

FORS⁺ GUIDES

to survey methods
and data management



Measuring psychological constructs

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Abstract:

Over the past years, psychological constructs have become increasingly important also for researchers outside the field of psychological research. This guide will provide an overview of the most used as well as the most useful psychological constructs in large scale surveys and will discuss the implications and difficulties related to psychological scales namely their length, validity, and reliability, the use of the same questionnaires across different data collection modes, as well as their translation for the Swiss context.

Keywords: psychological constructs, short scales, translation, multimode

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The FORS Guides to survey methods and data management

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1. INTRODUCTION

A growing number of researchers have become interested in psychological constructs. Therefore, various psychological scales in large generalist interdisciplinary surveys have been gradually introduced since the 1990s. By providing a general overview of the most used and the most useful psychological constructs in large interdisciplinary surveys, in this guide, we aim to sum up, present, and discuss the challenges related to the introduction of psychological scales in large generalist interdisciplinary surveys based on the Swiss Household Panel (SHP) experience (for an exhaustive presentation of the SHP, see Tillmann et al., 2022; Tillmann et al., 2016).

Psychological scales were originally constructed for personal assessment with questionnaires trained professionals would administer to individuals, mainly in clinical settings or in the laboratory during face-to-face sessions. In large interdisciplinary surveys, these scales must be adapted to assess psychological constructs in the population, and trained interviewers, not psychologists, administer or read the questions. Second, these scales contain many items. However, the particularity and the interest of many large interdisciplinary surveys is that they are generalist and cover many domains to put them into perspective and understand to what extent an event/transition in one life domain might, for example, impact another life domain. This means that large surveys have great time constraints and are obliged to introduce in their questionnaires *short* or *extra-short* scales. Therefore, to be suitable for large surveys, psychological scales must include fewer items. In the field of personality psychology, a well-known example might be the reduction of the Big Five Inventory (BFI), which comprises 44 items (John et al., 1991), to the now commonly used 10-item scale (BFI-Ten; Rammstedt & John, 2007). In the context of surveys in Switzerland, another pitfall is the translation of these scales. Indeed, large surveys that cover the whole country must be provided in three national languages: whereas French and Italian standardized and validated questionnaires can be used in the French- and Italian-speaking parts of Switzerland, the same cannot be said for German questionnaires. Validated and standardized assessment tools in German must be adapted for the German-speaking part of Switzerland, which is characterized by its various dialects in the spoken language. The last concern resides in the transferability of psychological scales for various data collection modes. In the SHP, for instance, data was mainly collected through computer-assisted telephone interviews (CATI), but the SHP comprises several data collection modes, including CATI and computer assisted web interviewing (CAWI). This variation across data collection modes raises the question of the comparability of questions across modes for the SHP participants¹. When adjusting the questions to different data collection modes, researchers have to avoid adding modifications that might add potential bias. Based on our expertise with the SHP, we aim to synthesize these difficulties and suggest recommendations for the implementation of psychological scales in large-scale interdisciplinary surveys.

¹ The use of various data collection modes in the SHP raises the question of the answers' comparability across modes that have to be controlled for in the analyses. This aspect will not be treated here.

1.1 PSYCHOLOGICAL CONSTRUCTS IN LARGE SCALE SURVEYS

In multi-theme and large-scale panel surveys, there is a growing interest and demand from researchers in many disciplines for psychological constructs. Below, we will provide an overview of some extensively used psychological constructs.

Well-being

A very important topic of interest is individuals' overall quality of life, which is often measured with well-being questions. Subjective well-being as well as positive or negative emotions (Diener, 1984) are some of the main dimensions used in a large array of disciplines. Subjective well-being is mostly conceptualized and theorized from a psychological perspective, but it is also used in a sociological, demographic, economic, and political science perspective and in medicine or psychiatry for instance. These measures of subjective well-being are therefore of major interest to a wide range of researchers from various disciplines. Well-being concepts are therefore very broadly cross-cutting, and some subjective well-being measures are systematically introduced in large-scale surveys.

Personality traits

The dimension of personality traits is also assessed in various other disciplines than psychology, such as economics (e.g. Wichert & Pohlmeier, 2010) and political science (e.g. Hirsh, 2010). Personality traits have also been shown to be related to health care utilization (e.g. Aschwanden et al., 2019; Friedman et al., 2013; Nolan et al., 2019), positive and negative health behaviors (e.g. Aarabi et al., 2022; Hakulinen et al., 2015), and mortality risk (e.g. Graham et al., 2017; Jokela et al., 2013), for instance.

Cognitive functioning

Several studies have demonstrated the cognitive functioning's crucial role in individuals' lives, particularly its effect on their social life and as well as their economic and professional success and its link with longevity (e.g. Gottfredson, 1997; Gottfredson & Deary, 2004; Strenze, 2007). However, it seems that short cognitive scales must be used with caution and may serve as proxies to measure cognitive abilities (Schipolowski et al., 2014). In the field of ageing, to understand dementia more clearly, the Harmonized Cognitive Assessment Protocol² (HCAP) has been developed to measure and understand dementia risk by gathering information from a selected set of well-established cognitive and neuropsychological assessments.

However, for large-scale panel surveys that comprise adults of all ages, the main issue is integrating cognitive testing that is not constrained by ceiling effects (Gatz et al., 2002; Kliegel et al., 2007). Such cognitive testing has to consider various cognitive functions for a heterogeneous population of various ages. Multiple measures of brief cognitive assessments have been developed to be implemented in large-scale telephone-based panel surveys.

Individual resources

Some surveys are intended to provide a better understanding of how individuals adapt to events and/or life transitions they experience, whether they are individual events or transitions

² <https://hrs.isr.umich.edu/data-products/hcap>. Retrieved December 9, 2022

related to changes or developments in society. These changes might often generate various types of stress for the individual and threaten his/her subjective well-being or health (Pearlin, 2010; Pearlin et al., 1981; Pearlin & Schooler, 1978). One of the psychologists' interests is to understand more thoroughly the resources individuals mobilize to adapt to their life course events/transitions or sociohistorical events. The introduction of measures of coping strategies or psychosocial regulations is therefore central to large-scale surveys and has been used, for instance, in the German Socio-Economic Panel (SOEP) since the 1990s (Rammstedt & Beierlein, 2014). It is crucial to study and better understand the mechanisms related to adaptation to various types of stressors and the possibility of identifying protective factors in the face of stressful situations. Moreover, this interest in such psychological constructs goes far beyond the field of psychology. Indeed, the effect of many psychological constructs on various areas of people's lives has been widely demonstrated for several decades. The processes related to an individual's ability to act to achieve goals in various areas of functioning have not only been treated from a psychological perspective (Bandura, 2003). Political scientists (e.g. Caprara et al., 2009) have dealt with this theme in relation to policy attitudes, for example. In economics, some researchers have become more interested in individuals' perception of their competencies that drive economic behavior (e.g. Wuepper & Lybbert, 2017).

To sum up

The abovementioned research demonstrates the usefulness of psychological characteristics and advocates for the use of more such scales in large interdisciplinary surveys. As Rammstedt and colleagues (Rammstedt & Beierlein, 2014; Rammstedt et al., 2013) noted, several researchers and institutions have strongly recommended introducing psychological measures into large scale-panel surveys. However, the widespread interest in psychological constructs in disciplines as diverse as social science, education, politics, economics, psychiatry, and medicine poses the challenge of these psychological tools' transferability to large surveys.

2. KEY ISSUES OF THE TRANSFERABILITY OF PSYCHOLOGICAL CONSTRUCTS IN LARGE-SCALE SURVEYS

The great interest in and demand for introducing psychological constructs into large-scale interdisciplinary surveys is, however, associated with a number of challenges. First, psychological scales are initially designed to measure a personal dimension, to assess an individual's psychological characteristics. They make it possible to objectivize psychological evaluation through measurement, and they limit the psychologist's subjectivity in his or her assessment. These scales have been developed, validated, and standardized for psychologists or psychotherapists to use them as diagnostic tools in the context of a more general therapy. Based on this evaluation with several questionnaires, practitioners can make decisions to help individuals adapt more effectively to live a better life. Psychological scales allow individuals to get to know themselves better; explore the facets of their personality, cognitive functioning, emotional and creative intelligence; and understand the difficulties or disorders they may encounter. This precise and exhaustive assessment of individuals' characteristics goes along with the need for many items. In contrast, large surveys do not represent diagnostic settings but are intended to evaluate the survey's population and assess the differences between subpopulations. Although these indicators are part of a larger

framework and will rarely be used as the sole diagnostic tool in psychotherapy, in surveys, these tools can be used as control variables with other indicators and as dependent variables.

To assess psychological constructs exhaustively, psychological scales require many items. In large interdisciplinary surveys, the scale's length is a major issue as well as its formulation and the translation for various linguistic areas, as in Switzerland, and for various collection modes.

2.1. THE ISSUE OF THE LENGTH OF PSYCHOLOGICAL CONSTRUCTS

Psychological constructs are measured with psychological scales that include many items to assess a particular dimension and its facets thoroughly. Many items are not compatible with multi-theme surveys in which questionnaire length is a major issue and time is limited. Moreover, it seems there is also a demand for shorter scales in the psychological field. Short scales can be defined as scales with a maximum of 10 items measuring a specific psychological construct (Ziegler et al., 2014). In some cases, this is a one-item-scale that represents a larger number of items, as Table 1 shows.

Table 1: Original satisfaction with life scale and the SHP version.

Original satisfaction with life scale (Diener, Emmons, Larsen, and Griffin, 1985)
In most ways, my life is close to my ideal.
The conditions of my life are excellent.
I am satisfied with my life.
So far, I have gotten the important things I want in life.
If I could live my life over, I would change almost nothing.
SHP abbreviated version
In general, how satisfied are you with your life if 0 means "not at all satisfied" and 10 means "completely satisfied"?

Psychological scales definitively must be reduced, as Rammstedt and Beierlein (2014) asserted. They discuss the extent to which a drastic reduction of the scale items affects short scales' psychometric properties, in particular in terms of the scale's reliability and validity. They state, "Contrary to the assumed negative effects of the brevity of a scale on its validity, several researchers have provided evidence that the validity of short scales is comparable to that of longer scales" (Rammstedt & Beierlein, 2014, p. 217). Recently, Nilsson, and colleagues (Nilsson et al., 2020) drew similar conclusions.

2.2. THE ISSUE OF THE FORMULATION OF PSYCHOLOGICAL CONSTRUCTS

From a quantitative-psychology perspective, most questionnaire items are formulated for the PAPI (paper and pencil interviewing) or CAWI mode. Such data collection modes allow respondents to take their time, reread the questions, and think about them to understand their subtlety. Thus, long and complex questions do not pose major comprehension problems for most of the respondents. But long questions require a high level of written comprehension of the language and might not be adequate for people with a low education level or with a migration background and low proficiency in the national languages. It means that for CATI and CAPI, long questions should be avoided due to the possible difficulty in fully understanding them.

Although they are never recommended, negations in questions are less of a problem for PAPI and CAWI respondents. However, this complex and indirect question wording is problematic

in CATI and CAPI (example in Table 2): negations are barely understandable, and long questions should be avoided. Special attention must be paid to adapting the psychological questions to make them understandable and intelligible for a collection mode they were not constructed for.

Table 2: Example from the original BFI-10 and the SHP version.

BFI-10 on a 5-point Likert scale	Adapted CATI SHP version on a scale from 0 to 10
How well do the following statements describe your personality? (From “disagree strongly” to “agree strongly”)	Please tell me , how well do the following statements describe your personality, if 0 means "I completely disagree" and 10 "I completely agree" .
I see myself as someone who ... has few artistic interests	I see myself as someone who... ... has artistic interest

Notes: Three adaptations were made. First, the wording of a self-assessment scale was adapted to phone interviews. Second, the SHP comprises a scale from 0 to 10 that aligns with the main answer scale of the SHP whereas the BFI-10 is based on a 5-point Likert scale. Finally, the negative wording was not intelligible by phone and has been changed.

The question wording raises the issue of the comparability across data collection modes. Indeed, a key issue is that some surveys, such as the SHP, rely on various data collection modes across waves. Respondents can answer the questionnaires mainly in CATI or CAWI, which means that the wording of the questions is adapted for these modes, as Table 3 shows, without changing the questions’ meaning.

Table 3: Example of instruction differences between CATI and CAWI mode for the three national languages.

SHP CATI version	SHP CAWI version
Pour chacun des énoncés que je vais vous lire, pourriez-vous me dire si vous êtes en accord ou en désaccord, 0 signifie "pas du tout d'accord" et 10 "tout à fait d'accord".	Pour chacun des énoncés suivants , veuillez indiquer si vous êtes en accord ou en désaccord, 0 signifie "pas du tout d'accord" et 10 "tout à fait d'accord".
Bitte sagen Sie mir für jede Aussage, die ich Ihnen jetzt vorlese , ob Sie damit einverstanden sind oder nicht, wenn 0 "überhaupt nicht einverstanden" bedeutet und 10 "vollkommen einverstanden".	Bitte geben Sie für jede der folgenden Aussagen an , ob Sie damit einverstanden sind oder nicht, wenn 0 "überhaupt nicht einverstanden" bedeutet und 10 "vollkommen einverstanden".
Per ognuno degli enunciati che Le leggerò , potrebbe dirmi se è in accordo o in disaccordo, 0 significa "per niente d'accordo" e 10 "pienamente d'accordo".	Per ognuno degli enunciati seguenti , indichi se è d'accordo o in disaccordo. 0 significa "per niente d'accordo" e 10 "pienamente d'accordo".

For some questions, the data collection mode might impact the participants’ answers for several reasons: formulation of the question, display on the screen, presence or absence of an interviewer, social desirability³, etc. (Klausch et al., 2013). The advice from the SHP is to control the analyses by data collection mode to avoid data collection mode bias (Voorpostel et al., 2020). According to Kreuter et al.,

“CATI had the highest rate of item missing data and the Web the lowest. The Web had the highest levels of reporting accuracy and CATI had the worst. Thus the choice of mode could depend on which source of error is most important for a survey (Kreuter et al., 2008, p. 864)”.

³ The issue of social desirability is a topic in itself that will not be covered exhaustively here.

Surveys rely on various data collection modes, so the researcher should be aware of the issues the transposition of psychological scales raises.

2.3. THE ISSUE OF THE TRANSLATION OF PSYCHOLOGICAL CONSTRUCTS

In the Swiss context, another challenge lies in the translation of the questions. Indeed, if the scales validated in French or Italian can be transposed in the context of the French- and Italian-speaking parts of Switzerland—except for the sociodemographic questions, which require some minor adjustments for Italian-speaking individuals—it is not the same for the Swiss German context regarding CAWI, CAPI, and CATI questionnaires. Although standard German is used for written correspondence in the German-speaking part of Switzerland, people use their regional dialect and specific Swiss vocabulary in all kinds of social interactions. Therefore, personal and telephone interviews in surveys are usually conducted in Swiss-German dialects. Therefore, scales developed in the German context need to be adapted for Switzerland in terms of vocabulary, syntax, and other specificities (see Table 4). The formulations differ, and so does the way of addressing the individuals (Renschler & Kleiner, 2013).

Table 4: Example of differences between CATI/CAPI and CAWI mode for the German speaking part of Switzerland.

SHP CATI/CAPI version	SHP CAWI version
Wie stark sind Sie nach der Arbeit zu erschöpft, um Sachen zu machen, wo Sie eigentlich gerne machen, wenn 0 "überhaupt nicht" und 10 "äusserst stark" bedeutet?	Wie stark sind Sie nach der Arbeit zu erschöpft, um Sachen zu machen, die Sie eigentlich gerne machen, wenn 0 "überhaupt nicht" und 10 "äusserst stark" bedeutet?

Notes: Swiss-German dialects include only one relative pronoun ("wo") whereas in written German, multiple pronouns must be used.

Another problem concerns the issue of multilingualism in the Swiss context: every survey at the national level includes questions in the three national languages. This means that the question of scales' and questionnaires' comparability also arises at the national level. Indeed, behind these various languages are also different cultural worlds to which the questions must be adapted. Hence the importance of having translators who not only know the language but are also familiar with the respective cultural context.

3. A CASE STUDY: PSYCHOLOGICAL SCALES IN THE SHP

Since the origin of the SHP in 1999, a number of psychological questions have been gradually introduced. Here, the psychological constructs, scales, and item questions that are currently available in the SHP are detailed. The following measures are available: measures of the cognitive and affective dimensions of subjective well-being, such as satisfaction with life in general and many domain specific fields of satisfaction, as well as measures of positive and negative emotions (Busseri & Sadava, 2011; Diener, 1984; Diener & Emmons, 1984; Scherer et al., 2004; Watson et al., 1988); two assessments of personality traits available in various waves (Lang et al., 2011; Rammstedt & John, 2007); self-esteem (Rosenberg, 1965); self-control (Levy, Joye, & Guye, 1997); personal mastery (Lachman & Weaver, 1998a, 1998b; Pearlin, 1981); dyadic coping (e.g. Bodenmann (1995, 1997); general trust (Rosenberg, 1956); perceived stress (Cohen et al., 1983); and work family balance indicators (e.g. Carlson et al.,

2000; Geurts et al., 2005). The various scales and their items are referenced and displayed in Table 5: some scales are available annually; some others are modularized.

Besides these psychological constructs, others have been introduced but not repeatedly, such as a scale to assess worries (Stöber & Joormann, 2001) and important things in life (Cheek, 1989; Cheek & Briggs, 1982). The questionnaires on the SHP_III (second refreshment sample, 2013) and the conjoint SHP LIVES-Vaud and LIVES-FORS Cohort samples included a number of additional scales on identification, discrimination, and anomie. Identification is measured using two sets of ad hoc questions: a measure of identification with regional categories and one focused on social categories that captures the extent to which various social categories are central to one's identity. Along with identification, a battery of questions measures discrimination based on ad hoc various social categories. Finally, anomie is measured using McClosky and Schaar's (1965) 7-item version, which captures feelings about the disruptive or nondisruptive effect of current social changes and individuals' appreciation that current social ties would become increasingly loose. These scales are not presented here.

Table 5: Psychological constructs and scales currently available in the SHP.

Cognitive well-being (Diener, 1984)		
Variables	Label	Available in waves
P\$\$C44	Satisfaction with life in general	W02 – W\$\$
P\$\$C02	Satisfaction with health status	W01 – W\$\$
P\$\$C100	LS: Life close to ideal	W14; W17; W20
P\$\$C101	LS: Excellent life conditions	W14; W17; W20
P\$\$C102	LS: Having gotten important things	W14; W17; W20
P\$\$C103	LS: Not changing anything	W14; W17; W20
P\$\$YTH01	Satisfaction with current studies	W03 – W\$\$
P\$\$YTH05	Satisfaction with things learned during studies	W03 – W\$\$
P\$\$YTH06	Satisfaction with relationship with the teaching staff	W03 – W\$\$
P\$\$YTH07	Satisfaction with the atmosphere with your fellow pupils/students	W03 – W\$\$
P\$\$YTH08	Satisfaction with the support from your parents	W03 – W\$\$
P\$\$W92	Satisfaction with the income	W01 – W\$\$
P\$\$I01	Satisfaction with financial situation	W01 – W\$\$
P\$\$I02	Satisfaction with financial situation: Change	W02 – W\$\$
P\$\$W93	Satisfaction with working conditions	W01 – W\$\$
P\$\$W94	Satisfaction with working atmosphere	W01 – W\$\$
P\$\$W228	Satisfaction with job in general	W01; W06 – W20
P\$\$W229	Satisfaction with the level of interest in tasks	W01; W06 – W20
P\$\$W230	Satisfaction with the amount of work	W01; W06 – W20
P\$\$W615	Satisfaction: hierarchical superiors	W16 – W\$\$
P\$\$W616	Satisfaction: promotion	W16 – W\$\$
P\$\$F01	Satisfaction with living alone	W01 – W\$\$
P\$\$F02	Satisfaction with living together	W01 – W\$\$
P\$\$F03	Satisfaction with living alone or together with other HH members	W01 – W\$\$
P\$\$F04	Satisfaction with way housework is shared	W01 – W\$\$
P\$\$QL04	Satisfaction with personal relationships	W03 – W\$\$
P\$\$F54	Happy with the partner	W16 – W\$\$
P\$\$N69	Satisfaction with the relationship with the partner	W15; W18; W21
P\$\$N72	Satisfaction with the relationship with the children	W15; W18; W21
P\$\$N81	Satisfaction with the relationship with mother	W15; W18; W21
P\$\$N90	Satisfaction with the relationship with father	W15; W18; W21
P\$\$N124	Satisfaction with the relationship with siblings	W15; W18; W21

P\$\$N100	Satisfaction with the relationship with closest friend		W15; W18
P\$\$A05	Satisfaction with free time		W01 – W\$\$
P\$\$A06	Satisfaction with leisure activities		W01 – W\$\$
Affective well-being (Scherer et al., 2004)			
P\$\$C18	... plenty of strength, energy and optimism		W02 – W\$\$
P\$\$C17	... depression, blues, anxiety		W01 – W\$\$
P\$\$C47	... joy		W08 – W\$\$
P\$\$C48	... anger		W08 – W\$\$
P\$\$C49	... sadness		W08 – W\$\$
P\$\$C50	... worry		W08 – W\$\$
Personality traits (Rammstedt & John, 2007)			
Variable	Latent variable	Label I see myself as someone who	Available once since 2009 wave 11
P\$\$C60	Extraversion	... is reserved ¹ .	W11; W12; W13
P\$\$C61	Agreeableness	... is generally trusting.	W11; W12; W13
P\$\$C62	Conscientiousness	... does a thorough job.	W11; W12; W13
P\$\$C63	Neuroticism	... is relaxed, handles stress well.	W11; W12; W13
P\$\$C64	Openness	... has an active imagination.	W11; W12; W13
P\$\$C65	Extraversion	... is outgoing, sociable.	W11; W12; W13
P\$\$C66	Agreeableness	... tends to find fault with others ¹ .	W11; W12; W13
P\$\$C67	Conscientiousness	... tends to be lazy ¹ .	W11; W12; W13
P\$\$C68	Neuroticism	... gets nervous easily ¹ .	W11; W12; W13
P\$\$C69	Openness	... has artistic interests ¹ .	W11; W12; W13
Personality traits (Gerlitz, and Schupp, 2005)			
Variable	Latent Variable	Label I see myself as someone who	Available in wave
P\$\$C140	Conscientiousness	... does a thorough job.	W17
P\$\$C141	Extraversion	... is talkative	W17
P\$\$C142	Agreeableness	... is sometimes rude to others ¹ .	W17
P\$\$C143	Openness	... is original, comes up with new idea	W17
P\$\$C144	Neuroticism	... worries a lot	W17
P\$\$C145	Agreeableness	... has a forgiving nature	W17
P\$\$C146	Conscientiousness	... tends to be lazy ¹ .	W17
P\$\$C147	Extraversion	... is outgoing, sociable.	W17
P\$\$C148	Openness	... values artistic, aesthetic experiences.	W17
P\$\$C149	Neuroticism	... gets nervous easily.	W17
P\$\$C150	Conscientiousness	... does thing efficiently	W17
P\$\$C151	Extraversion	... is reserved ¹ .	W17
P\$\$C152	Agreeableness	... is considerate and kind to almost everyone	W17
P\$\$C153	Openness	... has an active imagination.	W17
P\$\$C154	Neuroticism	... remains calm in tense situations ¹ .	W17
Self-esteem (Rosenberg, 1965)			
Variable	Label		Available in waves
P\$\$C74	At times, I think I am no good at all.		W11; W14; W17; W20
P\$\$C75	On the whole, I am satisfied with myself ¹ .		W11; W14; W17; W20
Self-control	(Levy, Joye, Guye, et al., 1997, p. 510; adapted from Strodtbeck (1958))		Available in waves

P\$\$C70	Often it is not worthwhile to make plans, because too much is unpredictable.	W11; W14; W17; W20
P\$\$C71	I feel like I have little influence on the events of my life.	W11; W14; W17; W20
P\$\$C72	I easily overcome unexpected problems ¹ .	W11; W14; W17; W20
P\$\$C73	In general, I have no difficulty choosing between two possibilities ¹ .	W11; W14; W17; W20
Personal mastery (Lachman & Weaver, 1998a, 1998b; Pearlin, 1981; Pearlin & Schooler, 1978; Zarit et al., 2003)		
Lachman and Weaver, 1998		
P\$\$C104	Sense of control: Doing everything set in my mind ¹ .	W14; W17; W20
P\$\$C105	Sense of control: Find a way to succeed ¹ .	W14; W17; W20
Pearlin and Schooler, 1978		
P\$\$C106	Sense of control: What I want is in my hands ¹ .	W14; W17; W20
P\$\$C107	Sense of control: What will happen depends on me ¹ .	W14; W17; W20
Perceived constraints		
Lachman and Weaver, 1998		
P\$\$C108	Sense of control: Others determine what I can do	W14; W17; W20
Pearlin and Schooler, 1978		
P\$\$C109	Sense of control: Feeling of being pushed in my life	W14; W17; W20
Dyadic coping (adapted from SUGES: Soziale Unterstützung und Gesundheit in der Stadt)		
P\$\$N04	Practical support from partner	W01 – W12; W15; W18; W21
P\$\$N05	Emotional support from partner	W01 – W12; W15; W18; W21
P\$\$N14	Practical support from relatives	W01 – W12; W18; W21
P\$\$N14A	Practical support from relatives: Who	W06 – W12
P\$\$N15	Emotional support from relatives	W01 – W12; W18; W21
P\$\$N15A	Emotional support from relatives: Who	W06 – W12
P\$\$N21	Practical support from neighbours	W01 – W12; W15; W18; W21
P\$\$N22	Emotional support from neighbours	W01 – W12; W15; W18; W21
P\$\$N28	Practical support from close friends	W01 – W12; W15; W18; W21
P\$\$N29	Emotional support from close friends	W01 – W12; W15; W18; W21
P\$\$N32	Practical support from colleagues	W01 – W12; W15; W18; W21
P\$\$N33	Emotional support from colleagues	W01 – W12; W15; W18; W21
P\$\$N48	Practical support from children over 15	W01
P\$\$N49	Emotional support from children over 15	W01
General trust in people (Rosenberg, 1956)		
P\$\$P45	General trust in people	W04-W\$\$
Perceived Stress (Cohen et al., 1983)		
P\$\$C184	Nervous	W18-W\$\$
Work-family balance (e.g. Carlson, Kacmar & Williams, 2000; Geurts, Taris, Kompier, Dikkers, van Hooff, & Kinnunen, 2005)		
P\$\$F50	Interference work <-> private activities/family obligations	W04 – W\$\$
P\$\$F51	Exhausted after work to do what you would like	W04 – W\$\$
P\$\$F52	How difficult to disconnect from work	W04 – W\$\$

Notes: 1) Items reversed in valence; W\$\$ means that the variable is available annually since its introduction.

4. IMPLICATIONS FOR SURVEY PRACTITIONERS

Recommendation 1 – Before introducing psychological constructs in a large panel survey, the question of the transversality of the dimension to be introduced should be debated. To what extent is the dimension based on a well-accepted psychological framework and might be useful in various fields of research? In addition, in longitudinal surveys, such as household panels and some large interdisciplinary surveys, it is better to introduce such constructs from a long-term perspective. Consequently, care must be taken in the choice of scale(s) and the wording of the items.

Recommendation 2 – An important question is whether a short scale’s profile matches the necessities of the assessment setting in which it is applied and whether the short scale corresponds to the survey’s target population.

Recommendation 3 – Quantitative psychological constructs have been mainly developed for the CAPI, PAPI, and CAWI modes. Are the scales of interest compatible with the data collection mode of the survey in which the construct should be introduced?

Recommendation 4 – Long and complex questions in general, but in particular for CATI, must be avoided as well as negations in questions. Simple, efficient, and straightforward wording of questions must be favored. In addition, surveys based on general random samples of a population comprise individuals from the whole spectrum of the social strata, including individuals with a migration background. All these subpopulations need to master the written or oral questionnaire language in a basic way. The wording of the questions is a key issue regarding high-quality data.

Recommendation 5 – Try to use short and validated standardized scales. Many psychological constructs have been introduced in Swiss samples of international surveys. Examining what has been done and exists in the Swiss context might help researchers select a scale that has demonstrated its value. In case of the need for an adaptation of the scale in Swiss-German, cognitive testing should be systematically undertaken. The adaptation of the German version into Swiss-German is, however, hampered by the fact that some questionnaires have a copyright. It is not possible to make even minimal changes to this type of questionnaire. Without any adaptation, such scales are often not suitable for the Swiss-German context.

Recommendation 6 – Try to base questionnaires on harmonized scales to allow for international comparisons.

Recommendation 7 – For longitudinal surveys, the data collection modes are likely to change over the waves. Similarly, some surveys combine several data collection modes simultaneously, which means that the choice of questionnaires must be compatible with these various data collection modes.

5. FURTHER READINGS

The Journal of Individual Differences edited a special issue titled “Measuring Psychological Constructs with Short Scales: Positive Outlooks and Caveats” (Ziegler et al., 2014). The aim of this special issue is to bring together methodological, statistical, and construction-oriented perspectives. The authors question the construction, psychometric quality, and use of various short scales.

Beatrice Rammstedt and her team develop and test extensively the psychometric properties of short and extra-short psychological measures. Several articles are of major importance regarding this issue (e.g. Rammstedt & Beierlein, 2014; Rammstedt et al., 2013). In addition, the team developed extra-short psychological scales for large-scale interdisciplinary surveys.

From a Swiss perspective, Renschler and Kleiner (2013) describe the importance of dialect variation in specific linguistic settings in the Swiss context.

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