# Evaluation of Health Competences; Questionnaire designed to evaluate functional competences in the prevention of HIV transmission

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#### **ABSTRAC**

The focus of this study was to design a questionnaire, aimed at assessing functional competencies and to identify the measurable properties internationality accepted in the construction of measurable scale, of an instrument to evaluate functional competencies related to HIV transmission. The questionnaire's items represent examples of situations where HIV infection risk exists. We consider the possibility to use electronic resources and we believe that the anonymous status of the internet lets the participants express real behavior, this way we can get reliable data and clarify those factors that underlie sexual behavior. The results showed, the way the data collected fits the theoretical model used, this is possible to observe by the variation of percentage explained by the components analyzed with the factor analysis. We confirm the appropriateness of the model used in the explanation of risky sexual behavior.

# INTRODUCTION

A different way to approach preventive health problems is the Psychological Model of Biological Health (Ribes, 1990). This model has its basis in previous interbehavioral psychology studies (Ribes y López, 1985; Kantor 1967). In this theory psychological health dimensions are conceive as *processes* and its *results. A fundamental* part in the process is relative to functional behavior competencies, which are define as people's capacity to confront various situations in reference to a specific demand. In other words, the set of abilities and skills present that facilitate or interfere with certain behaviors.

In the case of HIV/AIDS, the individual's capacity to interrelated with other people, the amount of information they have access to, and their experience in the sexual sphere, amount others factors are competences that in present interactions are likely to facilitate preventative behavior, like the use of condoms or sexual abstinence. Equally, if a person is not competence in relating to others and doesn't know about HIV/AIDS or the way it is contracted, these incompetences will increase the chances that the individual will participate in risky situations or sexual behavior.

From an interbehaviorism perspective, with a basis in the Biological Health Psychological Model and using Contingencial Analysis as an analytic system, the objective of this work was a questionnaire designed to competences evaluation in AIDS prevention, to identify people's ability (in terms of skills) to confront risky situations in HIV transmission, and to make a functional analysis of the variables that effect behavior.

#### MATERIAL AND METHODS

A questionnaire designed consisting of 60 items, aimed at assessing functional competencies. These items represent examples of situations where HIV infection risk exists. The instrument was designed in

two versions (in print and via Internet) and translated in 7 languages (the data below correspond to Mexico sample only and are a part of a preliminary study from the total sample).

## **Participants**

238 participants; they were distributed in two groups of 119 participants.

## Sample selection

The sample was intentionally selected (not random). For the print version, the participants were students from 3 different Universities in Mexico City, participation was voluntary. For the Internet version, an e-mail invitation was sent to all the contacts in the principal author's contact list.

# Data analysis

Exploratory Factor Analysis (method Principal component analysis and VARIMAX rotation) to get the construct validity  $\alpha$  de Cronbach, like indirect indicator about the reliability of test's data.

#### RESULTS AND DISCUSSION

In figure 1 the higher competence level is shown in participants who answered the Internet version of the questionnaire, in all the categories evaluated. Previous research has shown situations as factors that increase HIV transmission risk in a group of seropositives (García-Vargas, 2006). In this paper the consequences category was the factor with more risk, that is, the consequences increase the chances that the individual would participate in risky situations. The difference between this research would be attributed to the sample's clinic status.

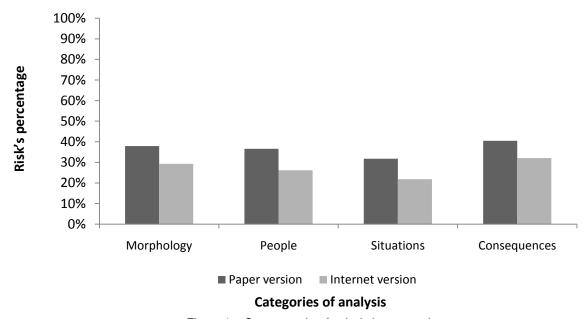


Figure 1 – Competencies Analysis by categories

The differences between the internet version vs. the paper version can be attributed to demographic differences. In the Internet group the age average is 26, while 23 for the paper group. Also 64% of the paper group participants are students, and 75% of the participants from the Internet group are employees. Finally, 50% of the paper group was female versus 69% of the Internet group. In these demographic variables significant differences were found (Age F(1-237)=12.630, p<0.05; Gender F(1-237)=9.475, p<0.05 & Profession F(1-237)=56.294, p<0.05).

The reliability analysis showed a high reliability in both samples ( $\alpha = 0.877$  and  $\alpha = 0.868$ ), with a high internal consistency, besides having a construct validity.

# **CONCLUSIONS**

We believe that the anonymous status of the internet lets the participants express real behavior, this way we can get reliable data and clarify those factors that underlie sexual behavior. Due to higher reliability levels and considering that sexual behavior is a taboo topic, we are considering the possibility of continuing using electronic resources.

It is convenient to emphasize the way the data collected fits the theoretical model used, this is possible to observe by the variation of percentage explained by the components analyzed with the factor analysis.

We confirm the appropriateness of the model used in the explanation of risky sexual behavior.

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