Short Inventory of Stress and Well Being (S-ISW) - Preliminary Report of Statistics Portugal 2017 application

Maria Graça Magalhães[1], Statistics Portugal

Madalena Oliveira[2], Statistics Portugal

José Magalhães[3], Statistics Portugal

Manuel Sommer[4], Pulso Portugal

Abstract

The promotion of healthy workplaces includes a healthy psychosocial work environment and should be understood as a vital purpose of current human resources management. Psychosocial risks are usually identified and assessed using surveys or interviews. In that context, Statistics Portugal has applied in March 2017 the S-ISW questionnaire, a Pulso[5] measurement instrument. 74% of employees participated. Therefore, the outcome results reflect the level of "well-being" at Statistics Portugal and as perceived by its employees when filling out the questionnaire online.

This paper will focus on a preliminary analysis of the outcome results, namely on the factors that require particular attention due to the risks and impacts on stress and motivation, either by the need of improvement or by the possibility of being used as buffers. Example findings of the first was the felt lack and need for information about what happens in the company, clear outlook about what is expected of people at work, personal development and opportunities to participate in training and diversification of tasks. Example findings of the second was the perception that opinions are taken into account in decision-making processes, the identification of employees with the values of Statistics Portugal, the support and feedback of the direct leadership and colleagues, autonomy and the willingness to accept greater responsibilities that the ones corresponding to their capabilities.

1.   Introduction

Increasing globalization, new technologies, and significant demographic changes could bring perceptions of insecurity and instability to employees, stirring organizations to adapt to new circumstances and to act responsibly, while ensuring productivity (Jain, Leka, & Zwetsloot, 2011). These changes are linked to the way work is designed, organized and managed, as well as to the economic and social context of work and have impacts on working conditions for employees, leading to increased levels of work-related stress and increasing the risk of serious deterioration of mental and

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[1] mgraca.magalhaes@ine.pt
[2] madalena.oliveira@ine.pt
[3] jose.magalhaes@ine.pt
[4] manuel.sommer@pulso-europe.eu
[5] https://pulso-europe.eu/en/about-pulso

physical health, include depression and burnout (European Agency for Safety and Health at Work, 2007).

As described in the report about psychosocial risks of the European Agency for Safety and Health at Work (EU-OSHA) and the European Foundation for the Improvement of Living and Working Conditions (Eurofound), in Europe, around 25% of current workers in Europe experienced work-related stress and a similar proportion believe that work affects negatively their health (EU-OSHA & Eurofound, 2014). According to the results of a recent Eurobarometer survey, in the past 12 months of the survey, 27% reported experiencing stress, depression or anxiety either caused by or exacerbated by work (European Commission, 2014).

Psychosocial risks, which include, among others, excessive (or the opposite) demands, job insecurity, violence and harassment, have a clear negative impact on workers' health and well-being, have costs and should be a concern for workers, companies and countries, stirring to an increasing recognition of the importance need to deal with psychosocial risks and the implementation of preventive policies. The promotion of healthy workplaces includes a healthy psychosocial work environment and should be understood as a vital purpose of current human resources management. Psychosocial risks are usually identified and assessed using surveys or interviews, within this purpose Statistics Portugal has applied the S-ISW questionnaire, a Pulso measurement instrument, considered useful in organizational analysis for the development of welfare policies (Vander Elst, T. et all, 2011).

2. The questionnaire

The S-ISW is a standardized European questionnaire, developed in collaboration with the Belgian Ministry of Work and the European Social Fund, scientifically validated, designed to a detection of psychosocial and organizational factors, currently available in English, French, Dutch, German, Portuguese, Spanish, Turkish and Japanese, that ensures the confidentiality and anonymity of the respondents. The S-ISW comprise 72 questions, of which 40 are related to risk factors on 5 dimensions – Job demands; Task challenges; Team; Organization; and, Context – and 21 indicators of well-being on 4 dimensions – Stress; Motivation; Undesirable behavior (harassment or other undesirable behavior); and Absenteeism. Besides socio-demographic variables such as age, gender, level of education, staff category, company seniority, among others.

3. Main findings

Statistics Portugal has applied in March 2017 the S-ISW questionnaire, with a response rate of 74%, over a population of 628 workers. The outcome results reflect the level of "well-being" at Statistics Portugal as perceived by its employees when filling out the questionnaire online and comprise: (1) the analysis of the average punctuation of well-being indicators and risk factors (benchmark charts); (2) a comparison of the Statistics Portugal averages with an external benchmark group (60 263 recent observations from the public sector on different European countries (Belgium, France, The Netherlands, Luxemburg, Germany, Austria); (3) an impact analysis with identification of 'buffers' and 'main priorities". In more detail for (1) and (2):

(1) Analysis of the average punctuation of well-being indicators and risk factors
- [**1,3**[: Low risk;
- [**3,5**]: Moderate risk;
- [**5,7**]: High risk.

(2) Comparison of the Statistics Portugal averages with an external benchmark group
- **Black average**: no significant difference between Statistics Portugal and the reference group;
- **Red average**: risk is significantly greater in Statistics Portugal than in the reference group;
- **Green average**: risk is significantly smaller in Statistics Portugal than in the reference group.

3.1. Indicators of well-being

The S-ISW analyzes 4 dimensions of well-being: Stress, Motivation, Undesirable behavior and Absenteeism.

3.1.1. Stress

Regarding the stress dimension, where the higher the score the more frequent or serious the complaints are, the 3.31 average represents a moderate risk and as no significant difference with the benchmark group (Chart 1), and in addition is an outcome from:

- Indicators where the average represents a **low risk although significantly greater** than in the benchmark group – Insufficiency (2.68);
- Indicators where the average represents a **moderate risk and is significantly smaller** than in the benchmark group – Psychological complaints – irritation (3.06);
- Indicators where the average represents a **moderate risk and not significantly different** from the benchmark group – Physical complaints (4.30), Psychological complaints – mood (3.03), Psychological complaints – tension (3.38), Exhaustion (3.37);
- Indicators where the average represents a **moderate risk and is significantly greater** than in the benchmark group – Psychological complaints – cognitive (3.02), Persistent strain (3.67).
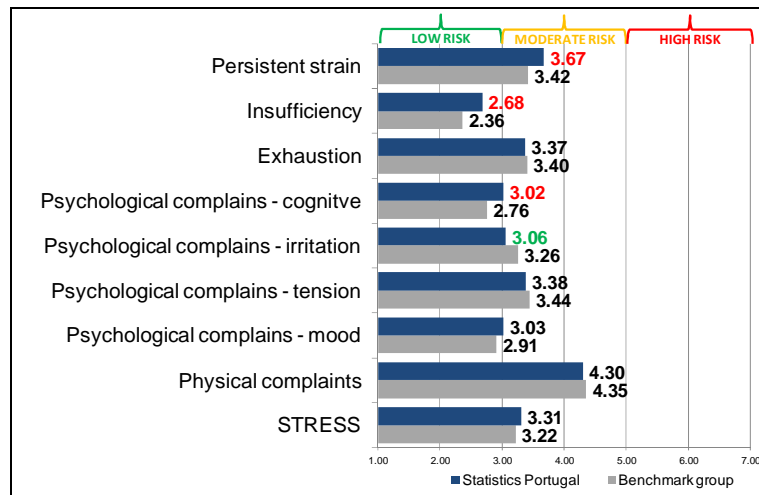

Chart 1 – Overview 'stress'

3.1.2. Motivation

Regarding the motivation dimension, where the higher the score, the lower the level of motivation, the 3.19 average represents a moderate risk and as no significant difference with the benchmark group (Chart 2), and in addition is an outcome from:

- Indicators where the average represents a **low risk and significantly smaller** than in the benchmark group – Feeling of performance (2.01), Pride in organization (2.69), Pride in one's job (2.52);
- Indicators where the average represents a **low risk and not significantly different** from the benchmark group – Intention of changing job (2.63);
- Indicators where the average represents a **low risk although significantly greater** than in the benchmark group – Job satisfaction (2.96);
- Indicators where the average represents a **moderate risk and is significantly greater** than in the benchmark group – Enthusiasm (4.39);
- Indicators where the average **simultaneously represents a high risk and is significantly greater** in Statistics Portugal than in the benchmark group – Job centrality (5.15).
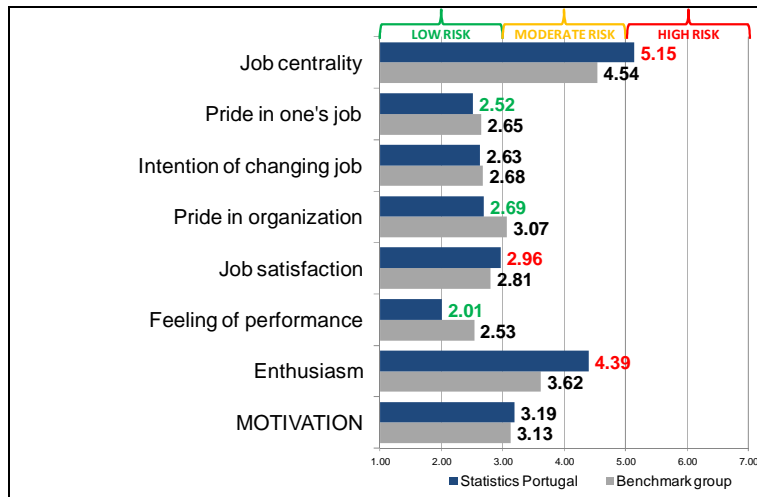

Chart 2 – Overview 'motivation'

3.1.3. Undesirable behavior/mobbing

Regarding the undesirable behavior/mobbing dimension, where the higher the score the more frequent are reported complaints about undesirable behaviors, the 3.19 average represents a low risk and is significantly lower than the benchmark group (Chart 3), and in addition is an outcome from:

- Indicators where the average represents a **low risk and significantly smaller** than in the benchmark group – Harassment – presence (1.83), Harassment - victim (1.35), Mutual respect (2.11);
- Indicators where the average represents **a low risk although significantly greater** than in the benchmark group – Other undesirable behavior – victim (1.60).
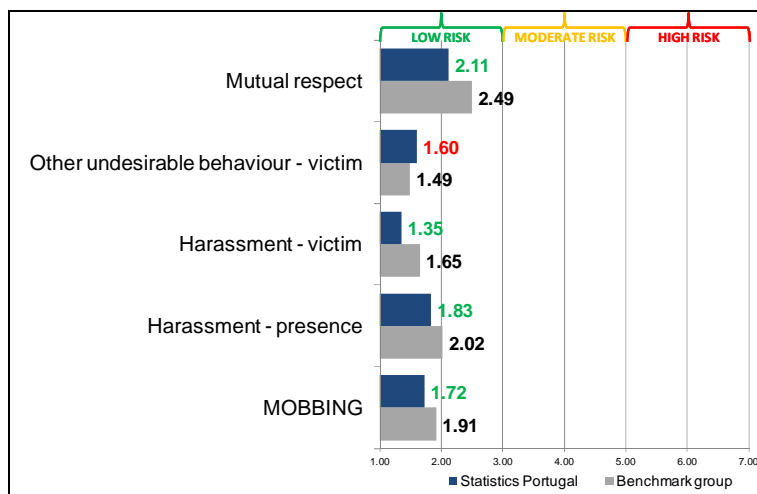

Chart 3 – Overview 'mobbing'

3.1.4. Absenteeism

S-ISW measures perceived absenteeism in terms of the number of days that respondents became ill in the previous year. Statistics Portugal figures are significantly smaller than in the reference group.

3.2. Work risk factors

The S-ISW analyzes 5 dimensions of risk factors: Job demands, Task challenges, Team, Organization and Context.

3.2.1. Job demands

Regarding the job demands dimension, where the higher the score, the greater the risk and the more disadvantageous to Statistics Portugal, the 3.40 average represents a moderate risk and as no significant difference with the benchmark group (Chart 4).This average adds the following:

- Factors where the average represents a **low risk and significantly smaller** than in the benchmark group – Breaks (1.92), Work-Life balance (2.69);
- Factors where the average represents a **low risk although significantly greater** than in the benchmark group – Travel time (2.99), Demanding responsibility (2.88);
- Factors where the average represents a **moderate risk and is significantly smaller** than in the benchmark group – Flexibility granted by employer (3.28), Emotional demands (3.42);
- Factors where the average represents a **moderate risk and not significantly different** from the benchmark group – Overtime (3.83), Physical demands (3.06), Difficult outsiders (3.55);
- Factors where the average represents a **moderate risk and is significantly greater** than in the benchmark group – Workload (4.37), Work complexity (3.61);
- Factors where the average represents a **high risk and not significantly different** than in the benchmark group – Impact of mistakes (5.18).
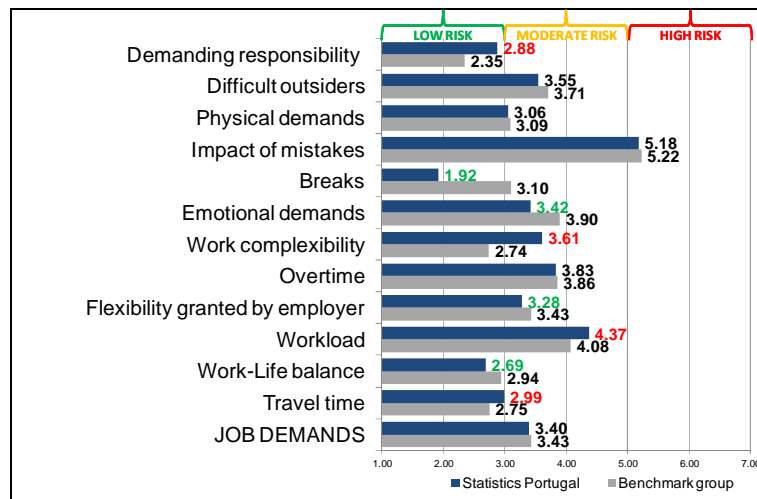

Chart 4 – Overview "job demands"

3.2.2. Task challenges

Regarding the task challenge dimension, where the higher the score, the greater the risk and the more disadvantageous to Statistics Portugal, the 3.09 average represents a moderate risk and as no significant difference with the benchmark group (Chart 5).This average adds the following:

- Factors where the average represents a **low risk and significantly smaller** than in the benchmark group – Responsibility (2.42);

- Factors where the average represents a **low risk and not significantly different** from the benchmark group – Skill utilization (2.90), Under stimulation (2.75);
- Factors where the average represents a **moderate risk and not significantly different** from the benchmark group – Autonomy (3.16), Personal development (3.37);
- Factors where the average represents a **moderate risk and is significantly greater** than in the benchmark group –Training (3.78), Variation (3.24).
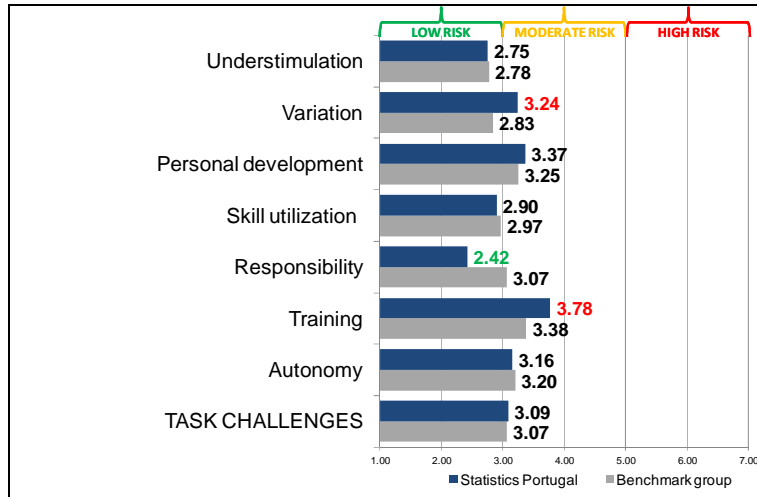

Chart 5 – Overview 'task challenges"

3.2.3. Team

Regarding the task challenge dimension, where the higher the score, the greater the risk and the more disadvantageous to Statistics Portugal, the 2,78 average represents simultaneously a risk low and significantly smaller than in the benchmark group (Chart 6).This average adds the following:

- Factors where the average represents a **low risk and significantly smaller** than in the benchmark group – Social atmosphere (2.79), Support from colleagues (2.51), Support from supervisor (2.62);
- Factors where the average represents a **moderate risk and significantly smaller** than in the benchmark group – Feedback from supervisor (3.18).
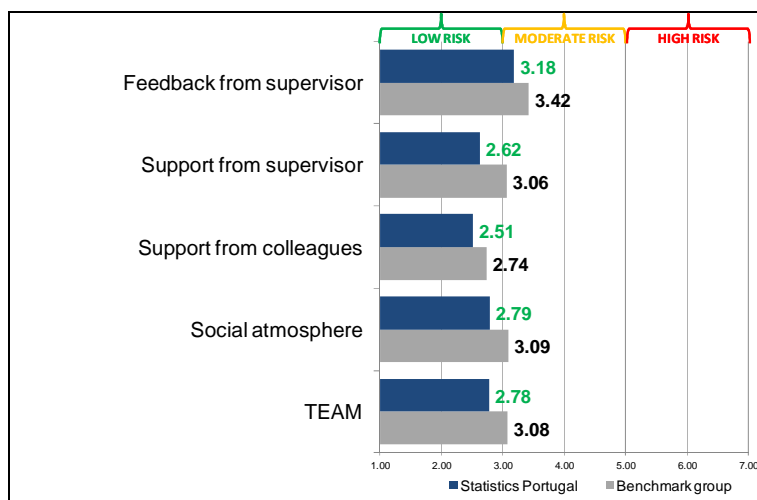

Chart 6 – Overview "team"

3.2.4. Organization

Regarding the task organization dimension, where the higher the score, the greater the risk and the more disadvantageous to Statistics Portugal, the 3.56 average represents a risk moderate and significantly greater than in the benchmark group (Chart 7).This average adds the following:

- Factors where the average represents a **low risk and significantly smaller** than in the benchmark group – Materials (2.56), Values (2.39), Physical conditions and safety (2.46);
- Factors where the average represents a **moderate risk and significantly smaller** than in the benchmark group – Staffing (3.48), Participation (3.42);
- Factors where the average represents a **moderate risk and not significantly different** from the benchmark group – Work organization (3.58);
- Factors where the average represents a **moderate risk and is significantly greater** than in the benchmark group – Remuneration (4.66), Information (4.00), Clear expectations (3.16), Policy (4.16), Staff attraction (4.21), Staff retention (4.97), Confidant (3.19).
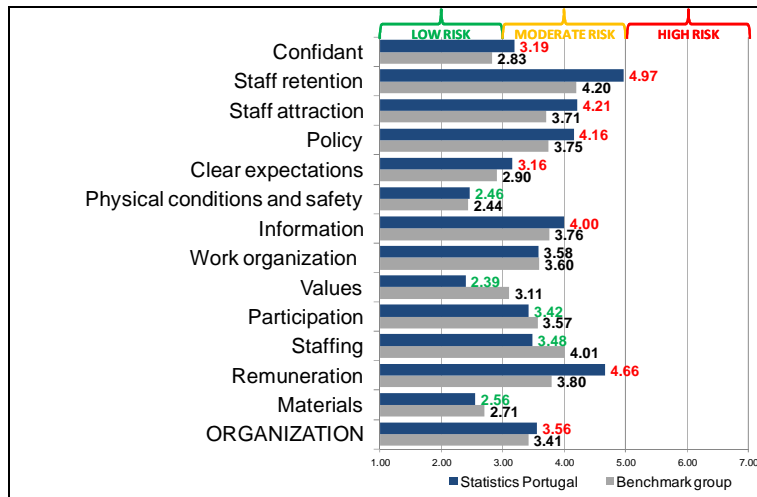

Chart 7 – Overview "organization"

3.2.5. Context

Regarding the task context dimension, where the higher the score, the greater the risk and the more disadvantageous to Statistics Portugal, the 4.22 average that represents a moderate risk and as no significant difference with the benchmark group (Chart 8).This average adds the following:

- Factors where the average represents a moderate risk and is significantly smaller than in the benchmark group – Fear of changes (3.22);
- Factors where the average represents a moderate risk and not significantly different from the benchmark group – Job insecurity (4.08);
- Factors where the average represents a moderate risk and is significantly greater than in the benchmark group – Position on job market (4.47);
- Factors where the average represents a simultaneously represents a high risk and is significantly greater in Statistics Portugal than in the benchmark group – Perspectives (5.10).
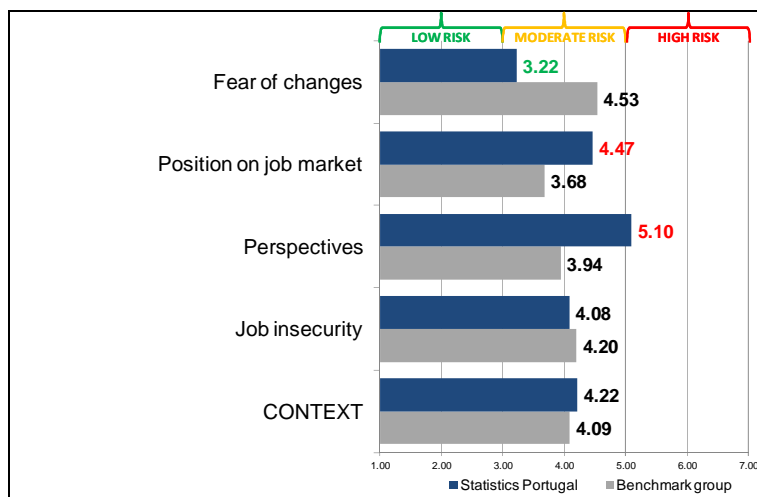

Chart 8 – Overview "context"

3.3. Impact analysis

Considering the two vectors impact on the indicators of well-being and difference with the benchmark group is possible to design a "map" of priorities (schema 1) for each dimension: stress (Chart 9), motivation (Chart 10) and mobbing (Chart 11).

IMPACT ON WELL-BEING INDICATORS	BUFFERS High impact + Lower risk compared to reference group	HIGHEST PRIORITY High impact + Higher risk compared to reference group
	LOWEST PRIORITY Low impact + Lower risk compared to reference group	AREAS OF CONCERN Low impact + Higher risk compared to reference group
	DIFFERENCE WITH REFERENCE GROUP	

Schema 1

Work-Life balance (job demands) *Emotional demands (job demands)* *Autonomy (task challenges)* *Social atmosphere (team)* *Support from colleagues (team)* *Support from supervisor (team)* *Feedback from supervisor (team)* *Participation (organization)* *Values (organization)* *Work organization (organization)*	*Demanding responsibility (job demands)* *Training (task challenges)* *Personal development (task challenges)* *Remuneration (organization)* *Information (organization)* *Policy (organization)* *Perspectives (context)*
Flexibility granted by employer (job demands) *Overtime (job demands)* *Breaks (job demands)* *Impact of mistakes (job demands)* *Physical demands (job demands)* *Difficult outsiders (job demands)* *Responsibility (task challenges)* *Skill utilization (task challenges)* *Understimulation (task challenges)* *Materials (organization)* *Staffing (organization)* *Job insecurity (context)* *Fear of changes (context)*	*Travel time (job demands)* *Workload (job demands)* *Work complexity (job demands)* *Demanding responsibility* *Variation (task challenges)* *Physical conditions and safety (organization)* *Clear expectations (organization)* *Staff attraction (organization)* *Staff retention (organization)* *Confidant (organization)* *Position on job market (context)*

Chart 9 – Priority chart for stress

Autonomy (task challenges) **Responsibility (task challenges)** **Skill utilization (task challenges)** **Social atmosphere (team)** **Support from colleagues (team)** **Support from supervisor (team)** **Feedback from supervisor (team)** **Materials (organization)** **Participation (organization)** **Values (organization)** **Work organization (organization)**	**Training (task challenges)** **Personal development (task challenges)** **Variation (task challenges)** **Remuneration (organization)** **Information (organization)** **Clear expectations (organization)** **Staff retention (organization)** **Confidant (organization)** **Policy (organization)** **Perspectives (context)**
Work-Life balance (job demands) **Emotional demands (job demands)** **Flexibility granted by employer (job demands)** **Overtime (job demands)** **Breaks (job demands)** **Impact of mistakes (job demands)** **Physical demands (job demands)** **Difficult outsiders (job demands)** **Understimulation (task challenges)** **Staffing (organization)** **Job insecurity (context)** **Fear of changes (context)**	**Demanding responsibility (job demands)** **Travel time (job demands)** **Workload (job demands)** **Work complexity (job demands)** **Demanding responsibility** **Physical conditions and safety (organization)** **Staff attraction (organization)** **Position on job market (context)**

Chart 10 – Priority chart for motivation

Emotional demands (job demands) **Autonomy (task challenges)** **Responsibility (task challenges)** **Skill utilization (task challenges)** **Social atmosphere (team)** **Support from colleagues (team)** **Support from supervisor (team)** **Feedback from supervisor (team)** **Participation (organization)** **Values (organization)** **Work organization (organization)**	**Personal development (task challenges)** **Variation (task challenges)** **Remuneration (organization)** **Information (organization)** **Clear expectations (organization)** **Confidant (organization)** **Policy (organization)**
Work-Life balance (job demands) **Flexibility granted by employer (job demands)** **Overtime (job demands)** **Breaks (job demands)** **Impact of mistakes (job demands)** **Physical demands (job demands)** **Difficult outsiders (job demands)** **Understimulation (task challenges)** **Materials (organization)** **Staffing (organization)** **Job insecurity (context)** **Fear of changes (context)**	**Training (task challenges)** **Demanding responsibility (job demands)** **Travel time (job demands)** **Remuneration** **Workload (job demands)** **Work complexity (job demands)** **Demanding responsibility** **Physical conditions and safety (organization)** **Staff attraction (organization)** **Staff retention (organization)** **Position on job market (context)** **Perspectives (context)**

Chart 11 – Priority chart for mobbing

4.   *Discussion of the results*

At first glance, Statistics Portugal results showing that the organization, in general, does not present any serious risks in what concern to stress, motivation or even undesirable behavior, since the scores represents a moderate risk and not significantly difference from the benchmark group or even representing a low risk and significantly lower than the benchmark group (for the undesirable behavior dimension). Even so, some indicators are requiring some attention, is the case of complaints of persistent strain, psychological complaints – cognitive and insufficiency (for stress dimension), job centrality, enthusiasm and job satisfaction (for motivation dimension), and, "other" undesirable behavior (for mobbing dimension), either by the high risk or because they present averages that are significantly higher than the benchmark group.

In what concerns to dimensions of work risk factors and according to the results, there are some work risk factors that should receive some attention, either because although the scores represents a low risk but is significantly greater than in the benchmark group – "Travel time" and "Demanding responsibility"; either because the scores represents a moderate risk however is significantly greater than in the benchmark group – "Workload", "Work complexity", "Training", "Variation", "Remuneration", "Information", "Clear expectations", "Policy", "Staff attraction", "Staff retention", "Confidant", and "Position on job market"; either because the scores represents a high risk even if not significantly different from the benchmark group – "Impact of mistakes"; either because the scores represents a high risk and also is significantly greater than in the benchmark group – "Perspectives".

Moreover, considering the tree dimensions of well being analyzed (stress, motivation and mobbing), most of these previous stated factors are considered as highest priority (Charts 9, 10 and 11): "Demanding responsibility", at job demands level, and that refers to the difficulty to deal with the responsibilities faced on job; "Training", "Personal development" and "Variation", at task challenges level; "Remuneration", "Information", "Policy", "Clear expectations", "Staff retention" and "Confidant", at organization level; and, at context level, "Perspectives".

On a more positive point of view, we can also identified some work factors that are "positive" for Statistics Portugal, that could be improved and that have a high impact on the well being, the buffers (Charts 9, 10 and 11): "Work-Life balance" and "Emotional demands", at job demands level; "Autonomy", "Responsibility" and "Skill utilization", at task challenges level; "Social atmosphere", "Support from colleagues", "Support from supervisor" and "Feedback from supervisor", at team level; "Participation", "Values", "Work organization" and "Materials", at organization level.

The next steps are ongoing and are related to drafting and propose some measures to deal with the disadvantages and to majoring some advantages, on a realistic and focused approach.

5. References

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