

## Moral development through a sports and values program in adult students with intellectual disabilities

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**Título:** Desarrollo moral a través de un programa deportivo y de valores en estudiantes adultos con discapacidad intelectual.

**Resumen:** El objetivo del presente trabajo fue incrementar el desarrollo moral en alumnos adultos con discapacidad intelectual, a través de un programa predeportivo y de valores. El programa se llevó a cabo a lo largo de un cuatrimestre de un título dirigido a la inserción sociolaboral de personas con discapacidad intelectual. Participaron 37 alumnos de ambos sexos, de tres promociones consecutivas ( $n1 = 11$ ;  $n2 = 12$ ;  $n3 = 14$ ), entre los 19 y los 37 años ( $M = 24.49 \pm 4.22$ ). Se utilizó la versión española del *Moral Competence Test* (MCT), que mide los dos componentes del desarrollo moral: la competencia moral y las orientaciones o preferencias morales. Se planificó un diseño cuasiexperimental de cohorte de ciclo institucional recurrente, implicando a tres cohortes evaluadas en tres años consecutivos. Además, para asegurar la equivalencia de los grupos se realizó un estudio acerca de la influencia de variables sociodemográficas y clínicas en el cambio de la competencia moral del alumnado, a través de un diseño *ex post facto* prospectivo de grupo único. Los resultados mostraron un aumento del desarrollo moral, en sus dos componentes, con significación estadística en el estadio 4 de las orientaciones o preferencias morales.

**Palabras clave:** Discapacidad intelectual. Desarrollo moral. Valores morales. Deporte.

**Abstract:** The aim of this study was to increase moral development of the students with intellectual disabilities, through an intervention with values learning and adapted sports. The program was developed in a training course for Social and Labor insertion of People with Intellectual Disability. The sample consisted of 37 students of three consecutive promotions ( $n1 = 11$ ;  $n2 = 12$ ;  $n3 = 14$ ), aged from 19 to 37 years ( $M = 24.49 \pm 4.22$ ). Instrument used was the Spanish version of the Moral Competence Test adapted to intellectual disability (MCT) which measures the two components of moral development through two scores: moral competence and moral orientations/preferences. A quasi-experimental recurrent institutional cycle cohort design was planned. This design involved three cohorts, evaluated in three consecutive years. In addition, to ensure the equivalence of the groups, a study was carried out on the influence of sociodemographic and clinical variables in the change of students' moral competence, through a prospective *ex post facto* single group design. The results showed an improvement in two components of moral development, with statistically significant differences in stage 4 of moral orientations/preferences.

**Keywords:** Intellectual disability. Moral development. Moral values. Sport.

### Introduction

In the last decades, the conceptualization of intellectual disability has undergone important changes (Santofinío-Rojas, 2016). According to the American Association on Intellectual and Developmental

Disabilities (AAIDD, 2019), intellectual disability is characterized by presenting limitations in the intellectual and adaptive functioning of the person, encompassing deficits in academic and social skills and in carrying out daily activities. For its part, the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5; American Psychiatric Association, 2013), defines intellectual disability as a neurodevelopmental disorder that involves two types of deficits, intellectual and adaptive type, which lead to difficulties in the personal independence and social responsibility of the people who present it. These definitions highlight that people with intellectual disabilities, in the absence of support systems, may have limitations in carrying out daily activities at home, at the school, at work, and / or in the community.

In this sense, adaptation to the social environment is closely linked to the adequate moral development of the individual. According to Kohlberg's Theory of Moral Development (1975), moral behavior is the result of a process in

which people value norms and act according to their own moral judgments, assimilating certain values from the social environment and acting according to them (Renner & Wertz, 2015). One of the main points of this theory is that moral development is understood as the result of an ordered and hierarchical succession of stages, ordered on three levels (Kohlberg & Hersh, 1977). The first level, or pre-conventional level, is characterized by selfish behavior. It normally occurs in children under the age of nine, and is divided into two stages: stage 1 or heteronomous, in which all the behaviors the child performs are to avoid punishment; and stage 2 or hedonistic-instrumental, in which the child behaves correctly when the consequences of his behavior satisfy his own interests. At the second level or conventional level, people guide their behavior not only to their own needs, but also to the consequences that this may have for their family or peers. It is characteristic of children from the age of nine to adulthood, and encompasses two stages: stage 3 or the exchange, in which the person seeks social approval; and stage 4 or the social system, in which the individual prioritizes social welfare over his own interests. At the third level, or post-conventional level, the person creates and assumes his own value system, acting independently of external authority or social trends. It is reached only in certain adults and is divided into two stages, stage 5 or the social contract, in which the individual acts correctly motivated by feelings of obligation and commitment; and stage 6 or universal ethical principles, characterized by high moral functioning and achieved when people put the highest values

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above their personal inclinations. Kohlberg (1975), to determine the level of moral development in which people are situated, used an interview based on the discussion of moral dilemmas. In this interview, hypothetical stories are presented in which a conflict situation between values underlies, so the person must choose a value explaining the reasons for their choice (Cohen et al., 2014). Years later, Lind (1978), based on the studies of Kohlberg (1975) formulates the Theory of the Dual Aspect of Moral Judgment, in which moral development is the result of the simultaneous confluence of cognitive and affective aspects (Lind, 2017). Furthermore, it modifies Kohlberg's (1975) method of discussing moral dilemmas, contributing his knowledge of educational psychology to develop the Konstanz Method of Dilemma Discussion (KMDD; Lind, 2003). The KMDD understands the discussion of moral dilemmas as a deliberative and group process, in which educational and semi-real dilemmas are debated, so that the person feels familiar with everyday situations (Lind, 2016). Used in many educational programs, it has shown various benefits for students, such as increased motivation for learning and high levels of moral development (Lind, 2015).

Human morality is intimately related to values, since people who reach higher levels of moral development act according to values linked to social good as a guide for their behavior (Martínez et al., 2002). In this sense, educational institutions are emerging as an ideal place for students to experience moral practices and acquire values, since education, regardless of the moral dimension, will not be a complete teaching (Balakrishnan & Narvaez, 2016; Thoilliez, 2019).

Located in the school context, sport offers a setting in which, appropriately, certain values can be transmitted and put into practice (Acuña-Delgado & Acuña-Gómez, 2018). The social interaction that takes place in the classroom makes the student acquire values through repeated experience, extrapolating said learning to real-life situations (Tosun & Yildiz, 2015). In addition, cooperative learning typical of the sports field is a pedagogical model that acts as a facilitator in the acquisition of values in students (Fernández-Río & Méndez-Giménez, 2016; Meroño et al., 2016). Proof of this are the numerous programs developed to promote behaviors related to certain values in children (Ruiz et al., 2015; Veroz et al., 2015; Yagüe et al., 2017), adolescent (Martínez et al., 2014; Martínez et al., 2016; Robles-Rodríguez et al., 2017) and university student (Ionescu, 2014).

In recent decades, the great moral controversy and crisis of values that today's society faces have led to further debate on which values associated with sports are essential to transmit (Scheerder & Vandermeerschen, 2016). The teachers of the area agree with the normative provisions, when raising the need to educate in values through physical-sports activity, prioritizing the learning of attitudinal content even to more conceptual aspects (Robles et al., 2015).

Despite attempts to offer educational programs aimed at students with intellectual disabilities, after completing compulsory education, the training programs offered are scarce

(Fullana et al., 2015). Students with intellectual disabilities have not been a group in which moral development or the acquisition of values has been investigated (Langdon et al., 2010). Research on disability in the educational context has been developed evaluating the attitudes that people without disabilities show towards people with disabilities (Luque-Parra & Luque-Rojas, 2015; Novo-Corti et al., 2015) or by carrying out more theoretical studies (Freire & Miranda, 2014). The higher educational context is a favorable environment for the development of training programs for students with intellectual disabilities, due to the possibilities they offer for integration not only in the workplace, but in a broader social context (Parisi et al., 2015). Despite the suitability of these actions for students with intellectual disabilities, in Spain there is only the study by Vilchez, Sánchez-Romero, Reche and De Francisco (2018). The work presented here follows the line of the same, developed in the higher educational field and focused on the sports field and the discussion of moral dilemmas. For this reason, the objective of this study was to increase moral development in adult students with intellectual disabilities, through a pre-sports and values program. Students' moral development is expected to improve after the implementation of the program, in its two components: moral competence and moral orientations or preferences.

## Methods

### Design

A recurrent institutional cycle cohort quasi-experimental design was planned. This design, widely used in the educational context, makes it possible to establish reasonable causal inferences between the cohorts, since, despite being non-equivalent groups, they are relatively similar (García-Gallego, 2001). It involves three cohorts, evaluated in three consecutive years, so, despite being different groups of students, they were all evaluated when they completed the first year of their training in the title for socio-occupational integration. In the first promotion, the evaluation was carried out after the implementation of the program ( $O_1$ ); the following year, in the second class, the evaluation was carried out at the beginning of the program ( $O_2$ ) and at the end of it ( $O_3$ ); finally, in the third class, students were evaluated before starting the program ( $O_4$ ).

With this type of design, the bias of the story is controlled, since the bias has to influence twice to explain that the moral development after the implementation of the program is greater than before its implementation in different promotions, being very difficult that moral development is affected by the same events external to the program on two occasions. Selection bias is also controlled (the initial non-equivalence of the groups could influence the inferences), since some comparisons are made with the same cohort ( $O_2$  and  $O_3$ ).

In addition, to ensure the equivalence of the groups, a study was carried out on the influence of sociodemographic variables (sex, age, studies, membership of the association, association services) and clinics (physical disease, sensory physical disability, physical motor disability, percentage of disability, category of disability, comorbidity with language and neurodevelopmental disorders) in the change in the moral competence of students. To calculate the variable change in moral competence, the difference between the average C Index after receiving the intervention and the average C Index before the intervention was obtained. This variable reports the change or improvement in the moral competence of the participants after receiving the program.

### Participants

Thirty-seven students with intellectual disabilities from three different promotions ( $n_1 = 11$ ;  $n_2 = 12$ ;  $n_3 = 14$ ), from a title typical of the Region of Murcia for socio-occupational integration framed in the higher educational context, participated, so a Incidental non-probability sampling for sample selection. Twenty were men (54.1%) and 17 women (45.9%), with ages between 19 and 37 years ( $M = 24.49 \pm 4.22$ ). All participants had a recognized percentage of disability of at least 33%, specifically between 34 and 84%, with an average percentage of disability of 55.5%. Regarding the studies, all graduated through diversity care programs: three reached primary studies (8.1%); 29 (78.4%) completed an Initial Professional Qualification Program (PCPI) or graduated from Compulsory Secondary Education (ESO); and five (13.5%) completed a Medium Level Training Cycle. The 37 students were members of associations for people with disabilities, of which 26 used services of the association to which they belonged. No student had physical illnesses that made it impossible for him to practice physical-sports activities

### Instruments

The instrument used was the Spanish version of Moral Competence Test (MCT; Lind, 2013), initially called Moral Judgment Test (MJT; Lind, 1999), with small adaptations suggested by the author for the group of young people with intellectual disabilities. The MCT measures two components of moral competence through two scores (Lind & Novak, 2015). On the one hand, it measures moral competence (cognitive component) through the C Index, a score that ranges between 1 and 100, with the following levels: low (1-9); medium (10-29); high (30-49); or very high (from 50). Index C reflects the person's ability to judge the reasoning of others in relation to their own moral standards. On the other hand, it measures the moral orientations or preferences (affective component), that is, the preference towards each stage of moral development established by Kohlberg (1975). The MCT is made up of two short stories, each containing a moral dilemma, the workers' dilemma and the doctor's dilemma, and each story raises three questions: a general one

about the level of agreement or disagreement in the performance of the protagonists of each story (the answer to this question does not intervene in the measurement of the moral competence of the individual); the second referred to the degree of agreement, presented through six arguments; and the third question refers to the degree of agreement of the reader against the conduct of the protagonists, also with six arguments. Therefore, the MCT is composed of 24 items, the original version of which has a response range between +4 and -4, but for people with intellectual disabilities, it was reduced to +2 to -2 (Totally disagree; Disagree; Neither disagree or agree; agree; strongly agree). Furthermore, to facilitate the reading of the questionnaire for the study population, the text was adjusted to the easy-to-read indications (García-Muñoz, 2014). The MCT has been translated and validated into more than 12 languages, showing validity in its applications and is a sensitive instrument to detect the effects of educational programs (Palacios, Palacios & Ruiz, 2003).

### Variables of the study

This paper analyzes the influence of the sports and values program on the moral development of the participants, defined by two components: moral competence and moral orientations or preferences. Moral competence is assessed through the C Index, which shows the person's ability to judge the reasoning of others in relation to their own moral standards. Moral orientations or preferences are the most affective component of moral development and refer to personal preference towards each stage of moral development.

In addition, the possible influence of sociodemographic and clinical variables on the change in moral competence was studied, this change being measured through the difference between the average C index after and before the intervention. Sociodemographic variables were sex, age, studies, membership in the association and uses of association services. The percentage of recognized disability completed studies and whether they belonged to any association. The clinical variables were the presence or absence of physical illness, sensory physical disability, physical motor disability, percentage of disability, category of disability, comorbidity with language and neurodevelopmental disorders.

### Procedure

The program was developed in three consecutive promotions of the degree aimed at the socio-labor insertion of people with intellectual disabilities. All participants and / or their legal guardians signed an informed consent for the use of images and personal data for research and dissemination purposes.

In the first session of the program, the initial evaluation of the moral development of the students was carried out applying the Spanish version of the MCT. In the last session, the final evaluation was carried out, using the same instru-

ment. It started from a pilot program for all promotions, in which three pre-reports and their corresponding values to work were worked: volleyball (commitment), handball or rugby, depending on the promotion (respect) and acrosport (responsibility). The pilot program was modified according to the characteristics and / or needs of the students, adding or modifying pre-reports and / or values, in one-hour sessions.

On a physical level, the sessions were divided into three parts: 1) warm-up; 2) main part, in which the students carried out activities, according to the pre-report worked; and 3) return to calm, in which passive stretches were performed while discussing what had been worked on during the session. Regarding the work of the values, the first value (commitment) and the last value (responsibility) were developed in three sessions; the rest in two.

The value was worked in situations played through the corresponding pre-report. All the important aspects that occurred in the situation played were taken up in the subsequent debate. After the return to calm, the group debate began, structured as follows: 1) the teachers read aloud a fictional sports story that contained a moral dilemma; 2) asked general questions about the story read, generating debate and inviting students to reflect and share their opinions; 3) the teachers gave examples of the behaviors of the students during the play situation of the session; and 4) the teachers extrapolated what the students had debated to specific classroom situations, to a supposed work context and to other daily areas of the students. This last part was carried out since the purpose of the degree in which this program was carried out is the social and labor insertion of people with intellectual disabilities.

### Statistical analysis

First, an exploratory analysis of the data and the verification of the assumption of normality of the variables were carried out using the Kolmogorov-Smirnov test. Given the non-compliance with the normality assumption and the size of the comparison groups in some cases ( $< 30$ ), the use of non-parametric tests was necessary to carry out certain statistical analyzes. The conclusions reached by the non-parametric tests are valid even when the distribution of the variables is significantly away from normality (Nahm, 2016). The tests used in each case are detailed below.

Change in moral competence. In order to analyze the influence of the variables: sex; disability association membership; services used in the association; physical illness; sensory physical disability; physical motor disability; comorbidity with language disorders; and comorbidity with neurodevelopmental disorders, on the change in moral competence, comparisons of means were carried out through the Student's t-test. To check the relationship between age and percentage of disability with the variable change in moral competence, a Pearson correlation was performed. To determine if the variables level of studies and the class / category of disability affect the change in moral competence, an ANO-

VA was carried out, comparing the three levels of studies (Primary Education, PCPI / ESO and Middle Grade Training Cycle) and the three types of disability class / category (category III, category IV and category V).

Moral competence and moral orientations or preferences. To assess whether the students who received the program improved in the scores of moral development, in its two components (moral competence and orientations or moral preferences), non-parametric tests were carried out. Mann-Whitney U test for the comparison of unrelated groups since they belonged to different promotions ( $O_1$  vs.  $O_2$ ,  $O_1$  vs.  $O_4$  and  $O_3$  vs.  $O_4$ ) and Wilcoxon test for related pairs in the comparison of pretest and posttest of the second promotion ( $O_2$  and  $O_3$ ).

## Results

### Influence of the program on sociodemographic and clinical variables

Influence of the program on sociodemographic and clinical variables ( $t_{34} = .22$ ,  $p > .05$ ), no statistically significant differences were detected between the mean of men (2.10;  $SD = 11.60$ ) and that of the women (1.27;  $SD = 11.04$ ) in the change of moral competence.

The correlation between age and change in moral competence was not statistically significant ( $r_{xy} = .21$ ,  $p > .05$ ).

According to the results of ANOVA ( $F_{2,33} = .22$ ,  $p > .05$ ), no statistically significant differences were observed between the means of the participants according to the level of studies completed: Primary Education (2.38;  $SD = 3.70$ ), PCPI/ESO (-2.18;  $SD = 11.62$ ) and Middle Grade Training Cycle (-1.52;  $SD = 12.68$ ).

The variable belonging to association did not show a statistically significant relationship with the change in the moral competence of the participants ( $t_{34} = 1.08$ ,  $p > .05$ ) ( $M$  association = 1.00;  $SD = 10.81$ ;  $M$  without association = 7.37;  $SD = 14.23$ ).

Regarding the services used in the association of membership, according to the results of the contrast of means performed ( $t_{34} = .60$ ,  $p > .05$ ), no statistically significant differences were observed between the mean of the participants who used any service in the association ( $M = .95$ ;  $SD = 10.96$ ) and the mean of participants who did not use the association's services ( $M = 3.41$ ;  $SD = 12.03$ ).

In the analysis of the influence of the variable presence of physical illness in the change of moral competence ( $t_{34} = -1.37$ ,  $p > .05$ ), no statistically significant differences were detected between the mean of the students with physical illness ( $M = 3.60$ ;  $SD = 10.57$ ) and those who did not present ( $M = -1.64$ ;  $SD = 11.87$ ).

Regarding the relationship between presenting physical sensory disability and the change in moral competence, no statistically significant differences were observed ( $t_{34} = 1.65$ ,  $p > .05$ ) between the means of the students who present ( $M$

= 5.69;  $SD = 12.65$ ) and those without physical sensory disabilities ( $M = -.55$ ;  $SD = 9.84$ ).

For its part, the variable physical motor disability did not show statistically significant differences ( $t_{34} = -.04$ ,  $p > .05$ ) in the change of moral competence among participants with motor disability ( $M = 1.60$ ;  $SD = 10.37$ ) and those who did not present it ( $M = 1.76$ ;  $SD = 11.78$ ).

The analysis of the correlation of the variable percentage of disability and the change in moral competence was not statistically significant ( $r_{xy} = .11$ ,  $p > .05$ ).

According to the ANOVA results ( $F_{2,33} = .39$ ,  $p > .05$ ), no statistically significant differences were observed between the means of the participants according to the class / category of disability: category III ( $-.52$ ;  $SD = 11.40$ ), category IV ( $2.98$ ;  $SD = 11.27$ ) and category V ( $2.92$ ;  $SD = 11.94$ ).

The results of the contrast of means performed ( $t_{34} = -.19$ ,  $p > .05$ ), did not show statistically significant differences in the change of moral competence among participants who presented comorbidity with language disorders ( $M = .53$ ;  $SD = 9.13$ ), and participants who did not have comorbidity with these disorders ( $M = 1.81$ ;  $SD = 11.46$ ).

Regarding presenting or not presenting comorbidity with neurodevelopmental disorders, it was not shown as an influencing variable in the score of change of moral competence ( $t_{34} = -1.17$ ,  $p > .05$ ) ( $M_{comorbidity} = 1.60$ ;  $SD = 10.37$ ;  $M_{without\ comorbidity} = 1.76$ ;  $SD = 11.78$ ).

### Influence of the program on moral competence

The results indicated that the students who received the program improved in their moral competence scores compared to the students who did not receive the program (the means of the pair  $O_1$  and  $O_3$  were higher than the measures of the pair  $O_2$  and  $O_4$ ), although no differences were observed statistically significant between the means of the scores before and after the implementation of the program. The highest mean scores were those registered in the posttest, the highest being that of  $O_3$  ( $M = 21.80$ ), followed by  $O_1$  ( $M = 20.87$ ) (Table 1).

**Table 1.** Pretest and posttest results of moral competence  $O_1$  y  $O_3 > O_2$  y  $O_4$ .

	<i>M</i>	<i>DE</i>	Contraste medias	<i>p</i>
$O_1$ & $O_2$	$O_1 = 20.87$	10.78	$U = 43$	.16
	$O_2 = 17.68$	12.87		
$O_1$ & $O_4$	$O_1 = 20.87$	10.78	$U = 67$	.58
	$O_4 = 16.90$	9.74		
$O_3$ & $O_4$	$O_3 = 21.80$	13.71	$U = 70.50$	.49
	$O_4 = 16.90$	9.74		
$O_2$ & $O_3$	$O_2 = 17.68$	12.87	$Z = -1.10$	.27
	$O_3 = 21.80$	13.71		

### Influence of the program on moral orientations or preferences

As can be seen in Table 2, the students who received the

**Table 2.** Pretest and posttest results of moral orientations or preferences.

		Stages of moral development						
			1	2	3	4	5	6
$O_1$ & $O_3 > O_2$ & $O_4$	$O_1$	<i>M</i>	1.00	2.00	.82	2.64	.91	-.55
		<i>DE</i>	2.14	2.32	3.09	1.75	1.38	3.11
$O_1$ & $O_2$	$O_2$	<i>M</i>	.00	2.09	1.27	.91	.82	-.73
		<i>DE</i>	2.65	1.87	2.28	1.38	2.56	2.33
$O_1$ & $O_2$		<i>U</i>	55.00	64.50	64.00	32.50	65.50	57.50
		<i>p</i>	.49	.93	.90	.04*	.98	.60
$O_1$ & $O_4$	$O_1$	<i>M</i>	1.00	2.00	.82	2.64	.91	-.55
		<i>DE</i>	2.14	2.32	3.09	1.75	1.38	3.11
$O_1$ & $O_4$	$O_4$	<i>M</i>	-.09	.36	.55	.18	.36	-.45
		<i>DE</i>	2.88	3.53	3.78	2.44	1.91	3.59
$O_1$ & $O_4$		<i>U</i>	60.50	53.50	62.00	30.50	58.50	61.50
		<i>p</i>	.36	.20	.41	.01*	.30	.39
$O_3$ & $O_4$	$O_3$	<i>M</i>	.73	2.64	.73	2.36	.27	-.55
		<i>DE</i>	2.24	2.38	1.79	2.16	3.23	2.02
$O_3$ & $O_4$	$O_4$	<i>M</i>	-.09	.36	.55	.18	.36	-.45
		<i>DE</i>	2.88	3.53	3.78	2.44	1.91	3.59
$O_3$ & $O_4$		<i>U</i>	71	48.50	74.50	38	72	72
		<i>p</i>	.50	.07	.62	.02*	.53	.53
$O_3$ & $O_2$	$O_3$	<i>M</i>	.73	2.64	.73	2.36	.27	-.55
		<i>DE</i>	2.24	2.38	1.79	2.16	3.23	2.02
$O_3$ & $O_2$	$O_2$	<i>M</i>	.00	2.09	1.27	.91	.82	-.73
		<i>DE</i>	2.65	1.87	2.28	1.38	2.56	2.33
$O_3$ & $O_2$		<i>Z</i>	-0.51	-.85	-.72	-2.11	-.66	-.25
		<i>p</i>	.96	.40	.47	.04*	.51	.80

\* $p < .05$

program improved in the scores of the moral orientations or preferences compared to the students who did not receive the program. This occurred in practically all stages, with statistically significant differences between means at stage 4 being observed for all comparisons between cohorts

## Discussion and conclusions

The objective of this work was to increase moral development in adult students with intellectual disabilities, through a pre-sports and values program. To evaluate the effectiveness of the program, a recurrent cycle cohort design was planned that involved three cohorts, evaluated in three consecutive years.

The results of moral competence (C Index), and of moral orientations or preferences (stages of moral development according to Kohlberg, 1975) indicate that the pretest observations in the different cohorts do not differ from each other, as do the posttest observations, indicating the equivalence of the groups. The fulfillment of this condition supports the validity of the design, since the cohort design assumes that the groups are equivalent. In addition, the results of the measurement of the influence of sociodemographic and clinical variables on the score of change of moral competence, indicated that although there were different promotions of students, these variables did not influence the program, supporting these results to the validity of the study.

The C Index scores increased after the implementation of the program, although no statistically significant differences were observed. One of the possible causes could be the implementation time of the program, less than one school year, as happened in programs developed in Spanish primary education (Hernández-Mendo & Planchuelo, 2014), Greek secondary education (Mouratidou et al., 2007) and university from various countries (Comunian & Gielen, 2006; Lerkiatbundit et al., 2006), where they also did not find an increase significant in moral development.

Regarding moral orientations or preferences, these increased in most stages, detecting statistically significant differences in stage 4. It agrees with Edwards (1986), who places the majority of American adults in stage 4 of moral development according to Kohlberg (1975). These results also coincide with research aimed at Spanish, French, Italian and Portuguese primary school students (Fraile, 2010), secondary school students (Barba, 2004), university students (Sánchez-Herrera & Palomo, 2014) and adults (Barba, 2002), who place stage 4 as the one with the most preeminence in all participants.

The findings of the present study coincide with previous research that concludes that students can improve their mor-

al development through group tasks focused on the discussion of moral dilemmas (Blatt & Kohlberg, 1975; Lind, 2017). The students to whom the presented program was applied, registered an increase in the scores of the moral competence and in the orientations or moral preferences, for which there was an improvement in moral development, although without statistical significance. This improvement may be due to the implementation of a program in which the student can apply what they have learned in play situations to different parts of their daily life. Furthermore, the groupings most used in the program were small groups and medium groups, organized differently according to the predeports worked in each session. Likewise, cooperative work prevailed over competitive activities, coinciding with multiple investigations in which group activities and cooperative structures were fundamental for the learning of values in the classroom (Aubert et al., 2014; Bogdan & Sabina, 2015; Fernández-Río & Méndez-Giménez, 2016; Iturbide-Luquin & Elosua-Oliden, 2017).

On the other hand, the results of various research aimed at secondary school students (Shaogang & Huihong, 2011), of university (Feitosa et al.), and workers from different companies (Verdorfer & Weber, 2016), they coincide with those of the present investigation, by placing the scores of the C Index at the medium level. Therefore, intellectual disability seems to be a variable that does not influence levels of moral competence.

One of the possible limitations of the present study was the use of an instrument that, due to the characteristics of the population under investigation (intellectual disability), raised multiple doubts among the participants, which could not be resolved due to the indications of the author of the MCT. Students are required to be able to understand the measurement instruments and to be able to complete them consistently (Von Grundherr et al., 2016), considering the need to find another instrument to assess moral development that can be explained in detail if required.

It agrees with Lind (2016) that education is a determining factor in human moral development, since this can regress if the person does not receive education. Moral education in today's classrooms needs to link affective and cognitive aspects (Gozálvez & Jover, 2016), so programs such as the one presented offer possibilities for educators and teachers not only of students with intellectual disabilities, but of students of all the educational stages, which seek to promote moral learning and the acquisition of values in the classroom.

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