is expected to be improved through the assistance of the teacher and other specialists in counselling and psychology.

Conflict of Interest

The authors declare no conflict of interest.

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