



LUND UNIVERSITY
School of Economics and Management

Workplace Burnout Within the Project Management Discipline

A Comparative Look at Sweden and the UK

by

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June 2020

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WORKPLACE BURNOUT WITHIN THE PROJECT MANAGEMENT DISCIPLINE:

A COMPARATIVE LOOK AT SWEDEN AND THE UK

MASTER THESIS | MSC MANAGEMENT
LUND UNIVERSITY SCHOOL OF ECONOMICS AND
MANAGEMENT

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5TH JUNE 2020

Abstract

Research into burnout has often focused on the helping professions, such as medical care (Schaufeli, Leiter & Maslach, 2009). However, the cost of burnout to private organisations is high, since it correlates with lower productivity and increased turnover/turnover intention amongst others (Maslach, Schaufeli, & Leiter, 2001). Project managers are at a particularly high risk of burnout due to the high-demands and pressure of the role (Pinto, Dawood & Pinto, 2014). This research uses the Maslach Burnout Inventory - General Survey (MBI-GS) and Areas of Worklife Survey (AWS) to assess which factors of project manager work-life correlate most strongly with the risk of burnout, as well as whether there are differences in the nature of work-life across a Swedish and British sample. We find no AWS factors correlating with the negative subscales of burnout, but reward, fairness and values all correlate positively with professional efficacy. The only significant work-life difference between our Swedish and UK sample lies in the perception of workload, where Swedes are less satisfied with their workload than the British sample. There are no significant differences in mean burnout scores between this study's project manager sample (N=41) and the normative data provided by the Maslach-Leiter databases (N=47,800). The implications of these findings for future research and organisational policy are discussed.

Keywords: Project Management, Burnout, Engagement, Sweden, UK, Areas of Worklife, Maslach Burnout Inventory - General Survey

Acknowledgements

We would like to thank our supervisor, Ola Mattisson, for his unwavering support and his help in finding project managers for our sample. Similarly, thanks are due to our friends and family who helped find both national and international project managers, and thanks to all the project managers who agreed to participate in our study, making our research possible.

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List of Abbreviations

AWS - Areas of Worklife Survey

CBI - Copenhagen Burnout Inventory

MBI - Maslach Burnout Inventory

MBI-GS - Maslach Burnout Inventory General Survey

1. Introduction

1.1 Burnout

Workplace burnout is a concept that emerged in 1970s America and has since become a well-established subject of academic study, as well as a growing focus of attention for organisations (Schaufeli, Leiter & Maslach, 2009). Historically, there has been a focus on studying burnout in professions in which it is more evident, such as healthcare, teaching and the civil service (Schaufeli et al., 2009). Workplace burnout is “*a crisis in one’s relationship with work*” (Maslach et al., 2010, p. 20), and can generally be described as “*the exhaustion of employees’ capacity to maintain an intense involvement that has a meaningful impact at work*” (Schaufeli et al., 2009, p. 205). It can be found in any profession and is, therefore, an issue for any organisation’s management team and policies. However, policies related to burnout are varied and burnout has been classified as an ‘occupational disease’ only in a few countries, such as Italy and Latvia (Eurofound, 2018).

1.1.1 Burnout causes

The border between work life and personal life is becoming very blurred. Psychosocial stressors contributing to workplace burnout include “*long hours, greater workloads, job uncertainty, poor prospects for pay and promotion, ambiguous roles on projects, and time and budget pressure that accelerate the risk of mistakes or compromise standards of quality and ethics*” (Korman, 2010, p. 24). In addition to the work itself, elements of the work environment, including technology, enable us to stay connected 24/7. With the fast pace and frequency of information flow, it becomes increasingly difficult to achieve work-life balance. Increased workloads compound job pressures. Economic downturns add to employee stress as firms consider and employ such human resource interventions as reduced staffing, fewer paid hours of work, reduction of benefits, rollbacks in compensation, and early retirement incentives and options, to name a few (Jugdev, et al, 2017). Most scholars agree that burned-out employees are characterized by high levels of exhaustion and negative attitudes towards their work (Demerouti & Bakker, 2008). This has a knock-on effect on work quality and productivity, highlighting the problem of absenteeism or negative presenteeism in the workplace - where employees who should be taking time off for sickness are working beyond their capabilities (Eurofound, 2018; Garrow, 2016). Turnover intention and actual turnover are also higher when employees are stressed or burnt out (Jugdev et al., 2017). Negative presenteeism, absenteeism and turnover are all costly to organisations, so studying how to avoid them is of interest to management (Wong & Spence Laschinger, 2015).

1.1.2 Factors and rates of burnout

Exact definitions regarding which factors define/lead to burnout have been debated, however, this research follows Maslach's operationalisation of burnout - an interaction between the components of exhaustion, cynicism, and professional efficacy (abbreviated to 'efficacy') (Maslach et al., 2001). Most researchers agree that burned-out employees demonstrate negative attitudes towards work (cynicism) coupled with exhaustion (Demerouti, Mostert & Bakker, 2010). Antecedents of burnout are varied, and depend partly on the personality and perceived coping mechanisms of each individual (Demerouti, Bakker, Nachreiner & Ebbinghaus, 2010; McGrath, 1976). The consequences are generally described as a state of reduced motivation and activation regarding specific tasks; emotional rejection of work; stress sensations and mental fatigue (Demerouti et al., 2010). Leiter and Maslach (2011) developed the 'Areas of Worklife Survey' (AWS) which aims to categorise workplace stressors into 6 areas - control, fairness, values, rewards, community and workload. These are all variables which assess person-environment fit in an organisation and will form the basis of this study's assessment of project managers - assessing how well they identify with their roles and the control they have within this (Jugdev et al., 2017). Other factors which play into burnout include individual differences such as how an individual perceives demands and resources; and role-specific stressors (e.g patient interactions in healthcare, or resource constraints in project management) (Jugdev et al., 2017).

Rates of burnout vary across countries and professions - partly because burnout is not treated systematically by different national or organizational policies, so it will not always be systematically diagnosed or measured (Eurofound, 2018).

1.1.2 Burnout impacts

Workplace burnout is becoming an increasingly pertinent issue for employers because it is strongly correlated with high turnover, and low organizational commitment (Schaufeli & Bakker, 2004; Wong & Spence Laschinger, 2015). Research has found that the negative impact of burnout on organisations include absenteeism, exhaustion, lowered effectiveness and productivity, reduced workplace commitment, and increased turnover (Cordes & Dougherty, 1993; Maslach, 2003; Maslach & Goldberg, 1998; Maslach, Schaufeli, & Leiter, 2001). In individuals, the stress component of burnout can lead to anxiety, depression, and increased health problems, with negative spillover to home life (Maslach, 2003; Maslach et al., 2001).

A 2002 deep-dive study by the European Commission found that work-related stress in the EU-15 (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, United Kingdom) cost €20 billion a year

(Roberts, 2019). Efforts to improve workplace wellbeing and culture could decrease stress-related absenteeism, presenteeism, or turnover, increasing organisational commitment and enabling companies to save money in the process (Eurofound, 2018; Roberts, 2019).

1.2 Research gaps

1.2.2 Limited occupational burnout research

In 1970, American psychologist Herbert Freudenberger coined the term “burnout” to describe the consequences of severe stress and high ideals experienced by people working in “helping” professions. Research on burnout initially began with the aim of understanding how people cope with emotional arousal (Maslach & Jackson, 1984). As a result, interviews were held with individuals most likely to face emotional arousal at the workplace - namely health care professionals (Cordes & Dougherty, 1993). Since then, the study of job stress focuses particularly on helping professions like medical care (Schaufeli et al., 2009), although a similar emotional distress phenomenon was identified in a stream of research on lawyers, suggesting that emotional job strain could be linked more generally to helping professions (Cordes & Dougherty, 1993). In policy, this is reflected through the creation of policies specifically shaped to limit ‘workplace burnout’ to being a condition faced in helping professions (Eurofound, 2018).

Expanding recognition of workplace burnout beyond the helping professions is an important step for future research, which could shape mental health policies. Leiter and Schaufeli (1996) discuss the development of the Maslach Burnout Inventory - General Survey (MBI-GS). This came after recognising that certain aspects of the standard MBI - particularly those relating directly to exhaustion from personal interaction - were not relevant to other professions (Leiter & Schaufeli, 1996). However, researchers were showing an increasing interest in modifying the MBI to assess burnout beyond the medical/helping context (Leiter & Schaufeli, 1996). Assessing the quality of a person’s relationship with work is important across professions, and ‘burnout’ is a term which has been used across professions since before the development of the MBI-GS and other measures (Berne, 1995; Maslach, 1993). The expansion of measures should be matched by an expansion of research and policy beyond the helping professions. However, as noticed when searching for resources, research is still overwhelmingly focused on the occupational medical/helping field.

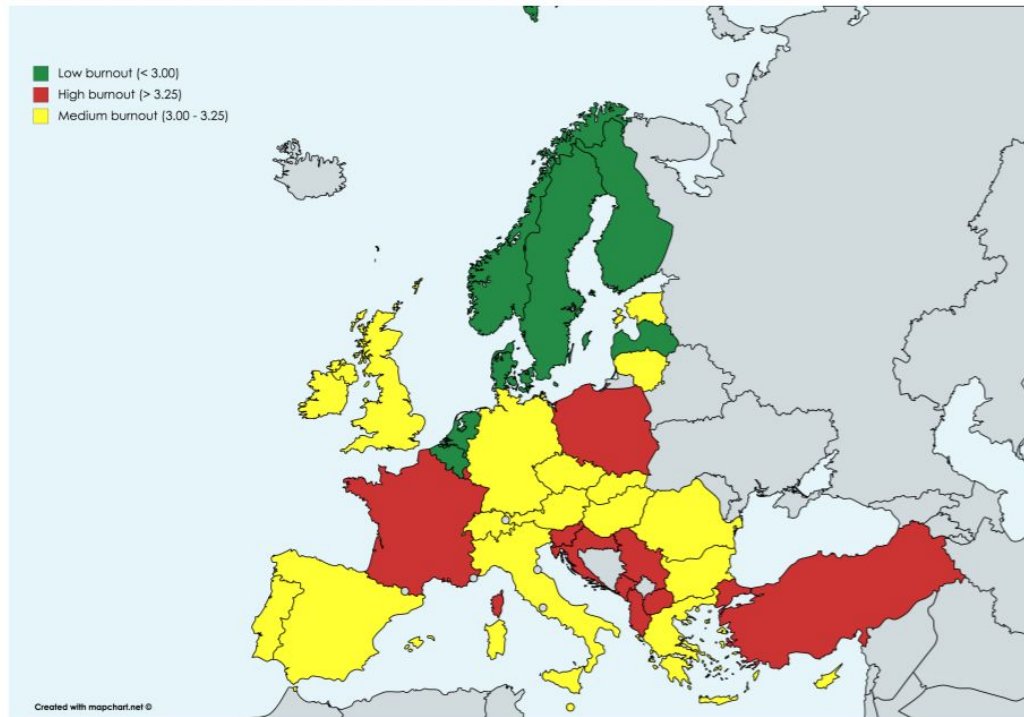
This study has chosen to focus more specifically on causes of burnout in project managers, since a) these are a particularly costly asset for organisations to lose (Wong and Spence Laschinger, 2015); b) our society is becoming increasingly projectivized (Gustavsson, 2015), meaning that the need for project managers will increase; and c) there is a general paucity of literature into burnout in project managers, despite the high-stress of the job (Jugdev et al.,

2017). This focus on one discipline will allow us to examine which areas of work-life in particular increase the risk of burnout in the specific professions, potentially allowing for more specific policy intervention proposals.

1.2.3 Cross-cultural data

Across Europe, consistent data on burnout is hard to establish due to the variety of burnout measures and definitions across studies (Eurofound, 2018). Furthermore, few wide-scale studies have been conducted, and meta-analyses are difficult due to the diverse nature of samples and studies (Eurofound, 2018). Although burnout is widely studied, the research tends to be patchy and applies a range of different instruments and cut-offs to measure burnout, which makes data difficult to compare (Eurofound, 2018). Furthermore, from the literature review, it was noticed that most research seems to look only at rates of burnout, and their cost or potential cultural/policy correlates of these, rather than looking more specifically at which areas of work-life are making burnout more likely in given countries. There is the potential for research to look more specifically at which areas of work-life (perceived control, workload, fairness and reward amongst others) increase the likelihood of burnout in different countries.

Schaufeli (2018) reports burnout rates across Europe, from a sample of 43, 675 workers from 35 countries sampled by the *6th European Working Conditions Survey* (Eurofound, 2015). He finds that rates of burnout are higher in Eastern (Poland) and Southeastern Europe (See figure 1 for a graphical illustration of burnout rates). One exception to this is France, where studies confirm over 3.2 million workers are on the verge of burnout (Schaufeli, 2018). Countries with the lowest burnout scores are found in Northwest Europe (Scandinavia, the Netherlands). Burnout was found to be linked to cultural factors, where countries, where work is considered more important, had higher rates of burnout; countries with weak democracy, gender inequality and corruption faced higher burnout; and more collectivist, hierarchical countries where uncertainty is undesirable faced higher rates of burnout (Schaufeli, 2018). Schaufeli (2018) concludes that burnout should be considered beyond the individual and organisational level, to understand the cultural implications of burnout.



Source: 6th EWCS - 2015

Figure 1. Rates of burnout across European countries

The policy implications of this research are also important - France, for example, has legally recognized the right to switch off sometimes called the ‘right to disconnect’, which refers to a worker’s right to be able to disconnect from work and refrain from engaging in work-related electronic communications, such as emails or other messages, during non-work hours (Eurofound, 2014).

Research into the rates of burnout in France has led to these policy interventions, highlighting the importance of more research into improving general working conditions. Policies regarding burnout, who it applies to, and what interventions are available are also very variable across Europe (Eurofound, 2018), so findings may not be generalisable

Two countries, Sweden and the United Kingdom have been selected to focus on for the remainder of this study. These countries were selected for their opportunity and convenience as the researchers were located in Sweden during the time of the study and are native English speakers with a professional network in the United Kingdom. These two countries were also selected for their seemingly different relationships with work-life balance and mental health policies in the workplace. Sweden is one of the European countries with the lowest levels of burnout, with an average score of 2.93/5, classified as having a ‘low’ rate of burnout (where a score of 1 would suggest no burnout), whereas the United Kingdom has an average score of

3.17/5, ranking it about halfway down the European countries based on burnout scores, classifying it as having ‘medium’ rates of burnout (Schaufeli, 2018). In Sweden, there is a culture of ‘healthy’ work-life balance, where Swedes are expected to have activities outside of work, and work-life is characterised by ‘Fika’ breaks (Savage, 2019). Furthermore, Swedes are entitled to 80% of their pay for 14 days of sick leave, needing a doctor/dentist’s note only after day 7. This pay is taken over by the Swedish Social Security Agency after Day 15 for as long as necessary (Fielding, Cliff & Vildhede, 2016). In the UK, there is a culture of working overtime, and employees must prove incapacity to obtain statutory sick pay after day 4, for a maximum of 28 weeks (Fielding et al., 2016). These small differences can have an impact on mental wellbeing at work and affect rates of negative presenteeism, or absenteeism, both of which are costly to organisations and countries (Eurofound, 2018; Garrow, 2016).

1.3 Purpose and research questions

Two research gaps are present - burnout research in occupations not categorized as the helping industry and cross-cultural burnout research. To address the issue, this study will compare burnout factors project manager professionals in Sweden, one of the first countries to have policies regarding burnout in the occupational medical field (Cooper et al., 2001), to burnout factors in project manager professionals in the UK, where current burnout research has been conducted to certain restricted occupations, mainly in healthcare (Eurofound, 2018).

The purpose of the current study is to discover burnout rates and factors for project management professionals in Sweden and the United Kingdom. The current research will test the link between the Areas of Worklife Survey (AWS) items and burnout as measured by the Maslach Burnout Inventory–General Survey (MBI-GS). This study aims to identify the AWS items with the most influence on burnout, while also exploring cross-cultural impacts, leading to the following research questions:

(RQ1) Which elements of work-life are most strongly correlated with burnout in project managers?

(RQ2) Are there differences in Areas of Worklife measures between a Swedish and a UK sample?

(RQ3) Are there differences in burnout/AWS results within the project management compared to other professions?

2. Literature Review

This chapter contains a brief review of the best available knowledge on project management and burnout as well as a comparison of Sweden and the United Kingdom with regards to burnout. A theoretical article by Jugdev, Mathur and Cook (2017) with a proposal for a conceptual framework to examine project managers and links to burnout will be discussed as it was particularly inspiring to the current research.

2.1 Project management and burnout

The majority of research into burnout has come from the civil service, front line workers such as doctors or teachers. However, humanity is living in an increasingly ‘projectivized’ society, where it is also more common for workers to face increased complexity by working on more than one project at once (Gustavsson, 2015). Projects are often fast-paced and dynamic, requiring alignment with organizational needs as well as client demands, whilst accounting for any competing concerns and changing situations (Pinto, Dawood & Pinto, 2014). It is little wonder that project settings are highly conducive to work-related stress (Verma, 1996; Richmond & Skitmore, 2006; Haynes & Love, 2004 - in Pinto et al. 2014) with high levels of workloads.

Project management is continuing to grow in popularity, and the global project management professional pool is already significant, with the largest professional organization, the Project Management Institute (PMI), having about half a million certified practitioners worldwide - excluding employees who may be unofficial ‘project managers’ in similar circumstances as an employee with the PMI membership (Pinto et al., 2014; Project Management Institute, 2020).

This study defines project management as the task of managing multiple projects - placing employees under the stress of having multiple demands, deadlines and projects in competition with each other, a role characterized by “role overload, frenetic activity and superficiality” (Slevin & Pinto, 1987, p. 33). Project management is a technique to control planning with the aim to accomplish given goals. This requires an ability to integrate and allocate specific resources, such as time, money, human resources, material, quality etc. to achieve this defined goal. So project management can be seen as the “*application of knowledge, skills and techniques to decompose, organize, oversee and control the various project processes*” (Okuhara, Shibata, & Ishii, 2007, p. 1753). The nature of the pressure placed on project managers is generally agreed-upon in the literature (Gustavsson, 2015; Pinto, Dawood, & Pinto, 2013): “*The project manager experiences a significant level of stress because of an endless list of demands, deadlines, and problems throughout the project's life cycle.*” (Verma,

1996, in Pinto et al., 2013, p. 578). This means coping with unpredictable workloads, with limited time in which to react to them.

Given the demanding and stressful nature of project work, the paucity of literature on burnout in project management presents an opportunity to apply existing theories of workplace burnout to study project manager burnout and engagement (Jugdev, Mathur & Cook, 2017).

2.2 Comparison of Sweden and the United Kingdom

While discussing cross-cultural differences with regards to workplace burnout, it is relevant to examine the average time spent working, and non-working time, or work-life balance. The definition of work-life balance is evolving with the expectations of each generation, and tending towards a definition in which careers should be flexible enough to support a lifestyle outside of work (Kohll, 2018). Work-life balance is striking a harmony between earning a living and having spare time. Studies often refer to work-life balance and burnout as the same side of a discussion about career/workplace satisfaction, highlighting how important and interlinked these maybe when it comes to retaining the vital employees in an organisation (Kanwar, Singh & Kodwani, 2009; Keeton, Fenner, Johnson & Hayward, 2007).

Research into medical professionals in the United States found that professionals working longer hours struggle more with work-life integration and are at higher risk of burnout than others (Shanafelt et al., 2012) However, Sweden - known for its culture of healthy work-life balance, has still been seeing rising cases of burnout in recent years (Savage, 2019). This serves to highlight the importance of conducting cross-cultural research in future, with more focus into the differences and potential causes of these differences.

In Sweden, the average employed person works 30.2 hours per week (Jürgensen, 2020), and according to the Swedish Annual Leave Act, Swedish workers are entitled to 25 full days of vacation every year. The average employed person in the United Kingdom works 36.75 hours per week (Clark, 2020) and is legally entitled to a minimum of 28 days paid holiday a year, known as statutory leave entitlement or annual leave (Government Digital Service, 2014). Sweden has thirteen bank holidays in 2020 (PublicHoliday.se) and the UK has six (gov.uk, 2020).

According to Sweden's Working Hours Act, total working hours of an employee (regular hours plus any overtime) should not exceed an average of 48 hours a week during a period of four months. Workers should have a nightly rest period of a minimum of 11 hours per day (uninterrupted rest) and a weekly rest period of no less than 36 consecutive hours, not including time on standby (Unionen.se). This is similar to the United Kingdom where employees can not be mandated to work overtime unless their contract states so. Even then,

employees have the protection by law to not be forced to work more than an average of 48 hours per week, although in practice companies often ask employees to sign a contract which waives this if necessary (Government Digital Service, 2015).

According to the 2020 Average Salary Survey, the average gross salary in Sweden is 513,006 SEK or about 49.216,44 Euro, and the average gross salary in the UK is GBP 49,632 or about 55.773,49 Euro. This difference is interesting, especially when weighed against the Numbeo’s 2020 Cost of Living Index in which the countries have similar rankings with Sweden at 69.85 and the UK at 67.28. These scores are calculated based on housing indicators, perceived crime rates, and quality of healthcare, among many other statistics and ranked on a scale with a high of one-hundred and low of zero.

Helliwell, Layard, Sachs, and De Neve’s World Happiness Report 2020 ranks countries on their Happiness Index. The index is based on variables including real GDP per capita, social support, healthy life expectancy, freedom to make life choices, generosity, and perceptions of corruption and is scored on a scale running from a low of zero to a high of ten. Sweden and the Nordic countries have a long-running tradition of ranking amongst the highest for happiness. For the year 2019, Sweden ranked seventh place with a score of 7.34 and the UK ranked fifteenth place with a score of 7.05 (Helliwell, et. al, 2020).

Table 1. Summary of comparisons between Sweden and the United Kingdom

	Hours worked in a week	Minimum holiday allowance	Total bank holidays	Average gross salary	Cost of Living Index	Happiness Index
Sweden	30.2	25	13	49.216,44€	69.85	7.34 (7th)
UK	36.75	28	6	55.773,49€	67.28	7.05 (15th)

2.2.1 Mental Health Policy

Policymaking around mental health and specifically burnout vary amongst countries. Sweden recognises burnout as a medical diagnosis only in the occupational medical setting (Eurofound, 2018; Schaufeli et al., 2009). England’s Health and Social Care Act 2012 introduced the first explicit recognition of the Secretary of State for Health’s duty towards both physical and mental health. This led to a commitment in the NHS constitution that the NHS is “designed to diagnose, treat and improve both physical and mental health”. Similarly, the 2015 Government’s Mandate to NHS England, states that “NHS England’s objective is to put mental

health on a par with physical health” (Parken and Powel, 2020). Even with these initiatives, burnout is not categorised as a ‘common mental health disorder’ (Baker, 2020).

2.2.2 Prevalence of Burnout

According to the Swedish Social Insurance Agency (Försäkringskassan), ‘clinical burnout’ was the most common reason for Swedes to be off work in 2018 – accounting for more than 20% of sickness benefit across age groups (Norlund et al., 2012; Savage, 2019). Sweden is one of few European countries which seek to systematically support municipalities facing high rates of sick leave, so this may be a reason that data is available for the rates of burnout (Eurofound, 2018).

In the UK, 44% of work-related ill health was linked to workplace stress, depression or anxiety across occupations - although this encompasses more than just workplace burnout (Health and Safety Executive, 2019). Statistics on the prevalence of burnout is available from the UK healthcare sector, where an estimated 30-40% of doctors are experiencing work-related burnout and stress (Locke, 2018). Generalized burnout statistics for the United Kingdom are unavailable due to the gap in generalized research, however, it was reported that 595,000 people in the UK suffered from workplace stress in 2018 (Gorvett, 2020).

2.3 A conceptual framework

Judgev, Mathur, and Cook (2017) propose a conceptual framework exploring the links between the determinants of burnout/engagement and turnover/retention in project management. They focus on burnout theories from social psychology that underlie two prevalent burnout measurement tools, the Maslach Burnout Inventory - General Survey (MBI-GS) and the Areas of Worklife Survey (AWS), applying these to a specific organizational context – project management.

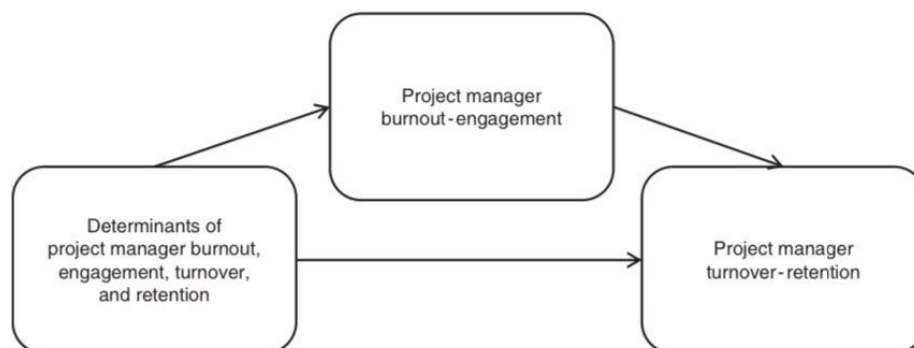


Figure 2. Determinants and outcomes of project manager burnout and engagement

The high-level framework provided in Figure 2 links factors that are determinants of employee burnout, engagement, turnover, and retention to these outcome variables. The model presents burnout and engagement as a mediator of the relationship between these determinants and project manager turnover/retention.

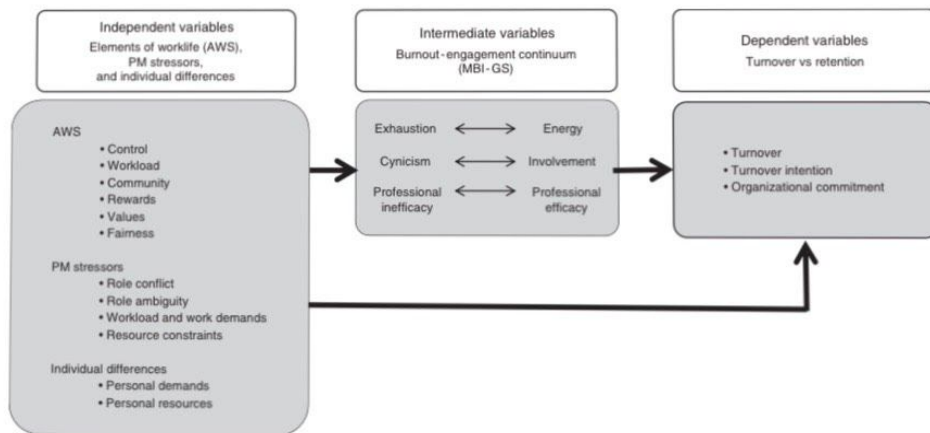


Figure 3. Determinants of project manager burnout, engagement, turnover, and retention

In Figure 3, the conceptual framework is elaborated using the variables from the MBI-GS and AWS and highlights determinants which are specifically relevant to project management contexts. The researchers account for individual differences as independent variables in this model. Individual differences would arise in the form of personal demands and personal resources and can be expected to predict the intermediate and dependent variables.

The primary stressors that the authors hypothesize will impact burnout/engagement, and turnover/retention, include the AWS factors - the perception of control, community, rewards, values, and fairness. Furthermore, the authors hypothesize that role conflict and ambiguity; workload and work demands; resource constraints; and individual differences such as personal demands, and personal resources will also have an impact (Jugdev et al., 2017).

Jugdev et. al (2017) suggest descriptive hypotheses linking the variables in the conceptual framework for future empirical research. The five general hypotheses proposed are:

H1. Work environment stressors will significantly relate to project manager burnout

H2. Work environment stressors will significantly relate to project manager engagement

H3. Individual differences will significantly relate to project manager burnout

H4. Individual differences will significantly relate to project manager turnover/retention.

H5. Project manager burnout/engagement will significantly relate to project manager turnover/retention.

The conceptual model presented by Jugdev et. al (2017) is intended as a step toward empirical research leading to the development of prescriptive hypotheses and recommendations for project-oriented organizations that strive to improve engagement and retention of high performing project managers. The broad objective is to contribute to workplace wellness in project-oriented organizations, influence positive implications on project success, enhance productivity, and ultimately, sustain and augment existing organizational competitive advantages through project management capability.

Jugdev et. al's (2017) proposed research agenda inspired elements of the current study as testing the conceptual model would contribute to the empirical literature on workplace burnout, engagement, turnover, and retention. The theoretical foundation laid by Jugdev et. al (2017) was referenced as a base when developing the current research's methodology.

2.4 Research questions and hypotheses

With this best available knowledge presented, this study has re-examined the research questions:

(RQ1) Which elements of work-life are most strongly correlated with burnout in project managers?

(RQ2) Are there significant differences in Areas of Worklife measures between a Swedish and a UK sample?

(RQ3) Are there significant differences in burnout results within the project management compared to other professions sampled by the MBI-GS Maslach-Leiter Database?

And drawn the following hypotheses:

(H1) The AWS factors of 'control' and 'workload' will be more significantly correlated with burnout in project managers than the other AWS factors

(H2) Swedish project managers will have more positive AWS scores than UK project managers.

(H3) There will be significant differences in burnout subscale scores in project managers compared to other professions sampled by the MBI-GS Maslach-Leiter Database.

3. Methodology

The current study was designed with a deductive approach (deductive reasoning). The presented hypotheses were developed based on existing theory from an academic literature review of the available resources. The literature cited was selected based on relevance to the current study, how recently the article was published, the number of citations it has, the journal it was published by, and by the status of the publishing authors within the relevant field. The research method was designed in order to study the effect of workplace cultural differences on burnout, as well as analysing the correlations between the Areas of Worklife subscale and MBI-GS subscale in project managers, and comparing the rate of burnout between this study's project manager sample and other normative sample respondents to the MBI-GS. This study's survey-based quantitative research can be compared to existing and future datasets.

3.1 Research materials

When choosing which tools to use, three of the most widely used instruments to measure burnout were considered; Maslach Burnout Inventory (MBI), (Maslach et al., 1996; 22 items), Burnout Measure (BM, Pines & Aronson, 1988; 21 items), and the Copenhagen Burnout Inventory (CBI, Kristensen et al., 2005; 19 items). The MBI is based on the Person-Environment Fit model (Kristof-Brown et al., 2005), which focuses on the “interplay of resources and stressors” (p. 61) on a burnout to engagement continuum (Jugdev et al, 2017, p. 202). There has been some criticism of the unidirectionality of the MBI's measures, i.e the negative wording of the questions, and the inability to apply the basic MBI to all professions (Demerouti et al., 2010). However, the development of the MBI - General Survey (MBI-GS) has allowed this tool to be used in project management, and despite the negative wording of the questions, it has still been established as a reliable tool by years of research (Mindgarden, 2020). Research has found that the MBI subscales actually assess different aspects of burnout, as described by Maslach & Jackson (1986) whereas the BM and the CBI subscales seem to assess manifestations or experiences of burnout (Platsidou, M., & Daniilidou, A., 2015). In addition to being recognized as the leading measure of burnout, the MBI is validated by the extensive research that has been conducted in more than 35 years since its initial publication (Mindgarden, 2020).

Two surveys were administered to collect the data necessary for testing the hypotheses. These surveys are the Maslach Burnout Inventory General Survey and the Areas of Worklife Survey. The tools required license purchases from the host, Mind Garden. This choice was made to increase the reliability and reproducibility of the results.

The MBI - General Survey (MBI-GS) was designed for use with occupational groups other than human services and education, including those working in jobs such as customer service, maintenance, manufacturing, management, and most other professions, making it the correct measure for this study on project managers.

The AWS was created to accompany the MBI to assess employees' perceptions of work setting qualities that play a role in whether they experience work engagement or burnout. AWS has demonstrated reliability and validity across a variety of occupational settings (Mindgarden, 2020).

The Maslach Burnout Toolkit™ for General Use, which combines the Maslach Burnout Inventory™ General Survey (MBI-GS) and the Areas of Worklife Survey (AWS) is used in this study to measure burnout in the work-life context. The MBI-GS was created by Christina Maslach, Susan E. Jackson, Michael P. Leiter, & Wilmar B. Schaufeli (2018) and the AWS was created by Michael P. Leiter & Christina Maslach (2011). The combined assessment consists of 44 items. The Maslach Burnout Inventory (MBI) assesses the level of burnout by measuring:

exhaustion: feelings of being emotionally overextended and exhausted by work.

cynicism: unfeeling and impersonal responses toward recipients of one's service, care, treatment, or instruction.

professional efficacy: feelings of competence and successful achievement in one's work.

The Areas of Worklife Survey (AWS) assesses “what” in your work environment may be contributing to burnout by measuring:

workload: the amount of work to be done in a given time. workload captures the extent to which work demands spill into personal life, the social pressures, and the physical and the intellectual burden of job demands.

control: opportunity to make choices and decisions, to solve problems, and to contribute to the fulfilment of responsibilities. Control is your participation in important decisions about your work as well as your range of professional autonomy.

reward: recognition – financial and social – you receive for your contribution to the job. reward includes praise, awards, perks, and salary.

community: quality of the social context in which you work, encompassing your relationships with managers, colleagues, subordinates, and others.

fairness: the extent to which the organization has consistent and equitable rules for everyone or the quality of justice and respect at work.

values: what matters to you in your work. The focus is the consistency between the personal values you bring to your profession and the values inherent in the organization where you work.

The Areas of Worklife Survey (AWS) research has considered a wide range of organizational correlates of burnout. The primary themes in burnout research fit into six areas of work-life; workload, control, reward, community, fairness, and values. These areas are sufficiently broad to encompass the rich variety of research approaches taken in the field while being sufficiently precise to permit clear distinctions among them. The Areas of Worklife Survey (AWS) was created to assess employees' perceptions of work setting qualities that play a role in whether they experience work engagement or burnout. The AWS is a short questionnaire with demonstrated reliability and validity across a variety of occupational settings.

The MBI-GS measures the three dimensions of the burnout-engagement continuum: exhaustion-energy, cynicism-involvement, and professional inefficacy-efficacy. Each of these six variables and their relationship to turnover vs retention will be tested. The AWS measures six areas of work-life, which Jugdev et al. (2017) hypothesize as determinants of burnout and engagement. The relationship between these six determinants as predictors of the intermediate and dependent variables will also be tested.

It consists of 44 items, 16 pertaining to the MBI-GS, and 28 pertaining to AWS. The 28 AWS items are first, under their respective headings 'workload/ Control/ reward/ community/ fairness/ values'. Each subscale has 5-6 items, ranked on a Likert scale from 1 (Strongly Disagree) to 5 (Strongly Agree). Participants are presented with these instructions:

Please use the following rating scale to indicate the extent to which you agree with the following statements. Please circle the number corresponding to your answer.

Participants are then presented with statements, under the subscale headings, such as the sample workload statement below, and asked to indicate the extent to which they agree with them.

Workload

“I have so much work to do on the job that it takes me away from my personal interests”

The MBI-GS follows the AWS. The participants are first presented with a new set of instructions, outlined below:

On the following pages are 16 statements of job-related feelings. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, select the Never option. If you have had this feeling, indicate how often you feel it by selecting the option that best describes how frequently you feel that way.

The phrases describing the frequency are:

Never

A few times a year or less

Once a month or less

A few times a month

Once a week

A few times a week

Every day

They are then presented with 16 uncategorised statements, 5 of which pertain to exhaustion; 5 to cynicism; and 6 to professional efficacy. These are presented in mixed order, some with a positive phrasing, others with a negative phrasing. An example of these statements, pertaining to cynicism, is below.

“I doubt the significance of my work”

3.2 Data collection

After an informal agreement, participants were sent via email a link to the MBI-GS and AWS surveys, including demographics questions encompassing gender and management level.

The survey was administered electronically through the survey host, Mindgarden.

This study had access to 50 survey licenses. An opportunity volunteer sample of 50 project managers was recruited from Sweden and the UK. Of the 50 surveys administered, 41 were successfully completed in time and included in the report. The result from this study's participant attrition was unequal sample sizes from Sweden and the United Kingdom ($n_1 = 25$,

$n_2 = 16$). This made conducting parametric analysis more difficult and increased the risk of error.

Very few studies into burnout report effect sizes (Awa, Plaumann & Walter, 2010). From available information in select meta-analyses and burnout studies, effect sizes generally range from $d = |-.1|$ to $d = |.55|$ dependent on the factor being studied (Awa et al., 2010; Purvanova & Muros, 2010). Studies into gender differences in burnout report effect sizes around $d = |.1|$ to $d = |-.19|$ (Purvanova & Muros, 2010). A review of burnout intervention studies reported effect sizes of $d = 0.29$ to $d = 1.2$ (Awa et al., 2010).

This study's sample size of $N=41$ is only large enough to detect a large effect ($d = 1.2$), with alpha 0.05 and 95% power for the independent samples t-tests, and medium effect size ($d = 0.6$), alpha 0.05, 95% power for the one-sample t-tests (G*Power 3.1, 2020). This means that only results with very big differences between groups, or very strong significant correlations, will be visible in this study's results. A small difference would need a very large sample size for it to be noticeable.

4. Results

4.1 Descriptive statistics

This study's final sample was composed of 41 project managers. Of these, 25 were Swedish, and 16 were from the United Kingdom. Table 2 below outlines the distribution of key characteristics within the sample.

Table 2. Sample key demographics

Baseline Characteristic	Sweden		UK		Full Sample	
	n	%	n	%	n	%
Gender						
<i>Female</i>	16	64	11	68.8	27	65.9
<i>Male</i>	9	36	5	31.3	14	34.1
Management Level						
<i>Senior</i>	8	32	0	0	8	19.5
<i>Middle</i>	3	12	3	18.8	6	14.6
<i>First-level</i>	4	16	11	68.8	15	36.6
<i>Other/ did not state</i>	10	40	2	12.5	12	29.3

4.2 Research Question 1: Correlations between AWS and MBI-GS

This study's primary research question aimed to address whether any of the AWS subscale factors correlated more strongly with the MBI-GS subscale factors than others. Table 3 below reports the findings.

Table 3. Correlations between AWS subscales and MBI-GS subscales (Project Manager Sample; N = 41)

	Control	Reward	Community	Fairness	Values	Exhaustion	Cynicism	Efficacy
Workload	-.086	.194	.040	-.144	.083	-.552	-.101	-.017
Control		.237	.518**	.304	.341**	-.124	-.093	.176
Reward			.409**	.419**	.435**	-.117	-.003	.404**
Community				.524**	.529**	-.106	-.276	.269
Fairness					.435**	-.113	-.208	.425**
Values						-.053	-.299	.434**
Exhaustion							.497**	-.135
Cynicism								-.268
Efficacy								

*Note: only results with an asterisk are significant, ** signifies results significant at the $p < 0.001$ level.*

This study found a few significant correlations. To simplify the analysis and maintain focus on the research question, the results of significant correlations between AWS subscale items and MBI-GS subscale items will be discussed - any other significant correlations corroborate previous findings by research collected by Leiter and Maslach (2011). Our non-significant results may be a result of our small sample, so will not be further discussed.

A moderate positive correlation was found between reward and efficacy, $r(39) = .404, p = .009, d = .5031$; between fairness and efficacy, $r(39) = .425, p = .006, d = .5093$; and between values and efficacy, $r(39) = .434, p = .005, d = .5118$. This supports previous research which has found that self-efficacy is increased when reward (physical or social) is present (French, Olander, Chisholm & McSharry, 2014; Schunk, 1984).

Table 4 reports the results of the MBI-GS in a normative sample of many eligible professions, $N = 22,000$ (Leiter & Maslach, 2011). This study noticed differences between the sizes of our significant correlations and a few of these measures. As a result, this study tested whether the sample had produced significantly different (stronger or weaker) correlations between the survey subscales. Z scores were computed using a Fisher transformation from the correlation coefficients of each sample in these cases. Only the Z-score computed from the efficacy-reward correlation suggested a deviation from the normative data in the sample - the correlation for our sample was significantly stronger than that of the normative sample ($z = 1.706, p = .044$).

Table 4. Correlations between AWS subscales and MBI-GS subscales (Maslach Database; $N = 22,000$)

	Control	Reward	Community	Fairness	Values	Exhaustion	Cynicism	Efficacy
Workload	.197	.232	.141	.226	.092	-.487	-.188	.013
Control		.418	.352	.407	.364	-.318	-.319	.309
Reward			.423	.474	.351	-.310	-.364	.261
Community				.447	.400	-.239	-.300	.244
Fairness					.521	-.300	-.314	.175
Values						-.226	-.341	.297
Exhaustion							.544	-.135
Cynicism								-.297
Efficacy								

Note: all results are significant, $p < 0.001$

4.3 Research Question 2: Swedish compared to British sample

To find differences in work-life perception between the Swedish and British samples, an independent samples t-test was conducted. This test compared the mean result on each of the AWS and MBI-GS subscales between the Swedish and British sample. Table 5 illustrates the means and standard deviations by nationality for each measure of the subscales, as well as the results of the t-test.

Table 5. Means, standard deviations and t for all relevant subscale factors

	Swedish		British		<i>t</i> (39)	<i>p</i>	Cohen's D (<i>d</i>)
	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>			
Exhaustion	2.2	1.5	1.9	1.3	0.585	0.562	0.187
Cynicism	1.7	1.2	1.5	1.3	0.379	0.707	0.121
Efficacy	4.7	1.0	4.3	1.2	1.271	0.211	0.407
Workload	2.9	.7	3.6	.7	-2.999	0.005**	-0.960
Control	4.0	.6	3.8	.6	1.050	0.300	0.336
Reward	3.7	.7	3.8	.7	-0.322	0.750	-0.103
Community	4.1	.5	4.2	.5	-0.796	0.431	-0.255
Fairness	3.9	.7	3.9	.6	1.189	0.242	0.381
Values	3.5	.6	3.3	.6	-0.206	0.838	-0.066

The only significant result is a difference in the reported workload. The 25 Swedish project managers ($M = 2.9$, $SD = .7$) reported a higher mismatch between their perceived coping abilities and workload than the 16 British project managers ($M = 3.6$, $SD = .7$), $t(39) = -3.0$, $p = .005$. This suggests lower satisfaction regarding workload in the Swedish sample than in the British sample, which is contrary to what this study's hypothesis suggested.

Testing for equality of variance with Shapiro-Wilk (since $N < 50$) demonstrated unequal variances in cynicism (non-normally distributed across both samples); reward, community and values were non-normal in the UK sample, and efficacy was non-normal in the Swedish sample. Despite the t-test's robustness to inequality of variance (Boneau, 1960), unequal variances combined with unequal variance can yield results with lower power and certainty (Zimmerman, 1987). As a result, the measures with unequal variances were retested with Mann-Whitney's non-parametric U test. All results for these were still non-significant. The 'workload' measure was also retested with Mann-Whitney to decrease the chances of a Type 1 error due to violation of the equal sample size assumption in the t-test. Table 6 outlines these results.

Table 6. Mann-Whitney's *U* and significance level for samples with unequal variances

	<i>U</i>	<i>p</i>
Cynicism	177	0.552
Efficacy	151.5	0.197
Workload	294	0.011*
Reward	241	0.570
Community	221.5	0.283
Values	219	0.625

Note: ** denotes a result significant at the $p = 0.05$ level.

4.4 Research Question 3: Project Managers vs reference MBI-GS sample

To assess whether there was any significant difference between the project manager sample and a normative reference sample from various professions and organizations, this study compared our average burnout scores with the values provided by the Maslach-Leiter Database (2018). Our sample of project managers fit within the distribution of burnout scores of the Maslach-Leiter Database ($N = 47, 800$) for the MBI-GS (Maslach et al., 2018).

This study found no significant difference in exhaustion between our sample ($M = 2.08, SD = 1.37$) and the normative sample ($M = 2.26, SD = 1.47$), $t(40) = -0.826, p = .413, d = -.129$; no significant difference in cynicism between our sample ($M = 1.61, SD = 1.24$) and the normative sample ($M = 1.74, SD = 1.36$), $t(40) = -0.700, p = .488, d = -.109$; and no significant difference in professional efficacy between our sample ($M = 4.53, SD = 1.07$) and the normative sample ($M = 4.34, SD = 1.17$), $t(40) = 1.150, p = .257, d = .180$.

5. Analysis and Discussion

In this section, the results of the statistical analyses are interpreted and the extent to which they agree with the hypotheses is discussed.

5.1 Research Question 1: Correlations between AWS and MBI-GS

Due to this study's small sample size, some of the results could not be guaranteed at the 95% certainty level, which is the cut-off for reliability in most social science research (Wasserstein, Schirm & Lazar, 2019). This means that the observed correlations could be down to chance more than 5% of the time (in the white boxes). On the contrary, the green boxes indicate correlations which would be observed over 99% of the time.

The most interesting findings are in the top right quadrant of the table - this study wanted to know whether any aspects of work-life have a stronger impact on burnout than others, and hypothesised that:

(H1) The AWS factors of 'control' and 'workload' will be more significantly correlated with burnout in project managers than the other AWS factors

This study's findings do not allow us to conclude this - the results of the correlation suggest that there is a moderate negative correlation between workload and exhaustion, although this result will be down to chance more than 5% of the time, so it is not reliable enough to infer that this study's hypothesis was correct. Surprisingly, the results are focused more on the relationship between good work life and increased efficacy, rather than on the negative relationship between bad work-life and increased exhaustion/cynicism, as this study could have expected given the focus on discussing stress in the project management discipline.

The current findings suggest that increasing workplace reward; increasing workplace fairness, and having personal values which align with the company's own result in higher professional efficacy. Based on previous research (Maslach & Leiter, 2011), this study expected to find more correlations which were significant over 95% of the time, however, the small sample size means this was difficult to guarantee.

Table 7. Correlations between AWS subscales and MBI-GS subscales (Project Manager Sample, N = 41)

	Control	Reward	Community	Fairness	Values	Exhaustion	Cynicism	Efficacy
Workload	-.086	.194	.040	-.144	.083	-.552	-.101	-.017
Control		.237	.518**	.304	.341**	-.124	-.093	.176
Reward			.409**	.419**	.435**	-.117	-.003	.404**
Community				.524**	.529**	-.106	-.276	.269
Fairness					.435**	-.113	-.208	.425**
Values						-.053	-.299	.434**
Exhaustion							.497**	-.135
Cynicism								-.268
Efficacy								

Note: A green box denotes a result which will be significant (correct) 99% of the time. Uncoloured boxes will be correct (significant) less than 95% of the time.

This study compared the statistically significant correlations to the Maslach Database (N = 22, 000) (Leiter & Maslach, 2011), to see whether both demonstrated the same pattern of correlation. The correlations in Maslach Database are considered very reliable and generalisable due to the large sample, and findings which have been corroborated many times. This study found that the only significant difference between our sample and the database is that efficacy is more strongly positively correlated with reward in our sample than in the database. This means that project managers feel more efficient when rewarded than other professions do.

Three (non-significant) correlations that could be of interest in further replications of this project management research are highlighted in yellow. This is because they suggest a negative correlation between workload and control, fairness and professional efficacy. This would suggest that project managers actually perceive themselves as having less control over their work, their company to be less fair, and themselves to be less efficient when their workload increases. In the database sample, the opposite pattern is identified. However, these findings are very unreliable from the current study. The observed negative correlation between workload and control is down to chance 59% of the time ($p = .593$); between workload and fairness is down to chance 37% of the time ($p = .369$), and the observed negative correlation between workload and professional efficacy is down to chance 92% of the time ($p = .916$). As a result, the normative database sample is more reliable and this study cannot say with certainty that further research into whether project management actually produces these negative correlations would be interesting.

Table 8. Correlations between AWS subscales and MBI-GS subscales (Maslach Database; N = 22,000)

	Control	Reward	Community	Fairness	Values	Exhaustion	Cynicism	Efficacy
Workload	.197	.232	.141	.226	.092	-.487	-.188	.013
Control		.418	.352	.407	.364	-.318	-.319	.309
Reward			.423	.474	.351	-.310	-.364	.261
Community				.447	.400	-.239	-.300	.244
Fairness					.521	-.300	-.314	.175
Values						-.226	-.341	.297
Exhaustion							.544	-.135
Cynicism								-.297
Efficacy								

Note: A green box denotes a result which will be significant (correct) 99% of the time.

This study found a few significant correlations between the AWS and MBI-GS. A moderate positive correlation was found between reward and efficacy; between fairness and efficacy, and between values and efficacy. Interestingly, these are all positive aspects of work-life and the positive measure of the MBI-GS. This increases the interest in studying burnout and workplace commitment from the perspective of increasing engagement since this study's results demonstrate potential in this area.

5.2 Research Question 2: Swedish compared to British sample

This study's second research question aimed to address whether there were any differences in perceptions of work-life between the Swedish and the British project managers. This study hypothesised, based on evidence that Sweden puts more emphasis on workplace wellbeing than the UK, that the Swedish project managers will score more positively on the AWS (since they are likely to have a more positive perception of work-life) than the British project managers. This study could also hypothesise that they should have lower scores on the burnout subscales, (exhaustion, cynicism, professional efficacy) than the UK sample as a result, however, there is little evidence to suggest this, so tests for differences were conducted, but we did not produce a directional hypothesis for this difference.

(H2) Swedish project managers will have more positive AWS scores than UK project managers.

This study's sample size had a similar effect on the probability of the results being correct in this comparison of the Swedish and British samples. This means that most of the observed differences between this study's Swedish and British samples could be down to chance more than 5% of the time, which is usually considered too much to consider the findings reliable. As a result, these findings are not further discussed here. Only one result was found to be significantly different between this study's samples. This study observed differences between the Swedish and British perceptions of workload were found to exist 99.5% of the time. Swedes report a lower satisfaction with workload ($M = 2.9, SD = .7$) than the British sample ($M = 3.6, SD = .7$) - figure 4 illustrates this graphically. Although this still does not guarantee a reliable difference between the perceived workload of the two countries - a different sample could produce different findings (this study's sample is small enough that it may not be representative of the two nationalities) - it is a significant finding worth reporting. This finding is surprisingly contrary to this study's hypothesis that Swedes will score more positively on AWS scales than the British. In this case, a lower score indicates a more manageable workload.

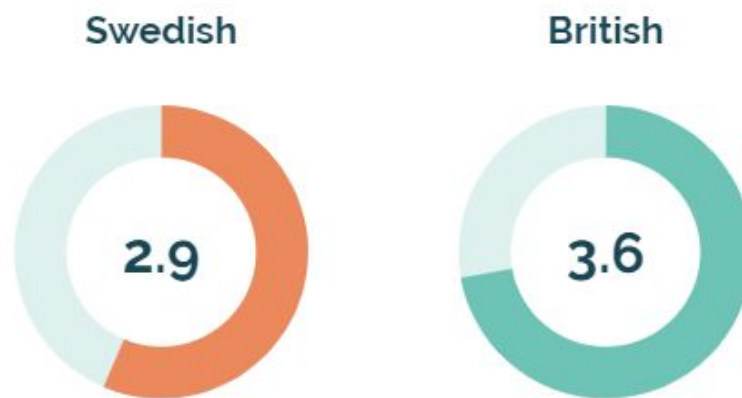


Figure 4. Mean score (out of 5) by nationality on the measure of workload.

When comparing the Swedish sample to the United Kingdom sample, the only significant difference was in reported workload, with the Swedish sample reporting a higher mismatch between their ability to cope with their workload than the 16 British project managers. Perhaps the stressful workload can be credited to that on average, Swedes work 30.2 hours per week (Jürgensen, 2020), where in the UK the average workweek is 36.75 hours (Clark, 2020). This means that although the two samples have the same reported workload, the Swedes have less working time to complete said work than their UK counterparts, resulting in workload related stress. Another explanation for this finding could be a difference in workload expectation between the samples, whereby a small increase in workload will be more unexpected and thereby stressful

to Swedes than to the British sample. However, external factors, such as activities and expectation outside of work could also be causing this difference - overtime may be easier for the British sample if they are not culturally expected to engage in many things outside of work, whereas overtime would put more pressure on a Swede with busy home life (Savage, 2019).

Interestingly, a consistent pattern found by Leiter and Maslach (2011) in the AWS correlations with the MBI-GS, is that workload is more closely correlated to exhaustion than to the other two MBI-GS subscales. Exhaustion is also more closely correlated with workload than to any of the other AWS scales. This could suggest that Swedes are more likely to be subject to exhaustion than a UK sample.

5.3 Research Question 3: Project Managers compared to reference MBI-GS sample

(H3) There will be significant differences in burnout subscale scores in project managers compared to other professions sampled by the MBI-GS Maslach-Leiter Database.

This study aimed to compare whether project managers had higher scores on the burnout subscales than other professions sampled by the MBI-GS. These professions include those of manufacturing, customer service, maintenance, management and most other professions with limited human services. This study does not have much specific information on other professions, so formulated a non-directional hypothesis. If there were any differences, this could have an impact on future research, suggesting that project managers face a truly unique set of work pressures. If not, it suggests that any research into alleviating burnout or improving work-life in project managers could be applied to other professions, increasing its potential impact.

This study compared the average scores of the sample on each subscale (exhaustion, cynicism, professional efficacy) to the average score from a normative, reliable sample of $N \approx 47,800$ individuals of various professions provided by Maslach et al. (2018). This study found no significant difference between any of this study's scores and this normative database, suggesting that project managers face similar rates of burnout as other professions.

This study's sample of project managers fit within the distribution of burnout scores of the Maslach-Leiter Database for the MBI-GS. The data showed no difference in exhaustion, cynicism, and professional efficacy between this study's sample and the normative sample. This suggests that this study used a representative sample, suggesting the results may be generalisable beyond the project management field. The conclusion can also be drawn that the study's sample of project managers related to stress and burnout in similar ways as those in

other professions. As a result, any future research into factors suggested here could be applicable across professions, increasing its potential impact.

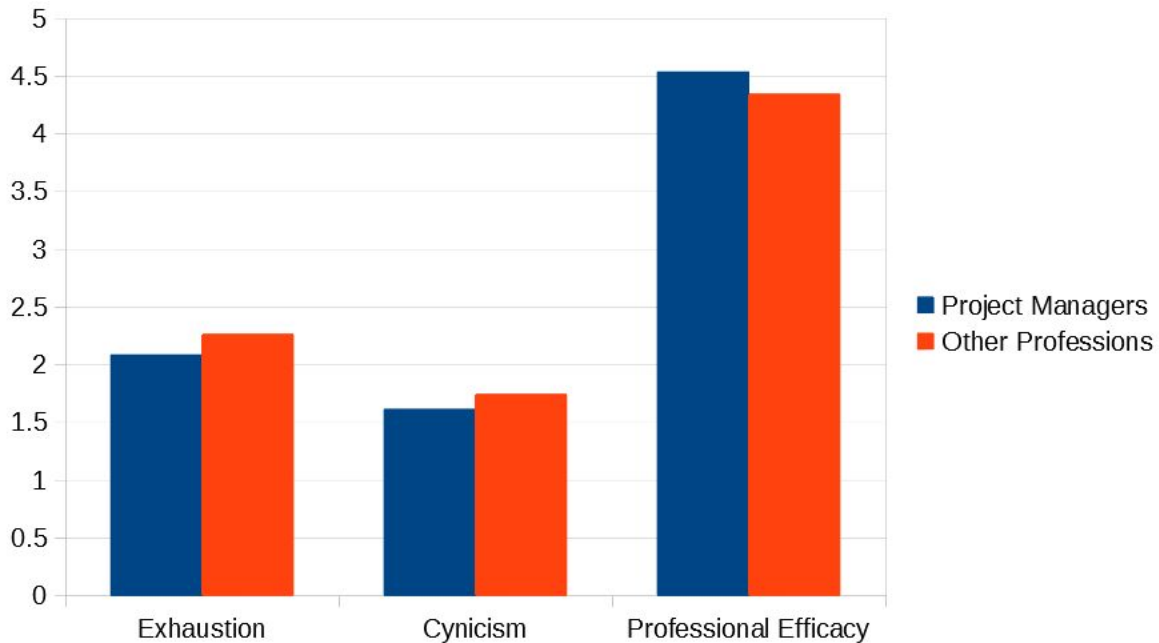


Figure 5. Mean scores on burnout subscales by profession

5.4 Data quality and limitations

An unexpected limitation of the study is the timeframe in which the study was conducted. During data collection, there was an ongoing pandemic, Covid-19. The Covid-19 pandemic brought with it a time of deep uncertainty and disruption to daily life. Most individuals, either by mandate or free will, stayed at their homes and adjusted to life under lockdown, including a work from home routine. Anecdotal evidence has suggested that this adaptation and need for new routines placed employees under higher pressure since communication and management was no longer as straightforward. This study was unable to control for stress caused by the pandemic which may have affected this study's participants' stress sources and therefore skewed their perceptions on the variables tested.

Based on the data collected in this study, other tests - for example, testing for differences in burnout, or perceptions of work-life based on gender or management seniority, could have been conducted. However, the study's sample size is very small compared to that of other existing research, and the current sample can only detect very large effects (greater than $d = 1.2$)(G*Power 3.1, 2020). For this reason, analysing whether there are differences in work-life/burnout by gender would be unlikely to produce any valid findings, nor would it add

a contribution to the field of burnout research, since there is already extensive research into gender differences in burnout.

Testing whether there are differences in burnout/work-life across the management levels (first line to senior management) could be interesting since there is a general paucity of literature in burnout in project management. However, this sample was not created with this in mind and has an uneven number of participants from each management level (n = 8 for senior management, n = 15 for first-line management, and n = 12 did not state or did not categorise themselves as managers). If this study had wanted to consider differences across management levels it would have had to specify a definition for each level, control for years of experience in the role, and other factors which could interfere with the results. This study would also have had to make the question compulsory - as it stands, this study's sample size for this analysis would have dropped to n = 29. As a result, this study's analyses based on this would not produce robust findings which could reliably lead to further interesting research.

5.4.1 Non-respondent analysis

This study's target sample size was 50 project managers, half from Sweden and half from the UK. This study was unable to sample 25 British project managers, so contacted 18 who agreed to participate and 32 Swedes. However, 9 of these 50 failed to respond to the survey in time to be a part of this study's analysis, leaving the final sample size at 41 project managers, 16 from the UK and 25 from Sweden.

There is little risk that these nine non-respondents would have made a huge difference had they participated, since this study's sample fit within the range of normal responses from Maslach and Leiter's databases, and there is little to suggest that the personality/respondents of the non-respondents would have been different from that of the respondents. Additionally, an extra nine participants would not have made a significant difference to the strength of the findings - ideally, an extra 50 participants (minimum) would have been required before any noticeable change to the power of the results occurred (G*Power 3.1, 2020).

Two factors to consider, however, are the nationality and potential predisposition to burnout of this study's non-respondents. Of the nine, 7 were Swedish, and 2 were British. Including their responses would have further skewed the sample sizes, making the comparison tests between cultures less reliable, due to the higher likelihood of UK responses being less representative of the general UK population (and more variable) than the Swedish responses.

This study does not know their reasons for not responding to this study's survey, however, it can be imagined that they may be more prone to burnout - a symptom/consequence of burnout is decreased motivation (Maslach, 1993), so the lack of response could be a symptom of burnout or higher levels of exhaustion than those who did respond. This could have changed the nature of this study's results, potentially making the project manager sample show a higher average score on the burnout measures than the general population, for example. However, it is

known that some of this study's samples did not respond due to technical difficulties, or uncertainty. Non-response may also have been down to forgetfulness, or email inbox overload, rather than work overload/burnout. Without asking, one cannot be certain - ideally, this study could have conducted interviews or personality tests to test for moderating effects of personality causing a response bias in this study's opportunity sample.

6. Conclusion

As discussed in the problem description, “*the substantial cost associated with replacing experienced managers calls attention to the need to address job strain in order to retain this valuable organizational asset*” (Wong & Spence Laschinger, 2015, p.1824). The data from AWS showcases the elements of work-life which are most strongly correlated with burnout in project managers and can inform decision/making by both companies and policymakers, simultaneously promoting health and saving money. This study’s results suggest there is a strong effect of reward, fairness and values on the ‘positive’ burnout subscale of professional efficacy. These findings suggest that focusing on increasing positive engagement with work (as opposed to merely focusing on negating negative factors such as a high workload) could be more beneficial to reducing the risk of burnout.

This research provides further support to the idea that burnout and engagement are closely tied, supporting researchers such as Demerouti et al. (2010). Furthermore, this research takes this a step further by suggesting that increasing positive engagement at work (e.g. providing more rewards, or ensuring you hire people with similar values to the company) may be more effective than mitigating burnout risk factors (by e.g. reducing individual workload).

Understanding the influences of cross-cultural differences could shed light on the effect of policy and social norms on rates of burnout within the project management discipline, and potentially beyond this field to other ‘general’ professions (those tested by the MBI-GS). Had there been a strong and significant difference between the UK and Swedish samples, this would highlight a difference in workplace management that could be used as a basis for interventions aimed at increasing workplace wellbeing. The lack thereof allows us to consider that corporate project management is similar across European countries, thereby making this study's findings more generalisable, and suggesting that future research applied to only one country could be generalisable beyond that nation. However the demands on project managers or workers, in general, differs slightly from country to country, so it would be important to have an internationally representative sample, and additional qualitative measures available to better understand this (Schaufeli, 2018).

Comparing burnout results within the project management discipline to other professions sampled by the MBI-GS Maslach-Leiter Database provides insights into how project managers relate to stress and burnout compared to those in other professions. This study found no significant differences between project managers and the database of other professionals. This can inform future policymaking around burnout, encouraging investment in mental health services across all ‘general’ professions.

6.1 Suggestions for future research

Replications of the current study with a larger, more representative project management sample (N = 5200 would detect even small effect sizes) would confirm whether increasing positive engagement with work (as opposed to merely focusing on negating negative factors such as a high workload) is more beneficial to reducing the risk of burnout. Additionally, increasing positive engagement at work can be tested for effectiveness over mitigating burnout risk factors, since it may be specific to the demands of project managers, and has a potentially strong impact on productivity and employee retention in project management.

This study's findings around work-life between project managers located in Sweden compared to the United Kingdom suggests that there may be some unexpected directionality to results, and as the 2018 Eurofound report suggests, there is a lack of comparative datasets available across European countries. Future research with representative datasets, covering more European countries, would, therefore, be a good start to identifying workplace burnout trends. Further research examining the causes of these differences should follow from this - especially if results are unexpected. A large-scale qualitative study examining cultural expectations and approaches to work-life concepts could shed light on why Swedes show a higher mismatch between perceived and expected workload than the British sample did - is it a result of higher a Swedish workload, or lower Swedish workload expectations, for example?

To address the diverse nature of project management, future research could control for the different nature of the profession across the public/private sector, seniority level, industry etc.

Additionally, if the resources are available, future researchers could explore more in-depth the personal factors (as proposed by Jugdev et al., 2017), or cultural factors (as reported by Schaufeli, 2018) that can weigh in on an individual's view on work-life stressors. This could be done by adding an additional quantitative survey to the MBI and AWS, or alternatively by conducting a qualitative interview to explore broader insights into the topic.

As discussed, there are many potential directions in which to take this research. The most important conclusion from this study is that more needs to be done to understand which are the best areas of work-life to invest in to decrease the risk of burnout in project management.

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