COMMUNICATIVE SELF-CONFIDENCE AND MOTIVATION: AN EDUCATIONAL EXPERIENCE OF LINGUISTIC IMMERSION AND LEISURE IN NATURE

Julio Fuentesal-García[1]
Alba González-Peño[1][✉]
Anna García-Hernández[2]
Evelia Franco[3]

[1]Universidad Politécnica de Madrid, Spain

[2]CEIP Valdelamusa-San Telmo, Spain

[3]Universidad Loyola Andalucía, Spain

[✉] alba.gonzalez.peno@upm.es

ABSTRACT

Communicative self-confidence and motivation play a crucial role in learning any language, including English. The absence of these elements significantly impacts students' ability to express themselves naturally and fluently. In Spain, language immersion programs seek to promote the simultaneous learning of language skills in a communicative context, facilitating learners' proficiency development. This study focuses on analyzing the influence of the natural environment and leisure activities on learning English as a second language (L2), investigating whether participation in a language immersion program in nature improves learners' communicative self-confidence and whether they perceive greater empowerment compared to conventional English classes. Participants were 305 secondary education students, of whom 172 were female. Results indicate that students who participated in the language immersion program experienced significant improvements in their communicative self-confidence and perceived greater relatedness support (Z =-3.55; p < .001; δ = -.21 and Z = -5.26; p < .001; δ = -.32, respectively). These findings highlight how the natural environment provides a conducive environment for the development of communicative and social skills, reducing language anxiety and improving students' self-confidence, and points to the importance of exploring basic psychological needs to understand the interaction between students, teachers and the environment in the process of learning English.

KEYWORDS

Communicative self-confidence, leisure, linguistic immersion, motivation, natural environment

HOW TO CITE

Highlights

- *The natural environment provides an environment conducive to developing communication skills, reducing linguistic anxiety, and improving students' self-confidence.*
- *Green spaces or nature spaces are suitable and beneficial settings for improving students' social relations.*
- *English language immersions are a key tool for improving student empowerment. In natural environments and with quality programs, students are immersed in a space where English is the main language and nature is the stimulus for learning.*

INTRODUCTION

In recent decades, there has been a significant increase in the commitment to integrating English within the educational context, driven by its global expansion and recognition (Axelsson, 2007; Cadiz-Gabejan, 2021), as well as the urgent need to enhance linguistic and multilingual competencies in younger generations. This aligns with the directives set by the Organic Law (LOMLOE, 2020), which is essential for navigating an increasingly globalized and interconnected society (Hashemi, 2011). Bilingual programs have proliferated across Europe since the 1990s to promote multilingual competencies. Consequently, educational policies promoted by organizations like the OECD, the Council of Europe, and the European Commission increasingly support the objective of enhancing language acquisition among their citizens (Palacios-Hidalgo et al., 2019). In Spain, language immersion programs based on Content and Language Integrated Learning (CLIL) aim to foster the simultaneous development of language skills and subject content by using a vehicular language different from students' mother tongue.

Effective communication in foreign language education necessitates that students possess foundational language

skills and confidence in speaking. However, Spanish students, similar to learners in various other contexts, often experience challenges with oral expression, notably in areas of pronunciation and vocabulary, which can significantly hinder interaction and dialogue (Alonso-Herrero & Lasagabaster, 2019; Cadiz-Gabejan, 2021; Gazali, 2022). These challenges can hinder intelligibility and comprehension between speakers (Thompson & Huensch, 2016). Self-confidence, therefore, is closely tied to students' success or difficulties in foreign language learning, as emphasized by Alonso-Herrero and Lasagabaster (2019). Supporting this, previous studies highlight self-confidence as a determinant of learners' willingness to communicate (Macintyre et al., 1998) and their inclination to initiate interactions with native speakers (Yashima et al., 2004). Although there is a shift toward more communicative and proficiency-based teaching approaches, many educational settings still rely heavily on traditional grammar-focused methods, often sidelining oral skills, such as listening and speaking. This is especially pronounced in formal teaching contexts, where limited opportunities for classroom communication restrict students' confidence in using English (Darasawang & Reinders, 2021). To reverse this trend, Hashemi (2011) advocates for creating supportive, informal spaces that encourage collaborative activities between teachers and students.

In this sense, fostering student confidence will be a key aspect that teachers can develop in teaching-learning contexts. In recent decades, the creation of empowering classroom climates has gained prominence due to the considerable influence that a teacher's words, actions, learning environment organization, and classroom dynamics management have on students' confidence and other adaptive variables (Appleton & Duda, 2016). Building on achievement goal theories (AGT; Ames, 1992; Nicholls, 1989) and self-determination theory (SDTDeci & Ryan, 1985; Ryan & Deci, 2020), Appleton and Duda (2016) propose that teachers can establish either empowering or disempowering climates that shape students' motivational processes.

To delve deeper into the social context in class, these authors characterize motivational climate from a broader, hierarchical, and multidimensional perspective, integrating constructs from SDT (Ryan & Deci, 2020) - autonomy support, control, and relatedness support - and from AGT (Ames, 1992; Nicholls, 1989)– task-oriented climate and ego- or performance-oriented climate. Appleton et al. (2016) point out that an empowering climate is fostered when teachers set achievement criteria based on effort, collaborative learning, and skill development (task-oriented climate); provide opportunities for choice and rationale for tasks; recognize students' preferences, interests, and perspectives (autonomy support); and ensure students feel valued and understood (relatedness support). However, a teacher can also create a disempowering climate when he or she establishes achievement criteria based on superiority, rivalry, and differentiated treatment according to performance, where mistakes are penalized. Achievements are rewarded (ego- or performance-oriented climate), and strategies that pressure students to think, behave, or feel a certain way (control). In the context of English as a foreign language, the literature suggests that when students perceive an empowering climate,

they experience greater autonomy and choice, feel capable of overcoming the challenges presented, and sense support from both teachers and peers. This type of climate has been associated with enhanced perceived competence in English, thereby strengthening self-confidence (Darasawang & Reinders, 2021). On the other hand, there is evidence that the context in which the teaching-learning process takes place can affect learning outcomes. Studies that have conducted adventure and leisure education programs (e.g., González-Melero, 2023) have shown improvements in school satisfaction, motivation, and self-efficacy. Along these lines, recent research related to teaching English as a foreign language (FLE) has concluded that connecting English language learners with nature reduces their stress and benefits both their academic and socioemotional well-being (Mueller & Pentón Herrera; Shoseyov-Kupferman, 2020). Additional studies by Gazali (2022), Sopanema (2016), and Asmara et al. (2016) report that secondary school students respond favorably, showing increased motivation and inspiration when learning English in natural settings. Pedagogical programs through leisure activities carried out in nature and outdoor spaces are marking a greater proliferation and an upward trend (González-Rivas et al., 2021; Marinho et al., 2017). Consequently, activities in natural spaces appear to create ideal environments for experiential learning, facilitating acquiring academic skills and competencies (Santos & Martínez, 2011). These transformative educational models provide students with social and academic benefits, as documented in recent years (Baena-Extremera et al., 2012; Hortigüela et al., 2017). Specifically, these approaches underscore the value of combining leisure and adventure activities with EFL instruction in nature, perceived as beneficial for enhancing self-esteem, social relationships, and self-confidence (García-Merino & Lizandra, 2022; Gehris & Swalm, 2011). Further research supports cognitive and mental health benefits from exposure to green spaces. Diamond et al. (2007) and Posner and Rothbart (2006) have shown improvements in attention spans and cognitive processing in such settings, as nature exposure helps students focus on relevant stimuli, facilitating a more directed cognitive experience (Peen et al., 2010).

The evidence discussed above suggests that engaging students in English language learning experiences within natural environments may enhance their self-confidence in communicating in English and foster an empowering climate that positively influences their motivational patterns. Nevertheless, previous literature has yet to explore whether learning English in nature directly affects students' communicative confidence. Additionally, no studies have compared students' perceptions of an empowering climate in formal classroom settings versus a natural environment for English language learning.

Students' gender could be a covariate to consider when understanding both the impact of immersion on self-confidence and the differences in the empowering climate between a classroom context and a nature immersion context. In this regard, Gardner's (1985) motivation theory suggests that students with greater integrative motivation (i.e., those interested in interacting with speakers of other cultures) are more successful in language learning and that girls tend to show higher integrative motivation than boys, which could

be related to a greater willingness to communicate in English. Also, previous evidence has suggested that Spanish girls might display higher English communicative competencies than boys when entering university (Suardí Peña & Eliche, 2023).

The aim of the present study was twofold. First, to investigate whether an immersion experience in learning English within a natural setting could enhance high school students' communicative self-confidence. In this respect, it was also explored whether the impact of the experience could vary between boys and girls. Second, this study examined potential differences in students' perception of an empowering climate between a formal English classroom setting and a natural language immersion experience. The role of gender in such differences was also analyzed. It was hypothesized that the natural immersion experience would increase students' communicative self-confidence and that students would perceive a stronger climate of empowerment in this setting compared to their regular English classes. Given the lack of conclusive previous evidence in this regard, no hypotheses were established regarding differences between boys and girls.

METHOD

Design

A quantitative pre-experimental design was employed, utilizing a within-subject comparison strategy to gather longitudinal data from the measurements taken in the pretest and post-test (Judd & Kenny, 1981).

Participants

The sample comprised 305 students ($M = 12.86$, $SD = .95$) in their second year of Compulsory Secondary Education. Specifically, 172 females and 133 males aged between 10 and 15 participated in the study ($M = 12.91$, $SD = .92$; $M = 12.81$, $SD = .99$ respectively). Participants belonged to a total of 19 public and private schools from different rural (47.8%) or urban (52.2%) areas in Spain. From those centers, 67.8% of students were engaged in bilingual schools.

Instruments

- **Communicative self-confidence**: a Spanish version of the Willingness to Communicate scale (Darasawang & Reinders, 2021) was used. This scale consisted of 10 items translated to Spanish by two research members, ensuring the comprehension of each item. In the pretest version, the introductory phrase was… "In settings where English is used….", while in the post-test version, it was "After having lived the immersion experience, I think that when being involved in settings where English is used…" (e.g., "I worry about not understanding what my friends say in English"). Responses were rated on a 5-point Likert scale from strongly disagree to strongly agree. Cronbach's alpha for the single dimension of the scale was 0.73, indicating acceptable internal consistency.

- **Empowering climate**: the Spanish version validated for the educational context of the empowerment climate dimension of the Educator-Created Empowering and Disempowering Climate Questionnaire (ECEDCQ; Granero-Gallegos et al., 2023) was used. This dimension comprises 21 items that measure the empowering climate (task-oriented motivational climate, autonomy support, and relatedness support). In the version applied in the first data collection, the introductory sentence was… "In English classes, my teacher…", while in the version administered after the immersion experience, the sentence was "During the activities we have done in the immersion week…". The items were grouped into five factors and measured students' perception of the teaching style: task-oriented motivational climate (4 items; e.g., "He expects us to learn new skills and gain new knowledge and skills"), autonomy support (5 items, e.g., "He has thought it is important that we participate in the activities because we really want to"), relatedness support (3 items; e.g., "He has listened openly and has not judged personal feelings"). A 5-point Likert scale was used for the responses. Cronbach's Alpha index was adequate: task-oriented climate ($\alpha = .85$), autonomy support ($\alpha = .70$), and relatedness support ($\alpha = .80$).

Procedure

First, public and private secondary schools were contacted to inform them about the study. Following the guidelines of the American Psychological Association (2002), informed consent and approval were required for data collection involving minors. Consent was obtained from both the schools and the student's parents or legal guardians. An informational email was sent detailing the study's objectives, nature, research instruments, and data handling procedures, emphasizing that the data would be used exclusively for scientific purposes. Ultimately, 19 educational centers across Spain agreed to participate, and data collection took place between February and June of the 2022–2023 academic year. After collecting the necessary information, the data were processed. All incomplete questionnaires or those with responses that could lead to confusion or unreliability were excluded from the analysis.

At the beginning of the immersion program, students were provided with all the necessary and relevant information about the study to ensure that everyone involved clearly understood the process to be followed in administering the questionnaires. The language used by the native foreign language teachers was English as L2 throughout the process. Questionnaires were administered twice: on the first day of the program upon arrival at the facility and at the end of the program following seven days of training. Both questionnaires lasted approximately 20 minutes and were administered to the students in digital format via electronic devices to ensure individual and anonymous responses.

Each group participated in a seven-day immersion, with fifty students per week. The bilingual pedagogical program focused mainly on learning English through physical activities in the natural environment, artistic performances, games, and cooperative activities, fostering intercultural communicative competence and reflecting on diverse identities. English was the primary language of communication, facilitating real-life interactions with peers and native-speaking teachers in everyday scenarios (see Figure 1).
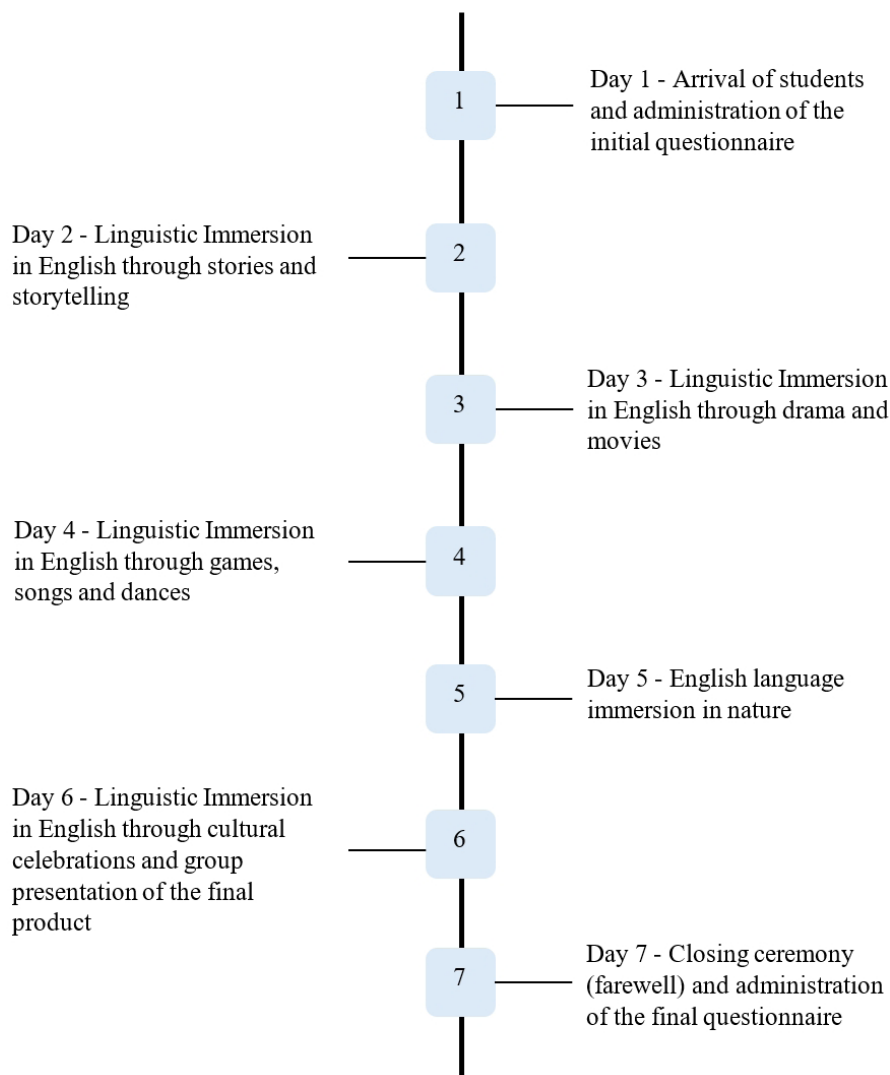
Day 1 - Arrival of students and administration of the initial questionnaire

Day 2 - Linguistic Immersion in English through stories and storytelling

Day 3 - Linguistic Immersion in English through drama and movies

Day 4 - Linguistic Immersion in English through games, songs and dances

Day 5 - English language immersion in nature

Day 6 - Linguistic Immersion in English through cultural celebrations and group presentation of the final product

Day 7 - Closing ceremony (farewell) and administration of the final questionnaire

Figure 1: Description of the intervention schedule

Data Analysis

The variables analyzed were communicative self-confidence in English and the perception of an empowering climate, composed of the subdimensions of autonomy support, relatedness support, and task-oriented motivational climate. First, descriptive statistics (minimum, maximum, means, and standard deviations) and bivariate correlations between the study variables were calculated. Next, the Kolmogorov-Smirnov test was performed to check the distribution of the scores on the study variables, which did not conform to the normal, so nonparametric tests were applied to address the study's objective. First, the Wilcoxon test for related samples was performed to determine possible pre-post differences in participants' communicative self-confidence. Then, three 2x2 univariate analyses of variance (ANOVA) with context condition and gender as independent variables were used to investigate the effect of the interaction of these two variables on climate task, autonomy support, and relatedness support. Last, the Wilcoxon test was used to test whether there were significant differences between the English class and immersive experience by gender. As an index of effect size (ES), Cohen's delta was calculated, whose interpretation was based on the following values: < 0.06 small, η^2 0.06 to < 0.14 medium, and η^2 0.14 large (Cohen, 1988). All analyses were performed using the SPSS statistical software, version 26.0.

RESULTS

Descriptive Statistics

Table 1 presents the descriptive statistics and bivariate correlations of the study variables pre- and post-intervention. Overall, mean scores were relatively high, particularly within the empowerment dimensions. The initial mean score for communicative self-confidence was below 3 in the first measurement but showed a significant increase following the intervention. As for the correlations, a strong association between the dimensions that make up empowerment was observed both before and after the intervention. Although less strongly, a positive and significant correlation between communicative self-confidence and the three dimensions of empowerment stands out. It is worth noting that, generally, cross-time associations were not significant (i.e., pre-intervention scores on empowerment dimensions did not significantly correlate with post-intervention scores in the other dimensions).

	1	2	3	4	5	6	7	8
1. Communicative self-confidence PRE	---	.336**	.320**	.326**	.140*	.089	.124*	.091
2. Task-oriented climate_English class		---	.789**	.688**	.046	.068	.133*	.037
3. Autonomy support_English class			---	.670**	.063	.066	.129*	.051
4. Relatedness support_English class				---	.000	.044	.144*	.052
5. Communicative self-confidence POST					---	.221**	.215**	.273**
6. Task-oriented climate_Inmmersive experience						---	.694**	.708**
7. Autonomy support__Inmmersive experience							---	.748**
8. Relatedness support__Inmmersive experience								---
M (DT)	2.95 (.59)	3.97 (.93)	3.95 (.84)	3.72 (.96)	3.20 (.60)	3.99 (.88)	3.88 (.77)	3.98 (.86)

Table 1: Descriptive statistics and bivariate correlations

Impact of the Immersive Experience on Communicative Self-confidence

The results of the Wilcoxon test (Table 2) in this investigation indicated a significant increase in the values of communicative self-confidence following the program intervention (Z = -5.26; p < .001; δ = -.32) with a moderate effect. Analyzing results by sex, both girls and boys showed a significant improvement in communicative self-confidence after the intervention with moderate and small effects (Z = -4.90; p < .001; δ = -.29 and Z = -2.34; p = .019; δ = -.12, respectively).

	Before intervention M (SD)	After intervention M (SD)	z	p	Cohen's d
Communicative self-confidence	2.95 (.59)	3.20 (.60)	-5.26	< .001	.32
Communicative self-confidence Girls (n=223)	2.91 (.57)	3.17 (.59)	-4.90	< .001	.29
Communicative self-confidence Boys (n=181)	3.08 (.59)	3.24 (.57)	-2.34	.019	.12

Table 2: Differences in communicative self-confidence between before and after the intervention.

Differences in Perceived Empowering Climate between English Class and Immersive Experience

First, three 2x2 ANOVA was carried out to explore the effect of the interaction between English class or immersive experience and gender. Results revealed that no significant interaction was found in the climate task (F = .43, p = .52, η^2_p = .01), autonomy support (F = 1.53, p = .22, η^2_p = .01), and relatedness support (F = .01, p = .94, η^2_p = .01).

Then, exploring significant differences between the English class and immersive experience by gender with the Wilcoxon test, results showed no significant differences in task-oriented climate for both the English class and immersive experience (Z = -.20, p = 0.84). Similarly, with the sample split by gender, neither girls (Z = -.64, p = .52) nor boys (Z = -.48, p = .63) significantly differed between contexts. Small effect sizes were found.

As for autonomy support, scores in the immersive experience did not differ from those in the English class (Z = −1.46, p = 0.15). The same pattern also emerged for girls, with no significant differences (Z = -0.66, p = 0.51). In contrast, boys showed significant differences between contexts with lower levels of perceived autonomy support in the immersive experience than in the classroom (Z = -2.53, p = .01), although the effect size was small.

Significant differences were also found in relatedness support between the English class and the immersive experience (Z = -3.55, p < .001). Specifically for gender, this effect was particularly noticeable for girls, who perceived higher relatedness support in the immersive experience compared to the classroom (Z = -1.96, p < .05). For boys, no significant difference was found (Z = -1.62, p = .11).

	English class M (SD)	Immersive experience M (SD)	z	p	Cohen's d
Climate Task	3.97 (.93)	3.99 (.88)	-.20	.84	.02
Climate Task Girls	3.95 (.93)	4.00 (.90)	-.64	.52	.05
Climate Tasks Boys	4.06 (.86)	4.04 (.82)	-.48	.63	.04
Autonomy support	3.95 (.84)	3.88 (.77)	-1.46	.15	.07
Autonomy support Girls	3.93 (.86)	3.89 (.78)	-.66	.51	.05
Autonomy support Boys	4.04 (.76)	3.86 (.73)	-2.53	.01	.13
Relatedness support	3.72 (.96)	3.98 (.86)	-3.55	< .001	.21
Relatedness support Girls	3.78 (.98)	3.94 (.88)	-1.96	< .05	.10
Relatedness support Boys	3.82 (.92)	4.00 (.80)	-1.62	.11	.06

Table 3: Differences in empowering climate dimensions between English class and immersive experience

DISCUSSION

The present study had two primary objectives: first, to examine whether an English language immersion experience in a natural environment could impact high school students' communicative self-confidence, and second, to analyze differences in perceptions of an empowering climate between formal classroom English instruction and an immersion experience in nature. It was hypothesized that the immersion experience would enhance students' communicative self-confidence and that participants would perceive a more empowering climate during the immersion than in their regular English classes.

The results of this work partially confirmed the hypotheses of the study. The main finding of this research has been the confirmation that the students who participated in the language immersion program in nature improved their communicative self-confidence in the English language. What might be more important is that the impact of the immersive program was similar to that of boys and girls. These findings suggest that the experience in the language immersion program in a natural environment and away from the commonly known as traditional classrooms, where language anxiety seems to be very present in English language learning (Hashemi, 2011; Öztürk et al., 2022), could provide a more favorable environment for the development of communicative skills. Students' perception of the language learning process, their self-concept and identity in terms of their performance in communicative situations, and the linguistic obstacles they face when communicating in English seem to be closely intertwined with language anxiety and may have an impact on students' positive self-image or self-identity (Hashemi, 2011; Öztürk et al., 2022). In addition, different authors have evidenced that student achievement could be influenced by learning contexts (Pariyanto & Pradipta, 2020), so the environment and spaces in which teaching takes place will be directly related to the social, emotional, and physical well-being of students (Mueller & Pentón Herrera, 2023; Shoseyov-Kupferman, 2020). One factor that could be affecting the lower level of self-confidence reported by the participants about their experience in ordinary English classes in their schools is the possible abuse of grammar that is palpable in the classrooms. The method, commonly called Grammar Translation, impairs the planning of realistic and communicative situations that involve greater cooperation between interlocutors and satisfy the learner. From this perspective, Kocaman (2017) considers that overexposure to grammar in Spanish students can be a critical factor that causes serious difficulties, noting, in his studies, that students expressed greater concern for grammatical rules and remarked significant difficulties in listening comprehension and anxiety. Several studies have shown that closed spaces with an artificial environment, such as classrooms, can lead to and develop anxiety or mood disorders (Lederbogen et al., 2011; Peen et al., 2010; van Os et al., 2010). Similarly, research has shown that natural environments and their interaction through different leisure activities can help improve students' physical and psychological health (Retete-Ochoa & Heredia-León, 2024). In this line, previous studies indicate that natural environments could improve different motivational variables, such as the perception of self-efficacy and motivation, and

academic variables, such as self-regulated learning and school satisfaction (González-Melero, 2023). Therefore, it seems that learning English in the natural environment could foster students' communicative self-confidence, which would reduce the levels of linguistic anxiety that they present in activities in which oral communication takes place. Thus, learning English in natural environments may bolster students' communicative self-confidence, potentially reducing the linguistic anxiety commonly associated with oral communication tasks. Further exploration of these factors could yield valuable insights into the interaction between students, teachers, and learning environments and the structuring of classes and specific activities that impact communicative self-confidence and language anxiety (Hashemi, 2011).

In addition, the results revealed that, during the program, students perceived greater relatedness support than during their English classes. While the analysis according to students' gender revealed that it was only among girls where this difference was significant, it must be noted that boys' values were also considerably higher in their perceptions of the immersive experience than in their English classes. From this perspective, and following studies by authors such as Cerrada et al. (2022) and Gutiérrez et al. (2017), this improvement could be related to the cooperative dynamics and the integral natural environment of the program, which foster social interaction, collaboration and bonding among participants. These values can be aligned with the studies of González-Melero (2023), whose adventure education (EA) program in secondary education with 416 subjects, significant improvements were observed in a multitude of variables such as school satisfaction, motivation, learning to self-efficacy or self-regulated learning to cognitive strategies, among others. Activities conducted in natural settings provide an optimal environment for experiential learning, enabling the acquisition of various academic skills and competencies (Santos & Martínez, 2011). The experiences generated in green spaces—marked by interaction with nature, risk, emotional engagement, social interaction, and uncertainty—create meaningful contexts for learning and self-expression (Caballero, 2012). In alignment with these findings, Cerrada et al. (2022) concluded that such activities offer substantial educational potential from multiple perspectives (Baena-Extremera et al., 2013; Caballero, 2012; Fuentesal-Garcia, 2014; González-Melero, 2023). Therefore, based on previous literature, we will say that the natural environment is considered an ideal setting for learning a foreign language, as well as for promoting certain behavioral and psychological variables among students that influence learning processes. This study highlights several factors affecting students' self-confidence and self-assurance. The fact that learners perceive greater ease in speaking and communicating in English will favor their self-confidence and empowerment towards the interaction and communicative situation. This is consistent with prior research, such as that of Pariyanto and Pradipta (2020), which found that positive attitudes, strong internal motivation, and supportive environments are essential for successful language learning.

The initial hypotheses were partially confirmed, as no significant differences were found in task-oriented climate and autonomy support between classroom and immersion experiences. Yet,

when splitting the sample by gender, boys exhibited significant differences between contexts in the opposite direction to that hypothesized with lower levels of autonomy support in the immersive experience. These findings could be explained by the need for teachers to control the classroom more, maybe due to safety concerns associated with the inherent risks of activities developed in the natural environment. The empowering climate is characterized by valuing student progress and establishing individualized criteria with the goal of personal improvement; specifically, the task-oriented climate seeks to offer opportunities for choice, reasoning, and justifying the activities that are proposed, as well as identifying and recognizing student interests and preferences (Appleton et al., 2016). This suggests the nature of the teacher-student relationship may influence the promotion of a task-oriented climate. In this study, the one-week program duration may have limited students' perception of certain task-oriented climate attributes, such as recognizing individual interests and preferences, given that instructors interacted with students for only a short time. Parallelly, it could be that students perceive more clearly the establishment of individualized criteria by their school English teacher since it is more feasible that, in this context, the objectives can be tailored to each student according to his or her previous performance and interests. Additionally, the inherent characteristics of each teacher—such as years of experience, gender, or motivational patterns—are strongly related to the type of climate generated in their teaching-learning contexts (Baena-Extremera et al., 2015; Baños et al., 2018; Franco et al., 2021). Consequently, students' perception of this variable may be more influenced by the individual qualities of the teacher or instructor than by the context or specific experience.

On the contrary, there was no distinct difference in perceptions in the autonomy support variable for the total sample, except for boys, who reported significantly lower levels of autonomy support in the immersion experience versus the classroom setting. A climate in which autonomy support is promoted is characterized by the fact that the people (teachers, technicians) who manage the context (class, training session, etc.) encourage participants to take the initiative, promote and value decision-making, propose interesting activities explaining the reasons for them, and put themselves in the place of the participants to understand them, showing understanding and flexibility (Mageau & Vallerand, 2003). Activities carried out in the natural environment are determined, in their management, by a fundamental aspect such as safety to preserve the physical integrity of the participants, and this could be conditioning the perception of support for autonomy on the part of the participants in these activities. For instance, and in line with what has been suggested in previous works, the fact that students are more controlled due to safety issues and being a space of continuous uncertainty (Peñarrubia et al., 2016) could have affected the perception of autonomy that students have during the immersion program. In contrast, in an ordinary classroom, students could be more encouraged to show initiative and make decisions, given the absence of physical risk. Additionally, as previously noted regarding task-oriented climate, evidence suggests that certain teacher-related characteristics, such as the satisfaction of teachers' psychological needs or burnout

experienced at work, may condition the autonomy support they provide to their students (Burel et al., 2021; Franco et al., 2020). Pursuing further studies along these lines would be valuable, particularly those incorporating additional dispositional motivational variables, such as the satisfaction of basic psychological needs. Such research could provide deeper insights into how autonomy-supportive strategies—or more controlling behaviors (perhaps necessitated by the imperative to ensure participant safety during activities)—may shape students' motivational patterns. Understanding these dynamics would contribute to a more nuanced comprehension of the complex interplay between teacher practices, safety considerations, and student motivation in diverse learning environments.

Limitations and Practical Implications

The present study presents different limitations that need to be taken into consideration. First, the context in which the language immersion program was developed could be a limiting factor in terms of the influence on certain variables of the empowerment climate, specifically on support for autonomy, given the specific characteristics of the natural environment with respect to the aforementioned safety aspects, which are fundamental in carrying out activities in the natural environment. In addition, other aspects, such as the teacher's or instructor's interpersonal style, could also influence the differences presented in the findings. Future research could benefit from examining the role of teacher experience and consistency across environments to gain a more comprehensive understanding. This could be achieved through a design in which the same instructor leads the intervention both in a conventional classroom and in a natural setting, allowing for a clearer comparison of autonomy support and other variables across contexts.

Additionally, the self-confidence variable used in this study, which captures students' subjective perception of their linguistic competence, may be influenced by the novelty and emotional impact of an immersive experience in a natural setting. We suggest the need for future studies that address this type of variable through more objective measures with validated questionnaires or even the validation of the tool itself. Lastly, the multi-component nature of the study introduces complexity, as it does not allow for an isolated examination of each didactic strategy's impact on empowerment climate variables. For future research, we recommend designing a study that systematically identifies and evaluates the individual teaching strategies that contribute to a teacher's capacity to foster an empowering climate. This approach would allow for a more precise analysis of which strategies most effectively enhance autonomy support, relatedness support, and other aspects of the learning environment.

Despite these limitations, this work represents an advance in understanding the influence that leisure activities in the natural environment have in English language teaching on students' communicative self-confidence and the social relationships they establish among peers. Consequently, several practical implications emerge from these findings. The study underscores the importance of implementing language immersion experiences in environments distinct from the traditional school context, given the evidence that such settings enhance various motivational and learning outcomes related to English language acquisition. In line

with prior research, such as Hashemi (2011), this work suggests that creating informal, friendly, and collaborative spaces—particularly those facilitating teacher-student interactions—may support more effective English language teaching and learning. Moreover, gender differences were observed, with girls reporting a stronger sense of relatedness support during the immersive experience compared to the classroom, underscoring the need to consider gender dynamics in designing such programs. Therefore, developing similar immersion experiences within the school context could be highly beneficial. These experiences might involve exposing students to English learning through leisure activities in natural environments or replicating such contexts within the school through simulated settings. The fact of creating playful situations in spaces totally different from the classrooms where the classes are held could foster commitment, motivation, and, consequently, the student's English language skills. This type of action could be developed through interdisciplinary projects with subjects such as PE, where the focus of English language learning could be brought to the objective or achievement of different games and recreational activities that are related to the natural environment.

Likewise, educational administrations need to promote and support this type of initiative. Through the implementation of educational programs and projects such as these language immersion programs, the Spanish institutions responsible for education seek to promote learning and equity and provide our students with tools that will make them more competent for their professional future. Encouraging the participation of institutions and organizations related to education to develop a greater number of programs related to language immersion, both in and out of school, would ensure quality education and the promotion of the integral development of our students.

In short, language immersion is not only an investment in students' personal development but also an intelligent strategy to strengthen their professional prospects in an increasingly interconnected and demanding world of work.

CONCLUSIONS

With a specific focus on communicative self-confidence, it was found that participants in the nature-based language immersion program experienced substantial improvements. This finding aligns with previous research suggesting that a natural environment may be conducive to developing foreign language skills. Compared to regular English classes, the perception of increased relatedness support during the program supports the notion that activities in natural settings facilitate social interaction and bonding.

This underscores the importance of implementing such programs within educational centers. As our findings indicate, this program enhances communicative self-confidence and reveals how green or natural spaces serve as supportive environments for improving social relationships (Thompson et al., 2011). In addition, language immersions foster adaptability and openness to new experiences, qualities increasingly valued by employers. Students hone their language skills and develop intercultural skills and a global mindset that will translate into more successful job performance in the future.

We believe and recognize the importance of English language immersions as an effective way to improve our students' communication skills and empowerment. Immersions in natural settings, combined with high-quality educational programs, offer students the opportunity to engage fully in an authentic green environment where English is the primary language of communication and nature serves as a stimulus for learning. These experiences allow students to build fluency, confidence, autonomy, and cultural competence in English, effectively preparing them for an increasingly diverse, multicultural, and globalized world.

CONFLICT OF INTEREST STATEMENT

The authors declare that there are no conflicts of interest in the writing of this article.

ACKNOWLEDGEMENT

REFERENCES

Alonso-Herrero, A. and Lasagabaster, D. (2019) 'Student attitudes towards English pronunciation and different varieties in the English classroom', *Elia: Estudios de Lingüística Inglesa Aplicada*, Vol. 19, pp. 71–100. https://doi.org/10.12795/elia.2019.i19.04

American Psychological Association. (2002) '*Ethical principles of psychologists and code of conduct*', Washington DC: American Psychological Association.

Ames, C. (1992) 'Achievement goals, motivational climate and motivational processes', in G. Roberts (Ed.) *Motivation in sport and exercise*, Champaign: IL: Human Kinetics.

Appleton, P. and Duda, J. L. (2016) 'Examining the interactive effects of coach-created empowering and disempowering climate dimensions on athletes' health and functioning', *Psychology of Sport & Exercise*, Vol. 26, pp. 61–70. https://doi.org/10.1016/j.psychsport.2016.06.007

Appleton, P., Ntoumanis, N., Quested, E., Viladrich, C. and Duda, J. L. (2016) 'The coach-created Empowering and Disempowering Motivational Climate Questionnaire (EDMCQ-C) was initially validated', *Psychology of Sport & Exercise*, Vol. 22, pp. 53–65. https://doi.org/10.1016/j.psychsport.2015.05.008

Asmara, C. H., Anwar, K. and Muhammad, R. N. (2016) 'EFL Learners' Perception toward an Outdoor Learning Program', *International Journal of Education and Literacy Studies*, Vol. 4, No. 2, pp. 74–81. https://doi.org/10.7575/aiac.ijels.v.4n.2p.74

Axelsson, S. (2007) *The weak language learner : a study of ways of taking weak language learners into consideration in class*. DiVA.

ERIES Journal
volume 18 issue 1

Electronic ISSN
1803-1617

Printed ISSN
2336-2375

55

Baena-Extremera, A., Granero-Gallegos, A., Bracho-Amador, C. and Pérez-Quero, F. J. (2015) ' Prediction of social goals according to the experience of physical education teachers', *Studia Psychologica*, Vol. 57, No. 3, pp. 215–228. https://doi.org/10.1123/jtpe.2013-0165

Baena-Extremera, A., Granero-Gallegos, A. and Del Mar, M. (2012) 'Quasi-experimental Study of the Effect of an Adventure Education Programme on Classroom Satisfaction, Physical Self-Concept and Social Goals in Physical Education', *Psychologica Belgica*, Vol. 52, No. 4, pp. 369–386. https://doi.org/10.5334/pb-52-4-369

Baena-Extremera, A., Granero-Gallegos, A., Sánchez-Fuentes, J. A. and Martínez-Molina, M. (2013) 'Apoyo a la autonomía en Educación Física: antecedentes, diseño, metodología y análisis de la relacción con la motivación en estudiantes adolescentes', *Retos,* Vol. 24, pp. 46–49. https://doi.org/10.47197/retos.v0i24.34523

Baños, R., Ortiz-Camacho, M. M., Baena-Extremera, A. and Zamarripa, J. (2018) 'Efecto del género del docente en la importancia de la Educación Física, clima motivacional, comportamientos disruptivos, la intención de práctica futura y rendimiento académico', *Retos*, Vol. 33, pp. 252–257. https://doi.org/10.47197/retos.v0i33.59991

Burel, N., Tessier, D. and Langdon, J. (2021) 'Are teachers' subjective feelings linked with need-supportive and need-thwarting motivating styles? A cross-lagged pilot study in physical education', *European Journal of Psychology of Education*, Vol. 36, No. 4, pp. 1221–1241. https://doi.org/10.1007/s10212-020-00517-x

Caballero, P. (2012) 'Potencial educativo de las actividades físicas en el medio natural: Actividades de colaboración simple', *EmásF, Revista Digital de Educación Física*, Vol. 4, No. 19, pp. 99–114.

Cadiz-Gabejan, A. M. (2021) 'Enhancing students' confidence in an English language classroom', *International Journal of English Language Studies*, Vol. 3, No. 5, pp. 16–25. https://doi.org/10.32996/ijels.2021.3.5.3

Cerrada, J. A., Navarro, B., Giménez, F. J. and Abad, M. T. (2022) 'Influencia de la actividad física en el medio natural sobre la motivación y las necesidades psicológicas básicas de los estudiantes: Una revisión sistemática', E-Balonmano.com: *Revista de Ciencias del Deporte*, Vol. 18, No. 2, pp. 171–182.

Cohen, J. (1988) *Statistical power analysis for the behavioral sciences*, 2nd Edition, LEA.

Darasawang, P. and Reinders, H. (2021) 'Willingness to Communicate and Second Language Proficiency: A Correlational Study', *Education Sciences*, Vol. 11, No. 9, p. 517. https://doi.org/10.3390/educsci11090517

Deci, E. L. and Ryan, R. M. (1985) *Intrinsic motivation and self-determination in human behaviour*, New York: Plenum Press.

Diamond, A., Barnett, W. S., Thomas, J. and Munro, S. (2007) 'Preschool Program Improves Cognitive Control', *Science*, Vol. 318, No. 5855, pp. 1387–1388. https://doi.org/10.1126/science.1151148

Franco, E., Coterón, J., Gómez, V. and Spray, C. M. (2021) 'A person-centred approach to understanding dark-side antecedents and students' outcomes associated with physical education teachers' motivation', *Psychology of Sport and Exercise*, Vol. 57, pp. 102021. https://doi.org/10.1016/j.psychsport.2021.102021

Franco, E., González-Peño, A. and Coterón, J. (2020) 'Compromiso y motivación en los alumnos de educación física, ¿es importante el burnout del profesor?', *Revista de Psicología del Deporte*, Vol. 29, pp. 28–35.

Fuentesal-Garcia, J. (2014) 'Motivación, ansiedad y autoconcepto en un programa de turismo activo', *Tándem*, No. 45, pp. 32–38.

García-Merino, R. and Lizandra, J. (2022) 'La hibridación de los modelos pedagógicos de aprendizaje cooperativo y educación aventura como estrategia didáctica para la mejora de la convivencia y la gestión de conflictos en el aula', *Retos*, Vol. 43, pp. 1037–1048. https://doi.org/10.47197/retos.v43i0.86289

Gardner, R. C. (1985) *Social Psychology and Second Language Learning: The Role of Attitudes and Motivation*, London: Edward Arnold.

Gazali, N. F. (2022) 'Outdoor experimental method for enhancing students' vocabulary', *International Journal of Research on English Teaching and Applied Linguistics*, Vol. 3, No. 1., pp. 62–73. https://doi.org/10.30863/ijretal.v3i1.3153

Gehris, J., Kress, J. and Swalm, R. (2011) 'Effects of adventure-physical education on high school students' physical self-concept and physical fitness', *Ennsylvania Journal of Health, Physical Education, Recreation, and Dance*, Vol. 81, No. 2, pp. 21–27.

González-Melero, E. (2023) *Estudio sobre el efecto de un programa de educación de aventura en educación física sobre el aprendizaje autorregulado, autoeficacia, motivación, satisfacción y concienciación ambiental en el contexto de Educación Secundaria*, Universidad de Granada, Granada.

González-Rivas, R., Zueck, M., Baena-Extremera, A., Marín, R., Soto, M. and Irigoyen, H. (2021) 'Desarrollo de competencias en educadores físicos en formación a través de la inclusión de programas de educación aventura en México', *Retos*, Vol. 42, pp. 126–135. https://doi.org/10.47197/retos.v42i0.85840

Granero-Gallegos, A., Baena-Extremera, A., Ortiz-Camacho, M. d. M. and Burgueño, R. (2023) 'Influence of empowering and disempowering motivational climates on academic self-concept amongst STEM, social studies, language, and physical education pre-service teachers: a test of basic psychological needs', *Educational Review*, Vol. 76, No. 7, pp. 1–23. https://doi.org/10.1080/00131911.2023.2290444

Gutiérrez, M., Tomás, J.-M., Romero, I. and Barrica, J.-M. (2017) 'Apoyo social percibido, implicación escolar y satisfacción con la escuela', *Revista de Psicodidáctica*, Vol. 22, No. 2, pp. 111–117. https://doi.org/10.1016/j.psicod.2017.01.001

Hashemi, M. (2011) 'Language Stress And Anxiety Among The English Language Learners', *Procedia - Social and Behavioral Sciences*, Vol. 30, pp. 1811–1816. https://doi.org/10.1016/j.sbspro.2011.10.349

Hortigüela, D., Hernando, A. and Sánchez-Miguel, P. A. (2017) 'Analyzing physical activities in the natural environment and their influence on the motivational climate of classes', *Journal of Physical Education and Sport*, Vol. 17, No. 2, pp. 854–860. https://doi.org/10.7752/jpes.2017.02130

Judd, C. M., & Kenny, D. A. (1981) 'Process Analysis: Estimating Mediation in Treatment Evaluations', *Evaluation Review*, 5(5), pp. 602-619. https://doi.org/10.1177/0193841X8100500502

Kocaman, O. (2017) 'Factors impeding the learning of a second language in Spanish school system: Valladolid University Sample', *Journal of Language and Linguistic Studies*, Vol. 13, No. 2, pp. 578–592.

Lederbogen, F., Kirsch, P., Haddad, L., Streit, F., Tost, H., Schuch, P., Wüst, S., Pruessner, J. C., Rietschel, M., Deuschle, M. and Meyer-Lindenberg, A. (2011) 'City living and urban upbringing affect neural social stress processing in humans', *Nature*, Vol. 474, No. 7352, pp. 498–501. https://doi.org/10.1038/nature10190

LOMLOE (2020) *Ley Orgánica de Modificación de la Ley Orgánica de Educación (LOMLOE)*, número 3/2020, publicada en el Boletín Oficial del Estado el 23 de diciembre de 2020.

Macintyre, P. D., ClÉMent, R., DÖRnyei, Z. and Noels, K. A. (1998) 'Conceptualizing Willingness to Communicate in a L2: A Situational Model of L2 Confidence and Affiliation', *The Modern Language Journal*, Vol. 82, No. 4, pp. 545–562. https://doi.org/10.1111/j.1540-4781.1998.tb05543.x

Mageau, G. A. and Vallerand, R. J. (2003) 'The coach-athlete relationship: A motivational model', *Journal of Sports Sciences*, Vol. 21, No. 11, pp. 883–904. https://doi.org/10.1080/0264041031000140374

Marinho, A., Santos, P. M. d., Manfroi, M. N., Figueiredo, J. d. P. and Brasil, V. Z. (2017) 'Reflections about outdoor adventure sports and professional competencies of physical education students', *Journal of Adventure Education and Outdoor Learning*, Vol. 17, No. 1, pp. 38–54. https://doi.org/10.1080/14729679.2016.1218781

Mueller, H. and Pentón Herrera, L. J. (2023) 'Nature journaling in English language teaching: an introduction for practitioners', *Innovation in Language Learning and Teaching*, pp. 1–11. https://doi.org/10.1080/17501229.2023.2256050

Nicholls, J. G. (1989) *The competitive ethos and democratic education*. Cambridge, MA: Harvard University Press.

Öztürk, G., Şahin, M. D., Ölmezer, Öztürk, E. and Elmas, B. (2022) 'Modeling skill-based foreign language learning anxieties as a single construct and testing its predictive aspect on foreign language classroom anxiety', *Educación XX1*, Vol. 25, No. 2, pp. 337–361. https://doi.org/10.5944/educxx1.30453

Palacios-Hidalgo, F. J., Gómez Parra, M. E. and Huertas Abril, C. (2019) 'Lenguas extranjeras y bilingüismo en una Europa multilingüe: una comparativa entre los sistemas educativos español y finlandés', *Creando redes doctorales. Investiga y comunica.*

Pariyanto, P. and Pradipta, B. (2020) 'Factors influencing an EFL learner's proficiency: An English teacher's perspective', *Anaphora: Journal of Language, Literary, and Cultural Studies*, Vol. 2, No. 2, pp. 89–95. https://doi.org/10.30996/anaphora.v2i2.3369

Peen, J., Schoevers, R. A., Beekman, A. T. and Dekker, J. (2010) 'The current status of urban-rural differences in psychiatric disorders', *Acta Psychiatrica Scandinavica*, Vol. 121, No. 2, pp. 84–93. https://doi.org/10.1111/j.1600-0447.2009.01438.x

Peñarrubia, C., Guillén, R. and Lapetra, S. (2016) 'Outdoor activities as part of the content of Physical Education, theory or practice?', *Cultura, Ciencia y Deporte*, Vol. 11, No. 31, pp. 27–36. https://doi.org/10.12800/ccd.v11i31.640

Posner, M. I. and Rothbart, M. K. (2006) 'Research on Attention Networks as a Model for the Integration of Psychological Science', *Annual Review of Psychology*, Vol. 58, No. 1, pp. 1–23. https://doi.org/10.1146/annurev.psych.58.110405.085516

Retete-Ochoa, M. and Heredia-León, D. A. (2024) 'Incidencia del modelo aventura sobre las necesidades psicológicas básicas y satisfacción deportiva en educación física', *Polo del Conocimiento*, Vol. 9, No. 1, pp. 347–359.

Ryan, R. M. and Deci, E. L. (2020) 'Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future direction', *Contemporary Educational Psychology*, Vol. 61, p. 101860. https://doi.org/10.1016/j.cedpsych.2020.101860

Santos, M. L. and Martínez, L. F. (2011) 'Aprendizaje integrado de las actividades en el medio natural desde las competencias en la ESO', *Tándem,* No. 36, pp. 53–60.

Suardí Peña, S. and Eliche, F. (2023) 'Evaluación de las competencias comunicativas en inglés en una muestra de estudiantes de nuevo ingreso a la universidad', *MLS Educational Research (MLSER)*, Vol. 7, No. 1. https://doi.org/10.29314/mlser.v7i1.993

Shoseyov-Kupferman, A. (2020) 'Outdoor Practice Of Speech In Efl Learning - A Pragmatic Approach', in V. Chis (ed.), *Education, Reflection, Development – ERD 2019*, Vol 85. European Proceedings of Social and Behavioural Sciences, pp. 142–149. European Publisher. Available at: https://doi.org/10.15405/epsbs.2020.06.15

Sopanema, N. (2016) 'Teaching English through Outdoor Experiential Learning in Islamic State University in Ambon', *al-Iltizam: Jurnal Pendidikan Agama Islam*, Vol. 1, No. 1, pp. 100–111. https://doi.org/10.33477/alt.v1i1.192

Thompson, A. S. and Huensch, A. (2016) 'Pronunciation Attitudes: The Role of Multilingual Status and Perceived Positive Language Interaction (PPLI)', *Pronunciation in Second Language Learning and Teaching Proceedings*, Vol. 8, No. 1.

Thompson, J., Boddy, K., Stein, K., Whear, R., Barton, J. and Depledge, M. H. (2011) 'Does Participating in Physical Activity in Outdoor Natural Environments Have a Greater Effect on Physical and Mental Well-being than Physical Activity Indoors? A Systematic Review', *Environmental science & technology*, Vol. 45, No. 5, pp. 1761–1772. https://doi.org/10.1021/es102947t

van Os, J., Kenis, G. and Rutten, B. P. F. (2010) 'The environment and schizophrenia', *Nature*, Vol. 468, No. 7321, pp. 203–212. https://doi.org/10.1038/nature09563

Yashima, T., Zenuk-Nishide, L. and Shimizu, K. (2004) 'The Influence of Attitudes and Affect on Willingness to Communicate and Second Language Communication', *Language Learning*, Vol. 54, No. 1, pp. 119–152. https://doi.org/10.1111/j.1467-9922.2004.00250.x