





# Contingency Analysis of Ethics Training in Psychology Programs in Colombia

Análisis contingencial de la formación ética en programas de psicología en Colombia

Análise de contingência da formação ética em programas de psicologia na Colômbia

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## ABSTRACT

**Introduction.** The topic of ethics training in psychology has been constant in Colombia, especially since the Colombian Association of Psychology Faculties was created. However, reports of deficiencies in ethics training and research reviews, centered on identifying the ethical knowledge of students and professional actions in psychology, justify more complex studies. In this framework, relationships between contextual factors, which are necessary to understand the dynamics of psychological education, and factors related to ethically practicing the profession, must be included in the analysis. The objective of the study was, therefore, to demonstrate interdependent relations between the different actors that participate in ethics training, the interlocking of individual reinforcement contingencies and cultural consequences through a contingency analysis of psychology program curricula in Colombia. **Methodology.** A qualitative documentary analysis study with the methodology proposed by Todorov in terms of contingency analyses. **Results.** Interlocking practices were demonstrated in terms of metacontingencies in educational institutions, more focused on professional development than on ethics training. On an inter-institutional level, practices do not demonstrate a metacontingency in the strict sense, which was analyzed in light of the university autonomy and academic freedom policy. Malpractice can be considered a

macrocontingency from the point of view of normalizing practices without an ethical reflection. **Discussion.** Psychological education is understood as a cultural practice that depends on relatively effectively interlocking contingencies, which prepares professionals who can adjust to the needs of society. This posture is coherent with the authors' proposals. **Conclusions.** It is necessary to effectively integrate training in disciplinary skills with ethics, in order to attain a cultural practice in the terms of the analyzed metacontingency.

**Keywords:**

Cultural Characteristics; Applied Behavior Analysis; Ethics, Professional; Universities; Practice, Psychological

**RESUMEN**

**Introducción.** El tema de la formación ética en psicología ha sido una constante en Colombia, especialmente desde la constitución de la Asociación Colombiana de Facultades de Psicología. Sin embargo, los reportes de deficiencias en la formación ética y la revisión de investigaciones, centradas en identificar el conocimiento ético de los estudiantes y el actuar profesional en psicología, justifican un estudio más complejo. En este marco, las relaciones entre los factores contextuales, que son necesarios para comprender las dinámicas en la formación psicológica, y los factores relacionados con el ejercicio ético de la profesión deben incluirse en el análisis. El objetivo del estudio fue, entonces, evidenciar, a través de un análisis contingencial de los planes de estudio de los programas de psicología en Colombia, las relaciones de interdependencia entre los diferentes actores que intervienen en la formación ética, el entrelazamiento de las contingencias de refuerzo individual y las consecuencias culturales. **Metodología.** Estudio cualitativo de análisis documental con la metodología propuesta por Todorov en cuanto al análisis contingencial. **Resultados.** Se muestran prácticas entrelazadas en términos de metacontingencias en las instituciones formativas, más enfocadas al desarrollo profesional que a la formación ética. A nivel interinstitucional, las prácticas no evidencian una metacontingencia en sentido estricto, lo cual se analiza a la luz de la política de autonomía universitaria y de libertad de cátedra. La mala praxis puede considerarse como una macrocontingencia, desde el punto de vista de la normalización de prácticas sin una reflexión ética. **Discusión.** La formación en psicología se comprende como una práctica cultural, en función de contingencias entrelazadas de forma relativamente efectiva, que forma profesionales que se ajustan a las necesidades de la sociedad, postura que es coherente con lo propuesto por otros autores. **Conclusiones.** Es necesaria una integración efectiva del entrenamiento en competencias disciplinares con el de competencias éticas, con el fin de lograr una práctica cultural en los términos metacontingenciales analizados.

**Palabras clave:**

Características Culturales; Análisis Aplicado de la Conducta; Ética Profesional; Universidades; Práctica Psicológica

**RESUMO**

**Introdução.** A questão da formação ética em psicologia tem sido uma constante na Colômbia, especialmente desde a constituição da Associação Colombiana de Faculdades de Psicologia. No entanto, os relatos de deficiências na formação ética e a revisão de pesquisas, voltadas para identificar o conhecimento ético dos alunos e o comportamento profissional em psicologia, justificam um estudo mais complexo. Nesse quadro, as relações entre os fatores contextuais, necessários para compreender a dinâmica da formação psicológica, e os fatores relacionados ao exercício ético da profissão devem ser incluídos na análise. O objetivo do estudo foi, portanto, mostrar, através de uma análise contingencial dos planos de estudo dos programas de psicologia na Colômbia, as relações de interdependência entre os diferentes atores envolvidos na formação ética, o entrelaçamento das contingências de reforço individual e consequências culturais. **Metodologia.** Estudo qualitativo de análise documental com a metodologia proposta por Todorov em termos de análise de contingência. **Resultados.** Práticas entrelaçadas se mostram em termos de meta-contingências nas instituições formadoras, mais voltadas para o desenvolvimento profissional do que para a formação ética. No plano interinstitucional, as práticas não apresentam uma meta-contingência em sentido estrito, o que

é analisado à luz da política de autonomia universitária e liberdade acadêmica. A práxis errada pode ser considerada uma macro-contingência, do ponto de vista da normalização de práticas sem reflexão ética.

**Discussão.** A formação em psicologia é entendida como uma prática cultural, baseada em contingências relativamente efetivamente entrelaçadas, que forma profissionais que se ajustam às necessidades da sociedade, posição condizente com a proposta por outros autores. **Conclusões.** É necessária uma integração efetiva da formação em competências disciplinares com a de competências éticas, a fim de alcançar uma prática cultural nos termos meta-contingenciais analisados.

#### Palavras-chave:

Características Culturais; Análise do Comportamento Aplicada; Ética Profissional; Universidades; Prática Psicológica

## Introduction

The concern over ethics training in psychology has been constant in Colombia, as in other countries of the region, especially since the decade of the 1970s. This training has strengthened in the country after creating the Colombian Association of Psychology Faculties (ASCOFAPSI, for the Spanish original) in 1986 (1,2) and its participation, along with the Ministry of Education (MEN for the Spanish original) (3) in defining quality guidelines for the discipline's programs. This interest has manifested itself in Colombia through creating proposals to promote seeking the well-being of the people and communities involved in the scientific and professional practice, without losing sight of the fact that ethics training is more than teaching deontological codes or moral or philosophical positions. In this sense, professionals have been required to make ethical decisions in light of dilemmas in their practice of psychology, based on strong argumentation that demonstrates their ethical reasoning (4-7). However, studies in Colombia, such as that of González et al. (8) and Ballesteros et al. (9), and studies in other countries (10-13), coincide in reporting deficiencies in ethics training despite the courses to that end in most curricular plans. These deficiencies include an emphasis on theory, disconnection from everyday activities, a lack of strategies to identify ethical dilemmas and critically address them and a lack of integration with the entire educational process.

In this line of interest, and in accordance with constitutional (14) and educational (15) regulations, it is understood that the objective of educational practices in Higher Education Institutions (IES for the Spanish original) is to coordinate the efforts of different actors to attain disciplinary teaching that ensures the very best moral and ethical education for students. In this way, teaching can be understood as a social practice that implies group interactions, the coordination of various actors and an ideal shared consequence (16-18). To

better understand this practice, it is important to understand that IES are specifically defined as cultural institutions or behavioral systems in relation to the contextual factors that affect them (18,19). In this regard, they adopt the perspective of behavioral analysis, which applies its principles on an individual and cultural level and proposes the contingency and metacontingency analysis as a methodology for understanding phenomena of interest in both levels; in this case, professional and ethics training in psychology in Colombia. This perspective also seeks to extend the research that has focused on molecular practices and leaves the critical relationships between various factors of the social and educational context aside.

The term metacontingency was proposed by Glenn (20,21) to describe the third level of selection by consequences: the cultural selection described by Skinner (22). It is important to remember that the first level of selection refers to phylogenetic contingencies and the second level refers to ontogenetic contingencies (functional relations between behavior and contextual factors). In this sense, a metacontingency is a relationship between interlocking recurring behavioral contingencies, an aggregate product and the environmental selection events or cultural consequences. On one hand, interlocking behavioral contingencies imply relationships in which a person's behavior or its consequences act as an environmental variable for the other people's behavior. On the other hand, cultural consequences are contingent upon interlocking behavioral contingencies, which explains their maintenance, even in the absence of direct reinforcement for each individual behavior (23-25). In that regard, it is important to indicate that, even though Ardila-Sánchez et al. (26) clarifies that interlocking contingencies are the unit of analysis, measured by their aggregate product, Zilio (27) questions the usefulness of the term and a different unit of analysis.

Therefore, metacontingency analyses work to study behavioral systems, such as the government, economy, health and education. They also work to understand complex organizational systems and the selection of certain collective behaviors and modify the context according to a particular social purpose (28-33). In that sense, Krispin (34,35) asserts that the theory

of self-organized systems helps better understand the role of metacontingencies in cultural analysis, although they recognize that cultural change processes remain to be identified. The author highlights that this must be done with interdisciplinary work based on principles and concepts of behavior theory and systems theory, which explain the dynamics of self-organization that can arise through metacontingencies.

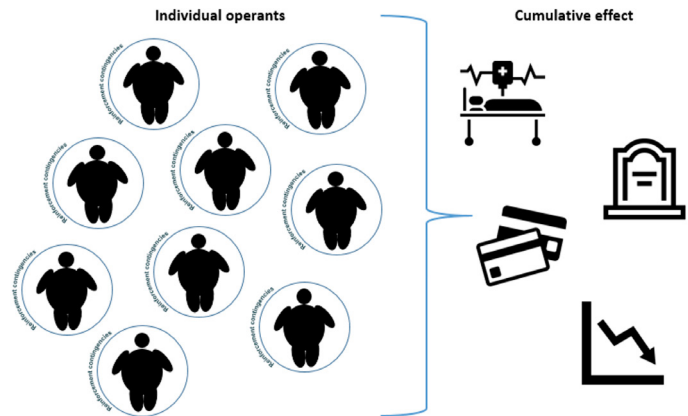
With respect to the aggregate product, it results from collaborative work of group members and does not have to be an object. It can have the double function of reinforcing the behaviour of participants and selecting the interlocking contingencies (33,36-41)

In Colombia, Páramo (42) and Páramo et al. (43) have worked on the concept of metacontingencies in citizen education and a school context, recognizing its value in the theory of urban pedagogy, applied behavior analysis research and environmental psychology.

At IES, according to Malott et al. (18), Robertson et al. (44) and Yáber (19), metacontingencies include the relationships between the interlocking contingencies of professors, students and support staff (in teaching, research and extension) and aggregate products of knowledge, graduates and services. Society is the receiving system that requires the graduates' skills. When graduates do not satisfy society's requirements, the demand of studied programs decreases, since it increases the probability of interlocking contingencies occurring at the IES.

It is worth adding that a fundamental component of a metacontingency is the rules that specify the consequence of an aggregate product for people, a group or organization. The rules can be explicit in a document, such as a bill (33,45), the Institutional Education Project (PEI, for the Spanish original), Program's Educational Project (PEP) and internal decrees and resolutions of each IES.

On the other hand, the term of macrocontingency is also important in this work. It was proposed by Glenn (36,46) to understand a social phenomenon resulting from the cumulative effect of individual behaviors, and can be considered a cultural practice even though it is not sufficient to assume its transmission. A macrocontingency is a relationship between the operating behavior governed by individual contingencies and a socially significant cumulative effect (24,47,48). An example of a macrocontingency is morbid obesity (Figure 1), which, according to Pulido-Castelblanco et al. (49), is the result of a practice by many people under idiographic contingencies, which means each person's dietary behavior is independent from every other's. However, a cultural consequence arises: an increase in the population's morbi-mortality, public health expenses, a reduction in per capita income and less health care coverage.



**Figure 1.** Graphic representation of the components of the macrocontingency.

**Source:** prepared by authors. Icons created by Eucalyp and Freepik at [www.flaticon.com](http://www.flaticon.com)

In light of all the above, the objective of demonstrating interdependent relationships between the different actors involved in teaching ethics, individually reinforced interlocking contingencies and cultural consequences was established. All of this was through a contingency analysis of the curricula of various psychology programs in Colombia. The main reason for this study was that, despite regulations, there are deficiencies in ethics training and the discipline's professional practice that merit defining IES as cultural institutions or behavioral systems that interact with the contextual factors that affect them. In the framework of this analysis, it is important to consider teaching a social practice that can be understood in terms of contingencies and metacontingencies.

### What is known on the topic?

The concern over ethics training in Psychology is reiterative, especially since the decade of the 1970s. In Colombia, studies such as that of González et al (8) and Ballesteros et al. (9) coincide in reporting deficiencies in this aspect despite ethics courses existing in most curricula.

### Methodology

A qualitative study was performed through a documentary analysis, inspired by Todorov's (33) proposal and aimed at functional analysis. This was to identify contingencies, metacontingencies and macrocontingencies in ethics training practices in psychology degree programs. This type of study is called a Contingency Analysis. As mentioned before, it has been effective as a methodology. The inclusion criteria of the psychology programs to be studied was their availability on the universities' websites. The result was 129 curricula of private and public IES in effect as of 2020.



Documents of ASCOFAPSI and Colombian College of Psychologists (COLPSIC for the Spanish original) were also consulted, as well as information updated by the executive director of the Deontological and Bioethical Courts, which will be listed later. In addition, the plans for mandatory and elective ethics courses were consulted, as well as the PEP and PEI, of three private universities and one public one, which are available on the internet.

Based on this information, paragraphs and sections with the following keywords were selected: “Ethics,” “Bioethics,” “Deontology” and “Morality.” The information was organized in an Excel spreadsheet that helped analyze guiding points in the following levels:

1. Institutional: the provisions on behaviors expected from students and teachers, as well as future psychology professionals, in the PEI and PEP.
2. Psychology program: the provisions in graduation profiles and mission and vision of psychology programs. In addition, the content of the curricula of specific courses on ethics, bioethics or deontology, with their respective modality (mandatory or elective), was included.
3. Ethics/bioethics/deontology courses: What is prioritized in the curricula’s statements. The following was taken into account to that end:
  - i) Skills to be trained
  - ii) Thematic content
  - iii) Bibliographical references
  - iv) Identifiable didactic and pedagogical strategies

With information, it was possible to define the interlocking contingencies stated in the reviewed documents to account for:

1. The behaviors of the different actors involved in teaching ethics: teachers, students, teaching, research and extension support staff, graduates and the community outside the university.
2. Interactions between the behaviors of each implied party, identifying the possible antecedents and consequences, as well as possible cultural consequences.
3. Contextual factors related to behaviours and their interactions, with the function of antecedents or consequences in the presented contingencies.
4. Definition of the expected aggregate product in terms of the graduate’s profile and its relationship with the courses, activities and other academic spaces for teaching ethics, bioethics and deontology.

Finally, the theoretical correspondence between the tenets of the applied behavior analysis and social processes and findings was analyzed.

## Results

The results of the contingency analysis are presented, organized into three sections:

### 1) Reinforcement contingencies in the classroom

This first level of analysis was performed based on the theoretical reflection of literature specialized on the teacher-student relationship in the classroom. It indicates that the behavior of students reinforces teaching practices and vice versa, in the measure one person’s behavior can become an antecedent or consequence of another person’s. This interaction occurs in the framework of institutionality with discriminative stimuli, which emphasizes the need to reinforce teaching and student practices. Personal variables come into play here, which include the history of the actors’ learning (teachers and students), their motivation conditions and verbal rules with respect to their role. Three aspects are encompassed in the personal variables of teachers:

- i. Disciplinary education related to the course to be taught and experience in teaching processes at IES. Even though having an education in university teaching is not required, teaching practices being limited and, in some cases, insufficient can be a consequence of this. Moreover, teachers may have different beliefs, values or interests and, in this way, undertake educational processes differently (13).
- ii. Motivation factors, which are influenced by, for example, economic variables, type of contracting, work relationships and financial compensation according to the teaching hierarchy. These elements vary and, on some occasions, said conditions result in teachers working at more than one university to earn the necessary income. In addition to this, the academic and administrative loads of teachers can create stress and even Burnout Syndrome (54-56).
- iii. Understanding the role of teachers. This role, which implies actively searching for new and innovative strategies to facilitate students’ learning and promote comprehensive education, can be understood from the relational framework derived throughout the experience (57).

With respect to the variables of students, a history of behavioral pattern development in the classroom was also included. Motivational factors, such as interest in the class and difficulty or ease understanding the analyzed topics, are added to this. In addition, extracurricular activities, number

of registered subjects, work activities, recreation, family commitments, sentimental commitments and other factors are also covered. All of this can influence commitment, participation and attention level in each subject.

When it comes to institutional factors, they include standards and regulations and statements in both the explicit curriculum (accepted and shared documents) and hidden curriculum (everyday practices, organizational culture). This can be observed in light of three aspects:

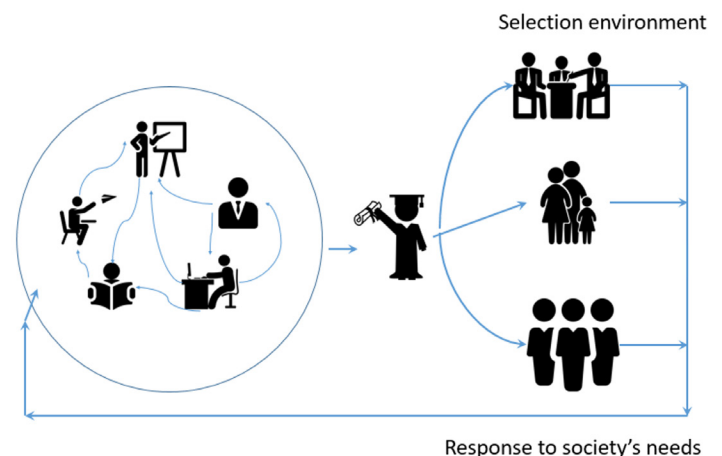
- I. Policies that state the mission, vision, profiles of students and even the institution's pedagogical model. These are a part of the institutional identity and a discourse on the behaviors expected to be developed in classrooms.
- II. Curricula are designed to be able to make the content and didactic pedagogical and evaluation strategies operational. These curricula state rules expected to be executed by teachers and accepted by students.
- III. Institutional dynamics (hidden curriculum): they include unintentional learning caused by factors related to teaching, not to the act of teaching itself. Examples of this are the modeling by teachers, methodologies used in academic spaces, evaluation systems prioritized in the institution, power relationships, forms of communication, social interactions, organizational culture, extracurricular activities, discourses and the institution's management. The hidden curriculum plays a central role in the contingency plans in the measure it promotes learning other than the desired learning in students if not hand-in-hand with the explicit curriculum. Furthermore, this causes a discrepancy between discursive practices and performed actions, which results in training professionals who do not comply with the profile formulated by the institution.

From all the above, on one hand, it is deduced that institutional variables are given feedback by the consequences observed in the interaction between teachers and students and, on the other hand, institutions can modify practices, generate curricular analysis processes, change policies or update pedagogical models. Institutional and personal variables are a dispositional context in the development of a class, where pedagogical and didactic strategies are reinforced (or punished) by students, so they can be maintained or modified based on said contingencies. For example, if the teacher uses an effective teaching strategy, students will be likely to participate actively, attend class, perform activities and even exceed the teacher's expectations. Moreover, the teacher can provide feedback on the student's behavior, both in discourse and in class, such as through evaluation and feedback strategies. In this regard, it is worth indicating that, even though this interaction has a general structure, it is not static, but dynamic. Therefore, each course is a particular

case with its own internal functioning contingencies. In addition, it is important to consider the function of the model the teacher carries out and is relevant in the field of ethics training (9).

## 2) Metacontingencies in professional education in psychology

Based on the contingency analysis of the described variables, interlocking between reinforcement contingencies of the different actors involved in the process was found. Furthermore, the existence of different academic spaces was verified. Their purpose is to educate professionals capable of responding to the needs of people, groups and communities in current society. These relationships are represented in Figure 2. The education process unfolds over a period of time (4 to 5 years) and each academic space has relationships of interdependence that can be understood, such as coherence between various courses, subjects, course curricula and curricula in general. An example of this can be the integrative projects some IES have established, which seek coordination between knowledge and the acquired skills. Moreover, interlocking is the result of the program's strategic planning, aiming to develop specific disciplinary skills in each student for all program graduates to have a similar profile (Figure 2).



**Figure 2.** Metacontingencies in professional psychology education at IES. Graphic representation of the components of the metacontingency.

**Source:** prepared by authors. Icons created by Freepik at [www.flaticon.com](http://www.flaticon.com)

On the other hand, on an intrainstitutional level, it was found that strategic planning adjusts to the indications of Martínez et al. (58), in terms of coordination between different actors of IES to manage a curriculum that guarantees the quality of education, as well as to respond to society's needs.

On the interinstitutional level, analyzing documents published by the COLPSIC, and ASCOFAPSI, among which were the profile and skills of psychologists in Colombia in the context of health (59) and Deontology and Bioethics (60), showed coordinated work aimed at defining the minimum skills every psychologist must have in Colombia to ensure an ethical, high-quality professional service. However, despite this, there is no evidence of metacontingencies.

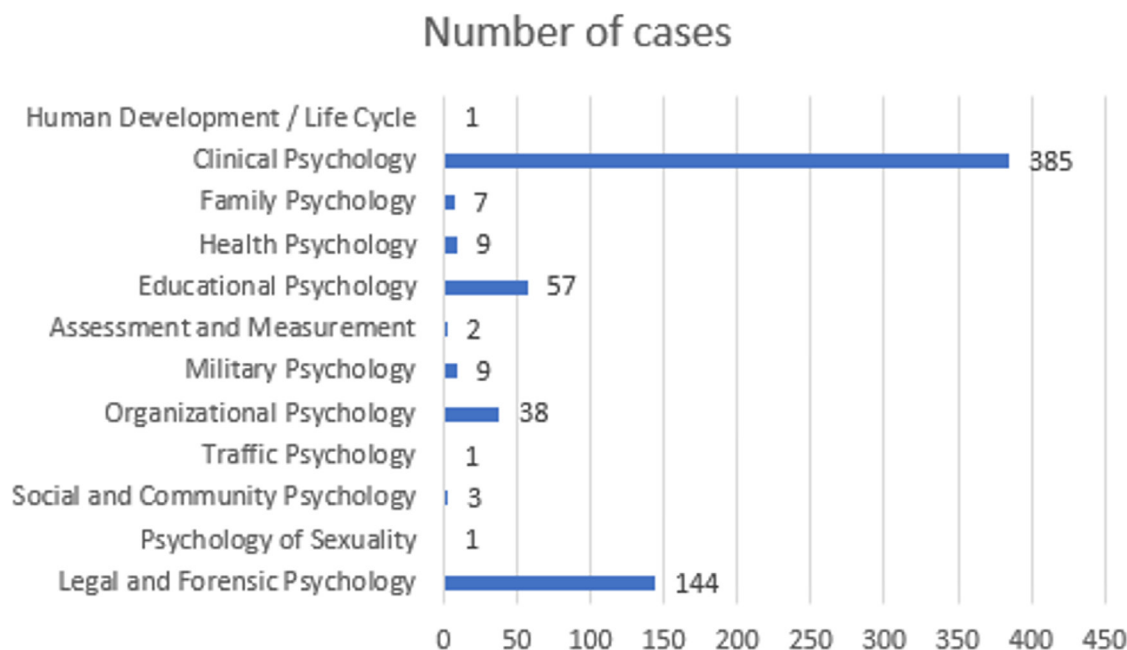
### 3) Ethics training in psychology

Two training options were found in the reviewed programs. On one hand, they resort to the concept of the cross-cutting nature of teaching ethics in all academic spaces, as described by various authors (8,57-65). On the other hand, they opt for ethics courses in the curricula. In this regard, after reviewing 129 programs published on institutional websites, it was found that 88% of them have ethics subjects.

The results of analyzing the institutional documents of a psychology program (PEI, PEP, pedagogical model and 53 curricula) helped demonstrate that, even though they talked about cross-cutting ethics and recorded ethics training objectives, 75% of courses did not have reading or content on the topic and 63% did not include activities that facilitated an ethical analysis of the discussed topics. This could be related to adopting the concept of academic freedom, which allows teachers to choose content and pedagogical methodologies.

When it comes to the modality of ethics courses, whether elective or mandatory, it was found that, of the 113 published curricula with ethics courses, 91% were mandatory. In the framework of autonomy, each IES plans its courses in terms of content and didactic and evaluation strategies. Content related to teaching codes of ethics and deontological codes takes precedence, in addition to presenting classical ethical theories. Likewise, the didactic strategy of master class stands out, in which the teacher makes a presentation and they review the selected text; this also includes analyzing cases of ethical dilemmas. In the programs, these didactic strategies are expected to promote acquiring basic knowledge on regulations and developing skills to recognize ethical dilemmas.

The various documents of most IES and professional institutions verified that ethics training is a pillar, but coordinated work between these institutions is lacking, to be able to speak of a metacontingency in a strict sense. According to the information of the Deontological and Bioethical Courts of Psychology (66), there is a significant number of reported cases of professional malpractice, which could be analyzed in terms of macrocontingencies. This means they could be analyzed as a cumulative effect of individual behaviors that violate one or more ethical principles (Figure 3). Nevertheless, it is important to highlight that the proportion of cases of malpractice is low for a population of 104,888 psychology graduates up to 2018 (67).



**Figure 3.** Number of cases by field of the practice of psychology. Date prepared: 03/17/2022.

**Source:** Database of files with macros, general base of processes and complaint database. Prepared by: Sandra Patricia Herrera Acosta, Attorney Secretary of Complaint Receipt, Deontological and Bioethical Courts of Psychology (personal communication with the Executive Director, March 2022) (66).

## What new contribution does the article provide?

This study facilitates a new approach to ethics training for psychology professionals by applying the contingency analysis methodology, in order to understand teaching as a social practice and educational institutions as behavioral systems. The above, in turn, helps demonstrate the usefulness of contingency analyses as research methodologies, which allow addressing cultural phenomena.

## Discussion

Contingency analysis as a methodology, based on a documentary study, allowed identifying the interdependent relationships between the different actors involved in teaching ethics, the interlocking contingencies and consequences on a cultural level, meeting the proposed objective. According to the study by Robertson et al. (44), psychological education is understood as a cultural practice based on interlocking contingencies, in a relatively effective way, to educate a professional that adjusts to society's needs. However, in some cases, developing technical and disciplinary skills is more heavily emphasized than learning ethical skills. Fisher (68) refers to this as a model of neoliberal logic, since education becomes a free market object and each institution creates a particular product according to their graduate profile, for it to have its differentiating "brand." This can be studied in light of the policy of university autonomy and academic freedom, which overlooks or neglects ethics training. This leads to malpractice due to a lack of ethics. This problem deserves to be analyzed not only as a function of deficiencies in ethical education, but as a function of sociopolitical factors in a society characterized by high indices of corruption and the normalization of practices without ethical reflection (2).

In this sense, even though the proportion of cases of malpractice is low and the concept of macrocontingencies, as used by experts, (20,29,43-44) does not apply, it is necessary to make ethics training practices interlocking on an interinstitutional level, which means making them a metacontingency. Agreements between COLPSIC and ASCOFAPSI and the psychological ethics projects could facilitate interlocking contingencies between educational institutions and between the institutions and professionals, in order to coordinate effective pedagogical strategies that integrate ethical reflection into the development of professional skills, as described later.

The low proportion of cases of malpractice can also be interpreted as a result of ignorance of the existence of

Deontological and Bioethical Courts of Psychology and the procedures to make a complaint, despite the pedagogical work performed by the Courts themselves (60).

On the other hand, when it comes to reinforcement contingencies in the classroom, since no direct observations were made, results must be interpreted with caution. However, they reflect the characteristics of personal, institutional and contextual variables that function within contingencies and metacontingencies. Coherence between curricula and teaching practices is key for maintaining positive reinforcement contingencies in the classroom (18,19).

When considering metacontingencies in psychological education, as mentioned at the beginning of this section, they are evident in the coherence between the various courses, subjects, course curricula, curricula in general and the program's strategic planning. The result in terms of aggregate product (26) are graduates with a similar profile in each institution.

Regarding ethics training, results show that most programs have courses that have prioritized teaching codes of ethics or deontological codes, and through master classes, which coincides with educational deficiencies in the reviewed studies (8-13,61). In addition, ethics training in programs that also include analyzing ethical dilemma cases and situations would be better if it promoted critical reflection on regulations from a cultural and historically positioned point of view. Moreover, this type of training would improve by facilitating a contextual understanding of the meaning of regulations in light of ethical principles and particular situations, as proposed by Ferrero (69), Montes (70) and Ballesteros-de Valderrama et al. (9). Gracia (71) and Hottois (16) also mention the importance of deliberative processes in ethics training. Additionally, the results on the cross-cutting nature of ethics training show deficiencies that can be discussed based on Díaz-Barriga et al. (61). The cross-cutting ethics model has potential when the ethical content is worked on systematically in each pedagogical situation and context and is accompanied by monitoring the curriculum and practices that comprise the hidden curriculum.

Lastly, it must be added that one limitation of the performed contingency analysis was having based it exclusively on documentary reviews. Future studies must include direct observations and other methodologies to specify metacontingencies and macrocontingencies in the field of ethics training at IES.



## Conclusions

The need to strengthen ethics training in psychology degree programs, seeking to integrate ethical skills into technical and professional degrees, has been observed based on the performed contingency analysis. An effective integration of training disciplinary skills and ethical skills would lead to a cultural practice in the terms of the analyzed metacontingency, whose aggregate product is a graduate recognized by their ethical and reflective professional actions. As suggested in the section above, this implies a professional who is capable of identifying the ethical dimension in their everyday practice, with a critical reflection of regulations and their contextual analysis.

Metacontingencies must be established on an interinstitutional level, regardless of the different institutions' particularities. This is in order for professionals to recognize the need for coordinated work with the community of psychologists in favor of positioning psychology as a socially committed science. Along that line, maintaining and enhancing joint work efforts by professional and academic unions COLPSIC and ASCOFAPSI is required, without affecting university autonomy.

Finally, even though this study was limited to the academic programs of psychology degrees, it can be concluded that the results and recommendations derived from them can apply to ethics training in the programs of other disciplines in social and health care fields.

## Conflicts of interest

The authors declare that there is no conflict of interest.

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