Frustration of basic psychological needs and emotions in communicative intent in English as a foreign language

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ABSTRACT: Despite educational policies that have promoted multilingualism in schools, the English language proficiency levels of young Spanish people are still below those of OECD (Organisation for Economic Cooperation and Development) member countries. This is despite the appearance of multiple studies that have addressed communicative competence and its intentionality from a positive perspective. However, there are hardly any studies that analyze the problems or blockages that may be causing the lack of communicative skills and competences of our young people. Therefore, the aim of the present study is to analyze the correlation between psychological needs frustration with embarrassment, anxiety and hopelessness, motivation and communicative intentionality in English. The sample of participants is 786 high school students. The analyses employed are reliability analysis, mean, standard deviation, bivariate correlations and a structural equation model. The results showed that frustration of psychological needs positively predicted anxiety, embarrassment and hopelessness, and in turn, each of these emotions negatively predicted motivation and communicative intention. However, motivation positively predicted communicative intention. These findings provide insight into students' English language failure and could support the use of classroom interventions, such as gamification, and teaching strategies, such as game-based learning, that strengthen students' confidence in using English both in the classroom and in other contexts.

Keywords: frustration of psychological needs; embarrassment; anxiety; hopelessness; motivation; communicative intention; English

Frustración de las necesidades psicológicas básicas y emociones en la intención comunicativa en inglés como lengua extranjera

RESUMEN: A pesar de las políticas educativas que han promovido el plurilingüismo en las escuelas, los niveles de competencia en lengua inglesa de los jóvenes españoles siguen estando por debajo de los de los países miembros de la OCDE (Organización para la Cooperación y el Desarrollo Económico). Y ello a pesar de la aparición de múltiples estudios que han abordado la competencia comunicativa y su intencionalidad desde una perspectiva positiva. Sin embargo, apenas existen estudios que analicen los problemas o bloqueos que pueden estar causando la falta de habilidades y competencias comunicativas de nuestros jóvenes.

Por ello, el objetivo del presente estudio es analizar la correlación entre las necesidades psicológicas frustración con vergüenza, ansiedad y desesperanza, motivación e intencionalidad comunicativa en inglés. La muestra de participantes es de 786 estudiantes de secundaria. Los análisis empleados son análisis de fiabilidad, media, desviación típica, correlaciones bivariadas y un modelo de ecuaciones estructurales. Los resultados mostraron que la frustración de las necesidades psicológicas predijo positivamente la ansiedad, la vergüenza y la desesperanza y, a su vez, cada una de estas emociones predijo negativamente la motivación y la intención comunicativa. Sin embargo, la motivación predijo positivamente la intención comunicativa. Estos hallazgos desde una perspectiva negativa del fracaso en inglés de los estudiantes podrían reforzar el uso de intervenciones en el aula, como la gamificación, y estrategias de enseñanza, como el aprendizaje basado en juegos, que refuercen la confianza de los estudiantes en el uso del inglés en el aula y en otros contextos

Palabras clave: necesidades psicológicas frustración; vergüenza; ansiedad; desesperanza; motivación; intención comunicativa; inglés

1. Introduction

Currently, the level of English language proficiency of Spanish secondary school students is well below the average score of OECD and EU countries. In this regard, the latest Education First report (2022) states that if we compare English proficiency in Spain with respect to other European countries, the level of English of Spaniards is ranked 25th out of 35. Therefore, English classes taught in schools should help to solve this problem, since, among their fundamental objectives is to develop a multilingual competence, which involves the use of different languages in an appropriate and effective way for learning and communication (Hernández & Moreno, 2021). However, despite educational reforms aimed at promoting bilingualism and multilingualism within the Spanish educational system, this has not translated into success in increasing either the proficiency or communication in English of young students (Fernández-Agüero & Hidalgo-McCabe, 2022). Among the reasons for this failure are low student interest in the subject, lack of motivation, poor knowledge transfer, and lack of student confidence to inspire them to achieve their academic goals and promote their interest in learning and using a second language (Fernández-Agüero & Hidalgo-McCabe, 2022; Günes, 2022; Tseng, 2022). Therefore, the educational center must be a safe environment that promotes the learning and use of the foreign language, eliminating any type of barrier that restrains the communicative intention of students in any foreign language (De Wilde et al., 2020). Thus, it is necessary to analyze the frustration and emotional blocks (anxiety, embarrassment and hopelessness) of students that inhibit their communicative intention, in this case, in the English language. By doing so, teachers, parents and the educational community can gain knowledge to implement measures and means that encourage the use of the English language among young people (Putri & Sari, 2021).

According to Self-Determination Theory (SDT; Deci, & Ryan, 2012), there is a set of universal psychological nutrients inherent to all human beings that are called psychological needs. These psychological needs are fundamental for integral development and personal well-being and are divided into three: autonomy, competence, and relatedness (Ryan & Deci, 2020). Competence refers to the individual's ability to execute actions successfully; autonomy refers to those actions that are performed for internal reasons, without external pressures; and relatedness refers to the feeling of belonging and integration to a social group

(Ryan & Deci, 2020). A study by González-Cutre *et al.*, (2016) has proposed the possible incorporation of novelty as the fourth psychological need, referring to the innate tendency of the individual to seek new activities and to have new experiences for their complete development and well-being. Considering these four basic psychological needs, students who can make their own decisions, perceive efficacy in performing their actions, find activities out of the ordinary and attractive, and feel integrated in their social reference group, will experience satisfaction of psychological needs, which is related to engagement in learning and the development of new learning strategies (Müller *et al.*, 2021). On the other hand, if students feel poorly socially integrated, have little success in their academic actions, are unable to make their own decisions, and activities are excessively monotonous and repetitive, they will experience frustration of psychological needs. This frustration is related to dropout, disengagement, and the manifestation of maladaptive behaviors (Holzer *et al.*, 2021).

Basic psychological needs have an influence on an individual's motivation. In this sense, SDT places motivation on a continuum, which oscillates between self-determined motivation and non-self-determined motivation (Ryan & Deci, 2020). The former is based on personal initiative and the ability to make one's own decisions. This type of motivation promotes the individual's adaptation to the context, as it fosters self-regulation of behavior because individuals tend to adhere to adaptive behaviors due to the satisfaction they produce (Ryan & Deci, 2017). The second type of motivation, on the other hand, is based on the fact that decision making is based on external pressures, acquired obligations or the receipt of rewards (Ryan & Deci, 2017). This type of motivation promotes the lack of self-regulation of adaptive behavior, since the individual usually gives up and abandons the behavior.

Motivation is not only influenced by basic psychological needs, but also by emotions. In this sense, Hoemann *et al.*, (2019) define emotions as an appraisal of an external situation that produces a psychological and physiological activation in the organism in the form of behavior. In this way, emotions could constitute a psychological element that acts as an activator of the motivational processes inherent in the individual (Garn *et al.*, 2017; Trigueros & Aguilar-Parra, 2022), since emotions are the result of situations and events that occur externally and that determine our actions. Therefore, emotions can have a certain influence on students' motivation when participating in classes, learning and undertaking efforts. In this sense, intrinsic motivation is influenced by positive feelings, interest and curiosity, while extrinsic motivation is influenced by anxiety and frustration (Pekrun & Linnenbrink-Garcia, 2012). In addition, emotions can influence the use of one or another learning strategy, as well as behaviors related to academic goals.

When talking about language behavior, it is difficult to separate it from the communicative intention. In this sense, communicative intention refers to the function of communicating with the aim of provoking something in the receiver of the message, so that he/she understands it in a certain way and/or acts in a specific way after receiving the information (Tai & Chen, 2023). Depending on the objective that the sender wants to achieve, one type of communication or another (oral or written), a particular language or a specific intonation will be used, focusing on the most appropriate aspects to achieve what is intended with the message (Thompson, 2003). In this way, motivation and positive classroom experiences help to foster communicative intention, making it necessary to promote the approach to the communicative process through the use of effective communication strategies that can only

be achieved through learning. However, to date, only two studies using interviews with two students have examined anxiety, embarrassment, and perceived motivation on communicative intention (Dewaele & Pavelescu, 2021; Kruk, 2022). In these studies, it was observed that the students' communicative disposition was relatively high, but that it fluctuated slightly. In this sense, the communicative disposition was influenced by past and present events that evoked in the students' emotions linked to success (i.e., pride) or failure (i.e., anxiety). Likewise, emotions influenced motivation given that amusement or boredom were present at some point during class sessions or because of the methodology employed by the teacher.

Despite these studies, the existing relationship between these variables has not been examined, since the use of interviews does not allow establishing a direct relationship between the variables (Opdenakker, 2006). Moreover, starting from the postulates of SDT, the study of motivation cannot be understood without taking into account the influence of psychological needs on cognition (Kraaij & Garnefski, 2019) and emotion (Trigueros *et al.*, 2020a). Furthermore, no study has taken into account hopelessness as a key emotional factor in communicative intention. In this sense, hopelessness is related to behavioral abandonment due to systematic failure or non-usability of a certain knowledge or skill (Holm *et al.*, 2020). Thus, the aim is to analyze the relationship between frustration of basic psychological needs and emotions (anxiety, embarrassment, and hopelessness), and how these, in turn, relate to motivation and communicative intention in English. In order to analyze this objective, a structural equation model is intended to analyze the relationship between the variables under study.

Derived from the study's objective and the previously stated information, the study hypotheses are as follows: H1) Correlations among the four frustrations of basic psychological needs will be positive; H2) the four frustrations of basic psychological needs will exhibit positive relations with anxiety, embarrassment, and hopelessness; H3) anxiety, embarrassment, and hopelessness will show negative relations with academic motivation and communicative willingness in English; H4) academic motivation will display a positive relation with communicative willingness in English.

2. Method

2.1. Participants

In the present study, 786 students of compulsory and post-compulsory secondary education (406 boys and 380 girls) participated. The age of the participants ranged from 13 to 20 years (M = 14.88; SD = 0.87). Weekly English class sessions were 4 hours per week. Most of the participants were from a middle-income socioeconomic class and were Caucasian.

2.2. Measurements

To analyze the frustration of basic psychological needs in English classes, the version used in this study was the Basic Psychological Needs Frustration Scale by Trigueros *et al.*, (2020b). The scale was preceded by the following heading "In my English classes..." and consists of 17 items (Appendix A), which are distributed among each of the factors that make

up the scale (i.e. autonomy, competence, relationship with others, and novelty). Students had to respond accordingly to a Likert scale ranging from 1 (not true at all) to 7 (completely true). This scale is validated in Trigueros *et al.*, (2020a), and has been used successfully in an English academic context (Trigueros *et al.*, 2020a).

To analyze anxiety, embarrassment, and hopelessness in English classes, the version employed in this study was the Emotional State Questionnaire (Trigueros *et al.*, 2019a). The questionnaire is headed by the following sentence "During English classes..." making up a total of 32 items distributed among the eight factors that make up the scale. However, in the present study only the following factors belonging to the scale were used: anxiety (4 items), embarrassment (5 items) and hopelessness (4 items) (Appendix B). Students were asked to respond on a Likert scale from 1 (strongly disagree) to 7 (strongly agree). This scale is validated in Trigueros *et al.*, (2020a), and has been successfully used in an English academic context (Trigueros *et al.*, 2020a) and French academic context (Méndez-Aguado *et al.*, 2020)

To analyze the academic motivation towards English classes, the version employed in this study was Academic Motivation Scale for English Classes by Trigueros *et al.* (2019b) was used (Appendix C). The scale was preceded by the heading "During English classes..." and consists of 24 items grouped into six factors measuring intrinsic motivation, integrated regulation, identified regulation, introjected regulation, external regulation, and demotivation. Students responded using a Likert scale ranging from 1 (not true at all) to 7 (completely true).

In the present study, the self-determination index (SDI; Vallerand, 2007) was calculated from the following formula. 3 x intrinsic motivation, 2 x integrated regulation, 1 x identified regulation, -1x introjected regulation, -2 x external regulation and -3 x demotivation. This index has been shown to be valid and reliable in several works (Leon *et al.*, 2015; Lonsdale *et al.*, 2009; Ntoumanis, 2005), being used to obtain a value to quantify the level of self-determination.

To examine English communicative intentionality, Peng's (2019) questionnaire adapted to and validated in the Spanish context by Barrios and Acosta-Manzano (2021) was used (Appendix D). The Spanish version consists of 11 items to measure willingness to communicate (WTC) in English. The items were rated on a 10-point scale (from 1 never or not at all to 10 always or all the time). Students were asked to indicate the extent to which they chose to communicate in three situations: when they felt stimulated to speak (e.g., "the topic is interesting"), when they were well prepared (e.g., "they know the correct answer"), and when they felt a responsibility to speak (e.g., "they are sitting at the front of the class"). Peng (2019) named these three dimensions: contextual stimulation, communicative readiness, and communicative responsibility, respectively.

2.3. Procedure

At the beginning of the study, it was necessary to contact several schools to request permission to administer the questionnaires to secondary school students. Prior to administering the questionnaires, the objective of the study was explained to both the students and those responsible for the educational center. In addition, it was necessary for the students to provide informed consent signed by their parents or legal guardians. On the day they filled

in the paper questionnaires, students were informed that their answers would be anonymous and personal. The administration of the questionnaires was carried out under the supervision of an expert interviewer member of the research group, who explained and resolved any doubts that arose during the completion of the questionnaires. The estimated time to complete the questionnaires was around 25 minutes.

All the ethical procedures of the Helsinki declaration and the American Psychology Association were respected at all times.

2.4. Data Analysis

The analyses used in the study were descriptive statistics (mean, bivariate correlations and standard deviation) and reliability analysis (Cronbach's Alpha and omega index). Subsequently, in order to analyse the relationships between the study variables, a structural equation model (SEM) was performed centered on the maximum likelihood methodology since it is the most appropriate when using Likert-type questionnaires and also considers non-normality distribution of the data (Beauducel & Herzberg, 2006). In addition, in the SEM model, the 95% bias-corrected bootstrap CIs (95% CIBC) were calculated for each of the proposed pathways with 6000 bootstrap samples (Hayes & Scharkow, 2013). For the SEM, the goodness of fit taken into consideration were the following: the $\chi 2$ coefficient, chi-square divided degrees of freedom ($\chi 2$ /df), the Comparative Fit Index (CFI), the Incremental Fit Index (IFI), the Root Mean Square Error of Approximation (RMSEA) plus its 90% confidence interval, and the Standardized Root Mean Square Residual (SRMR). In general, $\chi 2$ /df values between 2 and 3 (Bentler, 1990), CFI and IFI values equal to or greater than .95, values of .06 or less for the RMSEA and .06 or less for the SRMR are considered acceptable (Hu & Bentler, 1999).

3. Results

3.1. Opening Analysis

As can be seen in Table 1, the reliability analyses were above .70 for each of the factors ascribed to the hypothesized model. In addition, it can be observed that Pearson's correlations show a negative reciprocity between frustration and negative emotions with respect to motivation and communicative intention. Conversely, the correlations for motivation and communicative intention were positive, as well as the correlation between frustration of psychological needs and emotions (embarrassment, anxiety, and hopelessness).

Factors	M	SD	α	Ω	1	2	3	4	5	6	7	8	9
1. Frustration of Novelty	2.04	1.11	.80	.81		.40***	.35***	.28***	.41***	.54**	.21**	24**	30***
2. Frustration of Competence	2.07	1.57	.83	.84			.47***	.34***	.32**	.19***	.64**	62**	41**
3. Frustration of Autonomy	3.08	1.29	.81	.80				.39***	.24**	.25**	.35***	42***	26***
4. Frustration of Relatedness	2.59	1.36	.84	.85					.59***	.18*	.27**	34**	58**
5. Embarrasment	3.95	1.88	.85	.84						.66***	.45***	30**	51**
6. Anxiety	4.78	1.74	.80	.82							.27**	37***	32***
7. Hopelesness	2.56	.88	.82	.84								33**	47**
8. SDI-Academic	17.49	11.05	-	-									.55**
9. Willingness to Communicate	3.62	2.74	.79	.82									

Table 1. Descriptive statistics and correlation between the variables

3.2. Primary Analysis: Structural Equation Modelling Analysis

Before explaining the relationships established in the SEM (Figure 1), it should be noted that the model fit indices have been satisfactory: $\chi 2$ (440. N = 786) = 1149.35, p< .001; $\chi 2/df$ = 2.61; TLI= .97; CFI = .97; IFI = .97; RMSEA = .048 (90% CI = .042-.055); SMR = .039.

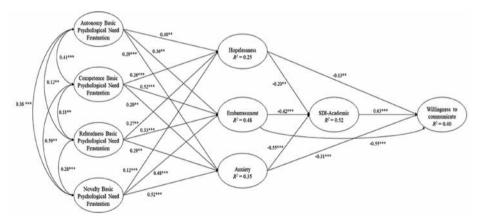


Figure 1. Structural Equations Model. Note = ***p< .001; ** p< .01; *p< .05

The relationships obtained between the different factors that make up the model are described below (Figure 1):

^{*}p<.05; **p<.01; ***p<.001. Note: SDI = Self-Determination Index.

H1) Autonomy frustration correlated positively with competence frustration (β = .41, p< .001); with novelty frustration (β = .36, p< .001); and with relatedness frustration (β = .12, p< .01). Similarly, competence frustration correlated positively with novelty frustration (β = .59, p< .01) and relatedness frustration (β = .31, p< .001). In turn, novelty frustration correlated positively with relatedness frustration (β = .28, p< .001).

- H2) Autonomy frustration was positively related to hopelessness (β = .40, p< .01), anxiety (β = .29, p< .001), and embarrassment (β = .36, p< .01); competence frustration was positively related to hopelessness (β = .26, p< .01), anxiety (β = .20, p< .01), and embarrassment (β = .52, p< .001); relatedness frustration was positively related to hopelessness (β = .27, p< .01), anxiety (β = .29, p< .01), and embarrassment (β = .33, p< .001); and novelty frustration was positively related to hopelessness (β = .12, p< .001), anxiety (β = .52, p< .001), and embarrassment (β = .48, p< .001).
- H3) Hopelessness was negatively related to SDI-Academic (β = -.20, p< .01) and to English communicative intention (β = -.13, p< .01); anxiety was negatively related to SDI-Academic (β = -.31, p< .001) and with communicative intention in English (β = -.20, p< .01); and embarrassment was negatively related to SDI-Academic (β = -.42, p< .001) and to communicative intention in English (β = -.55, p< .001).
- H4) SDI-Academic was positively related to communicative intention in English (β = .63, p< .001).

4. Discussion

The aim of the present study was to analyse the influence of the frustration of psychological needs on the emotions of embarrassment, hopelessness and anxiety, motivation and communicative intention of secondary school students in the area of English language. The present study aims to consider the emotional and psychological barriers that prevent students from communicating in the English language with either their peers or teachers during lessons. In this sense, the communicative exchange for teaching English enriches learning, as everyone acts as both learner and teacher at certain times. When we compare our language production with that of our peers, question it and exchange questions and doubts, we are giving space for active learning that keeps us motivated and connected to the language. However, if at some point this discursive exchange is blocked, learning may be hindered and impoverished.

- (H1) Initially, the results have shown that the four factors related to the frustration of basic psychological needs have been positively correlated. These results are in accordance with previous studies related to their conceptualization. A study by Trigueros *et al.*, (2020b) in the context of physical education revealed the same correlation. These results are relevant given the recent incorporation of novelty frustration as the fourth basic psychological need, so that the reciprocity of the factors is relevant given the postulates of SDT.
- (H2) The results have shown how the frustration of psychological needs regarding autonomy, competence, relatedness to others and novelty positively predicted anxiety, embarrassment and hopelessness. These results showed that frustration of psychological needs leads to social, emotional and behavioural dysregulation of the person, favouring the emergence of impulsive or disinhibiting behaviours associated not only with increased subjective distress

but also with an increase in maladaptive behaviours. One study examined that an autonomy support programme for seventh grade students resulted in high levels of general well-being and feelings of safety for participants (Kaplan & Assor, 2012). Trigueros *et al*, (2019c), in the field of Physical Education, showed how psychological need satisfaction positively predicted positive emotions and negatively predicted negative emotions. Similarly, the study showed that frustration of psychological needs negatively predicted positive emotions and positively predicted negative emotions. Despite the results of these studies, in the field of English language teaching, there is no evidence of studies that have delved into the effect of psychological needs on negative emotions, in this case embarrassment, anxiety and hopelessness, which inhibit the individual's behaviour (Pekrun & Stephens, 2010).

(H3) The results revealed that negative emotions (anxiety, hopelessness and embarrassment) were negatively related to autonomous motivation and communicative intention. Different studies have examined the influence of emotions on foreign language learners' communicative intention. In this regard, a study by Wang et al., (2022) showed that high levels of anxiety negatively predicted students' communicative intention, mentally blocking them from conversing with peers and teachers. However, in two studies by Li et al., (2022) and Wang et al., (2021) it was observed that university students who possessed high levels of anxiety negatively predicted communicative intention, but boredom positively predicted communicative intention. These results contrast with those of the present study. This is because the studies by Wang et al., (2021) and Li et al., (2022) are on university students where the large number of students in the classroom contrasts with high school classrooms and therefore did not include many opportunities to engage students. Likewise, the present study takes into account frustration as a psychological variable that significantly influences boredom by enhancing feelings of emptiness and lack of clearly identifiable goals, dissatisfaction or insufficient or excessive challenge (Pawlak et al., 2020). The latter is paradigmatic of the effect of hopelessness on academic motivation and communicative intention, since experiences of adverse or negative situations that have not been managed, integrated and/ or processed in the right way can paralyse students academically, preventing them from achieving the goals they had set themselves at some point (Cammarota, 2011).

(H4) Finally, the results of the present study have shown a positive relationship between motivation and communicative intention. A study by Joe *et al.* (2017) showed that intrinsic motivation and identified regulation positively predicted communicative intention. On the other hand, a study by Wu & Lin (2014) showed that motivation moderated the negative effects of anxiety on learners' communicative intention to speak in a foreign language. Thus, the results achieved in the present study seem to show that motivation exerts a stronger commitment of learners to engage agentively in a volitional action such as communicative intention due to its close association with effort investment and persistence.

The results achieved in the present study are not without a number of limitations that must be taken into consideration. The use of questionnaires based on self-reported measures does not allow the establishment of cause-effect relationships due to the use of correlational analyses. Therefore, future longitudinal and/or experimental studies could help to obtain more information and reduce the common method bias (Conway & Lance, 2010). Finally, although a SEM that explores the causal relationships between the study variables has been conducted and has shown good fit rates, there may be other types of models that have a better fit (Hershberger & Marcoulides, 2013).

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4.1. Conclusions

In short, the novelties of this study are, first, the exploration of the psychological need frustration of high school students in the academic context of English language. Second, the relationship of psychological needs frustration with emotions related to anxiety, hopelessness, and embarrassment, and finally, the relationship of the three emotions with motivation and communicative intention. These results could powerfully influence the English language communicative intention of high school students. Thus, investigating students' English language failure could reinforce the use of classroom interventions and teaching strategies that strengthen students' confidence in using English language in the classroom and in other contexts. Studies that have focused on game-based learning and the use of gamification are examples that could build students' confidence, strengthen group cohesion, and foster students' internal motivation to engage in their learning (Bagherpour et al., 2022; Cruaud, 2018; Saleem et al., 2022). This illustrates that the characteristics and salience of the academic context, in seeking to meet the psychological needs as they promote and nurture students' academic interest, are strongly related to their motivation and learning outcomes (Soubal-Caballero, 2008). In addition, it may help to explore other potential mediators that could be measured in future educational interventions.

5. References

- Bagherpour, N., Hajirostam, S., & Farjami, A. (2022). The impact of digital games on students' willingness to communicate in a flipped classroom context. *Journal of Contemporary Language Research*, 1(2), 96-104.
- Barrios, E., & Acosta-Manzano, I. (2021). Factors predicting classroom WTC in English and French as foreign languages among adult learners in Spain. *Language Teaching Research*, 13621688211054046.
- Beauducel, A., & Herzberg, P. Y. (2006). On the performance of maximum likelihood versus means and variance adjusted weighted least squares estimation in CFA. *Structural Equation Modeling*, 13(2), 186-203.
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107(2), 238.
- Cammarota, J. (2011). From hopelessness to hope: Social justice pedagogy in urban education and youth development. *Urban Education*, 46(4), 828-844.
- Conway, J. M., & Lance, C. E. (2010). What reviewers should expect from authors regarding common method bias in organizational research. *Journal of Business and Psychology*, 25, 325-334.
- Cruaud, C. (2018). The playful frame: gamification in a French-as-a-foreign-language class. *Innovation in Language Learning and Teaching*, 12(4), 330-343.
- De Wilde, V., Brysbaert, M., & Eyckmans, J. (2020). Learning English through out-of-school exposure. Which levels of language proficiency are attained and which types of input are important? *Bilingualism: Language and Cognition*, 23(1), 171-185.
- Deci, E. L., & Ryan, R. M. (2012). Motivation, personality, and development within embedded social contexts: An overview of self-determination theory. *The Oxford Handbook of Human Motivation*, 18(6), 85-107.

- Dewaele, J. M., & Pavelescu, L. M. (2021). The relationship between incommensurable emotions and willingness to communicate in English as a foreign language: a multiple case study. *Innovation in Language Learning and Teaching*, 15(1), 66-80.
- Education First (2022). EF English Proficiency Index: A Ranking of 111 Countries and Regions by English Skills. Available online: https://www.ef.com/assetscdn/WIBIwq6RdJvcD9bc8RMd/cefcom-epi-site/reports/2022/ef-epi-2022-english.pdf?_gl=1*c8wg6y*_ga*MjcwNjQxOTA 5LjE2OTcyNzk4NDU.*_ga_25YNHDZQQP*MTY5NzI3OTg0NC4xLjAuMTY5NzI3OT g0NC4wLjAuMA..&_ga=2.155673083.1748341854.1697279845-270641909.1697279845 Accessed on Nov 26, 2023
- Fernández-Agüero, M., & Hidalgo-McCabe, E. (2022). CLIL students' affectivity in the transition between education levels: The effect of streaming at the beginning of secondary education. *Journal of Language, Identity & Education*, 21(6), 363-377.
- Garn, A. C., Simonton, K., Dasingert, T., & Simonton, A. (2017). Predicting changes in student engagement in university physical education: Application of control-value theory of achievement emotions. *Psychology of Sport and Exercise*, 29, 93-102.
- González-Cutre, D., Sicilia, A., Sierra, A. C., Ferriz, R. & Hagger, M. S. (2016). Understanding the need for novelty from the perspective of self-determination theory. *Personality and Individual Differences*, 102, 159-169. https://doi.org/10.1016/j.paid.2016.06.036
- Güneş, Ö. (2022). Failure attributions and metacognitive awareness of EFL learners. *Language Awareness*, 31(1), 53-72.
- Hayes, A. F., & Scharkow, M. (2013). The relative trustworthiness of inferential tests of the indirect effect in statistical mediation analysis: does method really matter? *Psychological Science*, 24(10), 1918-1927.
- Hernández, M. J. P., & Moreno, R. D. L. P. Z. (2021). Factores psicopedagógicos que impactan la enseñanza aprendizaje del idioma inglés en docentes y alumnos de educación secundaria durante la pandemia. *Revista Lengua y Cultura*, 3(5), 100-107.
- Hershberger, S. L., & Marcoulides, G. A. (2013). The problem of equivalent structural models. In G. R. Hancock & R. O. Mueller (Eds.), *Structural Equation Modeling: A Second Course* (pp. 3–39). Charlotte, NC: Information Age Publishing.
- Hoemann, K., Xu, F., & Barrett, L. F. (2019). Emotion words, emotion concepts, and emotional development in children: A constructionist hypothesis. *Developmental Psychology*, 55(9), 1830.
- Holm, M. E., Björn, P. M., Laine, A., Korhonen, J., & Hannula, M. S. (2020). Achievement emotions among adolescents receiving special education support in mathematics. *Learning* and *Individual Differences*, 79, 101851.
- Holzer, J., Lüftenegger, M., Käser, U., Korlat, S., Pelikan, E., Schultze-Krumbholz, A., ... & Schober, B. (2021). Students' basic needs and well-being during the COVID-19 pandemic: A two-country study of basic psychological need satisfaction, intrinsic learning motivation, positive emotion and the moderating role of self-regulated learning. *International Journal of Psychology*, 56(6), 843-852.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Structural Equation Modeling: A Multidisciplinary Journal, 6(1), 1-55.
- Joe, H. K., Hiver, P., & Al-Hoorie, A. H. (2017). Classroom social climate, self-determined motivation, willingness to communicate, and achievement: A study of structural relationships in instructed second language settings. *Learning and Individual Differences*, 53, 133-144.

Kraaij, V., & Garnefski, N. (2019). The behavioral emotion regulation questionnaire: development, psychometric properties and relationships with emotional problems and the cognitive emotion regulation questionnaire. *Personality and Individual Differences*, 137, 56-61.

- Kaplan, H., & Assor, A. (2012). Enhancing autonomy-supportive I-Thou dialogue in schools: Conceptualization and socio-emotional effects of an intervention program. Social Psychology of Education, 15, 251-269.
- Kruk, M. (2022). Dynamicity of perceived willingness to communicate, motivation, boredom and anxiety in Second Life: The case of two advanced learners of English. *Computer Assisted Language Learning*, 35(1-2), 190-216.
- León, J., Núñez, J. L., & Liew, J. (2015). Self-determination and STEM education: Effects of autonomy, motivation, and self-regulated learning on high school math achievement. Learning and Individual Differences, 43, 156-163.
- Li, C., Dewaele, J. M., Pawlak, M., & Kruk, M. (2022). Classroom environment and willingness to communicate in English: The mediating role of emotions experienced by university students in China. *Language Teaching Research*, 13621688221111623.
- Lonsdale, C., Sabiston, C. M., Raedeke, T. D., Ha, A. S., & Sum, R. K. (2009). Self-determined motivation and students' physical activity during structured physical education lessons and free choice periods. *Preventive Medicine*, 48(1), 69-73.
- Méndez-Aguado, C., Aguilar-Parra, J. M., Álvarez, J. F., Trigueros, R., & Fernández-Archilla, J. A. (2020). The influence of emotions, motivation and habits in the academic performance of primary education students in French as a foreign language. *Sustainability*, 12(6), 2531.
- Müller, F. H., Thomas, A. E., Carmignola, M., Dittrich, A. K., Eckes, A., Großmann, N., ... & Bieg, S. (2021). University students' basic psychological needs, motivation, and vitality before and during COVID-19: A self-determination theory approach. *Frontiers in Psychology*, 12, 775804.
- Ntoumanis, N. (2005). A prospective study of participation in optional school physical education using a self-determination theory framework. *Journal of Educational Psychology*, 97(3), 444.
- Opdenakker, R. J. G. (2006). Advantages and disadvantages of four interview techniques in qualitative research. Forum Qualitative Social forschung / Forum: Qualitative Social Research, 7(4), art-11.
- Pawlak, M., Kruk, M., Zawodniak, J., & Pasikowski, S. (2020). Investigating factors responsible for boredom in English classes: The case of advanced learners. *System*, 91, 102259.
- Pekrun, R., Linnenbrink-Garcia, L. (2012). Academic emotions and student engagement. In S. Christenson, A. Reschly, C. Wylie (Eds), *Handbook of Research on Student Engagement* (pp. 259-282). Springer, Boston, MA. https://doi.org/10.1007/978-1-4614-2018-7 12
- Pekrun, R., & Stephens, E. J. (2010). Achievement emotions: A control-value approach. *Social and Personality Psychology Compass*, 4(4), 238-255.
- Peng J.E. (2019). The roles of multimodal pedagogic effects and classroom environment in willingness to communicate in English. *System*, 82, 161–173.
- Putri, N. R., & Sari, F. M. (2021). Investigating English teaching strategies to reduce online teaching obstacles in the secondary school. *Journal of English Language Teaching and Learning*, 2(1), 23-31.
- Ryan, R. M., & Deci, E. L. (2017). Self-Determination Theory: Basic Psychological Needs in Motivation Development and Wellness. New York, NY, USA: Guilford Publishing.

- Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, 61, 101860.
- Saleem, A. N., Noori, N. M., & Ozdamli, F. (2022). Gamification applications in E-learning: A literature review. *Technology, Knowledge and Learning*, 27(1), 139-159.
- Soubal-Caballero, S. (2008). La gestión del aprendizaje. Algunas preguntas y respuestas sobre en relación con el desarrollo del pensamiento en los estudiantes. *Polis. Revista Latinoamericana*, 21, 1-23.
- Tai, T. Y., & Chen, H. H. J. (2023). The impact of Google Assistant on adolescent EFL learners' willingness to communicate. *Interactive Learning Environments*, 31(3), 1485-1502.
- Thompson, S. E. (2003). Text-structuring metadiscourse, intonation and the signalling of organisation in academic lectures. *Journal of English for Academic Purposes*, 2(1), 5-20.
- Trigueros, R., & Aguilar-Parra, J. M. (2022). Adaptation and testing of the factorial structure of the Achievement Emotional Questionnaire-Short to the Spanish context of physical education classes. *European Physical Education Review*, 28(3), 777-796.
- Trigueros, R., Aguilar-Parra, J. M., Cangas, A. J., & Álvarez, J. F. (2019a). Validation of the scale of emotional states in the physical education context. *Sustainability*, 11(18), 5006.
- Trigueros, R., Aguilar-Parra, J. M., Fernández-Campoy, J. M., and Méndez-Aguado, C. (2019b). Adaptación y validación de la escala de motivación académica en secundaria con la incorporación de la regulación integrada y la desmotivación. Educación e Innovación. Inclusión, Tecnología y Sociedad. Universidad de Granada, Granada.
- Trigueros, R., Aguilar-Parra, J. M., Lopez-Liria, R., Cangas, A. J., González, J. J., & Álvarez, J. F. (2020a). The role of perception of support in the classroom on the students' motivation and emotions: the impact on metacognition strategies and academic performance in math and English classes. *Frontiers in Psychology*, 10, 2794.
- Trigueros, R., Cangas, A. J., Aguilar-Parra, J. M., Álvarez, J. F., & García-Más, A. (2019c). No more bricks in the wall: Adopting healthy lifestyles through physical education classes. *International Journal of Environmental Research and Public Health*, 16(23), 4860.
- Trigueros, R., Maldonado, J. J., Vicente, F., González-Bernal, J. J., Ortiz, L., & González-Santos, J. (2020b). Adaptación y validación al contexto de la educación física de la escala de la frustración de las necesidades psicológicas el ejercicio físico, con la inclusión de la novedad como necesidad psicológica. *Revista de Psicología del Deporte, 29*(3), 91-99.
- Tseng, M. C. (2022). Transfer of learning, fear of failure, procrastination, and self-efficacy in learning English: Any evidence from the arts? *Applied Linguistics Review, 13*(6), 1029-1053.
- Vallerand, R. J. (2007). Intrinsic and extrinsic motivation in sport and physical activity: A review and a look at the future. *Handbook of Sport Psychology*, 59-83.
- Wang, M., Wang, H., & Shi, Y. (2022). The role of English as a foreign language learners' grit and foreign language anxiety in their willingness to communicate: Theoretical perspectives. *Frontiers in Psychology*, 13, 1002562.
- Wang, H., Peng, A., & Patterson, M. M. (2021). The roles of class social climate, language mindset, and emotions in predicting willingness to communicate in a foreign language. System, 99, 102529.
- Wu, C. P., & Lin, H. J. (2014). Anxiety about speaking a foreign language as a mediator of the relation between motivation and willingness to communicate. *Perceptual and Motor Skills*, 119(3), 785-798.

6. APPENDICES

APPENDIX A: Frustration Scale of Basic Psychological Needs in English Classes.

The Spanish version: This was the one applied in the study.

En general durante las clases de Inglés...

- 1. Me siento impedido/a para tomar decisiones respecto a las actividades que realizo
- 2. Hay ocasiones en las que me siento incompetente porque los demás creen que soy mejor
- 3. Me siento rechazado/a por mis compañeros/as de clase
- 4. Me siento incapaz de hacer cosas nuevas
- 5. Me siento presionado/a hacia el éxito en las tareas y/o exámenes
- 6. Hay veces que mis compañeros/as me han dicho cosas que me hacen sentir incompetente
- 7. Siento que mis compañeros/as pueden tener una actitud despectiva hacia mí
- 8. Algunas veces me siento rechazado por tratar de hacer los ejercicios de forma diferente a los demás
- 9. Me siento obligado/a a seguir las decisiones de los demás
- 10. Hay actividades que me hacen sentir incapaz
- 11. Siento que no le gusto a mis compañeros/as
- 12. Me siento presionado para realizar los mismos ejercicios
- 13. Me siento presionado/a a realizar las actividades planeadas por el profesor
- 14. Me siento incompetente porque no me dan la oportunidad de desarrollar mi potencial
- 15. Percibo que algunos de mis compañeros/as sienten envidia cuándo más éxito
- 16. Soy incapaz de experimentar nuevas sensaciones
- 17. En ocasiones, me siento impedido a realizar cosas diferentes

Cada uno de los ítems va desde 1 Totalmente en desacuerdo a 7 Totalmente de acuerdo.

The English version

In general during English classes...

- 1. I feel that I am unable to make decisions about my activities.
- 2. There are times when I feel incompetent because others think I am better. 3.
- 3. I feel rejected by my classmates.
- 4. I feel unable to do new things
- 5. I feel pressured to succeed in homework and/or exams. 6.
- 6. There are times when my classmates have said things to me that make me feel incompetent.
- 7. I feel that my peers may have a derogatory attitude towards me.
- 8. Sometimes I feel rejected for trying to do the exercises differently from others.

- 9. I feel obliged to follow other people's decisions.
- 10. There are activities that make me feel incapable
- 11. I feel that my classmates do not like me.
- 12. I feel pressured to do the same exercises.
- 13. I feel pressured to do the activities planned by the teacher.
- 14. I feel incompetent because I am not given the opportunity to develop my potential.
- 15. I perceive that some of my peers are envious when I am more successful.
- 16. I am unable to experience new sensations
- 17. I sometimes feel prevented from doing different things.

Each of the items ranges from 1 Strongly disagree to 7 Strongly agree.

APPENDIX B: Anxiety, Embarrassment and Hopelessness

The Spanish version: This was the one applied in the study.

Durante las clases de inglés...

- 1. Hay veces que me siento como avergonzado/a
- 2. Mis compañeros me hacen sentir avergonzado/a
- 3. Me siento avergonzado porque no sé si soy capaz de realizar los ejercicios
- 4. Me siento como avergonzado/a cuando mis compañeros/as pueden hacer los ejercicios y yo no
- 5. Me siento avergonzado/a cuando participo
- 6. Siento que voy a fracasar
- 7. Me siento inútil
- 8. Me siento frustrado/a e inútil
- 9. Me siento abatido/a
- 10. No me preocupa cometer errores
- 11. A pesar de mi preparación, me siento muy nervioso/a
- 12. Me siento incómodo cuando creo que me están evaluando
- 13. Siento presión en el pecho cuando me toca hacer los ejercicios

Cada uno de los ítems va desde 1 Totalmente en desacuerdo a 7 Totalmente de acuerdo.

The English version

During English classes...

- 1. I sometimes feel kind of embarrassed.
- 2. My classmates make me feel embarrassed.
- 3. I feel embarrassed because I don't know if I am able to do the exercises.
- 4. I feel ashamed when my classmates can do the exercises and I can't do them.
- 5. I feel ashamed when I participate

- 6. I feel like I am going to fail
- 7. I feel useless
- 8. I feel frustrated and useless
- 9. I feel dejected
- 10. I am not worried about making mistakes
- 11. Despite my preparation, I feel very nervous.
- 12. I feel uncomfortable when I think I am being evaluated.
- 13. I feel pressure in my chest when it is my turn to do the exercises.

Each of the items ranges from 1 Strongly disagree to 7 Strongly agree.

APPENDIX C: Academic Motivation Scale for English Classes

The Spanish version: This was the one applied in the study.

En relación a las clases de inglés estoy interesado/a...

- 1. Pero realmente no sé porqué
- 2. Porque así no tendré una baja nota
- 3. Porque me sentiría mal si el profesor pensara que no soy bueno
- 4. Porque para mí es importante hacerlo bien
- 5. Porque están centrados en mis intereses
- 6. Porque las clases son agradables
- 7. Pero no comprendo porque deberíamos de tener esta asignatura
- 8. Para que el profesor no me llame la atención
- 9. Porque me sentiría mal conmigo mismo si no participara
- 10. Porque para mí es importante mejorar en los ejercicios que hacemos
- 11. Porque considero la asignatura como una parte fundamental en mi formación
- 12. Porque esta asignatura es emocionante
- 13. Pero realmente siento que estoy perdiendo mi tiempo en clase
- 14. Porque es obligatorio
- 15. Porque me sentiría mal si mis compañeros pensasen que no soy bueno/a
- 16. Porque para mí es importante ser bueno/a en las actividades que hacemos en clase
- 17. Porque estas clases son fundamentales para mi formación
- 18. Porque disfruto aprendiendo nuevas cosas
- 19. Pero no puedo ver que obtengo o gano con esta asignatura
- 20. Porque me preocupa cuando no asisto a clase
- 21. Porque para mí es importante participar las clases
- 22. Porque considero que estas clases están de acuerdo con mi forma de pensar
- 23. Porque las clases de esta asignatura son divertidas
- 24. Porque así obtengo un reconocimiento de mis compañeros

Cada uno de los ítems va desde 1 Totalmente en desacuerdo a 7 Totalmente de acuerdo.

The English version

In relation to English classes I am interested in....

- 1. but I don't really know why
- 2. Because then I won't get a low grade
- 3. Because I would feel bad if the teacher thought I was no good.
- 4. Because it is important for me to do well
- 5. Because they are focused on my interests
- 6. Because the classes are enjoyable
- 7. But I don't understand why we should have this subject.
- 8. So that the teacher doesn't call my attention to me
- 9. Because I would feel bad about myself if I didn't participate.
- 10. Because it is important for me to improve in the exercises we do.
- 11. Because I consider the subject as a fundamental part of my education.
- 12. Because this subject is exciting
- 13. But I really feel that I am wasting my time in class.
- 14. Because it is compulsory
- 15. Because I would feel bad if my classmates thought I was no good.
- 16. Because it is important for me to be good at the activities we do in class.
- 17. Because these classes are fundamental for my education
- 18. Because I enjoy learning new things
- 19. But I can't see what I get or gain from this subject.
- 20. Because it worries me when I don't go to class.
- 21. Because it is important for me to participate in the classes
- 22. Because I consider that these classes are in accordance with my way of thinking.
- 23. Because the lessons in this subject are fun.
- 24. Because I get recognition from my classmates.

Each of the items ranges from 1 Strongly disagree to 7 Strongly agree.

APPENDIX D: Willingness to Communicate Scale

The Spanish version: This was the one applied in the study.

Indique hasta qué punto decide comunicarse en clase de lengua extranjera en las siguientes ocasiones (1 equivale a nada o nunca y 10 a siempre o todo el tiempo).

- 1. Cuando estoy preparado/a para la clase de lengua extranjera.
- 2. Cuando sé la respuesta correcta.
- 3. Cuando realmente puedo aclarar el asunto que se está discutiendo.
- 4. Cuando tengo un punto de vista distinto al resto de mis compañeros de clase.
- 5. Cuando nadie más habla.
- 6. Cuando me siento en primera fila.

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- 7. Cuando mi punto de vista difiere del de mi docente.
- 8. Cuando toda la clase está involucrada en una conversación abierta.
- 9 Cuando el tema es interesante
- 10. Cuando se evalúa mi participación en la clase de inglés.
- 11. Cuando toda la clase está involucrada en un debate acalorado.

The English version

Please indicate the extent to which you are willing to communicate in a foreign language class on the following occasions (1 equals not at all or never and 10 equals always or all the time).

- 1. When I am ready for the foreign language class.
- 2. When I know the correct answer.
- 3. When I can really clarify the issue under discussion.
- 4. When I have a different point of view from the rest of my classmates in the foreign language class.
- 5. When no one else is speaking.
- 6. When I sit in the front row.
- 7. When my point of view differs from that of my teacher.
- 8. When the whole class is involved in an open conversation.
- 9. When the topic is interesting.
- 10. When my participation in the foreign language class is evaluated.
- 11. When the whole class is involved in a heated debate.