

Properties of measurement scales: comparison of 0-10 scales in different surveys

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Abstract:

This paper examines the distribution of individual response patterns in (mostly 0-10) scales used to measure satisfaction with "life as a whole" and with selected life-domains, "happiness" and other questions linked to Social Well Being (SWB). It specifically examines variables from the [Unrestricted Access Teaching Data Set](#)¹ prepared by the [Cathie Marsh Institute for Social Research](#) and distributed by the [UK Data Service](#) (UKDS, Essex University).

Data sources used are:

SSRC Quality of Life in Britain (1971-1975)

ONS Well-being survey, Unrestricted Access Teaching Data Set (April 2011)

ONS Well-being survey (merged data set April – August 2011)

British Social Attitudes (2008 and 2013)

European Social Survey (Wave 6, 2012)

When presented with show-cards and asked to indicate their level of satisfaction on (mainly 0-10) rating scales, individual respondents differ widely in the number, centring and spread of points used. This presents problems for comparing individuals or groups, and when searching for underlying structure, but little or no attention is paid to this problem in published work, especially in the fields of economics and psychology.

¹ The Unrestricted Access Teaching Data Set is based on the April 2011 wave of the [ONS Opinions Survey, Well-Being Module, April - August 2011](#) which in turn is part of the regular UK government [Opinions and Lifestyle Survey](#), run in various guises since 1990.

Quality of Life in Britain

The Social Science Research Council (SSRC) [Survey Unit](#) was set up in 1970 to provide advice and assistance to academics and others doing surveys on public funds, to develop survey methodology and to do research for Council. It also had an internally funded research programme to develop survey-based [subjective social indicators](#), in collaboration with colleagues in the USA² (Survey Research Center, University of Michigan, Ann Arbor). The research involved first, the design and use of rating scales to measure satisfaction with life as a whole and with selected life domains, second to test various measures of personal well-being and psychological traits.

In consultation with colleagues [Angus Campbell](#) (Director, Survey Research Center, ISR, Ann Arbor), [Norman Bradburn](#) (NORC) and [Aubrey McKennell](#) (Southampton) we also used summary measures of potential psychological intervening variables such as anxiety, trust in others, anomie. We replicated short scales from ISR to measure **Personal efficacy** and **Trust in others**, Bradburn's **Affect Balance Scale**, and (in 1971 and 1973) Srole-Christie **Anomy**.

In designing the questionnaires, in order to offer some "anchoring" for the subjective measures, we also included "objective" or "experiential" data for each domain, even if this was self-reported. This helped to test/demonstrate the validity of the approach. After all, what's the point of asking about satisfaction with the National Health Service if respondents (or their close family and friends) have little or no (recent) experience of it, or about satisfaction with personal health if you don't ask questions about current or recent (ill-) health conditions and/or episodes?

Reports and working papers from this work can be seen on [SSRC Survey Unit Quality of Life in Britain surveys 1971 - 1975](#). For accessible accounts of the planning and main findings see Hall 1973³ and Hall 1976⁴. Many other surveys "borrowed" our questions and scales (some uncritically and without acknowledgment) and used them without any such anchoring.

It is evident from the Quality of Life (QoL) in Britain⁵ surveys that, measured on 0 – 10 scales, distributions of self-reported satisfaction with life, and with various life-domains, are often quite "lumpy", being bi- or even tri-modal, indicating widely differing use of the show-cards by individual respondents, both in the range and number of points used.

In 1974 I gave a paper⁶ to the ISA conference in Toronto: during the discussion afterwards I cynically suggested that mean life-satisfaction on a 0 – 10 scale was a constant rather than a variable and that it would always be 7.6 or thereabouts: consequently governments and policy makers would always use this as an excuse not to improve things. [Alex Michalos](#) (Editor of [Social Indicators Research](#)) agreed.

Weighting the domain satisfactions by importance ratings made little if any difference to regression models either within or between domains. Aubrey McKennell said this indicated that the original satisfaction ratings could be used raw and that the perceived importance ratings added little or no

² Survey Research Center, University of Michigan, Ann Arbor.

See: Campbell, Converse and Rodgers, [The Quality of American Life: Perceptions, Evaluations and Satisfactions](#) (Russell Sage Foundation, 1976)

³ Hall J F [Measuring the Quality of Life Using Sample Surveys](#) in Stober G and Schumacher D (Eds) **Technology Assessment and Quality of Life** (Elsevier, 1973)

⁴ Hall J F [Subjective measures of quality of life in Britain 1971 to 1975: Some developments and trends](#) (specially commissioned paper: reprinted from Thompson E [Ed], **Social Trends 7** (HMSO, 1976)

⁵ [SSRC Survey Unit Quality of Life in Britain surveys 1971 - 1975](#) is a website page containing detailed information (abstracts, variables, fieldwork, sampling, facsimile questionnaires, user-manuals, data sets, publications) on all "Quality of Life in Britain" surveys conducted between 1971 and 1975 by [Mark Abrams](#) and [John Hall](#) at the [Survey Unit](#) of the then Social Science Research Council (now the Economic and Social Research Council)..

⁶ Hall J F and Ring A J [Indicators of Environmental Quality and Life-Satisfaction: a subjective approach](#). Invited paper to Research Cttee 26 (Social Ecology) International Sociological Association 8th World Congress of Sociology, Toronto, August, 1974

accuracy and were therefore not necessary when accounting for overall satisfaction with domains or with life as a whole.

I did once try some analysis taking into account the number, centrality and range of points used by individual respondents. In January 1976 I gave a graduate seminar at ISR Michigan on the SSRC/SU QoL research and gave details of what I called “ipsatised” scores: [Frank Andrews](#) thought the approach very interesting, but I had no time to pursue the idea as SSRC had decided to close the Survey Unit in September 1976, making all staff redundant. I was therefore looking for another job. When I found one in May 1976⁷ (to design and head up a new undergraduate degree in social research) I was busy working with the planning team as well as preparing data sets and documentation for all our surveys (for deposit with the then SSRC Survey Archive at Essex University) before the Survey Unit finally closed.

When the [British Social Attitudes Survey](#) (BSAS) was launched in 1983, and later the [European Social Survey](#) (ESS) I had many exchanges with [Roger Jowell](#) querying the format and number of points used on the satisfaction scales, now fixed in stone as 0 – 10. We also had many discussions on the use of mnemonic variable names⁸, but I long ago conceded defeat on this. The juggernaut rolls on!

My *Social Trends* article⁹ has plenty of examples of gradients of mean satisfaction ratings following (in the expected direction) differences in circumstances (including, in the case of Sunderland, some for Census and local planning data related to the wards in which respondents lived). Other items measured symptoms such as clammy hands, sleep problems etc., all of which are indicators for **anxiety**. Items considered, but not used, included the Crowne–Marlowe Social Desirability scale, and items from the *Health Opinion Survey*¹⁰ and *Stirling County Studies*^{11 12}.

Finally we included items on birth order, pet ownership and (interviewer’s) description of the outside view from the front door of the dwelling. Some meteorological data were collected for stations nearest the PSUs, but the data are now lost.

The 1975 national data set includes date and time of interview and codes for primary sampling unit (same wards as 1973, but different PSU). The order of items in some batteries was randomly rotated to check for order effects.

⁷ Principal Lecturer in Sociology, Polytechnic of North London (PNL) to design and head up the **Social Planning and Research** option of a new 4-year BA in Applied Social Studies. The proposal was agreed first time by the Council for National Academic Awards (CNAA) in Spring 1976 and the first students were admitted in September 1977.

⁸ See [1.3.1 Conventions for Naming Variables in SPSS](#)

⁹ See footnote 4

¹⁰ Allister M Macmillan, [The Health Opinion Survey: Technique for estimating prevalence of psychoneurotic and related types of disorder in communities](#) (Monograph Supplement 7, Psychological Reports, 1957, 3, 325-339, Southern Universities Press)

¹¹ Leighton, A. H. et al: [My Name is Legion](#). *People of Cover and Woodlot, the Character of Danger* (Basic Books, 1959)

¹² Huppert et al, [Measuring Well-being Across Europe: Description of the ESS Well-being Module and Preliminary Findings](#) (Social Indicators Research, 2009) make no reference to this material at all, even though some of it duplicates the content if not the actual format.

Satisfaction with "life as a whole".

Questions about satisfaction with life have been asked in many surveys. The wording of questions and the format of show-cards varies between the different surveys.

SSRC 1975

QG.4	(SHOW CARD C)	ENTER BOX NOS.	
	a) All things considered, how satisfied or dissatisfied are you overall with your <u>life as a whole</u> these days?		(45)

[NB: Implications for question wording: "How satisfied **or** dissatisfied..."

European Social Survey¹³

The ESS core questionnaire includes the two most common measures of subjective wellbeing: [HAPPINESS and LIFE SATISFACTION](#). These measures have been asked every two years since 2002/2003.

B20. All things considered, how satisfied are you with your life as a whole nowadays? Please answer using this card, where 0 means extremely dissatisfied and 10 means extremely satisfied.

Extremely dissatisfied											Extremely satisfied
00	01	02	03	04	05	06	07	08	09	10	

C1. Taking all things together, how happy would you say you are?

Extremely unhappy											Extremely happy
00	01	02	03	04	05	06	07	08	09	10	

British Social Attitudes (2008, 2013)

All things considered, how satisfied are you with your life as a whole nowadays? Using this card, please answer using the scale where 1 means extremely dissatisfied and 10 means extremely satisfied.

[NB: Scale is 1-10, **not** 0-10]

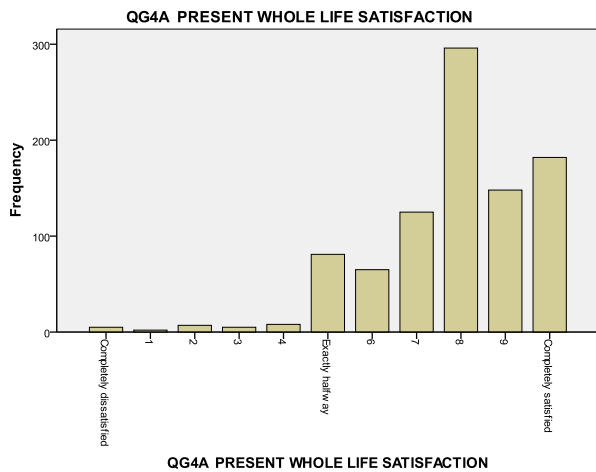
ONS (2011)

*Overall, how satisfied are you with your life nowadays?
(on a scale of 0-10, where 0 is not at all satisfied and 10 is completely satisfied)*

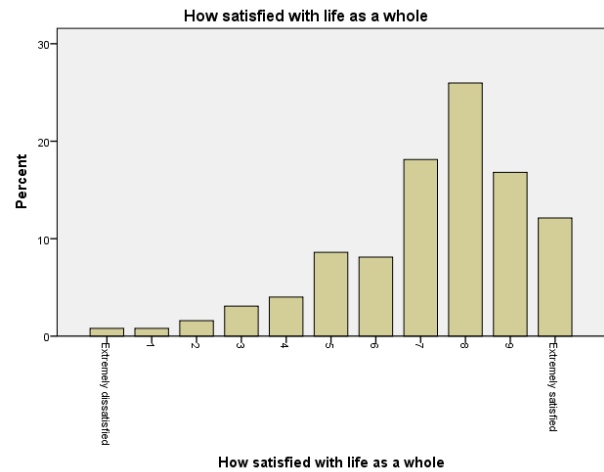
¹³ See: <http://esswellbeingmatters.org/> and [Measuring And Reporting On Europeans' Wellbeing: Findings from the European Social Survey \(Waves 1 -6\)](#) also [ESS Round 6 – Question Module Design Final Template](#)

Distribution of responses for satisfaction with life

SSRC (1975: 0-10 vertical)

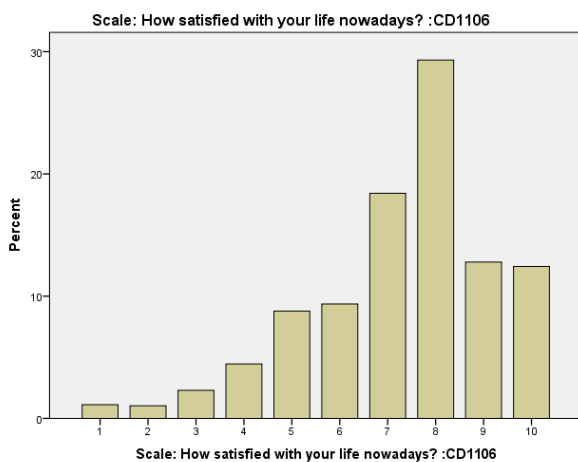


ESS (2006: horizontal)

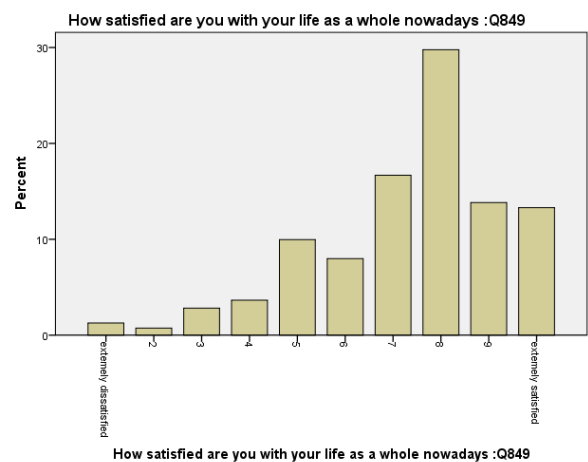


BSAS

2008 (1-10 scale)

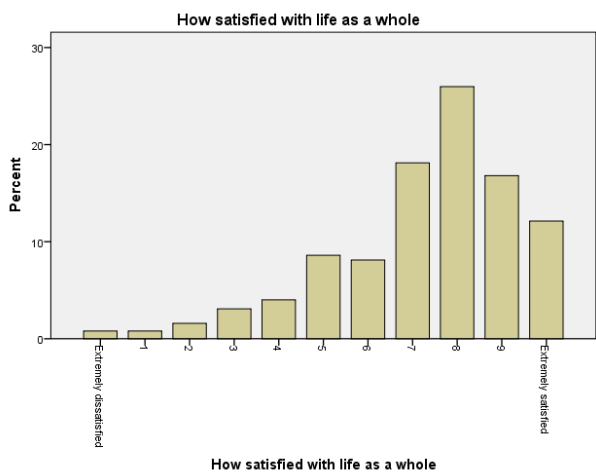


2013 (1-10 scale)

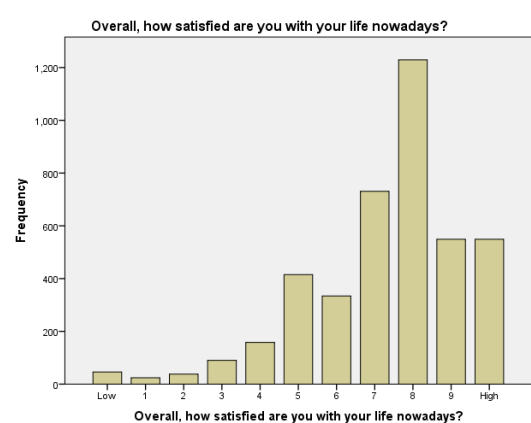


ONS

April 2011 (0-10)



April-August 2011 (0-10)



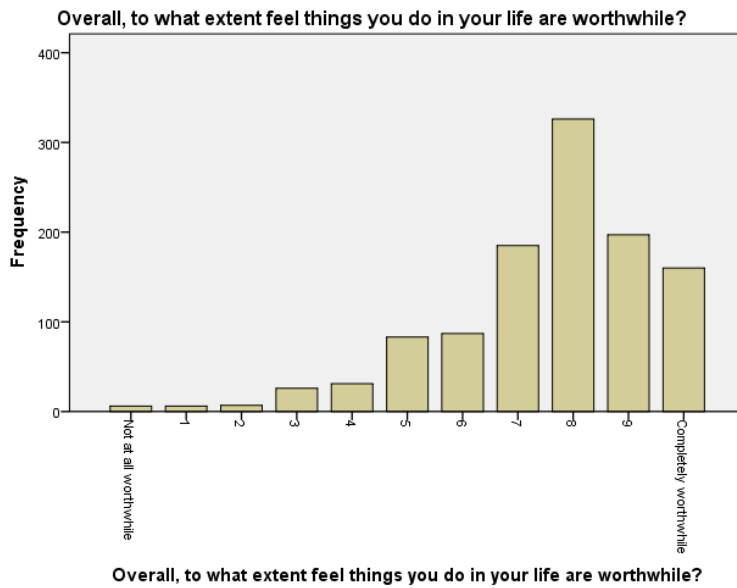
Other constructs

Worthwhile

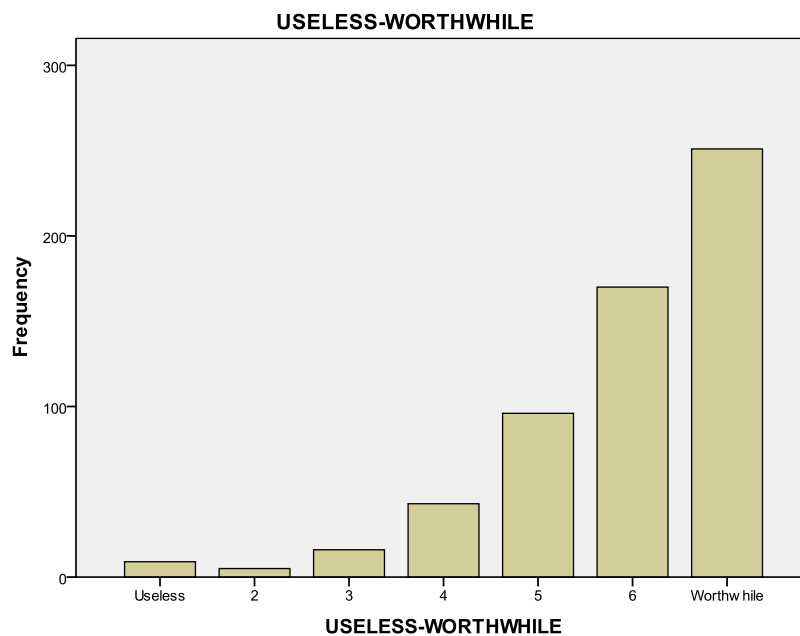
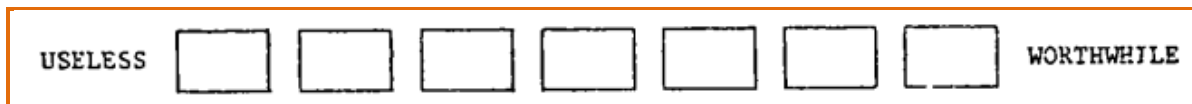
[ONS]

[MCZ_2]

Overall, to what extent do you feel the things you do in your life are worthwhile?
(on a scale of 0-10, where 0 is not at all worthwhile and 10 is completely worthwhile)



SSRC 1971 Pilot 1 had an item in the 7 – point [12-item SD scale](#)



[SSRC 1973: modified Srole Anomy]

No exact equivalent in SSRC but item F in scale below may cover it...

SHOW CARD 0		cc 5				
Q.J1	I am going to read out some things people have said about life today. As I read each one, could you tell me which answer on the card comes closest to your own point of view?	STRONGLY AGREE	AGREE	NEITHER AGREE NOR DISAGREE	DISAGREE	STRONGLY DISAGREE
	A. Most people will go out of their way to help someone else.	1	2	3	4	5
						(27)
	B. Most councillors and M.P.s are not really interested in the problems of the average man.	5	4	3	2	1
						(28)
	C. The average man is probably better off today than he ever was.	1	2	3	4	5
						(29)
	D. Nowadays a person has to live pretty much for today and let tomorrow take care of itself.	5	4	3	2	1
						(30)
	E. Even today, the way you make money is more important than how much you make.	1	2	3	4	5
						(31)
	F. You sometimes can't help wondering whether anything is worthwhile.	5	4	3	2	1
						(32)

Other constructs

Happy

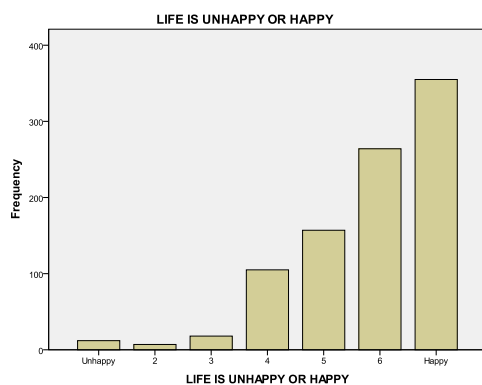
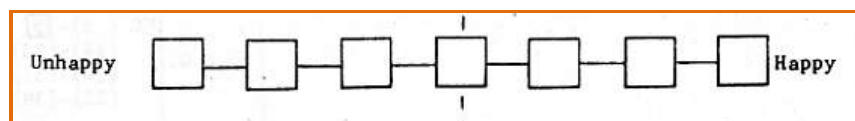
[SSRC 1975]

QG.3	Taking all things together, how would you say things are these days? Would you say you are ... (READ PRECODES)	Very happy Pretty happy Not too happy	3 2 1	O.U.O. (44)
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QG3 HAPPINESS THESE DAYS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NOT TOO HAPPY	57	6.1	6.2	6.2
	PRETTY HAPPY	516	55.4	55.7	61.9
	VERY HAPPY	353	37.9	38.1	100.0
	Total	926	99.4	100.0	
Missing	9	6	.6		
Total		932	100.0		

(7-point self-completion semantic differential scale item)



[ONS 2011]

Overall, how happy did you feel yesterday?

(on a scale of 0-10, where 0 is not at all happy and 10 is completely happy)

ESS [2006]

C1. Taking all things together, how happy would you say you are?										
Extremely unhappy										Extremely happy
00	01	02	03	04	05	06	07	08	09	10

ONS 2011 (0-10)



ESS 2006 (0-10)



Anxious/Worry

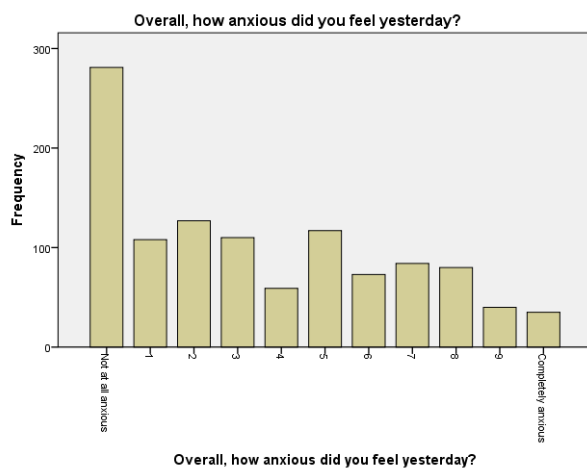
[ONS]

On a scale where nought is 'not at all anxious' and 10 is 'completely anxious', overall, **how anxious did you feel yesterday?**

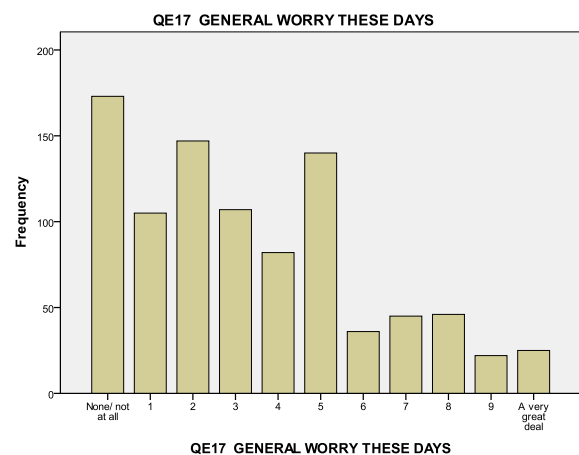
[SSRC]

QE.17	In general, how much would you say you worry these days? (TAKE BACK CARD E)	ENTER BOX NO ...→		(62)
QE.18	Have you ever consulted a doctor or anyone else to seek help about a nervous problem, either for yourself or another member of your family? IF YES:	No Yes - once Yes - more than once	1 2 3	(63)

ONS



SSRC



QE18 CONSULTATION OVER NERVOUS PROBLEM

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	NEVER	710	76.2	76.3	76.3
	ONCE ONLY	109	11.7	11.7	88.1
	MORETHAN ONCE	111	11.9	11.9	100.0
	Total	930	99.8	100.0	
Missing	9	2	.2		
Total		932	100.0		

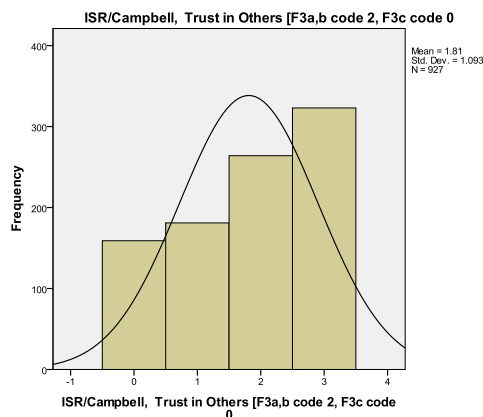
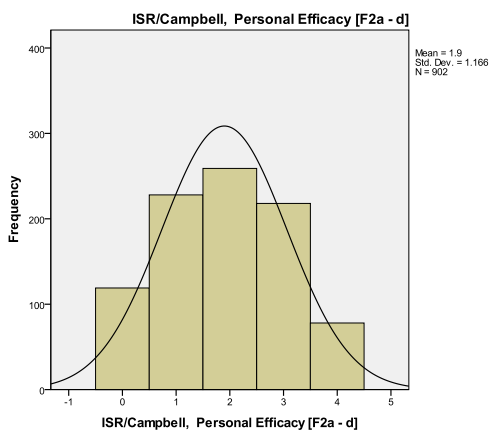
[SSRC 1975] Personal efficacy

QF.2a ✱	Have you usually felt fairly sure your life would work out the way you want it to, to, or have there been times when you haven't been sure about it?	Fairly sure Haven't been sure	2 0	(7)
QF.2b ✱	Do you think its better to plan your life a good way ahead, or would you say life is too much a matter of luck to plan ahead very far?	Plan ahead Too much luck to plan	2 0	(8)
QF.2c ✱	When you do make plans ahead, do you usually get to carry things out the way you expected, or do things usually come up to make you change your plans?	Carry out plans Change plans	2 0	(9)
QF.2d ✱	Do you think you have had a fair opportunity to make the most of yourself in life, or have you been held back in some ways?	Fair opportunity Held back	2 0	(10)

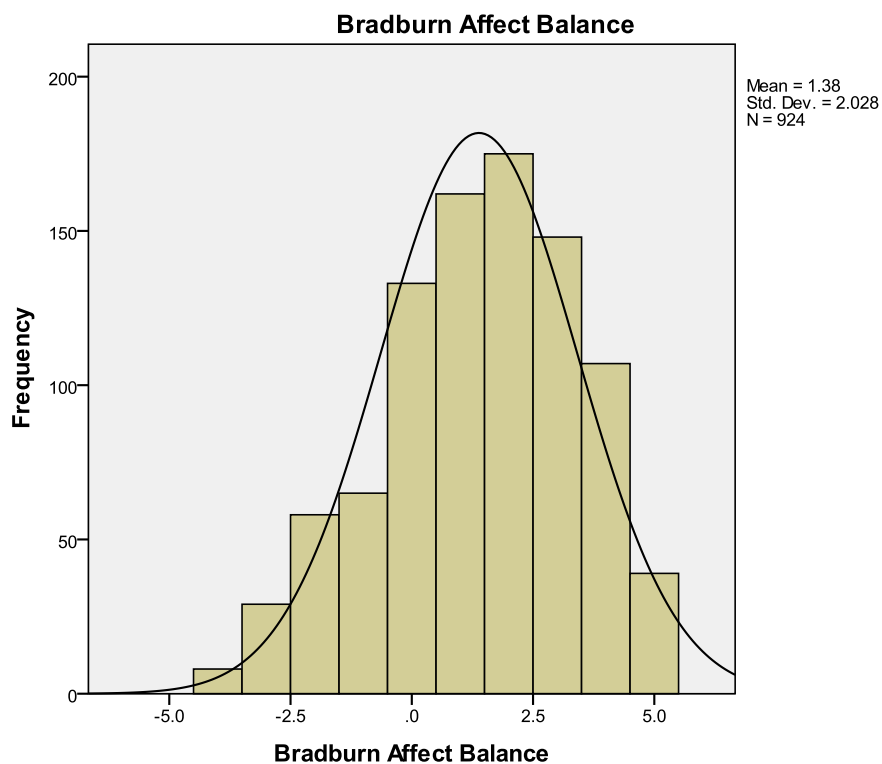
[NB: Not quite sure why coding was 0, 2 for this and **Trust in others** as only two values appear in frequencies for constituent items. The derived variables **EFFICACY** and **TRUST** weren't done with **COMPUTE** otherwise the scores would have been even numbers only. It could have been done with subsequent **RECODE**, or with **COUNT**: this needs to be checked]

[SSRC 1975] Trust in others

QF.3a ✱	Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?	Most people can be trusted Can't be too careful	2 0	(11)
QF.3b ✱	Would you say that most of the time, people try to be helpful, or that they are mostly just looking out for themselves?	Try to be helpful Look out for themselves	2 0	(12)
QF.3c ✱	Do you think that most people would try to take advantage of you if they got the chance or would they try to be fair?	Take advantage Try to be fair	2 0	(13)



INTERVIEWER NOTE: SECTION F - "YOURSELF"			
QF.1	Now let's talk about something else. We are interested in the way people are feeling these days.	CODE	O.U.O.
	During the past few weeks, did you ever feel ----- (RING CODE)	YES NO	
	a) Particularly excited or interested in something?	1 0	(64)
	b) So restless that you couldn't sit long in a chair?	1 0	(65)
	c) Proud because someone complimented you on something you had done?	1 0	(66)
	d) Very lonely or remote from other people?	1 0	(67)
	e) Pleased about having accomplished something?	1 0	(68)
	f) Bored?	1 0	(69)
	g) On top of the world?	1 0	(70)
	h) Depressed or very unhappy?	1 0	(71)
	i) That things were going your way?	1 0	(72)
	j) Upset because someone criticized you?	1 0	(73)



Semantic differential scales

ISR and SSRC 1971

.4

MY PRESENT LIFE

Please tick ☒ whichever box applies in each line.

BORING	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	INTERESTING
ENJOYABLE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	MISERABLE
EASY	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	HARD
USELESS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WORTHWHILE
FRIENDLY	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	LONELY
UNHAPPY	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	HAPPY
FULL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	EMPTY
DISCOURAGING	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	HOPEFUL
SATISFYING	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	UNSATISFYING
TIED DOWN	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	FREE
DISAPPOINTING	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	REWARDING
BRINGS OUT THE BEST IN ME	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DOESN'T GIVE ME MUCH CHANCE

Semantic differential scales (self-completion)

[SSRC 1973]

Please put a tick ☒ in whichever box applies in each line

MY PRESENT LIFE

Boring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Interesting
Enjoyable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Miserable
Tied Down	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Free
Rewarding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Disappointing
Rough	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Smooth
Full	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Empty
Discouraging	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hopeful
Easy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hard
Frustrating	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fulfilling
Full of fun	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No fun at all
Controlled by others	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Under my control
Full of possibilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	In a rut
Unsuccessful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Successful
Brings out the best in me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Doesn't give me much chance
Unhappy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Happy

Please put a tick ☒ in whichever box applies in each line

MY PRESENT LIFE

Boring	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Interesting
Enjoyable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Miserable
Tied Down	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Free
Rough	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Smooth
Full	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Empty
Easy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hard
Frustrating	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Fulfilling
Full of fun	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No fun at all
Unsuccessful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Successful
Unhappy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Happy

[SSRC 1975 – Hall-Brown scale]

This scale was designed by John Hall in response to an internal memo from Colin Brown¹⁴ commenting on the comparisons being made by the respondent when answering questions on satisfaction etc.

Please put a tick ☒ in whichever box applies in each line

MY PRESENT LIFE

Does not meet my needs in any way ☐ ☐ ☐ ☐ ☐ ☐ ☐ Meets my needs in every way

Is very much worse than I deserve ☐ ☐ ☐ ☐ ☐ ☐ ☐ Is very much better than I deserve

Makes me extremely unhappy ☐ ☐ ☐ ☐ ☐ ☐ ☐ Makes me extremely happy

Is very much worse than it used to be ☐ ☐ ☐ ☐ ☐ ☐ ☐ Is very much better than it used to be

Will get very much worse in the future ☐ ☐ ☐ ☐ ☐ ☐ ☐ Will get very much better in the future

Makes me extremely dissatisfied compared to other people I know ☐ ☐ ☐ ☐ ☐ ☐ ☐ Makes me extremely satisfied compared to other people I know

Other people think I am extremely dissatisfied with it ☐ ☐ ☐ ☐ ☐ ☐ ☐ Other people think I am extremely satisfied with it

Makes me completely dissatisfied ☐ ☐ ☐ ☐ ☐ ☐ ☐ Makes me completely satisfied

¹⁴ See [ISR 1973 and SSRC 1973 and 1975 scales plus commentary](#)

1: Definitions of "Quality of Life"

[SSRC 1975]

Quest. No.	INTERVIEWER NOTE: SECTION C - LIFE IN BRITAIN TODAY		J.8909
QC.1	<p>There's a lot of talk these days about the "Quality of Life", in Britain and in other countries. Of course, "Quality of Life" means different things to different people. What does it mean to you - What sort of things do you think of now when you hear the words "Quality of Life" (WRITE IN BELOW) (PROBE FULLY): What do you mean by that? Anything else?</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>	O.U.O.	(29) (30)

qol Frequencies

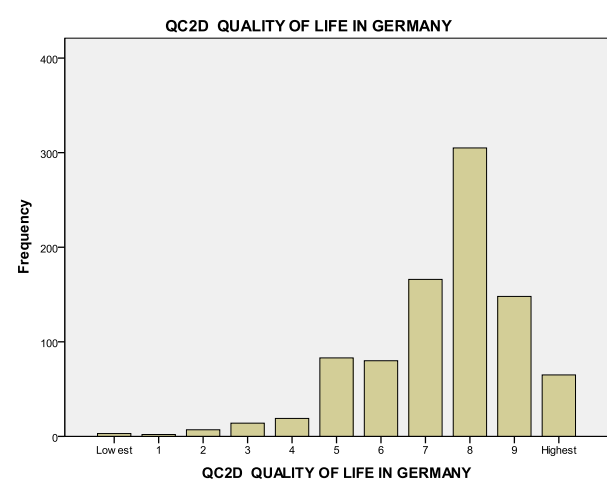
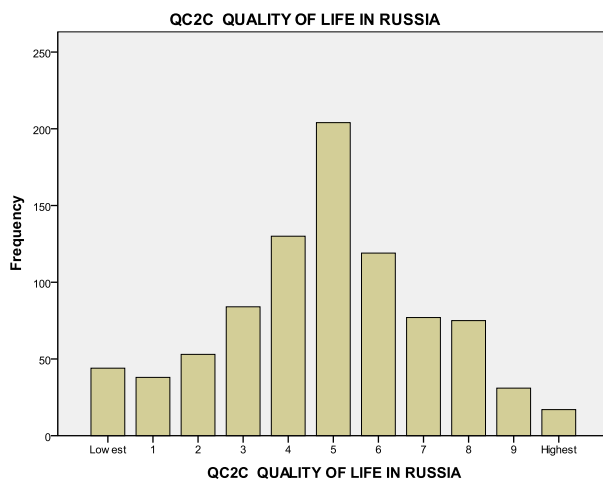
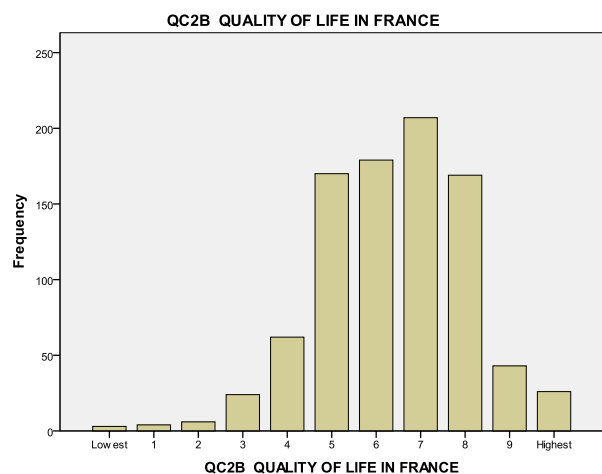
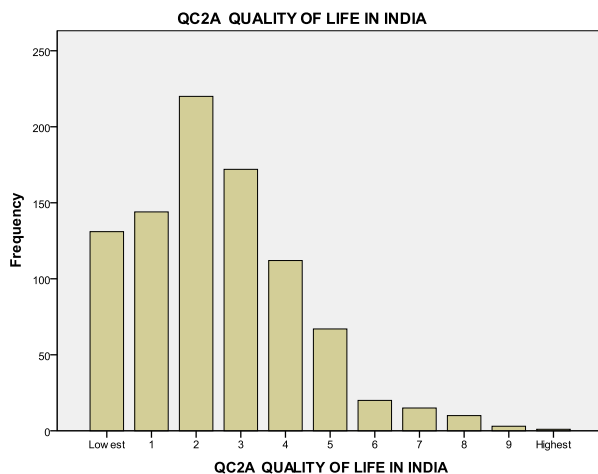
		Responses		Percent of Cases
		N	Percent	
Elements of quality of life ^a	Q-C1A*1* GENERAL CONTENTMENT, HAPPY ETC	179	9.9%	19.2%
	Q-C1A*2* REFERENCES TO HOMELIFE	215	11.9%	23.1%
	Q-C1A*3* SOCIAL RELATIONSHIPS	94	5.2%	10.1%
	Q-C1A*4* HOUSING,COMFORTABLE HOME	93	5.2%	10.0%
	Q-C1A*5* MONEY,COST OF LIVING ETC	167	9.3%	17.9%
	Q-C1A*6* STANDARD OF LIVING,COMFORT	159	8.8%	17.1%
	Q-C1A*7* CONSUMER DURABLES	31	1.7%	3.3%
	Q-C1A*8* WORK,EMPLOYMENT,JOB	80	4.4%	8.6%
	Q-C1A*9* VALUES,BEHAVIOUR PRIORITIES	148	8.2%	15.9%
	Q-C1A*0* EQUALITY,SOCIAL JUSTICE	16	.9%	1.7%
	Q-C1A*X* BEAUTY OF ENVIRONMENT	36	2.0%	3.9%
	Q-C1A*Y* PRESSURES OF MODERN LIFE	28	1.6%	3.0%
	Q-C1B*1* FREEDOM OF SPEECH ETC	61	3.4%	6.5%
	Q-C1B*2* EDUCATION,CULTURE ETC	33	1.8%	3.5%
	Q-C1B*3* LEISURE,HOLIDAYS,RELAXATION	59	3.3%	6.3%
	Q-C1B*4* HEALTH,SICKNESS,DOCTORS ETC	91	5.0%	9.8%
	Q-C1B*5* WORRIES,MENTAL HEALTH ETC	23	1.3%	2.5%
	Q-C1B*6* PHILOSOPHY AND BELIEFS	101	5.6%	10.8%
	Q-C1B*7* LIFE COMPARED TO PAST + ELSE	33	1.8%	3.5%
	Q-C1B*9* OTHER	29	1.6%	3.1%
Total	Q-C1B*0* DK,VAGUE,NO ANSWER	89	4.9%	9.5%
	Q-C1B*X* NEGATIVE STATEMENTS RE OTHERS	23	1.3%	2.5%
	Q-C1B*Y* ALTRUISTIC STATEMENTS	17	.9%	1.8%
Total		1805	100.0%	193.7%

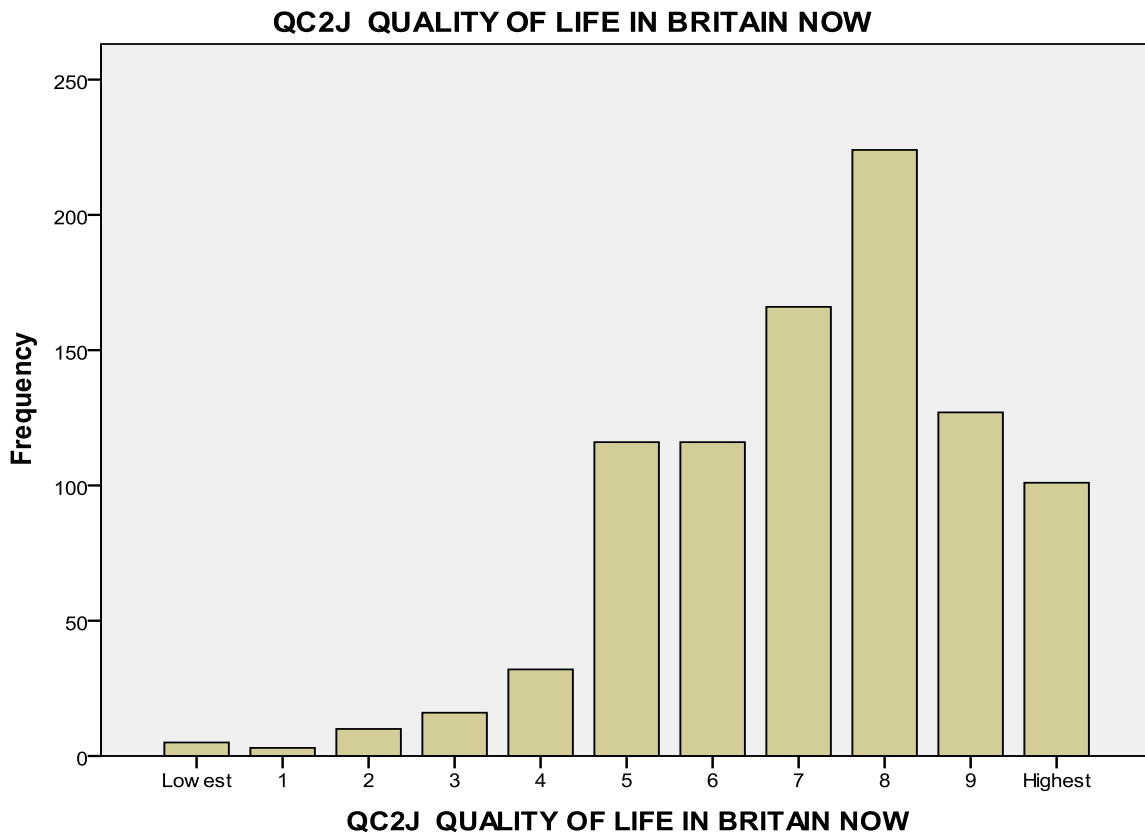
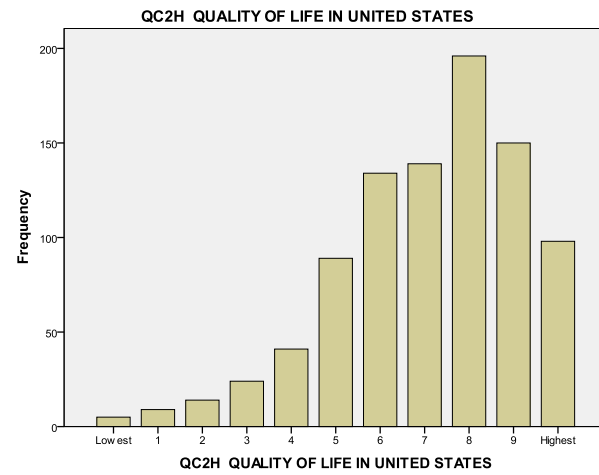
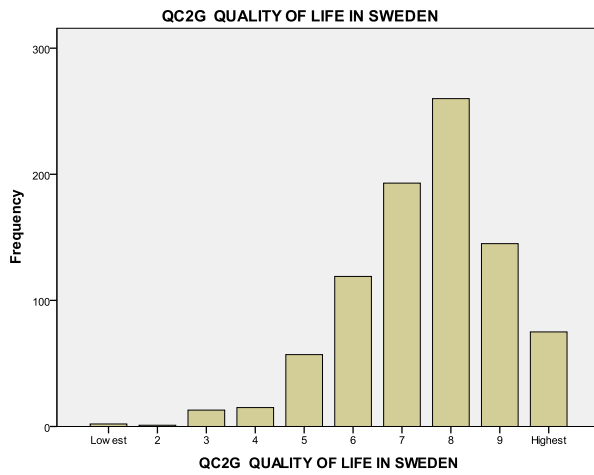
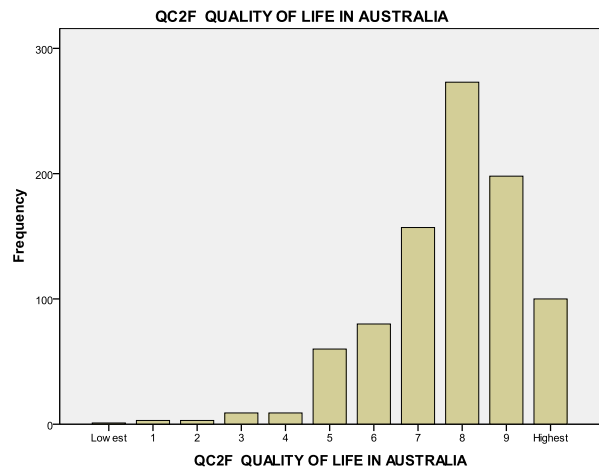
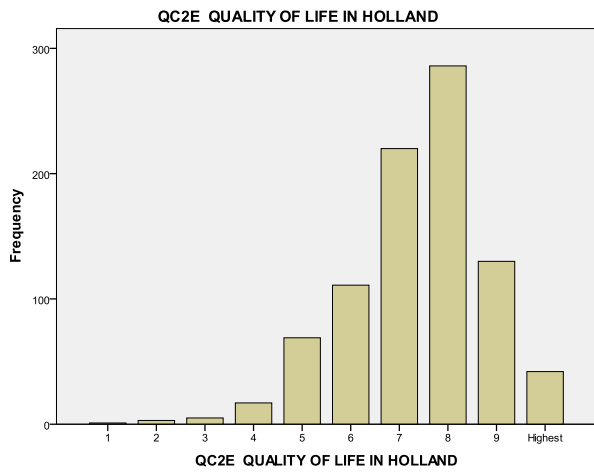
a. Dichotomy group tabulated at value 1.

2: Perceived quality of life in other countries and in Britain

[SSRC 1975]

<p>QC.2 Here is a scale to measure quality of life (SHOW CARD D). The highest quality of life is at the top (POINT TO 10) and the lowest quality of life is at the bottom (POINT to 0) and the other points are in between depending on how high or low you think the quality of life is.</p> <p>I'm going to read you some names of countries. I'd like you to tell me whereabouts on the scale you think each one is in quality of life. The first one is.....</p>		ENTER BOX NOS.	O.U.O.
a) India			(31)
b) France			(32)
c) Russia			(33)
d) Germany			(34)
e) Holland			(35)
f) Australia			(36)
g) Sweden			(37)
h) United States of America			(38)
i) Britain			(39)

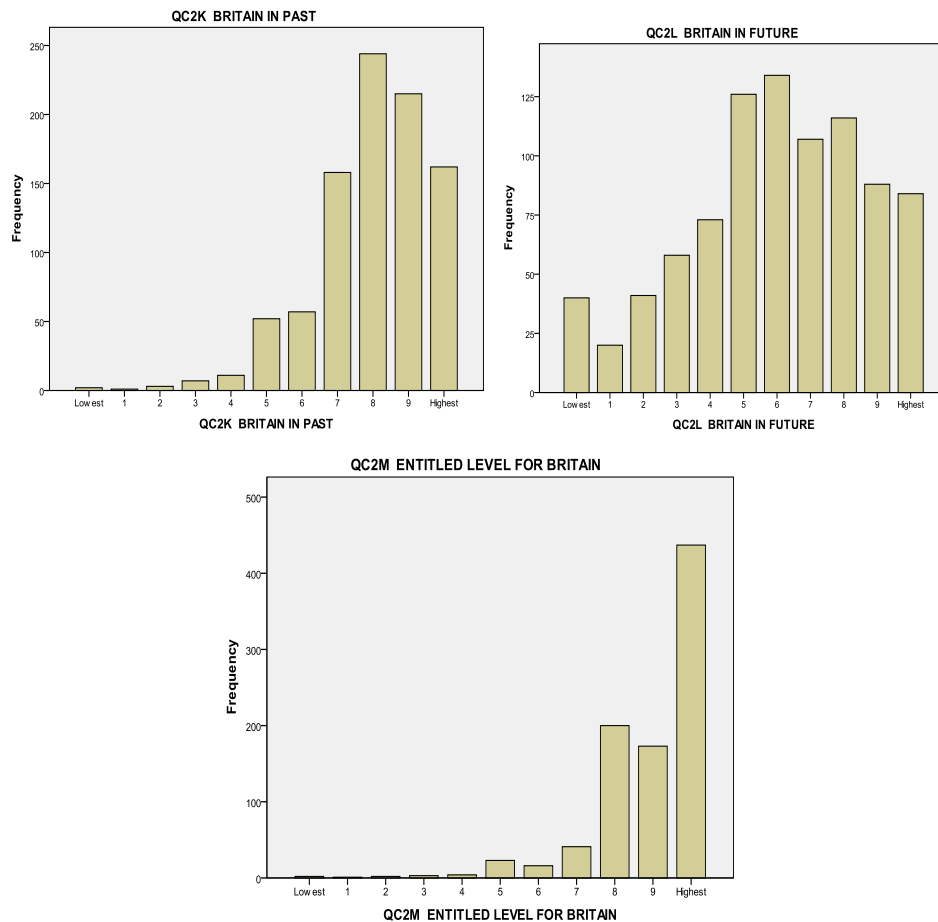




3: Past, future and entitled QoL in Britain

[SSRC 1975]

QC.2k and where would you say Britain was 5 years ago?	(40)
QC.2l and where do you think it will be in 5 years time?	(41)
QC.2m	What would you say is the right level for Britain: What level of Quality of Life do you think Britain is entitled to?	(42)



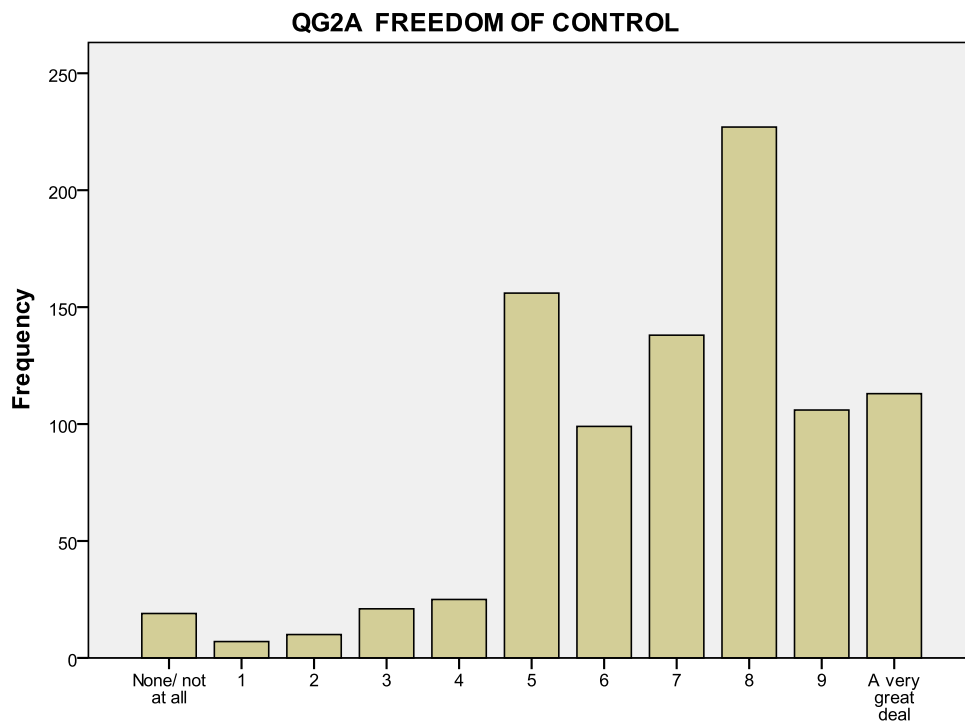
Facsimile questions below are scanned direct from the original questionnaires: output is from SPSS for Windows (releases 19 to 24).

Quest. No.	- 23 -	J.8909
	Finally, I want to ask you briefly about your life as a whole.	CC5
QG.1	When you think of the things you want from life now, would you say you were doing <u>very well</u> , <u>fairly well</u> , or <u>not too well</u> ? (RING CODE)	
	Very well	3
	Fairly well	2
	Not too well	1
		(40)

QG1 THINGS WANT FROM LIFE

W	Frequency	Percent	Valid Percent	Cumulative Percent
Valid NOT TOO WELL	97	10.4	10.5	10.5
FAIRLY WELL	637	68.3	68.8	79.3
VERY WELL	192	20.6	20.7	100.0
Total	926	99.4	100.0	
Missing 9	6	.6		
Total	932	100.0		

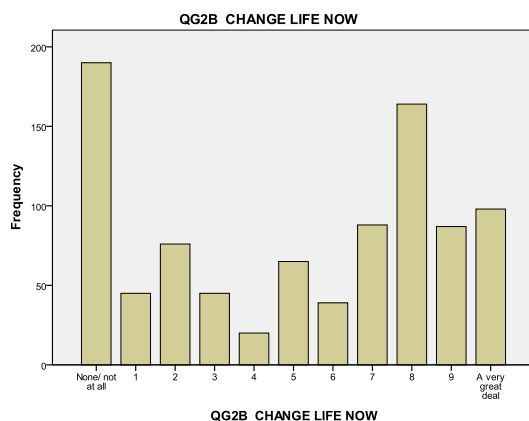
(SHOW CARD E)		
QG.2a	Some people feel they have completely free choice and control over the way their lives turn out; yet other people feel that what they themselves do has no real effect on what happens to them. Please use the scale to indicate how much freedom of choice and control you feel you have had over the way your life has turned out for you. (PROMPT): <u>Up to now</u> . (ENTER BOX NO....)	(41)



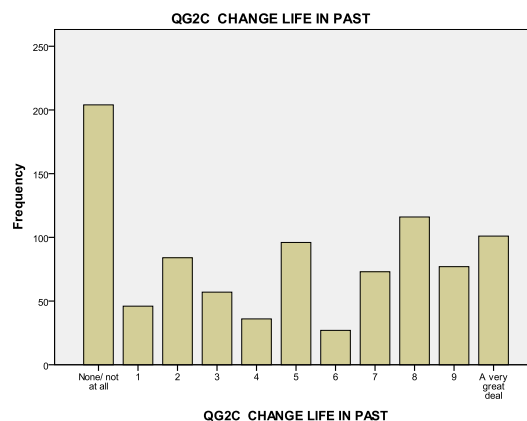
QG2A FREEDOM OF CONTROL

QG.2b	Think of how your life is going <u>now</u> . How much would you like to change your life as it is now? (PROMPT): <u>Where would that be on the scale?</u> (ENTER BOX NO....)	(42)
QG.2c	Now think of your life as it was in the <u>past</u> . If you could have your life over again, how much would you want to change any of it? (PROMPT): <u>Where would that be on the scale?</u> (ENTER BOX NO....)	(43)

(TAKE BACK CARD E)



QG2B CHANGE LIFE NOW



QG2C CHANGE LIFE IN PAST

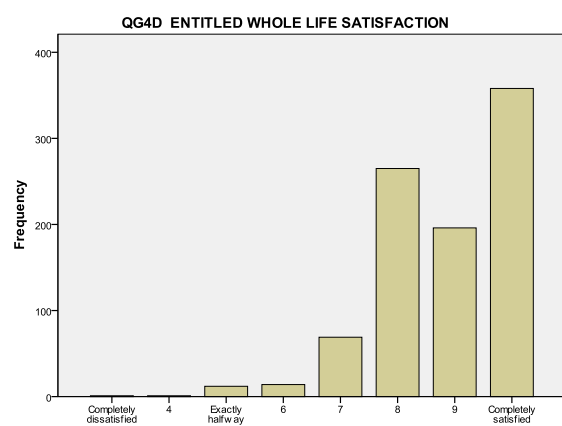
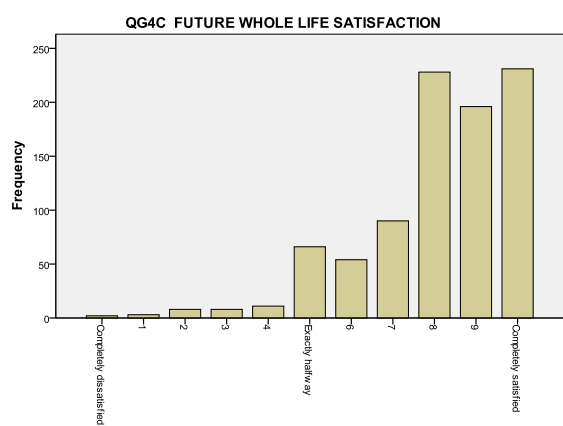
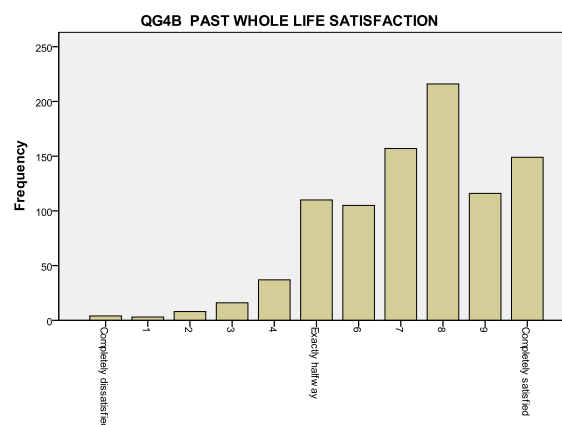
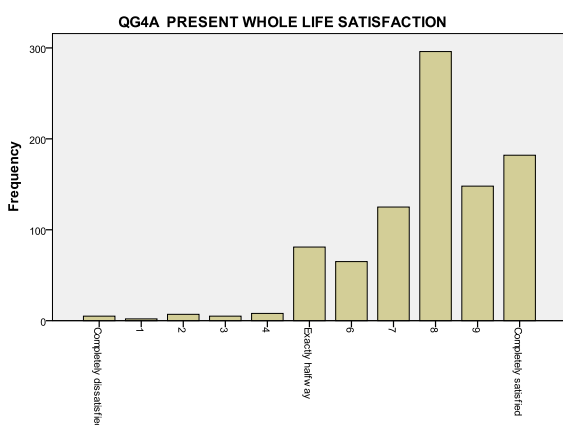
Appendix

[SSRC 1975]

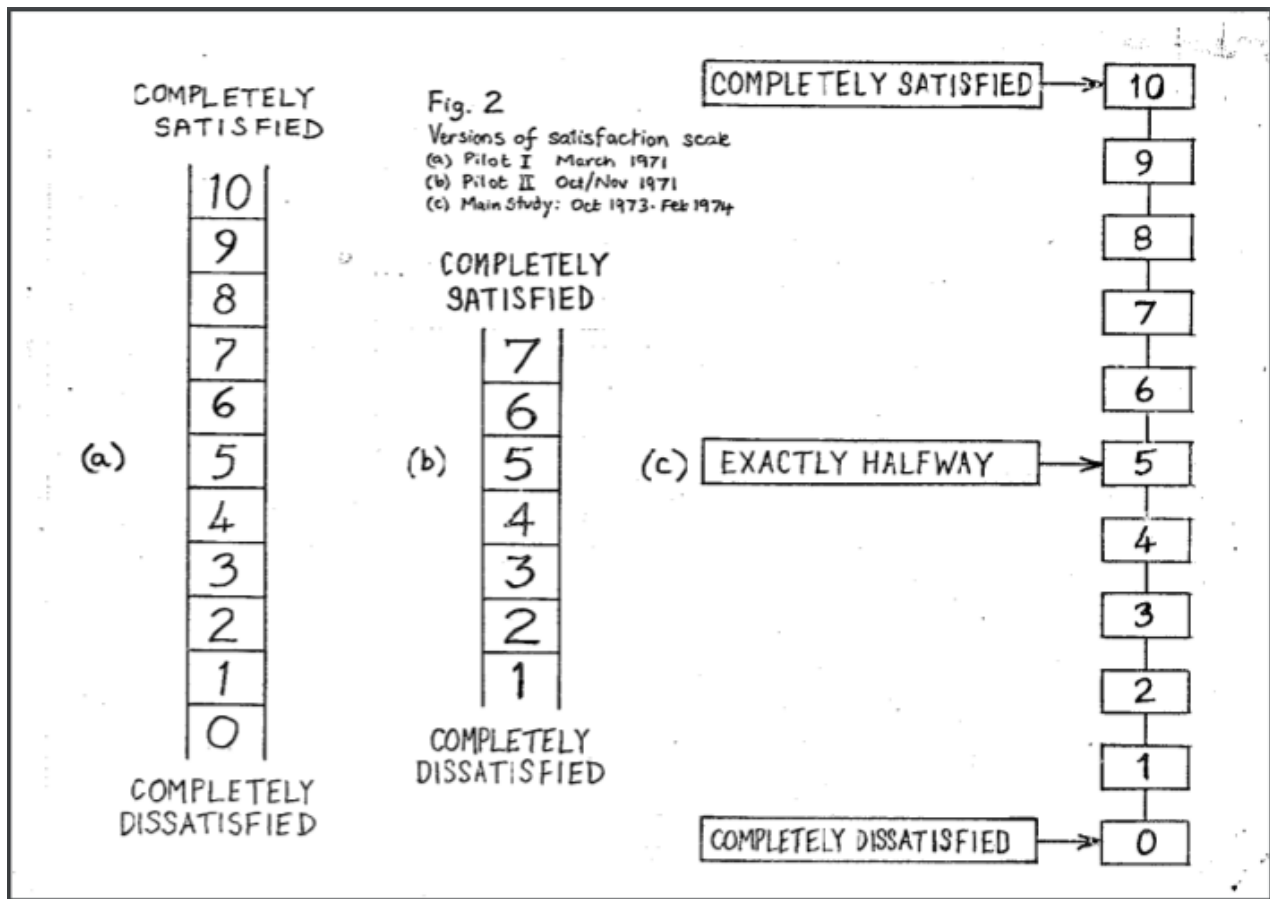
QG.4	(SHOW CARD C)	ENTER BOX NOS.	
	a) All things considered, how satisfied or dissatisfied are you overall with your <u>life as a whole</u> these days?		(45)

[NB: Implications for question wording: "How satisfied **or** dissatisfied..."]

b) And where would you put yourself as you were five years ago?	(46)
c) And where do you expect you will be in five years' time?	(47)
d) And what do you feel is the right level for people like yourself - what do you feel people like yourself are entitled to?	(48)



Show-cards



Pilot 1: May 1971

Pilot 2: October 1971

Urban Britain: 1973, 1975
Stoke-on-Trent, Sunderland: 1973

[Satisfaction scale showcards](#)

1st GB pilot May 1971: 0-10 ladder

2nd GB pilot Oct 1971: 1-7 ladder (as per USA survey)

Main GB, Stoke-on-Trent and Sunderland 1973, GB 1975: 0-10 boxed beads

[Self-completion semantic differential scales](#)

[My Present Life \(1971\)](#)

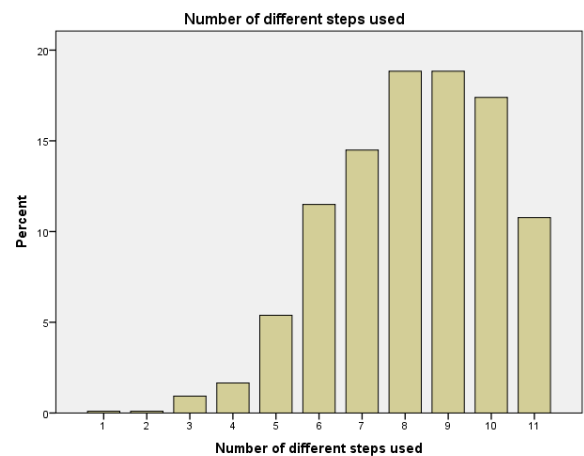
[My Present Life \(1973\)](#)

[My Present Life \(1975\)](#)

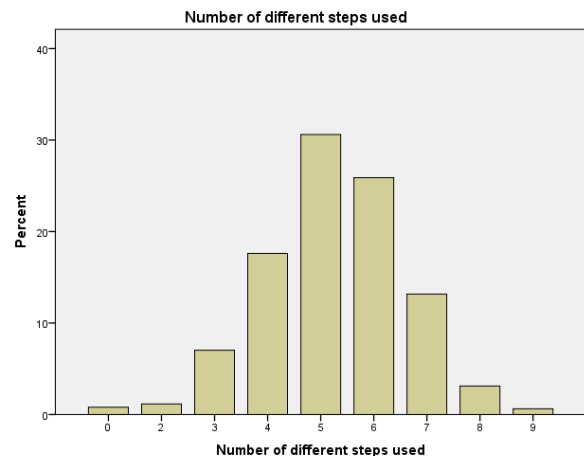
[My Present Life \(Hall-Brown 1975\)](#)

[ISR 1973 and SSRC 1973 and 1975 scales plus commentary](#)

Number of different steps used on 0-10 scales

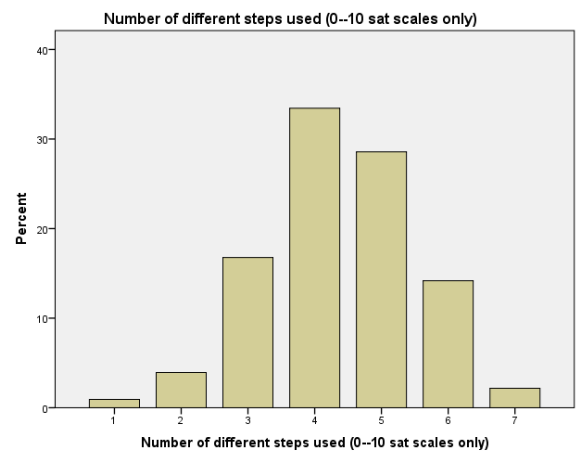


Urban GB 1973 (all 0-10 scales)

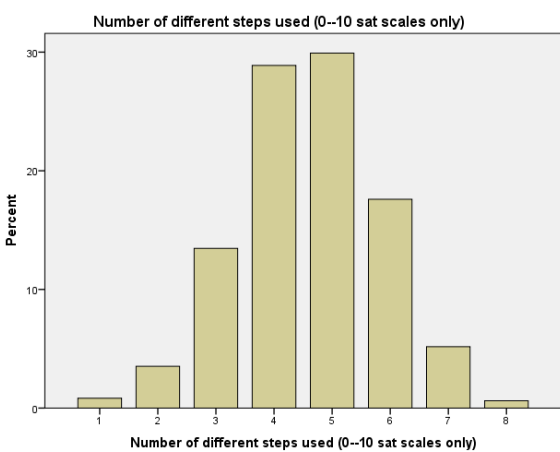


ONS April 2011 (all 0-10 scales)

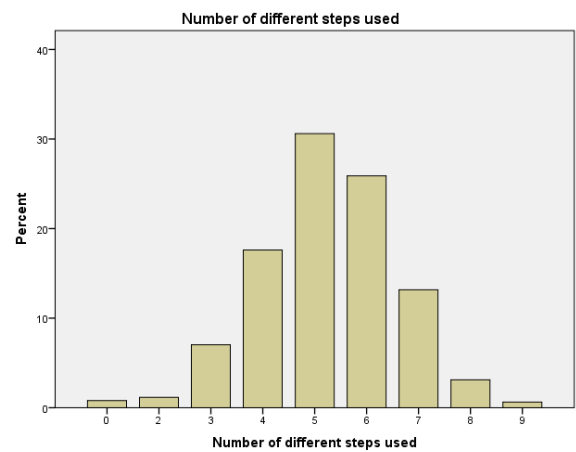
0-10 satisfaction scales only



Urban GB 1973



Urban GB 1975

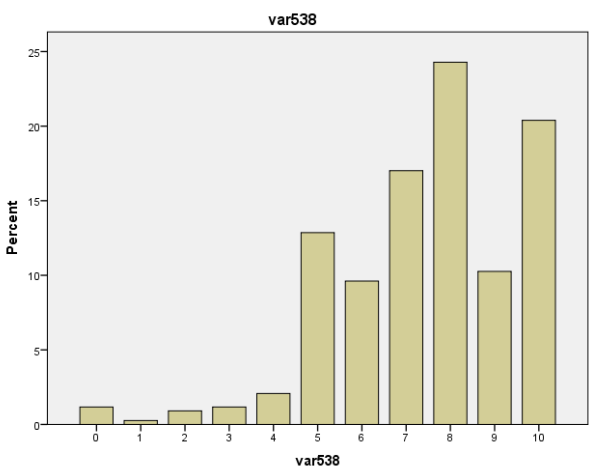


ONS April 2011

Satisfaction with life as a whole



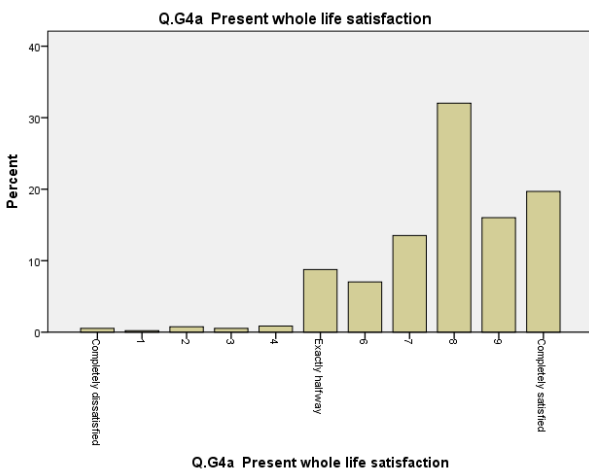
Stoke-on-Trent 1973



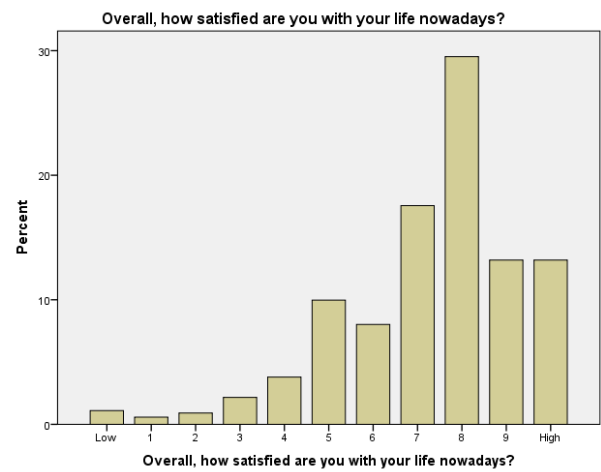
Sunderland 1973



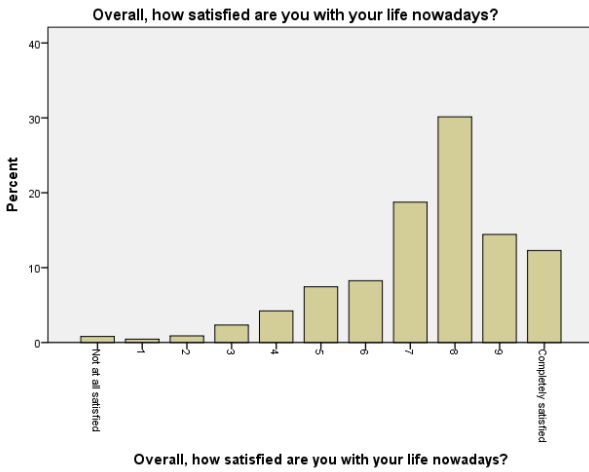
Urban Britain 1973



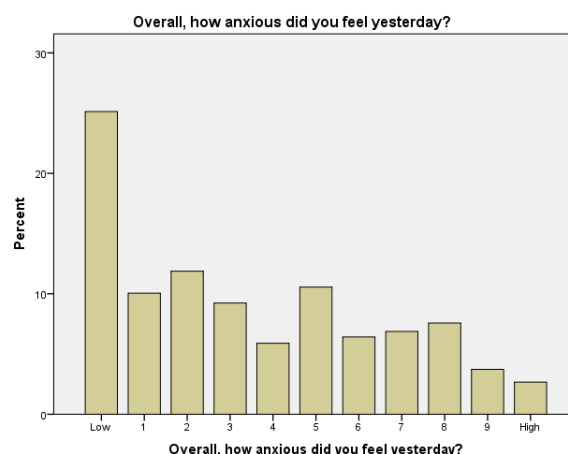
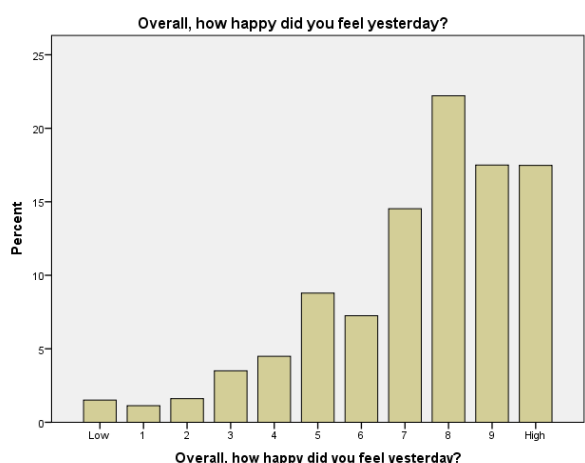
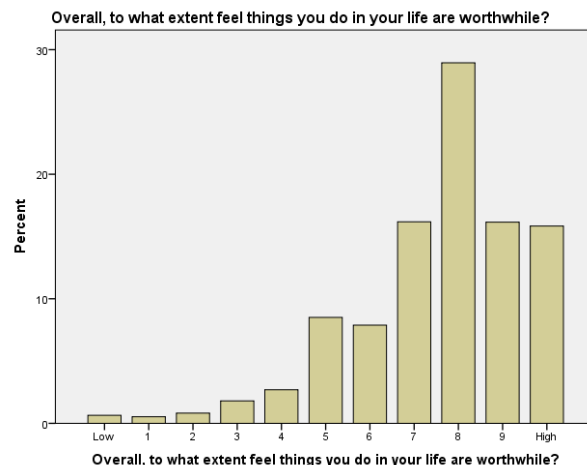
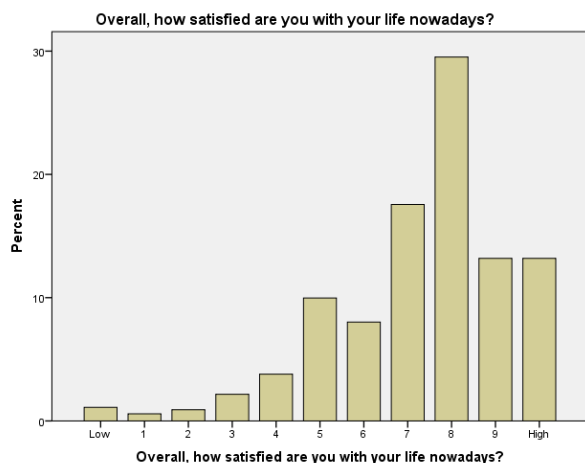
Urban Britain 1975



ONS merged (April-Aug 2011)



ONS Teaching (April 2011)



There was also some correspondence on the SPSS list a while back and I seem to remember Art Kendall suggesting that 7 points were best (and the longest that most respondents can handle).

In the early 1970s, when I was doing development work with Mark Abrams on the [Quality of Life in Britain](#) (QoL) surveys, we debated whether to use 1-7 or 0-10 to measure satisfaction with life as a whole and with various life-domains, and also what format to use (ladder or linked boxes) on showcards or self-completion pages. (Kilpatrick and Cantril had used matchstick figures on a mountain staircase) In the first pilot survey we used 0-10, but changed to 1-7 for the second pilot as we were collaborating with Angus Campbell et al (ISR Ann Arbor) for their US survey. Mark Abrams changed this back to 0-10 in our main survey (which to say the least makes comparison difficult!). We found that 0-10 scales tend to be tri-modal and 1-7 heavily skewed. (See [Satisfaction scale showcards](#): May 1971: 0-10 ladder, Oct 1971: 1-7 ladder (as per USA survey) 1973 and 1975: 0-10 boxed beads). Ornauer et al used 1 -9* and obtained smoother distributions. We also considered Paul Sheatsley's smiley faces (as now used in the Understanding Society self-completion questionnaire for children).

The current ONS National Well-being programme uses 0-10, and I have exchanged views with them on this. My problem is individual differences in use of the scales and how to cater for these in analysis. I once joked that mean life-satisfaction on a 0-10 scale is a constant rather than a variable, and is always around 7.8. Similar debates centred on the format of self-completion semantic differential scales.

In a 2005 communication with Rory Fitzgerald about the European Social Survey (ESS) I wrote:

"The format for this and other cards was developed on advice from William Belson of LSE (boxed numbers and labels focus respondents' attention and links to indicate scaling) and Donald Monk of RSL (evaluative scales vertical, non-evaluative scales horizontal). Earlier surveys used simple ladder scales and unboxed labels. I remain unconvinced of the need for 0-10 scales (Mark changed them back from 1-7 at the last minute, even though the USA studies used 1-7) but at least they are comparable with ESS. I think they are too long (a metallurgist would compare the response distributions to a tension fracture in a steel rod) and would have preferred more research, particularly on 1-9 and alternative formats."*

There is further relevant discussion on the NCRM thread [Single items for complex variables](#)

Further reading:

Frank M. Andrews, Stephen B. Withey

[**Social Indicators of Well-Being: Americans' Perceptions of Life Quality**](#)

(Plenum Press, 1976)

Michalos, A.C.

Frank M. Andrews: A Pioneer in Social Indicators and Social Reporting

Applied Research Quality Life (2014) 9: 779. doi:10.1007/s11482-014-9324-4

Hall J F and Ring A J

[Indicators of Environmental Quality and Life-Satisfaction: a subjective approach.](#)

Invited paper to Research Cttee 26 (Social Ecology) International Sociological Association 8th World Congress of Sociology, Toronto, August, 1974

Hall J F

[**Subjective measures of quality of life in Britain 1971 to 1975: Some developments and trends.**](#)

Speciallly commissioned article in Thompson E (Ed) **Social Trends No. 7** HMSO 1976

Liu and Cernat

[Item-by-item versus Matrix Questions: A Web Survey Experiment](#)

Social Science Computer Review 2016

[* as in [Ornauer et al, 1976](#) and in a 1977 [book review](#) by Eva Lyon]

Very thorough discussion in [OECD Guidelines on Measuring Subjective Well-being](#) (2013) but no actual question wording (See especially Table 2.1 Possible response biases and heuristics described in the self-report literature.)

Table 2.1. Possible response biases and heuristics described in the self-report survey literature

Response bias or heuristic	Expected pattern of responses
Acquiescence or yea-saying	A tendency to agree with, or respond positively to, survey items regardless of their content.
Nay-saying	A tendency to disagree with, or respond negatively to, survey items regardless of their content.
Extreme responding	A tendency to use response categories towards the ends of a response scale/the most extreme response category.
Moderate responding	A tendency to use responses towards the middle of the response scale/the most moderate response category.
No-opinion responding	A tendency to select the response category that is most neutral in its meaning (e.g. "neither agree nor disagree").
Random responding	A tendency to respond randomly, rather than meaningfully.
Digit preferences	On numerical response formats, a tendency to prefer using some numbers more than others.
Primacy effects	A tendency to select one of the first response categories presented on a list.
Recency effects	A tendency to select one of the last response categories presented on a list.
Socially desirable responding	Conscious or subconscious tendency to select response options more likely to conform with social norms or present the respondent in a good light.
Demand characteristics	A reaction to subtle cues that might reflect the surveyor's beliefs about how they should respond and/or their own beliefs about the purpose of the survey (e.g. "leading questions", where the tone or phrasing of the question suggests to respondents that particular answers should be favoured).
Consistency motif or bias	A tendency for respondents to try and ensure consistency between responses (e.g. consistency between a question about attitudes towards smoking and a question about cigarette purchasing habits).
Priming effects	Where the survey context (e.g. question order; survey source) influences how questions are understood, or makes certain information more easily accessible to respondents.