<u>The importance of pre-test in Trans-cultural Scale Validation:</u> <u>Pre-testing of BSQ, BES and BAS Scales</u>

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In the past decades, trans-cultural researches and tool validation in particular have been a great concern among researchers. One of the most used protocols in body image research is the one created by Beaton et al (2003), which comprises four steps: translation, synthesis meeting, retro-translation, expert meeting, pre-testing and psychometric study.

The pre-test is a fundamental step for the research. Here, the target population gets in touch with the questions and this allows the researcher to check whether the translated scale is correctly understood and interpreted by the subjects. According to researchers, the pre-test may not only allow adjustments and error detection and but also increase tool legitimacy (Windelfet, 2005).

In this study, the procedures used in the scale pre-testing were based on Malhotra's instructions (Malhotra, 2002). The author points out that the pre-test does not consist of item understanding only, but that subjects who are to take the pre-test should also consider questions related to the understanding of scale answers, questionnaire layout, difficulty in answering questions, questionnaire instructions and respondent's degree of attention. In addition, the environment where data will be collected shall also be taken into consideration. The author suggests a group of ten to twenty subjects for the pre-test. The diversity of the target population, however, should not be forgotten. Subjects will be asked to answer questions, comment and give opinions about its clearness of purpose, its logic and vocabulary suitability. If the tools bring about several doubts and misunderstandings which will jeopardize the legitimacy of the information gathered they shall be taken to the expert committee to be revised and tested again, until considered understandable and clear.

The Body Shape Questionnaire (BSQ) has thirty four items, is self-applied and was created in order to measure the concerns and satisfaction towards body shape. Subjects should answer questions based on their "four last weeks". The scale was authenticated among a group of female college English students with eating disorders. In Brazil, it was authenticated by Di Pietro (2004).

The Body Esteem Scale (BES) has 35 items, is self-applied and Lykert type (1 to 5 points). Its aim is to assess the subjects' body satisfaction according to its physical appearance and functions. It was validated by male and female college students. It's not available in Portuguese.

The Body Appreciation Scale (BAS) assesses the positive aspect of Body Image. It is one-dimensional, created and validated with four independent groups of female students (17 to 30 years old) and Lykert type (1 to 5 points). This scale has not been validated for Brazil.

The purpose of this study is to perform the pre-test of the scales: Body Shape Questionnaire, Body Esteem Scale and Body Appreciation Scale.

Twenty 44 to 58 year-old women participated in the pre-test. Also, a sample characterization questionnaire and a clear and free commitment term were applied. The study was approved by the Ethics Committee (protocol number 648/2009). The data will be presented in a descriptive way, bearing in mind the considerations and statements which are more relevant for the discussion about trans-cultural translation of the scales.

In the BSQ, the scale instructions were discussed. The decision of using the simple past in the translation was set ("Como você se sentiu nas 4 semanas = How did you feel in the four last weeks) because it was easier and clearer for the women who answered the questionnaire. The original scale was written in the present perfect, a verb tense which doesn't exist in Portuguese and that made it harder to answer the questions.

As for the questionnaire layout, the need to insert the reminder "four last weeks" on the side was considered, under the belief that this would help the respondents who might forget the answer should refer to their last month while taking the test.

The word *fleshy (carne in Portuguese)* appeared in several items of the questionnaire and required cultural adaptation. In our language, we had to use three different words "corpo" (body), "pele" (skin) and "partes flácidas" (sagging

parts). In questions (5, 8, 16, 24) the word "carne" was replaced by "corpo" (body), "corpo" (body) and "pneuzinhos" (love handles) (instead of "carne ao redor da barriga" - flesh around the belly – literally translating). In question 16, the word *fleshy* is used in the expression [...] *cutting off fleshy areas* [...] which would be literally translated as "cortar fora areas de carne" (cut off areas of flesh). In the pre-test and after talking it through, we realized that the best translation to our language would be "cut off sagging parts" (pelancas – wrinkled and flabby skin) of the body.

Another important issue was related to what would the best translation for the word diet be: either "dieta" or "regime" could be used (q.2 and 21). There was no agreement on the exact meaning of the two words in Portuguese, as both shared the same meaning: lose weight (out of aesthetic) or weight maintenance (medical advice). Yet, the majority considered "regime" a more appropriate word when describing weight loss motivated by physical appearance. Therefore, after taking the context of the scale into account, we decided to choose the word "regime".

Item 1 refers to the translation of the word "bored" which could mean "entediada" (uninterested) or "desanimada" (depressed). Both words were pretested. Most women considered that being depressed (which imply negative feelings) is the reason why they often worry about their physical appearance.

Item 3 of the scale questions whether women believe that her buttocks, hips and thighs do not match the rest of her body. The answers given in the pre-test showed that Brazilian women also believe that breasts and belly can be a reason for body unbalance. Hence, we decided to add belly and breasts to this question.

The word shape, which means "forma" in Portuguese, was used in several items of the scale. However, when literally translated, it makes no sense in Portuguese. Hence, after taking the context into account, the word "corpo" (body) was used instead. The word "corpo" (body) was better understood than the word "forma" (shape) by subjects who took the pre-test.

The first discussion on the BES scale taken to the pre-test concerns the answer options for the scale. The original scale uses the option "I have

feelings", in the plural. However, at their meeting, the experts could not make their minds up on whether to use plural or singular for feelings. We decided to pre-test and observe the women's perception. According to most women, the word feelings should be used in the singular. In their opinion, when reflecting about the parts of the body which were being asked in the items, they could clearly realize the presence of only one feeling. Thus, using the word feelings in the singular appeared to be a more appropriate choice according to the pre-test.

Item 1 of the scale which refers to the function "smell of my body" was not very clear for the women who took the pre-test. The question refers to the smell as a perfume and not to the action of smelling, as most women had understood it. Therefore, we decided to use the expression "aroma do corpo".(body perfume)

In item 22, cheeks/cheekbones means "bochechas" and "maçã do rosto" in Portuguese, two different parts of the face which appear in the same question of the original scale. One of the purposes of the pre-test was to test whether women understood these parts of the face as separate or as a single "thing". The respondents considered cheeks and cheekbones as a single part of the face.

Question 28 refers to sex drive, which can de translated as "impulse" (impulse), "desejo" (desire) or " impulse sexual" (sex impulse). Pre-test was performed to check which option would fit best, taking into account how clear and how easy it was to give answers. Women had more difficulty in understanding the concept of "impulse sexual" (sex impulse). According to them, affectivity has a connection to "desejo" (desire) and not to "sex impulse" (sex impulse). Hence, the expression "desejo sexual" (sex desire) fit into the context better.

Finally, respondents were asked to, if need be, suggest body parts or function which were missing, according to their perception. Hands, skin and hair were the most mentioned and were, therefore, added to the scale.

In the BAS pre-test, it was only necessary to check whether women noticed the difference between question 4 (... accept my body) and question 13 (... like

my body). Except two, the women noticed the difference and realized that "accepting" the body does not share the same meaning with "like" the body.

Based on the remarks presented above, we can reach the conclusion that even though the scale was translated, retro-translated, and discussed by experts, there is nothing more real and human than the subject's own perception of the object being studied. Because the pre-test is taken by the population who the scale will be validated for, it supplies subsidies from the subject's own life experiences and allows a look that goes beyond simple observation. This look can trespass inscrutable universes where only the significant has permission to enter. And that is the difference between a scale and a researcher, who is able to grasp the true meaning of what is being studied by using the pre-test.

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