

## Adaptations of the pilot of the *Unplugged#tamojunto* program for health promotion and drug prevention in Brazilian schools

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**Abstract** *The prevention of the use of alcohol and other drugs in Brazil is markedly discontinuous with a predominant model not based on evidence. In 2013, the General Coordination Office of Mental Health, alcohol and other drugs (Ministry of Health) implemented the European school program Unplugged#Tamojunto in the municipalities of São Paulo (SP), São Bernardo do Campo (SP) and Florianópolis (SC), involving 2,161 public school students. The research aimed to elaborate recommendations to adapt the program to the Brazilian context. The qualitative study is based on the Constructivist Grounded Theory and analyzed the institutional documents: “Cartographic Diaries”, “Logical Spreadsheet of Cultural Adaptation” and a research report titled “Results of the Implementation of the Unplugged Pilot Program in São Paulo and Santa Catarina” (UFSC and UNIFESP). The theoretical formulations were organized from the Theory of Dissemination of Innovations and revealed that the following is required: a paradigmatic change in the professional approach to drugs, greater adherence to interactive methodologies, adaptation of class time, commitment to school management, promotion of intersectoriality between health and education, consolidation of the monitoring process and ethical alignment with the principles of health promotion.*

**Key words** *Health promotion, Primary prevention, School health, Government programs*

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## Introduction

Health promotion is established as a policy in Brazil<sup>1</sup> and assumes the need to take health problems and their determinants as an object, calling for an expanded, intersectoral action not focused on the health-disease binomial and under a purely clinical perspective. Health promotion has both approached and distanced itself from the preventive approaches over the last few years, precisely because they focus, in some aspects, a view exclusively geared to individual aspects<sup>2</sup>.

The prevention of the use of alcohol and other drugs is implemented in the field of prevention of illnesses and diseases. Far from being a social policy, organized by principles and guidelines agreed among the spheres of government, something more diffuse and less articulated is found in Brazil between projects and programs that are defined as preventive but whose effect has not been verified<sup>3</sup>. The so-called preventive initiatives are marked by discontinuity and predominance of the “crackdown-on-drugs” model, whose effectiveness has already been questioned, which disregards fundamental realms in the establishment of this issue, especially the founding values that underpin the health promotion perspective, namely, the recognition of the subjectivity of individuals and groups, solidarity, happiness, ethics, respect for diversity, humanization, co-responsibility, justice and social inclusion<sup>1,4-6</sup>.

The development of evidence-based prevention strategies has been considered in policy improvement, influencing the choice of “good techniques” for the adequate use of public funds<sup>7-11</sup>. Prevention and promotion tap on evidence-based science models, but science and its intended objectivity alone is insufficient to capture and respond to the human spirit complexities<sup>12,13</sup>. Evidence brings ethical aspects relevant to the manager’s decision-making about the methods chosen to address certain social issues, but it must transcend the centrality of drug indicators in the appreciation of a technique. It is also necessary to cover the mapping of social and cultural meanings of individual and group behaviors that, if not understood, may interfere with the sustainability of policies – so that a good technique becomes a good practice<sup>14</sup>.

In the field of public policy, a study on the effectiveness of prevention has shown that for every dollar invested in prevention, around 4-5 dollars is saved in addressing drug use-related problems<sup>15</sup>. These strategies do not include coercive interventions, which are usually carried

out through lectures on harmful effects or in testimonials of former users since these do not have measurable outcomes<sup>8,11,16,17</sup>. Drug use must be understood from the perspective of social determinants, such as the interaction between factors that protect and endanger the health of the subject, who lives and interacts in an environment and community with beliefs and values, and these factors can increase the vulnerability conditions<sup>6,18-20</sup>. The study of this chain of mediations between risk and protection factors also reveals the most sensitive points where such interventions can have a greater impact, including, for example, on genders<sup>21-23</sup>.

Studies point that adolescents who consume alcohol before the age of 12, in comparison to those who do not, are more likely to consume alcohol in the *binge drinking* pattern (consumption of five doses or more on a single occasion), to have high consumption patterns (intake higher than 19 days per month) and to make use of illicit drugs<sup>24</sup>. Data from the 2012 National School Health Survey show a prevalence of 50.3% for alcoholic experimentation and 26.1% for consumption in the last 30 days among ninth-graders of public and private schools, which reinforces the indication that preventive actions should be, therefore, implemented before the first intake<sup>25</sup>.

In a recent study, Szalavitz<sup>26</sup> points to the myth of the “addictive personality” and indicates that there are universal character traits that are common to all people with or without problematic use. The research also argues that traits themselves are not more or less protective, and so it is not about eliminating certain traits to the detriment of others; instead, it is in the extremes of personality and temper, some of which are associated with talents, and not shortfalls, that risk is elevated. In the same direction, Sloboda et al.<sup>27</sup> indicates that genetic, neurobiological and behavioral predisposition factors are insufficient to explain the problematic drug use since the factor that activates predisposition will always be interaction with the environment.

The field of prevention must overcome the curative rationale of a vertical model of conceiving public health and integrate the perspective of collective health that broadens the perception about the risk concept, and understand that illnesses and diseases share the mediators of collective vulnerabilities, which, therefore, cover the ecological and adaptive aspect of health in the community<sup>28</sup>.

Schools stand out for their role of sharing and debating the social norms and, therefore, are

exclusive contexts to health promotion, and these actions must take place in a climate of solidarity relationships between people and groups and must extend to other sectors, such as the perspective of intersectoriality, facilitating a community intervention that strengthens social cohesion, a protective factor<sup>29,30</sup>.

Evidence shows that the promotion of life skills has been confirming its preventive effects. The development of emotional management, creativity, critical thinking, problem-solving and decision-making skills are particularly important<sup>9,10,31</sup>. However, the protective factors are multifaceted and, thus, should not be confused with ideal behavioral models – an attempt should be made to identify personality traits that could make the subject more or less prone to becoming a problematic drug user.

Faced with the challenges of responding to drug use in Brazil, the General Coordination Office of Mental Health, Alcohol and Other Drugs of the Ministry of Health, in partnership with the United Nations Office on Drugs and Crime (UNODC) have been investing since 2013 in the adaptation, implementation and evaluation of drug prevention programs among Brazilian students.

Part of this process is the implementation of the *Unplugged* program, which recorded preventive effect results in seven European countries and has been adapted in several countries in Africa and Asia<sup>20-22,32,33</sup>. The continuous evaluation of programs is a guideline of the Brazilian initiative and the *Unplugged* program is being evaluated in its different stages of implementation, regarding cultural adaptation, process evaluation, efficacy and effectiveness needs, by the Federal University of São Paulo (UNIFESP) and the Federal University of Santa Catarina (UFSC)<sup>34</sup>.

The *Unplugged* program, renamed *#Tamojunto* in Brazil in 2014, is organized in 12 classes conducted by primary school teachers with students aged 11-14 years in 2013, and 13-14 years in 2014. Besides the twelve classes, three Workshops for Parents and Community must be carried out, in the Brazilian version, by PHC Health and Education professionals<sup>35</sup>. Its theoretical line is based on the Comprehensive Social Influence Model<sup>34</sup>, which is defined by the following tripod: (1) promotion of life skills; (2) drug information; and (3) critical thinking regarding normative beliefs. Each class lasts 60 minutes.

Literature includes different cultural adaptation models, but these coincide because they contain steps that guide an investigation using quantitative (effects) and qualitative (descrip-

tive-analytical) methods to identify the adaptation needs<sup>36,37</sup>. Falicov<sup>38</sup> understands cultural adaptation as an intermediary path between two extremes: on the one hand, the understanding that the evidence has a universal character that can be replicated to any group and, on the other, the understanding that evidence found in a cultural subgroup cannot be adapted.

This study analyzed aspects of the stages of adoption and pilot implementation of the mentioned Program for the construction of recommendations to adapt the implementation to the Brazilian context, with the identification of procedures that are pertinent and appropriate to the culture of the target audience, contributing with the future stages of dissemination. Thus, we understand that the construction of inductive and deductive hypotheses based on evidence of implementation of the *Unplugged* program favor the construction of public policies in the field of prevention and health promotion, in the identification of factors that can operate in a determining the sustainability of the initiative<sup>38,39</sup>.

### Experience evidence-based theory

This qualitative study was based on the Constructivist Grounded Theory<sup>40,41</sup>, which consists of developing theories from data-based research rather than interpreting analyzable hypotheses from existing theories, with the construction of explanations of the processes.

The methodological steps foreseen in the model were followed, namely: sampling geared to the construction of the theory and not population representation; construction of codes and analytical categories from the data and not from preconceived hypotheses; constant use of the method to compare data between the same subject and between different subjects; drafting memoranda for the elaboration of categories; formulations of relationships that lead to the construction of theories at each stage of the analysis; and the bibliographic review after the development of an independent review.

The pilot of the *Unplugged* program (2013) was carried out in eight public schools distributed in the cities of São Paulo (SP), São Bernardo do Campo (SP) and Florianópolis (SC), covering a total of 2,161 primary school students. Concerning the pilot implementation, a training, monitoring and evaluation system was organized and provided for an essential articulator, called multiplier, who accumulated the tasks of training teachers, following the locus of this implemen-

tation in the format of individual meetings, and systematically completing an instrument of qualitative-descriptive character, called Cartographic Diaries.

These Diaries were set as the initial sampling<sup>41</sup> of this study. They were completed by six multipliers who, in turn, were selected and trained by the international developers of the program, generating, in total, 144 Cartographic Diaries on the implementation of the *Unplugged* program, which contained information about the process that revealed the opinions, feelings, intentions and actions of the multipliers, influencing the decision makers about the need to adapt the content and the implementation structure of the program to the Brazilian context.

While the multipliers physically followed-up the stages of implementing the program in each territory, supervisors linked to the Ministry of Health were responsible for political-institutional management. The supervisors produced management synthesis documents that demarcated decision-making about program adequacy, scope and challenges. At the same time, UNIFESP and UFSC carried out studies based on mixed methods on the effects and acceptability of the program.

Considering that the Constructivist Grounded Theory does not derive from pre-established hypotheses or specially demarcated objectives but from a complex area of investigation or an open and generative questioning, the identification of the analysis data occurs concurrently with the intermediate theoretical formulations. Thus, as a theoretical sample<sup>41</sup>, two instruments derived from these formulations were incorporated: the “Logical Matrix of cultural adaptation”, developed by the supervisors of the program and the Research report entitled “Results of the Evaluation of the Implementation of the Pilot Unplugged Program in São Paulo and Santa Catarina” (UFSC and UNIFESP).

The bibliographical review stage led to the incorporation of Rogers’ Diffusion of Innovations Theory<sup>42</sup> in the presentation of the recommendations, aiming to contribute to aspects of program adequacy.

Following the analysis stages of the Constructivist Grounded Theory<sup>41</sup>, the following theoretical classifications were reached: “The need for a paradigm shift in the practice of health and education professionals”; “The ‘enthusiasm’ and ‘discouragement’ in the implementation of the project”; “The ‘operational points’ as the most significant challenge in adapting to the context”.

The preparation of the theoretical classifications followed the methodological recommendation of the construction of diagrams (Figure 1).

### Categories of analysis and construction of arguments

#### The need for a paradigm shift in the practice of health and education professionals

The multipliers described that in order to have an understanding of the program and to obtain adequate management of the proposed techniques, it was necessary to invest in the expansion of the theoretical-conceptual field with the teachers. This investment dialogued with previous knowledge about prevention that was closer to informative and coercive actions and was perceived as a “venture”. In some contexts, the teacher himself experienced this with the students, who expressed initial resistance, for example, to question the teacher whether he saw them as “junkies” or stated that “they already knew everything about drugs”.

Shifting from the transmission of information to the mediation of interactions was a challenge. The multiplier encouraged the teacher to experiment with the technique, while bringing the “why” and “what” to the perceived strategy as “something new”. Difficulties in dealing with the proposal and with indiscipline led teachers to make adaptation decisions that were somewhat related to the transmission of information and the collection of content learning.

The original program provides for 60-minute classes, but in the Brazilian context, they ranged between 40 and 50 minutes. This required flexibility in the planning and execution of activities: besides having to deal with a shorter time than necessary, the teacher did not perceive himself as having the skills to produce more interactive modes. The most significant difficulties reported by the teacher were: organizing the room in a wheel, which was often not possible by the very structure of the place; encouraging small group discussions and then holding them in larger groups; the dynamics of warm-up and division of groups, called “energizers”, in which the students could “get too energized”.

There were similar challenges reported by health professionals in holding the Community-Parents Workshop. As the original programming format of the workshop was not followed in any context, the multiplier was induced by the planning of the meetings in an intersectoral way (health and education). There was an initial

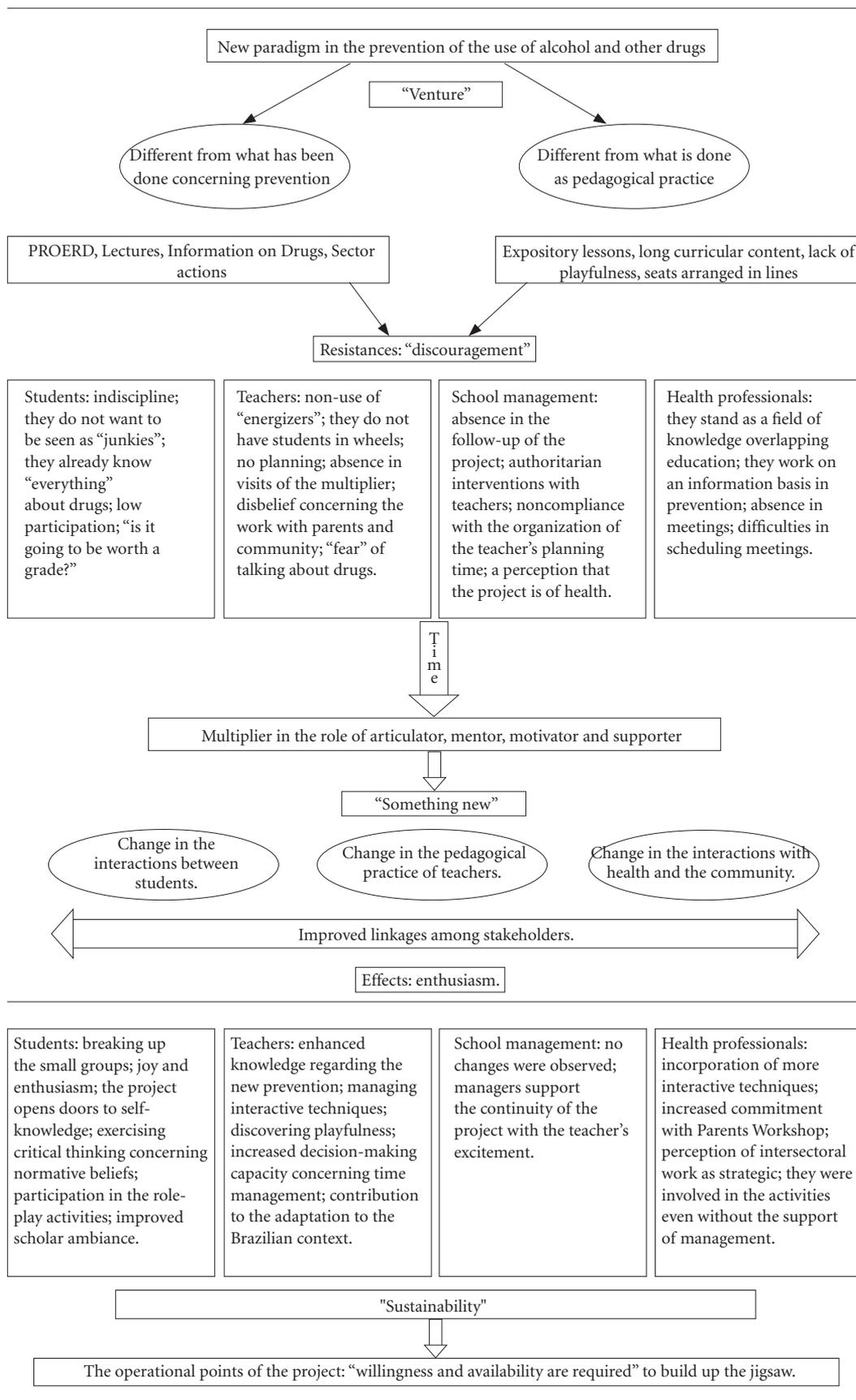


Figure 1. Comprehensive diagrams.

overlap of the health sector over that of education, both in planning and conducting the workshop, and a tendency for informational choice. Invitations to parents and the community for their participation in the workshop followed the invitation sent by the student, customary in the organization. The low adherence in the workshops was understood by the multiplier as low participation in the institution/school. One student even commented that her mother did not attend because she is not a “junkie”. One teacher exemplified reporting that the parenting meeting at the school where she teaches currently looks like a “wake”.

#### **The “excitement” and “discouragement” in the implementation of the project**

The multipliers worked to promote the intersectoral relationship between health and education. The intersectorality was a factor of “discouragement” for the professionals when there was no support from school managers and health equipment to accomplish joint actions. Embarrassment was reported by health professionals who, at the time of dedication to intersectoral activities, would be “absent from work”.

In most contexts, a distancing between the school manager and the teacher of the program was noted, which translated as a “discouragement”, and in this context, the figure of the multiplier became essential. However, this detachment was described as part of a cumulative school routine of tasks, organized in a schedule with a deadline and that is very hectic in the second semester, which is when the project occurred. More taxing practices concerning the arrival of the program were described, and this was a factor of discouragement for the teachers who felt “obliged” to perform.

The harm in curricular compliance of the regular subjects caused by the entry of the project was aggravated by the absence of management. No discouragement was noted in the contexts where the management was willing to review institutional arrangements. On the other hand, “discouragement” emerged when the teacher had to decide alone, which was revealed as “I just did not give up because I had already committed to it”. This commitment was reported as “professional to professional”, and this bond with trust between the teacher and the multiplier was required to enable the teacher to express implementation difficulties - strained by the teacher’s

perception that his/her skills were being evaluated, and not the project itself.

The teacher reported that labor relationships and links in institutions, aggravated by the high vulnerability to violence to which they were submitted, were a factor of “discouragement”. The drug issue produced fear in the teachers, especially in schools that are traversed by the trafficking route.

One factor of “excitement” was change in classroom relationships, characterized by the discovery of “playfulness”. The following effects of the program are described: improved teacher-student relationship; improved student-student relationship (breaking with “small groups”); recouping uninterested students; enhanced teacher practice; “the project opens doors to self-knowledge”; better discipline; exercise of critical thinking by students; and experience of pleasure, emotion and joy in the classroom, especially in the interactions among the students and in the role play, students’ preferred activity.

#### **“Operational points” as a major challenge in adapting to the context**

Operational points proved to be the greatest challenge in organizing the work process. In a partnership between the multiplier and the school professionals for the organization of the implementation agenda, follow-up visits were planned at a minimum frequency of every fortnight. In some contexts, the pedagogical coordinator of the school took on the task of organizing the agendas but was destabilized by the school’s demands. Calendars were reviewed by the multiplier permanently, and this task took the most time spent at a distance. Routine changes were initially mobilized by e-mail, but since this mechanism was not effective for communication, they were complemented by telephone contacts or, ultimately, unscheduled face-to-face visits such as “building a jigsaw”. The multiplier was perceived as essential in this phase, which generated concerns regarding the sustainability of the project.

There was a consonance among schools regarding what should be adjusted regarding the language and content of the program, including between participating cities, and the enthusiasm of teachers to collaborate with the proposals. These adaptations have proved to be feasible to multipliers.

### **From prevention to health promotion: recommendations on the adequacy of the *Unplugged* program and its challenges in the context of social inequalities**

The *Unplugged* program is based on the interaction of three theories<sup>39</sup>: Albert Bandura's "Social Learning Theory", Irwin M. Rosenstock's "Health Belief Model" and Martin Fishbein and Icek Ajzen's "Reasoned Action – Attitude". The theories start from the understanding that the personality is shaped from the interaction between the environment, behaviors and psychological processes and takes place from the observation and modeling of behaviors, attitudes and emotional reactions of others by imitative learning; the perceptions of health risks are directly affected by social, environmental and psychological variables, all of which are determinants in the development of behaviors of greater or lesser health risk; and subjective beliefs are determined by the intention to share behaviors of those who are part of subjects' contexts, including media references.

There is no international evidence of the challenges in the program's adequacy, considering that the existing studies indicated results regarding the impact on drug use and not on the implantation process and its stages<sup>33</sup>. In Brazil, the process evaluation evidenced results that dialogue with this study and will be detailed below<sup>34</sup>.

We can reaffirm that proper techniques require a mapping of incompatibilities between technique and context to become good practices. Environments, subjective beliefs and social norms act on the subjects' intentions, bringing them closer to or distancing them from practices of risk to their health and the health of the communities.

The mapped incompatibilities will directly interfere in the dissemination of innovations and their stages. The stages of dissemination of innovations<sup>42</sup> are understood as steps that traverse adoption, implementation, dissemination and sustainability. The Diffusion of Innovations Theory indicates that the careful understanding of how the implementers of the intervention update, modify and criticize the actions planned are strategic information for the adequacy of the intervention and organizes four central elements for analysis, namely: innovation itself; the media; the time required to learn about the new technology; and the social system in which innovation is embedded.

The "innovation itself" is an element characterized by the perception of the implementers

regarding the aspects of the new action being or not a better proposal than those previously used, both from an economic and subjective perspective. It thus becomes necessary to understand aspects of compatibility and incompatibility (complexity) with realities, and how the norms and principles of culture influence the perception of action innovation. The "media" is an element that identifies how participants create and share information in order to reach a mutual understanding, considering that most individuals perceive an innovation not based on scientific research but through subjective evaluations of peers that adopted the innovation. "Time" is the element that values the figure of the "innovator" as an agent of maintenance and dissemination of the strategy, even dealing with the degrees of uncertainty of the new action. The "Social system" is a limit within which an innovation is disseminated and, therefore, the patterns of community interaction must be understood in order to incorporate new practices.

The following theoretical formulations of the recommendations on the suitability for the Brazilian context of the *Unplugged#Tamojuntó* program, organized in the stages of Rogers' Diffusion of Innovations Theory<sup>42</sup>, emerged from the analyses described above:

➤ *Innovation itself*: data analysis reveals some aspects concerning the perception of action are innovative and can be improved. Regarding these aspects, it is recommended to include a moment of institutional presentation of the project to the school community (teachers, students, parents and others), focusing on the elements of innovation of the project; to adapt previous steps of adherence of the different levels (State, Municipal and Local) to the implementation of the program; to establish classroom monitoring of the implementing teacher, focusing on elements of improvement of the implementation, coordinating the theoretical aspects that underpin the program; to create sustainable local schemes to maintain the multiplier's function; and to incorporate the program into a curricular and non-extracurricular rationale.

➤ *The media*: weaknesses were found in the communication between the various stakeholders of the implementation, including the community, and a low exchange of experiences among implementers and with the school and health facilities managers. The following is proposed as an adaptation to improve these channels: to include moments of exchange among teachers about the implementation experience in the implementation

structure; to tailor the invitation to the Parent and Community Workshops with a view to community mobilization; to broaden the relationship with the management of the Municipal and State Health and Education Secretariats to raise the levels of prevention and health promotion to local public policies; and to include local managers at strategic project decision-making levels, fostering participatory and shared management.

➤ *Time*: the time of learning the innovation by the different stakeholders of the implementation influenced the overcoming of the action's challenges. The recognition of the innovation by the managers proved to be an influential element in the learning time of teachers and health professionals because it enabled (or not) that the follow-up meetings could be realized. The multiplier proved to be a strategic stakeholder for the "innovative" training, influencing the compliance with the planned agendas for action. Considering the need to increase learning and the network of innovators, we recommend that the initial classroom training should involve a representative of school management and full participation of the implementers (health and education); to include in the initial classroom training a start-up moment in the construction of a schedule of activities foreseen in the project; to prioritize actions for the planning and follow-up of the implementation collectively rather than individually; to establish instruments that monitor indicators of the implementation process; and to understand teachers' recommendations of adapting the material as permanent production of innovative knowledge.

➤ *The Social System*: From conceptions based on moral aspects to those related to participatory pedagogies, the paradigms of action in the field of drugs have influenced the challenges of implementation and commitment to fidelity. The relationships between the fields of health and education in the perspective of intersectoriality have proved to be essential aspects for the realization of community involvement. With their rules and ways of operating (health and education), organizations have realized a need to relax institutional standards for the implementation of innovation and others in which innovation must adapt to non-changeable standards. Considering the aspects of the social system in the sustainability of the innovation, the following is suggested as a recommendation of adequacy: mapping, with the stakeholders, the background of prevention in the territory, as well as the intersectoral background (health and education);

expanding project implementation throughout the year to reduce damage to curriculum content; adjusting class duration; and considering differentiated follow-up patterns for teachers in classes with a history of violence.

The process evaluation of the implementation of the program in Brazil<sup>34</sup> brings elements that facilitate the complementation of the theoretical formulations described above. Among them, we highlight the recommendations that indicate the need to adapt classroom time, strategic planning among the sectors involved and the expanded support from school management.

Among the elements clarified in this study is the difficulty of health and education professionals, as well as management, in implementing this prevention based on interactive principles and dialogue, and that leads to the production of new social inclusion conditions. In the case of *Unplugged*, this difficulty occurred within the context of a school curriculum and the pedagogical agenda focused on disciplinary activities geared to content transmission, with little flexibility of time and new institutional organizations. School management was far from the demands of the teachers' group and the relationship between school and community was weakened.

Teachers are afraid to talk about drugs and the intersectoral action between health and education has not proved to be a practice of the sectors. Prevention is still perceived by health as an act of providing correct information and there is a lack of knowledge about the theoretical-conceptual and practical frameworks of the evidence in prevention.

Freitas<sup>43</sup> works with the concept of institutional bad faith in education, understood as a standard of institutional performance that articulates from the state to the micro-powers and daily relationships, where class hierarchies define the symbolic resources provided by institutions. In a context of social inequalities, some institutions do not take these vulnerabilities into account in their ways of organizing themselves and end up ultimately denying the very students-subjects. Working conditions make the institution itself a space for the escalation of symbolic violence. This perspective puts us before a considerable challenge in the paradigm shift of health promotion, which is to perform "good practices" in institutions that, in their vulnerability itineraries, have led to a denial of dialogue, playfulness and the pleasure of autonomy. There is universal access to school but no universal access to education, and this is done through inequality-re-

producing mechanisms, in which institutions are not organized vis-à-vis the most vulnerable and reproduce their invisibilities<sup>41</sup>.

The experience of this other path, not of “crackdown-on-war” but of social cohesion, can be liberating. Working with health promotion, in which professionals have a mediating role with students, one breaks with prescriptive, informative and authoritarian practices and learns to act by capturing passions, fears and joys<sup>12</sup>. What is at stake in health promotion is not only content adequacy but an adequacy of ways of being and interacting: an invitation to the mediation of emotions<sup>12</sup>. There were times in this project where the multiplier held the role of mediator with the

professionals and the teacher held the role of mediator with the students. The *Unplugged #Tamojuntó* was capable of producing experiences of reevaluation of teachers and health professionals in their social role. This prevention based on the ethics of health promotion is a path that helps to disrupt the reproduction of invisibility mechanisms from generation to generation. A timely, moral, prohibitionist prevention reproduces inequalities and is far from the principles of health promotion. Interactive prevention focused on the development of life skills, critical reflection on social beliefs and norms, produces an emotion, a mark of liberation. That is why the teacher did not give up on the project.

### Collaborations

RT Pedroso worked in all stages of the paper’s elaboration; EM Hamann worked on design, critical review and approval of the version to be published.

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