

Title	Research report: 149. The promotion of human factors in the onshore and offshore hazardous industries
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Executive Summary	<p>The HSE, in recognition of the role of human error in major accidents, aims to promote the application of Human Factors in the hazardous industries. This study explored duty holders awareness and attitudes towards Human Factors and how best to promote a higher uptake of Human Factors. The lessons learnt from other examples of shifts in safety management thinking have been combined with the principles of marketing, and survey respondents' suggestions, to identify methods for increasing and maintaining duty holders' awareness, understanding and motivation to apply Human Factors. We have used the term "Human Factors" in this report in a slightly restricted sense, as short hand for the process of assessing human error, and identifying and implementing measures to prevent error and enhance performance, ranging from matters such as the ergonomics of equipment through training and assessment to safety culture.</p> <p>Survey findings</p> <p>A series of semi-structured exploratory discussions with persons and a telephone survey of 141 persons were completed, covering the onshore hazardous installations (as covered by COMAH) and offshore oil and gas platform operators, drillers and support services. The findings from the discussions and the telephone survey are consistent.</p> <p>The HSE is regarded to be a credible source of advice</p> <p>The HSE is the main source of information on major accident prevention, followed by trade associations. Respondents use HSE Books and the HSE website as sources in particular. However, there was little apparent awareness of HSG48. Other key sources include training from consultants, NEBOSH and university courses and attendance at seminars/ conferences.</p> <p>Human Factors is associated with the HSE and major accident prevention</p> <p>Human Factors is associated with the HSE and the prevention of accidents. In particular, many respondents cite the HSE as the source from which they have heard of Human Factors, along side other "safety" sources such as NEBOSH courses. Whilst Human Factors is thought to offer incidental commercial benefits, it is primarily conceived of as a part of accident prevention. Indeed, nearly all respondents agree that Human Factors is an essential part of major accident prevention.</p> <p>The audience is receptive to the concept of Human Factors</p> <p>Survey respondents tend to agree that Human Factors is a useful concept and few if any respondents could suggest an alternative phrase that captures this topic. It is regarded as a worthwhile investment and is not thought to be a barrier to "getting the job done".</p> <p>Few people have a clear or comprehensive understanding of what is meant by Human Factors.</p> <p>When asked what is meant by Human Factors respondents tend either to offer an intuitive "this is what I'd imagine it means" response or to equate it to a small number of issues they have had exposure to, such as behavioural safety. A minority of respondents spontaneously offer a more comprehensive view of Human Factors. In addition, a small minority is certain that they have heard of the term Human Factors and our assessment of the extent to which they address human factors or understand it is mixed. Many respondents fail spontaneously to mention</p>

human error as a cause of accidents, and display a minimal understanding of why people make errors.

Human Factors is thought to be difficult to grasp and ill-defined

Whilst respondents accept the notion of Human Factors, it is also thought to be a difficult subject to grasp, with many respondents seeing it as fuzzy and ill-defined. The perceived reasons for this fuzziness, reasons that are believed to be inherent aspects of Human Factors, are illustrated below: “It’s difficult to have one term to give it sufficient focus. Different steps are needed to address different issues. An all-encompassing term like human factors doesn’t allow you to understand the detail. It needs to be broken down into identifiable small bites”. “Companies deal with human factors issues without referring to it as human factors”. “It’s a fairly new topic in its own right but some aspects have always been there. For example, we’ve always been training – it’s just not called human factors”. “It’s not deliberately managed as human factors. I’m aware that we do a bit of this and that but it’s not coherent.”

Human Factors is driven by major accidents and the HSE

The primary drivers for firms addressing human performance issues under the umbrella of Human Factors is the wish to avoid major accidents and to satisfy HSE expectations. Within this comes the wish to follow good practice. Accordingly many respondents cite the illustration of good practice by “exemplar” firms, and the provision of clear advice from the HSE as important promotional tactics. Indeed, when asked which firms lead the way in the prevention of human error, well known leading examples of firms that are perceived to have a good safety record, evidence of safe behaviour and good safety culture are cited, such as Du Pont, BP, Shell and ICI.

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