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Why and how PROERD instructors adapt the program during its delivery: an implementation research

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ABSTRACT

Background: The Drug and Violence Resistance Educational Program (*Programa Educacional de Resistência às Drogas e à Violência* – PROERD) is the most widely implemented prevention program in Brazil and this study evaluated the reasons and ways in which PROERD instructors change the program, affecting its implementation fidelity.

Methods: This qualitative method study used three data sources: semi-structured interviews with 19 police officers (PROERD instructors), fidelity forms completed by the instructors, and the researcher's observations of 30 lessons, followed by thematic analysis.

Results: Strong evidence shows that instructors adapt the program, in general, because they experienced that some activities do not work when implemented as they were created by the developers. The main reasons to adapt the program were categorized into two groups: intrinsic and extrinsic reasons. The cultural reality and school performance of students and the support and infrastructure of the school were the extrinsic reasons, and instructors' performance was the intrinsic reason.

Conclusion: In order to make PROERD feasible for students and schools, instructors change the program in an unstructured way, often not following the curriculum. Therefore, PROERD will hardly have a positive effect for Brazilian students.

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Introduction

Considering the growing burden of drug use among adolescents (Whiteford et al., 2013), evidence-based prevention programs have been implemented worldwide (UNODC – United Nations Office on Drugs and Crime & WHO – World Health Organization, 2018). Keepin' it REAL (kiR) is an example of a school-based prevention program based on scientific evidence aimed at promoting the development of life skills, resistance skills (refusing, explaining, avoiding, and leaving), and decision-making (Gosin et al., 2003; Hecht et al., 2003). Over the last two decades, the kiR developers have culturally adapted and produced different versions of the program, according to the country (e.g. Mexico [Kulis et al., 2021], Guatemala [Kulis et al., 2019], and Spain [Cutrín et al., 2021]), area (urban or rural) (Hecht et al., 2018), or culture (e.g. Mexican/Mexican American, multicultural, Black, or white) (Elek et al., 2010; Marsiglia et al., 2011; Hecht et al., 2003) where it is delivered.

In 2009, the Los Angeles Police Department, United States, as part of the Drug Abuse Resistance Education (DARE), adopted the kiR prevention program and adapted it to be implemented by police officers in American schools,

renaming the program as Drug Abuse Resistance Education Keepin' it REAL (DARE-kiR). The Military Police of all Brazilian states, within the Drug Resistance Educational Program (PROERD), in partnership with DARE America, translated the DARE-kiR curriculum and has been implementing it in Brazilian schools since 2014, under the name *Caindo na Real*. This curriculum has two different versions (fifth and seventh grades) and has been delivered by trained police officers in public and private schools.

PROERD is currently the most prevalent drug and violence prevention program in Brazilian schools (Pereira & Sanchez, 2020). In the first and only evaluation of the PROERD program's effectiveness, it did not achieve the expected preventive results that could justify its implementation as a public policy (Sanchez et al., 2021). Considering that the kiR program achieved positive results in other contexts using the seventh-grade curriculum (Valente et al., 2022) the null findings of the Brazilian version can be related to the implementation of the program. Moreover, a previous study presented important aspects related to PROERD implementation fidelity, considering what was actually accomplished among what had been planned and the level of completeness of this planning. The authors showed that instructors adapt the program

curriculum according to the reality of the different schools (Gusmoes et al., 2022). So, in the present study, we analyze process implementation data to understand why the PROERD has not been implemented with fidelity in certain school contexts. This is important because, in the case of a negative result, other studies are required to understand the potential reasons underlying the program's failure, indicating future directions for the program. The kiR program achieved positive results in other contexts using the seventh grade curriculum (Valente et al., 2022). The null findings of the Brazilian version can be related to the implementation of the program. Moreover, a previous study presented important aspects related to PROERD implementation fidelity, considering what was actually accomplished among what had been planned and the level of completeness of this planning (McDavid et al., 2018). The authors showed that instructors adapt the program curriculum according to the reality of the different schools (Gusmoes et al., 2022).

Fidelity can affect program outcomes, thus, the higher the fidelity, the better the outcomes (Hill & Erickson, 2019). However, recent discussions point that some degree of flexibility should be considered so that the program is feasible in real-life scenarios (Evans et al., 2021). Therefore, considering the environment in which the program is delivered is greatly important (Griner & Smith, 2006) for a better understanding of what could be a good adaptation for the target population and for PROERD to be in line with the positive kiR results. Moreover, Miller-Day et al. (2013) state that the program developers need to better understand the types of adaptation and the reasons why instructors adapt the curricula for the program to be effectively implemented.

Thus, this study aims to assess how and why PROERD instructors adapt the program curriculum during implementation in order to support future decisions about its sustainability and dissemination in Brazil.

Methods

This qualitative study was based on data collected from interviews with police officers (PROERD instructors), fidelity forms, and the researcher's observations performed during a randomized controlled trial (Sanchez et al., 2021) that evaluated the effectiveness of PROERD. The process of selecting schools for the RCT involved three steps. Initially, we identified all state public schools offering 5th and 7th grades within the São Paulo municipality. This information was sourced from the roster of national schools maintained by the National Institute of Studies and Research in Education Anísio Teixeira (INEP), totaling 155 schools. Subsequently, we excluded schools that had previously received the PROERD program within the past three years, to prevent any potential influence on the control group, which led to the elimination of 96 schools. Finally, we randomly allocated these remaining 59 schools into either the control or intervention groups. The initial 30 schools on the randomized list were selected as the study sample, while the remaining 29 schools were designated as potential backup options in case of refusals. The involvement of these schools was authorized by the State

Secretariat of Education. In the intervention schools, all students in the 5th and 7th grades took part in the PROERD program. It is worth noting that out of the 30 schools listed by INEP, two only offered 7th grade in 2019. Consequently, the sample comprised 28 schools for 5th grade and 30 schools for 7th grade.

Intervention

The school-based PROERD *Caindo na Real* program consists of ten 50-minute weekly classes taught by trained police officers in classrooms according to student and instructor manuals. The instructor manual is used by the police officer teaching the class and provides information on procedures, objectives, required materials, activities, and tips to each lesson, including one to three activities. All officers participating in the program underwent an 80-hour training offered by the Military Police, under the guidance of DARE America.

All curricula were developed based on the theory of narrative engagement (Miller-Day & Hecht, 2013), the principle of cultural grounding (Hecht & Krieger, 2006), social and emotional learning (Botvin, 1986), and normative beliefs for drug use (Cialdini et al., 1990). In Brazil, the program is implemented by the Military Police of the state of São Paulo. No information on the program's cultural adaptation process was found, but the comparison between the DARE-kiR and PROERD manuals suggests that the material used in Brazil is a mere translation of the DARE material, showing that PROERD lacks cultural values and socio-environmental factors proper to the Brazilian context.

Data collection

Data were collected using three sources: interviews with instructors, fidelity forms completed by the instructors, and observations forms.

First, data were collected by semi-structured interviews, thus, most questions were previously defined, but the interviewer was free to add others, if necessary (WHO, 1994). All instructors answered the same set of basic questions in order to reduce the interviewer's interference and facilitate data organization, comparison, and analysis (Patton, 2002).

Interviews lasted 45 minutes on average and addressed the following topics: (i) how and why they became a PROERD instructor; (ii) what the effects of the program are and how they perceive them; (iii) how their relationship with the school counselor was and how it could influence the effects of the program; (iv) if they considered the program training sufficient and how it influenced their work with PROERD; (v) their opinions about the material and its content; (vi) what planned activities were well and poorly accepted by students; (vii) differences in the delivery of the fifth and seventh grade curricula; (ix) how PROERD demands affected their other police functions and vice versa; (x) what they would change in the program; and (xi) what could be done to improve PROERD implementation. All interviews were recorded with the prior consent of instructors and the resulting data were anonymized, transcribed, and identified by an alphanumeric

code created from the letter P (for 'police officer') and a random number assigned according to the order of the interviews (01, 02, 03...) and not related to the schools.

For the second data collection, instructors answered self-administered online questionnaires after each class, reporting whether the planned activities were delivered (yes/no questions) and whether they adapted/changed any activity (yes/no questions plus open-ended questions). Based on the instructor manual, the forms included a list of all expected activities for each lesson. The first author (JDG) trained instructors to complete each item in the form. These forms provided data on the level of intervention (activities actually delivered), incompleteness of activities (expected activities that were excluded), the percentage rates of activities changed in each lesson, and examples of change. This study considered only open-ended questions, in which instructors explained the reasons why the activity was changed/not completed.

The first author (JDG) conducted the third data collection by a structured classroom observation, recording on forms the number of students attending the class, lesson delivery (based on instructor training guidelines), changes in the original curriculum, and how the interaction between instructors and students and among students was.

Data analysis

Thematic analysis was conducted (Fereday & Muir-Cochrane, 2006) using axial coding, in which *a priori* analytical categories were created based on interview guide topics and, later, linked to other subcategories, following their properties and dimensions (Strauss & Corbin, 2012). This analysis provided nine codes divided into intrinsic and extrinsic reasons to change the program. The two categories were created based mainly on the codes analyzed. Extrinsic reasons were beyond the instructors' control, but intrinsic reasons concerned the instructors themselves. Intrinsic reasons involved aspects of

instructors' performance and included three codes (concern about time, instructors' opinions, and not using the PROERD material). Extrinsic reasons involved students' reality (with the codes: literacy, disabilities, inappropriate behavior, and social and cultural realities) and school environment (with the codes: reality of public schools and school administration) (Figure S1 in supplementary material). Qualitative analysis was performed using ATLAS.ti© version 7.5.4.

Coding was initially performed by the first author (JDG), a PhD researcher with training and experience in qualitative analysis. After information underwent its first version of coding, it was subjected to interpretive triangulation, in which the second author (RG), an anthropologist and PhD researcher, analyzed the data in parallel. Later, the senior author (ZMS) interpreted the data. Disagreements were discussed and resolved by a second review of the interview transcripts. The findings in this study emerged from a consensus among researchers and are bolstered by representative *verbatim*. We refer to these expressions as 'golden quotes'.

Results

Table 1 shows the instructors' characteristics and main reasons why the intervention is changed by each of them. Annex S1 (Supplementary File) presents the semi-structured interview script.

According to data triangulation, the three data sources provide strong evidence that instructors adapt the program, in general, because they have the impression, based on passed experience, that some activities do not work when delivered as they were created by the developers.

In the PROERD lessons, there are situations during the activities that I change! And I think that they need to be changed! Because if I don't change them, I realize that the program won't work. (P04)

The interview with this instructor, as it deepened, showed extrinsic and intrinsic reasons to adapt both fifth and seventh

Table 1. Characteristics of study participants ($n=19$) and the type of change made.

Participant	Sex (M/W)	Age (years old)	Schooling level ^b	Police rank ^a	Years teaching PROERD	Changes (yes/no)	Type of change
P01	W	42	–	Cabo	5	Yes	Extrinsic
P02	W	26	Secondary education	Soldado	1	Yes	Intrinsic and extrinsic
P03	M	32	Secondary education	Cabo	5	Yes	Intrinsic and extrinsic
P04	M	45	Secondary education	Cabo	14	Yes	Intrinsic and extrinsic
P05	M	40	Secondary education	Cabo	15	Yes	Intrinsic and extrinsic
P06	M	38	Secondary education	Cabo	11	Yes	Intrinsic and extrinsic
P07	M	42	Undergraduate student	Cabo	6	Yes	Intrinsic and extrinsic
P08	M	32	Secondary education	Soldado	<1	Yes	Extrinsic
P09	M	42	Secondary education	Cabo	7	Yes	Extrinsic
P10	M	39	Secondary education	Cabo	4	Yes	Extrinsic
P11	W	47	Secondary education	Cabo	10	Yes	Intrinsic and extrinsic
P12	W	40	Secondary education	Cabo	2	Yes	Intrinsic
P13	M	34	Secondary education	Soldado	4	Yes	Extrinsic
P14	M	33	Undergraduate degree	Cabo	1	Yes	Extrinsic
P15	M	46	Secondary education	Cabo	9	Yes	Intrinsic and extrinsic
P16	M	–	Secondary education	Cabo	9	Yes	Intrinsic and extrinsic
P17	W	48	Undergraduate degree	Cabo	19	Yes	Extrinsic
P18	W	48	Undergraduate degree	Cabo	21	Yes	Extrinsic
P19	W	49	Graduate degree	Cabo	10	Yes	Intrinsic and extrinsic

^aSoldado is the lowest Brazilian military police rank. Cabo is the following rank. Thus, Soldado and Cabo are the two lowest ranks.

^bWe transformed the Brazilian category into the US pattern. Thus, secondary education also includes officers that started college, but did not receive a degree. Undergraduate degree is the first degree that universities offer, and graduate degree is the highest level (master's degree and PhD).

grade curricula, classified in three dimensions: instructor's performance, students' reality, and school environment, corresponding to the nine codes. The extrinsic reasons are those considered as not related to the instructor himself, that is, reasons that could not be changed or improved by the person implementing the program. On the other hand, the intrinsic reasons are those linked to the instructors' performance, knowledge and pedagogical ability. Table 2 shows the respective golden quotes.

Extrinsic reasons

This study considered aspects associated with PROERD implementation that are beyond the instructor's control as extrinsic reasons to change the program. Students' reality and school environment were the main extrinsic reasons.

Special educational needs of students

The instructors' main issue about program delivery concerns the students, regarding their literacy, disabilities, social and cultural context, and classroom behaviors. The researcher's observations also included students.

According to the interviews and fidelity forms, students' literacy is the main reason to change the PROERD curriculum, since many students have difficulties in reading and writing properly. PROERD activities depend on reading, interpreting, and writing answers, posing a challenge to the instructors, who need to adapt activities to allow all students to participate. Moreover, instructors also perceive that some students

do not understand simple words used in the stories and in the program content, leading them to adapt the entire story or activity. During classes, the researcher observed that some instructors had to write the answers from the activities on the board for the students to copy, which made the lesson last longer than expected.

Are there any difficulties? There are, right? Because, unfortunately, some students can't read, they can't write, but you can develop the program with them. There are other classes that you have nothing. You can't develop the lesson. So, of course, you will adapt according to the reality. (P07)

Attempt to capture the attention of students living in drug trafficking contexts

In general, Brazilian public schools primarily serve students from lower-income families. Moreover, the schools participating in this study were located in vulnerable areas, which are under great influence of drug trafficking. Thus, students are used to being around drug use scenes, making it harder for instructors to stick to the manual, since, for them, students might think that the individuals addressed do not fit the reality that they live in their homes. The researcher witnessed moments when students of both grades laughed at the activity.

So, it's difficult for you to talk to a student, the son of a drug dealer [for example] who saw during his childhood people packing drugs; it's much more difficult for you to use the curriculum, the right segment to speak, and you have to address the reality: 'oh, my experience on the street at 911 was like that, the occurrence went that way, I conducted it that way,' it has more effect than using the curriculum segment. (P11).

Table 2. Main results of the analysis of changes made by the instructors participating in the study ($n=19$).

Type	Topic	Subtopic	Description	Golden quotes
Extrinsic	Students' reality	Literacy	Changes in the activities because the students did not know how to write or read properly	<i>There is something [to do] from the instructor manual and when you come here [at school], it's another reality. Some [students] have difficulty doing it, they are not reading and writing yet, so... P16</i>
		Disabilities	Changes in the activities because instructors did not know how to deal with students with disabilities	<i>We don't know how to work with special [needs] students, especially the autistic ones, the blind—there's not a lot of blind ones, but more the autistic ones, and also, how to work with fifth grade students who can't read or write. We adapt, right? P03</i>
		Inappropriate behavior	Difficulties to follow the manual due to student misbehavior	<i>There are classes that you can't work with groups. Seventh graders are bigger, they think they are already adults, anyways... P02</i>
		Social and cultural realities	Changes in the activities due to differences between the PROERD material and the students' reality	<i>For the seventh grade, I think the workbook has nothing to do with our reality in Brazil, because it is a workbook that came from the United States, translated into our reality here, which is completely different. I don't know how it is like there in the United States, but from the material, from the video, it has nothing to do with our reality. P01</i>
Extrinsic	School environment	Reality of public schools	Difficulties in delivering the program in public schools that lack material and media resources	<i>Sometimes, the principal or the school staff want to collaborate [with PROERD delivery], but the school infrastructure does not help. We get stuck. P01</i>
		School administration	Difficulties in delivering the program due to the school administration	<i>Every time I get there [at this school] there's no [PROERD'S]class. There's some meeting, there's some test, I don't know... they [the school's administration] always find a way to disturb my classes there. P02</i>
		Concerns about time	Changes in the program due to much or no concern about time	<i>The instructor did not apply the activity 'Effective Communication' from lesson 7 (fifth grade)—He took the class calmly and in no hurry to finish everything today. He finished lesson 6 at the beginning of the class. (Researcher's notes)</i>
Intrinsic	Instructors' performance	Instructor's opinions	Instructors did not stick to the PROERD material or theory	<i>The instructor said that the CEBRID scientific data presented in lesson 8 (seventh grade) were not correct. (Researcher's notes)</i>
		Not using the PROERD material	Instructors did not follow the manual	<i>The instructor talked mostly about her personal life during lesson 10 (seventh grade). (Researcher's notes)</i>

Changes made to culturally adapt the program material

Moreover, the cultural aspect of the material does not match the students' cultural characteristics. PROERD curricula are translations of a North American prevention program, thus, all situations addressed, both videos and stories, are related to American adolescents. Especially in Brazilian public schools, the reality is very different from the PROERD material (more details in the next topic). In one of the researcher's observations, the instructor used a subtitled video, which enhances the students' difficulties to understand the lesson, since they are not used to reading fast.

The video doesn't match the reality. When you tell a story, you stop, play a video, the child watches that video, you clearly see their disappointed face when they start to watch (...) so I would replace it with something either more real or more Brazilian, or I would change the stories; I would tell cooler, funnier stories; I would say other things, you know? I don't think it suits our students; I think they don't even watch [the videos]. To tell you the truth, I think there are few [police officers] who use them [the videos]. They prefer to tell stories of their life or to tell real stories, things that happen in everyday life, so that you can get more attention from the students. (P14)

Problems in providing instruction to neurodiverse students

Instructors also pointed that they are not trained to implement the program for students with disabilities, such as autism or other psychiatric condition, and the material has no options to adapt the program in this scenario. Thus, instructors either do not include these students and deliver the lesson following the manual—as the researcher's observations showed—or they adapt it.

What they teach [in the training] is basically for literate students, and when you have a student who is not literate, how do you deal with them? A student with a mental, physical disability... anyways, you have all kinds of children, and you have to know how to deal with them all in the same way. And then, instructors have to handle it on their own!. (P02)

Lack of order in the classroom environment

Finally, when considering students' behavior, instructors face difficulties, since the presence of the teacher during the class should mitigate this aspect, but it does not always happen. During observations, the researcher witnessed that, even when teachers were present, they used the time for other tasks and did not help instructors. Thus, instructors must deal with inappropriate behaviors as they see fit: giving attention only to students participating and not interrupting the class, or stopping the lesson to discipline students, leading to incomplete activities.

You stop all the time to get attention and lose class time. You get behind [with the lessons]! You can't complete the entire lesson. (P02)

Lack of support from school authorities

Instructors say that the way the school principal feels about the military police influences program implementation. When the school administration is against the presence of the police, they either do not allow program

delivery or, when they allow it, they make it difficult for instructors to work:

Well, the administration influences a lot, because there are schools that we contact in which the administration itself doesn't like the military police, so they will try to make it as difficult as possible for us to contact with students and have vacant space to teach. (P01)

Lack of resources in schools to deliver the program's classes to students

However, since PROERD is the most disseminated program in Brazil, many schools support the presence of police officers-instructors in the school routine. In these cases, instructors' issues are related to the reality of public schools in the country, but not to the regulations imposed by the school principal.

Uh, most principals and coordinators support the project, but the school sometimes doesn't have many resources. Like here [in this school], we don't have a blackboard, they [the students] don't write properly, because they don't have a desk... and if I go to the classroom, I don't have the projector. Then we must choose [what to do]. They [the school administration] do what they can. And so do we. (P12)

The researcher's observations also addressed it. Most schools (11 out of 15) had no resources to display audiovisual materials and, when they did, the classroom was not appropriate for students to answer the activities in the student manual. Most of them answered the questions with the book on their laps.

When schools did not have the resources necessary to perform the activities as provided in the program curriculum, some instructors changed the lessons and activities in several ways: by skipping an activity from the lesson, adding content in the class, or not showing the audiovisual material, which was the most prevalent adaptation.

We should present slides on the projector. There are schools that don't have the projector (...) and then you have to change the whole dynamic. You have to take all students to a room where, rarely, there is a projector, because other teachers are always using the room with it, and then you never get to show the audiovisual material. I never showed that. (P17)

Instructors use their own resources to deliver the program

Some instructors find a way to deal with the lack of resources in the school and teach the lessons as they are supposed to. They bring their own laptops, projectors, and buy the material needed for the classes, even though they are not expected to do it. These resources should be provided by the school or the military police.

I bring the material, I buy it using my own money; anyways, I write it [the video content] on the blackboard. When there are resources, and most [of schools] don't have (...) I print the images, anyways.... (P02)

Of course, even in the school where we are, here, we see the deficiencies, don't we? Weaknesses, because it's a state school; there's no computer, no projector, and I brought my computer today—that computer is mine—so we do our best to bring the resources to the students. (P13)

Intrinsic reasons

The researcher's observations pointed to some important aspects of PROERD implementation that police officers did not mention in the interviews, and we must present them to enable improvements. These aspects concern the instructors' teaching skills and how they deal with challenges, sometimes changing the lesson too much.

Lack of pedagogical skills to deliver the program

The researcher noticed that sometimes instructors were uncomfortable opening a discussion about the lesson topic, perhaps because they feared they did not have enough time to finish the lesson or simply because the group was not being participative. In those cases, instructors gave the students the correct answers to the activities and shared their opinion on the topic, contrary to the material's information. On the other hand, in classes with a good flow in the lesson delivery, which have space for the students to share their perceptions, instructors would either extend the lesson into the next week or exceed the scheduled class time.

Lack of adherence to program delivery guidelines

In general, besides the students' behavior, instructors did not have enough time to finish the lesson because they spent most of the class discoursing on their opinions on the lesson topic instead of focusing on the activities and letting the students do the thinking process. Therefore, the implementation did not follow any guideline of the instructor manual.

Lack of adherence to the program materials

The researcher also observed that instructors did not stick to the material. Some of them showed different videos, with content that they thought might be related to the lesson topic (e.g. a video showing children reuniting with their parents, who had returned from the war), asked sensitive questions that were not expected in the activity or questions that did not apply to the activity at all (e.g. questions about the death of students' family members), or added information about drugs that are not included in the curricula.

Discussion

This study aimed to assess why PROERD instructors adapt the program curricula and how these changes occur for both fifth and seventh grades. Analyzing the interviews, the fidelity forms completed by the instructors, and the researcher's observations, we separated the main reasons to adapt the program into two groups: intrinsic and extrinsic reasons. Students' reality and school environment were the extrinsic reasons and instructors' performance was the intrinsic reason.

Brazil is a continental country and its social inequality is highly related to the poorer education (OECD, 2021) of individuals in social vulnerability. Public schools tend to show some consequences of these disparities (Nobre et al., 2018), compromising initiatives such as PROERD. Corroborating the findings of this study, the Organisation for Economic Co-operation and Development (OECD, 2021) shows that

Brazilian students have a below-average reading performance, which justifies the instructors' need to change the activities based on reading and writing for both grades.

Moreover, Brazilian schools have been implementing an inclusion policy for students with disabilities (Decree 6.571/2008). However, having these students in the classroom is challenging for both private and public school teachers (Chakraborti-Ghosh et al., 2014). PROERD instructors also reported difficulties in teaching students with disabilities, since their 40-hour training does not include this topic and police officers who become instructors do not necessarily have a degree in education, relying only on the training to learn teaching skills.

Another challenge pointed by instructors during the interviews and confirmed by classroom observations was student misbehavior. Students' lack of interest and indiscipline are important factors that make it difficult for instructors to deliver a lesson as planned (Skaalvik & Skaalvik, 2017). Moreover, when considering the school environment, the lack of infrastructure and support from the school administration makes it impossible to implement the program as it was developed.

Previous analysis of this RCT data showed that PROERD curricula are not culturally adapted for the Brazilian reality (Gusmoes et al., 2022; Sanchez et al., 2021), which might be the main reason for the extrinsic factors that make instructors change the program (Ijadi-Maghsoodi et al., 2017). Valente et al. (2022), in their systematic review on the effects of kiR, the program that originated PROERD, stated that kiR is effective when the material is culturally adapted to the reality of the students receiving it. PROERD is a translation of DARE-kiR and, in this study, both the instructors and the researcher pointed the disparity between what the material presents and the students' reality. Moreover, previous studies on kiR implementation fidelity showed that kiR instructors adapt the program to their students' reality, corroborating with our findings and reinforcing the need to culturally adapt prevention programs (Miller-Day et al., 2013).

Regarding the intrinsic reasons to change PROERD, the instructors' performance was compromised by their inability to manage class time, their lack of teaching skills, and their difficulties with the program content, which suggests that the instructor training might not be enough for police officers to develop teaching skills and knowledge. Miller-Day et al. (2013), in their study on kiR fidelity, discussed that follow-up training and/or technical support for program delivery and content issues may reduce the frequency of problems related to adaptations, increasing fidelity and, consequently, program outcomes (Caldwell et al., 2012; Downer et al., 2009; Dusenbury et al., 2010).

These factors only became explicit due to classroom observations, which corroborates with previous studies that show that observers report more adaptations than program instructors (Miller-Day et al., 2013).

Concerns about class time is the most common reason to change the curriculum when implementing the program in the real world (Miller-Day et al., 2013). Moreover, as motivating students is important (Miller-Day et al., 2013; Skaalvik &

Skaalvik, 2017), instructors who lack teaching skills may replace the planned activities with others that they consider more appealing to students, such as different videos and talking more about drugs. They also tend to extend the contents they prefer and omit those that they think are not essential (Miller-Day et al., 2013). Thus, understanding and establishing the core PROERD elements is essential, allowing some flexibility for instructors while ensuring an effective implementation (Collins et al., 2011).

Considering these results and that kiR is a culturally based prevention program (Michael L. Hecht et al., 2003), PROERD needs a cultural adaptation in order to align the program with Brazilian cultural values and social/environmental factors (Valente & Sanchez, 2022). Recently, #Tamojunto2.0, the prevention program implemented by the Brazilian Ministry of Health, underwent an effectiveness evaluation and, after being adapted according to its findings, results showed that this program is effective for Brazilian students (Sanchez et al., 2021). Thus, we suggest that PROERD follows the steps of #Tamojunto2.0, contributing to the evidence-based implementation of prevention programs.

Limitations

The first limitation of this study is that the schools participating in the randomized controlled trial (RCT) were located in low-income regions of São Paulo, with high drug use rates (Daniel et al., 2009). Instructors working in different areas could have distinct experiences and perceptions about the program. Another limitation concerns the fidelity forms, which were subjected to information bias due to self-reporting (Dusenbury et al., 2003).

Conclusion

This study is the first to analyze the reasons to change PROERD in the real world, using three different data sources, deepening the knowledge that was found in the previous fidelity study that only evaluated the effect of fidelity in the program's effectiveness (Gusmoes et al., 2022). Future studies should establish the core element of the program (Miller-Day et al., 2013), since PROERD instructors with a clear understanding of the essential elements could adapt less important parts in a structured way according to their students. Considering the territorial extent of Brazil and its different realities, PROERD curricula should undergo a process of cultural adaptation. Moreover, the military police should incorporate scientific findings regarding PROERD implementation in São Paulo and continue to assess its effects not only in the city, but throughout the country.

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