Literary Competence and Creativity in Secondary Students

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ABSTRACT

Literary competence (LC) is the ability or capacity to produce and interpret literary texts. It has usually been assumed to have a close relationship with creativity, that is, the ability to find original and appropriate ideas in a specific context, although this relationship has rarely been analyzed empirically. This study tries to fill this gap by investigating the relationship between literary competence and creativity in adolescence and exploring which components of LC are especially relevant to the different criteria for creativity. A total of 193 first-year Obligatory Secondary Education (ESO) students and eight teachers of this educational level participated in the study. The students completed various LC and creativity tests, and the teachers evaluated their students’ LC according to their own professional criteria. The results show that the relationship between LC and creativity is significant, and it is especially intense in the case of literary creativity. Literary knowledge and the attitude toward literature are especially related to creativity. Among the criteria for creativity, flexibility seems to be especially sensitive to LC. No significant gender differences were found on the creativity measures, but differences were found in the teachers’ assessment of LC. Finally, the results are discussed in terms of their implications for Secondary Education.

KEYWORDS: Literary competence; Creativity; Divergent Thinking; Secondary Education
**Competencia literaria y creatividad en estudiantes de secundaria**

**RESUMEN**

La competencia literaria (CL) es la habilidad o capacidad de producir e interpretar textos literarios. Se ha asumido habitualmente que tiene una estrecha relación con la creatividad, es decir, la habilidad de encontrar ideas originales y apropiadas en un contexto específico, aunque esta relación rara vez se ha analizado empíricamente. Este estudio trata de rellenar este vacío investigando la relación entre competencia literaria y creatividad en la adolescencia y explorando qué componentes de la CL son especialmente relevantes para los diferentes criterios de la creatividad. Un total de 193 alumnos y alumnas del primer curso de la Educación Secundaria Obligatoria (ESO) y ocho profesores y profesoras de este nivel educativo participaron en el estudio. El alumnado completó varios tests de CL y creatividad, y el profesorado evaluó la competencia literaria de acuerdo con sus propios criterios profesionales. El resultado muestra que la relación entre CL y creatividad es significativa, y es especialmente intensa en el caso de la creatividad literaria. Los conocimientos literarios y la actitud hacia la literatura están especialmente relacionados con la creatividad. Entre los criterios de la creatividad, la flexibilidad parece ser especialmente sensible para la CL. No se encontraron diferencias significativas en las medidas de creatividad pero se encontró diferencias en la evaluación de la CL por parte del profesorado. Finalmente, los resultados se discuten en términos de su implicación para la Educación Secundaria.

**KEYWORDS:** Competencia literaria; creatividad; pensamiento divergente; Educación Secundaria

**Introduction**

Literary competence (LC) is a concept that, despite deserving a prominent place in the area of literature teaching, has not been the topic of much empirical research. This concept is based on Chomsky’s (1966) linguistic competence, although Van Dijk (1972) first used the term to refer to the human ability or capacity to produce and interpret literary texts. Other authors have modified this first definition. Coenen (1992) focused on the ability “to communicate with and about literature” (73) and Torell (2001) on the balance between the constitutional competence (innate), the performance competence (the ability to read the text through internalized literary conventions) and literary transfer (related to the literary response). Mendoza (1998; 2001; 2004) defines thoroughly the components of this competence, although his long list, in some cases with only slight differences between the components, makes its

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1 Culler (2019) was the author who mostly followed Chomsky’s theories since he intended to find the “universal grammar” for literature.
practical application difficult.

Mínguez-López (2015; Mínguez-López & Alfonso-Benlliure, 2019) tries to synthesize the components of Mendoza and other authors (Miall & Kuiken, 1995; Torell, 2001; Witte et al., 2006, 2012; Nikolajeva, 2010; Diehr & Surkamp, 2015; Alter & Ratheiser, 2019)\(^2\) around three axes. The first is the knowledge axis (or cultural, linguistic, cognitive and/or aesthetic axis) that is, what one should know about literature and its context; the second axis, includes procedures or skills needed to decipher different types of literary texts (or interpretative competence, discursive competence, contextualization, etc.); and, finally, the third axis consists of attitudes (or motivational and attitudinal competence, empathic competence, etc.) that facilitate, predispose, and orient the learner’s activity because understanding a literary text requires the reader’s active participation. Without this participation, readers engage in literal reading that does not allow them to grasp the various meanings of this type of text.

The relationship between LC and creativity is diffuse. We understand creativity to be the capacity to discover ideas that are both innovative (original) and appropriate (useful) in a specific context. Creativity can be expressed through many modalities, but the verbal modality is the predominant form of creation in adolescence (Vygotsky, 1984). Literary creativity is part of verbal creativity. It can be considered the linguistic competence that seeks to create a literary product that would be viewed by the social environment as original, innovative, and useful. Literary creativity means being able to mix fantasy and reality, dive into fictional worlds, play with words, describe subjective worlds for purposes other than the usual ones (redefinition), see elements, plots, scenarios other than the usual ones (identification), and, in turn, draw on linguistic skills and reading experience.

According to most of the specialized literature, there is a significant relationship between LC and creativity. For example, Witte, Janssen, and Rijlaarsdam (2006) include a creative writing test to measure LC. Mendoza (2001, 2004) refers to the intertextual reading capacity as a way to develop creativity in students. Alonso (2001) and Regueiro (2014) make a similar proposal, although with an emphasis on creative writing. Mediavilla (2015) directly relates creativity to the act of reading, whereas Wang (2012, p. 40) unequivocally states that “many of the characteristics that facilitate creativity can be developed through reading”. However, the relationship between LC and creativity is usually tacitly assumed, and we do not find any empirical studies that test this assumption or investigate its characteristics. This is the main objective of the present study.

Theoretical models of LC, such as those by Mendoza (2004) and Self-citation (2020), and models of creativity, such as componential or multivariate models (e.g., Amabile, 1983; Kaufman & Baer, 2005; Sternberg & Lubart, 1995; Amabile & Pratt, 2016; Beghetto & Kaufman, 2013; Hong & Song, 2020), are used to predict that developing a certain level of LC should also help to achieve a specific level of verbal and literary creativity. These models describe creativity as comprising general, domain-
specific, and task-specific abilities, and involving the confluence of multiple resources (Barbot et al., 2016). Among these components, knowledge, cognitive-metacognitive skills, and socio-affective elements, such as attitudes, personality factors, etc., can be highlighted.

The knowledge, processes, and attitudes that make up LC could promote creative behavior in adolescents. During adolescence, and according to the official curricula, students progressively become immersed in the most intense knowledge about the genres, literary resources, works, and authors (Valero & Ezquerro, 2012). In the first year of Secondary Education (ESO), the educational intervention focuses on providing students with general knowledge about literature, with references to certain canonical works in different languages, tasks related to the formal and critical analysis of youth literature, and the promotion of the reading habit, as stated in different legal texts. Moreover, in adolescence, students’ tastes are consolidated as they design their literary profile by choosing genres, authors, etc.

The parallels between these theoretical models of LC and creativity are evident. In a stage such as adolescence, which is full of life challenges, promoting the components of LC (knowledge, procedures, and attitudes) could encourage creative behavior in adolescents. A strong and well-organized literary knowledge base is not only relevant for good LC, but it also allows the adolescent to “play” with ideas, explore them, and try out combinations, thus facilitating creative thinking and behavior.

Among the relevant literary processes for LC, language didactics has tried to emphasize the reading processes (critical analysis, shared interpretation, etc.) as essential elements (Cassany et al., 1994; Mendoza, 1998, 2004; Chambers & Gregory, 2006, Carter & McRae, 2014). The procedures of manipulation, comprehension, metacognition, etc., that make LC possible can also be the keys to facilitating perspectivism, problem identification, or analogical reasoning, which are relevant skills for verbal and literary creative thinking.

Finally, reading, as an act that requires the active intervention of the reader, implies a participatory attitude. In addition, as Schiefele et al. concluded (2012, p. 458), "[...] reading competence is positively related to intrinsic reading motivation (including reading attitude and intrinsic task values) and negatively or non-significantly related to extrinsic reading motivation". Attitudes, among which we highlight the literary response (Miall & Kuiken, 1995; Van Schooten et al., 2001), allow adolescents to function and adapt to the social context and guide their activity (Rodríguez, 1989). Whether or not adolescents are aware of it, attitudes become reflex thinking tendencies that condition the direction of reasoning and must be considered. A favorable attitude toward literature can also be an element that enhances adolescents’ creativity.

In sum, for true verbal/literary creativity to be possible in adolescence, the level of LC may be a key factor. Knowledge, literary processes, and personal attitudes can contribute to facilitating ideation (flow of ideas), the degree of personalization of those ideas (originality), and, especially, their flexibility.
Literary competence, creativity, and gender

The relationship between LC and creativity could be conditioned by the gender variable. Although there are no data correlating gender and LC, a large amount of research on reading habits points to a higher percentage of female readers than male readers in adolescence (Hopper, 2005; Rosli et al., 2017; Sedo, 2003). Given the relationship between reading and creativity described above, the gender variable can be significant when evaluating LC.

With regard to verbal creativity, although the differences seem clear in the school population, these differences do not seem to be significant in adolescence (Baer, & Kaufman, 2008; Lau & Cheung, 2015; Matud et al., 2007; Stoltzfus et al., 2011). However, some studies find differences in flexibility and originality in favor of adolescent boys (e.g., Saini & Srivastava, 2018; Vorobyeva, et al., 2014), differences in verbal flexibility in favor of girls (e.g., Cheung & Lau, 2010; Saini & Srivastava, 2018; Poddaná, 2020), and gender differences in creative achievements in specific areas (Aranguren & Irazábal, 2012; Elisondo, 2013; Kaufman, 2006). Because empirical studies on gender differences have yielded inconsistent findings, it is necessary to examine these differences more closely.

Therefore, this study aims to investigate the relationship between literary competence and verbal creativity in adolescence, and explore which components of LC are especially relevant to different criteria for creativity. More specifically, the following hypotheses are proposed:

There is a positive and significant relationship between LC and Creativity. Students with higher levels of LC will also show higher levels of verbal and literary creativity.

1. LC promotes all the criteria for creativity. The criterion with the most weight in the relationship with LC will be flexibility.
2. All the components of LC promote creativity. The component with special importance in this relationship with creativity is literary procedures.
3. There are no significant gender differences in creative performance, but there are differences in LC in favor of girls.

Methodology

Participants

A total of 193 adolescents between 12 and 14 years old participated in the study (X= 13.2), 96 girls (49.6%) and 97 (51.4%) boys. All of them were first-year Obligatory Secondary Education (ESO) students from three public schools in the province of Valencia (Spain). The socioeconomic level of the three schools is quite similar, belonging to a medium category. All the students participated voluntarily in the study. Because they were under-age, their parents signed the corresponding consent form.

A total of eight teachers (five women and three men) also participated in the study. All of them evaluated their students’ LC according to their professional criteria. Three of them also acted as expert judges in the correction of the literary creativity exercise. The study met all the requirements established in the Declaration of Helsinki.
**Instruments**

- Basic Demographic Fact Sheet and Creative Achievement Checklist. This form collects basic information such as age, gender, school, etc. In addition, it includes a request for a list of creative achievements in the past two months in different areas (creative achievements: arts, sports, cooking, music, etc.)

- Battery of Literary Competence (BLC, Self-citation & Self-citation, 2019). This battery evaluates Literary Competence and is composed of three scales: the Literary Concepts Scale (LCS), the Literary Procedures Scale (LPS), and the Attitudes Towards Literature Scale (ATL). In all, it contains 70 items and has a maximum score of 100 (concepts and procedures 40% each and attitudes 20%). Knowledge includes information about the literature the adolescent has that was acquired through formal or informal experience. Procedures include the skills the adolescent has developed that allow him/her to understand and decipher different types of literary texts. Finally, attitudes refer to the adolescent's affective predisposition in reading the text.

  The knowledge and procedure scales are one-dimensional in nature, and they include correct vs. incorrect answer questions that show adequate discrimination and difficulty indices. The ATL is a questionnaire students have to answer on a Likert-type scale, and it includes three factors: Reading, real life, and personal relationships; Interest in reading and self-perception as a reader; and Reading as a source of experiences and creativity. According to the manual, the overall Cronbach's alpha for this scale is .81.

- Subjective assessment of LC (LC teachers). The literature teachers of the participating students were instructed to evaluate, on a scale from 1 to 10, the level of competence each student had at the time of the evaluation, according to their professional criteria based on their work with the students throughout the course.

- Creative Imagination Test-Youth (PIC-J: Artola et al., 2008). This instrument is inspired by the Torrance Test of Creative Thinking (TTCT, Torrance, 1974), and it is designed to assess divergent thinking. It contains four tests (three of them evaluate verbal creativity, whereas the fourth evaluates graphic creativity). All three verbal tests were administered in this study. They offer scores for fluency (number of responses given), flexibility (types of responses offered by the participant), and originality (statistical infrequency of the responses). The test offers an overall score for verbal or narrative creativity. According to the test manual, the PIC-J has a Cronbach's alpha of .85.

- Literary Creativity Exercise (creativity judges). This exercise consists of writing a story containing 15 to 20 lines based on a list of polysemous words the student has to include in the story (e.g., bench, saw, tail, letter, head...). The participants have absolute freedom over the content, form, and theme of the story. They were explicitly asked to try to make the story interesting, original, and personal. This test was rated by three independent judges. The intraclass correlation coefficient between the three judges' ratings was moderate but acceptable (ICC=.75)
**Procedure**

The participants completed the tests at school. With the supervision of the classroom teacher and the presence of a psychologist who was a member of the research team, the students completed the tests. The BLC was administered on computers in the appropriate room in the school. The next day, the PIC-J was administered in classic pencil-and-paper format, along with the personal data sheet and verbal creativity exercise. The BLC online session took about 30 minutes. The paper and pencil creativity tests took about 60 minutes.

The written verbal creativity exercise was distributed to three judges who are experts in literary education. The three judges independently and quantitatively (scale from 1 to 10) evaluated each student’s degree of verbal creativity. Following the consensual assessment technique (CAT, by Amabile 1996), the expert judges did not receive any "definition" of the concept of creativity; instead, they evaluated it according to their own criteria as experts.

Finally, the Literature teachers responsible for the subject matter of the students who participated in the study were asked to evaluate, on a scale from 1 to 10, the degree of literary competence of each participant.

In sum, we have two overall LC ratings (one objective through the BLC and another subjective based on the teachers' ratings) and three creativity ratings (literary, verbal, and general): literary creativity through the subjective opinions of the expert judges about the written exercise; verbal creativity from the subjects' scores on the objective test (divergent thinking); and general creativity from the adolescents' self-perceptions of their creative behavior in their recent past.

**Statistical analyses**

Correlation analyses (Pearson) were carried out to analyze the degree of convergence between the different creativity measures, on the one hand, and the two LC measures, on the other. This type of analysis was also performed to check the intensity of the link between the LC measures and creativity. Los trabajos recibidos son sometidos a una PRE-evaluación sobre los aspectos formales de la propuesta, en caso de superarla, serán evaluados por dos revisores (peer review), los cuales decidirán sobre la aceptación o no del artículo, para su posterior publicación. En caso de discrepancias relevantes entre los evaluadores se recurrirá a la opinión de un tercer evaluador. Anualmente, se publicará un listado con los revisores que han colaborado en dicha tarea.

**Results**

**Correlational analyses**

The first correlation analyses were carried out to check the degree of convergence between the measures used. These analyses show a positive and intense correlation between the two measures of literary competence (r = .55, p = .000). The correlation
between the teacher assessment and the Battery scores reaches the highest levels with the knowledge (r = .60, p = .000) and procedure components (r = .31, p = .000).

Table 1

Means and standard deviations in LC and Creativity

<table>
<thead>
<tr>
<th>Means</th>
<th>S.D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total BLC</td>
<td>59.55</td>
</tr>
<tr>
<td>Knowledge</td>
<td>16.76</td>
</tr>
<tr>
<td>Procedures</td>
<td>12.50</td>
</tr>
<tr>
<td>Attitudes</td>
<td>13.44</td>
</tr>
<tr>
<td>LC teachers</td>
<td>6.13</td>
</tr>
<tr>
<td>Crea. Test</td>
<td>49.33</td>
</tr>
<tr>
<td>Fluency</td>
<td>24.67</td>
</tr>
<tr>
<td>Flexibility</td>
<td>14.73</td>
</tr>
<tr>
<td>Originality</td>
<td>9.93</td>
</tr>
<tr>
<td>Crea. Achievement</td>
<td>5.74</td>
</tr>
<tr>
<td>Crea. Judges</td>
<td>6.34</td>
</tr>
</tbody>
</table>

Correlations between LC measures

Pearson’s correlation analysis showed a positive and intense correlation between the two measures of literary competence (teachers’ assessment and BLC, r = .55, p = .000). The highest correlations were found between teacher’s assessment and knowledge (r = .60, p = .000) and between teacher’s assessment and procedure components (r = .31, p = .000).

Correlations between creativity measures

With regard to the creativity scores, we also find a positive and significant, but moderate, correlation between the creativity test scores and the subjective achievements (r = .20; p = .014). The links between this latter variable and the fluidity (r = .21; p = .008) and flexibility (r = .21; p = .009) criteria are noteworthy. However, the relationship between the mean score of the three judges and the rest of the creativity scores is not significant (Creativity test r = .05; p > .05; Creative Achievements, r = .12, p > .05).

Correlations between LC and creativity measures

Table 2 shows the correlations between the participants’ total and partial scores. As the table reveals, the BLC global scores correlate positively and significantly with all the creativity measures, mainly with the assessment by the expert judges (r = .43, p = .000). The more moderate but also significant correlation is with the creative
achievements estimated by the students \( (r = .19, p = .011) \). Regarding the criteria for creativity, the LC is especially linked to flexibility, both evaluated with the BLC \( (r = .37, p = .000) \) and assessed by the teachers \( (r = .25, p = .003) \).

In the case of the teachers' assessments of LC, the correlations confirm their link to the creativity measures. Although these correlations are slightly more discrete, the three measures of creativity (test, judges, and creative achievements) are also significantly associated with LC. Again, the strongest link occurs with creativity assessed by the expert judges \( (r= 38; p = .016) \).

With regard to the subscores on the BLC (Attitudes, Knowledge, and Procedures), which can give us a more detailed view of the relationship between LC and creativity (divergent thinking), the component that appears to be most intensely linked to creativity is knowledge. Students who show higher levels of literary knowledge also show more creativity, mainly when creativity is rated by judges \( (r = .47, p = .002) \). This relationship is also significant when we use the objective creativity test \( (r = .24, p = .002) \). Literary knowledge is significantly associated with the three main components of creativity. The most intense link is with Originality \( (r = .24, p = .002) \). Students with a higher level of knowledge are also more original in their responses on the verbal creativity test.

The attitudinal component also shows a significant relationship with creativity when evaluated by judges \( (r = .45, p = .003) \), but also when students subjectively assess their recent creative achievements \( r = .24, p = .001 \). However, when creativity is evaluated with the creativity test, the correlation between attitudes toward literature and creativity is significant at a global level \( r = .13, p = .005 \), but with moderate significance (mainly due to its relationship with originality). Nevertheless, the attitude toward literature is more intensely associated with creative achievements \( r = .24; p = .001 \) and, especially, with the experts' ratings \( r = .45; p = .003 \).

Finally, the procedures component of LC only shows significant but moderate correlations with creative achievements \( r = .17; p = .021 \) and the flexibility criterion on the creativity test \( r = .16; p = .041 \), but not with the total score on that test \( r = .14; p > .05 \) or the judges' ratings \( r = .07; p > .05 \).

### Table 2

**Pearson correlations between CL and Creativity measures**

<table>
<thead>
<tr>
<th>LITERARY COMPETENCE</th>
<th>BLC Total</th>
<th>Knowledge</th>
<th>Procedures</th>
<th>Attitudes</th>
<th>LC Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CREATIVITY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total test</td>
<td>.35**</td>
<td>.24**</td>
<td>.17*</td>
<td>.23**</td>
<td></td>
</tr>
<tr>
<td>Fluency</td>
<td>.35**</td>
<td>.22**</td>
<td></td>
<td>.17*</td>
<td>.23**</td>
</tr>
<tr>
<td>Flexibility</td>
<td>.37**</td>
<td>.22**</td>
<td>.16*</td>
<td>.25**</td>
<td></td>
</tr>
<tr>
<td>Originality</td>
<td>.32**</td>
<td>.24**</td>
<td>.17*</td>
<td>.20*</td>
<td></td>
</tr>
<tr>
<td>Achievements</td>
<td>.19*</td>
<td>.17*</td>
<td>.24**</td>
<td>.16*</td>
<td></td>
</tr>
<tr>
<td>Judges</td>
<td>.43**</td>
<td>.47**</td>
<td>.45**</td>
<td>.38**</td>
<td></td>
</tr>
</tbody>
</table>

*Note:* * p<.05, ** p<.01
Analysis of variance

Several ANOVAS were carried out to find out whether there are gender differences in creativity or LC. The results show that there are no significant differences in the level of creativity (on any of the three measures), but there are differences in LC in favor of girls when evaluated by teachers \((F(1, 192) = 5.76, p = .018)\). When LC is evaluated on the BLC, the only score with significant gender differences is the one for attitudes toward literature, which is higher in girls than in boys \((F(1, 192) = 5.66, p = .018)\), although this difference is not significant on the final score.

Regression analysis

To find out what combination of LC components is the best predictor of the different types of creativity, we carried out three parallel regression analyses. In one, we used the judges’ assessment of literary creativity as the dependent variable. In the second analysis, the dependent variable consisted of the scores on the verbal creativity test. Finally, the third analysis tried to find the model that best predicts creative achievements. In all three cases, the independent variables were the LC measures (attitudes, knowledge, and procedures).

The results for the creativity-judges variable show that the best predictors of literary creativity in adolescents are, first, the level of literary knowledge and, second, the attitude toward literature. Both variables account for 36% of the total variance \((R = .63)\) in the explained variable (literary creativity).

With regard to the second analysis (the scores on the verbal creativity test), the only component of the final model is knowledge. In the third analysis (creative achievements), this component is attitudes. However, the percentages of explained variance are very low (5% in both cases), showing low predictive power of the LC variables (knowledge, procedures, and attitudes) on verbal creativity (divergent thinking) and the general creativity measure (creative achievements).

Discussion

The main objective of this work was to explore and better understand a relationship that is often assumed but seldom analyzed empirically, that is, the relationship between Literary Competence and Creativity. The main contribution of this study consists of confirming that this relationship is significant, thus supporting the first hypothesis proposed. The link is especially intense with literary creativity. Therefore, fostering LC is important for promoting innovative thinking. Developing LC is not understood as the accumulation of passive knowledge. Instead, it is an active process through which individuals are able incorporate new resources into their daily lives. Improving reading skills (understood from a holistic perspective) should help students to not only deal with increasingly complex texts, but also to be capable of producing them and applying the intertext (Mendoza 2001) to processing multiple messages, literary or otherwise. Thus, there is support for the assumption in literary education that the acquisition of LC should lead to an increase in creativity, due to the
incorporation of literary resources into verbal expression (Cassany et al., 1994; Mendoza, 2004) and the development of creativity in a broad sense (Rienda, 2014; Mediavilla, 2015, etc.).

Given the specificity of the domain and the complexity of the construct, the most reliable indicator of creativity is subjective evaluation by experts in literary creativity. However, it is worth noting that significant relationships appear between LC and creativity measures, even when creativity is based on the self-perceptions of the adolescents themselves. This relationship, although moderate, is also significant. This result shows that this type of subjective self-assessment by adolescents must not be disregarded and should be taken into account to complement the evaluation of creativity.

Indeed, as the second hypothesis proposes, being competent from a literary point of view promotes all the dimensions of creativity, but especially flexibility. LC necessarily involves a gradual increase in flexibility because the most complex literary texts demand greater plasticity to adapt to alternative interpretations that move from a literal reading to a critical one (Reyes-Torres, 2015).

Creative behavior requires several cognitive skills. One of them is recombining the elements of a problem to change its representation or selective combination (e.g., Pretz et al., 2003), and cognitive flexibility makes selective combination more likely. Janssen et al. (2012) found that adolescents with a better LC level tended to change their reading activities, both within and between stories, whereas those with lower LC showed more static response patterns. Adolescents differ in their flexibility, that is, the extent to which they vary their activities and strategies when reading and solving problems intrinsic to reading.

The third hypothesis proposed that, among the components of LC, procedures would have special importance in their relationship with creativity. However, the correlation analyses do not confirm this hypothesis, and they assign this special role to literary knowledge, followed closely by the attitude toward literature. Along the same lines, regression analysis confirms that these two components (knowledge and attitude) are the most relevant predictors of literary creativity.

A conceptually well-organized database, where information is easily and quickly retrievable and new information is smoothly related to existing schemes (Feldhusen, 2006), is fundamental for LC and confers cognitive flexibility, which fosters literary creativity. From this perspective, creative thinking depends on "inside-the-box thinking" because it builds on what people already know and the way they use old ideas to produce new ones (Weisberg, 2020). Creativity is always "recreational", not only due to the component of delight and fun that usually accompanies it, but also because it always uses previous knowledge as a starting point.

When the right knowledge and the right attitude meet, literary creativity is more likely. A positive attitude will help the adolescent to approach problems and tasks based on the assumption that it is possible and valuable to be creative (Runco, 2020). A positive attitude toward literature is a key factor in literary creativity because creativity requires effort and energy, and sustaining this drive for a long time is only possible with the right dose of motivation.
Regarding the last hypothesis, the absence of gender differences in creativity is confirmed, as well as their partial existence in LC. In the case of creativity, there are no differences between boys and girls in their levels of literary creativity according to the judges, their scores on verbal creativity, or their self-perceptions of their creative achievements. Previous studies seem to suggest that gender differences may exist in specific areas, but in the literary area, a large number of studies confirm the lack of differences (e.g., Abraham, 2016; Baer, & Kaufman, 2008; Stoltzfus et al., 2011).

The results point to significant gender differences when we evaluate LC, although only when the assessments are performed by the teachers, who tend to give better ratings to girls than to boys. However, when evaluating LC with an objective test, these differences do not appear in the overall LC scores, although they do appear in the attitudinal component, in favor of girls. This interesting result suggests that literature teachers, when analyzing the literary competence of their students, give greater weight to the attitudinal component, that is, the students’ inclination toward literary learning (and perhaps learning in general), than to their competences and knowledge. This result would confirm teachers’ tendency to have a sexist bias about women’s presumed greater capacity for literature and men’s greater capacity for science (Durán, 1996; Carlana, 2019).

Among the conclusions that can be drawn, we highlight the confirmation of a significant link between LC and literary creativity. This support the idea that if LC is promoted in secondary schools, we will be favoring adolescents’ creativity, especially the flexibility of their thinking. This training effort must be especially focused on their previous knowledge and attitudes. Having the right information and the appropriate personal disposition is essential for such flexibility. Finally, although there are no important differences between boys and girls, neither in creativity nor in LC, girls show a better attitude towards literature. Teachers of Literature seem especially sensitive to these attitudinal differences. They should take advantage of the better attitude of girls but also try to increase the attitude of the boys by connecting with their interests. This study has some limitations. Among them, it is important to mention the limited sample size and the fact that the results can only be generalized to other members of the reference population (young people from Western cultural backgrounds). Our future lines of research will focus on how this relationship between LC and creativity can be influenced by other variables linked to LC (e.g., readers' self-perception, reading frequency...) and other variables linked to creativity (openness to experience, perseverance...).

The aim of literary education is to provide students with the tools to critically interpret literary texts that are as close to their experience as they are to texts from the literary tradition, with this background also increasing their expressive resources and communicative competence. Thus, investing in developing LC is the key to promoting both verbal and literary creativity. Moreover, this effort can become a good alternative to diagonal, superficial, and less self-aware approaches to tasks linked to LC, such as mechanical and uncritical reading of canonical works followed by exams designed to control the tasks rather than to develop LC. Paradoxically, these tasks negatively influence students’ attitudes towards literature Magulod (2018) and, according to the results presented, their creativity. Strengthening LC is a way of promoting innovative
and creative thinking, which is as useful in the literary sphere as in everyday life. We think it is essential to take advantage of this opportunity and intervene during the particularly sensitive period of adolescence.

Conflict of interest
Authors declare there is no conflict of interest. There was not funding for this research.

Authors contributions
Conceptualisation, both authors, each one in its speciality (CL/creativity). Methodology, author 1 statistics, author 2 qualitative approach. Formal Analysis, both authors, each one in its speciality (CL/creativity). Research, both authors, each one in its speciality (CL/creativity). First draft writing, both authors, each one in its speciality (CL/creativity). Writing, revision and edition, both authors, each one in its speciality (CL/creativity).

References


Amabile, T. M. (1983). The social psychology of creativity. Springer.


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