

Mixed Methods as a Means to Overcome Methodological Limitations of Qualitative and Quantitative Research

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Discussion about mixed methods:
 qualitative and quantitative methods should be combined to use their
 „complementary strengths and non-overlapping weaknesses.“ (Johnson, Turner
 2003, S. 299)

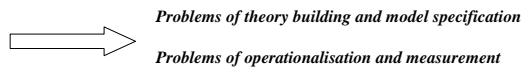
However:
 the question *which* weaknesses of qualitative or quantitative research could be
 overcome by drawing on *which* strengths is seldom, if ever, addressed.

Problem areas of “monomethod research” that can be addressed by mixed
 methods designs

- problems of *theory building* and *measurement* in quan research
- problems of *case selection* and *transferability* in qual research

QUAN Research: Heuristics of Common Sense knowledge

While formulating hypotheses and constructing
 standardized research instruments researchers
 employing an hypothetico-deductive approach
 often utilize their personal common sense
 knowledge. The hazards of this implicit
heuristics of common sense knowledge (cf.
 Kelle, Lüdemann 1995) become obvious, if
 socio-cultural backgrounds of researchers and
 research subjects differ.



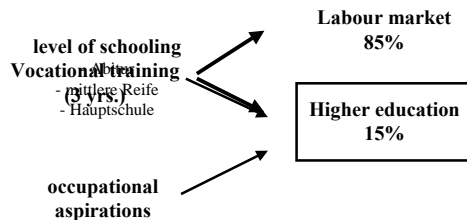
Problems of QUAN research 1: Theory Building and Model Specification

**Project A1: Transition from the dual system of „Vocational training and
 education“ to the labour market**
 (HEINZ, WITZEL, SCHAEFER, KÜHN, KELLE et.al.)

*hair dressers, car mechanics, bank executives, office workers, retail sales
 persons, industrial mechanics*

quantitative panel	4 waves soziodemographic information event history Data about occupational events and family events (3d and 4th wave)
qualitative panel	3 waves open ended interviews about subjective experiences, aspirations and reflections concerning occupational biography

Possible career paths Explaining variables



Clusters of occupational aspirations

- career involvement
 - optimizing opportunities for personality development
 - holistic ambitiousness
 - company identification
 - unpretentious acceptance of necessities
 - wage worker habitus
 - security orientations
- high tendency to achieve further educational qualifications and certificates
- low tendency to undergo further educational efforts

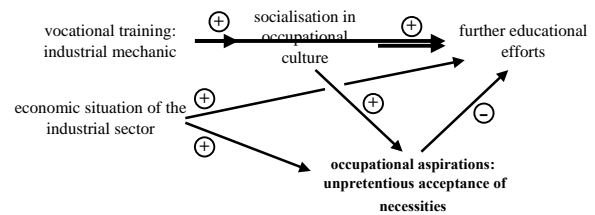
	in occupation trained for	in other occupations	back to school	college/university
bank executives (229)	53,7% (123)	9,6% (22)	0,4% (1)	31,9% (73)
office workers (319)	60,2% (192)	22,6% (72)	0,3% (1)	6,9% (22)
indust. mechanics (177)	40,7% (72)	23,2% (41)	10,2% (18)	14,1% (25)
car mechanics (103)	37,9% (39)	37,9% (39)	1% (1)	5,8% (6)
hair dressers (80)	42,5% (34)	33,8% (27)	2,5% (2)	1,3% (1)
retail sales persons. (130)	43,8% (57)	36,2% (47)	0	5,4% (7)
	49,8% (517)	23,9% (248)	2,2% (23)	12,9% (134)

Table 1: Occupational status of apprentices in six different professions (school leaver cohort 1989) in Bremen and Munich four to five years after vocational training. For reasons of readability the residual category (containing categories like without job, on sick leave, pregnant, maternity leave, imprisonment, abroad, military service) has been omitted. Therefore the row percentages do not add up to 100%

Covariate	Cluster						
	1 company identification	2 wage worker habitus	3 unpretentious	4 security orientation	5 career involvement	6 optimistic opportunities	7 holistic ambitions
Occupation trained for							
bank executives	-0,45*	-0,32	-0,19	+0,08	+0,51***	+0,66***	-0,64***
office workers	-0,16	+0,19	+0,38	-0,03	-0,25	+0,14	-0,24
industrial mechanics	-0,23	-0,06	+0,82***	+0,09	-0,19	-0,03	-0,02
car mechanics	-0,25	+0,49**	+0,63**	-0,06	-0,09	-0,78*	+0,34
hair dressers	+0,39	+0,30	-1,77**	-0,01	-0,26	-0,46	+0,86***
retail sales persons	+0,24	-0,60**	+0,14	-0,08	+0,29	+0,46*	-0,30
gender: female	+1,11***	+0,06	-0,35**	+0,06	-0,49***	-0,38***	+0,50***

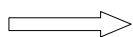
Access to „local knowledge“ through qualitative interviews

- Training takes place in large companies in the old core industries under supervision of highly skilled master craftsmen
- the industrial mechanic is regarded as one of the most prestigious occupations, representing esp. in former times some sort of working class aristocracy
- in a period of economic slowdown former apprentices were offered jobs with a very low qualification profile.



Problems of QUAN research 2: operationalisation and measurement

- interviewing as a social process where interviewers and respondents act according to their specific motives and goals
- individual social actors may hide their motives and intentions
- they may disguise or conceal certain facts, hold back important information, may invent fictitious events etc.
- they may misunderstand each other



Threats for the validity and quality of interview data

Research Project: Methodological Problems in Interviewing Elderly in Institutional Care

Udo Kelle & Christiane Niggemann



Purposes and Research Questions:

- *Exploration of dimensions of resident satisfaction* in institutionalised care settings
- *Identification of methodological problems* of interviewing in institutionalised care settings

Methods of Data collection and Analysis:

1. *Qualitative (semi-structured) interviews (n = 40)* with residents (age range: 52 - 92 yrs) of 12 residential care homes in North Germany of varying size and ownership
2. *Standardised questionnaires (pilot study n = 244)* with residents (55 - 107 yrs) of 14 different residential care homes tape-recorded and transcribed verbatim interaction protocols of the face-to-face interviews (n= 60)

Triangulation

- between results of statistical analyses and verbatim interaction protocols of standardised interviews
- between the analysis of the data coming from standardised questionnaires and the qualitative data from open ended interviews

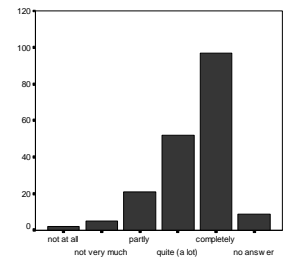
Item 8:

„I will now read some statements. Please tell me for every statement, whether it applies completely, quite a lot, partly, not very much or not at all.

Statement 1
(Read loudly and show the categories on the cards to respondent. The statement can be read several times. It is important that the respondent chooses a category independently)

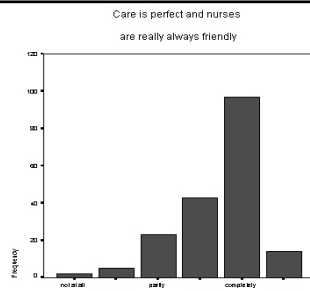
I am fully satisfied with life in the home.

Satisfaction with Life in Care Home



Female resident, b. 1908, Care category 1, „completely satisfied with life in the care home“ „... I can't always call somebody to help me to get washed, so I do it on my own as best I can“, answering another question „... well you see, they just don't have enough time ...“

Statement 7
The care is perfect and nurses are really always friendly.“



Female resident, b. 1913, Care category 1, fully agrees with the statement „...It was better in the beginning, but now there's a shortage of staff, but I wouldn't want you to write that down...“

Female resident, b. 1912, Care category 1, fully agrees with the statement: „A very tricky question, it is not something one talks about. Here, people who speak the truth are punished“ after that abrupt ending of the interview

Open or Hidden Refusal

B: Yesterday it was pointed out to me again that I would be visited by a lady today, and I said to them, tell her not to bother

I: Yes. But why?

B: (thinks). Because I was interrogated two years ago ... interrogated with my doctor. Under the same conditions as today.

I: Yes?

B: More or less

Semi-structured Interviews, Female resident, b. 1913, Care category 1, (622/634)

From a verbatim protocol of a standardised face-to-face interview
B: You know, I'm a lonely woman and don't have a home any more. If I say something here and I lose my accommodation, I wouldn't know where to go... It's better to say nothing... Can we stop it? I don't want to continue, it's too dangerous for me...“

Female resident, b.1912, Care category 1,

Results

- **Quality and validity of interview data** is highly dependent on whether an *atmosphere of mutual trust* can be established which is easier in qualitative interviews, where the respondents' demands for social interaction can be fulfilled.
- **Limited trustworthiness of results provided by standardised measurement instruments** regarding the level of satisfaction of persons in institutionalised care.

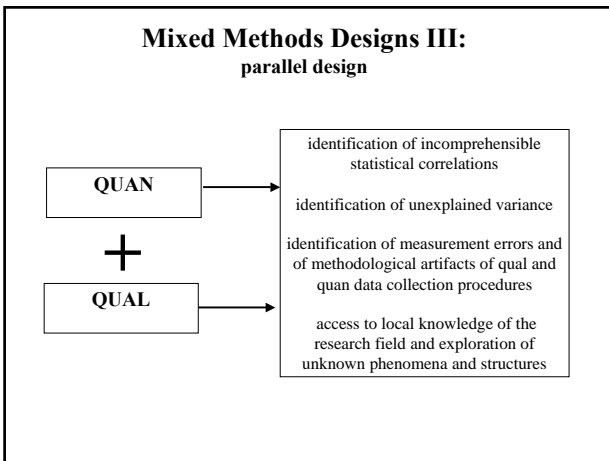
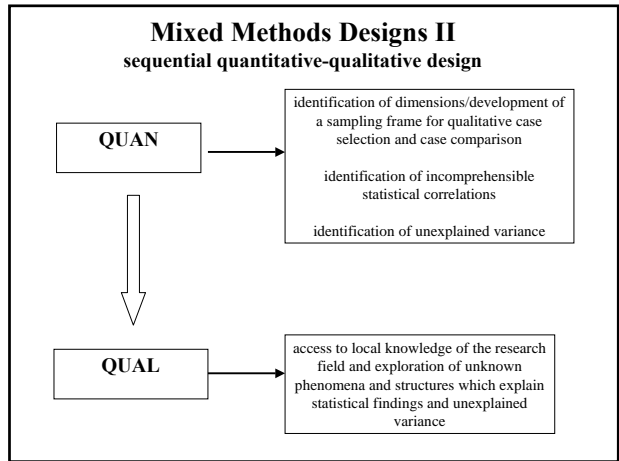
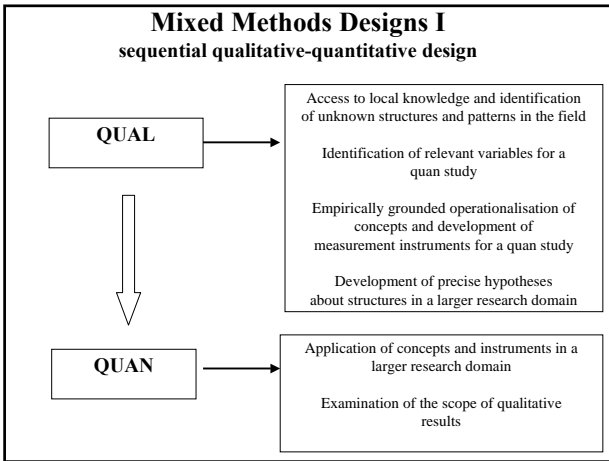
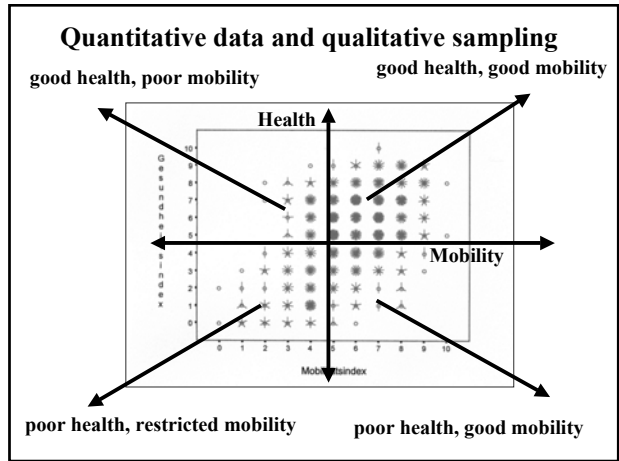
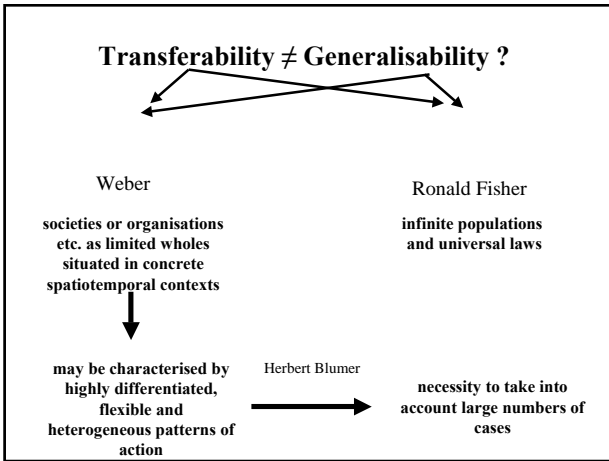
Problems of QUAL research: generalisability, transferability and the selection of cases

The challenge:

„The scientific value of all these (studies) depends, of course, upon the validity of the subjective interpretations of the authors as well as the extent to which the cases selected are typical. Neither the validity of the sample nor of the interpretations are objectively demonstrable on account of the informality of the method.“ (Lundberg 1929/1942, S.169)

Possible Answers:

- the classical approach
theoretical generalisation, e.g. „Analytic Induction“ (ZNANIECKI)
- the postmodernist approach:
"The only **generalization** is that there is no **generalization**," (GUBA, LINCOLN)



Conclusions

Mixed methods designs provide important tools to overcome limitations of qualitative and quantitative mono-method research:

- in a sequential quantitative-qualitative design quantitative research can *guide the selection of cases* in qualitative studies,
- results from qualitative interviews can help to *identify unobserved heterogeneity in quantitative data* as well previously *unknown explaining variables* and misspecified models,
- results from the qualitative part of mixed methods design can help to *understand previously incomprehensible statistical findings*,
- qualitative research can help to *discover quality problems of quantitative measurement instruments*,
- and quantitative research can be used to *examine the scope of results from a qualitative study* and support the transfer of such findings to other domains.

