

Boosting the Skills of Youth for Dealing with Stress at Work: Results of Boostress Study

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**Ενίσχυση των Δεξιοτήτων
Διαχείρισης Στρες στην Εργασία
για Νέους Επαγγελματίες Υγείας:
Αποτελέσματα της Μελέτης
Boostress**

Abstract at the end of the article

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Introduction: Work-related psychosocial risks and stress, together with their associated negative health and business outcomes affect a remarkable number of European workplaces. Despite this effect, research shows that 70% of businesses in Europe have no procedures or systems in place for dealing with workplace stress. **Aim:** The purpose of this European Erasmus+ Program (Erasmus+Boostress project) "Boosting the skills of youth for dealing with stress at work" is the development digital tools to empower young professionals to better cope with work-related stress. **Material and Method:** The study was conducted in three European countries, Ireland, Cyprus, and Spain. Specifically 60 young professionals (20 per country) were chosen via convenience sampling and subsequently invited to participate in the study. A ten-question close format questionnaire was developed, using a Delphi approach and completed by all participants. The descriptive analysis was conducted by using SPSS 20b package. **Results:** A total of 60 responders from all three countries agreed to participate Ireland, Cyprus and Spain (response rate 100%). The majority of participants had no prior participate in training for stress-related topics, 95%, 91%, 80%, respectively Irrespective of age or sex, participants considered themselves to be at a very high risk of stress development, 65% from Irelandων, 73% from Cyprus and 65% from Spain. The implementation of digital, ICT – based training was considered a useful and feasible approach to increase participant knowledge and skills and improve early intervention and prevention decisions. **Conclusions:** There is latent need for the training of young professionals on early stress recognition and appropriate management. The development of suitable digital and traditional learning material and the involvement of motivated and adequately qualified trainers are key strategies for the successful implementation of a relevant preventative intervention.

Key-words: Stress at work, burn out, stress management, anxiety, stress intervention.

Introduction

Work-related psychosocial risks and stress, together with their associated negative health and business outcomes affect a remarkable number of European workplaces.¹ Despite this effect, research shows that 70% of businesses in Europe have no procedures or systems in place for dealing with workplace stress.² While employers have a legal responsibility to reduce risks including psychosocial risks, to workers' health and safety stemming from the Framework Directive (89/391/EEC), in many organizations there is a misconception that addressing psychosocial risks is challenging and will incur additional costs when, in fact, the evidence suggests that failure to address these risks can be even more costly for employers, workers and society in general.³⁻⁴

With the dearth of resources available to professionals to help manage their workplace stress, the incidence of workplace stress also appears to be on the increase, affecting evermore employees across Europe and adding to the problem that the European workforce and employers are facing. In February 2018, the University of Bath, Bristol, Exeter, Southampton and Surrey published the result of a study they lead to identify the main factors causing stress among students and professionals in Great Britain and to ascertain the effects this is having on the health of British citizens. What they found is that on average 85% of British adults experience regular stress; with 54% of these individuals worrying about the effect it is having on their health. This research also highlighted that in general women suffer more from stress than men do, with women typically experiencing stress on 3 days more per month than men do. Additionally, the researchers found that young adults suffer more from stress than any other age group, with 18–24 year old experiencing stress on 12 days per month and 69% of these young people worrying about the impact that it is having on their health. When the study assessed the factors, which contribute to rising stress levels among young professionals in the UK, it found that in general those aged 18–24 worry most about money and those aged 25–34 worry most about factors related to their employment and careers.⁵ This study shows the impact that financial and professional stress and anxiety are having on young adults and young professionals and our research confirms that the trends that are presented in the findings from this study are comparable across other EU Member States.

The aim of this paper is to develop digital tools to empower young professionals to better cope with work-related stress.

Material and Method

Approval-bioethics

The study was performed following approval by the partner national bioethics committees and the research regulatory authority of the centres invited. In addition, the data protection regulators were informed and conformation to GDPR standards was confirmed prior to study conduction.

Study design

A cross-cut study was conducted in June 2018 simultaneously in all 3 countries participating in the BooStress project. A population of 20 participants per country were chosen by convenience sampling and subsequently invited to complete a structured 10 question questionnaire relevant to the topic of stress management in order to assess how the youth manage stress in their current job, if they have ever undertaken stress management training, what aids are available to them from their employers to help them to manage stress and to identify other coping strategies that may use to the development of BooStress training materials.

Tool development and validation

This screening questionnaire was developed by an expert panel consisting of five health professionals per country. Initial open questions were used to prepare a first questionnaire draft, followed by two rounds of progressive selection of statements of common approval using a Delphi approach.⁶ The final tool consisted of 10 closed format questions plus basic demographic questions – open response as depicted in the appendix.⁷ The derivative tool was translated in each participating country and subsequently validated using a pilot study of 10 volunteers. In all cases, both the Cronbach alpha and the test-retest validity (as calculated via the Pearson correlation coefficient) were satisfactory (rates between 0.72 and 0.93) thus justifying the tool's use at a wider target audience.

Recruitment

In terms of participants' recruitment, 20 individuals were approached per country based on an extensive search of existing best practices/centres of excellence. A convenience sample of young professionals and stakeholders were chosen in each setting with a minimum of 3 sampling sites per country. Participation was voluntary and no incentive was offered. In all cases, questionnaire completion was manual and anonymous, with the par-

ticipant being offered assistance for completion by the study field researcher only if needed.

Statistical analysis

All data was introduced in anonymous tables and descriptive statistical processing was performed using IBM SPSS Version 20.

Results

In total, 60 respondents answered the questionnaire disseminated in the 3 partner countries across Europe. The response rate was therefore 100% in all countries and sampling sites (table 1).

The results revealed that the 35% of the young professionals, who responded to the research questionnaire in Ireland, stated that they do not currently experience stress in their job, with the remaining 65% of respondents experiencing stress as part of their work. Of those young people who stated that they do experience stress in the workplace, 5 stated that they experience stress on a "weekly" basis, 4 on a "daily" basis, 3 on a "monthly" basis and 1 young employee stated that they experience stress in work every hour. In Spain, 65% of all participants reported stress at their current workplace, with over half of these (53.8%) stating that they experienced it daily and just under one-quarter of respondents (23.1%). In Cyprus, 73% of respondents stated that they experience stress in their current job, while only 21% said that they do not and 6% don't answer. The frequency of stressful experience varies, but it is notable that only 21% never

feel stressed in work. They usually experience stress on an hourly basis or only weekly (table 2).

In Ireland, 95%, or 19 out of all 20 respondents, stated that they have never completed training to help them cope with stress. They did not provide any additional information on the topic or purpose of the training. When asked if this support was helpful to the employees to support them in managing stress, one individual stated that this was not helpful because it was not comprehensive enough. Similarly in Spain, only 20% stated they have previously taken part in training to help with stress management, of which most seemed to be related to practicing mindfulness. All participants who took part in this type of training were offered the training by their employer; however only half of all those who took part in the training (2 out of 4) found it useful. Similarly, only 10% of all participants were aware of any training or support that specifically addresses work-related stress management among young workers and only 5% knew of online tools on the subject. Moreover, in Cyprus, in spite of the fact that most of the participants feel stress in their current job, the vast majority (91%) have never undertaken training to help them manage stress in work, with the remaining 9% stating that they had undertaken training in the form of private workshops (two responses) or from their family (one response).

Furthermore, 85% of the participants have never been offered support or training by their employer, 15% replied that they received support (3 participants further commented that they were supported and only 1 participant attended a 6-hour seminar). Wherever applicable, the

Table 1. Participants per country.

Ireland	Cyprus	Spain
20 (response rate 100%)	20 (response rate 100%)	20 (response rate 100%)

Table 2. Results of stress level.

Answers	Ireland	Cyprus	Spain
Experience Stress as part of their work	65%	73%	65.0%
In Weekly basis	25%	30%	
In daily Basis	20%	27%	53.8%
In monthly Basis	15%	12%	
In every hour	5%	3%	11.2%
Never participate in stress management training	95%	91%	80.0%

support received as part of the training offered by the employer was useful to help manage stress in work for only 18% of the participants. Despite the high levels of work-related stress, most participants (58%) did not use any specific tools or resources to help them manage stress and 73% did not have any specific strategies in place to help them manage stress.

Survey respondents were next asked to mention any online resources or tools that they were aware of to help young people manage their stress. This question received limited responses with only 10%, of the responders in Ireland (2 respondents out of 20), stating that they were aware of any online tools and of these respondents 1 mentioned the BooStress project as an online resource that they are aware of, and the other did not provide any specific details of online resources. However, when asked if they were aware of any specific tools and resources to help them manage their stress, 7 out of 20 young professionals answered positively to this question.

In Spain, 40% of participants named an activity that they do to overcome stress, while 30% stated they had a strategy for dealing with stress, though, these typically included meditation, yoga, respiratory exercises or simply "positive thinking". None of the young professionals surveyed in Spain mentioned that they had ever taken part in self-help groups.

As a follow-up question, young professionals were asked if they had any coping strategies in place for when they experience stress. As indicated by previous responses, almost half of all survey respondents (45%) had strategies in place. These included meditating ever day at lunch break or in the evenings, regular physical exercise, prioritizing and making to-do lists to manage work load, talking to friends and family for support when stressful situations arise, practicing breathing techniques to calm down when stress occurs, dealing with one stress source at a time, taking a break and looking at a problem from the broader perspective. This shows the range and scope of coping strategies that young employees in Ireland are already using to manage their stress.

Regarding the additional training for stress management the Ireland participants stated that the areas that they prefer are: talking to an employer about stress, the impact of stress on health, strategies for coping with stress, strategies for managing long-term stress, maintaining work-life balance and how not to bring workplace stress home, how to analyze what causes stress and deal with factors, crisis/conflict management, time

management, managing relationships in work and managing conflict. In relation to their preferred format of training materials, Irish respondents stated that they would prefer training materials to be presented as self-assessment tests (50%), online training (45%) and handbooks and guidelines (45%). Over half (55%) of all survey respondents in Spain expressed their interest in participating in a BooStress training program. In relation to the preferred topics, survey respondents were interested in developing "skills for stress management" (14 votes), "stress management techniques" (11 votes), and "intervention for stress management" (10 votes). In terms of the format of these training materials, only blended learning resources (12 votes) and online learning (10 votes) received votes from at least half of the research participants. Other formats, such as online games (9 votes), manuals/guidelines (8 votes) and online advice via an online platform (8 votes) received comparatively high scores as well, while worksheets/brochures (3 votes) and podcasts (1 vote) drew the least interest among young professionals in Spain.

Discussion

Cyprus young professionals in relation to the BooStress training package format, asked for user-friendly online courses with music in the background and images, photos and interactive videos included, as well as a layout like well-known and frequently used social media for "maximum user-friendliness". Moreover, respondents stated that educational games and quizzes could make the package more attractive to users and thus help them to deal with stress in a more efficient and pleasant way. A blended learning program is the preferred format for training materials and resources, however providing training fully online were also popular, especially among those who have limited time to give to attending training. It was also recommended that the BooStress modules are kept short, simple and free of technical and scientific terms, well-structured and follow modern educational and instructional design principles (e.g. role-play, real work-based scenarios, etc.). Furthermore, it was suggested that the modules are available for smartphones through an application and ideally downloadable so that it can be viewed or read off-line at a later stage if needed. Lastly, including visuals and audio, such as a narrator, was seen as necessary for those young employees with hearing and visual impairments.

When probed, participants in the current study listed the following resources: stress app on phone meditation

app on phone, guided meditation through YouTube, relaxing at home, hobbies, football, meditation-learning to control your mind and learning that other people's opinions or attitudes have nothing to do with you, rule your mind or your mind will rule you, regular exercise as it relieves stress so as not to bring the stress home. While these responses show the different strategies and coping mechanisms which young people use to help them to overcome and manage their stress, this question did not elicit the type of responses that was intended, as it did not result in the compilation of a comprehensive list of available tools and resources for young people to help them managing stress.

When it comes to the content of the modules, participants asked for the development of skills that will allow them to maintain good working relations with their colleagues, partners, clients, employers, etc., as well as the development of organizational, time management and general stress management skills, including the skill to control stress and learn how to live with stress in a positive way. Young professionals prefer to receive practical guidelines and advice and learn specific techniques that will help them to deal with work-related stress. Lastly, discussion groups in the form of "blind" chat rooms through which participants will be able to share their thoughts, experiences and feelings with their peers were also highlighted by the Cypriot focus group members. Overall, participants requested knowledge and skills that will increase their self-esteem at work and give them clear role and existence which will finally help them to manage stress at work. Research activities have shown that, on the one hand, young professionals in Cyprus suffer from increased work-related stress and they feel that they do not receive any substantial support by their employers or colleagues; and on the other hand, that trainers and stakeholders (as well as young professionals) are unaware of ICT tools and training programmes on how to deal with stress – apart from a few face-to-face seminars offered by private universities. In addition, employees' lack of time and resources prevent them from attending such training and employers are unwilling to commit their own time and resources to allow their employees to attend training, as they consider the development of stress management skills to be of secondary importance. The research has also shown some important gaps in the provision of training on stress management as well as the lack of certain skills among young professionals that will help them to deal efficiently with stress.

In a recent EU-funded project carried out by Matrix,⁸ the cost to Europe of work-related stress was estimated to be €617 billion annually. The total was made up of costs to employers resulting from absenteeism and presentism (€272 billion), loss of productivity (€242 billion), health care costs of €63 billion and social welfare costs in the form of disability benefit payments (€39 billion).

Another study conducted in the United Kingdom in 2007 by the Sainsbury Centre for Mental Health estimates that the overall cost to British employers of stress, anxiety and depression amounts to "£1,035 per employee per year (€1,220). Of this total, £335 (€400) (32.4 %) is due to absenteeism, £605 (€710), or 58.4 %, to 'presentism' and £95 to staff turnover (9.2 %).⁹ These studies highlight the impact that workplace stress, anxiety and other psychosocial issues can have on individual employees and employers, and yet little is being done to address this issue on a practice-level.¹⁰

Conclusions and Recommendations

As a general feeling, there appears to be a large interest in ICT-based stress-related training among the target group participants, and there is a latent need for more information and development of new materials within this concept. There was also unanimous agreement on the fact that new technologies are essential in young peoples' daily lives and will become progressively more integrated in almost all aspects of social and professional life. Taking into account numerous good practices already existing in the field of all partner countries, it can be noticed that this is the sector that is being developed a lot but there is still significant opportunity for improvement of the stress prevention, early diagnosis and management services offered to young professionals.

The following recommendations can be made to ensure that any future resource or training program regarding stress management in young professionals is relevant and useful for the target audience:

- ICT learning for young professionals requires appropriate tools and trainings tailored to individual needs, due to existing linguistic, generational and cultural gaps
- There are social and personal competencies that this report has identified that are essential for mental health educators such as patience, motivation, communication and the ability to have basic IT skills. Moreover, practi-

cal skills (time management and organizational skills) should not be underestimated as well

- Learning by talking with other people and having face-to-face trainings are commonly suitable and should be a vital component of any stress-related training program
- Due to the high aptitude and accustomization of the younger generation, the use of video and other social and digital media can significantly facilitate understanding and the learning acquisition in this applied topic

- Traditional format for learning content (usually printed materials, i.e. handbooks, guidelines, handouts) needs to be used during the training in combination with new, modern ones (digital tools, simulation, role playing, e-learning) depending on individual needs and resources.

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ΠΕΡΙΛΗΨΗ

Ενίσχυση των Δεξιοτήτων Διαχείρισης Στρες στην Εργασία για Νέους Επαγγελματίες Υγείας: Αποτελέσματα της Μελέτης Boostress

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Εισαγωγή: Οι ψυχοκοινωνικοί κίνδυνοι και το άγχος που συνδέονται με την εργασία, καθώς και οι σχετικές αρνητικές επιπτώσεις στην υγεία και τις επιχειρήσεις επηρεάζουν έναν αξιοσημείωτο αριθμό ευρωπαϊκών εργασιακών χώρων. Παρά το γεγονός αυτό, οι έρευνες δείχνουν ότι το 70% των επιχειρήσεων στην Ευρώπη δεν διαθέτουν διαδικασίες ή συστήματα για την αντιμετώπιση του άγχους στον χώρο εργασίας. **Σκοπός:** Σκοπός του Ευρωπαϊκού Προγράμματος (Erasmus+Boostress project) «Ενισχύοντας τις δεξιότητες των νέων επαγγελματιών υγείας για να αντιμετωπίσουν το στρες στην εργασία τους» είναι η ανάπτυξη ψηφιακού εργαλείου για την ενίσχυσή τους με στόχο την καλύτερη αντιμετώπιση του στρες στην εργασία τους. **Υλικό και Μέθοδος:** Η έρευνα πραγματοποιήθηκε σε τρεις ευρωπαϊκές χώρες. Συγκεκριμένα συμμετείχαν 60 επαγγελματίες υγείας (20 από κάθε χώρα) που επιλέχθηκαν με τυχαία δειγματοληψία και στη συνέχεια προσκλήθηκαν να συμμετάσχουν στη μελέτη. Αναπτύχθηκε και χρησιμοποιήθηκε κλειστό δομημένο ερωτηματολόγιο 10-ερωτήσεων, με τη μέθοδο (Delphi approach) και συμπληρώθηκε από όλους τους συμμετέχοντες. Η περιγραφική ανάλυση έγινε με το στατιστικό πακέτο SPSS-20. **Αποτελέσματα:** Συνολικά συμμετείχαν 60 άτομα από τρεις χώρες, Ιρλανδία, Ισπανία και Κύπρο (ποσοστό απάντησης 100%). Η πλειοψηφία των συμμετεχόντων δεν είχε προηγούμενη εκπαίδευση σε θέματα σχετιζόμενα με το εργασιακό στρες, 95%, 91%, 80%, αντίστοιχα για κάθε χώρα. Ανεξάρτητα από την ηλικία ή το φύλο, οι συμμετέχοντες θεώρησαν ότι διατρέχουν πολύ υψηλό κίνδυνο εμφάνισης στρες, το 65% των Ιρλανδών, το 73% των Κυπρίων και το 65% των Ισπανών. Η εφαρμογή της ψηφιακής κατάρτισης με βάση τη χρήση της τεχνολογίας θεωρήθηκε χρήσιμη και εφικτή προσέγγιση για την αύξηση των γνώσεων και των δεξιοτήτων τους καθώς και για τη βελτίωση των αποφάσεων έγκαιρης παρέμβασης και πρόληψης του εργασιακού στρες. **Συμπέρασμα:** Υπάρχει επιτακτική ανάγκη για την κατάρτιση των νέων επαγγελματιών υγείας σχετικά με την έγκαιρη αναγνώριση του στρες και την κατάλληλη διαχείρισή του. Η ανάπτυξη κατάλληλου ψηφιακού και παραδοσιακού εκπαιδευτικού υλικού και η συμμετοχή στο πρόγραμμα εκπαιδευτών με κίνητρα και κατάλληλα προσόντα αποτελούν βασικές στρατηγικές για την επιτυχή εφαρμογή μιας σχετικής προληπτικής παρέμβασης στο θέμα αυτό.

Λέξεις-ευρετηρίου: Εργασιακό στρες, επαγγελματική εξουθένωση, διαχείριση στρες, άγχος, παρεμβάσεις στρες.

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