

Evaluating the impact of a course in Solutionary Humane Education for teachers

Avaliando o impacto de um curso em Educação Humanitária Solucionária para professores

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ABSTRACT

The contemporary global context is characterized by the presence of multifaceted challenges, including climate change, armed conflicts, socio-economic disparities, food shortages and animal cruelty. Humane Education is the pillar for changing people's behavior and attitudes towards the environment, animals and society in general, promoting understanding of the challenges faced and their origins, as well as transforming them in a positive way. The aim was to train teachers in transformative humanitarian education in order to prepare them to analyze global problems in a critical, systemic, strategic and creative way. In addition, it seeks to motivate them to search for solutions that maximize well-being and minimize harm in everyday life, as well as enabling them to use tools acquired in a school environment to encourage active citizenship among their students. The Solving Humanitarian Education course inspired by the experience of the Institute for Humane Education took place in online format on the UFPR Virtual platform from 07/03/2022 to 08/05/2022 for teachers from all over the country. The course was made up of issues related to human rights, social justice, sustainability, animal protection and other interconnected themes in a broad and solution-oriented way divided into 9 modules. Participants' knowledge was assessed using a pre- and post-course questionnaires in a qualitative and quantitative way and a focus group. The course received 221 pre-registrations and 50 of them completed the Initial Questionnaire and were enrolled. Of the 50 teachers registered in the course, 10 completed the entire program. An increase of empathy and compassion towards non-human beings was observed, and reflected in a change in their perceptions of the sentience of various animal species. There was a rising awareness on behalf of the professionals of seeking pragmatic solutions to challenges faced by their communities.

Keywords: Systemic thinking. Critical formation. Sustainability. Social justice. Collective Veterinary Medicine.

RESUMO

O contexto global contemporâneo se caracteriza pela presença de desafios multifacetados, abrangendo questões como as mudanças climáticas, conflitos armados, disparidades socioeconômicas, escassez de alimentos e maus-tratos contra animais. A Educação Humanitária é o pilar para a mudança de comportamento e atitude das pessoas em relação ao meio ambiente, aos animais e à sociedade em geral, promovendo compreensão dos desafios enfrentados e suas origens, bem como sua transformação de maneira positiva. Objetivou-se capacitar docentes em Educação Humanitária transformadora com a finalidade de prepará-los a analisar, de maneira crítica, sistêmica, estratégica e criativa, os problemas globais. Ademais, visa motivá-los a buscar soluções que maximizem o bem-estar e minimizem o dano na vida cotidiana, além de habilitá-los a utilizar as ferramentas adquiridas no ambiente escolar para fomentar a cidadania ativa entre seus alunos. O curso Educação Humanitária Solucionária, inspirado na experiência do Institute for Humane Education, realizou-se no formato à distância pela plataforma UFPR Virtual, no período de 07/03/2022 a 08/05/2022, para professores de todo o país. O curso foi composto por questões relacionadas aos direitos humanos, justiça social, sustentabilidade, proteção animal e outros temas interconectados de uma forma ampla e solucionária, dividido em 9 módulos. O conhecimento dos participantes foi mensurado por meio de um grupo focal e questionários, pré e pós-curso, de forma quali-quantitativa. O curso recebeu 221 pré-inscrições, das quais 50 foram efetivadas por meio do preenchimento do Questionário Inicial. Dos 50 professores matriculados no Curso, 10 concluíram todo conteúdo programático. Observou-se o aumento da empatia e compaixão relacionadas aos seres não-humanos, refletido na alteração de suas percepções sobre a sentiência de várias espécies animais. Constatou-se um crescente interesse por parte dos profissionais em buscar soluções pragmáticas e solucionadoras para os desafios que suas comunidades enfrentam.

Palavras-chave: Pensamento sistêmico. Formação crítica. Sustentabilidade. Justiça social. Medicina Veterinária do Coletivo.

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Introduction

Humane education is a field of study with a teaching approach that establishes connections between human rights, animal protection, and environmental sustainability (Institute For Humane Education, 2020). It is aligned with the Sustainable Development Goals (Nações Unidas no Brasil, 2022) and the Earth Charter principles, “[...] to treat all living beings with respect and consideration” and “[...] to promote the tolerance culture, non-violence, and peace” (Novaes, 1992). It is a field of study that outlines the ways of social justice and examines the events occurring in society, from human oppression to environmental degradation (Weil, 2013). Among the values promoted by Humane Education it is possible to mention kindness, empathy, compassion, honesty, generosity, wisdom, integrity, courage, perseverance, self-discipline, and voluntary disposal (Weil, 2013).

Humane Education is essential to fight against domestic violence, animal violence, and other social problems. This approach has proved effective in teaching violent children (Faver, 2010) and promoting empathy between children (Daly & Suggs, 2010) with teachers’ incentives. Humane Education applied to older kids also showed effects on the development of positive attitudes toward pet animals (Ascione, 1992). It resulted in the development of socially healthy children and decreased social problems in their future, such as racism, criminalization, animal violence, and other ethical deviations (Arbour et al., 2009; Faver, 2010).

Some papers also demonstrated the relationship between domestic violence, animal violence, and child abuse (Ascione et al., 1997), an association known as The Link Theory. In other words, the early detection of behavior patterns related to violence, along with Humane Education, is capable of preventing more violent cases from occurring.

Humane Education aims to prepare people to have compassion, to be solutionary, to know how to identify unfair, unsustainable, and inhumane systems, and to create solutions that make people, animals, and nature thrive. It helps people to put values such as kindness, empathy, generosity, responsibility, and integrity into practice in daily life (Institute for Humane Education, 2020). Several studies have already proved the effectiveness of the Humane Education applied in teachers and children, in which a reduction in school suspensions was observed (Sprinkle, 2008), and the development of empathy and kindness to animals by a 1-month-program (Arbour et al., 2009).

The IHE (Institute for Humane Education) is a non-profit organization that aims to motivate people to create a prosperous world for all beings. The institute offers Master’s and PhD in humane education, online courses, workshops, and lectures. IHE’s president and co-founder, Zoe Weil, also authors books on humane education themes. Besides, the IHE has the Center for Solutionary Change, a developing and supporting center for teachers (Institute for Humane Education, 2020).

The term “solutionary”, created by the IHE, refers to an individual identifying unfair, inhumane, and unsustainable systems and can develop solutions to transform those systems. In other words, the focus of a solutionary is to solve problems and be a proactive citizen where they live.

This study aimed to train teachers in humane education, enabling them to analyze local and global problems, motivating them to find solutions that promote the most good and least harm, and enabling them to use the lessons and tools learned with their students, promoting active citizenship and sharing it with their community.

Materials and Methods

The course’s target audience was middle school teachers in Brazilian public schools from grades five through nine.

For the development of the course, the Solutionary Guidebook of the Institute for Humane Education (IHE) (Institute for Humane Education, 2020) was used as a reference, as it describes in detail the course that the institution in the United States applies. From the materials of the Solutionary Guide (Institute for Humane Education, 2020), from other bibliographic references (Itle-Clark, 2012; Weil, 2013), and the assistance of two teachers, one of them graduated in Humane Education from the Institute for Humane Education in the United States, the theoretical content was defined with didactic videos and other activities, organized in the UFPR Virtual Platform.

This online platform belongs to the Federal University of Paraná, chosen for the course.

As tools for course evaluation, two questionnaires were created, and a focus group was performed. The initial questionnaire and the Free and Informed Consent Form (FICF) were emailed to those registered. It contained 11 questions developed to measure the degree of knowledge of the participants about Humane Education, as well as their considerations regarding current teaching methodology, motivation to teach, knowledge about the subject, and expectations regarding the course. The completion of the questionnaire, as well as the acceptance of the FICF, were prerequisites for course participation, with a submission period of three days. The final questionnaire contained 11 questions and was included in the last module of the course.

From February to May 2022, the material used in the course was prepared, as well as visual summaries of the Solutionary Guide; explanatory videos; tutorials, activities, and tasks; selection of videos and texts, both to enrich each module and to add to the complementary materials; updating of the Virtual UFPR; dissemination of the course through the website of the Federal University of Paraná (UFPR), through the social network Instagram of the UFPR Collective Veterinary Medicine (IMVC), and emails to the Municipal Departments of Education of Paraná and other states.

The Course began on July 3, 2022, when participants had access to the first module, an introduction to the theme and platform, and the participant's self-presentation activity, shared through the Padlet platform. On October 3, 2022, a focus group was held (Iervolino & Pelicioni, 2001) with seven volunteer participants through an online meeting of approximately one and a half hours. The course content was organized into nine modules. The topics and activities are in Table 1. All modules had open forums for clarification of doubts, and their activities were corrected by the Course organizers with feedback, these corrections being one of the criteria for evaluating the participants.

At the end of the course, the focus group and questionnaires were applied, allowing for a comparison of the quantitative-qualitative data on the impact generated on the participants who completed the course and, from these data, a discussion of the importance of humane education content in schools and throughout the community.

Results and Discussion

The application form registered 221 responses from January 24, 2022, to February 18, 2022. Of this, 75.56%

(167/221) were middle school teachers, representing the target audience for the course. In comparison, 24.44% (54/221) were teachers of high school, universities, kindergarten, pedagogues, university students, and other individuals interested in the course. Regarding the geographic distribution of the registered, 79.64% (176/221) were from the state of Paraná, 7.69% (17/221) from São Paulo, 3.17% (7/221) from Minas Gerais, and the other participants 9.5% (21/221) were distributed in several other states of the country. Among those enrolled, only 0.45% (1/221) indicated not having adequate internet access and the lack of a computer or mobile phone to participate in the online course.

Initial questionnaire

23.98% (53/221) answered the initial questionnaire. However, 22.62% (50/221) accepted the conditions of the FICF, a prerequisite for the candidate's inclusion in the course and registration confirmation. The low Initial Questionnaire return was possibly due to the short three-day reply deadline and the delayed email delivery containing the link to the questionnaire. Also, many candidates received the email as spam, making it impossible for more participants to join the course within the deadline.

Regarding the previous knowledge of the participants on the theme of Humane Education, on a scale of 0 to 10, with 0 no knowledge and 10 subject domain, 6% (3/50) classified their knowledge between 0 to 2, 38% (19/50) between 3 to 5, 50% (25/50) between 6 and 6% (3/50) between 9 and 10. The American study by Itle-Clark (2012) found that 57.2% of the teachers participating in their research were unaware of the existence of Humane Education. In the present study, if responses from 0 to 5 are considered null to moderate knowledge, we found 44% (22/50) of participants with low experience in Humane Education, highlighting a lack of knowledge on the subject.

When asked about their ability to promote positive change in their environment, on a scale of 0 to 5, where zero is no capacity, and 5 is much capacity, 2% (1/50) of the participants answered 2, 28% (14/50) 3; 34% (17/50) rated their capacity as 4 and 36% (18/50) as 5.

Regarding the motivation of the participants to teach, on a scale of 0 to 5, where zero is no motivation, and 5 is high motivation, 8% (4/50) rated their motivation between 2 and 3, 18% (9/50) as 4 and 74% (37/50) as 5. Although most participants reported a substantial motivation for teaching, it is pertinent to point out that teaching in early childhood education is challenging for several reasons. Studies conducted with teachers found that the relationship with the parents of students, as well as the

Table 1 – Program content of the Course (Curitiba, 2022)

SOLUTIONARY HUMANE EDUCATION COURSE CONTENT		
Module	Topics	Tasks
1. Setting Module	<ol style="list-style-type: none"> 1. Focus group and initial questionnaire. 2. Guidelines about the platform and course overview. 3. Preparatory videos. 4. Theoretical material. 5. Activities. 	<ol style="list-style-type: none"> 1. Send a video introducing yourself and share it on the forum (or Padlet). 2. Comment on what you expect from the course, and then answer 2 comments from your colleagues on the forum.
2. Introduction to Solutionary Humane Education	<ol style="list-style-type: none"> 1. Preparatory text about Humane Education. 2. Preparatory video. 3. Activities. 	<ol style="list-style-type: none"> 1. Summarize what you understand by Humane Education and share it on the forum. 2. Comment on the answers of 2 participants.
3. Compassion and the challenge of facing current problems	<ol style="list-style-type: none"> 1. Preparatory text about compassion. 2. Preparatory video about compassion. 3. Theoretical material. 4. Activities. 5. Additional material. 	<ol style="list-style-type: none"> 1. Compassion Circle. 2. Give at least 2 examples of someone invisible. 3. Share a tool/platform you know that can be used to overcome apathy and cultivate compassion. Comment on the answers of 2 participants.
4. What is the Solutionary Solution?	<ol style="list-style-type: none"> 1. Preparatory text. 2. Preparatory video. 3. Theoretical material about different levels of solutionary solutions and conditions to implement the methodology. 4. Activities. 5. Additional material. 	<ol style="list-style-type: none"> 1. Identify a specific problem you want to solve. 2. Research the stakeholders and those working to solve the problem. 3. Share the findings of 1 and 2 on the forum.
6. The Iceberg Method	<ol style="list-style-type: none"> 1. Preparatory text. 2. Preparatory video. 3. Theoretical material. 4. Activities. 5. Additional material. 	<ol style="list-style-type: none"> 1. Research and identify the causes of the problem and the related systems. 2. Construction of the iceberg model. 3. Share 1 and 2 on the forum.
6. Identifying the Solutionary Solution	<ol style="list-style-type: none"> 1. Preparatory text. 2. Preparatory video. 3. Theoretical material. 4. Activities. 5. Additional material. 	<ol style="list-style-type: none"> 1. Research what has been done to solve the problem until now. 2. Elaborate solutions that approach the causes of the problem and cause the least harm. 3. Build a detailed graph of the solution you found.
7. Implementing the Solutionary Solution	<ol style="list-style-type: none"> 1. Preparatory text. 2. Preparatory video. 3. Theoretical material. 4. Activities. 5. Additional material. 	<ol style="list-style-type: none"> 1. Build a strategic plan to implement the chosen solution.
8. Applying the Solutionary Guidebook in the classroom	<ol style="list-style-type: none"> 1. Preparatory text. 2. Preparatory video. 3. Theoretical material. 4. Activities. 5. Additional material. 	<ol style="list-style-type: none"> 1. Build an implementation plan for the Solutionary Method in the classroom. 2. Questionnaire: "My Life Is My Message." 3. Reflect on how the process can help people become solutionaires in their daily lives and how to align their lives with their values. Share the reflection on the forum and comment on the reflections of 2 colleagues.
9. Review, questions and focus group	<ol style="list-style-type: none"> 1. Week to final questions, review, and reading of additional material from modules 1 to 8. 2. Focus group and final questionnaire. 	

absence of collective work in schools, devaluation, and lack of social recognition, are some of the demotivating reasons experienced by education professionals (Cardoso, 2016; Machado & Figueiredo, 2022). However, despite the negative aspects, the teachers participating in the study of Machado & Figueiredo (2022) cited the feeling of importance and responsibility for children's learning as career motivators. In addition, studies such as Silva et al. (2019) explain that teachers' belief in self-efficacy, that is, their belief in their ability to achieve goals and goals related to the profession, also contributes to personal motivation and achievement, as well as to the well-being of professionals.

When asked about how effective traditional teaching is, from 0 to 5, with 0 meaning not practical and 5 fully effective, 28% (14/50) classified between 0 and 1, 54% (27/50) between 2 and 3, and 18% (9/50) between 4 and 5. More than half of the participants did not classify traditional teaching as effective, highlighting the susceptibility to active learning methodologies, the student-centered strategies that integrate the teaching and learning process of contents, skills, and competencies (Altino Filho et al., 2020). The study by Altino Filho et al. (2020) found that most respondents to their research favor active learning methodologies. However, some difficulties were mentioned in its implementation, such as inadequate infrastructure and knowledge to apply the methodology.

As for the hope of the participants about the future, on a scale of 0 to 5, 0 being no hope and 5 much hope, 8% (4/50) rated between 1 and 2, 16% (8/50) rated their hope as 3, 28% (14/50) as 4 and 48% (24/50) as 5. Regarding the ability to live based on their moral principles, on a scale of 0 to 5, where 0 is null capacity, and 5 is a high capacity, 18% (9/50) of the participants answered between 2 and 3, and 82% (41/50) between 4 and 5. Most participants were classified as hopeful and living based on their moral principles.

When considering the challenges participants expected to face during the course, 38% (19/50) answered that lack of time was the only challenge. Another 22% (11/50) answered that lack of time was associated with a lack of support and/or difficulty applying knowledge and/or understanding the content. A smaller group, representing 6% (3/50), defined lack of support as the only challenge they expected to encounter during the course, and the difficulty in applying knowledge was noted by 10% (5/50) of the enrolled. However, 16% (8/50) answered that they did not expect any of the challenges mentioned. Table 2 shows the different combinations of challenges answered by the participants.

The principle of "most good, least harm" is one of the precepts of Solutionary Humane Education and consists of seeking solutions that avoid unintended negative consequences that can harm one group while benefiting another (Institute for Humane Education, 2020). Participants were introduced to five thought choices and asked to select the most appropriate one. "Most good, least harm" was among the options chosen by 40% of the participants (20/50). Another 54% (27/50) were of alternatives that disregard evil: "All good without thinking of harm," "All good and no harm," and "No harm." In addition, 6% (3/50) did not notice any difference between the alternatives. The result explains that most students correctly associated which thinking is most appropriate, according to the precepts of Humane Education.

Sentience is the "[...] ability to suffer or feel pleasure or happiness" (Singer, 2002), and animals, like humans, are endowed with this ability. The difficulty in interpreting how these beings express pain or suffering, for example, is one of the obstacles to recognizing sentience in animals. Even though there are studies that evaluate the feelings of different species through facial expressions (McLennan et al.,

Table 2 – Participants' expectations regarding the challenges faced during the Course (Curitiba, 2022)

Challenges	n	%
Difficulty in applying the knowledge	5	10
Difficulty in applying the knowledge, Lack of support	2	4
Difficulty in understanding the content	2	4
Lack of support	3	6
Lack of time	19	38
Lack of time, Difficulty in applying the knowledge	2	4
Lack of time, Difficulty in applying the knowledge, Lack of support	1	2
Lack of time, Difficulty in understanding the content	3	6
Lack of time, Difficulty in understanding the content, Difficulty in applying the knowledge	2	4
Lack of time, Difficulty in understanding the content, Difficulty in applying the knowledge, Lack of support	1	2
Lack of time, Lack of support	2	4
None	8	16
Total	50	100

2019), for the general population, this knowledge is not yet widespread. When course participants were asked about the ability to feel (pain, love, anguish, sadness, etc.) of some animals, among them elephants, chickens, dogs, and human children, they should answer if they considered the animal highly sensitive, moderately sensitive, feels little or does not feel. The answers are compiled in Table 3. The human child is considered the most sensitive (90%, 45/50), followed by dogs (76%, 38/50), cats (68%, 34/50) and elephants (58%, 29/50). The fish was selected by 18% (9/50) of the participants as an animal that does not feel, that is, cannot feel pain, anguish, love, etc., followed by the rat, with 16% (8/50) believing that these animals do not feel. These results represent the way society, in general, sees the different animal species. Those closest to the human environment, such as dogs and cats, are seen as sentient most of the time, while the more distant species, fish, or those associated with feelings of repulsion, such as rats, are seen as non-sentient (Randler et al., 2012).

Final questionnaire

Of the 50 participants, only 20% (10/50) completed the course. Of the 80% (40/50) who did not complete the course, 34% (17/50) did not complete Module 1, and 34% (17/50) never opened the course platform. At first, the registrations reached a satisfactory number, possibly due to the form of disclosure of the course, which counted the collaboration of several Secretariats of Education of different municipalities, especially from the state of Paraná. However, after the disclosure of the initial questionnaire, only 22.6% (50/221) answered. One possibility is that the initial questionnaire was not delivered to all registered participants due to the spam mechanism in the email inboxes, making it impossible for many teachers to fill out the questionnaire promptly at the beginning of the course. Some hypotheses can be cited regarding the low adherence of participants who answered the initial questionnaire

and had access to the course. The participants had little experience with this learning in the study of Rabello & Tavares (2019). Low adherence also occurred in the study of Ruy et al. (2022), with the authors noting that there is currently access to numerous activities and online courses, leaving participants overwhelmed with many alternatives.

The Final Questionnaire was answered by 14 of the 50 participants (28%). Of these, 20% (10/50) completed the course, and 8% (4/50) did not. Of the four participants who answered that they did not complete the course, two cited lack of time as the reason for not completing; one indicated lack of support and difficulty in understanding the content; the last answered another reason. Therefore, the reasons reported may provide more hypotheses regarding the non-compliance of the course by the other participants, in addition to those mentioned in the previous paragraph.

Regarding knowledge in Humane Education of the 10 participants who completed the course, on a scale of 0 to 10, with 0 no knowledge and 10 subject domain, 10% (1/10) of the enrolled responded between 3 and 5, 20% (2/10) between 6 and 8, and 70% (7/10) between 9 and 10. Comparing these values with those obtained in the first questionnaire, there was a considerable increase in the participants' knowledge, as a percentage, since in the first questionnaire, only 6% (3/50) of those enrolled considered their knowledge between 9 and 10.

As for motivation when teaching, on a scale of 0 to 5, where 0 means null motivation and 5 means high motivation, 60% (6/10) of the participants evaluated their motivation as 5, 30% (3/10) as 4, and 10% (1/10) as 3. In the initial questionnaire, more people reported greater motivation to teach, 74% (37/50) with a value of 5. This decrease may be related to some of the psychological challenges cited by the Solutionary Guide. One of them is the feeling of overload, which occurs from the moment each individual has challenges and responsibilities in global and local catastrophes, dilemmas happen, and causes a feeling of

Table 3 – Ability to feel of different species, according to participants in the initial questionnaire (Curitiba, 2022)

Animals	Highly sensitive		Moderate sensitive		Slightly sensitive		Not sensitive		Total
	n	%	n	%	n	%	n	%	
Cat	34	68%	11	22%	5	10%	0	0%	50
Human child	45	90%	3	6%	2	4%	0	0%	50
Elephant	29	58%	10	20%	10	20%	1	2%	50
Rabbit	27	54%	11	22%	10	20%	2	4%	50
Dog	38	76%	6	12%	5	10%	1	2%	50
Rat	24	48%	11	22%	7	14%	8	16%	50
Pig	27	54%	12	24%	8	16%	3	6%	50
Boi	26	52%	14	28%	9	18%	1	2%	50
Chicken	24	48%	15	30%	7	14%	4	8%	50
Fish	23	46%	12	24%	6	12%	9	18%	50

helplessness and demotivation (Institute for Humane Education, 2020).

Regarding the areas where knowledge in Humane Education can be applied, Table 4 shows participants' responses. Fifty percent (5/10) of the participants correctly related the seven areas in which Humane Education can be applied (Myself, Family, Colleagues, Animals, Environment, Community, and Work). In the first questionnaire, 42% (21/50) of the participants already identified this holistic relationship, but the remaining 58% (29/50) were divided into several combinations that did not cover all the different areas. For example, 10% (5/50) of participants in the initial questionnaire believed it possible to apply Humane Education only in the work environment. In the final questionnaire, it is possible to visualize that the participants learned that Humane Education is multidisciplinary and involves all spheres of relationship and human interaction.

As for the hope of the participants regarding the future, from 0 to 5, 40% (4/10) defined their hope as 5, that is, very hopeful, and the other 60% (6/10) defined their hope between 2 and 4, meaning low to moderate hope about the future. Comparing these values with those of the initial questionnaire, there is a lower percentage of hopeful participants about the future since, in the first questionnaire, 48% (24/50) were defined as 5 on the hope scale. It is possible to relate this change to the same psychological challenges already mentioned.

About living based on their moral principles, on a scale of 0 to 5, 0 not living based on their moral principles and 5 living entirely based on their moral principles, 70% (7/10) of the participants ranked between 4 and 5, and 30% (3/10) remaining as 3. In the first questionnaire, 82% (41/50) of the participants were classified between 4 and 5. Therefore, one of the hypotheses involved in this percentage decrease is that, during the participation in the learning about Solutionary Humane Education, some have become aware of the various ways that an individual can improve their interaction with the environment and other individuals, that is, their moral principles can have reached a greater number of requirements, diminishing your belief that you live entirely based on them.

The biggest challenge during the course was the lack of time, with 60% (6/10) of participants mentioning this difficulty in their answers. The other 40% (4/10) reported a lack of support, difficulty applying knowledge, difficulty understanding, and lack of interest.

Regarding the most appropriate thinking among the options, "Most good, least harm" was considered by 70% (7/10) of the participants, "All good and no harm" by 20% (2/10) of the participants, and a participant 10% (1/10) did not notice any difference between the thoughts. The option "All good without thinking about harm" was not considered by any subscribers. Comparatively, there was a considerable increase in the understanding of the philosophy "Most good, least harm" since in the first questionnaire, the percentage of correct answers was 40% (20/50), and in the final questionnaire, it was 70% (7/10).

Regarding the ability of participants to make positive change in their means, on a scale of 0 to 5, with 0 no capacity and 5 much capacity, 60% (6/10) answered 4 and 40% (4/10), 5. That is, 100% (10/10) of the participants who answered the final questionnaire considered themselves capable of promoting positive changes in their media. In the first questionnaire, 70% (35/50) of the participants considered themselves similarly. This percentage increase may mean that, through the tools presented and taught by the course, participants felt more confident and able to make positive changes.

Participants were again asked about the ability to feel (pain, love, anguish, sadness, etc.) of the same animals in the Initial Questionnaire. Table 5 shows a significant percentage increase in the ability to feel inferred by the participants to the livestock, such as pig, ox, chicken, and fish, since in the first questionnaire, 60% (30/50) of participants considered them highly sensitive. In addition, there was a percentage increase in all animal species, demonstrating that possibly the course topics related to empathy and compassion increased participants' knowledge about sentience.

Focus group

Of the 50 participants enrolled, 12 were volunteers to participate in the focus group, but only seven attended.

Table 4 – Areas to apply the knowledge on Humane Education (Curitiba, 2022)

Areas to apply the knowledge	n	%
Community, Work	1	10
Family, Environment, Community, Work	1	10
Myself, Colleagues, Community, Work	2	20
Myself, Family, Colleagues, Animals, Environment, Community, Work	5	50
Myself, Environment, Work	1	10
Total	10	100

Table 5 – Ability to feel of different species, according to participants in the final questionnaire (Curitiba, 2022)

Animals	Highly sensitive		Moderate sensitive		Slightly sensitive		Not sensitive		Total
	n	%	n	%	n	%	n	%	
Cat	9	90%	1	10%	0	0%	0	0%	10
Human Child	8	80%	1	10%	0	0%	1	10%	10
Elephant	8	80%	2	20%	0	0%	0	0%	10
Rabbit	8	80%	1	10%	1	10%	0	0%	10
Dog	9	90%	0	0%	1	10%	0	0%	10
Bird	8	80%	1	10%	0	0%	1	10%	10
Rat	7	70%	2	20%	0	0%	1	10%	10
Chicken	8	80%	1	10%	1	10%	1	10%	10
Pig	7	70%	2	20%	1	10%	0	0%	10
Ox	8	80%	1	10%	1	10%	0	0%	10
Fish	7	70%	2	20%	0	0%	1	10%	10

During the focus group, 11 questions were asked to guide the discussion. The meeting was held remotely on the Teams platform and recorded for later transcription and analysis of the responses.

When asked about their understanding of Humane Education, the participants answered that it relates to issues involving animals and the environment, which depends on individual choices. It was also mentioned that humane education implies consideration for others. In addition, one of the responses included an illustrative example shared by one of the participants. This example occurred in her classroom and involved a situation with a gecko and the students. The participant used this episode to demonstrate how her students showed compassion for the animal, although, at the same time, they felt apprehensive in its presence.

During the focus group, the issue related to the ability of participants to promote changes in their social environment promoted reflections about the frustration one of the participants felt when noting that their ability to promote change may not generate large-scale results. This reflection is in line with the psychological challenges mentioned in the discussion of the questionnaires. Another participant agreed, claiming to feel insufficient in helping stray animals.

One of the last questions asked the participants to say a word they believed related to humane education,

and among the answers cited were curiosity, reflection, freedom, awareness, equity, and sharing. It is noted that, in a way, all words can be found within humane education, which demonstrates, along with the other results, that the participants already had some knowledge about what would be addressed within the course.

CONCLUSION

The Solutionary Humane Education Course proved efficient in transmitting knowledge to participants who finished the content. Due to the large number of students who dropped out during the course, it is possible that the comparison between the results of the questionnaires was not accurate. Even so, the evolution of the participants who finished the course about topics such as empathy and compassion is evident. It is also possible that the participants felt more able to act and make changes in challenging situations due to the tools taught by the course.

Conflict of Interest

The authors declare that there was no conflict of interest.

Ethics Statement

The Research Ethics Committee of the Health Sciences Sector of the Federal University of Paraná approved the study.

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