Article

Application of a program to promote personal development and self-awareness in future Physical Education teachers of the degree in Education and its relationship with wisdom

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Abstract: The objective of the present study was to apply an intervention program based on emotional education and self-knowledge, in students of the degree in Education to verify changes in wisdom. For this, the 3S-WS questionnaire was administered before and after 8 weeks of intervention, analyzing aspects related to affective, cognitive and reflective wisdom. The sample consisted of 100 students (40 men and 60 women, aged between 20 and 29 years). After the intervention program, students improved reflective wisdom without difference between sexes. On the other hand, men had higher values in all variables than women. In conclusion, the program to improve personal development and self-awareness could be useful to improve wisdom (especially reflective wisdom) in 3rd and 4th year students of the degree in Education, specializing in Physical Education. At the same time, it is intended that these students understand the foundations of the intervention so that in the future it can be replicated in their classrooms and contribute to the sustainable development of the 2030 Agenda.

Keywords: university; emotional education; social ambit; cognitive domain; physical education degree

1. Introduction

Education must train in identity and values to obtain adequate adaptation and social integration. For this purpose we highlight in this article, the importance of training and progressing in "personal development and awareness" considering it a pillar on which to support the personality maturation process, to promote a positive attitude and gain in confidence and responsibility within academic and personal [1,2].

Personal development acquires importance as a formula to develop emotional aspects in the educational field, since as Fernández-Berrocal [3] explains, reality has changed, and it no longer has as a priority to develop intellectual and academic aspects, if not that it is necessary to face emotional and social aspects at the educational level. Here, various investigations have shown that students lack psychological resources that allow them to successfully cope with problems associated with negative behaviors and emotional difficulties at school [4-7].

On the other hand, a highly relevant construct is wisdom, understood as the degree of learning associated with personal and level development, associated with an exceptional amount of knowledge, judgment and advice applied to important, complex and uncertain issues related to the life and its meaning [2] taking into account the own limits and uncertainties in which all knowledge moves [8]. Other authors link wisdom to aspects related to personality and affections, to the achievement of psychological maturity and attributes such as transcendence, compassion, prudence and commitment to other people[9,10].
Several authors have described the dimensions of wisdom. Webster [11] differentiates five dimensions in wisdom: experience, emotional regulation, reminiscence, openness to experience, and humor. Although it is not without debate about results, they are the essential components of wisdom, both necessary and sufficient, and what constitute the predictors and consequences. A basic definition is that wisdom is composed of a cognitive aspect (general), a reflective aspect (related to oneself) and an affective aspect (related to others) [12]. Montávez’s research [13] is also noteworthy, adding that the process of discovery and development of individual expressiveness is made up of three phases necessary for its integration into the reality of each person. The phases established by the author are: “Awareness of the body (physical bases), emotional experience (expressive bases) and the consolidation of expressive abilities”.

Another highly important variable refers to the concept of socialization. Merino in turn [14] considers socialization as an active process through which the individual has to achieve his personal identity, social identity and social insertion. In the achievement of the first objective (personal identity) the individual intellectual and psychic processes predominate, and they are fundamentally introspective. In the second (social identity) all those communicative processes and the acquisition of skills, competences and social roles stand out. In the third (social insertion) not only the socio-labor incorporation is sought but also its realization and personal projection to through different personal, cultural and work contributions that as an active and responsible member he contributes to society. These three factors are part of the trajectory of every individual, and this comprehensive model of socialization constitutes and enhances a social learning process in which harmony between the possibilities and limitations of the individual, and the conditioning and requirements of the environment is sought and intended social [15].

On the other hand, emotional well-being is shaped by personality traits, without knowing with certainty which processes exactly influence it. Apparently, cognitive regulation serves to improve well-being, proposing that interventions that help reduce unpleasant emotional experiences associated with anxiety and depression, as well as promote greater happiness and emotional well-being. Emotional well-being work can help avoid negative effects such as depression [16], as well as more flexible thinking and the ability to find positive aspects in stressful situations [17]. Although the most important thing is that there are authors who consider emotions as high-intensity affective responses that can be managed through training [18]. Thus, the review by Sánchez-Álvarez [19] shows how research on emotional well-being has increased significantly in recent decades given its great interest in improving the well-being of the person, being the sample of university students one of the most used in most investigations.

Focusing on the development of the person, Goleman [20] conceived knowledge and personal development with the name of “self-knowledge” or “emotional self-awareness”. For this author, emotional self-awareness is the first component of emotional intelligence, of which he states that “knowing how one feels implies becoming aware of internal states, resources and intuitions, making an objective assessment of oneself and being able to recognize their own strengths and weaknesses”.

For the work of these skills, the spontaneous and natural expression of the body as a means of development takes on a special relevance, allowing a greater development in society of the person and achieving personal fulfillment [21,22]. In this way, one of the most important needs of the human being is to express himself, and frustration in this area can contribute to behavioral disturbances, mainly in early ages, since what happens in the first years of life it will mark the evolutionary development of the child [23]. Thus, awareness and sensitization when learning to observe and analyze our behaviors and those of others through body expression, can help develop the wisdom that will help us understand life [2,15].

It is from childhood, when we are filled with beliefs that initially are patterns that have been reinforced by adults and will configure a belief system to adapt to the world. Part of these beliefs are based on messages of ignorance that cause us limitation, and it is
the ego that is responsible for making us believe that we are safer within that imprisonment than outside of it [2]. To be able to dismantle ingrained patterns that are the result of having seen life in one way for a long time, it requires at least training and it takes a period to dissolve them. In addition, there is a high interest in the work of these aspects due to their relationship also with physical and mental health, highlighting the fact that emotions can influence them [24-28].

Although, as has been indicated, these states that are rooted in the person are conceived from childhood and therefore, it is of great interest to see if once established, it can be modified over the years, through intervention proposals. In this sense, there are several studies that have carried out intervention programs with university students looking forward an improvement in aspects such as motivation, reduction of anxiety levels, stress or well-being [29-37].

For all the reasons explained above, the main objective of this study is, in the first place, to develop a methodological proposal based on the teaching of the recognition of the purposes of life and self-knowledge with students of the specialist teaching degree in Physical Education. On the other hand, the second objective focuses on evaluating how this intervention can influence the three areas of wisdom, known as the cognitive, affective and reflective areas and, in turn, check if there are differences after the intervention based on the gender of participants.

2. Materials and Methods

2.1. Study design and participants

It is a quasi-experimental study with pre-post-test measurements. These measurements were made to third and fourth year students of the degree of specialist teacher in physical education who are taking the subject of "Body expression and communication" at the University of Jaén. A total of 100 students completed the pre-test and the post-test and participated in the present study, being 60 women and 40 men.

2.2. Instruments

A multiple response questionnaire was used where the first question was asked about the course they were in, the date of birth and the gender of the participants. Next, the “Three-Dimensional Wisdom Scale” was used, which main purpose was to measure the Wisdom of the participants.

Three-Dimensional Wisdom Scale (3D-WS) [38]: Scale that seeks to measure 3 dimensions in relation to wisdom, based on the Ardelt scale in 2003 and validated and translated into Spanish by García-Campayo [38]. The scale is made up of three subdimensions with a total of 39 items. 14 items for the cognitive dimension (eg, “I am hesitant about making important decisions after thinking about them”), 12 items for the reflective dimension (eg, “When I look back on what has happened to me, I can’t help feeling resentful”), and 13 items for the affective dimension (eg, “I don’t like to get involved in listening to another person’s troubles”). The items are self-rated using five options, and they are scaled from 1 (strongly agree or definitely true of myself) to 5 (strongly disagree or not true of myself). The reliability values for this study was α = .816 and α = .846 for the pre-test and post-test.

At the time of passing the questionnaires, they were administered electronically together with the instructions to a total of 106 students (finally remaining 100 who took the pre-test and the post-test), in a quiet environment and were answered in 15 minutes approximately. In any case, they were urged to be honest as they would be anonymized afterwards and would not influence their academic grades.

2.3. Procedure and intervention

In the first place, the intervention proposal was prepared seeking an improvement in personal development and awareness, with a total of 13 weeks of intervention with 8
sessions of an hour and a half in duration, in the subject expression and body communication. The test was administered both initially and after the intervention to verify the results. More specifically, the development was as follows:

The first week, the participants were informed about the procedure to follow to complete the questionnaires in the initial evaluation and this procedure was carried out in the same way at the end of the process in week 12. They were offered the instructions to access the he by telematic means and an operational delivery time was established with a maximum of 15 minutes.

In the eight intermediate weeks, the methodological proposal was developed where they held sessions oriented to the points of improvement that had been marked as the objective of the study. The student had previously had a document that provided information of interest associated with the activities to be carried out in said practice, studied it and then responded with concentration and individually. Next, he joined a working group where the information of all the members of the group was put in common and they established common guidelines and patterns by making a brief report that had a scheduled delivery.

Following guidelines from various authors [39-43], the methodological process follows a sequence or structure that seeks to reduce until eliminating what influences harming the person, and for this, trains the mind to stop living in the past or in the future, stop judging ourselves and others, let go of control of what is not controllable and allow life to rule, learn to relativize what happens under the norms and human justice, seek the elimination of dependencies towards people and means with sensationalist speeches that are not accompanied by positive final intention and do not convey solutions, and seeks to prevent emotional moments and thoughts that may affect what is of great value in your life.

Once aware of the procedures for the elimination of these patterns, we seek to do daily what helps or improve us and make proposals that help us accept what happens using universal laws to guide us [2], seeking solutions to the situations we experience in our destiny and with a life purpose, and on it a scale of priorities is established that allows us to discern about events, forgiving and forgiving ourselves, accepting failures and weaknesses and trusting in life. To improve functionality and consolidation, protocols of mental silence or contemplation are shown that help focus attention [44,45]. Verbalizing the positive despite feeling artificial at the beginning, using gratitude in everything is part of the development of this stage.

Finally, in a personalized way and to favor the discovery of an objective reality, personalized and individual supports are proposed, providing tools for self-knowledge. The tools are focused on improving mental silence, reknowing the purpose, recognizing universal laws, reducing what hurts us, creating improvement habits and developing empathy in social relationships.

As an example, following the book by Arteaga [46], some of the proposals that were carried out are specified:

### Table 1. Exercises examples and description

<table>
<thead>
<tr>
<th>Exercise</th>
<th>Description and purpose</th>
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<tbody>
<tr>
<td>“Enneagram”</td>
<td>It is a system to classify the personality and includes 9 types or ways of seeing the world called enneatypes. It offers a roadmap for analyzing personality patterns and helps to identify them. Two groups are divided and in each group, they must choose the paragraph that best choose their attitudes and behavior. Finally, they are classified into an enneatype (enthusiastic, challenger, peacemaker, etc.)</td>
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<tr>
<td>“A happy world”</td>
<td>This activity consists of devising a world around where everything that happens is good and perfect. Visualize yourself in it and discover an</td>
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image of how you would be. Finally, they must describe the image they have seen.

<table>
<thead>
<tr>
<th>“The crude reality”</th>
<th>Students are instructed to do the following: visualize real life and list the factors that prevent you from being the image you saw in the “brave new world” exercise. Are they external factors to you?</th>
</tr>
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<tbody>
<tr>
<td>“The system”</td>
<td>The following is indicated: Consider your body as a working system or machine, or as if it were a company working together on a global project. They must visualize aspects such as What would be the best and most appropriate to be effective when there are people who do not perform their function? Imagine parts of your body that do not do their function.</td>
</tr>
<tr>
<td>“The wheel of life”</td>
<td>Draw a circle and divide it into six equal segments, leaving a circle with six sections that represent the six main areas of life. There could be more, but those six vital areas are universal. These areas can be evaluated and become six goals for an ideal life (self-knowledge, health-well-being, emotions, relationships, transcendence and professional). Each area is scored from 1 to 10.</td>
</tr>
<tr>
<td>“Reality on my Screen”</td>
<td>Students are asked the following: Write about yourself, the things you give yourself and give yourself permission aimed at creating an image of yourself that is real and in harmony with what you want to be. What do you want to experience more, what gives you confidence and energy, who would you like to be.</td>
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</tbody>
</table>

The sequence proposed to be followed to promote development and personal identity would consist, first of all, in creating and reflecting on everyday situations in which suffering, discomfort appears and is felt and produce mistakes and errors in the actions that we carry out. Then learn to recognize the existence of natural laws and their operation to realize our own actions and have a reference pattern. At that point, become aware of the individual unconscious defense patterns, since it is useful to recognize the motivations that arise from the mechanisms of the ego, to provide different perspectives of reality and how to face it, and lastly, to provide guiding references.

2.4 Data analysis

First, we check the internal consistency of both the pre-test and the post-test of each of the scales, using the Cronbach’s alpha test to calculate the reliability. Then, we checked the normality of the variables using Kolmogorov-Smirnov and chi-square test. After that, a T-student test for related measures was conducted. Additionally, we checked the differences between gender using a MANOVA (Multivariate Analysis of Variance). An analysis of the residuals revealed the non-fulfillment of the hypothesis of normality and homoscedasticity of some variables, so it was decided to carry out the analyzes also using non-parametric tests (Wilcoxon test and U de Mann Whitney test). The results obtained with both procedures were very similar, therefore, the results of nonparametric tests were not included for brevity. The statistical package IBM SPSS 24.0 (New York: USA) was used for the analysis.

3. Results

In the first place, taking into account the total sample analyzed, we find the results reflected in Table 2.

| Table 2. Analysis of pre- and post-test for the sample |
Considering them, we found no changes after the intervention weeks in the affective or cognitive variables, where the values remained practically unchanged. On the other hand, in the reflective field, we do find statistically significant differences (p = .038) for the total sample.

On the other hand, the multivariate analysis carried out to differentiate according to gender, reflected the results indicated in Table 3. This analysis was carried out on the one hand, for the three variables of the questionnaire in total and on the other hand, for the scale of the questionnaire as a whole, taking into account the results of the Univariate Anova.

### Table 3. Multivariate analysis of the variables according to gender

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
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<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Ambit_Affective_Pre</td>
<td>3.68 .43</td>
<td>.670</td>
</tr>
<tr>
<td>Ambit_Affective_Post</td>
<td>3.63 .44</td>
<td>.564</td>
</tr>
<tr>
<td>Ambit_Reflective_Pre</td>
<td>3.54 .35</td>
<td>.127</td>
</tr>
<tr>
<td>Ambit_Reflective_Post</td>
<td>3.66 .47</td>
<td>.52</td>
</tr>
<tr>
<td>Ambit_Cognitive_Pre</td>
<td>3.48 .51</td>
<td>.140</td>
</tr>
<tr>
<td>Ambit_Cognitive_Post</td>
<td>3.57 .54</td>
<td>.36.54</td>
</tr>
<tr>
<td>Ambit_Global_Pre</td>
<td>3.56 .35</td>
<td>.328</td>
</tr>
<tr>
<td>Ambit_Global_Post</td>
<td>3.62 .43</td>
<td>.328</td>
</tr>
</tbody>
</table>

Note: ** p < 0.01; M = Mean; SD = Standard Deviation.

Regarding gender, we found statistically significant differences both in the pre-test and in the post-test for the affective domain variable, where men had statistically significant values higher than women (p = .017 and .019). In addition, in the post-test cognitive field they had an approximation to significance (p = .066). On the other hand, the scale as a whole showed statistically significant differences in favor of men at p = .034 and .048 (pre-test and post-test). Finally, to check if the intervention had a different influence on boys and girls, we proceeded to segment the file and make the comparison between the pre-test and post-test separately according to gender. In this way, it was possible to see how no statistically significant differences were found, which could be due to the small sample (40 and 60 subjects), if observing how the men had a similar value to that of the reflective field (which, if statistically gave differences when joining the sample) in the cognitive field.

4. Discussion
The objective of this study was firstly, to apply a methodological proposal based on the teaching of the recognition of the purposes of life in university students of the degree in Physical Education. Second, assess how this intervention could affect aspects related to wisdom and its three areas and verify the differences based on gender.

Attending to the first of the objectives, the intervention strategy used by the study has been aimed at creating a transformation or change in the areas of "Self-knowledge", "Emotions", "Relationships" and "Transcendence of life" avoiding the “learned helplessness" that consists of looking for something where we cannot really find it or, what is the same, looking for it outside when the answer is within us. This appreciation or concept conveys the need to change the paradigm we have to understand life that is usually associated with seeking solutions, answers and changes outside of ourselves.

Montávez [13] establishes that this awareness is the first phase in the personal development process and consists of “perceiving and feeling the body and becoming aware of its reality” and adds that awareness is carried out through their own personal experiences and experiences, that is, through “experimentation”. This phase is developed in our intervention constantly since each experience lived is taken into account and would end when the individual becomes capable of adapting the work carried out to their personal characteristics, which in this research would be when arriving at the last session.

On the other hand, the students' perception of the intervention in general was quite positive, after carrying out surveys during the classes about the usefulness they saw in the exercises and in the way of carrying out the sessions, compared to the rest of the course academic in relation to the subject. Therefore, it is thought that it may be an appropriate protocol for students, which must be deepened so that they can also apply it safely with their students in the future. Secondly, when describing the results obtained after the intervention, we must emphasize that statistically significant changes were observed in the reflective field, taking into account the total sample.

Considering that our intervention greatly promoted the participants' self-knowledge and reflection on the events and experiences they had experienced, it seems logical that this was the greatest change experienced by them. Although, the measurement of wisdom through questionnaires, although it may be simplistic because it is thought that it is affected by biases such as social desirability [47], has advantages by offering a simple and fast means to approach the base empirically and that it allows to know antecedents, starting situation and consequences. It should be noted that there are different investigations that have translated the 3D-WS scale into different languages, but they are very recent studies [38,48,49].

No studies have been found that have analyzed this area in university students with this questionnaire, but correlations have been found between the global score of this questionnaire with happiness [50], life satisfaction [51] or emotional competence and self-efficacy [52]. This is very interesting to consider given that the observation of low levels of these scales could be detrimental to these aspects. When observing in our case that men had higher values than women both in the pre-test and in the post-test, although there were no differences in the change (both improved, but they were not statistically significant data), it could be of great interest to investigate why these values are higher in men and to make intervention proposals especially focused on the female gender. Furthermore, this differs from Andreia's study [53] with this scale where he indicates the non-existence of differences based on gender or educational level, generally finding that young people score higher in the three dimensions than older people [54]. However, it should be noted the study by Fernandez [55] where differences according to age are appreciated in the affective and reflective dimensions, but not in the cognitive one; results with similar results to our study.

In university students, it should be noted that this is the first study using this scale, but if interventions have been found in order to improve certain related variables with quite disparate results that make us reflect on the importance of carrying out an adequate protocol to intervene. So, we find investigations that did not achieve improvements in satisfaction and learning [56] and other studies, on the other hand, did find improvements.
in academic satisfaction [30,57] or with life satisfaction [36] with similar intervention durations. This aspect was not assessed in the present study but it is a very interesting aspect to take into account.

Entering psychological variables, interventions in university students have given good results in aspects such as reducing levels of anxiety, stress and depression [32]. It would be very interesting to consider the hybridization of methodologies that is providing optimal result due to its multiple possibilities [54], for example, combining the current intervention with biofeedback, which has given very good results in university students in variables related to emotional well-being in interventions from as little as 4 weeks [32,33,58] and with other aspects as important to life as resilience or the ability to overcome adversity [37]. Another aspect linked to prosocial behaviors is motivation, and it is essential to work on it from an early age. However, the present proposal could have contemplated the analysis of this variable, teaching motivational resources in addition to the variables contemplated, such as the study by Gonzalez Cabanach [34] which also allowed students to have greater self-control and self-efficacy.

Describing students of the degree in Education linked to Physical Education, the promotion of healthy habits related to physical activity is essential. In this regard, in recent years, an increase has been observed due to the study of those factors associated with a healthy lifestyle of the young population and especially university students [59]. Therefore, interventions where this stimulation is sought, such as that of Carranza [35] with more than 800 students, may be appropriate to promote these aspects and teach university students who aspire to be future teachers.

We must point out that there is an urgent need to accelerate actions to achieve the sustainable development goals that are within the 2030 Agenda and, without the involvement of universities, these cannot be met [60]. Among them, guaranteeing a healthy life and promoting well-being at all ages, as well as guaranteeing an inclusive, equitable and quality education. Future teachers can provide solutions, knowledge and innovative ideas to the sustainable development goals, training those who will be in charge and responsible for implementing these goals [61]. They need to innovate by mobilizing, involving and motivating the youngest; that, as in the university, give a quality education with relevant skills that promote and research on sustainable development. This will lead to better personal, national and international development results. Key competencies for sustainability are systems thinking, anticipation, strategy, collaboration, critical thinking, self-awareness, and problem-solving skills [62].

Finally, it should be noted a series of limitations following the Engberg recommendations [63], such as the need to randomize the participants, carry out mixed-method studies including a qualitative analysis, or increase the duration of the intervention. Finally, the sample size was low and it could influence the significance of results.

5. Conclusions

There are difficulties in finding research or studies that relate the influence that the teaching of personal development and self-awareness exerts on wisdom in its cognitive, reflective and affective spheres, with very few authors who have carried out studies on it and there are no at the university level.

The intervention presented in this study can lead to an improvement in the process of personal development and awareness of the participants, thanks to the program of self-awareness, search for mental silence and recognition of the patterns of action that negatively influence behavior, person, creating habits of improvement towards ourselves and in relation to our social relationships.

On the other hand, from the information compiled in the bibliographic review, the conclusion is reached of the importance of addressing personal and conscientious development in the educational field as a channel to externalize one's own feelings and emotions. Likewise, personal knowledge acquires great relevance for this process, becoming a primary phase. The object of another study would be to verify the different educational
systems established in Spain and see the relationship it has with the new trends based on Gardner’s Multiple Intelligences, where developing emotional competence has become a significant aspect.

The intervention that was carried out could serve to improve emotional well-being, wisdom and socialization processes in university students. Although, there was a positive but not significant trend in most of the studied aspects of wisdom, improving the reflective field, being necessary more studies in this field. In addition, women had lower results than men, which makes reflection on this aspect also important.

It is necessary to reflect on the importance of continuing to carry out studies and research on related aspects, since there are benefits for people that can be produced with their progress. Also, it is recommended to carry out more studies, especially intervention studies, to test improvements in the general wisdom in the university environment, being advisable to carry out longitudinal studies of larger and more diverse samples to explore the mediating effects of these constructs on well-being, respect and learning.

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