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

Appendices

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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	"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"
		AND
		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
		AND
		Stress OR anxiety OR depression OR "mental health" OR "mental illness*" OR worry OR "low mood" OR concern OR distress
		• 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	- 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.	- 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	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.	• 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.

		• 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.
Model 5-8	Models 5-8 show the equivalent models as 1-4, but based on the AHW data	• 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.

		• 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***	-0.99610**	-0.00960	-0.05937**
	(0.13102)	(0.39640)	(0.00809)	(0.02817)
Financial concerns	1.68830***	1.59188***	0.03875***	0.03547***
	(0.04140)	(0.14398)	(0.00286)	(0.01039)
2019	0.19695**	0.32082	0.01342***	0.02495
	(0.08718)	(0.21391)	(0.00463)	(0.01704)
Income				
£20,000-£29,999	-0.61526***	-0.84690***	-0.03228***	-0.04848***
	(0.09844)	(0.21154)	(0.00524)	(0.01535)
£30,000-£39,999	-0.93151***	-1.60661***	-0.04181***	-0.07479***
	(0.12010)	(0.24741)	(0.00606)	(0.01835)
£40,000+	-1.11181***	-1.29471***	-0.04818***	-0.04171
	(0.11056)	(0.31018)	(0.00648)	(0.02619)
Age	-0.08012***	-0.02163	-0.00186***	-0.00004
	(0.00237)	(0.05280)	(0.00015)	(0.00413)
Gender				
Female	0.05425	1.01302***	-0.01572***	0.03183***
	(0.04122)	(0.14100)	(0.00278)	(0.01150)
Other	2.73191***	3.40584**	0.15495***	0.33934**
	(0.57935)	(1.72714)	(0.04902)	(0.14207)
Degree educated	-0.16792***	-0.90776***	-0.00645**	-0.01558
	(0.04718)	(0.16111)	(0.00255)	(0.01121)
Married / in a relationship	-0.76415***	-0.39790***	-0.04883***	-0.03197***
	(0.05230)	(0.13907)	(0.00413)	(0.01103)
Ethnicity				
Asian	0.23308*	0.41782	-0.02536***	-0.02244
	(0.12204)	(0.34085)	(0.00612)	(0.02736)
Black	-0.82847***	-0.72705	-0.03251***	-0.03379
	(0.17200)	(0.53086)	(0.00991)	(0.03199)
Mixed	0.41120***	0.01941	-0.00284	-0.00491
	(0.12362)	(0.38717)	(0.00773)	(0.02464)
Other	0.40183	-0.44862	-0.00624	-0.08597*
	(0.26564)	(0.99848)	(0.01626)	(0.04633)
Health				
Unhealthy BMI	0.64211***	0.82587***	0.03037***	0.05235***
	(0.04594)	(0.19227)	(0.00307)	(0.01714)
Lack of exercise	0.80875***	1.13917***	0.03177***	0.05815***
	(0.04540)	(0.17980)	(0.00266)	(0.01148)
Smoker	0.57410***	1.15565***	0.02453***	0.06806***
	(0.04957)	(0.16647)	(0.00345)	(0.01771)
Health conditions[1]	0.72056***	0.55297***	0.02835***	0.04420***
	(0.03168)	(0.12628)	(0.00243)	(0.01342)
Non-permanent employment	-0.22697***	-0.31127*	-0.01210**	-0.02567*

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[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.

	(0.07852)	(0.17235)	(0.00525)	(0.01367)
Constant	8.31217***	6.49886***	0.18089***	0.09236
	(0.14038)	(1.14264)	(0.00908)	(0.08699)
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

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

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[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***	4.27322**	0.06617***	0.07863
	(0.26102)	(1.65602)	(0.00880)	(0.07953)
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

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

Sub-group		n	18-24 Kessler score	18-24 Mental health (binary)	n	25+ Kessler score	25+ Mental Health (binary)	n	all ages Kessler score	all ages 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
Education	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
Ethnicity	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
Income[3]	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
Employment contract	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
Gender	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
Workplace discrimination	No discrimination	21	-1.558*	-0.139***	264	-0.298	0.006	285	-0.337*	0.000

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[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	-	-	-

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[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	• 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	• 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	• 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).

	• 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	• 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	• 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, "*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*" (BITC, 2019)
Sexual orientation	• 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	• 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	• 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	• 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).

Family life, and household	• 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	- Gender should be considered when designing financial wellbeing interventions, as gender is may influence financial capability needs. Interventions can therefore be taioiled 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	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	- 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	Interventions should target vulnerable groups, such as lower earners or lower income households (e.g. single parent families).
Disability or long-term illness	- 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	Employers should be aware of employees from sexual minority groups' experiences regarding discrimination in support received.
Region of the UK	Employees in some regions may benefit more than others. However, this is likely to be due to other variables, such income, or employment type.
Education at school	Certain young people may benefit more than others, based on their access or attainment in financial or mathematical topics at school.
Type of employment	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.

Family life and household factors	• 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	- 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	- 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	- 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 "*to increase young workers' awareness of the potential benefits of seeking assistance when they are experiencing financial difficulties*" (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). "*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*." (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).