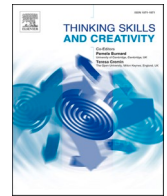


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Is it true that young drama practitioners are more creative and have a higher emotional intelligence?

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ABSTRACT

Drama studies can provide adolescents and young adults with learning opportunities that can help them to develop creative and socio-emotional skills. In interviews and discussion groups, when given the opportunity to talk about their experiences, young drama students explain the creative and emotional benefits they feel they have received from their participation in the arts. This research study investigates whether engagement, and particularly engagement over time, in drama is significant in stimulating creative and socio-emotionally intelligent behaviour in young people. It compares the creative and socio-emotional levels of adolescents and young adults who participate in drama studies routinely, to both those who have participated for two years or less and those who have no experience in this field. The research sample comprised 222 young people between the ages of 13 and 21. Findings analysed for this sample suggest that, those who have taken part in drama studies for two years or more develop higher levels of fluency, flexibility, originality and self-perceived creativity than those whose participation is less or nil. No significant differences in socio-emotional skills were noted in relation to different degrees of participation. The results are discussed in relation to the benefits that participation in drama activities can have for the development of skills during a key stage of life for young adults, replete with challenges.

1. Introduction

Adolescence is a demanding period of life, full of challenges for young people. Participation in drama studies seems to have a positive effect on how they face the obstacles and hurdles that confront them in life. Even when participating in scenarios based on fictitious contexts and roles, the emotions that surface can feel real (Davis, 2015). This implies that emotions may be important in understanding the influence that drama studies have in adolescent development. In a study carried out by Hughes and Wilson (2004), the researchers concluded that activities used in drama activities target abilities and skills that help to make the transition to adulthood more successful.

Within the framework of Theater in Education, a distinction is usually made between drama and theater. Rather than distinct they might be recognised as the two poles of the same continuum. Theatre involves acting, usually in a designated performance space,

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emphasizing communication between actor and audience and focusing on the viewer's (spectator's) benefit. Whilst there is no universal agreement on definition, the 'drama' is often used to refer more to improvised and participant focused activity, where performance is focused more on the experience of participants, rather than audience and is thus mainly concerned with their benefit. In spite of these differences, both have the same roots: the elements of theatrical art, concretized in dramatic or theatrical activities. In this paper, when we use the term "drama studies", we are referring to theatrical and dramatic activities.

Most of the studies that analyse the impact of such "drama activities" on personal and social development of adolescents, come from the Anglo-Saxon community (e.g., Craig, 2011; McLauchlan & Winters, 2014; Selman & Heater, 2015; Rowe, Reason, & Preston, 2017; Vettrains, Warren, & Jindal-Snape, 2017), and use qualitative methodology. They measure the perceptions youths have of the impact of drama activities on their lives. They suggest that being actively involved in drama studies has a positive effect on different aspects of development.

This study forms a part of an investigation about the beliefs, the perceived impact and the effects on their personal development that young adults feel about drama activities. The results of the first two phases of the project can be found in Motos and Alfonso-Benlliure (2018) and Motos, Alfonso-Benlliure, and Fields (2019). In summary, the subjects in those studies report that being involved in drama activities helps them to develop intrapersonal skills (e.g., to explore, know and express their feelings), interpersonal skills (e.g., improve oral expression, listening abilities; understanding of others), stress coping strategies (overcome fears, face personal challenges) and think in a more creative way (be more imaginative and spontaneous, see reality from different perspectives...).

The present study is focused on the most prominent factors highlighted by the young drama practitioners: creativity and emotional intelligence. Its design recognises that qualitative methodologies have dominated the field to date and that both qualitative and quantitative methodologies can generate insights. As Choy (2014:104) states "there is no perfect between qualitative and quantitative research methodologies". Therefore, a design which quantitatively analyses quantities of qualitative experience may address some of the 'limitations and biases' often levelled at qualitative designs.

The objective of this study is to compare the responses to standardized instruments on creativity and EI of young people who participate in drama studies with those who have never experienced drama studies. It also aims to corroborate if the "degrees of experience" variable is significant in this comparison. The results will help to verify whether the subjective perceptions of adolescents about their creative and emotional development identified in previous studies are confirmed when using standardized instruments for their evaluation. A final consideration is how gender might interact with experience.

1.1. Drama activities and creativity

The first studies that focused on the effects that activities, designed for drama activities, had on developing creativity in general, was in the 1960s (see Torrance, 1972 for a review). Karioth (1970:301) suggested that "there are certain abilities that are trained and reinforced in the creative dramatics program and that these same abilities are manifest when taking the Torrance Tests of Creative Thinking". In a study with secondary students, Motos (1992), concludes that drama activities encourage oral and written expression and the development of fluidity, elaboration, personal commitment and metaphoric language.

More recent studies show similar results: active involvement in the drama activities positively influences psychological development and is tied to creative thinking. Hughes and Wilson (2004) carried out a study using surveys, qualitative interviews, and workshops. The study, based on the participation of 250 adolescents, concluded that drama studies promote creativity, specifically through three elements: meeting new people/getting to know themselves, taking the initiative, and taking risks. The first element, self-knowledge, is key to helping students recognise differences between themselves and others, this is a critical element in learning how to outline an original course of action for their lives. The second element, taking the initiative, gives students the opportunity to pursue projects actively, not only to think about them theoretically and to make concrete decisions and proposals. The last element, taking risks, is an integral part of creativity given that when diverging from the norm, one can never have 100 % security of success; normally, without the ability to tolerate uncertainty, young adults find deviating from the norm to be very difficult. According to the researchers, drama activities demand creativity, elicit uncertainty and risk, but all within a safe and secure environment and one in which the participants can test different ways to act and respond to others.

Méndez (2019) tested the idea that drama activities (improvisation) could have a positively impact on motor creativity. After 14 sessions, over a three-month period, pretest and posttest showed significant improvements only in the experimental group, with higher scores in fluidity, flexibility and originality.

Why do drama activities encourage creativity and, above all divergent thinking? Green (1995) proposes that this dynamic occurs because of what he calls 'social imagination': the ability to visualize a different world, an alternate reality. According to Courtney (1995), drama activities promote creativity because by their very nature of giving a safe space to create a fictitious world, adolescents and young adults can compare the real world to what they imagine, and so create alternate possibilities of how the world could be. Davis (2017) insists that drama engenders a creative commitment from the participants and so enriches their imagination; inside the imaginary worlds the participants create, they confront and resolve problems, evaluate possible plans of action, and create new meaning.

Despite these studies and in view of the conclusions available, it can only be surmised, but not concluded definitively, that drama activities have a positive effect on creativity (Winner, Goldstein, & Vincent-Lancrin, 2014); however, more research is necessary to confirm these findings.

1.2. Drama activities and emotional intelligence

Emotional Intelligence (EI) can be defined as a combination of emotional, personal, and interpersonal skills that influence one's capacity to face the demands and pressures of one's environment. (Bar-On & Parker, 2000). This perspective is called "EI mixed model". From this view, EI is understood to be mix of attributes connected to one's personality that seem to be related to the competences necessary to achieve personal academic and professional goals (Pérez & Castejón, 2006).

EI is relevant in determining the capacity to adapt successfully to the demands of the lives of adolescents. The activities involved offer these young participants the opportunity to interact within a range of situations that they would not normally experience in their daily lives. These include a variety of social and emotional stimuli that include the necessity of learning to process and reach conclusions.

Many researchers (e.g., Goldstein, 2009; Goldstein & Winner, 2009; Konijn, 1999; Orzechowicz, 2008), argue that emotions experienced during acting could be a source of knowledge and learning. The studies suggest that being involved in drama activities may be useful in developing intrapersonal skills, necessary to manage and regulate negative emotions (Goldstein, Tamir, & Winner, 2013), and accelerate the development and positive long-term influences that last into adulthood (McCammon, Saldaña, Hines, & Omasta, 2012). Orzechowicz (2008) gives two reasons why drama could help young participants to improve their intrapersonal EI skills: a) because of the opportunity to try out different ways of transmitting emotions (through tone of voice, body language, etc.); and b) because of the training participants receive in the use of cognitive strategies to improve attention, concentration, imagination, etc. Together, these factors can pro-actively affect self-awareness and the managing of emotions, neither of which can be examined so in such a safe sphere in day-to-day life, and something that those who do not participate in drama studies experience with any significant frequency.

Drama activities could also promote not only EI intrapersonal skills but also interpersonal ones. Adolescents who have good relationships with their peers tend to have a healthier and positive development (Youngblade et al., 2007). Involvement in drama studies can promote social skills that allow relationships of trust and intimacy with others. In the complex transition from adolescence to adulthood, peers are a critical source of emotional support, attachment and solidarity. In drama groups, interaction with peers permits young adults to "put themselves in someone else's shoes", explore who they are and who they want to be, handle problematic situations in a more efficient way, explore social roles...

In essence, it appears then that drama activities have the potential to promote young people's social and emotional development and their ability to navigate challenging such experiences. Different studies have found significant improvements in adolescents who participate in drama activities with regard to their social competences and their capacity to adapt to changes. Goldstein and Winner (2012) stress empathy among these interpersonal competences. Knox (1998) and McLauchlan (2010) state that adolescents acquire a sense of identity and cohesiveness within their peer groups, and above all, value the drama activities as their opportunity to develop socially.

Nevertheless, other studies have not found evidence of differences related to socio-personal skills. For example, Craig (2011) worked with a group of adolescents on tasks that involved improvisation and assessed indicators of improvement in positive identity and social values. Her results could not confirm improvements in socio-emotional factors as a consequence of taking part in drama activities.

1.3. Relationship between creativity and EI

When exploring the relationship between creativity and EI, Sánchez-Ruiz, Hernández-Torrano, Pérez-González, Batey, and Petrides (2011) found that trait EI sociability was the best predictor of divergent thinking. However, their findings do not indicate that creative people are more empathic or socially warmer as these facets were collected in the trait EI emotionality factor, which was unrelated to the creativity criteria. Sociability factor involved the qualitatively different aspects of emotion management, assertiveness and social awareness. The authors stated that social awareness and emotion management are necessary characteristics for creative people in order to communicate their ideas and persuade others, while assertiveness covers the non-conformist and autonomous element associated with creativity (Eysenck 1993).

A positive hedonic tone (joy, exaltation ...) facilitates cognitive flexibility, as it allows the subject to be more inclusive in his thinking (use of more cognitive categories and unusual perspectives). A negative hedonic tone facilitates cognitive perseverance, since it informs that the situation is threatening and, therefore, that some measure is urgent, which calls for a more restricted, systematic and analytical approach (Ambady & Gray, 2002; Baas, Roskes, Sligte, Nijstad, & De Dreu, 2013). Thus, intrapersonal skills such as affective self-awareness and managing could facilitate creative thinking. Those who are better in understanding and regulating their emotions could be more likely to direct their emotions productively for creative goals, give original answers and persist when facing obstacles and show passion for their interests, which in turn increases creativity (Ivcevic, Hoffmann, Brackett, & Botin Foundation, 2014).

However, there are not many specific studies with adolescents that address the relationship between creativity and EI and some of them fail to confirm this relationship. For example, Pérez-Fuentes et al. (2019) could not confirm a direct connection in a sample of 742 high-school students (range from 13 to 19 years). Furnham (2016) could not do it either. This author argues that it could be one or several mediators' variables between EI and creativity. So these relationships need further exploration.

1.4. Degrees of experience and gender variables

The period of time involved in drama studies is considered to be an important variable when evaluating its impact on the

participants. Literature suggest that sustained experience of the arts makes a difference to impact (e.g., [Aprotosoiae-Iftimi, 2020](#); [Kavolis, 2015](#)). [Silva, Ferreira, Coimbra & Menezes \(2017\)](#), applied the scales of Social-Cognitive Complexity in the theatre (SSCDT), to 222 subjects with varying degrees of experience in drama interpretation. They found a positive relationship between drama experience and complexity of thinking. The researchers found that the degree of maturity in the subjects' manner of thinking, rose incrementally with the time involved in the theatre, above all when they were focused on the complexities and profile of the world around them.

On the same line, our own experience with adolescents tells us that an academic course is usually not enough to generate significant effects on their development. Most drama teachers assert that two years is the key period to obtain significant effects on adolescent's skills. Drama activities are not a magic tool. As [Silva, Ferreira, Coimbra, and Menezes \(2017\)](#) state, the more time one participates in drama activities, the stronger the imprint on cognitive and social effects.

With respect to gender, most studies to date indicate that there is no important difference between females and males regarding the impact of drama activities on creative and socio-affective development. When they do appear, differences are isolated instances. For example, [Rodríguez and Araya \(2009\)](#) found significant attitudinal changes in boys but not in girls at the end of a drama course. [Motos and Alfonso-Benlliure \(2018\)](#) also report significant differences with respect to risk tolerance and expression of feelings, in that girls are more likely to develop these skills more readily than boys during drama activities.

Previous research about gender differences in EI conducted with adolescents showed higher scores for adaptability among boys, and higher interpersonal and total EI among girls ([Bar-On and Parker, 2000](#); [Ferrándiz, Hernández, Bermejo, Ferrando, & Sáinz, 2012](#); [Prieto et al., 2008](#)).

In short, this research study investigates whether engagement over time in drama is significant in stimulating creative and socio-emotionally intelligent behaviour in young people. It compares the creative and socio-emotional levels of adolescents and young adults who participate in drama studies routinely, to both those who have participated for two years or less and those who have no experience in this field. It is expected that young adults who participate in drama activities groups (two years or more) will show a higher level of creative and socio-emotionally intelligent behaviour in terms of more intrapersonal and interpersonal skills, better coping mechanisms and more fluidity in managing stress'. Finally, gender differences will be analysed.

2. Methodology

2.1. Participants

A group of 222 subjects between the ages 13–21, (an average of 15.6) participated in the study. Of these, 61 % were female (N = 135) and the other 39 % were male (N = 87). They were all students in a chain of (15) high schools scattered across the Valencian community (Spain). Thirty-nine percent of these students had never participated in drama studies (Group 1. N = 86). Thirty-one percent had participated in drama activities for less than two years (Group 2. N = 69) and the remaining 30 % had two years or more of experience in this field (Group 3. N = 67).

In Spain the activities and drama contents are specified in the curricular subjects "Performing Arts and Dance" (optional subject of the 4th year of Compulsory Secondary Education) and "Performing Arts" (in the Bachelor of Arts). Both courses promote knowledge and understanding of dramatic language, theatre genres and stagecraft, dramatization of texts and playwriting. Moreover, these subjects are also focus on the development of personal abilities (corporal, gestural, oral and rhythmic-musical expression, communication, improvisation, interpretation, creativity...). In summary, participants with experience in drama activities had either attended elective drama courses in their high schools (N = 95; 70 %), studied drama as part of a Bachelor of Art in university (N = 10; 7 %) or participated in an extracurricular drama activity (N = 31; 23 %).

All of them voluntarily participated in the study. The active consent of the school, parents and adolescents was obtained prior to questionnaire administration.

2.2. Procedure

The 2018's Youth Theater Meeting at the "Sala Inestable" (Valencia) was the first contact the researchers of this study had with many of the students. This first contact enabled us to identify the students that wanted to participate in the study. After that, we contacted their high school educational centers (the management team) to locate students in the same centers but who did not have experience in drama courses and wanted to participate in our study. Visits to the educational centers were made over a period of two weeks. All the students participating in the study were gathered in a classroom and answered the questionnaires. The survey sessions were similar for all the groups. The tests were administered in class situations with the presence of the tutor and a psychologist that directed the survey and guaranteed the same standards in the different educational centers. In total 15 surveys were conducted, one for each educational center. On average, in each survey there were 14.8 students, although this participation ranged between 26 students from the center with the highest participation and 7 from the least. Each survey session lasted approximately 60 min. There was a concerted effort to make sure all standards were ethical, and all participants were asked and granted permission for their information to be anonymously used in this and other studies. Ethical issues were minor and related with maintaining the students' confidentiality.

2.3. Instruments

2.3.1. Questionnaires on demographics

The questionnaire included information regarding gender, age, grade level, school...

2.3.2. PIC-J. Test of creative imagination for adults (Artola et al., 2008)

This instrument evaluates creativity and divergent thinking, through the implication of four tasks (three verbal and one graphic). This study used only the three verbal tasks. The tasks consisted of the participants having to identify a problem presented through a laminated image, a test of alternative uses, and a test of consequences. These verbal tests offer markers in Fluidity (number of answers given), Flexibility (types of questions offered to the subject), and Originality (statistical information regarding the answers). According to the guide, the Cronbach alpha is .85 and it has acceptable levels of validity (Artola et al., 2008).

2.3.3. SAC, self-assessment creativity scale (Cropley, Kaufman, White, & Chiera, 2014)

Adapted by Kaufman and Baer (2004), this questionnaire evaluates the perception that the participants have regarding their own creativity. They are asked to respond, on a Likert scale of 6 points, to statements such as 'I consider myself a creative person' and 'I notice details and things that other people do not.' The Cronbach alpha is 0.81. Researchers who use this tool confirm that it can scientifically measure the creativity of an individual (Wigert, Reiter-Palmon, Kaufman, & Silvia, 2012), and demonstrate the true level of creativity of a person (Kaufman, Pumacchua, & Holt, 2013; Wigert et al., 2012).

2.3.4. EO-i. YV inventory of emotional intelligence (Bar-On & Parker, 2018), version for adolescents

This is an inventory that is designed to measure the emotional intelligence of youths from seven years upwards. It is based on the model of socio-emotional intelligence by Bar-On and includes 60 points distributed in four (4) categories: interpersonal, intrapersonal, adaptability and stress management. Interpersonal refers to social consciousness, interpersonal relationships, and the capacity to have satisfactory relationships with others. Intrapersonal refers to self-knowledge and the emotional self-expression of the person evaluated. The category of adaptability has to do with the capacity one has to adapt to change. Finally, the category of stress management evaluates the ability to self-regulate one's emotions in stressful situations. The authors of this study recognise that this inventory covers a wide range of emotional and social skills.

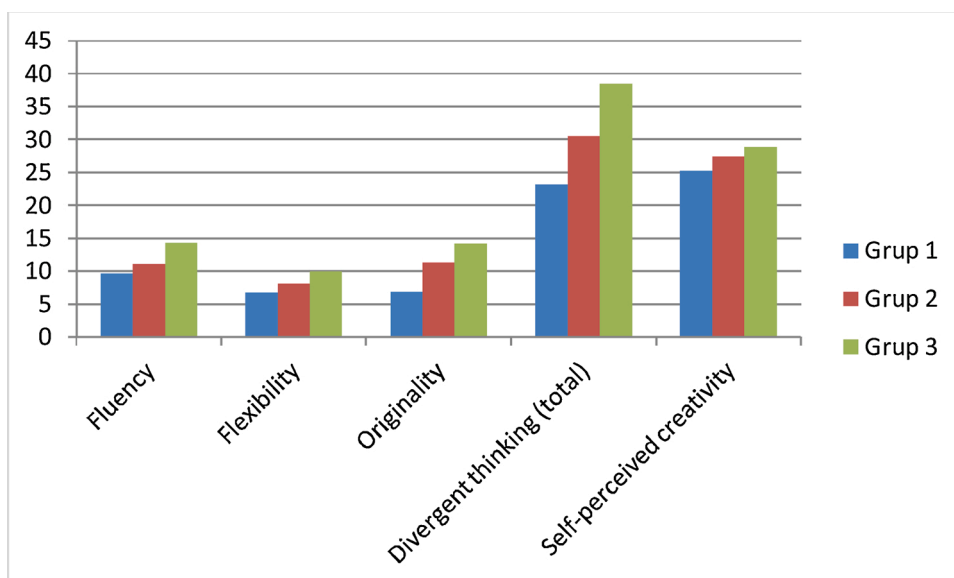
2.4. Statistical analysis

In order to analyse the relationship between creativity and EI, Pearson's correlation coefficients were calculated. In order to analyse the differences between the subjects in relation to their experience and gender, two MANOVAs (Multivariate analysis of variance) were conducted. The first analysis included the level of creativity as the dependent variable. In the second, the dependent variable was Emotional Intelligence. All the statistical analysis performed using the Statistics Program SPSS 26.

3. Results

3.1. Correlation analysis

The analysis of the correlation between variables of creativity and emotional intelligence offered no significant links when carried out with Groups 1 and 2, but there were important ties with the participants with longer experience in drama activities (Group 3). In this last group, a significant relationship was found when analysing interpersonal intelligence, regarding flexibility ($r = 0.45$, $p =$



Graph 1. Comparison of self-perceived creativity and divergent thinking between the three groups.

0.013, $CI_{95} = 0.12-0.97$), originality ($r = 0.41$, $p = 0.027$, $CI_{95} = 0.19-0.59$), and the total markers related to divergent thinking ($r = 0.41$, $p = 0.026$, $CI_{95} = 0.19-0.59$). On the other hand, intrapersonal intelligence was significantly related to originality ($r = 0.39$, $p = 0.035$, $CI_{95} = 0.17-0.58$) and total creativity ($r = 0.37$, $p = 0.048$, $CI_{95} = 0.14-0.56$). When creativity was self-perceived, subjects who see themselves as more creative also showed a higher level of adaptability ($r = 0.49$, $p = 0.007$, $CI_{95} = 0.28-0.65$).

3.2. Analysis of variance

The multi-layered contrasts showed significant differences in the degrees of experience ($\lambda = 0.75$, $F_{(9, 18)} = 1.89$, $p < .001$, $\eta^2 = 0.068$) but neither for gender ($\lambda = 0.95$, $F_{(9, 18)} = 0.62$, $p = 0.117$; $\eta^2 = 0.028$) nor for interaction experience-gender ($\lambda = 0.55$, $F_{(9, 18)} = 0.78$, $p = 0.532$, $\eta^2 = 0.012$). There were no statistically significant differences between males and females on any of the creativity variables.

The univariate revealed significant statistic differences between the three groups both in self-perceived creativity ($F_{(1, 128)} = 3.27$; $p = 0.028$, $\eta^2 = 0.034$) and in divergent thinking ($F_{(1, 128)} = 10.96$; $p = 0.000$, $\eta^2 = 0.110$). Tukey post hoc multiple comparisons tests (DHS) allowed examination further into the differences in creativity between the three groups according to their degrees of experience in drama activities. The comparison between the groups shows that there are significant differences between the group with higher experience (Group 3) and the group with no experience (Group 1), both in creativity assessed with a divergent thinking test ($X_1 = 23,21$ and $X_3 = 38,45$), and self-perceived creativity ($X_1 = 25,26$ and $X_3 = 28,91$). The differences between Group 1 (no experience in drama activities), and Group 2 (less than two years' experience), are not significant in any of the creativity variables. Differences are not either significant when group 2 and 3 were compared (See [Graph 1](#)).

Finally, another MANOVA analysis was conducted to study emotional intelligence. The multi-variable contrasts showed no significant differences either with respect to degrees of experience ($\lambda = 0.90$, $F_{(4, 8)} = 1.58$, $p = .070$, $\eta^2 = .031$), gender ($\lambda = 0.96$, $F_{(4, 8)} = 1.26$, $p = .194$, $\eta^2 = .028$), or the interaction ($\lambda = 0.95$, $F_{(4, 8)} = 0.75$, $p > .693$, $\eta^2 = .013$). No statistically significant differences between boys and girls were found on any of the EI variables considered. Univariate contrasts showed no statistically significant differences between the three groups.

4. Discussion

The main objective of this study has been to compare the level of creativity and EI of young people that have a sustained experience in drama studies with those with less experience or no experience at all, in order to see if length of engagement might be a factor in the efficacy of drama in stimulating creativity and EI. The results presented here open doors for reflection. When we compare those participants who have experience in drama activities and those who don't, the results confirm that there are significant differences in the creativity shown between the students with at least two years of experience (group 3) and the students with no drama experience (group 1).

Although the differences already appear between group 2 and 1, these differences are not significant. The main contribution of this study is to confirm previous findings about the creativity of drama students. Not only do they see themselves as more creative than students with no drama experience (self-perception), but they also perform better on divergent thinking test.

Subjects with extensive experience have produced more ideas (fluency), demonstrate more variety (flexibility), and have more innovative ideas (originality). They also show more self-awareness of their competences (self-perceived creativity). These findings which suggest that drama promotes fluency, may do so because drama requires participants to imagine themselves in multiple, different roles and situations and thereby to explore a variety of ideas and possibilities. The flexibility that these tests also reveal may be associated with the different points of view that such role-playing requires, and the shifting of perspective and empathy associated with such roles. The duality, or liminality, of living simultaneously in both the fictional world of the drama and their real daily world which enables them to imagine and try out with other versions of themselves, may also be significant here ([Baldwin, 2012](#)) in triggering both fluency and flexibility. Finally, originality can be increased by these drama experiences because they promote risk-taking and the self-knowledge necessary to creatively express the individuality of each person.

In sum, these results suggest that adolescents and young adults who participate in drama activities have a more divergent and complex thinking. These results follow the conclusions reached by [Silva et al. \(2017\)](#), having found the complexity of thought was directly related to the degrees of experience and contact with drama.

The importance of drama activities does not have to do with interpretation of roles in playscripts, but rather the opportunity to be involved in significant experiences ([Neelands, 2009](#)), that promote the development of creativity. Along these lines, [Motos \(2009\)](#) states that drama activities offer adolescents and young adults the opportunity to distance themselves to a certain extent from their day-to-day difficulties, giving them the opportunity to test out different ways of confronting them. Drama studies put them in situations where they can spread their creative wings and explore different possible situations, integrating different languages (corporeal, verbal, artistic, rhythmic, musical), from an interdisciplinary or transdisciplinary optic manner.

Through this expression mode, adolescents can see the real world and the fictitious one they create, side-by-side. By having the 'what if' factor, they are allowed to project and transform what they know and potentially, who they are ([Wright & Rasmussen, 2001](#)). For adolescents and young adults, drama activities permit them to go beyond the immediate reality and learn to create alternative worlds instead of being limited to only one consensual reality. In summary, we cannot conclude that students on group 3 have "increased" their creativity as a consequence of their drama experience, only that they show more creativity than the students that never have been implicated in drama activities.

With respect to the socio-emotional variables, results cannot certify the connection between participating in drama activities and

significant benefits on young people's development. When comparing the more experienced group with the other two, no significant differences were found. This is still a controversial matter as some previous studies found significant effects, but some didn't. The latter suggest that drama activities, despite generating subjective sensations of socio-emotional transformations, do not really bring significant changes (Corwin, 2014; Nettle, 2006). In other words, it could be that the effect of drama experience on adolescent's socio-emotional development is a myth.

Nevertheless, some studies (e.g., Cárdenas-Rodríguez, Terrón-Caro, & Monreal Gimeno, 2017; Osterholt & Barratt, 2010), suggest that drama practice helps to develop communicative skills, active listening, verbalization, and verbal communication and other socio-emotional skills. Other interesting studies nuances in this relationship by suggesting that role-playing helps actors to develop 'theories of mind' (the ability to distinguish between one's own mental representation and those of others). Goldstein, Wu, and Winner (2009) found that adolescent actors perform better than adolescents without acting experience in inferring the mental states revealed by the eyes, but show no advantage in empathy. They suggest that acting develops the ability to predict and interpret the behaviour of others, but at the same time, actors are required to regulate and even 'close down' (not show) their empathetic sides in order to develop their role in a more realistic and successful manner. Banks and Kenner (1997) only found differences favouring semi-professional actors regarding social skills and self-esteem but no differences between drama students and non-actors. Neither were differences found regarding the expressive of emotions or sensitivity between the three groups.

We are facing a methodological issue that needs deeper research. Studies that describe improvements are founded fundamentally on what participants themselves verbalize in focus groups or interviews. So, much of the evidence could be based on biased or over-estimated perceptions due to the enthusiasm of the subjects when assessing the impact of drama activities. To date, we cannot find studies that assess that progress in EI using standardized instruments. Nevertheless, research that do not find evidence of these effects are not free of limitations, as is the case of our own study. For example, not having an initial reference point regarding the level of socio-emotional and adaptive development before having participated in drama studies, means that the researchers have no way to track whether there were, indeed, improvements once they began their practice.

Many research studies have shown that the two constructs of EI and creativity are positively correlated (e.g., Hansenne & Legrand, 2014; Sternberg, 2005). Although MANOVA analysis did not show any differences in IE between the three groups, correlational analysis showed that, within group 3 (sustained experience with drama activities), there are significant relationships between EI and creativity. Drama students who manifest higher levels of interpersonal EI, also gave more divergent responses (flexible and original) to creativity exercises. Drama students who manifest higher levels of intrapersonal EI, also gave more original responses. Social consciousness and the capacity to have good relationship with others could help to see problems from different points of view, enriching personal responses and making them more flexible. Intrapersonal skills (like self-awareness) means learning and knowing one's unique personality as well as one's attributes, limitations, feelings, motivations... (Scheick, 2011) and can aid originality by helping adolescents to find their "personal touch".

Given the higher mean creativity of group 3, but no difference in EI scores, some plausible inferences could be that creativity is higher in those already high in EI within the group. That is, that EI has a mediating role or even that a third factor allows those with some ability (e.g., to reflect on their activity) to become more creative through drama, while also endowing them with greater EI scores. More and deeper research needs to be done to understand the relationship between EI and creativity and identify the variables that could be mediating this relationship (e.g., self-concept, personality traits...).

With respect to gender differences, we did not find significant differences between boys and girls in either of the three groups. The greater or lesser experience with drama activities does not sharpen the differences by gender. Regarding the differences in IE, although they were expected in favor of girls (in total scores), these did not finally take place. Although some studies support the existence of these gender differences, some others do not confirm them (e.g., Meshkat & Nejati, 2017; Nasir & Munaf, 2011; Olatoye, Akintunde, & Yakasai, 2010). This disparity of results suggests that gender differences in EI could be sensitive to cultural context. This reveals the necessity of further cross-cultural studies.

5. Conclusions

To the question asked by the title of this paper, the answer is not binary. Our findings suggest that adolescents and young adults who have prolonged experience in drama activities show higher level of creativity than others, both in self-perception and when asked to respond to creativity tests.

Thus, their perceptions about the positive effect that dramatic activities have on the development of their creativity are correct. They are able to give more ideas, those ideas involve more categories and they are also more original than those given by students with no dramatic experience. However, we have not been able to confirm that the same is true for IE skills.

Future research is needed to clarify the questions raised and overcome the limitations of this study. Among them, we can highlight that its correlational character does not allow us to reach casual conclusions. Divergent tests (used to assess creativity) have some limitations: they focus on the product but ignore the creative process; they overlook the evaluative dimension of creativity (Runco, 2008); and they may lack of ecological validity (Zeng, Proctor, & Salvendy, 2011). Finally, groups were self-selected as participation in drama classes is voluntary.

Although overcoming last limitation is difficult to achieve since drama activities cannot be beneficial if such practice is not done voluntarily, it would be valuable to carry out a long-term study of a quasi-experimental character to bring light to the real impact of drama activities in young people. Taking creativity and EI measures at an early stage in the school life and repeating the evaluation at time points thereafter in order to examine changes between those who decided to get involve in drama activities and those who did not, will be an ambitious and relevant study to be developed in the future. Studies with actors and drama students (e.g., Galindo, 2015;

Nettle, 2006), suggest that adolescents of both genders show higher levels of extroversion and openness, a lower sense of responsibility, and a certain tendency for neurotics. Thus, it would be interesting to consider whether the adolescents who sign up for drama activities already have certain psychological characteristics (personality, personal needs, etc.) that define them as a group.

Regarding the methodology, we would like to highlight the need to complement the large number of existing qualitative studies, with quantitative researches in order to contrast their results. Both methodological perspectives are complementary and valid ways to arrive to reliable conclusions about the impact of drama activities on young people. The combination of both methodologies is essential to achieve relevant advances in the future (Choy, 2014).

Although effects on socio-emotional development cannot be confirmed yet, there are enough reasons to defend the necessity of drama activities in the young people's curriculum. One of them is creativity. Maybe adolescents who decide to participate in drama activities are either more creative or more predisposed, but creativity needs to be stimulated in order to grow. Creative development is especially important at a time when life is replete with challenges that adolescents and young adults must confront in their transition to adulthood. The educational system needs to continue promoting and facilitating access to drama experiences to youths. These practices can never be undervalued. Despite being based on ephemeral artistic activities, drama experiences will have a lasting footprint on their lives.

Authorship statement

All persons who meet authorship criteria are listed as authors, and all authors certify that they have participated sufficiently in the work to take public responsibility for the content, including participation in the concept, design, analysis, writing, or revision of the manuscript. Furthermore, each author certifies that this material or similar material has not been and will not be submitted to or published in any other publication before its appearance in the Thinking Skills and Creativity Journal.

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