Staff Well-Being and Mental Health in UNHCR
Acknowledgements

This report is the result of the efforts of many individuals. The Staff Wellbeing Survey was developed thanks to the collaboration between the Staff Counsellors and the Staff Welfare Officers of UNICEF, UNHCR and the UN Secretariat, and supported by the Webster University, Geneva Campus, and New York University, NY.

The research team of the Webster University accompanied the UNHCR Staff Welfare team throughout all the phases of this research on a pro-bono basis; we would like to extend our gratitude to the University, and particularly to Dr. Roslyn Thomas, PhD, Associate Professor and Head of Psychology, Sociology and Counseling Programs, for her interest in supporting this research. We would also like to thank Liza Jachens, M.A. and Loredana Mihalca, PhD, from the Webster University for all the statistical analysis, report writing and guidance. The UNHCR Staff Welfare team provided comments throughout the project as well as support with editing and translation.

The greatest thanks go to the UNHCR workforce for their encouragement and participation in this survey.
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Executive Summary

The UNHCR Staff Well-Being Survey was launched by the Staff Welfare Section of the Staff Health and Welfare Service (SWS/SHWS) in May 2014. It was completed by 2,431 respondents, accounting for 21% of UNHCR’s staff and its affiliate workforce. It was the first-ever comprehensive survey of risk for mental health outcomes and focused on measuring the risk for anxiety, depression, post-traumatic stress disorder, secondary stress and the burnout dimensions (emotional exhaustion (EE), personal accomplishment (PA) and depersonalization). In addition, the survey measured two behavioural outcomes: hazardous alcohol use and use of mental health services.

The objective of the survey was to obtain the baseline data on the prevalence of risk for mental health and behavioural outcomes among UNHCR’s workforce; to understand how these risks related to the psychological hazards, such as exposure to traumatic events, exposure to working with people of concern and exposure to workplace stress; and, to help prioritize the focus of the Staff Welfare Section to where the needs are.

The data analysis confirmed that the risk for mental health and behavioural outcomes is higher amongst UNHCR’s staff than among the general population. In comparison with data gathered from other researches conducted on humanitarian and emergency workers, the findings are much more similar. The elevated levels of risk for mental health outcomes among the humanitarian workers are linked with the psychosocial hazards measured. The percentage of participants classified as at risk for anxiety, depression, PTSD, secondary stress and alcohol misuse is between 25% and 38%, while between 9% and 43% are at risk for the burnout dimensions. All health outcomes were positively correlated with each other, except for alcohol. This indicates a fair amount of co-morbidity, meaning that many respondents are at risk in more than one area.

Effort-Reward Imbalance (ERI), as a measure of workplace stress, had the strongest predictive value of risk for all mental health outcomes (anxiety, depression, PTSD, Secondary Stress and burnout dimensions) but not for the behavioural outcome (hazardous alcohol drinking). The individuals at risk for ERI had more chances to be at risk for mental health outcomes than those who reported experiencing traumatic situations. Exposure to traumatic events had a strong predictive value of risk for PTSD and secondary trauma, and could also marginally predict the risk of depersonalization as a burnout dimension. Finally, this study found that as many as 38% of respondents who worked directly with people of concern were at risk for secondary traumatic stress. As for other mental health and behavioral outcomes, the study found a significant and relatively strong relationship with burnout (respondents working with people of concern were less likely to be classified as at risk for diminished personal accomplishment), hazardous alcohol use (respondents not working with people of concern were more at risk for hazardous alcohol use) and a weak relationship with risk for anxiety (respondents working with people of concern were only marginally more likely to be classified at risk for anxiety). Working with people of concern could potentially
be a positive factor in mental health, yet the level of risk for secondary traumatic stress and burnout might undermine that potential.

Although most socio-demographic variables did not have a very strong relationship with mental health and behavioural outcomes, two strong trends emerged for regions: more staff in MENA and at the HQ are likely to be classified as at risk for mental health outcomes in comparison with other regions. The other strong trend related to the risk for hazardous alcohol use indicating that it is much higher for international than for the national staff.

Most participants were somewhat to very satisfied with their jobs (43.8% somewhat satisfied and 35.7% very much satisfied). Job satisfaction is moderately and negatively correlated to anxiety, depression, PTSD, secondary stress and emotional exhaustion. This means that as job satisfaction increases, the chance of being at risk for these health outcomes decreases.

Given the high proportion of staff classified as at risk, the percentage of respondents who indicated they needed to consult health services was understandably high (48.8%), yet only 26.4% actually consulted a mental health service. Of those at risk for each of the mental health and behavioural outcomes, as many as third did not believe they needed to contact the mental health service. Among those at risk who did feel the need for support, only half sought help, mostly from within the UN mental health services (including UNHCR). The reason for this lack of uptake on an expressed need to consult mental health services warrants further investigation.

The main recommendations are in line with the goal of the UNHCR’s People Strategy 2016-2021 issued recently by DHRM in which care and support for staff is one of the four key strategic goals. They emphasize the importance of sustaining and further strengthening the measures in place for support to colleagues following traumatic events, focusing on staff working in the high-risk environments and particularly on national staff. In addition, UNHCR should prioritize developing two corporate strategies to further enhance the staff’s well-being in the organization: one to reduce ERI and another to support staff working directly with people of concern. In that context, further qualitative research to obtain a more detailed understanding of ERI and use of mental health services should be foreseen.
Foreword

As awareness on mental health grows, the importance of psychological safety in the workplace is gaining importance in occupational health discussions. A growing body of scientific research (Lopes Cardozo et al, 2012; Ager et al., 2012) provides information about the psychosocial hazards prevalent in humanitarian work environments and their impact on the mental health of the humanitarian workers.

The Global Staff Wellbeing Survey is the first-ever comprehensive research on the staff’s mental health in UNHCR. Along with the Staff Health Risk Appraisal (UNHCR, 2014), which took stock of key indicators of physical health in UNHCR, these surveys indicate the readiness and commitment of UNHCR’s Staff Health and Welfare Service and, UNHCR as the organization, to ground its health and welfare protection strategies on evidence. Efforts have already been made to shift psychological support to staff from reactive to proactive. The results of the Global Staff Wellbeing Survey are extremely useful in supporting this work, as they identify trends and foster a better understanding of the mental health risks in UNHCR and associated impacts.

The questionnaire used for the survey is the result of collaborative efforts among Staff Welfare Officers and Staff Counsellors in UNHCR, UNICEF and in the UN Secretariat in New York with an intention to create a common instrument, allowing us to benchmark our results against each other. Our interest in measuring mental health at the UNHCR coincided with the launch of the Multi-site Research Project: Improving the Health of International Organisation Workforces in Geneva conceptualized by the Psychology faculty of Webster University in Geneva; Dr. Roslyn Thomas and her research team provided invaluable support throughout all the phases of this research, for which we are very grateful.

When the initiative was launched, the Staff Welfare Section received many positive comments, which was very encouraging; we would like to take this opportunity to thank all colleagues who took part in it. The Staff Wellbeing Survey will be re-launched in UNHCR every three years, allowing us to monitor trends and identify patterns that require particular attention and intervention. The results of this survey have already influenced the work plan of the Staff Welfare Section for the year 2015 and 2016.

This report has two objectives. First, to honour our responsibility to UNHCR’s staff and the organization to share the results of the statistical analysis of the data collected by the survey. Second, to raise awareness and stimulate discussions on mental health outcomes, and contribute to reducing the stigma that often stands in the way of reaching out for help.
Mental health problems are forecast to become one of the top economic burdens for employers (Goetzel et al. 2004). The human and economic consequences of mental health problems in the workplace are considerable, in terms of loss of productivity, absenteeism, high staff turnover, early retirement and exclusion from the workforce (Sanderson & Andrews, 2006). Employers are often unaware of how costly mental illness and stress at work is. According to one recent estimate, the total cost of work-related depression across the EU’s 27 Member States amounts to nearly €620 billion per annum, €270 billion of which are borne by employers as a result of absenteeism and presenteeism (reduced performance at work) and €240 billion by the economy due to lost output (Matrix Insight, 2012). In Switzerland, between 1998 and 2007, the disability allowances for psychiatric disorders doubled, and the financial cost related to stress issues has been estimated by the State Secretariat for Economic Affairs (SECO) at SwF 4 billion. The prevention of mental illness and the promotion of mental health have therefore become important focus areas for countries and organizations.

The same is valid for humanitarian organizations: understanding what challenges the staff’s mental health in the workplace and what support measures could mitigate this negative impact is part of the occupational health and well-being approach.

From a psychosocial hazards perspective, it is clear that the context of humanitarian aid work is intrinsically demanding: humanitarian workers operate in complex environments characterized by protracted problems such as wars and civil strife, severe levels of poverty and famine, personal tragedies and natural disasters. Humanitarian aid workers have an overwhelming workload, lack privacy and personal space, and are separated from family and friends for extended periods of time. A build-up of such chronic stressful experiences, as well as exposure to single traumatic incidents, can lead to a negative psychological impact that includes mental health difficulties (Min-Haris, 2011). Stress-related illnesses such as depression, anxiety and emotional exhaustion, for example, are common mental health difficulties experienced in the workplace (Maslach, 2003; Sanderson & Andrews, 2006). On the other hand, humanitarian staff members are generally able to adapt to the acute and chronic stressors of their work. Overall, as an occupational group, they demonstrate substantial resilience and reap many personal rewards from their work such as job satisfaction, personal meaning and improved well-being (McFarlane, 2003). The active pursuit of rebuilding communities and nations may have a protective effect on their well-being.

All this is valid for UNHCR’s workforce as well. Despite many challenges and adverse workplace situations, the Global Staff Surveys conducted between 2006 and 2014 consistently indicated a strong sense of job satisfaction and pride in the work carried out. However, it is important to define and understand the potential difficulties that staff might face — and their consequences — in order to preserve and promote such resilience.

The Global Staff Well-Being Survey was designed to reveal the prevalence of risk for mental health outcomes (risk of anxiety, depression, post-traumatic stress disorder, secondary stress disorder and burnout) and behavioural outcomes (hazardous alcohol drinking and
need to seek the mental health). We asked a number of other questions to clarify which psychosocial hazards might be related to these outcomes. Exposure to security or traumatic incidents was found to be one of the most evident psychosocial hazards. UNHCR’s workforce most often operates in locations affected by insecurity and despite protection measures, security incidents can still take place.

Another psychosocial hazard we wanted to explore in this research was related to work-related stress, which has been empirically confirmed to be a common source of psychological and physical health problems (Clarke & Cooper, 2004). The Staff Health and Welfare Watch published annually by the Staff Health and Welfare Service indicates that working conditions are the primary reason staff seek individual support from the Staff Welfare Officers, regardless of contract type (UNHCR, 2014, 2015), location of work or national/international status. Working conditions refer to workload, clarity of tasks, quality of supervision, job insecurity and lack of career perspectives.

To gain insight into the relationship between workplace and employees’ health, we used one of the Effort-Reward Imbalance models (ERI) introduced by Siegrist (1996). The model has a strong explanatory value for a large number of harmful health and mental health outcomes and is considered an important tool for understanding stress in the work environment. Siegrist’s model posits that a lack of reciprocity between effort and potential rewards leads to emotional distress and other negative health effects. In other words, employees with high effort and low reward levels have a higher risk for (emotional) exhaustion and low job satisfaction and motivation (rewards include money, esteem, promotion prospects and job security).

The last psychosocial hazard mentioned in the survey was exposure to work with people of concern; however, the survey analyzed its impact on mental health and behavioural outcomes, not the hazard itself. The Staff Welfare Section has observed a significant incidence of burnout and secondary trauma in colleagues whose work primarily consists of direct work with people of concern, such as those working in resettlement programmes or refugee status determination. If the survey confirms this observation, the organization would need to ensure that mitigating measures are well designed and implemented in operations where such activities take place.
The survey also collected information on a number of socio-demographic variables, essential for establishing trends and targeting our interventions.
SECTION 2

OBJECTIVES
Research Objectives

1) Establish the baseline for the monitoring of UNHCR’s workforce mental health;
2) Identify the levels of risk for key mental health outcomes such as anxiety, depression, post-traumatic stress disorder (PTSD), secondary traumatic stress and burnout;
3) Investigate the impact of socio-demographic and professional variables (location of work, length of service, working hours per day, position in the organization and job satisfaction) on the mental health outcomes;
4) Compare the level of risk for mental health outcomes with other organizations;
5) Use the report to raise awareness on mental health issues within the organization.

This is the first comprehensive mental health survey launched online in UNHCR.

Research Model

The purpose of this research is to take stock of the prevalence of mental health outcomes in UNHCR employees. More specifically, it is aimed at determining the percentage of UNHCR’s workforce at risk of suffering from a defined number of mental health outcomes (anxiety, depression, PTSD, secondary traumatic stress and burnout) and behavioural outcomes (hazardous alcohol consumption; need to consult a Mental Health Specialist -MHS-) and these outcomes’ relationship with the key psychosocial hazards identified for the purpose of this study (effort-reward imbalance, exposure to trauma, exposure to direct work with people of concern⁠¹). Socio-demographic factors such as gender, age, marital status and some other factors such as location of work, position in the organization, length of service, working hours/day and job satisfaction were considered as possible moderating variables.

It is assumed that the psychosocial hazards would be associated with the mental health and behavioural outcomes and that the moderating variables might have an impact on that relationship.

¹ In UNHCR’s terminology, the term “people of concern” includes refugees, internally displaced persons, asylum seekers, returnees and stateless people.
Mental Health Outcomes
- Anxiety, depression, post-traumatic stress disorder, secondary stress and burnout
- Behavioral outcomes
  - Hazardous alcohol consumption
  - Need to consult MHS

Psychosocial Hazards
- Effort/reward imbalance, exposure to trauma, working with people of concern

Moderating Variables
- Socio-demographics, location of work, length of service, working hours/day, position in the organization, job satisfaction

Figure 1 – Research Model
Development of the Survey

The survey was developed in collaboration with UNICEF and the Office of the Medical Director of the UN Secretariat in New York, with the support of the Webster University in Geneva and the University of New York; on the long-term, it aims to compare data across UN organizations. The selection of measurements focused on available and psychometrically validated instruments. All questionnaires used were in English, and a number of them were also available in French and/or Spanish. When this was not the case, professional translators were hired to translate from English into Spanish or French. Other professional translators were used to translate the answers from Spanish or French back into English.

The survey (Appendix 1) measures the following aspects:

1) Outcomes
   a. Mental Health Outcomes
      i. Anxiety: Generalized Anxiety Disorder 7 (GAD-7) (Section 2: q1 – q2)
      ii. Depression: Patient Health Questionnaire 2 (PHQ-2) (Section 3: q1)
      iii. Post-Traumatic Stress Disorder (PTSD): PTSD Checklist -6 (PCL-6) (Section 4: q2)
      iv. Secondary Traumatic Stress: Secondary Traumatic Stress Survey (STSS) (Section 6: q1 – q17)
     v. Burnout: Maslach Burnout Inventory Human Services (MBI-HS) (Section 7: q1 – q22)
   b. Behavioural Outcomes
      i. Alcohol: Audit C (Section 5: q1- q3)
      ii. Need to consult mental health services (Section 8: q1 – q2)

2) Psychosocial hazards
   a. Effort-Reward Imbalance () Questionnaire (Section 1: q1 - q16)
   b. Exposure to Traumatic Events (Section 4: q1)
   c. Exposure to Direct Work with People of Concern (Section 6: q1)

3) Moderating variables
   a. Socio-demographic data
      i. Gender (male, female), (Section 9: q2)
      ii. Marital status (single, married, divorced, widowed) (Section 9: q3)
      iii. Age (whole number) (Section 9: q1)
      iv. Children under 18 (yes/no), (Section 9: q4)
      v. Grade (G1-G7, NOA-NOD, FS, P1-P4, P5 and above) (Section 9: q12)
      vi. Staff status (staff, UNV, UNOPS, consultant…) (Section 9: q11)
      vii. Contract type (indefinite, fixed term or temporary appointment, consultant) (Section 9: q13)

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2 In the data analysis, the information about the grades was converted into the national (G1-G7, NOA-NOD) or international staff (FS, P1-P4, P5 and above).
b. Location of work
   i. Country of work (Section 9: q5)³
   ii. Hardship level of duty stations (HQ, H, A, B, C, D, E, U) (Section 9: q6)
   iii. Working in home country (yes/no) (Section 9: q7)

c. Length of service
   i. Number of years of service in the humanitarian field (Section 9: q8)
   ii. Number of years of service in UNHCR (Section 9: q9)
   iii. Number of years in D and E duty stations (Section 9: q10)

d. Number of worked hours in a day, amount of travel (Section 9: q14 – q15)

e. Job satisfaction (Not at all, Not very much, Somewhat, Very much) (Section 8: q3)

The respondents were given an opportunity to make additional comments in the open-ended question (Section 8: q4).

The English version of the questionnaire can be found in Appendix 1. The questionnaires in Spanish and French are available upon request.⁴

Data Collection

The survey was conducted online. All employees received an email link to the questionnaire, available in three languages, created in Survey Monkey. The same email provided information on the research, its purpose, confidentiality clauses, and approximate time needed for completion. Neither names nor IP addresses were collected. Participation in the survey was voluntary.

The survey was launched on 5 June 2014 by an all-staff message from the High Commissioner. A reminder was sent by the Deputy High Commissioner on 2 July 2014. The survey was closed on 18 July 2014.

Data Preparation

Data was downloaded from Survey Monkey into Microsoft Excel. It was then imported into SPSS. The data file was screened for errors and these were corrected. Missing data were excluded pairwise (meaning that cases were excluded only if they were missing data required for the specific analysis) as recommended by Pallant (2010). Because of this, the total number of participants varies for each variable under consideration. Data analysis was conducted using IBM SPSS ver. 22 Statistics.

To establish whether the participants were at risk of a particular health outcome or not, cut-offs (specified thresholds for scores) were used in the analysis. Cut-off scores (Annex 2) were

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³ In the data analysis, the information about countries of work (Afghanistan, Tunisia, Switzerland, etc.) was grouped into the respective regions of work (Asia, MENA, HQ respectively) in order to protect the respondents’ confidentiality.
⁴ Please write to HQSW00@ unhcr.org for an electronic copy of the questionnaires.
determined by examining peer-reviewed research; they are reported and referenced for each health outcome separately further in the text.

Sample

The participants to this study were UNHCR’s staff and affiliate workforce. A total of 2,431 participants completed the study, representing a response rate of 21% of the organization’s staff and affiliate workforce (N= 11709). Staff (n = 1,635) accounts for 82.2% and affiliate workforce (n = 343) for 17.3% of the sample. This compares with the 77.3% of staff (N= 9062) and 22.6% (N= 2647) of the affiliate workforce within the total number of UNHCR’s global workforce. Participants responded to the questionnaires in one of the three available languages as follows: English (79.4%), French (14.6%) and Spanish (5.9%).

Table 1 presents the counts and percentages of the sample’s demographic variables. Where available, organizational data is provided for comparison. Overall, the sample represents the global workforce of UNHCR reasonably well even though:

- A higher percentage of women completed the questionnaire in relation to their proportion in the organization; equally, a lower percentage of men completed the questionnaire than expected.
- A lower proportion of general service staff responded to the questionnaire and a higher proportion of the international staff responded to the questionnaire, in relation to their respective proportions in UNHCR.
- A lower proportion of staff working in Africa completed the questionnaire in relation to their actual proportion in UNHCR. Equally, higher percentages of staff working in Europe and the Americas completed the questionnaire, in relation with their respective proportions in UNHCR.
- A higher percentage of staff working at the HQ duty stations and a lower proportion of staff working in E duty stations completed the questionnaire in relation to their respective proportions in UNHCR.
Table 1 – Counts and Percentages for Socio-demographic Variables (marital status, gender, age…) and Location of Work Segregated by their Respective Values (i.e. married/partner, single and divorced/widowed for marital status)

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Count (percentage)</th>
<th>Valid percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married / Partner</td>
<td>1210 (49.8%)</td>
<td>61.60%</td>
</tr>
<tr>
<td>Single</td>
<td>595 (24.5%)</td>
<td>30.30%</td>
</tr>
<tr>
<td>Divorced/Widowed</td>
<td>158 (6.5%)</td>
<td>8%</td>
</tr>
<tr>
<td>Missing data</td>
<td>468 (19.3%)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2431 (100%)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Have Children under 18</th>
<th>Count (percentage)</th>
<th>Valid percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have Children under 18</td>
<td>928 (38.2%)</td>
<td>47.80%</td>
</tr>
<tr>
<td>No children under 18</td>
<td>1015 (41.8%)</td>
<td>52.20%</td>
</tr>
<tr>
<td>Missing data</td>
<td>488 (20.1%)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2431 (100%)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Based in Home Country</th>
<th>Count (percentage)</th>
<th>Valid percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at Home</td>
<td>847 (34.8%)</td>
<td>43.80%</td>
</tr>
<tr>
<td>In Home Country</td>
<td>1088 (44.8%)</td>
<td>56.20%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1935 (79.6%)</td>
<td>100%</td>
</tr>
<tr>
<td>Missing data</td>
<td>496 (20.4%)</td>
<td></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td>2413 (100%)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Sample Affiliate Staff</th>
<th>Sample Staff</th>
<th>Organization Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less = 34</td>
<td>83 (28%)</td>
<td>372 (28.7%)</td>
<td>2495 (27.5%)</td>
</tr>
<tr>
<td>35-44</td>
<td>1128 (37.8%)</td>
<td>463 (35.7%)</td>
<td>3175 (35%)</td>
</tr>
<tr>
<td>45-54</td>
<td>74 (25%)</td>
<td>338 (26.1%)</td>
<td>2404 (26.5%)</td>
</tr>
<tr>
<td>55 more</td>
<td>27 (9.1%)</td>
<td>124 (9.6%)</td>
<td>988 (11%)</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>296 (100%)</td>
<td>1297 (100%)</td>
<td>9062 (100%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1513</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing Data</td>
<td>918</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total sample</strong></td>
<td>2431</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>Sample Affiliate Staff</th>
<th>Sample Staff</th>
<th>Organization Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>158 (52.3%)</td>
<td>711 (53.6%)</td>
<td>3374 (38.8%)</td>
</tr>
<tr>
<td>Male</td>
<td>144 (47.4%)</td>
<td>616 (46.4%)</td>
<td>5688 (62.7%)</td>
</tr>
<tr>
<td><strong>Subtotal Total</strong></td>
<td>302 (100%)</td>
<td>1327 (100%)</td>
<td>9062 (100%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1629</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing data</td>
<td>802</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total sample</strong></td>
<td>2431</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contract types</th>
<th>Sample Staff</th>
<th>Organization Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temporary appointment</td>
<td>260 (13.7%)</td>
<td></td>
</tr>
<tr>
<td>Fixed term</td>
<td>953 (50.2%)</td>
<td>Unknown</td>
</tr>
<tr>
<td>Indefinite</td>
<td>588 (31%)</td>
<td></td>
</tr>
<tr>
<td>Consultant</td>
<td>78(4.1%)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>19(1%)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1898 (100%)</td>
<td>9062 (100%)</td>
</tr>
<tr>
<td><strong>Total sample</strong></td>
<td>2431</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grade (Staff Category)*</th>
<th>Sample Staff</th>
<th>Organization Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field</td>
<td>9 (.5%)</td>
<td>43 (.6%)</td>
</tr>
<tr>
<td>General Service</td>
<td>990 (54%)</td>
<td>6032 (66.6%)</td>
</tr>
<tr>
<td>Professional</td>
<td>694 (37.9%)</td>
<td>2315 (26.3%)</td>
</tr>
<tr>
<td>National Officer</td>
<td>139 (7.6%)</td>
<td>610 (7%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1832(100%)</td>
<td>9062 (100%)</td>
</tr>
<tr>
<td><strong>Total Sample (including missing data)</strong></td>
<td>2431</td>
<td></td>
</tr>
</tbody>
</table>

*Respondents' grades were converted into staff categories.
Staff and Affiliate Workforce

<table>
<thead>
<tr>
<th>Staff and Affiliate Workforce</th>
<th>Sample</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN Staff</td>
<td>1635 (82.7%)</td>
<td>9062 (77.3%)</td>
</tr>
<tr>
<td>National UNV</td>
<td>27 (1.4%)</td>
<td>209 (1.8%)</td>
</tr>
<tr>
<td>International UNV</td>
<td>46 (2.3%)</td>
<td>343 (2.9%)</td>
</tr>
<tr>
<td>National UNOPS</td>
<td>145 (7.3%)</td>
<td>1969 (16.8%)</td>
</tr>
<tr>
<td>International UNOPS</td>
<td>18 (0.9%)</td>
<td>-</td>
</tr>
<tr>
<td>Individual Consultant</td>
<td>37 (1.9%)</td>
<td>126 (1%)</td>
</tr>
<tr>
<td>Contractor</td>
<td>15 (0.8%)</td>
<td>-</td>
</tr>
<tr>
<td>Other</td>
<td>55 (2.8%)</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>1978 (100%)</td>
<td>11709 (100%)</td>
</tr>
</tbody>
</table>

Total sample (including missing data) 2431

Regions

<table>
<thead>
<tr>
<th>Regions</th>
<th>Sample Affiliate Staff</th>
<th>Sample Staff</th>
<th>Organization Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Americas</td>
<td>49 (16.2%)</td>
<td>87 (6.6%)</td>
<td>317 (3.4%)</td>
</tr>
<tr>
<td>Europe</td>
<td>29 (9.6%)</td>
<td>198 (14.9%)</td>
<td>738 (8.1%)</td>
</tr>
<tr>
<td>Africa</td>
<td>90 (29.8%)</td>
<td>386 (29.1%)</td>
<td>3898 (43%)</td>
</tr>
<tr>
<td>MENA</td>
<td>55 (18.2%)</td>
<td>290 (21.9%)</td>
<td>1763 (19.4%)</td>
</tr>
<tr>
<td>Asia Pacific</td>
<td>50 (16.6%)</td>
<td>193 (14.5%)</td>
<td>1312 (14.4%)</td>
</tr>
<tr>
<td>HQ</td>
<td>29 (9.6%)</td>
<td>173 (13%)</td>
<td>1034 (11.4%)</td>
</tr>
<tr>
<td>Subtotal</td>
<td>302 (100%)</td>
<td>1327 (100%)</td>
<td>9062 (100%)</td>
</tr>
<tr>
<td>Total valid</td>
<td>1629</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing data</td>
<td>802</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total sample</td>
<td>2431</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Level of hardship

<table>
<thead>
<tr>
<th>Level of hardship</th>
<th>Sample Affiliate Staff</th>
<th>Sample Staff</th>
<th>Organization Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>HQ</td>
<td>39 (12.9%)</td>
<td>225 (17%)</td>
<td>1034 (11.4%)</td>
</tr>
<tr>
<td>H</td>
<td>27 (8.9%)</td>
<td>141 (10.7%)</td>
<td>380 (4.1%)</td>
</tr>
<tr>
<td>A</td>
<td>74 (24.5%)</td>
<td>269 (20.3%)</td>
<td>1518 (16.7%)</td>
</tr>
<tr>
<td>B</td>
<td>42 (13.9%)</td>
<td>198 (15%)</td>
<td>1230 (13.5%)</td>
</tr>
<tr>
<td>C</td>
<td>29 (9.6%)</td>
<td>120 (9.1%)</td>
<td>757 (8.3%)</td>
</tr>
<tr>
<td>D</td>
<td>33 (10.9%)</td>
<td>146 (11%)</td>
<td>982 (10.8%)</td>
</tr>
<tr>
<td>E</td>
<td>54 (17.9%)</td>
<td>210 (15.9%)</td>
<td>3092 (34.1%)</td>
</tr>
<tr>
<td>U</td>
<td>4 (1.3%)</td>
<td>14 (1.1%)</td>
<td>69 (0.7%)</td>
</tr>
<tr>
<td>Subtotal</td>
<td>302 (100%)</td>
<td>1327 (100%)</td>
<td>9062 (100%)</td>
</tr>
<tr>
<td>Total valid</td>
<td>1625</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing data</td>
<td>806</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total sample</td>
<td>2431</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Professional Variables

Table 2 presents the descriptive statistics of the sample’s professional variables.

Table 2 – Descriptive Statistics for the Professional Variables

<table>
<thead>
<tr>
<th>Professional Variables</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years of service in the humanitarian field</td>
<td>1944</td>
<td>0</td>
<td>38</td>
<td>11.60</td>
<td>7.798</td>
</tr>
<tr>
<td>Years of work with UNHCR</td>
<td>1952</td>
<td>0</td>
<td>35</td>
<td>8.80</td>
<td>7.402</td>
</tr>
<tr>
<td>Years of service in the D and E locations</td>
<td>1785</td>
<td>0</td>
<td>27</td>
<td>3.53</td>
<td>4.580</td>
</tr>
<tr>
<td>Working hours per day</td>
<td>1949</td>
<td>0</td>
<td>18</td>
<td>9.49</td>
<td>1.53</td>
</tr>
<tr>
<td>Percentage Time Traveling</td>
<td>1871</td>
<td>0</td>
<td>100</td>
<td>16.79</td>
<td>21.01</td>
</tr>
</tbody>
</table>
SECTION 4
DATA ANALYSIS
To analyze data collected during the survey, we used descriptive statistics to describe and identify the patterns that have emerged from the data. In addition, inferential statistics were used to analyze the relationships between psychosocial hazards, mental health outcomes, behavioural outcomes and moderating variables.

**Descriptive Statistics**

**Percentages** were calculated for each demographic variable with respect to the risk for each mental health/behavioural outcome and ERI. For example, the percentage of male and female respondents at risk will be reported for anxiety, depression, PTSD, burnout, secondary traumatic stress, etc.

Due to the missing data, the group size for each demographic variable was different from the total sample size. For that reason, the percentages of respondents at risk for each of these outcomes were calculated based on each demographic group and measure. For example, the reported percentage classified as at risk for anxiety in HQ is calculated as: Number of respondents at risk for anxiety in HQ / total number of respondents to the measure for anxiety in HQ.

The percentages used throughout this report are valid, i.e. they already exclude the missing data. For example, many respondents did not complete the Secondary Traumatic Stress Questionnaire (only required if working with people of concern). Therefore, the percentage at risk is the percentage of those participants who completed that measure, not of the total sample.

Selecting percentages rather than means was considered more appropriate for the purpose of this study, given the non-normal distribution of the data and aims of the study.

**Inferential Statistics**

**Chi-square tests of independence** were used to test whether there was a *significant* difference in results for each of the mental health/behavioural outcomes (e.g. anxiety) between levels of each demographic variable (e.g., male vs. female). When the chi-Square test does not yield significant results, the differences in results between the tested groups are considered to be accidental. The chi-Square test was the chosen test as the data is categorical in nature (at risk – not at risk; male –female), and because the data was not normally distributed.

Cramér’s V is an *effect size* (strength of association between two variables). It varies from 0 (no association) to 1 (complete association), where .10 is considered a small effect, .30 considered a medium effect and .50 a large effect. When the effect size is large, the changes in one variable are likely to cause the changes in the other.

**Correlations** were used to analyze the relationship between continuous variables (e.g. average number of hours worked per day) and the scores of the mental health/behavioural outcomes. In social sciences, a good rule of thumb to examine the strength of the
correlation is Cohen’s scale: when \( r < +/- .10 \), there is little or no correlation; when \( .10 < r < .30 \), there is a weak correlation; when \( .30 < r < .50 \), there is a moderate correlation, and when \( r > .50 \), there is a strong correlation.

**Logistic regression analyses** were conducted to investigate the relative importance of psychosocial hazards (ERI and exposure to trauma at work), moderating variables (demographics, location of work and number of working hours per day) and burnout, as a means to predict mental health and behavioural outcomes. In other words, we investigated which of the factors might best predict whether respondents are classified as at risk for a specific mental health/behavioural outcome.

With logistic regressions we verified the following hypotheses:

A. Gender, age, years of work in the humanitarian field and regions of work predict the risk for anxiety, depression, PTDS, secondary traumatic stress, burnout, ERI and hazardous alcohol consumption.

B. Effort-reward imbalance, overcommitment, frequency of exposure to trauma at work, exposure to a traumatic event at work (exposure to traumatic events: yes or no) predict the risk for hazardous alcohol consumption, anxiety, depression, PTSD, secondary traumatic stress and the burnout dimensions (personal accomplishment, emotional exhaustion and depersonalization).

C. Personal accomplishment, emotional exhaustion and depersonalization predict the risk for hazardous alcohol consumption, anxiety, depression and PTSD.

For all outcomes, we used cut-off scores to determine whether respondents were at risk for a specific mental health problem or not. The cut-off scores are summarized in Appendix 3. Odds ratios were calculated to indicate the likelihood of “at risk” classification for each health outcome: if the odds ratio is 2.00, “at risk” classification is twice as likely and if the odds ratio is 1.50 then “at risk” classification is one and a half times more likely.
SECTION 5
RESULTS
**Total Sample Results**

**Descriptive Statistics for Mental Health Outcomes, Behavioural Outcome and ERI**

Graph 2 presents the percentages of respondents at risk for anxiety, depression, PTSD, secondary traumatic stress, hazardous alcohol consumption, burnout (personal accomplishment, emotional exhaustion and depersonalization) and ERI. It should be noted that only those employees who indicated they worked with people of concern were able to complete the Secondary Traumatic Stress Survey (STSS). As 59.7% (n=1,451) of the total sample confirmed they work directly with people of concern, this number was used to calculate the percentage of those at risk for secondary traumatic stress (544 out of 1,451 and not out of the total sample of 2,431).

**Graph 2 - Mental Health/Behavioural Outcomes and ERI: Percentages and Counts of those at Risk for the Total Sample**

![Graph 2 - Mental Health/Behavioural Outcomes and ERI: Percentages and Counts of those at Risk for the Total Sample](image)

*Note: the Personal Accomplishment percentage identifies respondents at risk for diminished personal accomplishment, as one of the three dimensions of burnout.*

The percentages presented in Graph 2 are higher than the figures indicating the prevalence of the same outcomes in the general population (see Section 8). Even when compared to similar occupational groups (care and service providers) the prevalence of UNHCR employees at risk for different mental health outcomes is still high. The risk for ERI is by far the highest, as 72% of all respondents consider that the efforts they invest in work are unmatched by rewards. Since previous research has shown that a high ERI is associated with negative health outcomes such as anxiety and depression (Proeschold-Bell et al., 2013; Siegrist, 1996).
The following chapters will further investigate the relationship between ERI and the risk for each of the mental health/behavioural outcomes.
Effort-Reward Imbalance

Seventy-two percent of respondents indicated that the effort they put into their work is higher than the rewards they receive.
The effort-reward model (see Figure 2) posits that lack of reciprocity between effort and potential rewards, or effort-reward imbalance (ERI), can lead to emotional distress and other negative health effects. In other words, employees with high effort and low reward levels have a higher risk for (emotional) exhaustion, and lower job satisfaction and motivation (van Vegchel, 2005). Rewards include money, esteem, promotion prospects and job security. An ERI occurs when the ratio between efforts and rewards is above 1.0. The negative effect of ERI on health outcomes increases if the person has a certain coping style known as overcommitment (OC). The overcommitted person exhibits a motivational pattern of excessive work (i.e. he/she is involved in work all the time) where investments often exceed gains. Overcommitment is either due to the employees’ personality or to work pressure.

**Measuring the Risk for ERI and Overcommitment**

The Effort-Reward Imbalance (ERI) questionnaire (Siegrist, 1996) is a 16-item measure that examines effort and reward at the workplace. **Effort** (3 items), the first component, is defined as the demanding aspects of the work environment (e.g., “I have constant time pressure due to a heavy workload.” “Over the past few years, my job has become more and more demanding.”). **Reward** (7 items) is operationalized as (a) financial reward, (b) esteem reward (e.g., I receive the respect I deserve from my superiors), (c) reward related to promotion prospects (e.g., my job promotion prospects are poor), and (d) job security (e.g., “I have experienced or I expect to experience an undesirable change in my work situation.”). The cut-off score for a high risk for ERI is when the ERI ratio is higher than one (1).

**Overcommitment** (OC; 6 items) is a separate scale that measures an exhausting coping style with the demands of work (e.g., people close to me say I sacrifice too much for my job). There is no cut-off score for overcommitment and therefore the statistical analysis that included overcommitment was limited.

The survey indicates that 72% of the sample is at risk for ERI, which is rather high. When segregating the data across different socio-demographic variables, the risk level for ERI varies from 68% to 79%.
ERI Risk Differences by Socio-demographic Variables

a) Gender, marital status and age

Graph 3 presents the percentages of respondents at risk for ERI by gender, marital status and age.

The chi-square test revealed a statistically significant but very weak relationship between the risk for ERI and gender ($\chi^2 (1, N= 1980) = 4.91, p = .02, \text{Cramér's V} = .05$) indicating that female respondents were slightly more likely to be classified as at risk for anxiety than male respondents.

The chi-square test did not reveal a significant relationship between the risk for ERI and marital status or age ($p > .05$).

b) Regions and level of hardship

Graph 4 presents the percentages of respondents at risk for ERI by regions and hardship level of their work locations.

The respondents who work in HQ (Switzerland) are slightly more likely to be classified as at risk for ERI in comparison to the respondents from other regions ($\chi^2 (5, N= 1,980) = 14.33, p = .02, \text{Cramér's V} = .09$).

The chi-square test did not reveal a significant relationship between the risk for ERI and the level of hardship ($p > .05$).
c) Staff status

Staff status included the following variables:
- international (Int) vs. national (Nat) staff;
- staff vs. affiliate workforce (AWF);
- contract type: temporary assignment (TA), fixed-term appointment (FTA), indefinite contract (IND), consultants (Cons) and others.

Graph 5 presents the percentage of respondents at risk for ERI by staff status.

International staff members were slightly more likely to be classified as at risk for ERI than national staff ($\chi^2(1, N=1832) = 5.51, p = .02, \text{Cramér's } V = .06$).

The chi-square test did not reveal any significant difference in the risk for ERI, whether between the staff and the affiliate workforce ($p>.05$) or among the respondents with different types of contracts ($p>.05$).

d) Working with People of Concern

Working with people of concern did not show any relationship with the risk for ERI. The percentage of respondents at risk for ERI who work with people of concern and the percentage of respondents at risk for ERI who do not work with people of concern is exactly the same (72%). The chi-square test did not reveal a statistically significant relationship ($p>.05$).

Correlations between the ERI, Overcommitment (OC) and Moderating Variables

Table 3 presents the non-parametric Spearman Rho correlations\(^6\) between the ERI and OC scores and the years of service in the humanitarian field, years of service with UNHCR, number of years of service in D and E locations, number of working hours in a typical day, percentage of time spent on official travel and job satisfaction.

Table 3 shows that the ERI score is negatively and moderately correlated with job satisfaction, indicating that the higher the ERI, the lower the job satisfaction.

The OC score is moderately and positively correlated with the number of working hours in a typical day. In other words, the higher the OC, the more hours colleagues tend to work.

\(^6\) Spearman-Rho correlations were used because of the non-normal distribution of data.
Table 3 – Correlations between the Scores for ERI and Overcommitment and Moderating Variables

<table>
<thead>
<tr>
<th></th>
<th>Years of service in the humanitarian field</th>
<th>Years of service in UNHCR</th>
<th>Years of service in D&amp;E</th>
<th>Number of working hours in a typical day</th>
<th>Percentage of time spent on official travel</th>
<th>Job satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ERI</strong></td>
<td>.076**</td>
<td>.122**</td>
<td>-.011</td>
<td>.249**</td>
<td>-.050*</td>
<td>-.426**</td>
</tr>
<tr>
<td><strong>Sig. (2-tailed)</strong></td>
<td>.001</td>
<td>.000</td>
<td>.640</td>
<td>.000</td>
<td>.031</td>
<td>.000</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>1944</td>
<td>1952</td>
<td>1785</td>
<td>1949</td>
<td>1871</td>
<td>2079</td>
</tr>
<tr>
<td><strong>OC</strong></td>
<td>.064**</td>
<td>.094**</td>
<td>.114*</td>
<td>.310**</td>
<td>.060**</td>
<td>-.267</td>
</tr>
<tr>
<td><strong>Sig. (2-tailed)</strong></td>
<td>.005</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.009</td>
<td>.000</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>1944</td>
<td>1952</td>
<td>1785</td>
<td>1949</td>
<td>1871</td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed)

**Socio-demographic Variables as Predictors of ERI**

The logistic regressions indicated that in the overall model, the variables of gender, age, years of service in the field and regions were useful predictors to distinguish between respondents who are at risk for ERI and those who are not ($\chi^2 (8, N= 1916) = 25.42, p=.001$).

Further analysis of the individual relationships between each of the aforementioned predictors and risk for ERI revealed that men were 0.78 less likely to be at risk for ERI than women ($p = .022$).

**Summary and Comments**

In this chapter, we investigated the relationship between the risk for ERI as a psychosocial hazard and socio-demographic and work related variables.

- 72% of all respondents are at risk for ERI, indicating that the efforts they invest in work are not met by rewards such as job security, self-esteem, career opportunities or financial retribution.
- The risk for ERI showed little variation across different socio-demographic variables, although some marginal trends were revealed: men tend to be slightly less classified as at risk for ERI than women; staff in HQ (Switzerland) are slightly more likely to be classified as at risk than respondents in other regions; and international staff members are marginally more likely to be classified as at risk for ERI than their national colleagues.
- The higher the ERI score, the lower the job satisfaction.
- The higher the level of overcommitment, the higher the number of hours worked per day. It must be remembered that overcommitment is a measure of an exhausting coping style with the demands of work.

High risk for ERI has been linked with the risk for various physical and mental health problems (van Vegchel et al., 2005) The next sections of the report examine the relationship between ERI and specific mental health/behavioural outcomes measured by the survey.
Almost a third of all respondents were classified as at risk for anxiety.
Anxiety disorders include panic disorder, generalized anxiety disorder, phobias and separation anxiety disorder. They are often quoted as the most common types of mental disorders in the general population (Kessler et al., 2009). Out of all of them, this research only collected information on the risk for generalized anxiety disorder (GAD).

GAD is chronic, exaggerated and persistent worrying that interferes with social, occupational, or other important areas of functioning. The etiology of GAD is related to a complex range of factors such as biological factors, family background and stressful experiences, — in personal life and at work — that all significantly contribute to its incidence (Kaplan et al., 2015).

According to the Anxiety and Depression Association of America (ADAA), among the key causes of GAD in the workplace are workload, working hours, deadlines, interpersonal relations, staff management issues and job security (source: www.adda.org). Because these factors increase the level of stress, the likelihood of GAD is higher when they are present (cdc.gov/niosh). The research on the linkage between ERI, as a model of stress in the workplace, and anxiety confirmed a positive relationship. Proeschold-Bell et al. (2013) found that increased ERI was linked to increased anxiety in the clergy, while another study found a similar association in a sample of Italian teachers (Zurlo et al. 2010).

People affected by GAD often anticipate the worst, feeling extremely apprehensive about any issue, whether related to health, work, family, money or relationships. They may not be able to relax, might have difficulties in sleeping and concentrating on tasks, and commonly experience unpleasant physical sensations such as muscular tensions, headaches, sweating, shaking, and shivering. Further physical symptoms may include feeling lightheaded, nauseous, or breathless. In severe cases of GAD, the overwhelming fear can become completely debilitating. This anxiety does not only negatively impact the individual, but also work performance and relationships with colleagues and supervisors (www.adda.org).

One of GAD’s damaging stigmas is that individuals who suffer from this overwhelming anxiety are not taken seriously by people around them. They are often unfairly judged as uncommitted and not strong enough. The truth is that those suffering from GAD might not be able to control it. Stigma and lack of support and understanding make them hide the symptoms or take longer sick leaves without getting proper treatment. According to the Anxiety and Depression Association of America (www.adda.org), only one third of those suffering from anxiety receive treatment. While a longer absence from the anxiety-provoking environment will help reduce the symptoms, return to the same work environment is likely to trigger the problem again. Treatment should include direct work with the individual and introducing constructive changes in the work environment. In extreme situations, changing the workplace may be necessary.
Measuring the Risk for Anxiety

The General Anxiety Disorder –7 is a seven-item test designed to assess the presence of GAD symptoms, as listed in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).

Answers for all seven items were given on a three-point rating scale, where 0 =not at all, and 3 =nearly every day. The total score ranges from 0 to 21 and can be categorized into four severity groups: minimal anxiety (0–4), mild anxiety (5–9), moderate anxiety (10–14) and serious anxiety (14–21).

A cut-off score of >10 was applied, indicating the probable presence of an anxiety problem (Lowe, Decker, Muller et al. 2008; Spitzer, Kroenke, Williams, & Lowe, 2006; Kroenke, Spitzer, Williams, Monahan, & Lowe, 2007).

Difference in Risk for Anxiety by Socio-demographic Variables

a) Gender, marital status and age

Graph 6 presents the percentages of respondents at risk for anxiety by gender, marital status and age.

The chi-square test revealed a statistically significant but very weak relationship between the risk for ERI and gender ($\chi^2$ (1, N= 1980) = 5.97, p = .02, Cramér’s V = .06). As indicated in Graph 6, female respondents are slightly more likely to be classified as at risk for anxiety than male respondents.

The chi-square test did not reveal a significant relationship between the risk for anxiety and marital status or age (p.s > .05).

b) Regions and level of hardship

Graph 7 presents the percentages of respondents at risk for anxiety by regions and level of hardship.

The chi-square test revealed a significant but weak relationship between risk for anxiety and regions ($\chi^2$ (5, N= 1980) = 30.08, p < .001; Cramér’s V = .12). The percentages of staff at risk for anxiety by region ranged from 24% to 39%, with staff in MENA and HQ (Switzerland) slightly more likely to be classified as at risk for anxiety compared with staff in other regions.
The chi-square test did not reveal a significant relationship between the level of hardship and the risk for anxiety ($p > .05$).

c) Staff status

Staff status included the following categories:
- international (Int) vs. national (Nat) staff;
- staff vs. affiliate workforce (AWF);
- contract type: temporary assignment (TA), fixed-term appointment (FTA), indefinite contract (IND), consultants (Cons) and others.

Graph 8 presents the percentages of respondents at risk for anxiety by staff status.

The chi-square test revealed that staff members are slightly more likely to be classified as at risk for anxiety in comparison with the affiliate workforce ($\chi^2 (1, N=1925) = 4.63, p < .03$; Cramér’s $V = .05$). No significant relationship was found between the risk for anxiety and the international/national staff or contract type ($p > .05$).
d) Risk for anxiety and working with People of Concern

Respondents working with people of concern seem to be marginally more likely to be classified as at risk for anxiety in comparison to the respondents who do not work with people of concern ($\chi^2 (1, N=2239) = 5.27, p< .02, \text{Cramér’s } V = .05$). Graph 9 presents the relevant percentages.

![Graph 9 - Percentage of Respondents at Risk for Anxiety](image)

**Correlations between the Level for Anxiety and Moderating Variables**

The non-parametric Spearman Rho correlations were used to investigate the relationships between the score for anxiety and the remaining moderating variables such as years of service in the humanitarian field, years of service with UNHCR, number of years of service in D and E locations, number of working hours in a typical day, percentage of time spent on official travel and job satisfaction (Table 4).

The level of anxiety is moderately and negatively correlated with job satisfaction. As anxiety increases, the job satisfaction decreases.

**Table 4 – Correlations between the Risk for Anxiety and Moderating Variables**

<table>
<thead>
<tr>
<th></th>
<th>Years of service in the humanitarian field</th>
<th>Years of service in UNHCR</th>
<th>Years of services in D&amp;E</th>
<th>Number of working hours in a typical day</th>
<th>Percentage of time spent on official travel</th>
<th>Job satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>Correlation</td>
<td>.022</td>
<td>.074*</td>
<td>.034</td>
<td>.201**</td>
<td>-.024*</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.339</td>
<td>.001</td>
<td>.149</td>
<td>.000</td>
<td>.300</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>1944</td>
<td>1952</td>
<td>1785</td>
<td>1949</td>
<td>1871</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.05 level (2-tailed)**

**Socio-demographic Variables as Predictors of Risk for Anxiety**

The logistic regressions indicated that in the overall model, the variables of gender, age, years of service in the humanitarian field and regions were useful predictors for distinguishing between respondents who are at risk for anxiety and those who are not ($\chi^2 (8, N=1916) = 39.40, p< .001$). Regarding the individual relationships between each of the
above-mentioned predictors and the risk for anxiety, the following significant results were obtained:

- **Regions:**
  - Respondents who worked in MENA were 2.16 times more likely to be at risk for anxiety compared to those in the Americas ($p < .001$).
  - Respondents who work in HQ (Switzerland) were 1.69 times more likely to be at risk for anxiety than those in the Americas ($p = .026$).

**ERI, Overcommitment and Exposure to Trauma as Predictors of Risk for Anxiety**

The logistic regressions indicated that in the overall model, the variables of ERI, overcommitment, trauma frequency at work, and trauma event at work were useful predictors for distinguishing between respondents who are at risk for anxiety and those who are not ($\chi^2 (4, N= 2142) = 653.62, p< .001$). Regarding the individual relationships between each of these predictors and risk for anxiety, the following significant results were obtained:

- **Effort-reward imbalance:**
  - For each unit increase in the effort-reward imbalance ratio, respondents were 2.47 times more likely to be at risk for anxiety ($p < .001$).
- **Overcommitment:**
  - For each unit increase in the overcommitment score, respondents were 1.44 times more likely to be at risk for anxiety ($p < .001$).

**Burnout Dimensions as Predictors of Risk for Anxiety**

The logistic regressions revealed that in the overall model, the burnout dimensions (personal accomplishment, emotional exhaustion, depersonalization) were useful predictors for distinguishing between respondents who are at risk for anxiety and those who are not ($\chi^2 (3, N= 2100) = 538.69, p< .001$). The individual relationships between each of these predictors and the risk for anxiety did not reveal a strong predictive value of burnout dimensions for risk of anxiety.
Summary and Comments

- 31% of respondents are at risk for anxiety.
- The only socio-demographic variable that had a significant relationship with the risk for anxiety was that of the region. The respondents from MENA and HQ (Switzerland) were more likely to be classified as at risk for anxiety than the respondents working in other regions.
- For each unit increase in the ERI score, respondents were 2.47 times more likely to be classified as at risk for anxiety.
- For each unit increase in the OC score, respondents were 1.44 times more likely to be at risk for anxiety.
- Burnout was not a significant predictor of risk for anxiety.
- The higher the risk for anxiety, the lower the job satisfaction.

The study of humanitarian workers indicates that 11.8% of humanitarian staff report symptoms of anxiety following their deployment (Cardozo et al., 2012). However, according to the national survey conducted by the Anxiety and Depression Association of America (http://www.adaa.org/workplace-stress-anxiety-disorders-survey), anxiety is highly under-diagnosed and its prevalence could be higher. Based on the findings in the UNHCR survey, MENA and the HQ should be given special attention in relation to reducing the risk for anxiety.
Risk for Depression

Twenty-five percent of respondents were classified as at risk for depression.
Sadness is a normal human reaction to life’s disappointments, difficult changes, struggles and losses. But if that sadness takes hold of a person and leads to relentless feelings of despair and emptiness, then it may be considered depression. Many describe the experience of depression like “living in a black hole”: when one falls into it, it may be difficult to feel that it is possible to get out. It is as though the light in life had gone out.

Alongside with anxiety, depression is a very common mental disorder — with more than 350 million people suffering from it worldwide (WHO, 2015). The disease is different for each person, but it often negatively interferes with an individual’s ability to function at work or school and to cope with daily life, commonly impairing motivation, concentration, relationships, appetite, energy and sleep functioning. A person suffering from depression may feel empty, lifeless, apathetic, overwhelmingly sad, or easily angry. He or she might lose interest in the things that would normally make them happy, and sometimes the ability to feel joy or pleasure. The state of profound helplessness and hopelessness often associated with the disorder may lead the affected person to believe that ending his or her life is the only way to escape the pain. Thus, in its most severe state, depression can lead to suicide.

**Measuring the Risk for Depression**

In this survey, the risk for depression was measured by the Patient Health Questionnaire 2 (PHQ-2). The PHQ-2 includes the first two items of the full depression scale of the Patient Health Questionnaire 9 (PHQ-9). The PHQ-2 score can range from 0 to 6. A cut-off score that identifies the risk as ≥3 has the best trade-off between sensitivity and specificity for major depressive disorder, but also for any other depressive disorder (Löwe, Kroenke & Gräfe, 2005). A study shows that 75% of those screened by this instrument as being at risk would likely be diagnosed with a form of depression in a further clinical interview (Thibault & Prasaad Steiner, 2004).

**Difference in Risk for Depression by Socio-demographic Variables**

In this section the study focuses on examining the relationship between each socio-demographic variable and the risk for depression by using the chi-square test of independence ($\chi^2$).

**a) Gender, marital status and age**

The chi-square test of independence indicated that there was no significant relationship between the risk for depression and gender, marital status or age of employees (Graph 10).
b) Regions and level of hardship

Graph 11 presents the percentages of respondents at risk for depression by region and level of hardship.

A chi-square test revealed that the respondents from MENA and HQ were slightly more likely to be at risk for depression than their colleagues working in other regions. ($\chi^2 (5, N=1979) = 30.96, p = <.001, \text{Cramér’s } V = .13$).

The chi-square test of independence did not reveal a significant relationship between the risk for depression and the level of hardship ($p_s > .05$).

c) Staff status

Staff status included the following variables:
- international (Int) vs. national (Nat) staff;
- staff vs. affiliate workforce (AWF);
- contract type: temporary assignment (TA), fixed-term appointment (FTA), indefinite contract (IND), consultants (Cons) and others.

Graph 12 presents the percentage of respondents at risk for depression by staff status. The chi-square test did not reveal a statistically significant relationship between these variables and the risk for depression ($p_s > .05$).
d) Risk for depression and working with People of Concern

Graph 13 presents the percentages of respondents classified as at high risk for depression for each of the groups.

The chi-square test did not reveal a significant relationship between the risk for depression and whether respondents worked with people of concern or not.

**Correlations between the Level of Depression and Moderating Variables**

Table 5 presents the non-parametric Spearman Rho correlations between the scores for depression with the years of service in humanitarian field, years of service with UNHCR, number of years of service in D and E locations, number of working hours in a typical day, percentage of time spent on official travel and job satisfaction.

Only job satisfaction was found to have a moderate negative correlation with the level of depression. As the level of depression grows the job satisfaction is likely to decrease.

**Table 5 – Correlations between the Level of Depression and Moderating Variables**

<table>
<thead>
<tr>
<th></th>
<th>Years of service in the humanitarian field</th>
<th>Years of service in UNHCR</th>
<th>Years of service in D&amp;E</th>
<th>Number of working hours in a typical day</th>
<th>Percentage of time spent on official travel</th>
<th>Job satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>.007</td>
<td>.042</td>
<td>.028</td>
<td>.108**</td>
<td>-.058*</td>
<td>-.428**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.755</td>
<td>.064</td>
<td>.235</td>
<td>.000</td>
<td>.012</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>1943</td>
<td>1951</td>
<td>1784</td>
<td>1948</td>
<td>1870</td>
<td>2078</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed)

**Socio-demographic Variables as Predictors of Risk for Depression**

The logistic regressions indicated that in the overall model, the variables of gender, age, years of service in the humanitarian field and regions were useful predictors for
distinguishing between respondents who are at risk for depression and those who are not ($\chi^2 (8, N= 1915) = 33.63, p< .001$). The analysis of the individual relationships between each of the aforementioned predictors and the risk for depression showed no significant results.

**ERI, Overcommitment and Exposure to Trauma as Predictors of Risk for Depression**

The logistic regressions indicated that in the overall model, the variables of ERI, OC, trauma frequency at work and trauma event at work were useful predictors for distinguishing between respondents who are at risk for depression and those who are not ($\chi^2 (4, N= 2141) = 431.87, p< .001$). Regarding the individual relationships between each of the aforementioned predictors and the risk for depression, the effort-reward imbalance was found to be the strongest predictor of risk for depression.

- **Effort-reward imbalance:**
  - For each unit increase in effort-reward imbalance score, respondents were 2.49 times more likely to be at risk for depression ($p < .001$).
- **Overcommitment:**
  - For each unit increase in overcommitment score, respondents were 1.28 times more likely to be at risk for depression ($p < .001$).
- **Frequency of exposure to trauma at work:**
  - For each unit increase in the frequency of exposure to trauma, respondents were 1.09 times more likely to be at risk for depression ($p = .018$).

**Burnout Dimensions as Predictors of Risk for Depression**

The logistic regressions indicated that in the overall model, the burnout dimensions (personal accomplishment, emotional exhaustion and depersonalization) were useful predictors for distinguishing between respondents who are at risk for depression and those who are not ($\chi^2 (3, N= 2099) = 483.73, p< .001$). Regarding the individual relationships between each of the aforementioned predictors and the risk for depression, the following significant results were obtained:

- **Emotional exhaustion:**
  - For each unit increase in emotional exhaustion score, respondents were 1.10 times more likely to be at risk for depression ($p < .001$).
Summary and Comments

- 25% of respondents were identified as at risk for depression in UNHCR.
- A trend of higher risk for depression was found among respondents in MENA and HQ in comparison to other regions.
- Effort-reward imbalance was found to be a strong predictor of the risk for depression.
- Job satisfaction was the only moderating variable that was moderately and negatively correlated with the level of depression. The higher the level of depression, the lower the job satisfaction.

The prevalence of depression in the general population is 12% (Sadock et al., 2015), although a study on humanitarian workers indicates that one in five international humanitarian workers tend to develop depression in the post-deployment period (Cardozo et al., 2012). Depression is more prevalent in high-conflict regions; for instance, more than 20% of the general population in Afghanistan suffers from depression (pro.psychcentral.org).

UNHCR results clearly indicate that in addition to efforts to reduce the risk for depression across the organization, the mental health protection measures in MENA and HQ need to be given particular attention.
Risk for Post-Traumatic Stress Disorder (PTSD)

Thirty-six percent of respondents are classified as at risk for PTSD.
The exposure to a life-threatening event that involves physical harm or the threat of physical harm leads to common post-traumatic stress reactions that include a high level of alertness to stimuli that remind survivors of their trauma, mental preoccupation with the event, intense emotions linked to the event and physical exhaustion. Being confronted to a life threat also often causes deep questioning, from the meaning of the event in their life to guilt for having survived. In most situations, these symptoms significantly decrease in the 30 days following the trauma and they eventually fade. When the symptoms persist beyond that time, the likelihood of post-traumatic stress disorder (PTSD) is high. People experiencing PTSD may still feel frightened or stressed even when they are no longer in harm’s way. They are likely to experience sleep problems, have continuous frightening thoughts and memories of the event, feel numb or disconnected, or be easily startled. PTSD sufferers may also lose interest in the things they used to enjoy, be more irritable, or become aggressive. A person may develop PTSD after being directly exposed to a life threatening event, or after witnessing a life threatening event happening to someone else.

**Measuring the Risk for PTSD**

The PTSD Checklist-6 (PCL-6) is a well-established self-report measure of PTSD symptoms with good psychometric properties (Wilkins, Lang, & Norman, 2011). The items directly map onto PTSD symptoms in the DSM-IV-TR [APA, 2000]; respondents are asked to rate the degree to which they were bothered by symptoms caused by a stressful experience in the past month on a 5-point rating scale, where 1= not at all, 2=a little bit, 3=moderately, 4=quite a bit, and 5=extremely. PCL-6 has a sensitivity of .92 at the cut-off of 14 (Lang et al., 2005).

**Risk for PTSD and Exposure to Traumatic Events in UNHCR**

As exposure to PTSD is one of the main criteria for diagnosing PTSD, respondents were asked if they had experienced a traumatic event in the previous 12 months at work or in their personal life (May–July 2013 – May–July 2014). They were also asked to indicate how many incidents they had experienced in that period of time. Their responses are summarized in Graph 14.

![Graph 14 - Number of Respondents who Experienced Trauma at Work and/or at Home in the Last 12 Months](image)
It is striking that the descriptive statistics related to experiencing trauma at work and at home (yes/no/missing data) are virtually identical. By combining the experiences of trauma at work and trauma at home, the following information was obtained:

- 1,280 respondents (60% of respondents after adjusting for missing values) did not experience trauma in last 12 months, whether at work or at home.
- 288 respondents (14%) experienced trauma at work but not at home.
- 266 respondents (12%) experienced trauma at home but not at work.
- 293 respondents (14%) experienced trauma at work and at home.

In terms of the frequency of experienced events, Graph 15 shows the percentage of respondents who experienced 1, 2–3 or more than 4 traumatic events either at work or at home. The trends are very similar and more than half of those who experienced traumatic events had 2 or more traumatic encounters in the previous 12 months. The maximum number of incidents experienced was 10 per person, which is a very high number per individual in a 12-month period.

Examining the data on trauma at work, a Kruskal-Wallis non-parametric test confirmed that there was a significant difference in risk for PTSD between colleagues who were exposed to a traumatic event (mean score on PTSD = 15.2) and those who were not (mean score on PTSD = 11.6) (p<.001). Participants who had been exposed to trauma are more likely to get a higher score on the PCL-6.

Further investigation indicated that 338 respondents who did not experience a traumatic event in the indicated period of time were still classified as at risk for PTSD. It could be assumed that these individuals may have had traumatic experiences before the 12 months covered by this research.

Although this report does not focus on the impact that trauma at home has on the risk of PTSD, it is worth mentioning that among all respondents classified as at risk for PTSD, 130 reported experiencing trauma only at home in the last 12 months.
Difference in Risk for PTSD by Socio-demographic Variables

In this section the study focuses on examining the relationship between each socio-demographic variable and the risk for PTSD by using the chi-square test of independence ($\chi^2$).

a) Risk for PTSD and gender, marital status and age

The chi-square test of independence did not reveal a significant relationship between risk for PTSD and gender, marital status or age (p > .05). The percentages of staff at risk for PTSD for each of the categories are presented in Graph 16.

b) Regions and level of hardship

Graph 17 presents the percentages of respondents at risk for PTSD by regions and level of hardship. The chi-square test revealed a statistically significant but weak relationship between region and risk for PTSD, indicating that the respondents in MENA are slightly more likely to be classified as at risk for PTSD in comparison to their colleagues in other regions ($\chi^2 (5, N=1980) = 23.63, p = <.001; Cramér’s V = .10$).

The chi-square test of independence did not reveal a statistically significant relationship between the risk for PTSD and level of hardship (p > .05).

c) Staff status

Staff status included the following categories:
- international (Int) vs. national (Nat) staff;
- staff vs. affiliate workforce (AWF);
- contract type: temporary assignment (TA), fixed-term appointment (FTA),
indefinite contract (IND), consultants (Cons) and others.

Graph 18 presents the percentages of respondents at risk for PTSD for each category of staff status defined above. The chi-square test of independence did not reveal a significant relationship between any of these variables and the risk for PTSD ($p > .05$).

d) Risk for PTSD and working with People of Concern

The chi-square test did not reveal a significant relationship between the risk for PTSD and whether respondents worked or not with people of concern ($p > .05$) (Graph 19).

**Correlations between the Level of PTSD and Moderating Variables**

Job satisfaction is the only moderating variable that has shown a moderate and negative correlation with the level of PTSD. The higher the PTSD score, the lower the job satisfaction (Table 6).

Table 6 – Correlations between the Risk for PTSD and the Moderating Variables

<table>
<thead>
<tr>
<th></th>
<th>Years of service in the humanitarian field</th>
<th>Years of service in UNHCR</th>
<th>Years of service in D&amp;E</th>
<th>Number of working hours in a typical day</th>
<th>Percentage of time spent on official travel</th>
<th>Job satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTSD</td>
<td>.032</td>
<td>.076**</td>
<td>.066**</td>
<td>.116**</td>
<td>-.016</td>
<td>-.325**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.163</td>
<td>.001</td>
<td>.005</td>
<td>.000</td>
<td>.490</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>1944</td>
<td>1952</td>
<td>1785</td>
<td>1949</td>
<td>1871</td>
<td>2079</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed)

**Socio-demographic Variables as Predictors of Risk for PTSD**

The logistic regressions indicated that in the overall model, the variables of gender, age, years of service in the humanitarian field and regions were useful predictors for distinguishing between respondents who are at risk for PTSD and those who are not ($\chi^2 (8, N= 1916) = 28.19, p < .001$). Regarding the individual relationships between each of the aforementioned predictors and risk for PTSD, the following significant results were obtained:

- Regions:
Respondents from MENA were 1.89 times more likely to be at risk for PTSD than those from America (p = .001).

**ERI, Overcommitment and Exposure to Trauma as Predictors of Risk for PTSD**

The logistic regressions indicated that in the overall model, the variables of ERI, OC, trauma frequency at work and trauma event at work were useful predictors for distinguishing between respondents who are at risk for PTSD and those who are not ($\chi^2 (4, N= 2141) = 471.16, p< .001$). Regarding the individual relationships between each of the above-mentioned predictors and risk for PTSD, the effort-reward imbalance was found to be the strongest predictor, followed by trauma exposure:

- **Effort-reward imbalance:**
  - For each unit increase in the ERI score, respondents were 2.61 times more likely to be at risk for PTSD ($p < .001$).

- **Exposure to trauma at work (yes/no):**
  - Respondents who were exposed to traumatic events at work were 1.41 times more likely to be at risk for PTSD than those who were not ($p = .024$).

- **Overcommitment:**
  - For each unit increase in the OC score, respondents were 1.22 times more likely to be at risk for PTSD ($p < .001$).

- **Frequency of traumatic exposure at work:**
  - For each unit increase in the frequency of exposure to trauma, respondents were 1.16 times more likely to be at risk for PTSD ($p < .001$).

**Burnout Dimensions as Predictors of Risk for PTSD**

The logistic regressions indicated that in the overall model, the variables of personal accomplishment, emotional exhaustion and depersonalization (the burnout dimensions) were useful predictors for distinguishing between respondents who are at risk for PTSD and those who are not ($\chi^2 (3, N= 2100) = 455.0, p< .001$). Regarding the individual relationships between each of the aforementioned predictors and risk for PTSD, the following significant results were obtained with very low odds ratios:

- **Emotional exhaustion:**
  - For each unit increase in emotional exhaustion score, respondents were 1.07 times more likely to be at risk for PTSD ($p < .001$).

- **Depersonalization:**
  - For each unit increase in depersonalization score, respondents were 1.08 more likely to be at risk for PTSD ($p < .001$).
Summary and Comments

- About 40% of respondents (adjusting for the missing values) were exposed to at least one traumatic event at work or at home in the 12 months prior to the study. In comparison, 28% (adjusting for the missing values) of respondents were exposed to traumatic events at work, and maybe or maybe not at home.
- 36% of respondents (or 823 after adjusting for missing answers) were classified as at risk for PTSD. Among them, more than half (or 468) did not experience trauma at work in the 12 months prior to the survey. Out of these 468,338 respondents did not experience trauma at all during the specified period.
- Exposure to trauma (yes/no) increases the chances to be classified as at risk for PTSD by 1.41 times, while the frequency of trauma increases these chances by 1.16 times).
- Effort-reward imbalance was revealed as the strongest predictor of risk for PTSD, even stronger than the traumatic exposure at work.
- Working in MENA increases the odds to be classified as at risk for PTSD by 1.89 times.
- The higher the score on PTSD, the lower the job satisfaction.

The life-time prevalence of PTSD in the general population is 8% (Sadock et al., 2015). The Antares Foundation suggests that around 30% of aid workers report significant symptoms of PTSD upon returning from assignment and that there is a PTSD prevalence of 25% among search and rescue personnel responding to events such as bomb explosions, airplane crashes and earthquakes (the Antares Foundations, 2006). The same source indicates that PTSD prevalence among war journalists is over 28% (far higher than for non-war journalists). Another source indicates a PTSD prevalence of 21% among firefighters. While these figures provide us with a framework for comparison, it should be taken into consideration that different instruments might have been used in measuring the level of risk for PTSD.

The Review of the Mental Health and Psychosocial Support for Staff (UNHCR, 2013) reported that 45% of the online survey respondents were exposed to a traumatic event in their lifetime. In the current research, we limited the reporting period of experienced trauma to 12 months prior to the completion of the survey, hoping to attain a better understanding of the link between the traumatic exposure and PTSD. The results showed that 40% of respondents had experienced trauma either at work or at home while 28% had experienced trauma at work (and maybe at home).

Our data analysis revealed that more than half of those classified as at risk for PTSD did not experience trauma at work during the indicated period. They may have experienced trauma at home or they may have had a traumatic experience prior to the reporting period. Furthermore, 16% of the total valid sample (adjusting for missing values) were classified as at risk for PTSD but did not experience trauma either at home or at work.

The future survey could consider expanding the time period during which the traumatic exposure occurred; also, data analysis should include the impact of the trauma exposure.
Two findings in this research are particularly interesting. First, the incidence of risk for PTSD is higher among the respondents working in MENA. The analysis did not geographically map the traumatic exposure so we can only assume that this finding reflects an exposure to security incidents in Syria and Iraq in 2014, when the data was collected. Second, the level of ERI proved to be a stronger predictor of risk for PTSD than exposure to traumatic events. While the design of the study does not allow us for causal interpretation, this finding highlights the importance of the organization’s active support to colleagues following critical incidents at all levels. This is supported by the work of Armstrong et al. (2014) who established that organizational factors are important in development of PTSD amongst the firefighters.
Risk for Hazardous Alcohol Drinking

Twenty-five percent of the survey's respondents were classified as at risk for hazardous alcohol drinking.
Alcohol use is common in many societies as a means to enjoy oneself, relax or unwind. It can play a big role within families, social groups and traditions, so it is sometimes difficult to know how much is too much. When people use alcohol as a coping mechanism to numb themselves from experiencing strong negative emotions or painful life circumstances, problems might arise. Controlled and moderate usage can quickly become abuse when it compromises one’s own health and safety or that of those around. Hazardous alcohol use can lead to dangerous decisions, harmed relationships, and work and legal problems; it can quickly lead to alcohol dependence (also called alcohol addiction or alcoholism), a condition in which a person feels that they need alcohol just to survive.

Denial is a key component of alcohol abuse and dependence. Many people affected by this addiction do not stop and will not admit that the problem is significant, despite its negative consequences. Persons dependent on alcohol must drink more and more to get the same effect and often cannot control how much they drink; they are not able to cut back even if they wished to, and when they stop drinking, they experience withdrawal symptoms such as nausea, sweating, anxiety and shakiness. But alcoholism is a treatable, recoverable disease. One of the biggest obstacles to treatment is the strong stigma associated with it and the lack of social support.

**Measuring the Risk for Hazardous Alcohol Drinking**

The Alcohol Use Disorders Identification Test – Consumption (AUDIT-C) is a brief validated screening measure for risky drinking, alcohol abuse and dependence (Frank, De Benedetti, Volk, Williams, Kivlahan & Bradley, 2008). The three questions (0–4 points each) result in possible AUDIT-C scores of 0–12 points. The recommended cut-offs used in this research are ≥4 points for men and ≥3 points for women.

**Difference in Risk for Hazardous Alcohol Drinking by Socio-demographic Variables**

In this section the study focuses on examining the relationship between each socio-demographic variable and the risk for hazardous alcohol drinking by using the chi-square test of independence ($\chi^2$).

**a) Gender, marital status and age**

Graph 20 presents the percentages of respondents at risk for hazardous alcohol drinking by gender, marital status and age.

A chi-square test showed a significant but very weak relationship between
the risk for hazardous alcohol consumption and gender, indicating that female respondents are slightly more likely to be classified as at risk for hazardous alcohol use than their male colleagues ($\chi^2 (1, N=1980) = 5.99, p = .02; \text{Cramér's V} = .06$).

Also, a significant though very weak relationship was revealed between the risk for hazardous alcohol drinking and marital status. According to the results, the divorced/widowed respondents were 1.56 times more likely to be classified as at risk for hazardous alcohol drinking than their married colleagues ($\chi^2 (2, N=1963) = 6.83, p = .03; \text{Cramér's V} = .06$).

The age variable was not found to have a significant relationship with the risk for hazardous alcohol use ($p_s > .05$).

b) Regions and level of hardship

Graph 21 presents the percentages of respondents at risk for hazardous alcohol use by region of work and by level of hardship.

The chi-square test revealed a statistically significant relationship indicating that respondents working in HQ (Switzerland), followed by their colleagues working in Europe, had more probability to be classified as at risk for hazardous alcohol use than the respondents working in other regions ($\chi^2 (5, N=1980) = 119.21, p = <.001; \text{Cramér's V} = .25$).

Colleagues based in HQ duty stations have a higher probability to be classified as at risk for hazardous alcohol use ($\chi^2 (7, N=1974) = 62.96, p = <.001; \text{Cramér's V} = .18$) compared to other colleagues.

c) Staff status

Graph 22 presents the percentages of staff at risk for hazardous alcohol use by the following categories:
- international (Int) vs. national (Nat) staff;
- staff vs. affiliate workforce (AWF);
- contract type: temporary assignment (TA), fixed-term appointment (FTA), indefinite

![Graph 21 - Risk for Hazardous Alcohol Drinking by Region and by Level of Hardship](image)

![Graph 22 - Risk for Hazardous Alcohol Drinking by Staff Status](image)
contract (IND), consultants (Cons) and others.

The chi-square test revealed that international staff are more likely to be classified as at risk for hazardous alcohol use than the national staff ($\chi^2 (1, N= 1832) = 76.82, p <.001; \text{Cramér's } V = .21$).

To further understand alcohol consumption, the percentages of international and national staff were broken down by duty stations. As can be seen in Graph 23, internationals are at higher risk for alcohol consumption across all duty stations.

The chi-square test did not find a significant relationship between the risk for hazardous alcohol use and staff vs. affiliate workforce ($p>.05$).

Finally, respondents with consultancy contracts were more likely to be classified as at risk for hazardous alcohol use than their colleagues with other types of contracts ($\chi^2 (4, N= 1898) = 13.73, p <.001; \text{Cramér's } V = .09$).

d) Risk for hazardous alcohol drinking and working with people of concern

Graph 24 presents the percentages of respondents classified as at the high risk for hazardous alcohol drinking for each of the two groups.

The chi-square test revealed a statistically significant but very weak relationship between these two variables ($\chi^2 (1, N= 2239) = 4.56, p <.03; \text{Cramér's } V = .05$) indicating that the respondents who do not work with people of concern were slightly more likely to be classified as at risk for hazardous alcohol use.
Correlations between the Level of Hazardous Alcohol Drinking and Moderating Variables

As shown in Table 7, the level of hazardous alcohol drinking is not strongly correlated with any moderating variable.

Table 7 – Correlations between the Level of Hazardous Drinking and Moderating variables

<table>
<thead>
<tr>
<th></th>
<th>Years of service in the humanitarian field</th>
<th>Years of service in UNHCR</th>
<th>Years of service in D&amp;E</th>
<th>Number of working hours in a typical day</th>
<th>Percentage of time spent on official travel</th>
<th>Job satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous alcohol drinking</td>
<td>.044</td>
<td>.050*</td>
<td>-.037</td>
<td>.151**</td>
<td>.027</td>
<td>-.047*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.050</td>
<td>.028</td>
<td>.114</td>
<td>.000</td>
<td>.245</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>1944</td>
<td>1952</td>
<td>1785</td>
<td>1949</td>
<td>1871</td>
<td>2079</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed)

Socio-demographic Variables as Predictors of Risk for Hazardous Alcohol Use

The logistic regressions indicated that in the overall model, the variables of gender, age, years of service in the humanitarian field and the regions of work were useful predictors for distinguishing between respondents who are at risk for alcohol consumption and those who are not ($\chi^2 (8, N= 1964) = 112.10, p< .001$). However, concerning the individual relationships between each of these predictors and the risk for alcohol consumption, the only significant result was obtained for regions:

- Respondents from HQ in Switzerland were 2.81 times more likely to be at risk for alcohol consumption than those from America ($p<.001$).
- Respondents from Europe were 1.67 times more likely to be at risk for alcohol consumption than those from America ($p=.018$).
- Respondents from MENA were 0.68 times less likely to be at risk for alcohol consumption compared to those from America ($p=.076$; so only marginally significant).
- Respondents from Asia-Pacific were 0.50 times less likely to be at risk for alcohol consumption than those from America ($p=.004$).

ERI, Overcommitment and Exposure to Trauma as Predictors of Hazardous Alcohol Use

The logistic regressions indicated that in the overall model the variables of ERI, overcommitment, trauma frequency at work and trauma event at work were not significant predictors of risk for hazardous alcohol drinking($\chi^2 (4, N= 2124) = 5.03, p > .05$). Therefore, the ERI, OC and exposure to trauma were not useful predictors of this behavioural outcome.
**Burnout Dimensions as Predictors of Hazardous Alcohol Use**

The logistic regressions revealed that in the overall model, the burnout dimensions (personal accomplishment, emotional exhaustion, depersonalization) were useful predictors for distinguishing between respondents who are at risk for hazardous alcohol use and those who are not (χ² (3, N= 2100) = 39.63, p< .001). Regarding the individual relationships between each of the predictors mentioned above and the risk for hazardous alcohol use, personal accomplishment and depersonalization were revealed as significant predictors but with extremely low odds ratios.

**Summary and Comments**

- 25% of respondents were found to be at risk for hazardous drinking.
- The slight trend of women being more at risk for hazardous alcohol use than men was not confirmed by the logistic regressions.
- Divorced respondents were more at risk for hazardous alcohol consumption.
- There is a higher prevalence of risk for hazardous alcohol drinking among international staff than among national staff across all category duty stations.
- The region of work has a significant predicting value of the level of hazardous drinking: respondents at HQ and Europe showed the highest risk for hazardous alcohol consumption. A significantly lower risk for hazardous alcohol consumption was found in Asia, MENA, Africa and the Americas.
- The region of work was the strongest predictor of being at risk for hazardous alcohol use. Personal accomplishment and depersonalization has a marginal capacity to predict the hazardous alcohol drinking. ERI, overcommitment and exposure to trauma had no predictive value of hazardous alcohol drinking.
- Respondents who do not work with people of concern were slightly more likely to be classified as at risk for hazardous alcohol use.

The screening instrument selected for this survey uses a conservative cut-off level: respondents would be considered at risk for hazardous alcohol use if they drank a glass of wine four times a week. The cut-off score being lower for women may explain why women were more likely to be classified as at risk for hazardous alcohol use than men.

However, the findings that 1) most respondents classified as at risk for hazardous alcohol use work in Geneva and in HQ locations; and 2) international staff are significantly more at risk for hazardous alcohol use that the national staff, deserve more attention and further research.

The data from the Staff Health and Welfare Service reports a low number of cases of hazardous alcohol use (UNHCR, 2015). This gap may be influenced by the stigma linked to alcohol abuse and the fear of consequences if help were sought. Furthermore, the lack of knowledge and confidence among both managers and affected individuals in relation to the existing protocols and support mechanisms are also likely obstacles to seeking support.
Risk for Secondary Trauma

The risk for secondary traumatic stress was identified in 38% of those respondents who worked directly with people of concern.
Humanitarian aid workers who support traumatized populations are likely to experience cognitive, physical, and emotional consequences because of their empathic engagement, which may lead to developing secondary traumatic stress disorder (STSD). A person suffering from STSD may begin feeling negative changes in their self-perception and worldviews, professional functioning, capacities, sense of security and psychological needs (Saakvitne & Pearlman, 1996). STSD has been characterized as “a state of physical, emotional and mental exhaustion caused by long term involvement in emotionally demanding situations” (Pines, Aronson, & Kafry, 1981). Common coping responses to STS among humanitarian workers are increased tobacco use and alcohol consumption (Britt & Adler, 1999). This psychological illness commonly goes unnoticed until it becomes something more serious such as depression, anxiety, burnout, PTSD or substance dependence.

**Measuring the Risk for Secondary Traumatic Stress**

The Secondary Traumatic Stress Scale – STSS – (Bride, Robinson, Yegidis, & Figley, 2004) was designed to assess the frequency of intrusion, avoidance and arousal symptoms associated with indirect exposure to traumatic events, for example through clinical work with traumatized populations. The STSS was developed in accordance with Figley’s (1995) definition of secondary traumatic stress as a syndrome of symptoms nearly identical to those of post-traumatic stress disorder (PTSD). Figley (1995) defines secondary traumatic stress as “the natural and consequent behaviors and emotions resulting from knowing about a traumatizing event experienced by a significant other — the stress resulting from helping or wanting to help a traumatized or suffering person” (p. 7).

Each of the 17 items was designed to tap one of the criteria for PTSD according to DSM-IV-TR (APA, 2000). Respondents are instructed to indicate how frequently each statement was true for them in the past seven days using a 5-point Likert-scale (1 = never, 2 = rarely, 3 = occasionally, 4 = often, and 5 = very often). The STSS is comprised of three subscales referred to as intrusion, avoidance and arousal that respectively correspond to the B, C, and D criteria for PTSD (APA, 2000).

A cut-off of 38 or above was used for STSS scores, indicating the presence of secondary traumatic stress (Bride, 2007).

**Exposure to Work with People of Concern in UNHCR**

As secondary traumatic stress is linked to work with traumatized populations, participants were asked whether or not they directly worked with people of concern. For UNHCR, the term “people of concern” includes refugees, internally displaced persons, asylum seekers, returnees and stateless people. The degree of their traumatic experiences varies. Only those respondents who indicated that they worked directly with people of concern were asked to complete STSS questionnaire. These participants accounted for 1,426 or 59% of the total sample. Therefore, further percentages in the text were based on N= 1426.
Difference in Risk for Secondary Traumatic Stress by Socio-demographic Variables

a) Gender, marital status and age

Graph 25 presents the percentages of respondents working with people of concern and at risk of secondary traumatic stress by gender, marital status and age.

The chi-square test revealed a statistically significant although very weak relationship between risk for STS and gender ($\chi^2 (1, N=1298) = 4.18, p = .04$; Cramér’s $V = .06$) indicating that female respondents are slightly more likely to be classified as at risk for secondary traumatic stress than male respondents.

The chi-square test did not find a significant relationship between the risk for secondary traumatic stress and marital status ($p>.05$) or age of respondents ($p>.05$).

b) Regions and level of hardship

Graph 26 presents the percentages of respondents who worked with people of concern and were at risk for secondary traumatic stress by region and level of hardship.

The chi-square test revealed that the respondents working in MENA are slightly more likely to be classified as at risk for secondary traumatic stress than their colleagues in other regions ($\chi^2 (5, N=1298) = 12.58, p = .02$; Cramér’s $V = .10$).

The chi-square test did not reveal a statistically significant relationship between the risk for secondary traumatic stress and level of hardship ($p>.05$).
c) **Staff status**

Graph 27 presents the percentages of respondents who worked with people of concern and were at risk for secondary traumatic stress by the following variables:
- international (Int) vs. national (Nat) staff;
- staff vs. affiliate workforce (AWF);
- contract type: temporary assignment (TA), fixed-term appointment (FTA), indefinite contract (IND), consultants (Cons) and others.

The chi-square test of independence did not reveal a significant relationship between the risk for secondary traumatic stress and any of the categories of staff status ($p > .05$).

**Correlations between the Level of Secondary Traumatic Stress and the Moderating Variables**

Table 8 indicates that scores on the STSS are moderately and negatively correlated with job satisfaction. Other correlations were too weak for any meaningful interpretation.

| Socio-demographic Variables as Predictors of Risk for Secondary Traumatic Stress |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                                 | Years of service in the humanitarian field | Years of service in UNHCR | Years of service in D&E | Number of working hours in a typical day | Percentage of time spent on official travel | Job satisfaction |
| Secondary traumatic stress     | Correlation    | Sig. (2-tailed) | N                | Correlation    | Sig. (2-tailed) | N                | Correlation    | Sig. (2-tailed) | N                |
|                                 | - .050         | .072            | 1275             | -.105**        | -.348**         | 1358             |
|                                 | .026           | .348            | 1286             | -.075**        | -.348**         | 1358             |
|                                 | .023           | .430            | 1181             | -.008          | -.348**         | 1358             |
|                                 | .105**         | .000            | 1281             | -.008          | -.348**         | 1358             |
|                                 | -.075**        | -.008           | 1237             | -.348**        |                  |                  |

**Correlation is significant at the 0.01 level (2-tailed)**

**Correlation is significant at the 0.05 level (2-tailed)**

The logistic regressions indicated that in the overall model, the variables of gender, age, years of service in the humanitarian field and region of work were useful predictors for distinguishing between respondents who are at risk for secondary traumatic stress and those who are not ($\chi^2 (8, N= 1262) = 17.85, p= .022$). Regarding the individual relationships between each of the predictors previously mentioned and the risk for secondary traumatic stress, the following significant results were obtained:
• Regions:
  ✓ Respondents from MENA were 2.10 times more likely to be at risk for secondary traumatic stress than those from America (p = .002).
  ✓ Respondents from HQ in Switzerland were 1.88 times more likely to be at risk for secondary traumatic stress than those from America (p = .065; so only marginally significant).
  ✓ Respondents from Africa were 1.56 times more likely to be at risk for secondary traumatic stress than those from America (p = .060; so only marginally significant).

**ERI, Overcommitment and Exposure to Trauma as Predictors of Risk for Secondary Traumatic Stress**

The logistic regressions indicated that in the overall model, the variables of ERI, overcommitment, trauma frequency at work and trauma event at work (yes/no) were useful predictors for distinguishing between respondents who are at risk for secondary traumatic stress and those who are not ($\chi^2 (4, N= 1354) = 259.70, p< .001$). Regarding the individual relationships between each of these predictors and the risk for secondary traumatic stress, the following significant results were obtained:

• Effort-reward imbalance:
  ✓ For each unit increase in the ERI score, respondents were 2.50 times more likely to be at risk for secondary traumatic stress ($p < .001$).

• Exposure to traumatic event (yes/no):
  ✓ Respondents who were exposed to traumatic events at work were 1.58 times more likely to be at risk for secondary traumatic stress than those who were not ($p = .009$).

• Overcommitment:
  ✓ For each unit increase in the OC score, respondents were 1.23 times more likely to be at risk for secondary traumatic stress ($p < .001$).
Summary and Comments

- 38% of respondents who worked with people of concern (N= 1426) were identified as at risk for secondary traumatic stress.
- Female respondents had a slightly higher probability to be classified as at risk for secondary traumatic stress than the male respondents.
- Respondents who worked in MENA had the highest probability to be classified as at risk for secondary traumatic stress compared to the respondents working in other regions.
- ERI, exposure to trauma and overcommitment had a predicting value for being at risk for secondary traumatic stress. For each unit increase in the ERI score, respondents were 2.10 times more likely to be classified as at risk for secondary traumatic stress.
- Respondents exposed to trauma were 1.58 times more likely to be classified as at risk for secondary traumatic stress.
- For each unit increase in the OC score, respondents were 1.23 times more likely to be at risk for secondary traumatic stress.
- The higher the secondary traumatic stress, the lower the job satisfaction.

Different researches found that between 40% and 85% of helping professionals develop vicarious trauma, compassion fatigue or high rates of traumatic symptoms (Conrad & Kellar-Guenther, 2006; Lobel, 1997; Bride 2007). The identified prevalence of 36% compares with the prevalence of 37% identified among the Protection staff involved in operations in Syria (UNHCR, 2015).

Considering their working environment at the time of the survey and the likely impact of the war in Syria and Iraq, the higher prevalence of risk for secondary traumatic stress among MENA respondents is not surprising. Higher risk for secondary traumatic stress in HQ and Europe is likely linked to the staff’s significant involvement in refugee status determination (RSD) and/or resettlement activities, which show a consistent relationship with secondary trauma. Next research should consider further segregating this data by specific functional groups (e.g. RSD interviewers, field assistants, interpreters).
Risk for Burnout

The survey identified 26 out of 2431 respondents at risk for burnout, of which 23 work with people of concern.
Burnout is one of the responses to prolonged chronic emotional and interpersonal stressors on the job. Although there is no universally accepted definition of burnout, it has been defined as a psychological syndrome involving chronic emotional and interpersonal stressors that individuals experience in the workplace (Cordes & Dougherty, 1993; Maslach, & Leiter, 2008). Two major contributors can explain the experience of burnout at work: the persistent imbalance of demands over resources and the conflict between the personal values of employees and the organization’s values (Schaufeli, Leiter and Maslach, 2009).

Although burnout is still predominantly considered as a social problem, it has been increasingly used as a diagnostic criterion in the medical world. The burnout diagnosis requires the following symptoms to appear over the period of two weeks and in relation to work: 1) persistent and increased fatigue or weakness after a minimal effort; 2) a minimum of two distress symptoms (i.e. irritability, inability to relax) and 3) the absence of other disorders such as mood or anxiety disorders (ICD-10). Those who experience burnout may suffer from sleep disturbances, work/family conflict, physical illness and substance abuse (Swider & Zimmerman, 2010).

Burnout has also been placed on the opposite side of the spectrum of employee engagement, called erosion of engagement (Schaufeli, Leiter and Maslach, 2009). The authors refer to the fact that organizations in twenty-first century need their employees to engage “their body, mind and soul” because of the pressure to produce more with less. That has created the need to shift the focus from organizational structures and economic principles to human capital management. A longitudinal study among humanitarian workers showed that failure to provide adequate support often resulted in high levels of psychological distress among humanitarian workers (Lopes Cardoso et al., 2012).

**Measuring the Risk for Burnout**

The survey approached burnout as a psychosocial phenomenon and used the Maslach Burnout Inventory (MBI) – (Human Services Survey), which includes three subscales for measuring the three burnout dimensions:

- **Emotional exhaustion (EE)** refers to feelings of being emotionally overextended and exhausted by one's work. The major sources of this exhaustion are work overload and personal conflicts. When experiencing emotional exhaustion, people feel drained and lack the energy to face daily tasks. The emotional exhaustion subscale represents the basic stress dimension of burnout.

- **Depersonalization (DP)** refers to a negative or excessively detached response to other people. It is a self-protective response and serves as an emotional buffer. The depersonalization component is regarded as the interpersonal dimension of burnout.

- **The Personal Accomplishment (PA) subscale** represents the self-evaluation dimension of burnout (Maslach & Goldberg, 1998). Reduced personal accomplishment leads to reduced feelings of competence at work. This lowers self-efficacy, and employees experience a growing sense of inadequacy about their ability to help those they are responding to.
Answers on all subscales were given on a 7-point rating scale ranging from 0 (never) to 6 (every day), and on the basis of the MBI responses, independent scores are calculated for each of the three subscales of the burnout inventory. High scores on the emotional exhaustion or depersonalization subscales indicate burnout, as do low scores on the personal accomplishment subscale.

Clinically validated cut-off scores for each of the three MBI scales were taken from the Maslach Burnout Inventory Manual for Human Services for the overall sample. For EE it was ≥ 27, for DP ≥ 13 and PA ≤ 31 (Table 1, P 6, MBI Manual). It is important to note that the percentages presented below for the dimension of PA identify respondents at risk for diminished personal accomplishment.

In the following chapters the results are reported for each of the burnout dimensions separately. It is worth reporting that using the above cut-off scores, 26 respondents met the full criteria for burnout.

**Difference in Risk for Burnout by Socio-demographic Variables**

In this section, the study focuses on examining the relationship between each socio-demographic variable and the risk for each of the three scales of burnout by using the chi-square test of independence.

**a) Gender, marital status and age**

Graph 28 presents the percentages of respondents at risk for the three burnout dimensions, by gender, marital status and age.

*Gender*

Women were slightly more likely to be classified as at risk for emotional exhaustion and diminished personal accomplishment than men (PA: $\chi^2 (1, N= 1977) = 11.29, p < .001; \text{Cramér’s } V = .08$; EE: $\chi^2 (1, N= 1979) = 16.46, p < .001; \text{Cramér’s } V = .09$). The chi-square test did not find a significant relationship between the risk for depersonalization and gender ($p>.05$).
Marital status
Married respondents were marginally less likely to be classified as at risk for emotional exhaustion ($\chi^2 (2, N= 1260) = 8.86, p = .01; \text{Cramér's } V = .07$). The chi-square test did not find a significant relationship between the risk for depersonalization and diminished personal accomplishment and marital status ($p > .05$).

Age
Colleagues less than 34 years old were slightly more likely to be classified as at risk for depersonalization ($\chi^2 (3, N= 1939) = 12.25, p = .00; \text{Cramér's } V = .08$). The chi-square test did not find a significant relationship between the risk for either diminished personal accomplishment or emotional exhaustion and age ($p > .05$).

b) Regions and level of hardship
Graph 29 presents the percentages of respondents at risk for the three burnout dimensions by region and level of hardship.

Regions
The respondents working at HQ (Switzerland) were more likely to be classified as at risk for diminished personal accomplishment followed by the respondents working in Europe ($\chi^2 (5, N= 1977) = 100.42, p < .001; \text{Cramér's } V = .23$). The respondents working at HQ (Switzerland) and MENA were more likely to be classified as at risk for emotional exhaustion ($\chi^2 (5, N= 1979) = 58.54, p < .001; \text{Cramér's } V = .17$). Finally, the highest probability to be classified as at risk for depersonalization was found among the colleagues working in MENA (39.7%) ($\chi^2 (5, N= 1976) = 24.10, p < .001; \text{Cramér's } V = .11$).
Level of hardship

The respondents working in HQ-category duty stations had a somewhat higher likelihood to be classified as at risk for diminished personal accomplishment and emotional exhaustion (PA: χ² (7, N= 1971) = 58.82, p < .0001; Cramér’s V = .17; EE: χ² (7, N= 1979) = 21.17, p = .004; Cramér’s V = .10). The chi-square test did not find a significant relationship between the risk for depersonalization and the level of hardship (p>.05).

c) Staff status

Graph 30 presents the percentages of respondents at risk for burnout dimensions by the following variables:
- international (Int) vs. national (Nat) staff;
- staff vs. affiliate workforce (AWF);
- contract type: temporary assignment (TA), fixed-term appointment (FTA), indefinite contract (IND), consultants (Cons) and others.
International/national staff

International staff members were marginally more likely to be classified as at risk for emotional exhaustion ($\chi^2 (1, N= 1831) = 5.00, p = .03; \text{Cramér's } V = .05$) and for diminished personal accomplishment ($\chi^2 (1, N= 1830) = 12.90, p < .0001; \text{Cramér's } V = .08$) than their national colleagues.

Staff vs. Affiliate Workforce (AWF)

The chi-square test did not reveal a significant relationship between the risk for any of the scales of burnout and the staff vs. affiliate workforce variable ($p>.05$).

Contractual status

Colleagues with indefinite contracts were slightly more likely to be classified as at risk for diminished personal accomplishment in comparison to colleagues with other types of contracts ($\chi^2 (4, N= 1895) = 26.83, p < .001; \text{Cramér's } V = .12$). The test did not find a significant relationship between the risk for emotional exhaustion or risk for depersonalization and the type of contract ($p>.05$).

d) Risk for burnout and working with people of concern

Respondents who did not work with people of concern were marginally more likely to be classified as at risk for Emotional Exhaustion ($\chi^2 (1, N= 2106) = 7.78, p = .06; \text{Cramér's } V = .06$) and slightly less likely to be classified as at risk for Depersonalization ($\chi^2 (1, N= 2101) = 6.50, p = .01; \text{Cramér's } V = .06$). The chi-test revealed a weak statistical relationship between working or not with people of concern and the risk for diminished personal accomplishment. The respondents who did not work with people of concern were more slightly more likely to be classified as at risk for diminished personal accomplishment ($\chi^2 (1, N= 2103) = 51.74, p <.001; \text{Cramér's } V = 0.16$).

Out of the 26 respondents who met the criteria for burnout on all three dimensions, 23 worked with people of concern.
Correlations between the Level of Burnout and Moderating Variables

The personal accomplishment score (note that it is the raw score, not the percentages of respondents at risk for diminished personal accomplishment) has a weak positive correlation with job satisfaction (Table 9).

The emotional exhaustion score has a weak to moderate positive correlation with the number of working hours in a typical day and a moderate negative correlation with job satisfaction.

The depersonalization score has a weak to moderate negative correlation with job satisfaction.

Table 9 – Correlations between the Burnout Dimensions and Moderating Variables

<table>
<thead>
<tr>
<th></th>
<th>Personal accomplishment</th>
<th></th>
<th></th>
<th></th>
<th>Number of working hours in a typical day</th>
<th>Percentage of time spent on official travel</th>
<th>Job satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correlation</td>
<td>-.037</td>
<td>-.103**</td>
<td>.088**</td>
<td>.010</td>
<td>.137**</td>
<td>.240**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.100</td>
<td>.000</td>
<td>.000</td>
<td>.660</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sample size (N)</td>
<td>1942</td>
<td>1950</td>
<td>1783</td>
<td>1946</td>
<td>1870</td>
<td>2075</td>
</tr>
<tr>
<td>Emotional exhaustion</td>
<td>Correlation</td>
<td>-.031</td>
<td>.025</td>
<td>-.039</td>
<td>.257**</td>
<td>-.071**</td>
<td>-.449**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.173</td>
<td>.279</td>
<td>.102</td>
<td>.000</td>
<td>.002</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sample size (N)</td>
<td>1943</td>
<td>1951</td>
<td>1784</td>
<td>1948</td>
<td>1870</td>
<td>2077</td>
</tr>
<tr>
<td>Depersonalization</td>
<td>Correlation</td>
<td>-.093**</td>
<td>-.041</td>
<td>.005</td>
<td>.148**</td>
<td>-.047*</td>
<td>-.268**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
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<td>.071</td>
<td>.835</td>
<td>.000</td>
<td>.043</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sample size (N)</td>
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<td>1948</td>
<td>1781</td>
<td>1945</td>
<td>1868</td>
<td>2073</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed)

Socio-demographic Variables as Predictors of Risk for Burnout Dimensions

a) Risk for diminished personal accomplishment and socio-demographic variables
The logistic regressions indicated that in the overall model, the variables of gender, age, years of service in the humanitarian field and region of work were useful predictors for distinguishing between respondents who are at risk for diminished personal accomplishment and those who are not ($\chi^2 (8, N=1914) = 102.73, p<.001$). Regarding the individual relationships between each of these predictors and the risk for diminished personal accomplishment, the following significant results were obtained:
Regions:
✓ Respondents from HQ (Switzerland) were 3.25 times more likely to be at risk for diminished personal accomplishment than those from America (p < .001).
✓ Respondents from Europe were 2.67 times more likely to be at risk for diminished personal accomplishment than those from America (p < .001).
✓ Respondents from MENA were 1.71 times more likely to be at risk for diminished personal accomplishment than those from America (p = .007).
✓ Respondents from Asia Pacific were 1.72 times more likely to be at risk for diminished personal accomplishment than those from America (p = .009).

b) Risk for emotional exhaustion and socio-demographic variables
The logistic regressions indicated that in the overall model, the variables of gender, age, years of service in the humanitarian field and region of work were useful predictors for distinguishing between respondents who are at risk for emotional exhaustion and those who are not ($\chi^2(8, N= 1915) = 70.63, p< .001$). Regarding the individual relationships between each of these predictors and the risk for emotional exhaustion, the following significant results were obtained:

• Gender:
  ✓ Male respondents were 0.73 times less likely to be at risk for emotional exhaustion than females (p = .002).

• Regions:
  ✓ Respondents from HQ (Switzerland) were 1.57 times more likely to be at risk for emotional exhaustion than those from America (p = .041).
  ✓ Respondents from Asia-Pacific were 0.53 times less likely to be at risk for emotional exhaustion than those from America (p = .005).

C) Risk for depersonalization and socio-demographic variables
The logistic regressions indicated that in the overall model, the variables of gender, age, years of service in the humanitarian field and region of work were useful predictors for distinguishing between respondents who are at risk for depersonalization and those who are not ($\chi^2(8, N= 1912) = 34.13, p< .001$). Regarding the individual relationships between each of the aforementioned predictors and the risk for depersonalization, only one significant result was obtained:

• Regions:
  ✓ Respondents from MENA were 5.15 times more likely to be at risk for depersonalization than those from America (p = .001).
  ✓ Respondents from HQ (Switzerland) were 3.48 times more likely to be at risk for depersonalization than those from America (p = .016).
  ✓ Respondents from Africa were 3.19 times more likely to be at risk for depersonalization than those from America (p = .016).
  ✓ Respondents from Europe were 2.85 times more likely to be at risk for depersonalization than those from America (p = .039).
**ERI, Overcommitment and Exposure to Trauma as Predictors of Risk for Burnout Dimensions**

a) **Risk for diminished personal accomplishment**
The logistic regressions indicated that in the overall model, the variables of ERI, overcommitment, trauma frequency at work and trauma event at work (yes/no) were useful predictors for distinguishing between respondents who are at risk for diminished personal accomplishment and those who are not ($\chi^2 (4, N= 1996) = 22.00, p< .001$). Regarding the individual relationships between each of these predictors and the risk for diminished personal accomplishment, the only significant result was obtained for effort-reward imbalance:
- For each unit increase in the ERI score, respondents were 1.45 times more likely to be at risk for diminished personal accomplishment ($p < .001$).

b) **Risk for emotional exhaustion**
The logistic regressions indicated that in the overall model, the variables of ERI, overcommitment, trauma frequency at work, trauma event at work (yes/no) were useful predictors for distinguishing between respondents who are at risk for emotional exhaustion and those who are not ($\chi^2 (4, N= 1998) = 536.50, p< .001$). Regarding the individual relationships between each of these predictors and the risk for emotional exhaustion, the following significant results were obtained:
- **Effort-reward imbalance:**
  - For each unit increase in the ERI score, respondents were 4.62 times more likely to be at risk for emotional exhaustion ($p < .001$).
- **Overcommitment:**
  - For each unit increase in overcommitment score, respondents were 1.26 times more likely to be at risk for emotional exhaustion ($p < .001$).

   c) **Risk for depersonalization**
The logistic regressions indicated that in the overall model, the variables of ERI, overcommitment, trauma frequency at work and trauma event at work (yes/no) were useful predictors for distinguishing between respondents who are at risk for depersonalization and those who are not ($\chi^2 (4, N= 1995) = 121.39, p< .001$). Regarding the individual relationships between each of these predictors and the risk for depersonalization, the following significant results were obtained:
- **Effort-reward imbalance:**
  - For each unit increase in the ERI score, respondents were 2.32 times more likely to be at risk for depersonalization ($p < .001$).
- **Overcommitment:**
  - For each unit increase in the overcommitment score, respondents were 1.14 times more likely to be at risk for depersonalization ($p < .001$).
- **Frequency of traumatic exposure:**
  - For each unit increase in the frequency of exposure to trauma, respondents were 1.10 times more likely to be at risk for depersonalization ($p = .049$).
Summary and Comments

- 43% of the respondents in UNHCR were at the risk for diminished personal accomplishment associated with negative self-evaluations about work.
- 31% of respondents were at risk for emotional exhaustion associated with feelings of fatigue, emotional exhaustion and stress.
- 9% were at risk for depersonalization linked to cynical attitudes and negative feelings about people of concern.
- 26 respondents were classified as at risk for burnout, taking into account their scores in all three burnout dimensions.
- Among the demographic variables, the region of work was a good predictor of results on burnout dimensions: The risk for diminished personal accomplishment was more frequent among the respondents at the HQ (Switzerland) and in Europe. The respondents at HQ and in MENA were more likely to be classified as at risk for emotional exhaustion while the respondents in MENA had a higher probability to be classified as at risk for depersonalization. Other socio-demographic variables had weak relationships with the scores in burnout dimensions:
  - Females were slightly more likely to be at risk for diminished personal accomplishment and emotional exhaustion than their male colleagues.
  - International staff members were slightly more likely to be classified as at risk for diminished personal accomplishment and emotional exhaustion than national staff.
  - Holders of indefinite contracts were slightly more likely to be classified as at risk for diminished personal accomplishment.
- Exposure to work with people of concern is linked with a higher probability of being classified as at risk for emotional exhaustion and a lesser probability to be at risk for diminished personal accomplishment and depersonalization. However, analysis of individual scores indicated that 23 out of 26 respondents who worked with people of concern were at risk for burnout (high EE, high DP and low PA).
- Effort-reward imbalance was found to be a strong predictor of higher risk for all three burnout dimensions than overcommitment and/or traumatic exposure. The higher the ERI, the higher the probability to be at risk for diminished personal accomplishment (1.45 times more), for emotional exhaustion (4.62 times more) and for depersonalization (2.32 times more). The higher the overcommitment score, the higher the probability to be at risk for emotional exhaustion (1.26 times more) and for depersonalization (1.14 times more). Frequency of trauma exposure at work was found to be a significant predictor of depersonalization only. The higher the frequency of exposure to trauma at work, the higher the probability to be at risk for depersonalization (1.10 times more), which is linked to cynicism and negative attitudes towards the people of concern or jobs carried out.
- Job satisfaction was significantly correlated with the results on the burnout dimensions. The higher the personal accomplishment score, the higher the level of job satisfaction. The higher the emotional exhaustion or depersonalization score, the lower the level of job satisfaction.
The findings on the relationship between the socio-demographic variables and the risk for each of the three burnout dimensions were consistent with most of the findings established by other researches (Ahola et al., 2006), particularly in relation to gender and marital status.

The high level of risk for each of the three dimensions at the HQ Switzerland and in Europe merits attention. As ERI again proved to be a much stronger predictor of burnout than any other variable, understanding the reasons for low effort-reward imbalance may be critical.

The 26 respondents classified as at risk for burnout on all three dimensions represent about 1.1% of the total sample and 1.6% of the subsample directly working with people of concern. On the other hand, an internal report from MENA identified that 12% of participants to Workshops on Prevention of Vicarious Trauma and Burnout (UNHCR, 2015) were at risk for burnout. Many factors could explain this more than 10-fold difference in the identified prevalence of risk for burnout (MENA data were collected on a particular, geographically focused professional profile; global data were collected by an online survey, and the workshop data were collected in the workshop context.
SECTION 6

RELATIONSHIPS AMONG MENTAL HEALTH AND BEHAVIOURAL OUTCOMES
Correlations between Mental Health and Behavioural Outcomes

All the mental health outcomes and the ERI score correlate moderately or strongly to each other except for hazardous alcohol use and Personal Accomplishment, which show a weak or no relationships to any other health outcomes (Table 10).

<table>
<thead>
<tr>
<th>ERI Ratio</th>
<th>Correlation Sig (2-tailed)</th>
<th>OC</th>
<th>Anxiety</th>
<th>Depression</th>
<th>PTSD</th>
<th>Alcohol</th>
<th>STS</th>
<th>PA</th>
<th>EE</th>
<th>DP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overcommitment (OC)</td>
<td>.520** .000 2421</td>
<td>.000 2421</td>
<td>.000 2421</td>
<td>.000 2421</td>
<td>.000 2421</td>
<td>.000 2421</td>
<td>.000 2421</td>
<td>.000 2421</td>
<td>.000 2421</td>
<td>.000 2421</td>
</tr>
<tr>
<td>Anxiety</td>
<td>.510** .000 2354</td>
<td>.000 2354</td>
<td>.000 2354</td>
<td>.000 2354</td>
<td>.000 2354</td>
<td>.000 2354</td>
<td>.000 2354</td>
<td>.000 2354</td>
<td>.000 2354</td>
<td>.000 2354</td>
</tr>
<tr>
<td>Depression</td>
<td>.477** .000 2344</td>
<td>.000 2344</td>
<td>.000 2344</td>
<td>.000 2344</td>
<td>.000 2344</td>
<td>.000 2344</td>
<td>.000 2344</td>
<td>.000 2344</td>
<td>.000 2344</td>
<td>.000 2344</td>
</tr>
<tr>
<td>PTSD</td>
<td>.394** .000 2231</td>
<td>.000 2231</td>
<td>.000 2231</td>
<td>.000 2231</td>
<td>.000 2231</td>
<td>.000 2231</td>
<td>.000 2231</td>
<td>.000 2231</td>
<td>.000 2231</td>
<td>.000 2231</td>
</tr>
<tr>
<td>Alcohol</td>
<td>.063** .000 2243</td>
<td>.000 2243</td>
<td>.000 2243</td>
<td>.000 2243</td>
<td>.000 2243</td>
<td>.000 2243</td>
<td>.000 2243</td>
<td>.000 2243</td>
<td>.000 2243</td>
<td>.000 2243</td>
</tr>
<tr>
<td>Secondary Traumatic Stress (STS)</td>
<td>.401** .000 2101</td>
<td>.000 2101</td>
<td>.000 2101</td>
<td>.000 2101</td>
<td>.000 2101</td>
<td>.000 2101</td>
<td>.000 2101</td>
<td>.000 2101</td>
<td>.000 2101</td>
<td>.000 2101</td>
</tr>
<tr>
<td>Personal Accomplishment (PA)</td>
<td>-.092** .000 2101</td>
<td>.000 2101</td>
<td>.000 2101</td>
<td>.000 2101</td>
<td>.000 2101</td>
<td>.000 2101</td>
<td>.000 2101</td>
<td>.000 2101</td>
<td>.000 2101</td>
<td>.000 2101</td>
</tr>
<tr>
<td>Emotional Exhaustion (EE)</td>
<td>.551** .000 2101</td>
<td>.000 2101</td>
<td>.000 2101</td>
<td>.000 2101</td>
<td>.000 2101</td>
<td>.000 2101</td>
<td>.000 2101</td>
<td>.000 2101</td>
<td>.000 2101</td>
<td>.000 2101</td>
</tr>
<tr>
<td>Depersonalization (DP)</td>
<td>.295** .000 2101</td>
<td>.000 2101</td>
<td>.000 2101</td>
<td>.000 2101</td>
<td>.000 2101</td>
<td>.000 2101</td>
<td>.000 2101</td>
<td>.000 2101</td>
<td>.000 2101</td>
<td>.000 2101</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed)

Overall, this means that as one health outcome score increases (e.g. PTSD) so does the score of another health outcome (e.g. secondary traumatic stress).

A high level of co-morbidity was found between the risk for anxiety, depression and PTSD. In other words, respondents were classified as at risk for more than one health outcome. The percentage of participants who were classified as at risk for anxiety and depression (Figure 4) is 18.9% (n= 443). The percentage of those classified as at risk for depression and PTSD is 19% (n= 430), while the percentage of those classified as at risk for anxiety and PTSD is 22.5% (n= 509). Thus, the percentage of participants classified as at risk for all three health problems is 15.8% (n= 357).
SECTION 7

JOB SATISFACTION AND USE OF MENTAL HEALTH SERVICES
**Job satisfaction**

Respondents were asked to rate their job satisfaction. The percentages for job satisfaction are presented in Graph 1. The majority of respondents (43.8%) were ‘somewhat’ satisfied with their job. Close to 80% of all respondents were either somewhat or very much satisfied with their job. A similar finding was revealed in a survey of a smaller sample of UNHCR staff (UNHCR, 2015), where over 80% of respondents reported being somewhat or very much satisfied with their job. These findings indicate an increase in the level of job satisfaction measured by the Staff Health Risk Appraisal in November 2013, where 57% of respondents were mostly or completely satisfied with their job (UNHCR 2014).

![Graph 32 - Are you Satisfied with your Job?](image)

**Use of Mental Health Services**

Around half of the respondents (n= 1090, 52.4%) indicated that they did not need to consult a counsellor, while the other half (n= 989, 48%) did express the need to consult a counsellor. Of those who expressed the need, 548 (26%) actually spoke to a counselor and 441 did not. The survey results indicate that there is a significantly higher use of UN internal counsellors than external mental health professionals (88% vs. 12 %).

Further investigation attempted to better understand how the respondents at risk for mental health/behavioural outcomes and ERI related to the use of the mental health services. Graph 32 summarizes the percentages of respondents at risk for mental health/behavioural outcomes and ERI.

For all mental health outcomes, between 29.8% and 32.2% of those at risk for each of them did not believe it was necessary to consult mental health services. The reasons for that were not made available from this survey. For ERI, 45.9% of respondents at risk for ERI did not feel
the need to consult mental health services. Lastly, 52% of those at risk for hazardous alcohol consumption did not believe they needed to consult mental health services.

Among those at risk for mental health/behavioural outcomes and ERI and who expressed the need to consult mental health services, slightly more respondents did seek help than not. The chi-square tests were used to investigate the relationship between the variable ‘need to consult’ (no need to consult, need to consult and contacted MHS, need to consult and did not contact MHS) and each of the mental health/behavioural variables and ERI (at risk, not at risk). Tests were significant for all outcomes save for hazardous alcohol use, meaning that the differences in results are not accidental.

A future study should consider if the question on the use of MHS offered a too narrow choice of answers. It could be that colleagues sought support from other sources than MHS. For the population at risk that expressed the need for mental health support but did not follow through, it is important to investigate further the reasons behind this decision.
UNHCR’s Global Staff Well-being Survey, conducted in 2014, is the first research that to our knowledge has used a theoretical model of psychosocial hazards in a global humanitarian organization and considered it in relation to mental health outcomes. The psychosocial hazards included exposure to trauma, working with people of concern and workplace stress (effort-reward imbalance). The mental health outcomes measured were risk for depression, anxiety, PTSD, secondary traumatic stress and burnout. Risk for hazardous alcohol use was measured as a behavioural outcome.

The survey’s response rate of 22% is a good result for an online survey. Although the sample was rather representative of the overall workforce composition in UNHCR, more women than men responded to this survey. Equally, there was a lower percentage of respondents working in E duty stations than expected. Are women more likely to be interested in mental health issues? Do colleagues in E locations have good facilities to participate in an online survey? This is a good indication that future efforts will need to look into ways to increase the engagement of the male population and the staff working in E locations in this kind of research.

**Percentages at risk for Mental Health/Behavioural Outcomes**

This study revealed that high percentages of UNHCR employees are at risk for different mental health/behavioural outcomes. This finding presents an important baseline that will help us to strategically focus the staff wellbeing strategy for the next few years. Furthermore, the staff wellbeing survey will be conducted every three years, which will allow comparing results over time. As similar studies using the same measurements are being conducted in other UN organizations, it will shortly be possible to benchmark our findings against the findings of the prevalence of risk for mental health outcomes in other agencies.

The literature on the prevalence of the risks for mental health/behavioural outcomes among humanitarian workers is scarce. Table 11 summarizes the prevalence rates we have found from available studies and compares them with the percentages at risk for each of the mental health/behavioural outcome obtained in UNHCR by this study.

When comparing the percentages classified as at risk, the following is to be taken in consideration:

- The percentages used in the UNHCR study are the percentages of respondents at risk for mental health/behavioural outcomes. The percentage of those actually diagnosed with mental health/behavioural outcomes is usually lower.
- The studies have not used the same measurements and therefore the purpose of the comparison is only to provide readers with a general idea of how the risk prevalence in UNHCR compares with risk prevalence in other settings.
Table 11 – Summary of Mental Health Outcomes

<table>
<thead>
<tr>
<th>Risk for mental health and behavioural outcomes (UNHCR measures)</th>
<th>UNHCR (respondents at risk) - 2014</th>
<th>Mental health outcomes in expatriate humanitarian workers in Kosovo - 2012</th>
<th>Mental health outcomes in national humanitarian workers in N. Uganda - 2012</th>
<th>General population in Europe - 2010</th>
<th>Life-time prevalence in the general adult population worldwide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety (GAD)</td>
<td>31%</td>
<td>11.8%</td>
<td>53%</td>
<td>1.7-3.4%</td>
<td>3%-8%</td>
</tr>
<tr>
<td>Depression</td>
<td>25%</td>
<td>19.5%</td>
<td>68%</td>
<td>6.9%</td>
<td>12%</td>
</tr>
<tr>
<td>PTSD</td>
<td>36%</td>
<td>-</td>
<td>26%</td>
<td>1.1-2.9%</td>
<td>8%</td>
</tr>
<tr>
<td>Secondary Traumatic Stress</td>
<td>38%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Diminished personal accomplishment (BO)</td>
<td>43%</td>
<td>45.6%</td>
<td>30%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Emotional Exhaustion (BO)</td>
<td>31%</td>
<td>20.7%</td>
<td>45%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Depersonalization (BO)</td>
<td>9%</td>
<td>13.6%</td>
<td>24%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Hazardous Alcohol Use</td>
<td>25%</td>
<td>-</td>
<td>-</td>
<td>3.4%</td>
<td>10-20%</td>
</tr>
<tr>
<td>Effort Reward Imbalance</td>
<td>72%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Evidently, the prevalence of the risk for mental health outcomes is higher among humanitarian workers than in the general population. The report on the Labor Force Survey conducted in the UK in 2013–2014 indicated a similar finding: the occupational groups involved with human health and social work activities, public administration and defense had the highest prevalence rates of work-related stress and mental health problems (www.hse.gov.uk/statistics/). The same report indicated that 39% of all work-related illnesses were linked to depression and anxiety. All these findings make a strong case for ensuring that appropriate resources are given to mental health.

All mental health outcomes were positively correlated with each other except for hazardous alcohol use, which was not highly correlated with other mental health outcomes. This indicates a fair amount of co-morbidity —many respondents are at risk for more than one mental health issue.

Socio-demographic Variables, Professional Variables and Mental Health Behavioural Outcomes

Understanding the impact of socio-demographic variables and working conditions on mental health and behavioural outcomes is critical in tailoring the strategies aimed at improving

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7 Cardozo et al. (2012) conducted a longitudinal study on the mental health of the expatriate humanitarian workers in Kosovo in 2012, measuring, among other variables, the risk for anxiety, depression, psychological distress and burnout dimensions at pre-deployment, post deployment and 3-6 months after the deployment. The study was conducted on a much smaller sample concentrating on one operational area (Kosovo).

8 Ager et al. (2012) reported on a study on stress, mental health and burnout among the national humanitarian workers in Gulu, Northern Uganda.

9 Wittchen et al. (2011) reported on the size and burden of mental health disorders in Europe in 2010.

10 Epidemiological information on life prevalence of mental health conditions from Sadock, Sadock and Ruiz (2015).
staff well-being and retention, as one approach may not fit all. Women may have different needs than men; younger colleagues may be more sensitive to different stressors than older ones; and colleagues working in high-risk environments may need a different type of support than those working in safer environments.

In this research, socio-demographic variables (gender, age, marital status, international/national classification, staff status, contract type) did not have strong associations with the mental health/behavioural outcomes, although some trends emerged such as:

- Men were slightly less at risk for anxiety, secondary traumatic stress, diminished personal accomplishment and emotional exhaustion.
- The youngest respondents (< 34 years old) showed a slightly higher tendency to be at risk for depersonalization (cynicism, negative self-evaluation).
- Married respondents were slightly less at risk for hazardous alcohol use and emotional exhaustion.
- International employees were more likely to be classified as at risk for hazardous alcohol use than national employees.

On the other hand, the results revealed that the region of work was a significant predictor for mental health outcomes. More specifically, respondents working in MENA had a higher probability to be classified as at risk for anxiety, depression, PTSD and secondary traumatic stress. This is not surprising, given the socio-political context in MENA and the intensity of UNHCR operations in the region, to mention but a few of the possible factors; this calls for paying specific attention to this region. The respondents in HQ and Europe had the highest risk for burnout and hazardous alcohol use. The Medical Section attests to a higher number of medical cases related to severe stress, adjustment disorders and depression than outside HQ (Staff Health Watch, UNHCR 2015). High pressure, limited resources, low control over work and decision-making and working far away from people of concern are among the reasons shared by the HQ-based employees with the Staff Welfare Officers. While this observation is the result of counselling work, not a systematic research, it may be interesting for the future study to include a measure of job content (Karasek, 1998) that may be able to investigate the association between the job characteristics and mental health outcomes.

The level of hardship did not reveal a strong relationship with any mental health/behavioural outcome. Employees serving in D and E duty stations did not show any particular difference on any of the mental health outcomes in comparison to their colleagues in other categories of duty stations. Equally, the length of service in D and E locations showed weak correlations with the mental health/behavioural outcomes.

This finding is contrary to the intuitive thinking that working in hardship places is damaging to mental health. Several reasons may explain this finding. First, this was a cross-sectional study and as such, not designed to investigate specifically the difference in mental health/behavioural outcomes between the employees serving in hardship locations and those who are not. Second, the employees working in E category duty stations were under-
represented, while the employees working in HQ, H and A category duty stations were over-
represented. Next, the rotation of international employees in UNHCR is high. Employees 
who currently work in non-hardship locations may have worked in hardship locations before. 
Furthermore, a lot of employees working in hardship locations often emphasize the 
rewarding aspect of working directly with people of concern. While this was not investigated 
this research, the meaning of work could be one of the mediating variables. Finally, most 
of the staff-support measures in UNHCR (R&R, accelerated home leave, psychosocial 
support) are directed towards staff in hardship locations.

Contractual status (indefinite, fixed-term, temporary, consultant), length of service in the 
humanitarian field and the amount of hours worked in a typical day did not reveal significant 
relationships with the mental health and behavioural outcomes.

These trends need to be kept under observation and certainly reported on in any similar 
surveys in the future.

**Job Satisfaction**

The finding that 35% of respondents were very much satisfied and 43.8% of respondents 
were somewhat satisfied with their jobs is very encouraging. The UNHCR Global Staff Survey 
conducted in 2014 also found that 73% of respondents agreed that they were satisfied with 
their present job (UNHCR, 2015). Furthermore, our research indicated that job satisfaction 
was moderately and negatively correlated with all mental health outcomes (anxiety, 
depression, PTSD, STS and Emotional Exhaustion as a dimension of burnout). The higher the 
job satisfaction, the lower the risk for these mental health outcomes. Although correlations 
do not allow us to make any inferences about causality, this finding is an opportunity to be 
considered in the management strategy at both macro (policies) and micro (management) 
levels. Paying attention to job satisfaction and having effective strategies to keep it at a high 
level would be an important element of the mental health strategy in UNHCR.

**Psychosocial Hazards and Mental Health/Behavioural Outcomes**

The survey explored the impact of three psychosocial hazards that are characteristic of the 
UNHCR workplace:

- Exposure to traumatic experiences is part of today’s humanitarian work, as the 
  populations of concern to humanitarian organizations reside in environments deeply 
  affected by insecurity and risks. The ensuing psychological trauma and its prevention 
  has been the centerpiece of many psychosocial support strategies that have 
  included preparation for traumatic situations, resilience building, critical incident 
  interventions and end of assignment debriefings. In UNHCR alone, a number of 
  recommendations of the MHPSS report (2013) focused on dealing with the 
  prevention of PTSD and on supporting critical incidents stress.
Exposure to secondary trauma through working directly with people of concern was identified as another important psychosocial hazard. Years of observations by the Staff Welfare Officers in UNHCR found that continuous exposure to the traumatic experiences of people of concern through interviews, assessments and translation can have a profound impact, both positive and negative, on employees.

Effort-reward imbalance was included as a psychosocial hazard linked to organizational factors. Although the effort-reward imbalance theory does not capture all organizational stressors (such as interpersonal relationships or type of work), it was considered relevant enough for UNHCR’s environment. The global prevalence of 72% of respondents being at risk for ERI confirmed that.

**Effort-Reward Imbalance (ERI) – the Surprise Factor**

Effort includes working under pressure, heavy workload and increasing job demands over the years. Rewards include financial compensation, esteem reward (respect and recognition), promotion prospects and job security.

The results obtained by this research for the risk for ERI and its relationship with mental health and behavioural outcomes deserve special attention. The risk for ERI was found to be much higher than the risk for any mental health or behavioural outcome. The percentage of respondents at risk for ERI ranged between 68.5% and 79.1% across socio-demographic variables. While some trends were revealed, such as that ERI tends to be higher among women and that it seems to be higher among HQ staff (Switzerland), these trends were not strong enough to allow any categorical conclusion. In other words, the high risk for ERI is spread across the organization.

While ERI is a well-known and strong predictor of physical and mental health outcomes in occupational health psychology (van Vegchel et al., 2005), the surprising finding was that it was a better predictor of mental health outcomes than traumatic exposure. This is supported by the research by Armstrong et al. (2014) on firefighters. A higher ERI raises the probability of being at risk for any of mental health outcome. Traumatic exposure was a significant and strong predictor only of risk for PTSD and Secondary Traumatic Stress. However, in comparison to ERI, which increases the risk for PTSD by 2.6 times, the traumatic exposure increases the risk for PTSD by 1.4 times, while the frequency of traumatic events increases the risk for PTSD by only 1.2 times.

What does this mean? When there is a traumatic incident, there is an increased risk for PTSD, a fact confirmed by this study as well. However, when in addition to that, there is an imbalance between efforts and rewards, the risk for PTSD seems to further increase. Therefore, it is not just trauma that leads to PTSD outcomes. UNHCR needs to consider organizational stressors and support systems to help build resilience, along with the trauma prevention and response mechanism. The response should include the recognition of the incident and its impact by the managers, being accompanied through the administrative procedures and ensuring a subsequent posting that takes into account the experiences encountered earlier, to mention but a few options. All these are important elements in
meeting the “reward” criteria. Life-threatening situations highlight the limits that a person is not necessarily willing to cross but is nevertheless exposed to. The sense of not being supported following critical incidents in the manner described above tends to create the sense of resentment and frustration, complicating recovery from trauma. Unfortunately, some of the administrative processes that are not in UNHCR’s control, such as service-incurred compensation plans, have been notorious for adding to the injury.

The importance of work-related stressors in mental health can be corroborated by the data from the Staff Welfare Section. In 2014, the Staff Welfare Officers (SWO) registered 4,506 actions with staff and affiliate workforce. The most common reason for staff to contract the individual support of SWOs was linked to the working-conditions category (workload, lack of clarity of roles etc.) accounting for 31% of all actions taken. This is way above the 16% of actions linked to cases of personal problems and/or family-related concerns. Finally, 14% of all actions were related to cases involving security incidents and trauma. This confirms the findings of this research that organizational stressors are must be considered seriously.

Why is this important? An organizational culture that is founded on a supportive attitude and environment towards employees has a very important role to play in approaching the mental health of humanitarian workers. It is not sufficient to focus on the coping mechanisms of individuals. The manner in which the organization engages with its staff to communicate reassurance, commitment and respect is vital as well. Without that, any psychosocial support to employees will be unable to improve their mental health.

**Exposure to Trauma**

The survey used in this research collected information about the traumatic exposure at work and in personal lives during the previous 12 months. Considering exposure to trauma as a psychosocial hazard in UNHCR, the research only analyzed the impact of exposure to trauma at work, excluding the information about any trauma experienced outside this context.

The results revealed that 36% of all respondents were classified as at risk for PTSD while only 27% of the overall respondents were exposed to a critical incident at work in the last 12 months prior to the survey. The results of this survey clearly showed that exposure to trauma is linked to the risk for PTSD - as expected— and Secondary Traumatic Stress. The frequency of trauma during the previous 12 months only slightly increased the chances of being classified as at risk for PTSD as well as for depression and depersonalization.

Traumatic exposure is a psychosocial hazard most commonly considered as the source of mental health problems by different authors, from researchers to journalists. It is easy to measure and it could be simple to mitigate. However, focusing on traumatic exposure only could divert attention from other psychosocial hazards that also have an impact on mental health including the PTSD, such as organizational stressors (measured by ERI in our study).

Understanding traumatic exposure and its impact on mental health is important for an organization in which security incidents (as one example of traumatic exposure) are not
uncommon. Next research should further improve the way of measuring the traumatic exposure, to ensure that the prevalence of risk for PTSD in UNHCR is better understood.

**Working with People of Concern**

Working with people of concern in UNHCR involves witnessing human suffering; therefore this study considered it as one of the psychosocial hazards. The degree of exposure depends on type of work: for example, a functional profile that focuses on refugee status determination (RSD) is highly likely to spend most of the working time interviewing asylum seekers to determine whether or not they meet the criteria to be recognized as refugees (i.e., persecuted in their country of origin), and such interviews typically contain detailed descriptions of human rights abuses. A community services profile (CS) is highly engaged with people of concern and is often exposed to similar content. However, their work also includes a number of projects related to organizing community support, healing measures and similar.

In this research, we wanted to examine the relationships between working with people of concern as a psychosocial hazard and the risk for anxiety, depression, PTSD, dimensions of burnout, hazardous alcohol use and ERI. The Secondary Traumatic Stress Survey was exclusively completed by those who worked with people of concern.

Secondary Traumatic Stress (STS) was identified in 38% of respondents. Considering that the survey used in this study did not separate the sample by different functional profiles as described above, this prevalence of risk for STS may be underestimated for some functional groups.

In relation to other mental health/behavioural outcomes, the results revealed that working with people of concern had the strongest relationship with the burnout dimensions. Those working with people of concern were more likely to be at risk for emotional exhaustion but less likely to be at risk for depersonalization and diminished personal accomplishment. The fact that the vast majority of respondents identified as at risk for burnout worked with people of concern (23 out of the 26) points to the need for establishing proper support mechanisms at the psychological, managerial and organizational levels.

**Burnout as a Predictor of Mental Health Outcomes**

The results of this survey demonstrated that except for the diminished personal accomplishment, the burnout dimensions of emotional exhaustion and depersonalization correlated moderately and positively with the risk for anxiety, depression, PTSD, secondary traumatic stress and ERI. As the risk for these mental health outcomes increases, the scores on the emotional exhaustion and depersonalization increase as well. On the other hand, these two burnout dimensions were poor predictors of the risk for mental health outcomes. Emotional exhaustion only marginally predicted an increased risk for anxiety, depression and
PTSD, while depersonalization only marginally predicted an increased risk for PTSD and hazardous alcohol use.

**Use of Mental Health Services**

The percentage of respondents who indicated the need to consult health services was 48.8% in the overall sample. Slightly more than half of them actually consulted the services (26.4% of the total sample) and mostly did so within the UN. The Review of Mental Health and Psychosocial Support to Staff (UNHCR, 2013) revealed similar findings: 45% of respondents who reported certain signs of distress had contacted Staff Welfare Officers.

Although the two studies used different questions to explore the use of mental health services and measures of mental health, the reason for not contacting the mental health service needs to be further investigated.

These findings could be considered in light of another result: around 30% of respondents at risk for depression, anxiety, PTSD, secondary traumatic stress and burnout believed they did not need to consult mental health services. Furthermore, 45% of those at risk for ERI and 52% of those at risk for hazardous alcohol use did not believe they needed mental health support. From the available information it is not possible to conclude with certainty what causes that. Is it related to denial? Is it related to lack of information about different mental health problems? Or could it be that employees do not perceive mental health services in general as appropriate, effective and/or useful in reducing these problems?

The practical implications of the results revealed by this research point to the need to better articulate the question of use of mental health services so that the issue of trust, self-awareness and perceived relevance of mental health services in general can be properly explored.

**Limitations of the Study**

This is a cross-sectional research, which was the most efficient and appropriate way of establishing the baseline for the prevalence of risk for mental health outcomes in UNHCR. This means that we have collected information on different variables, at the same time, across the organization. The key disadvantage of this research design is the limitation it poses on the interpretation of causality: cross-sectional research can establish an association between two variables, but it cannot determine if one caused the other.

While we have been very careful in selecting the measurements used in this study, these measurements were applied across a very culturally diverse sample of UNHCR employees, which may have affected the results. As the study used the online survey, it is impossible to ensure that the understanding of the questions was the same across the sample. Technical challenges may have also discouraged participants with slower Internet connectivity to complete the survey.
Finally, social desirability is an expected bias in mental health studies; responses appear to be rather candid but this limitation needs to be taken into consideration.

The present research has been able to identify some of the main psychosocial and occupational hazards linked to humanitarian aid work and to document their associated outcomes. The results offer rich and detailed information that is valuable for human resource and staff welfare practices. UNHCR should not only focus on what they can provide for an employee in terms of help to cope with stress more effectively, but also consider what they can do to eliminate or reduce workplace stressors. This report has outlined a number of situational/work and individual risk factors that can further advance the understanding and promotion of a model of active support for employees.
The objective of the follow-up to this survey is to decrease the percentage of staff at risk for mental health and behavioral outcomes and to increase access to mental health services. The concrete recommendations include:

1. Continue the efforts to ameliorate the effects of exposure to trauma including PTSD.
   a. Ensure the implementation of the Standard Operating Procedures for support to colleagues following critical incidents everywhere and especially in the high-risk environments.
   b. Psychological preparation and end-of-assignment debriefings should be mandatory for operations in high-risk environments.
   c. Recording critical incidents, submitting compensation claims and case management should be more strictly enforced.
   d. Recording critical incidents that are not related to work but could very well affect one’s well-being should be considered.
   e. A strategy of support to national staff, especially in operations in high-risk environments, has to be strengthened.

2. Develop an organizational approach of support to staff working directly with people of concern (especially in RSD/Resettlement operations). This approach should include:
   a. Robust support measures (preparation, education, support, self-care plan, access to mental health services) for colleagues who work directly with people of concern should be an integrated part of each RSD/Resettlement operation in the spirit of Duty of Care.
   b. Revision of the methodology of work and managerial support practices in such contexts.

3. Develop a strategy to reduce workplace stress (ERI). Plan for a qualitative research to explore the following:
   a. Effort-reward imbalance: What does it exactly mean for the UNHCR workforce? What kind of rewards would be possible and appropriate? Are the demands reasonable?
   b. Use of mental health services: What would make it easier for staff at risk to use mental health services? What other sources of support exist or are available to colleagues?

The strategy should also consider the importance of job satisfaction in mental health.

4. Establish UNHCR’s organizational policy for dealing with alcohol use in the workplace and for dealing with alcohol abuse cases. Establish an awareness campaign to reduce stigma related to this problem.

5. Ensure that the notions of psychosocial hazards, associated impacts and mitigating measures are incorporated in the Occupational Health and Safety policy.

6. Increase the psycho-educational efforts in order to increase knowledge on various types of mental health problems and reduce stigma. This could involve online educational programmes, regular information on the intranet and the possibility of self-assessment. Particular attention should be given to the observed trends in different regions.
7. Review the Staff Well-Being Survey with a view of improving it for its next launch in 2017. While the mental health/behavioral outcomes measures should be kept the same for comparison purposes, improving and clarifying some segments of it would be important, such as the use of Mental Health Services. Adding other questionnaires should be considered i.e. coping skills, job content, interpersonal relations and management support, for a fuller understanding of mental health and behavioural outcomes. Some of these questions are included in the Global Staff Survey and in the Health Risk Appraisal Survey. As all three aim at being periodically repeated, the benefits and disadvantages of merging the three of them into one should be considered.
References


United Nations High Commissioner for Refugees. UNHCR’s mental health ad psychosocial support for staff. UNHCR (2013).


United Nations High Commissioner for Refugees. Summary of the Prevention of Vicarious Trauma and Burnout Workshops, Regan Shercliffe, UNHCR MENA (2015).


Internet links:

http://www.adaa.org/understanding-anxiety
http://www.cdc.gov/niosh/programs/workorg/risks.html
http://psychcentral.com
Appendix 1 – All staff invitations to participate in the on-line survey

**First Invitation**

To: All Staff at Headquarters and in the Field

From: The High Commissioner

Date: 5 June 2014

Subject: Invitation from the High Commissioner to participate in UNHCR’s first Staff Well-being survey

Dear colleagues,

Over the past years, UNHCR’s work has become increasingly demanding, unpredictable and at times dangerous. The growing number of armed conflicts, displacement and humanitarian crises has led to ever more difficult working and living conditions. Rising levels of insecurity and the threat of violence create anxiety and stress among colleagues and their families. I am fully aware of the personal efforts and sacrifices that working for UNHCR entails. Many of your families have had to move several times, you may be separated from them as a good number of you serve in non-family duty stations, sometimes for prolonged periods of times. Staff members, in the field and at headquarters often find it difficult to cope.

It is clear that we need to learn more about the psychosocial, mental and emotional state of our workforce and about your needs in this area. I would therefore like to invite you to take part in the first ever **UNHCR Staff Well-being Survey**.

UNHCR’s Staff Health and Welfare Service, in collaboration with Staff Counselling Units in other UN organizations, prepared this survey to establish a baseline of several key indicators of well-being among UNHCR staff. Its results will be used to adapt our staff welfare strategy, to improve the organizational environment and to support colleagues in building and maintaining resilience.

Please take the time to participate in this survey. Your contribution is important for you, your families and the millions of people we care for.

Thank you.

António Guterres

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The Staff Well-being survey is linked to the Health Risk Appraisal Survey that was launched last November to capture and address issues regarding the physical health of our workforce. It is anonymous and confidential. The Webster University in Geneva will analyse the results, which will be shared later in the year.
Click the language of your choice below. The Survey will remain **open until 6 July 2014.**

- **English:** [https://www.surveymonkey.com/s/UNHCRStaffWellbeingSurveyEnglish](https://www.surveymonkey.com/s/UNHCRStaffWellbeingSurveyEnglish)
- **Français:** [https://fr.surveymonkey.com/s/UNHCRStaffWellbeingSurveyFrench](https://fr.surveymonkey.com/s/UNHCRStaffWellbeingSurveyFrench)
- **Español:** [https://es.surveymonkey.com/s/UNHCRStaffWellbeingSurveySpanish](https://es.surveymonkey.com/s/UNHCRStaffWellbeingSurveySpanish)
Second Invitation

To: All Staff Members at Headquarters and in the Field

From: T. Alexander Aleinikoff, Deputy High Commissioner

Date: 02 July 2014

Subject: Reminder: Staff Well-being survey – Invitation to participate

Dear colleagues,

The Staff Well-being survey was launched by the High Commissioner on 6 June 2014 and to date, close to 1,500 responses have been received. I would like to thank those who completed the survey and encourage those of you who have not, to do so. The survey will take 10 minutes.

I would like to assure you of the complete confidentiality of your responses and that results will be handled with the greatest sensitivity. The Staff Health and Welfare Service will ensure that all reports published on the basis of results of this survey will focus on regions and not on country operations. The country data will not be shared beyond the Staff Welfare Section and the Head of the Staff Health and Welfare Service, and will only be used to ensure that appropriate support is provided where needed.

In order for this survey to provide us with as representative data as possible, it is important to have as many respondents as possible.

The deadline for the survey has been extended until 18 July 2014. All of you who have not done so yet, please click on one of the links below.

Thank you.

English: https://www.surveymonkey.com/s/UNHCRStaffWellbeingSurveyEnglish
French: https://fr.surveymonkey.com/s/UNHCRStaffWellbeingSurveyFrench
Spanish: https://es.surveymonkey.com/s/UNHCRStaffWellbeingSurveySpanish
### Appendix 2 – Summary of the cut-off scores

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Max score</th>
<th>Cut-off score</th>
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<tbody>
<tr>
<td>GAD-7</td>
<td>21</td>
<td>&gt;10</td>
</tr>
<tr>
<td>PHQ-2</td>
<td>6</td>
<td>≥ 3</td>
</tr>
<tr>
<td>PCL-6</td>
<td>30</td>
<td>≥ 14</td>
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<tr>
<td>STSS</td>
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<td>≥ 38</td>
</tr>
<tr>
<td>MBI –HS</td>
<td>EE: 54</td>
<td>EE: ≥ 27</td>
</tr>
<tr>
<td></td>
<td>DP: 30</td>
<td>DP: ≥ 13</td>
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<tr>
<td></td>
<td>PA: 48</td>
<td>PA: ≤ 31</td>
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<tr>
<td>AUDIT C</td>
<td>12</td>
<td>≥ 3 for women</td>
</tr>
<tr>
<td></td>
<td></td>
<td>≥ 4 for men</td>
</tr>
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</table>