
Combining Qualitative and Quantitative Research Methodologies

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Background

- **Dream interpretation ...**
- **Ph.D. social psychology**
- **Focus group moderator**
- **Customer visits**
- **Ultimately**
 - ◆ **Stream of research on advertising rhetoric**
 - ◆ **Books on qualitative market research for an industry audience**

What Is Qualitative Research?

(What is Quantitative Research?)

■ Qualitative materials

- ◆ Texts
- ◆ Interviews
- ◆ Observation & participation
- ◆ Generally, a small sample of the above, possibly $n = 1$

■ Quantitative materials

- ◆ Archive of texts or numbers
- ◆ Survey or other self-report instrument
- ◆ Experiment with treatment contrasts
- ◆ Generally, a large sample, $n > 30, 100, 1000 \dots$

Output of Qualitative & Quantitative Research Methodologies

- **Qualitative output**

- ◆ ???

- **Quantitative output**

- ◆ **A distribution of quantities and a comparison of this distribution to one or more other distributions**
 - **Content analysis: incidence over time or across groups or situations**
 - **Data mining: patterns of covariation**
 - **Survey: incidence across groups or time, or against expectation**
 - **Experiments: quantity across treatment conditions**
- ◆ **Probability theory, in the form of sampling, significance testing, random assignment, etc., serves as the guarantor of the meaningfulness, reliability, and validity of the results generated by quantitative research methodologies**

Qualitative Research Output

- Identification (discovery) of **qualities**
 - ◆ The quiddities of things and relationships between things
- A **quantity** is necessarily a **quantity** of—some **quality**
- **Quantitative** research estimates and compares the **quantity** of some **quality** identified (or discovered) through **qualitative** methodologies

Two Types of Generalization

- **Type 1: Incidence or magnitude**
 - ◆ **Generalize sample values to population**
 - ◆ **Distinctive competence of quantitative research conducted on large probability samples**
- **Type 2: Identity and range**
 - ◆ **Generalize set membership identities in sample to identities in population**
 - ◆ **Distinctive competence of qualitative research conducted on judgment samples**

The Overarching Category

- For our purposes, qualitative and quantitative research methodologies are both attempts to contribute to *scholarship*
 - ◆ Later, this overarching category will help situate industry uses of qualitative methodologies relative to our primary focus in this workshop
- **Scholarship: non-obvious, vetted conceptual structures possessed of generality**
 - ◆ *Aka*, sound theory

Risk Factors Across Types of Scholarship

| Type of failure | Qualitative ? | Quantitative ? |
|-----------------|---------------|----------------|
| Not theory | ✓ | ✓ |
| Unsound | | ✓ |
| Obvious | ✓ | |
| In general | Journalism | Curve-fitting |

Implications

- **The risk factor profile for qualitative methodologies is disadvantageous**
 - ◆ In the context of the journals of interest
- **Reviewers, by and large, are confident of their ability to identify unsound quantitative methodology**
 - ◆ And much less confident, (and perhaps not even certain the category applies), of identifying unsound qualitative methodology
- **This lack of confidence puts extra emphasis on judgments of theoretical caliber and non-obviousness**
 - ◆ And since 'non-obvious' is in the eye of the beholder, the weight placed on theory contribution redoubles when purely qualitative research is evaluated

Summary Thus Far

- **From texts, interviews, observations and participation we can identify (discover) the qualities of consumer response within some domain**
- **From archives, surveys, or experiments we can quantify the incidence and magnitude of previously identified qualities**
- **And, from gazing at our navels, we can generate new, non-obvious conceptual structures, with generality, that are to some degree self-vetting (coherence, etc.)**

Point

- **Theoretical contribution, which is the sine qua non for publication in refereed journals, doesn't require any particular kind of data—or any data at all.**
 - ◆ Theory doesn't come from data
 - ◆ There is no minimum amount of data required to generate theory
 - ◆ Theory value is independent of data type
- **Theory comes from scholars**
- **Hence, purely qualitative data is neither more nor less useful for developing theory than any other kind of data**

Interesting Consequence

- **Purely qualitative research**
 - ◆ especially of the $n = 1$ kind,
 - ◆ and especially when the referee does not feel the soundness of the methodology can be evaluated,
 - ◆ will be judged by the same standards as purely conceptual, $n = 0$ papers
- **That standard will be the extent to which **new** theory results**
 - ◆ Hence, the purely qualitative paper stands or falls on perceptions of the novelty and magnitude of its theoretical contribution

Contributions to Theory: The Two Possibilities

- 1. Generate theory**
 - 2. Test theory**
-
- **Going out on a limb,**
 - ◆ **Purely qualitative research can never be the subject when ‘test theory’ is the predicate**
 - **Qualitative data are non-confrontational, as it were**
 - ◆ **Generate theory, ground theory, develop new theory, provide the occasion for theory—but never test it.**

A (Possibly) Startling Conclusion

- Concerning purely qualitative studies designed for journal publication:
 - ◆ There can never be published a second, purely qualitative study of the same phenomenon X
 - ◆ Using the same methodology
- In the case of purely qualitative studies, only first efforts can get published
 - ◆ Second efforts get rejected, because
 - “not new,” “not a test,” or “just a tweak”
- Any number of new **tests** can be envisioned, but theories can only be **generated** once
 - ◆ A second effort is either a rival (which calls for a test), or a tweak on the first (and journals don't publish tweaks), or new data only (data that don't test or generate theory can't be published either)

Aside

- **Good qualitative research for industry—
useful, powerful, worthwhile, a real
contribution to the organization's goals—
requires no theory whatsoever, and need
not test anything**
- **No new theory & no test ≠
bad data or poor methodology**
- **No new theory & no theory test =
no journal publication**

The Argument Thus Far for Combining Qualitative & Quantitative Research

■ Pragmatic

- ◆ The difficulty of publishing purely conceptual papers is well known
- ◆ Generating really new theory—being the first—is a tough standard to meet
- ◆ Hence, combining methodologies hedges your risk
 - If you can test, you don't have to be so new, or go so deep
- ◆ Combined methodologies remain scarce
- ◆ And finally (a personal reason),

“Ai no rite sew gud”

A Substantive Argument

- **Combine in order to do better scholarship that makes a greater contribution**
- **Presupposes that:**
 - ◆ **Quantitative research can supplement some weakness or gap in qualitative data**
 - ◆ **And (less recognized), that qualitative research can supplement weaknesses or gaps in quantitative data**

How Qualitative Research Can Support Quantitative Research

- **When preceding quantitative:**
 - ◆ **Establish the existence of a phenomenon or response**
 - ◆ **Discover what might be measured**
 - ◆ **Enumerate members of a set whose incidence will subsequently be estimated and compared**
 - ◆ **Stake out the range of responses or alternatives**
 - ◆ **Ground concepts in specific examples**
 - ◆ **Stimulate the scholar**
 - ◆ **Facilitate communication and understanding**

How Qualitative Research Can Support Quantitative Research

- **When following quantitative:**
 - ◆ **Generate alternative explanations for a finding**
 - ◆ **Ground numerical findings in a complex multi-dimensional context**
 - ◆ **Explore underlying process that generated the measured result**
 - ◆ **Provide triangulation**
 - ◆ **Facilitate communication and understanding**

Examples

- **Richins JCR 1991**
 - ◆ Focus groups → experiments
- **McQuarrie & Mick 1992**
 - ◆ Experiment 1
 - ◆ Content analysis, experiment 2, phenomenological interviews
- **Phillips and McQuarrie 2003**
 - ◆ Content assessment → content analysis

Conclusions Thus Far

- **Purely qualitative research must meet a demanding standard in terms of generating truly new theoretical material**
- **Combining qualitative and quantitative research may be more forgiving/safer/less risky**
 - ◆ **Opportunity to succeed by being very good at two things, rather than absolutely great at one thing**
 - ◆ **Providing some kind of test markedly expands the possibilities for a contribution**

Characteristic Failures of Purely Qualitative Studies I

■ Closet quantitative research

◆ Tell-tale weasel words

- “more than” ~ $A > B$
- “only a few” ~ $A < \text{criterion}$
- “most

◆ Don't have sample size/quality to support what are fundamentally incidence claims

◆ Can certainly generate hypotheses about quantities, but few papers get published based on hypothesis generation alone

Characteristic Failures II

- **Mediocre journalism (field notes redux)**
 - ◆ **All good journalists at the WSJ, NY Times, or Atlantic Monthly level are excellent practitioners of qualitative data collection**
 - **And are as well excellent communicators who bring their subjects alive and make a contribution to our knowledge of things**
 - **However, most wouldn't know a good theory if it hit them over the head**
 - ◆ **Excellent qualitative data collection, which conveys knowledge of the quiddities of some consumer phenomenon, will be rejected unless made to serve the purposes of theory generation**
 - ◆ **Generally speaking, scholarly journals are not interested in descriptive information on consumer phenomena**
 - **You cannot publish instantiations of known theory**

Characteristic Failures III

- **Misdirected industry research**
 - ◆ **Thorough, disciplined investigations devoted to revealing the quiddity of some consumer phenomenon**
 - **Generally more conceptual than journalism**
 - **More likely to be informed by existing consumer and marketing theory**
 - ◆ **But, fundamentally atheoretical—the focus is on the phenomenon, and not the explanatory structure underlying it**
 - **Or, an existing explanatory structure is merely applied**

Some Practical Advice

- **“Combine qualitative and quantitative methodologies”**

Is a less useful nostrum than

- **“Integrate multiple methodologies to provide converging and mutually reinforcing evidence”**

Interesting Corollary: The Value of Multiplicity in Purely Qualitative Studies

- **If we put the emphasis on ‘multiple’ rather than ‘method’, some possibilities include:**
 - ◆ **Conduct interviews with multiple populations deliberately chosen to provide structured contrasts**
 - ◆ **Interpret multiple texts**
 - **Aimed at different audiences**
 - **Appearing in different media or vehicles**
 - **Advertising different product categories**
 - ◆ **Observe multiple occasions sampled across space, time, groups, or function**
 - ◆ **Just because it is qualitative research doesn’t mean sampling procedure is irrelevant**
 - **Judgment samples, no less than probability samples, can add value**
 - **‘Style is difference’**

Natural (Fruitful) Combinations of Qualitative & Quantitative Data

- **Text interpretation → content analysis**
 - ◆ **Content analysis alone fairly boring, and difficult to publish**
 - If based on known, existing categories
 - ◆ **Conversely, isolated text interpretation is the type case of the challenges facing purely qualitative studies**
 - ◆ **Combination can be interesting and authoritative**
 - Identify and formulate heretofore unknown categories
 - Demonstrate incidence, persistence, or pervasiveness

Natural Combinations II

- Interviews → experiments (or)
Experiments → interviews
- Interviews for the quiddity, experiments for the causality
- Interviews can provide:
 - ◆ Demonstration of extra-laboratory reality of phenomenon or response
 - ◆ Processing tracing to reduce the 'black box' character of many experiments
- Experiments can provide
 - ◆ Evidence of the generality of some phenomenon, and establish the direction of causality
 - ◆ Rebut the charge of idiosyncrasy

Natural Combinations III

- **Observation, participation → archival data**
- **Observation provides the concrete particulars**
- **Archival data establishes the generality, persistence or pervasiveness of what has been observed**

Bastard (Unnatural) Combinations of (Academic) Qualitative and Quantitative

- **Interviews → surveys, questionnaires**
- **IMHO, surveys done for academic purposes tend toward the bogus**
 - ◆ **The availability of magical-seeming statistical technologies (e.g., structural equations) notwithstanding**
- **The purpose of a survey is to establish the exact incidence of some phenomenon or response (and possibly compare one to another)**
- **Such exactitude requires a sample size and a sampling methodology seldom available to the individual scholar**
 - ◆ **Absent such sampling, there is no exactitude**
- **In any case, it is difficult to imagine how/why theory development or testing could hinge on the estimate of incidence a survey provides**

In Support of Qualitative Methodologies: The Futility of Academic Survey Research

- **Most scholars can't obtain the resources needed to obtain the exactitude that is the distinctive competence of survey research**
- **Most theories don't hinge on the exact incidence of a phenomenon or response**
- **Many theories *do* hinge on the presence or absence of some pattern of covariation**
 - ◆ **But experiments dominate surveys from the standpoint of demonstrating causal covariation**
 - ◆ **And archival data dominates surveys from the standpoint of data quality**
- **Of course, prior surveys (=archival data) may be useful to make a point, in the same way as a literature cite**
 - ◆ **But a standalone survey is no more likely to get you published than a standalone literature review**

Conclusion: Multiple Methods

- **Use of multiple methodologies generally strengthens a research effort**
 - ◆ Iff, the individual methodologies are valid, soundly applied, and appropriate to the task
 - ◆ One-off surveys by individual scholars rarely meet this standard
- **For qualitative researchers seeking to strengthen their research effort via multiple methodologies, the best supplements are:**
 - ◆ Multiplicity within the qualitative design
 - ◆ Experiments
 - ◆ Archival data

Final Note

- **Exploratory vs. confirmatory may be a more fundamental distinction than qualitative vs. quantitative**
- **Hence, it is possible to apply quantitative methodologies in an exploratory way (i.e., for purposes of identification & discovery)**
- **Multidimensional scaling example**

Practical Advice: Avoid Methodological Fetishism

- **Different methods are appropriate for investigating different kinds of phenomena and different types of theoretical issues**
- **All valid methods have countless appropriate applications, but any particular method tends to foreground some kinds of questions and background other kinds.**
- **If your fundamental loyalty is to advancing theoretical understanding of consumer behavior, then ideally, you will be methodologically agnostic**
- **If your fundamental loyalty is to tool or to phenomenon—industry may be a more hospitable place than academia**

Academic Qualitative vs. Industry Qualitative

- **Key point: same methodology, profoundly different deliverable**
 - ◆ Potentially the same phenomena are studied, but again, profoundly different deliverable
- **Hence, a very different definition of ‘success’, ‘value’, ‘worthwhile’**
- **Generally,**
 - ◆ **Sound methodology + interpretive skill + time-on-task + on-time delivery = successful qualitative research in an industry context**
- **Research methodology ≠ scholarship**

Managers vs Scholars

- **Scholars develop and test theories in a manner that engages other scholars**
 - ◆ **Scholars ↔ scholars (community)**
- **Managers seek input to decisions aimed at influencing consumers**
 - ◆ **Managers ↔ consumers (out group relations)**

Managers vs. Scholars: Developing the Contrast

■ Scholars/Referees

- ◆ Theory
- ◆ Novelty
- ◆ Self-focused
- ◆ Phenomenon
secondary
- ◆ Must advance the field
- ◆ Abstract & general

■ Managers/Clients

- ◆ Decision
- ◆ Result
- ◆ Other-focused
- ◆ Phenomenon
primary
- ◆ Correctness sufficient
- ◆ Concrete and specific

Implications for Qualitative Researchers Considering Industry

- **Same emphasis on methodological soundness**
- **Same emphasis on interpretive skill**
- **No emphasis on theory**
 - ◆ Although 'theory-free data' is an oxymoron, 'data of no theoretical moment' is not
 - ◆ Old theory is fine (and on balance preferred)
- **Much greater emphasis on understanding consumer behaviors within a domain for their own sake**
 - ◆ Manager benefits to the extent s/he learns to think like a customer
- **In short, correct procedure and knowledge of concrete particulars is highly valued**
 - ◆ Theoretical advance and theoretical generality have no place

Final Thought

- **Most qualitative researchers could do quantitative research if needed**
- **Most quantitative researchers could not do qualitative without a substantial investment in additional training**