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ORIGINAL ARTICLE

CONSTRUCTION AND EVALUATION OF ISSUES DATABASE ABOUT PSYCHOACTIVE SUBSTANCES

CONSTRUÇÃO E AVALIAÇÃO DE BANCO DE QUESTÕES SOBRE SUBSTÂNCIAS PSICOATIVAS

CONSTRUCCIÓN Y EVALUACIÓN DE BANCO DE PREGUNTAS SOBRE SUSTANCIAS PSICOACTIVAS

Monaliza Ribeiro Mariano[1], Fernanda Jorge Guimarães[2], Lorita Marlena Freitag Pagliuca[3]

ABSTRACT

Objective: to describe the construction and learning assessment tool validation about psychoactive substances. ***Method:*** methodological study, with questions about psychoactive substances evaluated by experts as the content, statement of clarity, response ambiguity, repetition or similarity. The consensus criterion was adopted to accept the suggestions. Then, they classified the statements indicating T for true and F for false. ***Results:*** after evaluation, the database resulted in 42 statements distributed according to the covered topics; categorized into true or false; and arranged in low, medium and high complexity levels. ***Conclusion:*** the questions were validated and can be used to evaluate the information about psychoactive substances. ***Descriptors:*** Validation Studies; Validity of Tests; Health Education; Health Promotion; Disorders Related to Substance Use.

RESUMO

Objetivo: descrever a construção e validação de instrumento de avaliação de aprendizagem sobre substâncias psicoativas. ***Método:*** estudo metodológico, em que se elaboraram questões sobre substâncias psicoativas, avaliadas por especialistas quanto a conteúdo, clareza de enunciado, ambiguidade de resposta, repetição ou semelhança. Adotou-se critério de consenso para acatar as sugestões. Em seguida, classificaram as afirmativas indicando V para as verdadeiras e F para as falsas. ***Resultados:*** após avaliação, o banco resultou em 42 afirmativas distribuídas de acordo com os temas abordados; categorizadas em verdadeiras ou falsas; e organizadas nos níveis de baixa, média e alta complexidade. ***Conclusão:*** as questões foram validadas e podem ser utilizadas para avaliar a informação sobre substâncias psicoativas. ***Descritores*:** Estudos de Validação; Validade dos Testes; Educação em Saúde; Promoção da Saúde; Transtornos Relacionados ao Uso de Substâncias.

RESUMEN

Objetivo: describir la construcción y validez de instrumento de evaluación de aprendizaje sobre sustancias psicoactivas. ***Método:*** estudio metodológico, en que se elaboraron preguntas sobre sustancias psicoactivas, evaluadas por especialistas en cuanto a su contenido, claridad de enunciado, ambigüedad de respuesta, repetición o semejanza. Se adoptó el criterio de consenso para acatar las sugestiones. En seguida, clasificaron las afirmativas indicando V para las verdaderas y F para las falsas. ***Resultados:*** después de la evaluación, el banco resultó en 42 afirmativas distribuidas de acuerdo con los temas abordados; categorizadas en verdaderas o falsas; y organizadas en los niveles de baja, media y alta complejidad. ***Conclusión:*** las preguntas fueron validadas y pueden ser utilizadas para evaluar la información sobre sustancias psicoactivas. ***Descriptores*:** Estudios de Validación; Validad de los Tests; Educación en Salud; Promoción de la Salud; Trastornos Relacionados al Uso de Sustancias.

[1]Nurse, Ph.D in Nursing, *Estácio* University Center of *Ceará*. *Fortaleza/Ceará*, Brazil. Email: monalizamariano@unilab.edu.br; [2]Nurse, Ph.D. in Nursing, *Vitória* Academic Center, Federal University of *Pernambuco*/UFPE-CAV. *Vitória de Santo Antão/Pernambuco*, Brazil. E-mail: ferjorgui@hotmail.com; [3]Nurse, Ph.D. in Nursing, Federal University of *Ceará*/UFC. *Fortaleza/Ceará*, Brazil. E-mail: pagliuca@ufc.br

INTRODUCTION

Health promotion is a broad concept, discussed among researchers and health professionals, as it is not restricted to the prevention of diseases and biological aspects, and goes beyond a healthy lifestyle for overall well-being.[1] It means a training process of individuals, families and communities to increase control over the health determinants and work on improving the quality of life and health.[2]

The training for health promotion can be achieved through health education, a resource that offers subsidies to adopt new habits and health behaviors[3], which allows the professional to permeate many areas and address issues, among them the psychoactive substances. To provide access to information and knowledge acquisition represents incentive to possible change of behavior because the social practice of health knowledge construction can contribute to empowering people in their care[4-5], based on guidelines and transmission of information.[6]

This access to information may be performed through technologies and should be provided in a reliable and comprehensible manner because the access is still fragile to contemplate acquiring knowledge with subsequent reflection and attitude change. Therefore, it is necessary during the teaching and learning process, the use of strategies to facilitate the understanding and acquisition of information about the discussed topic, covering issues related to the subject at various complexity levels.

Concerning psychoactive substances, the main means of getting information are television and school.[7-8] However, the quality of provided information is rarely assessed. Thus, in addition to providing information, it is essential to measure learning. To this end, it should be elaborated with rigor and discretion, an instrument to measure the existing knowledge and that acquired through the issue of teaching-learning process in question. The learning measurement instrument is relevant as it helps the health professional to define the most appropriate intervention strategy.[9] There are tools that verify facility of use and applicability of knowledge, and also the power through appropriate instructions, to be self-administered.[9]

In a previous time, the text was elaborated, supported in literature search in Google Scholar database, Cooperative Bireme System, and Scielo virtual library, which addressed the main types of psychoactive substances, physical, psychological and social effects and prevention strategies, risk and protective factors.[10] The cited text has been validated and contributed significantly to the development of educational technology.[8] In this context, we emphasize the importance of construction and validation of the learning assessment tool about psychoactive substances information.

Given the importance of having an appropriate, coherent and reliable instrument to provide an assessment of the acquisition of knowledge during the health education process, this study aims to describe the construction and validation of learning assessment tool about psychoactive substances.

METHOD

A methodological study of construction and validation of the learning assessment tool about psychoactive substances, held from December 2012 to February 2013, supported by bibliographic research in Google Scholar database, Cooperative Bireme System, and Scielo virtual library. In the first stage, a database of questions with 50 statements following the themes was constructed, namely: 1) concept and classification; 2) signs and symptoms, loss; 3) protective factors, 4) risk factors.

Five experts who met the inclusion criteria: having a doctoral degree, working with the theme and having an article published in the area, previously received the text and the database issues. At a meeting scheduled for this purpose, they evaluated the questions as to the relevance of the content, clarity in the statement, repetition or similarity between questions, ambiguous answers. Then, they classified the statement indicating T for true and F for false. At the same time, they established the low, medium and high complexity level of knowledge required to answer each question. This validation process occurred with the sequential reading of the issues, followed by evaluation of specialists. We used the consensus criterion to accept the specialist's suggestions.

This study had the project approved by the Research Ethics Committee of the Federal University of *Ceará*/UFC, protocol 115,850, CAAE 07173712.1.0000.5054.

RESULTS

Five female specialists participated in the analysis with education in Social Work, Nursing, and Nutrition; four work in public universities in Brazil.

In the first version, the database had 50 questions. In the evaluation process, it was suggested to delete four issues, for not keeping adherence to the content of the text; one statement was withdrawn, as had a technical statement and three changed by presenting an extensive writing, and was divided into two statements to facilitate their understanding. So 48 statements were classified.

In the second analysis round, six statements presented differing responses among specialists, being taken from the database, which resulted in 42 statements, which were then, organized by subject and complexity level, with 21 low, 11 medium and 10 high complexity.

The issues that composed the database are presented in figures, as the issues related to psychoactive substances, namely: concepts and classification; signs and symptoms, loss; protective factors; and risk factors. Conducts, also, the name of the level of complexity and the answers. There was no concern in establishing a homogeneous number of issues by addressed theme and not even by complexity level.

Complexity	Concepts and Classification
Low	1. Marijuana and crack are illegal drugs. (T) 2. Marijuana and crack are forbidden drugs. (T) 3. Alcohol and tobacco are illegal drugs. (T) 4. Alcohol use is not a serious public health problem. (F) 5. Alcohol and diet pills are not considered drugs by the population. (T)
Medium	1. Illicit drugs are those that have the sale forbidden. (F) 2. Drugs allowed for people over 18 years old are legal drugs. (T)
High	1. Dependence is characterized by the continual use of drugs to maintain well-being. (T) 2. A dependent is one who cannot be without the drug because it directly interferes with their life. (T) 3. Abstinence crisis is a set of physical and psychological reactions that the body produces before the lack of drugs. (T)

Figure 1. Distribution of issues related to the concept and classification of psychoactive substances by complexity level. *Fortaleza*/*Ceará*, 2015.

Complexity	Signs and Symptoms, Losses
Low	1. Drugs cause pleasure and so users seek repeated use several times. (T) 2. Use of tobacco by pregnant women can harm the baby. (T) 3. Alcohol and smoking do not cause harm to health. (F) 4. The use of cocaine by pregnant women can cause spontaneous miscarriage. (T) 5. People who use drugs in the vein can be infected with hepatitis B virus (T) 6. People who use drugs in the vein can be contaminated by the AIDS virus. (T)
Medium	1. Marijuana excess consumption can cause poor school performance, decrease in notes, isolation. (T) 2. Chronic use of substances that can be smelled like glue and inhalants can cause impaired memory and decreased manual dexterity. (T) 3. The use of marijuana produces fatigue, headache, mental confusion. (T) 4. A person who uses drugs can cause traffic accidents, family separation, loss of friends, school abandonment, among others. (T) 5. Alcohol is not a drug because it brings joy and pleasure to those who drink. (F)
High	1. Red eyes, euphoria, laughing, impatience, anxiety, fear, delusions, hallucinations can be considered behaviors associated with drug addiction. (T) 2. The use of cocaine initially produces feelings of energy, confidence, and power. (T) 3. When a person uses drugs alters the functioning of their body and their behavior. (T) 4. Stealing, anxiety, restlessness and reduced memory may be signs of occasional use of drugs. (T)

Figure 2. Distribution of issues related to signs and symptoms, and losses of drugs by complexity level. *Fortaleza*/Ceará, 2015.

Complexity	Protection factors
Low	1. Parents do not need to worry about behavior and attitudes of children. (F) 2. The rigidity of parents can prevent the child to use drugs. (F) 3. The routine use of drugs does not hinder the performance at school or work. (F) 4. Drug User always has the support of friends. (F) 5. The practice of sports and participation in religious groups help to prevent drug use. (T)
Medium	1. The conversation between parent/child and emotional support helps to prevent the use of drugs by young people. (T) 2. To address the problems related to drug use is important to have the support of family and friends. (T) 3. Drugs subject should not be discussed at school not to encourage its use. (F)
High	1. Drug theme should be discussed only in schools with young people because they are who use drugs. (F)

Figure 3. Distribution of issues related to protective factors by complexity level. *Fortaleza/Ceará*, 2015.

Complexity	Risk factors
Low	1. Drug use can be caused by many reasons, such as s family situation, the influence of friends, use by parents, stress, divorce, and unemployment, among others. (T) 2. The main reason that leads to the use of drugs is the influence of friends. (T) 3. The use of drugs is the only way to overcome shyness. (F) 4. Economic factors, friend's influence, anxiety, may influence the use of drugs. (T) 5. The only damage caused by drug use is the family abandonment. (F)
Medium	1. People who live with smokers and do not smoke have the risk of developing diseases associated with smoking. (F)
High	1. Drug users are people who have broken family and for failing to face the difficulties of life turn to drugs. (T) 2. Facility to buy drugs and lack of information does not influence the use of drugs. (F)

Figure 4. Distribution of issues related to risk factors by complexity level. *Fortaleza/Ceará*, 2015.

DISCUSSION

The construction of educational material for health promotion is the initial phase performed by the nurse educator. For those who deal with psychoactive substances there is a wide range of information, but should be selected the most significant for the target audience, adapting content and form.

In the information management, the requirement for the right information should be considered, at the right time to help the patient, caregiver, or consumer to take a specific health decision.[11] These aspects are relevant in the process of nursing care, especially in health education activities.

Furthermore, it highlights the importance of assessing the adequacy of the information and their learning potential to the intended public. Thus, the use of validated instruments is essential, that assesses the provided information, but is still scarce in the literature. Through appropriate tools, it is possible to analyze the informational capacity of educational materials, like workshops, brochures, videos, texts among others, used in health education activities.

In the process of instruments construction, the participation of the specialist panel is relevant to evaluate and validate the educational text and evaluative questions as it provides constructive feedback on instrument quality.[12] In this process, the content validation by specialists is one of the major steps.[13] These contributions are essential creating valid and reliable instruments in the current context of health.

The critique of the evaluation process by a specialist, mentions the subjectivity of the analysis. Although it is a subjective process, the validity apparent is essential in constructing an instrument that later can be applied other tests. When there is consistency in the evaluation of issues by specialty, this step contributes to the improvement and enables to legitimize a new measuring instrument.[14]

In this study, we chose to develop questions of different levels of complexity, which can assess the theme "psychoactive substances." Low, medium and high complexity issues used to identify the knowledge about AIDS and drugs by university students, and it was found that the students hit rate was higher in low complexity issues, despite the issues addressing widely discussed topics in media and health services.[7] It is recommended that the questions are selected at different levels of complexity for not presenting so simple, to not stimulate curiosity and exchange of information, and not so complex as to chase away the learner.

The analysis of adolescent's knowledge about drugs revealed that they showed a simplistic view of the phenomenon. Therefore, in the educational process should

be a space to discuss its size and complexity and the implications for physical, mental health and social development of adolescents.[15]

Nursing Graduates knowledge assessment about psychoactive substances have shown that have knowledge, but with general information. They verbalized knowing the most reported physical problems among users, such as lack of appetite and weight loss. They related problems of physical, psychiatric and social order, notably the changes in cognitive function, changes in the ability to absorb and manipulate information in mind, deficits in decision-making, mood changes.[16] This group of people also deserve reinforcement in providing safe and reliable information.

The issues here validated, which discussed the classification of psychoactive substances address aspects related to legal and illegal substances. One has to be attentive to discuss and raise issues related to various content topics "psychoactive substances" as classification, signs and symptoms of use, risk factors and protective factors.

Concept and classification of substances, although seem redundant, are addressed, often wrongly, and may influence the behavior of individuals. In daily life, it can be seen in alcohol advertisements in the media that stimulate the consumption of licit substances, which are protected by law, are tolerated and allowed.[15] Thus, the media can influence either positively or negatively on the behavior and training of individuals, particularly teenagers.

The issues also described aspects related to dependence and abstinence from substance use. To address also the risks of using these substances by pregnant women. The dependent use is identified when detected signs and symptoms of tolerance and problems as a result of use while the abstinence syndrome is characterized by physical and psychological behaviors resulting from a decrease or cessation of substance use.[17] This topic reinforces the main damage that the abuse of psychoactive substances can cause to individuals.

Issues related to protection and risk factors highlight the family relationship, the practice of sports and support of friends as the main protective factors to substance abuse. Moreover, it emphasizes the role of the school as a partner in addressing this problem. The school should fulfill its role in education, as one of the first consequences of substance use is the avoidance or low school performance.[18] Evaluation of school knowledge level with validated database questions provides reliable support to implement educational activities directed to strategic aspects still unknown by young people.

A family situation, the influence of friends, facility to buy drugs and lack of information are risk factors for substance abuse. It is stressed that it must adopt measures to prevent substance use, invest in information and monitoring of consumption at school.[19]

Information about positive and negative aspects of the use of psychoactive substances is one of the main reasons for non-use by adolescents, also singled out as a protective factor against the consequences of substance use.[20] It is noteworthy that, for information to be considered a protective factor, it needs to be transmitted correctly and completely, as well as assess whether its understanding was given properly.

Corroborates the experience with prevention of substance abuse among children and adolescents, who pointed out that the language and implementation workshops help to understand the information provided.[21]

Attention should also be given to the way the question is worded, respecting the ability to answer the participant. The individual must have prior information about the content and master skills to use it in various situations.[12] In this reasoning line, we have here a database of validated questions, but should be aware of the target audience as the level of education and area of prior information. The sensitivity of the evaluator should consider the learner's strengths and limitations to select those most appropriate questions to each situation. Thus, revisit, reuse and give new formats content already validated as psychoactive substances, consolidates knowledge and values the development of knowledge.

CONCLUSION

It developed a database of questions to assess information on psychoactive substances. A panel of six specialists approved 42 statements, which addressed concepts and classification; signs and symptoms, loss; protective factors; and risk factors related to psychoactive substances.

The issues were also organized by complexity level. It did not establish a homogeneous number of questions by topic and by complexity level. Thus, 21 remained low, 11 medium and 10 of high complexity.

The results of this study may be useful for nurses in health promotion, given that this professional develops in their practice, different health education activities, especially aimed at preventing the abuse of

psychoactive substances. With the availability of database issues, it is expected that professionals can review the information provided to users.

The adoption of the issues of this database must be preceded by reflection by the health educators about the target audience, respecting education level, age, context and prior knowledge about the subject. The study is limited as to the subjective analysis of the specialist panel.

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Corresponding Address

Fernanda Jorge Guimarães
Universidade Federal de Pernambuco
Centro Acadêmico de Vitória
Rua Alto do Reservatório, S/N
Bairro Bela Vista
CEP 55608-680 – Vitória de Santo Antão (PE), Brazil