## 2018 Health, Work & Retirement Survey Content Inventory

Question #	Content	# items	Origin & Reference (where applicable)			
HEALTH AND	HEALTH AND WELLBEING					
			Australia/New Zealand adaptation SF-12v2: Ware J, Kosinski M, Turner-Bowker D, Gandek B. How to Score Version 2 of the SF-12® Health Survey (With a Supplement Documenting Version 1). Lincoln, RI: Quality Metric Incorporated; 2002			
Q1, Q4-Q9	SF-12	12	Recommended scoring: Frieling MA, Davis WR, Chiang G. The SF-36v2 and SF- 12v2 health surveys in New Zealand: norms, scoring coefficients and cross- country comparisons. Australian and New Zealand Journal of Public Health.			
			2013;37(1):24-31.			
Q2	Life satisfaction	1	The WHOQoL Group. Development of the World Health Organization WHOQOL-BREF quality of life assessment. The WHOQOL Group. Psychol Med. 1998;28(3):551-558.			
Q3	WHO Quality of life	1	WHOWoL-8: kept single item "rate your quality of life"			
Q10	Purpose in life	6	Scheier MF, Wrosch C, Baum A, et al. The Life Engagement Test: assessing purpose in life. Journal of behavioral medicine. 2006;29(3):291-298.			
Q11	CES-D	10	Andresen, E. M., Malmgren, J. A., Carter, W. B., & Patrick, D. L. (1994). Screening for depression in well older adults: evaluation of a short form of the CES-D (Center for Epidemiologic Studies Depression Scale). Am J Prev Med, 10(2), 77-84			
Q12	GAI	5	Byrne GJ, Pachana NA. Development and validation of a short form of the Geriatric Anxiety Inventorythe GAI-SF. Int Psychogeriatr. 2011 Feb;23(1):125-31. doi: 10.1017/S1041610210001237. Epub 2010 Jun 18. PMID: 20561386.			
Q13	CASP-12	12	Wiggins RD, Netuveli G, Hyde M, Higgs P, Blane D. The Evaluation of a Self- enumerated Scale of Quality of Life (CASP-19) in the Context of Research on Ageing: A Combination of Exploratory and Confirmatory			

			Approaches. Social Indicators Research. 2008;89(1):61-77.
Q14	Physical activity	3	Items from ELSA
Q15-16	Health service use	5	Items from Medical Expenditure Panel Survey
Q17	Chronic conditions	15	Health and Ageing Research Team
Q18-Q19	Vision and hearing impairment	2	Vision questions are drawn from the NZ Disability Survey.
Q20-21	Falls	2	Lamb SE, Jørstad-Stein EC, Hauer K, Becker C; Prevention of Falls Network Europe and Outcomes Consensus Group. Development of a common outcome data set for fall injury prevention trials: the Prevention of Falls Network Europe consensus. <i>J Am Geriatr Soc.</i> 2005;53(9):1618-1622. doi:10.1111/j.1532-5415.2005.53455.x
Q22	Sleep	1	Rosie Gibson
Q23	Driving	1	Taylor, J.E., Alpass, F., Stephens, C., & Towers, A. (2011). Driving anxiety and fear in young older adults in New Zealand. Age and Ageing, 40, 62-66. doi:10.1093/ageing/afq154
Q24	Smoking	2	
Q25	Alcohol use	4	AUDIT-C
WHĀNAU, FA	AMILY AND FRIENDS		
Q26	Childcare	2	Australian Longitudinal Study on Women's Health (ALSWH)
Q27-Q29	Volunteering	8	Dr Patrick Dulin - Volunteer frequency: HWR Team
Q30	Social participation	7	
Q31	Loneliness	6	Gierveld, J. D. J., & Tilburg, T. V. (2006). A 6-Item Scale for Overall, Emotional, and Social Loneliness: Confirmatory Tests on Survey Data. Research on Aging, 28(5), 582-598. doi: 10.1177/0164027506289723

Q32	Social Provisions Scale	24	Cutrona, C. E., & Russell, D. W. (1987). The provisions of social relationships and adaptation to stress.  Advances in personal relationships, 1(1), 37-67.
CAREGIVING			
Q33-Q34	Caregiving commitments	2	Australian Women's Longitudinal Study on Women's Health (ALSWH)
Q35-Q42	Key care recipient details and care duration	9	Australian Women's Longitudinal Study on Women's Health (ALSWH)
Q43-Q44	Care in crisis	4	HWR/NZLSA
Q45-Q46			LaPlante MP. The classic measure of disability in activities of daily living is biased by age but an expanded IADL/ADL measure is not. The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences. 2010;65:720–732. doi:10.1093/geronb/gbp129
	Care type+care help	19+10	Spector WD, Fleishman JA. Combining activities of daily living with instrumental activities of daily living to measure functional disability. The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences. 1998;53:46–57. doi:10.1093/geronb/53B.1.S46.
			McKenzie, S., Tooth, L., Lucke, J., & Dobson, A. (2009). Caring and use of services in women born between 1946 and 1951: Findings from the Australian Longitudinal Study on Women's Health: Detailed report for the Australian Government Department of Health and Ageing Carers Project, Stage 2, Phase 1.
Q47-Q49	Care and work	18	Davey and Keeling, Working Carers Report, 2004, Alpass and Keeling
Q50-Q52	Care relationship + overall	2	Women's Health Australia (caring for your health pilot study) 2007
WHERE YOU	LIVE		
Q53-Q55	Current housing type and tenure	3	Heywood F Oldman C Means R (2002)

Q56	Moving plans	1	Heywood F Oldman C Means R (2002)
Q57-Q60	Housing satisfaction	19	Heywood F Oldman C Means R (2002)
Q61	Neighbourhoo d trust	6	Stafford et al 2003
WORK AND	RETIREMENT		
Q62	Retirement age	1	
Q63	Hours paid employment	1	HWR/NZLSA
Q64	Entrepreneurs hip	3	
Q65-66	Preferred and current work	2	Grant Scobie, New Zealand Treasury
Q67	Job Search strategy	16	Crossley, C. D., & Highhouse, S. (2005). Relation of job search and choice process with subsequent satisfaction. Journal of Economic Psychology, 26(2), 255-268, doi:https://doi.org/10.1016/j.joep.2004.04.001.
Q68-Q69	Occupation and duration of employment	3	Australian Bureau of Statistics & Statistics New Zealand. (2006). Australian and New Zealand Standard Classification of Occupations: First Edition. ABS cat. no. 1220.0.

Q70a	Job satisfaction	1	from Brayfield et al., 1951
Q70b	Work involvement	1	Work Involvement Index: Kanungo, R. N. (1982). Measurement of job and work involvement. Journal of Applied Psychology, 67, 341-349.
Q70c	Job demands/decis ion latitude	1	J.H. Greenhaus, S. Parasuraman, W.M. Wormley. Effects of race on organizational experiences, job performance evaluations, and career outcomes. Academy of Management Journal, 33 (1990), pp. 64-86
Q70d	Job stress index	1	HWR
Q70e	Work/family conflict	1	Kopelman, R. E., Greenhaus, J. H., & Connolly, T. F. (1983). A model of work, Family, and interrole conflict: A construct validation study. Organizational Behavior and Human Performance, 32, 198-215.
Q71-79	Work Ability Index (without chronic illnesses)	9	Schouten, L. S., Bültmann, U., Heymans, M. W., Joling, C. I., Twisk, J. W. R., & Roelen, C. A. M. (2016).  Shortened version of the work ability index to identify workers at risk of long-term sickness absence.  European Journal of Public Health, 26(2), 301-305, doi:10.1093/eurpub/ckv198.
			Andreas, L., Ola, L., Marjan, V., Mats, H., & Margareta, T. (2017). Predictive validity of the Work Ability Index and its individual items in the general population. Scandinavian Journal of Public Health, 45(4), 350-356, doi:10.1177/1403494817702759.

Q82	Nordic Age Discrimination Scale (NADS)	6	Furunes, T., & Mykletun, R. J. (2010). Age discrimination in the workplace: Validation of the Nordic Age Discrimination Scale (NADS). <i>Scandinavian Journal of Psychology, 51</i> (1), 23-30, doi:10.1111/j.1467-9450.2009.00738.x.
			Garstka, T. A., Schmitt, M. T., Branscombe, N. R., & Hummert, M. L. (2004). How Young and Older Adults Differ in Their Responses to Perceived Age Discrimination. <i>Psychology and Aging, 19</i> (2), 326-335, doi:10.1037/0882-7974.19.2.326.
Q81	Age group identity	5	Macdonald, J. L., & Levy, S. R. (2016). Ageism in the Workplace: The Role of Psychosocial Factors in Predicting Job Satisfaction, Commitment, and Engagement. <i>Journal of Social Issues, 72</i> (1), 169-190, doi:10.1111/josi.12161.
			Roberson, L., Deitch, E. A., Brief, A. P., & Block, C. J. (2003). Stereotype threat and feedback seeking in the workplace. Journal of Vocational Behavior, 62(1), 176-188, doi:https://doi.org/10.1016/S0001-8791(02)00056-8
Q80	Stereotype threat	5	Kulik, C. T., Perera, S., & Cregan, C. (2016). Engage Me: The Mature-Age Worker and Stereotype Threat. <i>Academy of Management Journal, 59</i> (6), 2132-2156, doi:10.5465/amj.2015.0564.

Q83	Flexible Work Arrangements	20	Rudolph, C. W., & Baltes, B. B. (2017). Age and health jointly moderate the influence of flexible work arrangements on work engagement: Evidence from two empirical studies. <i>J Occup Health Psychol, 22</i> (1), 40-58, doi:10.1037/a0040147.
			Pitt-Catsouphes, M., & Smyer, M. (2013). Age and generations study, 2007–2008. Retrieved from: http://www.icpsr.umich.edu/icpsrweb/ICPSR/studies/3 4837
Q84	Perceived adequacy of available flexible work arrangements	1	Health and Ageing Research Team
Q85	Work Related Stress (Effort- Rewards Imbalance Scale)	16	Siegrist, J., Starke, D., Chandola, T., Godin, I., Marmot, M., Niedhammer, I., et al. (2004). The measurement of effort-reward imbalance at work: European comparisons. <i>Soc Sci Med</i> , <i>58</i> (8), 1483-1499, doi:10.1016/s0277-9536(03)00351-4.
Q86	Organisational Commitment	20	Jaros, S. (2007). Meyer and Allen model of organizational commitment: Measurement issues. <i>The Icfai Journal of Organizational Behavior, 6</i> (4), 7-25.
Q87	Utrecht Work Engagement Scale (UWES-9)	9	Seppälä, P., Mauno, S., Feldt, T., Hakanen, J., Kinnunen, U., Schaufeli, W., et al. (2009). The Construct Validity of the Utrecht Work Engagement Scale: Multisample and Longitudinal Evidence. <i>Journal of Happiness Studies</i> , 10(4), 459-481, doi:10.1007/s10902-008-9100-y.

Q88	Meaningfulnes s of Work	6	May, D. R., Gilson, R. L., & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. <i>Journal of Occupational and Organizational Psychology</i> , 77(1), 11-37, doi:10.1348/096317904322915892.
Q89	Availability of Training	3	Adapted from Taylor, P., & Urwin, P. (2002). Age and Participation in Vocational Education and Training. Work, Employment and Society, 15(4), 763-779, doi:10.1017/S0950017001007632.
Q90	Training Perceptions	12	Bulut, C., & Culha, O. (2010). The effects of organizational training on organizational commitment. <i>International Journal of Training and Development,</i> 14(4), 309-322, doi:10.1111/j.1468-2419.2010.00360.x.
Q91-Q92	Quit intention	2	Fabi, B., Lacoursière, R., & Raymond, L. (2015). Impact of high-performance work systems on job satisfaction, organizational commitment, and intention to quit in Canadian organizations. <i>International Journal of Manpower</i> , <i>36</i> (5), 772–790.  https://doi.org/10.1108/IJM-01-2014-0005
Q93-Q94	Retirement intentions	2+1	Adams, G. A., & Beehr, T. A. (1998). Turnover and retirement: a comparison of their similarities and differences. <i>Personnel Psychology, 51</i> (3), 643-665, doi:10.1111/j.1744-6570.1998.tb00255.x.

Personal and household income, superannuatio n, and number of dependants	4	NZ Census
ELSI-SF	25	Economic Living Standards Index Short Form (ELSI Short Form): Jensen, J., Spittal, M., & Vasantha Krishnan. (2005). ELSI Short Form: User manual for a direct measure of living standards. Retrieved from http://www.msd.govt.nz/about-msd-and-our-work/publications-resources/monitoring/living-standards/elsi-short-form.html
LS-CAPE + dentistry item	6+1	Breheny, M., Stephens, C., Henricksen, A., Stevenson, B., Carter, K., & Alpass, F. (2014). Measuring living standards of older people using Sen's Capability Approach: development and validation of the LSCAPE-24 (Living Standards Capabilities for Elders) and LSCAPE-6. <i>Ageing and Society, 36</i> (2), 307-332, doi:10.1017/S0144686X14001160.
NAL SITUATION		
Gender, sexuality, DOB, marital status, education	5	NZ Census
Household composition	1	NZ Census
Ethnicity?	2	NZ Census
Where were you born?	2	
JRAL IDENTITY		
Maori identification	2	Te Hoe Nuku Roa Study
Whānau engagement	1	Te Hoe Nuku Roa Study
	household income, superannuatio n, and number of dependants  ELSI-SF  LS-CAPE + dentistry item  NAL SITUATION  Gender, sexuality, DOB, marital status, education  Household composition  Ethnicity?  Where were you born?  JRAL IDENTITY  Maori identification  Whānau	household income, superannuatio n, and number of dependants  ELSI-SF 25  LS-CAPE + dentistry item 6+1  MAL SITUATION  Gender, sexuality, DOB, marital status, education  Household composition 1  Ethnicity? 2  Where were you born? 2  JRAL IDENTITY  Maori identification 2  Whānau 1

Q117	Financial interest in Māori land	1	Te Hoe Nuku Roa Study
Q118	Māori contacts	1	Te Hoe Nuku Roa Study
Q119a/b	lwi affiliation	2	Te Hoe Nuku Roa Study
Q120	Māori language	1	Te Hoe Nuku Roa Study