A set of key questions to assess the stress among bank employees and its reliability: Bank Employee Stress Test (BEST8)

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Abstract

The aims of the present study are: to realize a tool, clear and helpful, to assess the occupational distress level in bank employees in Italy; secondly to assess the reliability of the tool.
Eight sentences were considered after a consensus meeting that involved different professional figures.
70 questionnaires were collected. The overall Cronbach's alpha was 0.596, a sufficient reliability was found. The elimination of one sentences ("I haven't time to dedicate myself to my hobbies/activities/stuff") increases alpha's value from 0.596 to 0.620, and thus reach fully sufficient score. The claim "The pace of change on work place exceeds my capacity for adaptation" maximises the change of the level of reliability (Inter item Correlation = 0.528).

Introduction

The new Century the globalization and the new economy have determined significant changes in the organization and management of work. The banking sector are living a consequence of these evolutions, including mass layoffs, acquisition and crash, digitalization, outsourcing, business re-engineering with the reduction of the hierarchical levels, job insecurity, increased competition from the entrance of more private (corporate) sector banks, and multifunctional tasks [1,2].

Due to these changes, the employees in the banking sector are experiencing a high level of stress.
The concept of occupational stress in a medical sense has become a major cause of illness and a major risk to the psychological and social well-being of workers.
Several researches have studied the complexity of the phenomenon, and the multifactorial aspect that determine the distress on workers and in particular in bank employers. Some studies underline that there are many set of stressors that play a main role such as: career, relationship at work,   home and work interface, organizational structure [3-5].

In this context, the aims of the present study are firstly to realize a tool, clear and helpful, to assess the occupational distress level in bank employees in Italy and secondly to assess the reliability of the tool (Bank Employee Stress Test BEST).

Methods

Description of the tool

To decide the key sentences to evaluate the occupational stress, a consensus meeting was organized in March 2016. Five different figures were involved: an

epidemiologist, three employee representative of banking sector and an medical doctor specialized in hygienist that he works in occupational medicine. The BEST was composed of eight items shared at the end of the meeting: BEST8 (**Table 1**).

Table 1. BEST8: The eight sentences ad hoc for bank employees stress included in the test [a].

1. In terms of safety, It makes me uncomfortable thinking about a possible robbery on my desk. ☐ I agree   ☐ I don't agree
2. The failure to achieve the budgets targets causes me anxiety, because there are risks of geographical mobility and/or of the switch of duties. ☐ I agree   ☐ I don't agree
3. The pace of change on work place exceeds my capacity for adaptation. ☐ I agree   ☐ I don't agree
4. I'm not comfortable recommending a bank product just because in the budget". ☐ I agree   ☐ I don't agree
5. Frequent Company's re-organization make me fell me uncomfortable ☐ I agree   ☐ I don't agree
6. The requests of sales and/or consultations are in conflict with what I consider morally right. ☐ I agree   ☐ I don't agree
7. I haven't time to dedicate myself to my hobbies/activities/stuff ☐ Yes   ☐ No
8. My colleagues or superiors ask me to be more flexible with the job. ☐ I agree   ☐ I don't agree

a. The Italian version is available contacting the first or the last author of this publication.

Setting

An opportunistic sample was invited to answer to the anonymous questionnaire and to note possible inconsistent or unclear questions. The sample included bank employees in Tuscany. Different job position, job seniority in the bank were considered.

Description of the administration

The online questionnaire was created using the Google Forms and at the end of the data collection phase the information was imported from a Google Doc into an Excel spreadsheet. Data were collected during the April 2016.
The BEST8 was administered in an anonymous way.

Statistical analysis

Cronbach's alpha was used as a measure of the internal consistency for the questionnaire. In addition for checking whether any item was not consistent with the rest of the scale, and could thus can be discarded, a reliability analysis was performed.
The item-total correlation and the variability of the alpha between items, adding and eliminating items one at a time, was performed. The higher the score, the more reliable the generated scale is. The scientific publications have indicated 0.7 to be an acceptable reliability coefficient [6-8].
The level of significance was set $p < 0.05$. The software used to analyze data was SPSS 20 for Windows.

Results

A total of 70 questionnaires was collected to assess the reliability.
The overall Cronbach's alpha (on all 8 items) was 0.596 and the reliability analysis is shown in **Table 2.** The value indicates a low reliability [8]. The elimination of the 7th sentences ("I haven't time to dedicate myself to my hobbies/activities/stuff") increased alpha from 0.596 to 0.620 (Inter Item Correlation minimum = 0.038) with a sufficient reliability level.

The sentence number 3 ("The pace of change on work place exceeds my capacity for adaptation") represents the items that maximize the change of the level of reliability (Inter item Correlation = 0.528).

Table 2. Item-total correlation and variability of standardized Cronbach's alpha, if one item was deleted.

Items *	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1	0.108	0.589
2	0.319	0.532
3	0.528	0.439
4	0.469	0.490
5	0.420	0.491
6	0.269	0.540
7	0.038	0.620^
8	0.216	0.558

The overall Cronbach's Alpha based on standardized items 0.596

The number correspond to the sentences showed in Table 1.
^ Without these items the level of alpha, in according with Nunnally and Bernstein (9), is sufficient.

Discussion

The eight items made Crombach's alpha at limit of the sufficient reliability, and when the seventh item was deleted the level gets better with a fully sufficient score [9,10]. The seventh item probably no influence so much the reliability because covers a different set of stressors, that some researchers defined "home and work interface", for this reason it is suggest that this item should be deleted.

On the other hand, the items "The pace of change on work place exceeds my capacity for adaptation" and "I'm not comfortable when I have to advise investment customers to put their money into products only because they are in the budget" result key items for reliability and probably they are arguments that explains the effects banking reforms.

The revolution started at the end of the last Century with the advent of the extensive use of computers and today, with the intensive internet banking services, it requires to redefined roles and responsibilities of the bank employers. Finally the fact that all remaining sentences have the same Inter Item Correlation, suggests that likely the items are stressors covering the same areas, quite conceivably the "organizational structure" and "relationship at work" ones [4].

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