



EUROPE

Workplace financial wellbeing interventions for young workers

A review of the evidence and analysis of Britain's Healthiest Workplace (BHW) and Asia's Healthiest Workplace (AHW) surveys

Jennifer Bousfield, William Phillips,
Camilla D'Angelo, Christian van Stolk*

*Senior and corresponding author





Funded by
Wellcome

For more information on this publication, visit www.rand.org/t/RRA839-1

Published by the RAND Corporation, Santa Monica, Calif., and Cambridge, UK

RAND® is a registered trademark.

RAND Europe is a not-for-profit research organisation that helps to improve policy and decision making through research and analysis. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors.

© Wellcome 2021

All rights reserved. No part of this book may be reproduced in any form by any electronic or mechanical means (including photocopying, recording, or information storage and retrieval) without permission in writing from the sponsor.

Support RAND

Make a tax-deductible charitable contribution at
www.rand.org/giving/contribute

www.rand.org

www.randeurope.org

Table of contents

List of figures	IV
List of tables	IV
Abbreviations	IV
Acknowledgements	IV
Appendices (in separate document)	V
1. Executive summary	1
1.1. <i>Background and rationale</i>	1
1.2. <i>Findings</i>	1
1.3. <i>Conclusions and next steps</i>	2
2. Introduction and background	3
2.1. <i>Poor financial wellbeing in young people is a pressing issue</i>	3
2.2. <i>Financial wellbeing and mental health are closely linked</i>	4
2.3. <i>The workplace is an ideal context for financial wellbeing interventions</i>	4
2.4. <i>Methods and approach</i>	5
3. Evidence of the effectiveness of WFWI	8
3.1. <i>Evidence of the effectiveness of WFWI</i>	8
3.2. <i>A strong case is made in the literature and data analysis for WFWI to be tailored to the characteristics and needs of young people in design and in encouraging participation</i>	10
4. Discussion and key messages for employers	13
4.1. <i>WFWI are a promising approach for preventing and addressing mental health problems in young workers but there is a lack of evidence</i>	13
4.2. <i>Interventions may gain improved outcomes by delivering personalised and culturally appropriate approaches</i>	13
4.3. <i>Developing and implementing WFWI: content, design and strategies for encouraging participation</i>	14
References	15

List of figures

Figure 1.	Respondents with an 'at-risk' Kessler score (13-24)	4
Figure 2.	Percentage of respondents with poor mental health indicators, by racial discrimination	12

List of tables

Table 1.	Description of WFWI	6
Table 2.	Regression analysis of BHW respondents	9
Table 3.	Regression analysis of AHW respondents	10

Abbreviations

WFWI	Workplace Financial Wellbeing Interventions
YIACS	Youth Information Advice and Counselling Services
OHA	Organisational Health Assessment
EHA	Employee Health Assessment
CIPD	Institute of Employment Studies and the Chartered Institute of Personnel and Development

Acknowledgements

We would like to thank Jessica Plumridge for her contributions to the design of this report and other outputs associated with this study.

In addition, Professor Kevin Daniels and Michael Whitmore for their roles in quality assurance.

Appendices (in separate document)

Appendix 1. Literature review methods

Box 1. Description of literature review methods

Table 1. Details of searches conducted

Table 2. REA inclusions and exclusion criteria

Appendix 2. BHW and AHW survey data

Box 2. Description of BHW and AHW analysis methods

Table 3. Further details of regression models and key findings

Table 4. Regression analysis of BHW survey respondents

Table 5. Regression analysis of AHW survey respondents

Table 6. Subgroup analysis, by age breakdown, BHW

Table 7. Sub-group regression analysis, by age breakdown, AHW

Table 8. Participation in financial wellbeing interventions coefficient, by sub-group regression analyses

Table 9. Additional findings from BHW & AHW: provision, employee awareness, and uptake of interventions

Appendix 3. Supporting data on targeting WFWI for particular groups of workers

Table 10. Table 10. WFWI Summary of findings from the literature on which groups are most likely to benefit from, or should be targeted for participation in WFWI

Table 11. Further details of recommendations to CEO's based on a review of the literature on workplace financial wellbeing, in terms of tailoring approaches to characteristics of young employees

Appendix 4. What should WFWI look like?

Table 12. Findings from the literature review on what WFWI should look like for young people

Appendix 5. Strengths and limitations of the study

Box 4. Strengths and limitations of the study

1 Executive summary

1.1. Background and rationale

Financial wellbeing is defined as the ability to meet current and ongoing financial obligations, feel secure in one's financial future, and make choices that allow enjoyment of life (CFPB 2017). The proportion of young workers globally with financial concerns is high, and the link between financial concerns and mental health is well known. Challenges young people face that cause poor financial wellbeing and associated mental health problems include credit card debt, less affordable housing, and lower earnings and savings than previous generations. This highlights the need for interventions to improve the financial wellbeing of young people. The workplace is an ideal setting for interventions to improve financial wellbeing, which may also positively impact mental health.

Workplace financial wellbeing interventions (WFWI) are a potentially promising approach to prevent and address mental health problems in young workers. There is, however, a lack of consolidated learning about their effectiveness on the mental health of this group of workers. In this report, we present the findings of a Rapid Evidence Assessment (REA), a review of wider literature, and analysis of Britain's Healthiest Workplace (BHW) and Asia's Healthiest Workplace (AHW) data.

1.2. Findings

Through our literature searches we identified no studies investigating the impact of WFWI on the mental health of young people; only two considering workers of all ages; and one of a financial wellbeing intervention specifically with young people, but not in the workplace. Findings from these studies suggest these interventions have a positive impact on mental health. However, it is important to acknowledge the small number of relevant studies identified, and that two had a risk of bias. The total sample for our analysis of survey data to explore the effectiveness of WFWI was 51,384 employees from 242 companies in BHW and 35,589 employees from 444 companies in AHW. Our analysis of BHW and AHW survey data showed that participation in WFWI is associated with better mental health.

Through our analysis of BHW and AHW data of employees who had participated in WFWI (n=2,259, 785 from BHW and 1474 from AHW; 168 of whom aged 18-24), we found that participation is associated more strongly with better mental health amongst certain sub-groups, although some of these findings do differ according to whether the UK or Asian sample is concerned. Across both BHW and AHW samples, a stronger association is found amongst 18-24-year olds and those with low incomes. In the UK sample this extends to workers who do not have a university degree,

are from an ethnic minority background, or believe there is discrimination in the workplace. This highlights the potential role of these interventions in addressing the mental health of young workers in these groups.

1.3. Conclusions and next steps

Our findings suggest that WFWI are a potentially promising approach, but overall, evidence of the effectiveness of WFWI on the mental health of young workers is lacking and there is a pressing need for further evidence. Employees should consider implementing WFWI, and we provide recommendations to support this process. These include focusing on topics and skills identified as important by young people and developing strategies to

enable access and encourage participation (particularly in those most likely to benefit). Furthermore, interventions should be tailored to the needs and characteristics of individuals and groups (e.g. based on gender and income) and targeted at those most in need.

For information about RAND Europe or this document please contact:

Dr Christian van Stolk
RAND Europe
Westbrook Centre
Milton Road
Cambridge
CB4 1YG
United Kingdom

Email: stolk@randeurope.org

2 Introduction and background

RAND Europe is a not-for profit independent research institute that aims to improve decision-making through objective research and analysis. Our research on workplaces has focused on creating an evidence base to improve health and wellbeing in the workplace. We do this through data driven approaches, literature reviews, and in-depth analyses of workplaces and interventions. This commission builds on that work, but also allows us to look at a salient yet underexplored issue, the financial wellbeing of young workers. The extent to which WFWI are effective in preventing or addressing anxiety and depression, particularly in young workers, is unclear. In this report we outline the likely and proven impact of WFWI on the mental health of young workers. The Consumer Financial Protection Bureau (CFPB) in the United States defines financial wellbeing as the ability to meet current and ongoing financial obligations, feel secure in one's financial future, and make choices that allow enjoyment of life (CFPB 2017). Financial wellbeing is widely agreed to consist of concepts that are both objective (e.g. debt) and subjective (e.g. financial worry and anxiety).

2.1. Poor financial wellbeing in young people is a pressing issue

Poor financial wellbeing is a pressing concern for the mental health of young people today

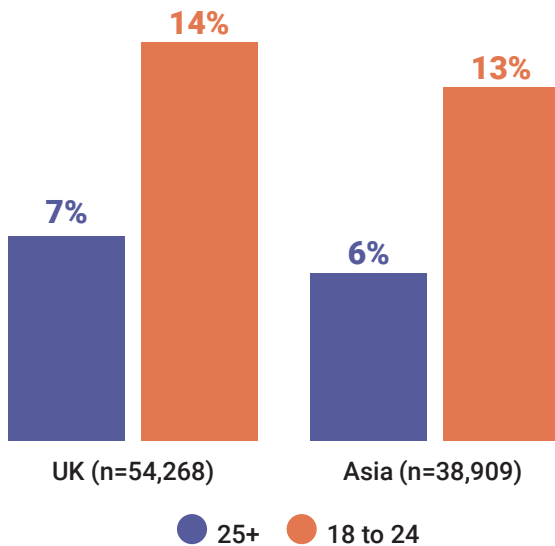
(Brüggen et al. 2017). The proportion of young workers globally with financial concerns is high (International Labour Organisation, 2020a; The London Institute of Banking & Finance 2019), particularly in comparison with older age groups (BITC 2019; Cebr 2018; Cox et al. 2009). This was supported by the data in the surveys we analysed for this study: Britain's Healthiest Workplace (BHW) and Asia's Healthiest Workplace (AHW) surveys. These were designed by a team at RAND Europe and the Institute of Public Health at the University of Cambridge. The surveys collect voluntary responses from employers and their employees through the Organisational Health Assessment (OHA) and the Employee Health Assessment (EHA) respectively. It surveys typically 600 large employers in Asia and the UK on an annual basis. The surveys collect information on financial wellbeing, mental health (Kessler-6) and participation in workplace interventions including financial wellbeing interventions.

These surveys show that 18-24-year olds in the workplace are approximately twice as likely as their older counterparts to have poorer mental health. This is indicated by an 'at-risk' Kessler score of between 13 and 24 (see Figure 1) in BHW and AHW survey data.¹ The Kessler scale (K6) is a widely used indicator of psychological distress. It measures psychological distress

1

For more information on BHW, see Van Stolk et al. (2019b), and for more information on AHW, see Van Stolk et al. (2019a).

Figure 1. Respondents with an 'at-risk' Kessler score (13-24)



related to anxiety and depressive symptoms over the last four weeks.²

Furthermore, young people are likely to be disproportionately affected psychologically and financially by Covid-19 (Béland et al. 2020; Blustein et al. 2020; International Labour Organisation 2020; Pieh et al. 2020). This highlights the need for efficient interventions to improve the financial wellbeing of young people. Challenges young people face that cause financial anxiety and worry include credit card debt, less affordable housing, and lower earnings and savings than previous generations (Brüggen et al. 2017; Cebir 2018; Shim et al. 2009).

2.2. Financial wellbeing and mental health are closely linked

The relationship between economic hardship and mental health is well established. For instance, poor financial wellbeing negatively

impacts psychological wellbeing, interpersonal relationships, and the transition into adulthood (e.g. through a negative correlation with health and academic progress) (Shim et al. 2009; Turunen & Hiilamo 2014). Research by the Institute of Employment Studies (IES) and the Chartered Institute of Personnel and Development (CIPD) highlights the link between poor financial wellbeing and employee anxiety, stress, and other indicators psychological wellbeing (Cox et al. 2017). In a study by Shim et al. (2009) where a conceptual model of financial wellbeing in adulthood is presented, a relationship was found between young adults' financial wellbeing and their psychological wellbeing and depression. This framework illustrates the relationship between positive financial knowledge, attitudes and behaviour (often targets of WFWI) and mental health in young people. This was supported by our analysis of BHW and AHW, which showed that financial concerns are associated with poor mental health, particularly in young people (see Appendix 2, Table 4 and 5 for further details).

2.3. The workplace is an ideal context for financial wellbeing interventions

The workplace is an ideal context for financial wellbeing interventions as conversations about finance already take place at work (e.g. around pay and pensions) and a large proportion of the population can be reached through this route. This is supported by a small number of available theoretical frameworks that note the potential influence of employers' policies and procedures on the financial wellbeing of young employees (Shim et al. 2009; Salignac et al. 2020). Shim et al. (2009) comment that there are many routes to the

² The Kessler score associated with each respondent ranges from 0 to 24, with a higher value representing worse mental health.

improvement of financial wellbeing in young people and that institutions within society (e.g. family, educational institutes and employers) play an important role in this. For example, through investing in financial education and the development of personal capacities for financial wellbeing.

Traditional WFWI have focused on educating older employees about pensions and encouraging enrolment on pension schemes. There has, however, been progression towards more comprehensive education and support suitable for younger age groups, often tailored to the individual needs of employees, including their age and stage in life (Hannon et al. 2017). Employees often use a selection of interventions in financial wellbeing programmes offered, and these usually include financial education (e.g. courses and workshops on financial literacy, or debt management), direct financial support (e.g. advances on pay), or benefits (e.g. money off goods and services). Table 1 provides a description of WFWI interventions.

The way in which these interventions are delivered can be innovative, such as the use of financial wellbeing gaming apps. These draw upon principles of interactive game-based learning, such as the use of feedback and rewards systems to engage users. They can be accessed on a number of devices and appeal to the ways in which the young workforce consumes information (Fordham 2016).







Studies have found that participation in financial education through workshops (on topics such as financial decision making and cash management) is associated with increased financial knowledge, positive behaviour change, and other indicators of financial wellbeing (e.g. self-reported feelings about one's financial situation, budgeting and retirement contributions) (Kim, 2008; Prawitz & Cohart 2014). Similarly, studies evaluating financial counselling and coaching (e.g.

one-to-one coaching) have shown a decrease in requests for loans and pay advances, and increased employee satisfaction with their financial situation (Theodos et al. 2015; Edmiston et al. 2009). Evaluations of WFWI are predominantly focused on more traditional financial education or coaching interventions, rather than other forms of support (Ashby 2010). A study on pay advances in the United States, however, reports a significant reduction in defaults in bill payments (Schneider & Koide 2010). Although the evidence base for the effectiveness of WFWI is positive overall, some studies have reported less favourably and identified methodological limitations. For example, a reliance on self-reported (rather than objective) measures and unrepresentative samples (e.g. data from a single company) (Hannon et al. 2017; Prawitz & Cohart 2014).

2.4. Methods and approach

- Our study consisted of a literature review and analysis of survey data. For the literature review:
- A REA was conducted to synthesise evidence on the effectiveness of WFWI on the mental health of workers. REA is a method that ensures a robust and comprehensive review of existing evidence, but some concessions are made to the breadth of the process (e.g. fewer databases searched). The REA included searching academic databases, Google Scholar and grey literature (Google searches and targeted searches of over 30 websites known to be relevant to this area). We did not limit the search by age, to allow for wider learning.
- We then widened our focus to explore theoretical and conceptual frameworks and interventions provided in non-employment settings, through wider literature searches using Google and Google Scholar searches.

Table 1. Description of WFWI

Intervention	Definition	Examples
 Financial education	Interventions that aim to improve financial literacy on topics such as retirement schemes, debt management, credit cards, and investments. Financial education may also include financial coaching, and access to resources and tools (e.g. day-to-day financial guidance). These can be provided in-house or outsourced and could be targeted on the specific needs of the employee.	These interventions can take the form of courses and workshops, video tutorial, webinars, self-study or more innovative interventions such as gaming apps. Financial coaching may include on-to-one support with a specialist or working towards financial goals over a period of time.
 Financial benefits	Schemes to support the financial situation of employees	These may include reduced prices and discounts for goods and services (e.g. gym membership, computers, season travel tickets, bicycle schemes) and employee-matched retirement schemes.
 Financial services	Employer-provided or outsourced services to support financial literacy and positive financial habits.	Such as personal financial risk assessments, or one-to-one financial counselling or support.
 Advances on pay/ affordable credit	Access to affordable credit/an advance on wages at no or low interest, to avoid the use of high-cost loans (e.g. overdraft borrowing or payday loans).	Smaller amounts may be interest free and the money repaid through payroll. Larger loans, however, may be managed by a third party.
 Automated saving schemes	Schemes that divert an employee's monthly outgoings to support saving.	For example, directing money for bills into a separate bank account after pay day, or auto-enrolment on pension schemes.
 Other interventions	<ul style="list-style-type: none"> • Rewards programmes • Hardship funds • Childcare programmes • Allocated time during work hours for employees to use online tools to plan their finances 	Employees may be rewarded for participating in financial wellbeing interventions, or for achieving their financial targets (e.g. saving). Hardship funds are similar to pay advances but may be a larger sum with no expected repayment. Childcare programmes aim to reduce financial stress of working parents and include flexible working and support with childcare expenses.

- As well as looking for direct evidence of effectiveness of interventions on mental health, throughout our literature searches we consolidated: key messages and recommendations for employers on which groups of young workers might benefit most; what these interventions should look like; and potential pitfalls and solutions in the design and implementation of interventions. Further details of the methods for the literature searches can be found in Appendix 1.

For the analysis of survey data, we carried out:

- Ordinary least square (OLS) regression analysis to see if participating workers of all ages and younger workers (18-24) have improved mental health using data from 2018 and 2019. The total sample for our analysis of survey data to explore the effectiveness of WFWI was 51,384 employees from 242 companies in BHW and 35,589 employees from 444 companies in AHW. Of these, 8,586

employees were aged 18-24: 4,600 from BHW and 3,986 from AHW.

- Sub-group regression analyses to compare older and younger workers, and to explore which groups of employees are most likely to benefit from participating in WFWI. Further details of the data analysis methods can be found in Appendix 2 (Box 2 and Table 3). For this, we analysed data from 2,259 participating employees, 168 of whom were aged 18-24.

The approach taken to the concept of mental health in our study was broad, including stress, disrupted sleep, and persistent low mood and/or worry. This approach aimed to capture individuals at risk of mental illness as well as those with existing anxiety and/or depression, regardless of whether a clinical diagnosis was present. This is because WFWI are focussed on the mild to moderate rather than severe mental illness and not all workers experiencing mental health problems are likely to have a diagnosis.

3 Evidence of the effectiveness of WFWI

3.1. Evidence of the effectiveness of WFWI

3.1.1. Evidence from the REA suggests that WFWI may address and improve the mental health of young workers

From our database searches, we screened 876 abstracts, read 70 full texts to check their eligibility and identified (and included) only two studies that investigated the effectiveness of WFWI on the mental health workers. These did not relate specifically to young workers. From our grey literature searches, no relevant articles were found.

The first of the two academic studies reported on an intervention called 'My Budget Day' by the employer AXA. Eight-thousand workers took-up the offer of an hour of work time per day to use online tools to plan and review their finances (Wolsey-Cooper 2009). Of those who completed a survey following the intervention (figure unclear), 37 percent reported feeling less worried about their finances at work. Similarly, the second study included in our review reported an improvement in workers' mental health following an intervention called 'Meredith Wellness', evaluated in 2010 (Drake et al 2019). The intervention involved four financial workshops on topics such as retirement planning and budgeting, as well as financial coaching and 'personalised learning', whereby algorithms identify an employee's financial risks and therefore the most

appropriate educational content. Reductions in cash flow stress and financial distress are reported, as well as improved relationships with family. There is a risk of bias in both articles through a conflict of interest in the companies evaluating the interventions. We therefore conclude that although existing studies are promising, there is a substantial lack of research and evaluation of WFWI with employees, using mental health outcomes.

3.1.2. Evidence from the wider literature, of financial wellbeing interventions in non-employment settings are sparse, but one study revealed positive impacts on the mental health of young people

Research on the impact of financial wellbeing interventions on the mental health of young people provided in non-employment settings is sparse. Only one study was identified, and further research is needed. This study was by the Youth Information Advice and Counselling Services (YIACS) (Egglestone et al. 2018). Holistic and tailored support and services called 'Money Matters' were provided, which aimed to improve the financial stability and capability of young people aged 16-24, who are often highly vulnerable. A Money Matters advisor worked with young people to develop their skills in budgeting, saving, spending behaviours, attitudes towards money and financial confidence. A large-scale evaluation of the programme was carried out using multiple

methods (e.g. qualitative interviews and cost effectiveness analysis). Post-intervention improvements were reported in both mental health, as measured by the Short Warwick and Edinburgh Mental Wellbeing Scale (SWEMWBS), and the perceived ability by respondents to cope with their mental health. The authors note the limitation of a lack of a counterfactual group.

3.1.3. Findings from the analysis of BHW and AHW support the use WFWI for the mental health of young workers

Some data suggest that participation in WFWI is associated with better mental health. Table 2 shows the OLS regression analysis looking at the relationship between WFWI participation and mental health, amongst the BHW survey responses.

Model one (1) uses the first outcome measure of the Kessler score and incorporates participants of all ages. According to this model (1), respondents who accessed WFWI scored 0.52 points lower on the Kessler score (lower scores mean better mental health) than respondents who did not participate in the

interventions. This effect almost doubles to -1.0 in model two (2) where the sample just comprises 18-24-year olds. According to model three (3), which looks at participants of all ages and uses the second outcome measure of a self-perceived binary indicator of mental health, there is no statistically significant relationship for individuals between participating in WFWI and their mental health. Model four (4), however, shows that young people who participate in WFWI are associated with a 5.9% lower likelihood of reporting 'poor' or 'very poor' mental health. Therefore, this evidence suggests that WFWI are effective for improving the mental health of all workers, but more clearly younger people.

Regression models (5)-(8) in Table 3 show the equivalent models based on the AHW data. Similar to the BHW data, participating in WFWI is associated with a lower Kessler score, especially for younger workers. WFWI are also associated with better mental health using the binary indicator, however the coefficient associated with 18-24-year olds is not statistically significant.

Table 2. Regression analysis of BHW respondents

VARIABLES	(1) Kessler	(2) Kessler 18-24 only	(3) Mental health (binary indicator)	(4) Mental health (binary indicator) 18-24 only
Financial wellbeing intervention	-0.52243*** (0.13102)	-0.99610** (0.39640)	-0.00960 (0.00809)	-0.05937** (0.02817)
Financial concerns	1.68830*** (0.04140)	1.59188*** (0.14398)	0.03875*** (0.00286)	0.03547*** (0.01039)
Sample size	51,384	4,600	51,384	4,600
R-squared	0.17700	0.20838	0.05523	0.11488

Robust standard errors in parentheses

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Note: Additional controls include: year, income, age, gender, education, marital status, ethnicity, health status and employment type. For the full model containing all coefficients, see Appendix 2 (Table 4).

Table 3. Regression analysis of AHW respondents

VARIABLES	(5) Kessler	(6) Kessler 18-24 only	(7) Mental health (binary indicator)	(8) Mental health (binary indicator) 18-24 only
Financial wellbeing intervention	-0.62267*** (0.13465)	-1.08829** (0.49356)	-0.00921* (0.00502)	-0.01619 (0.01973)
Financial concerns	1.72575*** (0.05313)	1.86818*** (0.18853)	0.02242*** (0.00200)	0.02569*** (0.00892)
Sample size	35,589	3,986	35,589	3,986
R-squared	0.18342	0.18607	0.04827	0.14008

Robust standard errors in parentheses

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Note: Additional controls include: country, year, income, age, gender, education, marital status, ethnicity, health status and employment type. For more information, see Appendix 2 (Table 6).

3.2. A strong case is made in the literature and data analysis for WFWI to be tailored to the characteristics and needs of young people in design and in encouraging participation

3.2.1. Insights from the wider literature suggest that a one-size-fits-all approach to WFWI for employees is not suitable

Across the literature reviewed, there was agreement that one-size-fits-all or generic approaches to WFWI for young employees are not appropriate (Bank Workers Charity n.d.; BITC 2019; Griffiths & Ghezelayagh 2018). Instead, interventions may be more effective if tailored (in design and in strategies to encourage participation) to the needs and characteristics of employees (Bank Workers Charity n.d.; BITC 2019). This is because research suggests that certain groups are in

greater need of financial wellbeing support than others (see Appendix 3, Table 10 and 11). The following groups are identified as having a greater need for support with their financial wellbeing: women; young workers; workers going through significant life changes; BAME workers; low income workers; those who are disabled; the long-term ill; young people who may have missed out on financial education as children; young carers; single parents; and those with a mortgage or who are renting (compared with out-right home owners). Employers should encourage participation in WFWI by these groups in particular and ensure that interventions address the aspects of financial wellbeing found to be lacking in these groups. Specific details of the recommendations can be found in Box 1.

Box 1. Further information on recommendations for employers: tailoring to the characteristics of young workers

- Gender should be considered, including what is known about how genders differ in terms of financial literacy, skills and risks can be used to design content and focus of interventions (Griffiths & Ghezelayagh 2018). For instance, building financial confidence is more likely to be a priority for women, and learning about avoiding and managing debt a priority for men (Griffiths & Ghezelayagh 2018). Furthermore, due to gender differences in help-seeking, young men may need encouragement to participate (BITC 2019).
- Interventions should be tailored to the age and life stage of employees. For instance, one provided by Nudge Global incorporates content relevant for significant life stages and changes such as purchasing a first house, paying off student debt, and having children (Bank Workers Charity n.d.; Calnan 2015).
- Interventions should be suitable for, and target vulnerable groups, such as lower earners or lower income households (e.g. single parent families, particularly young families) (Kempson et al. 2017).
- WFWI should target young workers in specific sectors. For instance, younger workers in lower skilled jobs or young apprentices who have been found to have lower financial wellbeing due to lower incomes (Dowling et al. 2008; NatWest n.d). In addition, young workers in professions such as social work and public services who have been found to have lower financial wellbeing than their counterparts in construction or financial services (NatWest n.d).

Although tailoring to socio-demographic characteristics is recommended, some stakeholders suggest that all employees should have access to WFWI (BITC 2019).

3.2.2. Results from BHW & AHW suggest that the impact on WFWI on mental health is greater amongst some groups of workers than others

When the Kessler score is used as the outcome, evidence from the sub-group analysis of BHW and AHW for participants of all ages suggests that WFWI have a stronger association with better mental health for groups in the UK and Asia who: are 18-24 years old; have a low income; and are male. In the UK sample, this also extends to respondents without a degree, as well as those from an

ethnic minority background and who believe there is discrimination in the workplace³.

Evidence from binary outcome regressions also suggest that accessing WFWI is more strongly associated with better mental health amongst those on a non-permanent employment contract. In the Asia sample, this also extends to those with a degree and to respondents who have a permanent employment contract. There is some contradictory evidence surrounding gender in the Asian sample compared to the British sample, with WFWI having a stronger association with better mental health for

3 However, statistical tests reveal that there is no statistical difference between the WFWI coefficients based on whether the respondent believes there is workplace discrimination or not.

women when the binary indicator of mental health is used as the dependent variable.

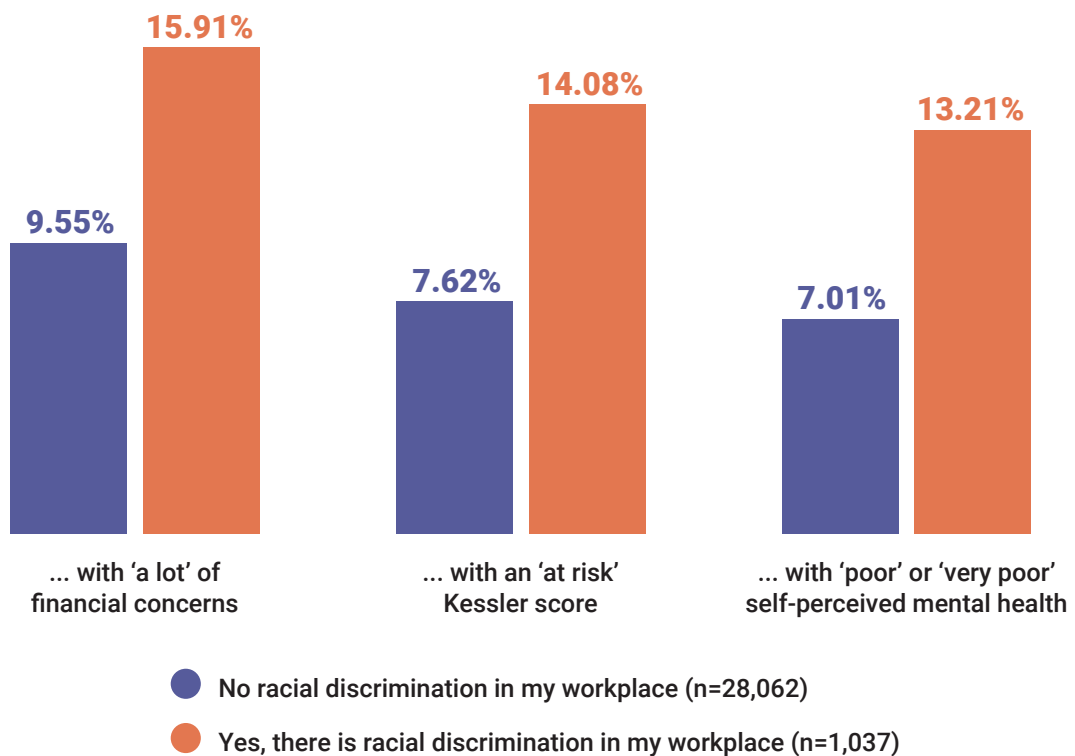
In the UK Kessler analysis, there are larger differences in coefficient magnitudes by age, income, ethnicity and discrimination (although this difference is not statistically significant), compared to other sub-groups. Similarly, in the Asia sample, there are larger differences by age and income, compared to other sub-groups.

There is limited statistical significance when the binary indicator of mental health is the dependent variable, as opposed to the Kessler score. This is understandable as the Kessler score sits on a scale ranging from 0 to 24, which picks up a much greater degree of sensitivity, especially amongst those who report better levels of mental health. The binary outcome, however, takes a value of 0 or 1, meaning it is far less sensitive. Due to the lack of statistical significance, sub-group analysis using the binary indicator as the dependent

variable does not provide any conclusive findings. For further details of the subgroup analyses, see Appendix 2 (Tables 6-8).

In addition, the 2018 UK survey asks a question about racial discrimination in the workplace. Insufficient sample size prevents us from analysing this question specifically in relation to financial wellbeing interventions. We can, however, see how it relates to other key mental health outcomes. Figure 2 shows that people who believe there is racial discrimination in their workplace are more likely to report 'a lot' of financial concerns, an 'at-risk' Kessler score and 'poor' or 'very poor' mental health. This suggests that this may be an appropriate group to target with financial wellbeing interventions. Yet, it also points to broader issues affecting the mental health of young workers. Other factors (in particular racial discrimination) should be considered and addressed.

Figure 2. Percentage of respondents with poor mental health indicators, by racial discrimination



4 Discussion and key messages for employers

4.1. WFWI are a promising approach for preventing and addressing mental health problems in young workers but there is a lack of evidence

The survey analysis of BHW and AHW data indicates that participation in financial wellbeing interventions is associated with better mental health. Participation is also more strongly associated with better mental health amongst certain sub-groups, although some of these findings do differ according to whether the UK or Asian sample is concerned. Across both samples, a stronger association is found amongst 18-24-year olds and low-income groups, highlighting the potential role of these interventions in addressing the mental health of this group of young workers. Similarly, findings from the literature review suggest that WFWI could have a positive impact on the mental health of workers. This was suggested by three studies that used mental health outcomes. We therefore think that employers should consider implementing WFWI for their young workers.

There are, however, some limitations to note. Overall, evidence of the effectiveness of WFWI on mental health is lacking, particularly for young workers, and there is a risk of bias in the articles reviewed. Furthermore, research on financial wellbeing interventions provided by schools, colleges, or universities using mental

health outcomes are also lacking, limiting the ability to draw inferences from this area of research. Regarding BHW and AHW, we did not collect data on the type of WFWI intervention participated in. Therefore, the analysis only indicates the potential effectiveness of WFWI generally, not any specific aspects or types of intervention. We can assume that these will have had an educational element, as this is common in WFWI. As discussed further below, we would recommend that employers consider a using a selection of different interventions to encourage participation. Further information on the strengths and limitations of this study can be found in Appendix 5 (Box 4).

4.2. Interventions may gain improved outcomes by delivering personalised and culturally appropriate approaches

The literature review and analysis of BHW and AHW data highlight a need for interventions to be personalised or tailored to the needs and characteristics of individuals and groups. For instance, cultural differences were also found in AHW and BHW data (e.g. whether men or women benefit most from WFWI), and some groups are more in need of support with financial wellbeing than others. These findings have been translated into recommendations for employers regarding the design and targeting of interventions (described in section 4.3).

4.3. Developing and implementing WFWI: content, design and strategies for encouraging participation

Our review and data analysis revealed some other key lessons for employers that, although not directly related to evidence of the effectiveness of WFWI on the mental health of young workers, hold relevance for any employers considering implementing these interventions. When deciding what to offer, we recommend that employers do the following:

Offer a range of WFWI

Think about offering a range of WFWI (e.g. education, direct support and benefits), with different modes of delivery (e.g. online resources or gaming apps), to increase the chances of engaging a large number of young workers.

Create educational content suitable for young workers

When thinking about the content of educational interventions for young workers, incorporate the financial topics and skills that have been identified as important by young people, which include:

- Developing good money habits, such as saving regularly and planning ahead (Griffiths & Ghezelayagh 2018)
- Gaining a deeper understanding of financial concepts and attitudes (Griffiths & Ghezelayagh 2018).
- Learning about basic financial literacy and gaining important skills, such as cash management, financial products (such as mortgages, loans and credit cards), tax, budgeting and debt (Dowling et al. 2008; The London Institute of Banking & Finance 2019)
- Key knowledge for living independently (Griffiths & Ghezelayagh 2018)

- A preference to focus on money management rather than debt (Dowling et al. 2008)

Increase awareness and tackle barriers to participation

Be aware of pitfalls and potential solutions to enable access and encourage participation:

- Despite young worker's generally positive attitudes towards financial wellbeing interventions, uptake is low, particularly in individuals who have the poorest financial wellbeing (e.g. individuals undergoing changes in life circumstances or with long-term health problems or disability) (BITC 2019). Furthermore, employees are often unaware that WFWI are offered by their organisations. For further information, see Appendix 2, Table 9).
- This may be helped by:
 - Tackling barriers to employee participation in these schemes and increasing accessibility (Dowling et al. 2008). For example, by offering time during work hours to develop skills, and tackling stigma around financial issues/ increasing social acceptability of financial help seeking, as well as confidence in financial professionals (Dowling et al. 2008; FCA 2017).
 - Increasing awareness of WFWI through better (and targeted) advertising and awareness raising in employees of the meaning of workplace financial wellbeing interventions (Aegon 2018; BITC 2019). 'Having a comprehensive and on-going communications plan, especially for those that work outside of the office, is critical' (BITC 2019).

Further information on these recommendations can be found in Appendix 3 (Table 11 and 12).

References

- Aegon. 2018. *Financial Wellbeing in the Workplace*. The Hague: Aegon. As of 17 November 2020:
<https://www.aegon.co.uk/content/dam/ukpaw/documents/financial-wellbeing-CEBR-condensed.pdf>
- Bank Workers Charity. n.d. *Employee Financial Wellbeing*. London: Bank Workers Charity. As of 17 November 2020:
<https://www.bwcharity.org.uk/time-to-do-more>.
- Béland, Louis-Philippe, Abel Brodeur & Taylor Wright. 2020. 'The Short-Term Economic Consequences of COVID-19: Exposure to Disease, Remote Work and Government Response'. *IZA Discussion Papers* 93. As of 17 November 2020:
<https://www.iza.org/publications/dp/13159/the-short-term-economic-consequences-of-covid-19-exposure-to-disease-remote-work-and-government-response>
- BITC. 2019. *Time to Take Ownership: Mental Health at Work 2019 Report*. London: Business in the Community (BITC). As of 17 November 2020:
<https://www.mentalhealthatwork.org.uk/resource/mental-health-at-work-2019-report-time-to-take-ownership/?read=more>
- Blustein, David L., Ryan Duffy, Joaquim A. Ferreira, Valerie Cohen-Scali, Rachel Gali Cinamon & Blake A. Allan. 2020. 'Unemployment in the Time of COVID-19: A Research Agenda.' *Journal of Vocational Behavior* 119 (June): 103436. doi:10.1016/j.jvb.2020.103436
- Brüggen, Elisabeth C., Jens Hogreve, Maria Holmlund, Sertan Kabadayi & Martin Löfgren. 2017. 'Financial Well-Being: A Conceptualization and Research Agenda.' *Journal of Business Research* 79 (October): 228–37. doi:10.1016/j.jbusres.2017.03.013.
- Calnan, Marianne. 2015. 'EXCLUSIVE: Getty Engages 73% of Staff with Financial Wellbeing.' employeebenefits.co.uk/ 12 November 2015, 12.27 p.m. GMT. As of 17 November 2020:
<https://employeebenefits.co.uk/issues/november-online-2015-2/exclusive-73-of-getty-images-staff-engage-with-financial-wellbeing/>
- Cebr. 2018. *Financial Wellbeing and Productivity: A Study into the Financial Wellbeing of UK Employees and Its Impact on Productivity*. London: Centre for Economics and Business Research. As of 17 November 2020:
<https://www.aegon.co.uk/content/dam/ukpaw/documents/financial-wellbeing-and-productivity.pdf>
- CFPB. 2017. *CFPB Financial Well-Being Scale: Scale Development and Technical Report*. Washington, DC: Consumer Financial Protection Bureau (CFPB). As of 17 November 2020:
<https://www.consumerfinance.gov/data-research/research-reports/financial-well-being-technical-report/>

- Cox, A., H. Hooker, C. Marwick & P. Reilly. 2009. *Financial Well-Being in the Workplace*. Institute for Employment Studies Report 464. Brighton: Institute for Employment Studies (IES).
- Cox, A., C. Richard, K. Spiegelhalter & D. Brown. 2017. *Employee Financial Well-Being: Why It's Important*. Brighton: Institute for Employment Studies (IES). As of November 17 2020: <https://www.employment-studies.co.uk/resource/employee-financial-well-being-why-its-important>
- Dowling, Nicki, Lauren Hoiles, Tim Corney & David Clark. 2008. 'Financial Management and Young Australian Workers.' *Youth Studies Australia* 27 (1): 26.
- Drake, D.S., Tim O'Neill & J.S. Hoffmire. 2019. 'Financial Wellness at Meredith Corporation.' *American Journal of Health Promotion* 33(1): 153-155. doi:10.1177/0890117118812822d
- Edmiston, Kelly D., Mary C. Gillett-Fisher & Molly McGrath. 2009. *Weighing the Effects of Financial Education in the Workplace*. Research Working Paper 9 (01). Kansas City: The Federal Reserve Bank of Kansas City Community Affairs Department. As of 17 November 2020: <https://www.kansascityfed.org/publicat/cap/carwp09-01.pdf>
- Egglestone, Corin, Jackie Woodhouse, Seana Friel, Connor Stevens & Ash Patel. 2018. *Money Matters: Financial Capability, Well-Being and Young*. London: Financial Capability. As of 17 November 2020: <https://www.fincap.org.uk/en/evaluations/money-matters-financial-capability-well-being-and-young-people>
- FCA. 2017. *Financial Well-Being in the Workplace: A Way Forward*. London: Financial Advice Working Group for HM Treasury & the Financial Conduct Authority. As of 17 November 2020: <https://www.fca.org.uk/publication/research/fawg-financial-well-being-workplace.pdf>
- Fordham, Louise. 2016. 'How Could Gamification Be Used to Support a Financial Education Strategy?' employeebenefits.co.uk/ January 18, 2016, 4.35 p.m. GMT. As of 17 November 2020: <https://employeebenefits.co.uk/issues/financial-education-supplement-2016-2/how-could-gamification-be-used-to-support-a-financial-education-strategy/>
- Griffiths, Ann & Shadi Ghezelayagh. 2018. *Children and Young People and Financial Capability: Needs Analysis*. London: Money Advice Service.
- Hannon, Geraldine, Meredith Covington, Mat Despard, Ellen Frank-Miller & Michal Grinstein-Weiss. 2017. *Employee Financial Wellness Programs: A Review of the Literature and Directions for Future Research*. CSD Working Papers 17-23. St. Louis: George Warren Brown School for Social Work.
- International Labor Organization. 2020a. *World Employment and Social Outlook - Trends, 2020*. Geneva: International Labor Organization (ILO). As of 17 November 2020: <https://www.ilo.org/global/research/global-reports/weso/2020/lang--en/index.htm>
- 2020b. *Young Workers Will Be Hit Hard by COVID-19's Economic Fallout*. Geneva: International Labor Organization (ILO). As of 17 November 2020: <https://iloblog.org/2020/04/15/young-workers-will-be-hit-hard-by-covid-19s-economic-fallout/>
- Kim, Jinhee. 2008. 'Workplace Financial Education.' In *Handbook of Consumer Finance Research*, edited by Jing Jian Xiao, 375–86. New York, NY: Springer. doi:10.1007/978-0-387-75734-6_23
- NatWest. n.d. *NatWest Financial Capability and Young Workers Report*. London: NatWest.

- Pieh, Christoph, Sanja Budimir & Thomas Probst. 2020. 'The Effect of Age, Gender, Income, Work, and Physical Activity on Mental Health during Coronavirus Disease (COVID-19) Lockdown in Austria.' *Journal of Psychosomatic Research* 136 (September): 110186. doi:10.1016/j.jpsychores.2020.110186
- Prawitz, Aimee D & Judith Cohart. 2014. 'Workplace Financial Education Facilitates Improvement in Personal Financial Behaviors.' *Journal of Financial Counseling and Planning* 25(1): 5-26.
- Salignac, Fanny, Myra Hamilton, Jack Noone, Axelle Marjolin & Kristy Muir. 2020. 'Conceptualizing Financial Wellbeing: An Ecological Life-Course Approach.' *Journal of Happiness Studies* 21 (5): 1581–1602. doi:10.1007/s10902-019-00145-3
- Schneider, Rachel & Melissa Koide. 2010. 'How Should We Serve the Short-Term Credit Needs of Low-Income Consumers?' finhealthnetwork.org/ March 8, 2010. As of 17 November 2020: <https://finhealthnetwork.org/research/how-should-we-serve-the-short-term-credit-needs-of-low-income-consumers/>
- Shim, Soyeon, Jing J. Xiao, Bonnie L. Barber & Angela C. Lyons. 2009. 'Pathways to Life Success: A Conceptual Model of Financial Well-Being for Young Adults.' *Journal of Applied Developmental Psychology* 30 (6): 708–23. doi:10.1016/j.appdev.2009.02.003.
- The London Institute of Banking & Finance. 2019. *Young Persons' Money Index 2019: Examining the Delivery of Financial Education in Schools and the Financial Capability of Young People in the UK*. London: The London Institute of Banking & Finance.
- Theodos, Brett, Margaret Simms, Mark Treskon, Christina Stacy, Rachel Brash, Dina Emam, Rebecca Daniels & Juan Collazos. 2015. *An Evaluation of the Impacts and Implementation Approaches of Financial Coaching Programs*. Urban Institute Research Report. Washington, DC: Consumer Financial Protection Bureau.
- Turunen, E. & H. Hiilamo. 2014. 'Health Effects of Indebtedness: A Systematic Review.' *BMC Public Health* 14 (1). doi:10.1186/1471-2458-14-489
- Van Stolk, Christian, Marco Hafner, Ben Baruch. 2019a. Asia's Healthiest Workplace. RAND Research Project. Santa Monica, Calif.: RAND Corporation. As of 17 November 2020: <https://www.rand.org/randeurope/research/projects/asia-s-healthiest-workplace.html>
- Van Stolk, Christian, Marco Hafner, Michael Whitmore, Ben Baruch. 2019a. Providing Support to the 'Britain's Healthiest Workplace' Competition. RAND Research Project. Santa Monica, Calif.: RAND Corporation. As of 17 November 2020: <https://www.rand.org/randeurope/research/projects/britains-healthiest-workplace.html>
- Wolsey-Cooper, S. 2009. 'AXA Focuses on Employee Financial Wellbeing.' *Strategic HR Review* 8 (4). doi.org/10.1108/shr.2009.37208dab.008

Appendices

Appendix 1. Literature review methods

Box 1. Description of literature review methods

Rapid evidence assessment (REA)

A REA was conducted to synthesise evidence on the effectiveness of WFWI on the mental health of workers. REA is a method that ensures a robust and comprehensive review of existing evidence. The principles of a systematic literature review are followed in line with good practice guides for systematic reviews (Centre for Reviews and Dissemination University of York 2008), but concessions are made to the breadth of the process by limiting some aspects (e.g. the databases searched). This approach is the most appropriate for a literature review such as this, in which literature is diverse (including grey literature) and in which the process requires iteration. As this is an under-researched area, and the focus of the brief commissioned by Wellcome Trust was to build inferences from wider literature, we did not limit the search to interventions with young people specifically.

Target and wider literature searches

To support the inference building process, targeted searches of websites about financial wellbeing and mental health were undertaken focusing on theoretical and conceptual frameworks (with a focus on young people) and interventions provided in non-employment settings. These were supported by wider literature searches. Across these searches, additional data was extracted and analysed that related to socio-demographic influences on risk of poor financial wellbeing, to help in the development of recommendations about which groups of young workers may benefit most from WFWI.

Table 1. Details of searches conducted

Focus of search	Platform used	Example of search Terms
Evidence of effectiveness of workplace financial wellbeing interventions on the MH of employees (Academic literature)	Databases: Web of Science, SCOPUS, PSYCInfo, Business Source Complete	<p>“Financial wellbeing” OR “financial well-being” OR “financial freedom” OR “financial insecurity” OR “financial independen*” OR “financial literacy” OR “financial capability” OR “financial difficult*” OR “financial strain” OR “financial management” OR “financial exclusion” OR “financial resilience” OR “financial anxiety” OR “financial wellness”</p> <p style="text-align: center;">AND</p> <p>Workplace OR employer* OR employee* OR occupation* OR “employee assistance program*” OR “employee assistance programme” OR “intervention” OR scheme OR counseling OR counselling OR plan</p> <p style="text-align: center;">AND</p> <p>Stress OR anxiety OR depression OR “mental health” OR “mental illness*” OR worry OR “low mood” OR concern OR distress</p> <ul style="list-style-type: none"> • Searches were amended for each database • Limitations were added: English language only, and articles published from 2008 – 2020
Evidence of effectiveness of workplace financial wellbeing interventions on the MH of employees (Grey literature)	Google Targeted website searches such as the CIPD, Mental Health at Work, and the Bank Workers Charity	("financial wellbeing" OR "financial well-being" OR "economic wellbeing" OR "financial insecurity") AND (work OR employment OR occupation) AND ("mental health" OR anxiety OR depression OR sleep OR mood).
Targeting young people specifically	Google	"financial wellbeing" intervention* "mental health" anxiety depression young people
Other institutions	Google	"financial wellbeing" intervention* "mental health" anxiety depression young people
Theoretical and conceptual frameworks	Background documents Google search	("financial* education" FOR "financial wellbeing" OR "financial wellness" OR "finance* programme") AND (adolescent* OR "emerging adult" OR "young person" OR "young people") AND (theor* OR concept* OR framework* OR model*)

Table 2. REA inclusion and exclusion criteria

Criteria	Inclusion criteria	Exclusion criteria
Publication date	Published 2008-2020	Published before 2008
Location	All countries	N/A
Language	English	Non-English
Study type	Peer-reviewed journal publications presenting empirical evidence, review papers, grey literature with clear authorship, book chapter, theses, conference proceedings.	Documents without clear organisational authorship, theoretical work, letters, editorials, comments or opinion pieces, book reviews.
Topic	<ul style="list-style-type: none"> • Interventions targeting financial wellbeing (i.e. worry about finances, perceived financial wellbeing, and debt) carried out in the workplace, but may be initiated externally (e.g. government or charity led); • Interventions aimed at preventing or addressing financial concerns and anxiety and/or depression through targeting financial wellbeing. 	<ul style="list-style-type: none"> • Workplace interventions targeting other types of outcomes (i.e. non-financial wellbeing related) • Impact of work or the workplace on health
Study participants	Humans	Animals and plants

Appendix 2. BHW and AHW survey data

Box 2. Description of BHW and AHW analysis methods

The OLS regression analysis conducted looked at the association between participation in WFWI and mental health. This provided a cross-sectional econometric analysis using 2018 and 2019 data to see if participating young workers (18-24-year olds) have improved mental health. We have investigated country context as part of the analysis (UK and selected Asian countries). We had two dependent variables representing mental health: i) the Kessler score, and ii) self-perceived binary indicator of mental health. All statistical analyses were conducted in STATA 16.

Dependent variables: The Kessler score associated with each respondent ranges from 0 to 24, with a higher value representing worse mental health. The Kessler scale (K6 used in this study) is a widely used indicator of psychological distress, and is calculated using the answers to the following six questions - *During the last 30 days, how often did you feel:*

- *nervous?*
- *hopeless?*
- *restless or fidgety?*
- *that everything was an effort?*
- *so depressed that nothing could cheer you up?*
- *worthless?*

Each answer is rated on a scale from none of the time (0) to all of the time (4), giving a total score range of 0 to 24. This will be the main indicator of mental health used throughout this study. Our alternative indicator of mental health is based on the question: *How is your mental health in general?* With the response options ranging from *very poor* through to *very good* on a five-level Likert scale. The variable was then recoded to take the value of 1 if the respondent perceives their mental health as being '*poor*' or '*very poor*' and 0 if perceiving their mental health as '*fair*', '*good*' or '*very good*'. Therefore, in both cases, a coefficient with a negative sign represents an association with more positive mental health, and a coefficient with a positive sign represents worse mental health. In the case of the binary outcome, as the variable takes a value of 0 or 1, the model transforms into a linear probability model. For interpretation, this means that the coefficients represent the marginal effects of the independent variables on an individual reporting '*poor*' or '*very poor*' mental health. In the case of the Kessler regression models, the coefficients represent the marginal effects of the independent variables on the Kessler score.

Controlling variables: The regression analyses control for basic socio-demographics (income, education, age, marital status, gender, ethnicity, health conditions and employment type), which allows us to examine the independent association between our explanatory variables and mental health, without the influence of these confounding effects. We also controlled for the year the data was collected in case of any year-specific effects, and in the case of the Asian dataset, we also control for country-specific effects.

As the data is linked by employer and employee, we also control for company fixed-effects and cluster the standard errors at the company level, to control for any shared company characteristics.

Table 3. Further details of regression models and key findings

Model	Description	Key findings
Models 1-4	<p>Regression model (1) shows the relationship between the explanatory variables and the Kessler score as the dependent variable. (2) shows the same model as (1) but for 18-24 year olds only. (3) shows the relationship between the explanatory variables and self-perceived binary indicator of mental health as the dependent variable. (4) shows the same model as (3) but for 18-24 year olds only.</p>	<ul style="list-style-type: none"> • Respondents who accessed financial wellbeing programmes offered by their employer are associated with a Kessler score 0.52 points lower. The coefficient magnitude almost doubles to -1.00 when the sample just comprises 18-24 year olds. According to (3), programme participation is associated with a 0.9% reduction in the likelihood of having ‘poor’ or ‘very poor’ mental health. However, this relationship is not statistically significant. (4) shows that young people who participate in financial wellbeing programmes are associated with a 5.9% lower likelihood of reporting ‘poor’ or ‘very poor’ mental health. • Across all four models, reporting financial concerns is associated with worse mental health (all at the 99% significance level). Interestingly, (2) and (4) both have lower magnitudes, meaning that financial concerns have a slightly weaker association with mental health for 18-24 year olds. • The models also show that having a higher income is associated with better mental health. This trend is true across all four models, with only the £40,000+ group being statistically insignificant in model (4). The coefficient magnitudes are larger in the 18-24 only models, indicating that income may have a more important association with mental health for younger people. • Gender also plays an interesting role. In models (2) and (4), being female is statistically significantly associated with poorer mental health. However, the sign switches in (3) and is statistically insignificant in (1), suggesting there may be differing effects of gender based on age. What is more conclusive, however, is that respondents who selected the gender option as ‘other’ (i.e., did not identify as male or female) are associated with worse mental health, representing by far the highest-magnitude coefficients in the model. They are also comparatively bigger for the 18-24 group, for instance those who identified as ‘other’ are 15% more likely to report ‘poor’ or ‘very poor’ mental health and this more than doubles to 34% amongst younger workers. Unfortunately, due to the small sample size, additional analysis cannot be undertaken on this sub-group. However, it likely represents a very vulnerable group of people who report poor mental health.

		<ul style="list-style-type: none"> • Having a degree is associated with better mental health, although it is statistically insignificant in (4). • Similarly, being married or in a relationship is associated with better mental health, statistically significant across all models. • Ethnicity shows some interesting relationships, with respondents of Asian ethnic background less likely to perceive their mental health as ‘poor’ or ‘very poor’, but more likely to have a higher Kessler score. However, amongst younger workers specifically, models (2) and (4) largely find statistically insignificant relationships. • Having an unhealthy BMI, not doing enough exercise, smoking and having a serious health condition are all associated with worse mental health, across all age groups, and with all coefficients statistically significant at the 99% confidence level. • Not having a permanent employment contract (for example fixed term, temporary, zero-hours, etc.) is associated with better mental health across all four models. This result is perhaps one of the more surprising ones, as you may expect non-permanent employment, a less secure form of employment, to create a sense of instability and uncertainty that may impact mental health in a negative way.
<p>Model 5-8</p>	<p>Models 5-8 show the equivalent models as 1-4, but based on the AHW data</p>	<ul style="list-style-type: none"> • As with the UK data, participating in financial wellbeing programmes is associated with a lower Kessler score. However, the effect on self-perceived mental health is small (-0.009) and for young workers it is statistically insignificant. • Respondents with financial concerns also have worse mental health. • There are some country specific effects that are statistically significant, with respondents from Sri Lanka noticeably reporting Kessler scores 2.36 points higher. Interestingly, Thai 18-24 year olds are 34% more likely to have ‘poor’ or ‘very poor’ mental health. • Having a low income is associated with a 0.556 higher Kessler score amongst 18-24 year olds, but conversely is associated with being less likely to have ‘poor’ or ‘very poor’ mental health amongst all ages.

		<ul style="list-style-type: none"> • Being female is associated with a higher Kessler score, especially for 18-24 year olds, but is insignificant in models (7) and (8). • Having a degree is associated with worse mental health in (7), however, it is insignificant across all other models. • Being married or in a relationship is associated with better mental health and this is consistent across all models. • There are also some statistically significant differences by ethnic backgrounds, with those of Chinese ethnicity generally reporting worse mental health. • Having an unhealthy BMI, serious health condition or smoking is all associated with poor mental health. • There is no statistically significant relationship between employment type and mental health.
--	--	--

Table 4. Regression analysis of BHW survey respondents

VARIABLES	(1) Kessler	(2) Kessler 18-24 only	(3) Mental health (binary indicator)	(4) Mental health (binary indicator) 18-24 only
Financial wellbeing programme	-0.52243*** (0.13102)	-0.99610** (0.39640)	-0.00960 (0.00809)	-0.05937** (0.02817)
Financial concerns	1.68830*** (0.04140)	1.59188*** (0.14398)	0.03875*** (0.00286)	0.03547*** (0.01039)
2019	0.19695** (0.08718)	0.32082 (0.21391)	0.01342*** (0.00463)	0.02495 (0.01704)
Income				
£20,000-£29,999	-0.61526*** (0.09844)	-0.84690*** (0.21154)	-0.03228*** (0.00524)	-0.04848*** (0.01535)
£30,000-£39,999	-0.93151*** (0.12010)	-1.60661*** (0.24741)	-0.04181*** (0.00606)	-0.07479*** (0.01835)
£40,000+	-1.11181*** (0.11056)	-1.29471*** (0.31018)	-0.04818*** (0.00648)	-0.04171 (0.02619)
Age	-0.08012*** (0.00237)	-0.02163 (0.05280)	-0.00186*** (0.00015)	-0.00004 (0.00413)
Gender				
Female	0.05425 (0.04122)	1.01302*** (0.14100)	-0.01572*** (0.00278)	0.03183*** (0.01150)
Other	2.73191*** (0.57935)	3.40584** (1.72714)	0.15495*** (0.04902)	0.33934** (0.14207)
Degree educated	-0.16792*** (0.04718)	-0.90776*** (0.16111)	-0.00645** (0.00255)	-0.01558 (0.01121)
Married / in a relationship	-0.76415*** (0.05230)	-0.39790*** (0.13907)	-0.04883*** (0.00413)	-0.03197*** (0.01103)
Ethnicity				
Asian	0.23308* (0.12204)	0.41782 (0.34085)	-0.02536*** (0.00612)	-0.02244 (0.02736)
Black	-0.82847*** (0.17200)	-0.72705 (0.53086)	-0.03251*** (0.00991)	-0.03379 (0.03199)
Mixed	0.41120*** (0.12362)	0.01941 (0.38717)	-0.00284 (0.00773)	-0.00491 (0.02464)
Other	0.40183 (0.26564)	-0.44862 (0.99848)	-0.00624 (0.01626)	-0.08597* (0.04633)
Health				
Unhealthy BMI	0.64211*** (0.04594)	0.82587*** (0.19227)	0.03037*** (0.00307)	0.05235*** (0.01714)
Lack of exercise	0.80875*** (0.04540)	1.13917*** (0.17980)	0.03177*** (0.00266)	0.05815*** (0.01148)
Smoker	0.57410*** (0.04957)	1.15565*** (0.16647)	0.02453*** (0.00345)	0.06806*** (0.01771)
Health conditions ¹	0.72056*** (0.03168)	0.55297*** (0.12628)	0.02835*** (0.00243)	0.04420*** (0.01342)

¹ Includes the following; Severe asthma or allergies, Heart condition, Kidney condition, Cancer, Diabetes, Hypertension, Epilepsy, Cerebral palsy, Spina bifida, Cystic fibrosis, Muscular dystrophy, Migraines, Arthritis or rheumatism, Multiple sclerosis, Paralysis.

Non-permanent employment	-0.22697*** (0.07852)	-0.31127* (0.17235)	-0.01210** (0.00525)	-0.02567* (0.01367)
Constant	8.31217*** (0.14038)	6.49886*** (1.14264)	0.18089*** (0.00908)	0.09236 (0.08699)
Observations	51,384	4,600	51,384	4,600
R-squared	0.17700	0.20838	0.05523	0.11488

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 5. Regression analysis of AHW survey respondents

VARIABLES	(5) Kessler	(6) Kessler 18-24	(7) Mental health (binary indicator)	(8) Mental health (binary indicator) 18-24
Financial wellbeing programme	-0.62267*** (0.13465)	-1.08829** (0.49356)	-0.00921* (0.00502)	-0.01619 (0.01973)
Financial concerns	1.72575*** (0.05313)	1.86818*** (0.18853)	0.02242*** (0.00200)	0.02569*** (0.00892)
2019	-0.38522* (0.22467)	-1.07867 (0.80258)	0.00441 (0.00808)	-0.00032 (0.04072)
Country				
Thailand	1.35767 (0.91945)	1.73132 (1.09173)	0.01489 (0.02331)	0.34154** (0.17254)
Sri Lanka	2.36300*** (0.40190)	2.93561* (1.49309)	-0.00517 (0.01509)	-0.00983 (0.07640)
Low income ²	0.10713 (0.07792)	0.55630*** (0.18265)	-0.01518*** (0.00323)	-0.01213 (0.01203)
Age	-0.09124*** (0.00454)	-0.00027 (0.06606)	-0.00164*** (0.00014)	-0.00246 (0.00322)
Gender				
Female	0.46232*** (0.06005)	0.93033*** (0.23522)	0.00055 (0.00246)	0.00712 (0.01079)
Other	-0.11334 (0.83398)	2.91251* (1.75803)	-0.04497*** (0.00728)	-0.00518 (0.02544)
Degree educated	0.03023 (0.07035)	0.19704 (0.26037)	0.00484** (0.00228)	-0.00148 (0.01092)
Married / in a relationship	-0.78037*** (0.05252)	-0.76446** (0.35406)	-0.01674*** (0.00263)	-0.01667 (0.01329)
Ethnicity				
Chinese	0.85629*** (0.09664)	0.50537** (0.24713)	0.01031*** (0.00367)	0.00373 (0.01686)
Indian	0.44990*** (0.13203)	0.13358 (0.46132)	0.01053* (0.00553)	-0.00517 (0.03148)
Bumiputera Sabah/Sarawak	-0.01307 (0.13589)	-0.51268 (0.74795)	0.01166 (0.00863)	0.06023 (0.03726)
Thai	-1.14258 (0.84057)	-1.05541 (0.79371)	0.00214 (0.02197)	-0.30108* (0.17052)
Sinhala	0.45381* (0.25648)	-0.35184 (0.68494)	0.00310 (0.01061)	-0.00035 (0.03525)
Health				
Unhealthy BMI	0.15083*** (0.05284)	0.33497** (0.15515)	0.01348*** (0.00262)	0.03214*** (0.00995)
Smoker	0.39571*** (0.06760)	0.67423** (0.27951)	0.01319*** (0.00347)	0.01857 (0.01738)
Health conditions	0.90693*** (0.05147)	1.10906*** (0.16714)	0.02599*** (0.00271)	0.05372*** (0.01152)
Non-permanent employment	0.06580 (0.05736)	-0.06926 (0.20606)	0.00028 (0.00237)	-0.00379 (0.00882)

² Monthly income of 20,000 Thai baht or below (Thailand), 40,000 Sri Lankan rupees or below (Sri Lanka), 2,999 Malaysian ringgit or below (Malaysia).

Constant	6.70119*** (0.26102)	4.27322** (1.65602)	0.06617*** (0.00880)	0.07863 (0.07953)
Observations	35,589	3,986	35,589	3,986
R-squared	0.18342	0.18607	0.04827	0.14008

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 6. Sub-group regression analysis, by age breakdown, BHW

		18-24			25+			all ages		
Sub-group		n	Kessler score	Mental health (binary)	n	Kessler score	Mental Health (binary)	n	Kessler score	Mental Health (binary)
Entire sample		73	-0.996**	-0.059**	712	-0.497***	-0.006	785	-0.522***	-0.010
Education	No degree	30	-0.549	-0.193***	204	-0.709 **	-0.009	234	-0.584*	-0.022
	Degree	43	-1.649 ***	-0.005	508	-0.418 **	-0.003	551	-0.499***	-0.003
Ethnicity	Non-white	15	-1.135	-0.092*	95	-0.820 *	0.010	110	-0.910**	-0.003
	White	58	-0.873*	-0.046	617	-0.477***	-0.008	675	-0.492***	-0.011
Income ³	Low income	43	-1.435 ***	-0.115***	148	-0.782 **	0.006	191	-0.802***	-0.015
	High income	18	-0.305	0.062	520	-0.390**	-0.007	538	-0.380**	-0.005
Employment contract	Permanent	59	-1.427***	-0.033	681	-0.469***	-0.006	740	-0.528***	-0.008
	Non-permanent	14	0.968	-0.163***	31	-1.253**	-0.011	45	-0.590	-0.053*
Gender	Female	42	-0.692	-0.087*	392	-0.471 **	0.003	434	-0.422**	-0.002
	Male	31	-1.692 **	-0.020	319	-0.594 ***	-0.018*	350	-0.672***	-0.019*
Workplace discrimination	Discrimination	7	-0.580	0.324	39	-1.156*	-0.058*	46	-1.108*	-0.030
	No discrimination	21	-1.558*	-0.139***	264	-0.298	0.006	285	-0.337*	0.000

³ Low income corresponds to those earning below £30,000, with high income concerning those earning £30,000 or more

Table 7. Sub-group regression analysis, by age breakdown, AHW

Sub-group		18-24			25+			all ages		
		n	Kessler score	Mental Health (binary)	n	Kessler score	Mental Health (binary)	n	Kessler score	Mental Health (binary)
Entire sample		95	-1.088**	-0.016	1379	-0.595***	-0.009*	1474	-0.623***	-0.009*
Education	No degree	40	0.000	0.009	553	-0.312	-0.004	593	-0.303*	-0.004
	Degree	55	-1.703**	-0.038	826	-0.684***	-0.010*	881	-0.740***	-0.012*
Income	Low income	72	-0.407	-0.005	255	-0.919***	-0.007	327	-0.832***	-0.008
	High income	21	-3.318***	-0.085	1067	-0.498***	-0.009	1088	-0.564***	-0.010
Employment contract	Permanent	47	-1.029	-0.062***	924	-0.639***	-0.010	971	-0.666***	-0.012*
	Non-permanent	48	-1.170*	0.012	455	-0.532***	-0.010	503	-0.574***	-0.007
Gender	Female	56	-0.567	-0.037**	809	-0.536***	-0.013**	865	-0.540***	-0.014***
	Male	39	-2.225***	-0.002	569	-0.674***	-0.004	608	-0.736***	-0.004

Table 8. Participation in financial wellbeing programmes coefficient, by sub-group regression analyses (** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$)⁴

Sub-group		UK			Asia		
		n	Kessler score	Mental Health (binary)	n	Kessler score	Mental Health (binary)
Age	18-24	73	-0.996**	-0.059**	95	-1.088**	-0.016
	25+	712	-0.497***	-0.006	1379	-0.595***	-0.009*
Education	No degree	234	-0.584*	-0.022	593	-0.303*	-0.004
	Degree	551	-0.499***	-0.003	881	-0.740***	-0.012*
Income	Low income	191	-0.802***	-0.015	327	-0.832***	-0.008
	High income	538	-0.380**	-0.005	1088	-0.564***	-0.010
Employment contract	Permanent	740	-0.528***	-0.008	971	-0.666***	-0.012*
	Non-permanent	45	-0.590	-0.053*	503	-0.574***	-0.007
Gender	Female	434	-0.422**	-0.002	865	-0.540***	-0.014***
	Male	350	-0.672***	-0.019*	608	-0.736***	-0.004
Workplace discrimination	Discrimination	46	-1.108*	-0.030	-	-	-

⁴ For the Kessler score, there is a statistically significant difference between the coefficients for the following sub-groups for BHW: education**, ethnicity*, income***, age**, gender** and for all sub-groups for AHW: age*, education**, income***, employment contract*** and gender***.

Table 9. Additional findings from BHW & AHW: provision, employee awareness, and update of programmes

Finding	Further details	Recommendation
Low provision of programmes	Based on our analyses of BHW and AHW surveys, over one third of young UK workers and over two thirds of young Asian workers do not have access to any financial wellbeing programmes.	Given that there is evidence to suggest financial wellbeing programmes are effective, more should be done to increase employer provision of these programmes amongst young people.
Low employee awareness of programmes	Within organisations that provide financial wellbeing programmes, employee awareness of these programmes is low. In the UK, less than 1 in 5 (19%) young workers who have access to programmes, are aware of them. In Asia, the awareness rate is even lower, at just 16% of young employees. These figures highlight the stark contrast between what is actually available to employees, and what employees are actually aware of in reality.	This could be improved by better (and targeted) advertising and awareness raising in employees of the meaning of workplace financial wellbeing interventions.
Low take-up of programmes	Only 1 in 10 young people in the UK who know they have access to financial wellbeing programmes, decide to use them. However, in the Asian sample, almost half (45%) of young workers take-up the service offering, representing a distinct difference between behaviour in the UK and Asian samples.	Better education of what financial wellbeing programmes actually offer, as well as making them easier to access.

Appendix 3. Supporting data on targeting WFWI for particular groups of workers

Table 10. WFWI Summary of findings from the literature on which groups are most likely to benefit from, or should be targeted for participation in WFWI

Factor	Findings
Gender	<ul style="list-style-type: none"> • Several sources report lower financial wellbeing in girls and women than boys and men (BITC, 2019; Cox et al., 2009; Kempson et al., 2017; PwC, n.d.) across numerous variables, including: engagement with financial education at school; knowledge of tax; self-teaching about finances (The London Institute of Banking & Finance, 2019); levels of financial literacy (Griffiths & Ghezelayagh, 2018); financial confidence (Griffiths & Ghezelayagh, 2018; NatWest, n.d) • Compared to men, women are more likely to report worries about money (Neyber, 2020; The London Institute of Banking & Finance, 2019), and have lower levels of perceived and objectively measured financial resilience, and to struggle to make ends meet (Kempson et al., 2017; PwC, n.d.)(BITC, 2019). • However, men have higher levels of debt (Griffiths & Ghezelayagh, 2018; Neyber, 2020) • There is little variation in the types of things young people would like to learn more about, based on gender (The London Institute of Banking & Finance, 2019). • There are gender differences in help seeking, whereby men are less likely to seek help on issues such as mental health problems or stress (BITC, 2019).
Age & life stage	<ul style="list-style-type: none"> • Financial needs and threats vary with life circumstances and with age. For instance, retirement/pension savings are a focus of older workers, whereby the struggles of young people are often to balance their finances on a daily basis (FCA, 2017). • Young parents are likely to have lower education and educational attainment and appear to perform worse in some areas of financial capability (Griffiths & Ghezelayagh, 2018) • Single parents are likely to be handling finances on their own, and single parents report feeling less comfortable with finances. In addition, having dependent children in the household can lead to lower wellbeing in part due to demands on disposable income (Kempson et al., 2017).
Ethnicity	<ul style="list-style-type: none"> • A survey suggests that BME children have poorer financial wellbeing than their white counterparts (Griffiths & Ghezelayagh, 2018). For instance, to be less likely to have access to financial products. • However, findings are mixed, and BME children performed better than other children in saving behaviours (Griffiths & Ghezelayagh, 2018). • Other differences based on ethnicity have been reported in the literature. For instance, lower average scores in financial knowledge have been reported in African Americans and Hispanics (Haisken-DeNew et al., 2019).

	<ul style="list-style-type: none"> • BME employees are more likely than white employees to feel underpaid (37% vs. 27%), or to feel “stuck in the role with no progression” (39% vs. 25%) (BITC, 2019).
Income	<ul style="list-style-type: none"> • Lower socioeconomic status, including lower-income, has been associated with poorer financial wellbeing, both in adults and young people (Cox et al., 2009). • Poorer financial capacity has found to be linked with having parents with no or low levels of qualifications, and growing up in a low-income (Griffiths & Ghezelayagh, 2018).
Disability or illness	<ul style="list-style-type: none"> • Having a longstanding illness or disability is associated with poorer financial capability (Cox et al., 2009; Griffiths & Ghezelayagh, 2018). • In addition, children of parents with a disability may also have specific financial education needs (Griffiths & Ghezelayagh, 2018). • Although not related to financial wellbeing specifically, “<i>Disabled employees are more likely to feel that their organisation does not do well in supporting employees, with close to 2 in 5 (38%) reporting this compared to a quarter (25%) of those without a disability</i>” (BITC, 2019)
Sexual orientation	<ul style="list-style-type: none"> • Sexuality “LGBT+ people are more likely than other employees to feel their organisation does not do well in supporting employees (35% compared to 27%), rising to 45% of lesbians and 38% of bisexuals.” (BITC, 2019)
Region of the UK	<ul style="list-style-type: none"> • Some regional differences in financial wellbeing have been reported. For example, students in London, Northern Ireland, the South East and the South West have been found to be most worried about their finances (The London Institute of Banking & Finance, 2019). In a different study, the economic north-south divide is partly reflected in the regional financial wellbeing score, with London showing the highest average score, Wales and the East Midlands scoring in the lowest (Cebr, 2018).
Education at school	<ul style="list-style-type: none"> • Some evidence suggests that educational attainment at school has an impact on financial capability later on (Griffiths & Ghezelayagh, 2018) • Cognitive skills in both literacy and numeracy, in particular maths ability, have been found to be linked to financial capability (Griffiths & Ghezelayagh, 2018) • Children who report that they have learned about managing money at school have better financial capability overall (Griffiths & Ghezelayagh, 2018)
Type of employment	<ul style="list-style-type: none"> • There is some evidence that type of employment (i.e. in terms of sector, skill level and working pattern) has an impact on financial wellbeing. For instance, that young workers in lower skilled jobs have lower financial wellbeing. In one study, the lowest levels of knowledge of financial literacy were found in unskilled workers, particularly those aged 18 to 24 (Dowling et al., 2008). Similarly, young apprentices, who may have lower incomes, are more likely to find it difficult to keep to a budget (NatWest, n.d). • One report identified that young workers in financial services or construction are more positive about their financial capability than those working in public services and social work (NatWest, n.d).

<p>Family life, and household</p>	<ul style="list-style-type: none"> • Children who have not received age-appropriate financial education (e.g. from parents, community or youth groups, formal education, or statutory services) may be at greater risk of poor outcomes later on (Griffiths & Ghezelayagh, 2018). • Young carers, who have additional challenges and are at risk of poorer financial outcomes may require targeted support (Griffiths & Ghezelayagh, 2018). Differences have been identified regarding the financial skills of carers and non-carers, that suggest the need for targeted support • Other characteristics and life context linked to children’s poorer financial capability include having a lone parent, low financial capability in parent(s), and family debt (AMP, 2018; Griffiths & Ghezelayagh, 2018). • Compared with outright homeowners, tenants and those with a mortgage have lower scores on wellbeing (Cox et al., 2009; Kempson et al., 2017)
-----------------------------------	--

Table 11. Further details of recommendations to CEO’s based on a review of the literature on workplace financial wellbeing, in terms of tailoring approaches to characteristics of young employees

Characteristic	Description
Employee characteristics	
Gender	<ul style="list-style-type: none"> • Gender should be considered when designing financial wellbeing interventions, as gender may influence financial capability needs. Interventions can therefore be tailored to what is known about how genders differ (Griffiths & Ghezelayagh, 2018). For instance, interventions for girls should include financial confidence building and men may be more likely to benefit from debt management or support (Griffiths & Ghezelayagh, 2018). • Due to gender differences in help-seeking, young men may need encouragement to participate.
Age & life stage	<ul style="list-style-type: none"> • Interventions should be tailored to the age and life stage of employees. For instance, a programme provided by Nudge Global considers significant life stages and changes such as purchasing a first house, paying off student debt, having children and retiring. (Bank Workers Charity, n.d.; Calnan, 2015).
Ethnicity	<ul style="list-style-type: none"> • Employees from BME backgrounds should be invited to participate in workplace wellbeing interventions. • Employers should ensure their procedures are not discriminatory against BME employees, in particular, those that affect pay fairness and opportunities for role progression (BITC, 2019).
Income	<ul style="list-style-type: none"> • Interventions should target vulnerable groups, such as lower earners or lower income households (e.g. single parent families).
Disability or long-term illness	<ul style="list-style-type: none"> • Financial wellbeing support should be tailored to the needs of employees based on longstanding illness or disability. • Employers should be aware of disabled employees’ experiences regarding discrimination in support received.
Sexual orientation	<ul style="list-style-type: none"> • Employers should be aware of employees from sexual minority groups’ experiences regarding discrimination in support received.
Region of the UK	<ul style="list-style-type: none"> • Employees in some regions may benefit more than others. However, this is likely to be due to other variables, such as income, or employment type.
Education at school	<ul style="list-style-type: none"> • Certain young people may benefit more than others, based on their access or attainment in financial or mathematical topics at school.
Type of employment	<ul style="list-style-type: none"> • Evidence suggests that it might be worth targeting financial wellbeing interventions at workers in specific sectors or types of employment (e.g. younger workers in lower skilled jobs), which would require determining appropriate content and method of delivery; however, further research is needed into the differences between sectors.

<p>Family life and household factors</p>	<ul style="list-style-type: none"> • When developing interventions for financial wellbeing, employers should consider the needs of employees based on specific characteristics, such as: whether they have had any access to financial education in the past; being a young carer; family composition (e.g. single or young parent(s)); and those with rent or mortgage repayments.
--	--

Appendix 4. What should WFWI look like?

Table 12. Findings from the literature review on what WFWI should look like for young people

	Description
Content/ focus	<ul style="list-style-type: none"> • Developing good money habits, like regular saving and planning ahead (Griffiths & Ghezelayagh, 2018) • Depth of understanding around financial concepts and attitudes (Griffiths & Ghezelayagh, 2018). • Covering basic financial literacy such as cash management; financial products (such as mortgages, loans and credit cards); tax; budgeting; and debt management (The London Institute of Banking & Finance, 2019) (Dowling et al., 2008; The London Institute of Banking & Finance, 2019) • Key knowledge for living independently (particularly aged 16–17) (Griffiths & Ghezelayagh, 2018) • A focus on money management rather than debt is preferred (Dowling et al., 2008)
When designing interventions	<ul style="list-style-type: none"> • Identify barriers hindering the translation of positive attitudes to good financial practice (Dowling et al., 2008) • Consider offering higher employer pension contributions and financial counselling services (Cebr, 2018)
Enabling access and participation	<ul style="list-style-type: none"> • Despite young worker’s generally positive attitudes towards financial wellbeing interventions, uptake is low and work is required to understand barriers to employee engagement and participation with these schemes, and to <i>“to increase young workers’ awareness of the potential benefits of seeking assistance when they are experiencing financial difficulties”</i> (Dowling et al., 2008). • Uptake appears to lowest in individuals who have the poorest financial wellbeing, including individuals with changing life circumstances (e.g. changes to work hours), and those with long-term health problems or disability (BITC, 2019). • These educational efforts should incorporate strategies for increasing the social acceptability of seeking assistance in regard to financial issues, and for fostering confidence in finance professionals (Dowling et al., 2008). • Efforts to reduce the stigma around discussing money in the workplace may help encouraging young people to accept support from employers (FCA, 2017). • Ensure employees are aware of what is on offer (Aegon, 2018; BITC, 2019). <i>“Having a comprehensive and on-going communications plan, especially for those that work outside of the office, is critical. Using multiple channels and methods achieve the highest levels of engagement.”</i> (BITC, 2019)

Appendix 5. Strengths and limitations of the study

Box 3. Strengths and limitations of the study

Our REA and literature review were thorough and structured, but a systematic review was not conducted, meaning there were some limitations in the methodology. For instance, only English language papers were reviewed. Our findings suggest that WFWI are a potentially promising approach, but findings are not conclusive due to a need for more direct evidence in the employment setting with young people.

The survey data used was collected across several countries across Asia and the UK, enabling us to explore cultural differences. However, it is worth noting some limitations of the data used in this analysis. Companies and employees self-select to participate in the survey, meaning the samples are not necessarily representative of their respective national profiles, raising questions about external validity and wider generalisability. That being said, previous survey sensitivity analyses have found no connection between company survey response rate and overall wellbeing levels (Hafner et al. 2020). Further, we control for company fixed effects to adjust for any factors that may be related to company self-selection into the survey. Our sample also under-represents some groups (for example certain ethnicities and certain income groups). However, by controlling for demographic effects such as age, gender, income and ethnicity groups in our regression analyses, we largely mitigate this issue. Further, other than knowing whether survey respondents participated in WFWI or not, we do not have much more information regarding the details of what each individual programme consists of. Thus, the analysis only indicates the potential effectiveness of the programmes generally, not any specific aspects or types of programmes. The small sample size of young workers who have participated in financial wellbeing programmes (preventive and interventive) means we are not able to track young workers over time. Finally, the analyses do not include pre-post differences in wellbeing after participating in a programme. However, the Youth Information and Counselling Services evaluation did, and reported improvements from baseline in participating young people (Egglestone et al. 2018).