Validity

8 Articles Pertaining to the Role of Validity in Rigorous Qualitative Research Design

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The contents of this compilation include a selection of 8 articles appearing in *Research Design Review* primarily from 2020 to 2025 that highlights the various ways the construct of validity contributes to a rigorous qualitative research design. These articles represent a small sampling of the articles in *RDR* devoted to a quality approach to qualitative research and design. Excerpts and links may be used, provided that the proper citation is given.

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A TQF Approach to Construct Validity

Construct validity plays an important role in the design, implementation, analysis, and ultimate usefulness of qualitative research methods. The construct of validity itself in qualitative research is discussed in **this article** and cites qualitative researchers across disciplines who explore "unique dimensions" and other considerations relating to validity in qualitative research.

The **Total Quality Framework** (TQF) relies heavily on construct validity in its quality approach to each phase of the qualitative research process. At each phase, the researcher must ask "Am I gaining real knowledge about the core concepts that are the focus of this research?" For example,

- An important step when **developing a research design** is to identify the key constructs associated with the research objectives to investigate, and the particular attributes of each construct that the researcher wants to explore. So, for example, a researcher conducting a study on dietary behavior may have interest in "health consciousness," including shopping behavior related to organic and fresh foods.
- In the in-depth interview and focus group discussion methods, careful attention needs to be paid to **guide development** and the inclusion of questions relevant to the constructs of interest. When developing the guide, the researcher needs to ask "Is this [topic, question, technique] relevant to the construct we are investigating?", and "Does this [topic, question, technique] provide us with knowledge about the aspect of the construct that we intended to explore in the interviews/discussions?"
- In ethnography, the **observation guide and observation grid** are important tools. "The grid is similar to the guide in that it helps to remind the observer of the events and issues of most import; however, the observation grid is a spreadsheet or log of sorts that enables the observer to actually record and reflect on observable events in relationship to the research constructs of interest" (Roller & Lavrakas, 2015, p. 206).
- The quality of **qualitative data analysis** hinges on the researcher's ability to effectively identify, analyze, and develop valid interpretations of the data around the important constructs associated with the research objectives. To assist the researcher, a TQF approach to analysis recommends a **codebook format and coding form** (which is basically a reflexive journal for the coder[s] to record thoughts and justifications for their coding decisions) that highlights constructs of interest. For example,

Codebook

Unit of Analysis and Key Constructs	Code Name	Code Description and Date of Latest Update	Relationship to Other Codes	When to Apply	Examples
Unit of analysis: Each diary	EDUOPPTY	*Code description:* Specifically mentions educational opportunities that are provided by the facility (e.g., access to online webinars, art classes, workshops).	*This is a main code. Subcodes include:* OLEDU (online education) ARTCL (art class) CPUCL (computer skills class) FINCL (personal finances class) EECL (exercise equipment class) *Other related codes:* POSPHYWB (positive physical well-being) NEGPHYWB (negative physical well-being) POSMENWB (positive mental well-being) NEGMENWB (negative mental well-being) POSFINWB (positive financial well-being) NEGFINWB (negative financial well-being)	Code applies to any mention of any type of educational, career, or personal development opportunity provided by the facility.	"Weekly access to online webinars is helping me keep up with my career." "Twice a week there is an art class. Who would have thought I could draw?"
Main construct: Well-being *Subordinate constructs:* Physical well-being Mental well-being Financial well-being		*Last updated on:* December 5 at 10 A.M.			

Coding Form

Relevant Construct/ Issue	Relevant Code	Nature of Relevant Content	Example/Additional Feedback
Physical well-being	EDUOPPTY	I am seeing a lot of examples where the classes on how to use the exercise equipment are perceived as educational as well as giving women a workout and making them feel physically stronger.	"The weekly classes in the gym on how to use and operate the equipment (like the elliptical machine) have shaped me up, which makes me feel like my body is not totally going to waste."
Mental well-being	EDUOPPTY	There is a lot of overlap in the physical and mental well-being associated with the classes on how to use the exercise equipment in the gym. Mentally, it makes women feel like they are learning a new skill, keeping their minds sharp.	I see most of the comments pertaining to positive mental well-being from the exercise equipment classes coming from the women who have been at the facility for a long time (more than 5 years).
Financial well-being	EDUOPPTY	The educational opportunities at the facility seem to give many women confidence that they can do something productive when they are released from prison and provide themselves with an income.	"I wonder how much I could sell my art for if I continued drawing when I leave here." "I have learned so much about how to properly use the exercise equipment, I am thinking about applying for a job at the fitness center when I'm released."

FIGURE 6.5. Example of a codebook and coding form for a hypothetical content analysis study of diaries written by women confined to the county correctional facility. Roller & Lavrakas (2015, p. 264)

- Construct validity also plays an important role in the **transparency** of the final research document. In the study report, the researcher can (and should) elaborate on the design, data gathering, and analysis decisions that were made pertaining to the key constructs, as well as the main themes that were derived from the data — i.e., the knowledge that was gained from the research — concerning these constructs.

Roller, M. R., & Lavrakas, P. J. (2015). *Applied qualitative research design: A total quality framework approach*. New York: Guilford Press.

Shared Constructs in Research Design: Validity

Not unlike **Part 1 (concerning sampling)** and **Part 2 (concerning bias)** of the discussion that began earlier, the shared construct of validity in research design has also been an area of focus in several articles posted in *Research Design Review*. Most notable is **"Quality Frameworks in Qualitative Research"** posted in February 2021 in which validity is discussed within the context of the parameters or strategies various researchers use to define and think about the dimensions of rigor in qualitative research design. This article uses the **Total Quality Framework** (Roller & Lavrakas, 2015) and criteria of Lincoln and Guba (1985) to underscore the idea that quality approaches to design cuts across paradigm orientation, leading to robust and valid interpretations of the data.

Many other qualitative researchers, across disciplines, believe in the critical role that the shared construct of validity plays in research design. Joseph Maxwell, for example, discusses validity in association with his realism approach to causal explanation in qualitative research (Maxwell, 2004); and discusses in detail five unique dimensions of validity, including descriptive validity, interpretative validity, theoretical validity, evaluative validity, and generalizability (Maxwell, 1992). And of course, Miles & Huberman were promoting greater rigor by way of validity more than three decades ago (Miles & Huberman, 1984).

More recently, Koro-Ljungberg (2010) takes an in-depth look at validity in qualitative research and, with extensive literature as the backdrop, makes the case that "validity is in doing, as well as its (un)making, and it exhibits itself in the present paradox of knowing and unknowing, indecision, and border crossing" (p. 609). Matteson & Lincoln (2008) remind educational researchers that validity does not solely concern the analysis phase of research design but "the data collection method must also address validity" (p. 672). Creswell & Miller (2000) discuss different approaches to determine validity across three paradigm orientations — postpositivist, constructivist, and critical — and "lens" of the researcher, participants, and researchers external to the study.

Among qualitative health researchers, Morse (2020) emphasizes the potential weakness in validity when confusing the analysis of interpretative inquiry with that associated with "hard, *descriptive* data" (p. 4), and Morse et al. (2002) present five verification strategies and argue that validity (as well as reliability) is an "overarching" construct that "can be appropriately used in all scientific paradigms" (p. 19).

These researchers — and those discussed in Part 1 – Sampling and Part 2 – Bias — are admittedly a small share of those who have devoted a great deal of thought and writing concerning these shared constructs. The reader is encouraged to utilize these references to build on their understanding of these constructs in qualitative research and to grow their own library of knowledge.

Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory into Practice*, *39*(3), 124–130.

Koro-Ljungberg, M. (2010). Validity, responsibility, and aporia. *Qualitative Inquiry*, *16*(8), 603–610. https://doi.org/10.1177/1077800410374034

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage Publications.

Matteson, S. M., & Lincoln, Y. S. (2008). Using multiple interviewers in qualitative research studies: The influence of ethic of care behaviors in research interview settings. *Qualitative Inquiry*, *15*(4), 659–674. Retrieved from http://qix.sagepub.com/cgi/doi/10.1177/1077800408330233

Maxwell, J. A. (1992). Understanding and validity in qualitative research. *Harvard Educational Review*, *62*(3), 279–300.

Maxwell, J. A. (2004). Casual explanation, qualitative research, and scientific inquiry in education. *Educational Researcher*, *33*(2), 3–11.

Miles, M. B., & Huberman, A. M. (1984). Drawing valid meaning from qualitative data: Toward a shared craft. *Educational Researcher*, *13*(5), 20–30. https://doi.org/10.3102/0013189X013005020

Morse, J. (2020). The changing face of qualitative inquiry. *International Journal for Qualitative Methods*, *19*, 1–7. https://doi.org/10.1177/1609406920909938

Morse, J. M., Barrett, M., Mayan, M., Olson, K., & Spiers, J. (2002). Verification strategies for establishing reliability and validity in qualitative research. *International Journal of Qualitative Methods*, *1*(2), 13–22.

Roller, M. R., & Lavrakas, P. J. (2015). *Applied qualitative research design: A total quality framework approach*. New York: Guilford Press.

How People Think (Part Deux): Validity is Valid in Qualitative Research

Back in February 2010 I posted a discussion concerning **"Qualitative Research & Thinking About How People Think."** In it I argued for the idea that "if cognitive principles apply in the quantitative realm then surely they apply to research forms devoted to in-depth conversations and elaborate probes that ladder to key benefits in the qualitative arena." I go on in that post to focus on cognitive-process theories – specifically optimization and satisficing – and how they can inform a well-designed approach to qualitative marketing research.

Let's take this discussion one step further to include validity. If all research is essentially about the discovery of how people think then we have to admit that our research designs are susceptible to any number of measurement errors. And we cannot talk about measurement error without touching on (in some way) the construct of validity. Although the idea of validity is not typically uttered in the same breath with qualitative research, the underlying goals – trustworthiness, quality, dependability – are germane to all research methods. **William Trochim** and others have **discussed** the reluctance among qualitative researchers to accept the notion of validity, in large part because they reject the belief that there is a truth or reality by which participants' attitudes and behavior can be judged.

But there certainly *is* a reality associated with elements of qualitative design that *can* be judged and is a necessary component to the integrity of our efforts. As one example, the focus group moderator has control of question administration by the fact that questions can be probed for clarification and mis-(or unintended) interpretations of questions can be unearthed on the spot. This ability enables the researcher to realize the true meaning of questions asked, understand the alternative interpretations, and thereby add greater veracity and transparency into the design. Indeed, question-answer validation is a key strength of qualitative research, esp., face-to-face designs that maximize the probing function. Not unlike the cognitive interviews incorporated in many quantitative designs, qualitative research can measure the validity of questions by uncovering how people formulate answers.

Validation has an important role in qualitative research. Qualitative researchers know this and exploit their ability to validate questions as well as answers, esp., when the research is being conducted face-to-face or via telephone. The jury is still out as to whether a computer-assisted mode (e.g., Zoom-like platforms, online bulletin boards, online communities or panels) adequately facilitates the rich probing – the validity – that is a central benefit to conducting qualitative research.

Exploring Complexity, Identifying Connections, Deriving Meaningful Next Steps

In 2025, ***Pubic Opinion Quarterly*** made history with the publication of its first-ever special issue devoted to qualitative research. As discussed **here**, "this special issue includes nine articles that 'illustrate a quality approach to applying qualitative methods and techniques to investigate underrepresented population segments, sensitive topics, survey design, and qualitative data analysis.'"

The nine articles in this special issue are preceded by an editorial written by guest editors, **Margaret Roller** and **Zachary Smith**. In that article, Roller and Smith provide a historical context in which to think about the juxtaposition of qualitative and quantitative methods in public opinion research, as well as the critical role qualitative methodology plays in the social sciences, the unique and essential attributes of qualitative research, quality considerations and frameworks to help guide qualitative researchers, and the all-important role of transparency.

The following is an excerpt from the editorial article emphasizing that "the true definition of qualitative research resides in the complexity of the lived experience and the opportunity for the researcher to explore this complexity, identify connections in the human experience, and derive meaningful next steps." The complete open-access article can be found at **"Qualitative Research: Advancing the Social and Behavioral Sciences"** (Roller & Smith 2025).

In public opinion research, qualitative methods are often paired with survey research to explore the underlying behavior and attitudes that help shape survey questionnaires and give meaning to numerical data. However, within the broader context of social and behavioral sciences, qualitative research is more likely applied as a standalone approach that moves the researcher or research sponsor forward in some way. As stated by Thomas and Magilvy (2011), "The intent of qualitative research is to provide a close-up view, a deeper and richer understanding within a specific context, which can be missed in quantitative research" (p. 152). This sentiment is expressed in a 1987 issue of *Public Opinion Quarterly* where Merton (1987) discusses the focused interview and qualitative research in general, asserting that the "costs" of experimental research mean "giving up access to the phenomenological aspects of the real-life experience and [inviting] mistaken

inferences about the sources of that experienced response" (p. 557). Merton points to the importance of gaining an in-depth understanding of what survey researchers seek to measure: human experiences, attitudes, and behavior, underscoring the idea that qualitative research is the essential companion to quantitative research toward achieving this goal.

Qualitative research does this because it is defined by much more than particular qualitative methods, or any one type of approach or technique, or the typical data formats, or the distinctive qualitative data analysis process. All of these are components of qualitative research, yet the true definition of qualitative research resides in the complexity of the lived experience and the opportunity for the researcher to explore this complexity, identify connections in the human experience, and derive meaningful next steps. (p. 479)

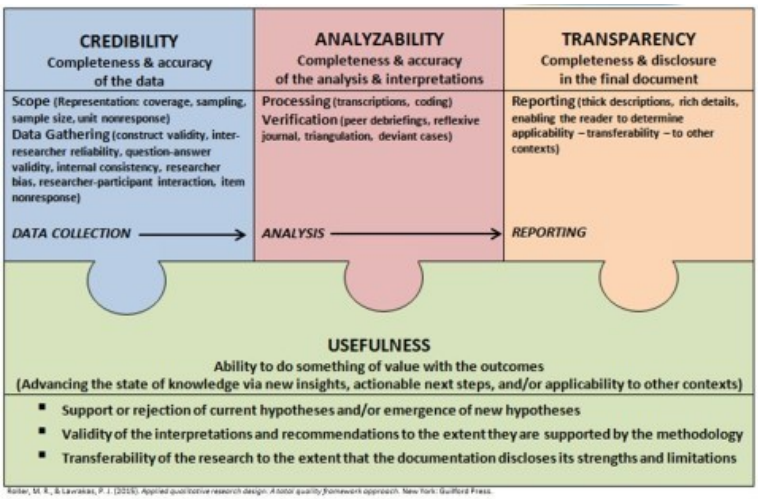
Merton, R. K. (1987). The focussed interview and focus groups: Continuities and discontinuities. *The Public opinion quarterly*, *51*(4), 550-566.

Roller, M. R., & Smith, Z. R. (2025). **Qualitative Research: Advancing the Social and Behavioral Sciences**. *Public Opinion Quarterly*, *89*(SI), 477-491.

Thomas, E., & Magilvy, J. K. (2011). Qualitative rigor or research validity in qualitative research. *Journal for specialists in pediatric nursing*, *16*(2).

Quality Frameworks in Qualitative Research

The following is a modified excerpt from Applied Qualitative Research Design: A Total Quality Framework Approach (Roller & Lavrakas, 2015, pp. 20-21)



Many researchers have advanced strategies, criteria, or frameworks for thinking about and promoting the importance of "the quality" of qualitative research at some stage in the research design. There are those who focus on quality as it relates to specific aspects—such as various validation and verification strategies or "checklists" (Barbour, 2001; Creswell, 2013; Brinkmann & Kvale, 2015; Maxwell, 2013; Morse et al., 2002), validity related to researcher decision making (Koro-Ljungberg, 2010) and subjectivity (Bradbury-Jones, 2007), or the specific role of transparency in assessing the quality of outcomes (Miles, Huberman, & Saldaña, 2014). There are others who prescribe particular approaches in the research process—such as consensual qualitative research (Hill et al., 2005), the use of triangulation (Tobin & Begley, 2004), or an audit procedure (Akkerman, Admiraal, Brekelmans, & Oost, 2006). And there are still others who take a broader, more general view that emphasizes the importance of "paying attention to the qualitative rigor and model of trustworthiness from the moment of conceptualization of the research" (Thomas & Magilvy, 2011, p. 154; see also, Bergman & Coxon, 2005; Whittemore et al., 2001).

The strategies or ways of thinking about quality in qualitative research that are most relevant to the **Total Quality Framework** (TQF) are those that are (a) **paradigm neutral**, (b) flexible (i.e., do not adhere to a defined method), and (c) applicable to all phases of the research process. Among these, the work of Lincoln and Guba (e.g., 1981, 1985, 1986, and 1995) is the most noteworthy. Although they profess a paradigm orientation "of the constructionist camp, loosely defined" (Lincoln et al., 2011, p. 116), the quality criteria Lincoln and Guba set forth more than 35 years ago is particularly pertinent to the TQF in that it advances the concept of trustworthiness as a major criterion for judging whether a qualitative research study is "rigorous." In their model, trustworthiness addresses the issue of "How can a [qualitative researcher] persuade [someone] that the findings of a [study] are worth paying attention to, worth taking account of?" (Lincoln & Guba, 1985, p. 290). That is, what are the criteria upon which such an assessment should be based? In this way, Lincoln and Guba espouse standards

that are flexible (i.e., can be adapted depending on the research context) as well as relevant throughout the research process.

These standards put forth the criteria of credibility, transferability, dependability, and confirmability. For Lincoln and Guba (1985), credibility is the extent to which the findings of a qualitative research study are internally valid (i.e., accurate). Credibility, or the lack thereof, is established through (a) prolonged engagement, (b) persistent observation, (c) triangulation, (d) peer debriefings, (e) negative case analysis, (f) referential adequacy, and (g) member checks. Transferability refers to the extent to which other researchers or users of the research can determine the applicability of the research design and/or the study findings to other research contexts (e.g., other participants, places, and times). Transferability, or the lack thereof, is primarily established through thick description that is "necessary to enable someone interested in making a transfer to reach a conclusion about whether transfer can be contemplated as a possibility" (Lincoln & Guba, 1985, p. 316). Thick description and transferability are key elements of the **TQF Transparency component**. Dependability is the degree to which an independent "auditor" can look at the qualitative research process and determine its "acceptability" and, in so doing, create an audit trail of the process. To that end, the Transparency component of the TQF deals directly with the idea of providing the user of the research with an audit trail pertaining to all aspects of the research in the final research document. And, confirmability refers to utilizing the same dependability audit to examine the evidence in the data that purportedly supports the researcher's findings, interpretations, and recommendations.

Like the Lincoln and Guba model, an important facet of the TQF is its focus on maintaining the integrity of qualitative research design. By acknowledging the **unique attributes of qualitative research** while also applying core research principles, quality frameworks such as the TQF hold qualitative researchers accountable and ultimately produce outcomes that are useful.

Akkerman, S., Admiraal, W., Brekelmans, M., & Oost, H. (2006). Auditing quality of research in social sciences. *Quality & Quantity*, *42*(2), 257–274. https://doi.org/10.1007/s11135-006-9044-4

Barbour, R. S. (2001). Checklists for improving rigour in qualitative research: A case of the tail wagging the dog? *BMJ (British Medical Journal)*, *322*(7294), 1115–1117.

Bergman, M. M., & Coxon, A. P. M. (2005). The quality in qualitative methods. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, *6*(2, Art. 34).

Bradbury-Jones, C. (2007). Enhancing rigour in qualitative health research: Exploring subjectivity through Peshkin's I's. *Journal of Advanced Nursing*, *59*(3), 290–298. https://doi.org/10.1111/j.1365-2648.2007.04306.x

Brinkmann, S., & Kvale, S. (2015). *Interviews: Learning the craft of qualitative research interviewing* (3rd ed.). Thousand Oaks, CA: Sage.

Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Thousand Oaks, CA: Sage Publications.

Guba, E. G. (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Communication and Technology Journal*, *29*(2), 75–91.

Hill, C. E., Knox, S., Thompson, B. J., Williams, E. N., Hess, S. a., & Ladany, N. (2005). Consensual qualitative research: An update. *Journal of Counseling Psychology*, *52*(2), 196–205. https://doi.org/10.1037/0022-0167.52.2.196

Koro-Ljungberg, M. (2010). Validity, responsibility, and aporia. *Qualitative Inquiry*, *16*(8), 603–610. https://doi.org/10.1177/1077800410374034

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage Publications.

Lincoln, Y. S., & Guba, E. G. (1986). But is it rigorous? Trustworthiness and authenticity in naturalistic evaluation. *New Directions for Program Evaluation*, *30*(1), 73–84.

Lincoln, Y. S. (1995). Emerging criteria for quality in qualitative and interpretive research. *Qualitative Inquiry*, *1*(3), 275–289. https://doi.org/10.1177/107780049500100301

Maxwell, J. A. (2013). *Qualitative research design: An interactive approach* (3rd ed.). Thousand Oaks, CA: Sage Publications.

Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Thousand Oaks, CA: Sage Publications.

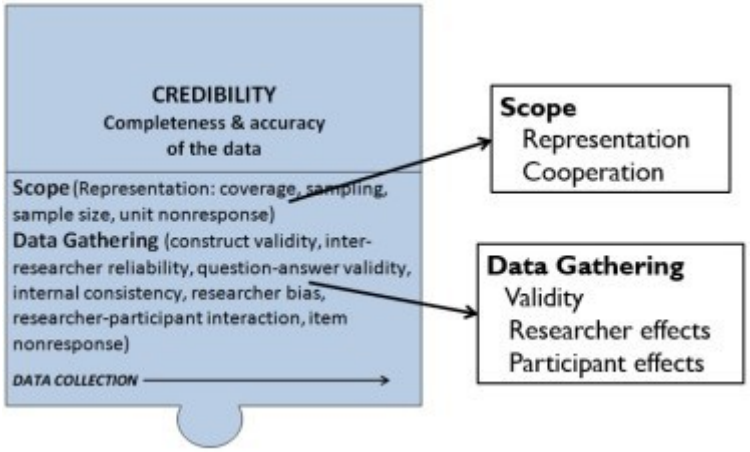
Morse, J. M., Barrett, M., Mayan, M., Olson, K., & Spiers, J. (2002). Verification strategies for establishing reliability and validity in qualitative research. *International Journal of Qualitative Methods*, *1*(2), 13–22.

Thomas, E., & Magilvy, J. K. (2011). Qualitative rigor or research validity in qualitative research. *Journal for Specialists in Pediatric Nursing*, *16*(2), 151–155. https://doi.org/10.1111/j.1744-6155.2011.00283.x

Tobin, G. A., & Begley, C. M. (2004). Methodological rigour within a qualitative framework. *Journal of Advanced Nursing*, *48*(4), 388–396. https://doi.org/10.1111/j.1365-2648.2004.03207.x

Whittemore, R., Chase, S. K., & Mandle, C. L. (2001). Validity in qualitative research. *Qualitative Health Research*, *11*(4), 522–537. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/11521609

Qualitative Tech Solutions: Coverage & Validity Considerations



Back in 2018, *Research Design Review* posted an article titled **"Five Tech Solutions to Qualitative Data Collection: What Strengthens or Weakens Data Quality?"** The focus of this article is on a presentation given in May 2018 concerning technological alternatives to qualitative research data collection. Importantly, the aim of the presentation was, not to simply identify different approaches to data collection beyond the in-person and telephone modes but rather, to examine the strengths and limitations of these technological solutions from a data quality – specifically, **Credibility** – standpoint.

Broadly speaking, technological approaches to qualitative research data gathering offer clear advantages over in-person methods, particularly in the areas of:

- **Representation**, e.g., geographic coverage, potential access to hard-to-reach population segments;
- **Cooperation**, e.g., convenience and flexibility of time and place for participants, appropriateness for certain demographic segments (18-49 year olds*);
- Validity associated with **data accuracy**, e.g., research capturing in-the-moment experiences do not rely on memory recall;
- Validity associated with the **depth of data**, e.g., capturing multiple contextual dimensions through text, video, and images;
- Validity associated with data accuracy and depth allowing for the **triangulation** of data;
- **Researcher effects**, e.g., mitigated by the opportunity for greater reflection and consistency across research events;
- **Participant effects**, e.g., mitigated by the multiple ways to express thoughts, willingness to discuss sensitive issues, and (possibly) a lower tendency for social desirability responding; and
- Efficient use of **resources** (i.e., time, money, and staff).

There are also potential drawbacks to any technological solution, including those associated with:

- Uneven Internet **access and comfort** with technology among certain demographic groups (e.g., sampling favors "tech savvy" individuals), hard-to-reach and marginalized segments of the population;
- Difficulty in **managing engagement**, including the unique researcher skills and allocation of time required;
- Potential **participant burnout** from researcher's requests for multiple input activities and/or days of engagement. This is a type of participant effect that negatively impacts validity;
- **Nonresponse** due to mode, e.g., unwillingness or inability to participate to a mostly text-based discussion;
- **Data accuracy**, e.g., participant alters behavior in a study observing in-home meal preparation;
- Missing important **visual &/or verbal cues** which may interfere with rapport building and an in-depth exploration of responses;
- Difficulty managing **analysis** due to lots and lots of data (in volume & formats);
- **Fraud**, misrepresentation – "Identity is fluid and potentially multiple on the Internet" (James and Bushner, 2009, p. 35) and people may not share certain images or video that reveal something "embarrassing" about themselves**; and
- **Security**, confidentiality, anonymity (e.g., data storage, de-identification).

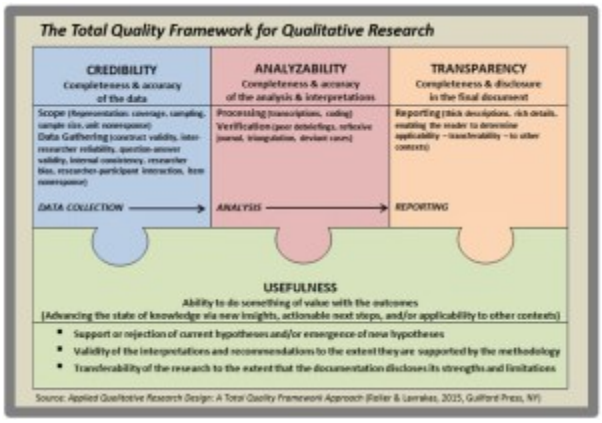
* https://www.pewresearch.org/internet/fact-sheet/internet-broadband/

** https://www.marketingdive.com/news/minute-maid-lauds-family-imperfections-in-social-campaign/521074/

James, N., & Busher, H. (2009). *Online interviewing*. London: Sage Publications.

User Feedback in Software Development: A Rigorous Study Guided by the TQF

Ze Shi Li et al. (2024) conducted research to investigate the benefit of user feedback to software organizations' development process. Specifically, their overriding research question was, "How do software organizations manage user feedback to help improve existing products?" (p. 1). The researchers conducted 40 semi-structured in-depth interviews with engineers and data scientists across 32 organizations.



In the interest of rigorous research while mitigating potential threats to the validity of their research, the authors relied on the four components of the **Total Quality Framework** (TQF) — **Credibility**, **Analyzability**, **Transparency**, and **Usefulness**. The researchers describe their quality assessment by way of the TQF components as follows:

> For credibility, our study may suffer from sampling bias as we could only talk to participants who agreed to interviews with us. However, our interviews indicated that all of our participants manage user feedback in some capacity, and a non-trivial number of participants believed that they were effective in managing user feedback. We also tried limiting bias by informing the interviewees at the beginning of interviews that participants would be anonymized and the study would not cause risk to them. For analyzability, we utilized tooling to assist with transcribing the audio into text and also manually verified the transcripts against the audio. Two co-authors followed the steps of grounded theory and conducted open, axial, and selective coding to analyze the transcripts. For transparency, we attempted to provide rich descriptions and quotes where possible, and make available a replication package containing our base interview questions and codebook. Due to confidentiality agreements, we cannot release the interview transcripts.
>
> For usefulness, our study is intended to shed more insights on how software organizations manage user feedback. We provide more empirical results regarding the life cycle of activities and best practices that they utilize. We conducted member checking with 10 of the participants and presented all the findings that emerged from the study in checking that our research findings resonate with our study participants and their organizational practices. We do not expect our results to hold true for all software organizations, though we would expect organizations of similar demographics to those in our studies to share similarities. (Li et al., 2024, p. 10)

From this research, the authors draw implications relevant for software organizations (e.g., best practices in managing user feedback) as well as researchers (e.g., the need for more research regarding the effect of organization size and maturity on the utilization of best practices).

Li, Z. S., Sihag, M., Arony, N. N., Ernst, N., Devathasan, K., & Damian, D. (2024). Unveiling the Life Cycle of User Feedback: Best Practices from Software Practitioners. *Proceedings – International Conference on Software Engineering*. https://doi.org/10.1145/3597503.3623309

A Rigorous Qualitative Study to Explore Type 1 Diabetes in Older Adults: Using the Total Quality Framework

In "Supporting the 'lived expertise' of older adults with type 1 diabetes: An applied focus group analysis to characterize barriers, facilitators, and strategies for self-management in a growing and understudied population" (Cristello Sarteau et al., 2024), the authors discuss their study among older adults (OAs, defined as adults 65 years of age or older) with type 1 diabetes concerning care management. This research consisted of nine in-person focus group discussions with a total of 33 OAs and caregivers.

Central to the design and implementation of this research was the **Total Quality Framework** (TQF) (Roller & Lavrakas, 2015). The authors selected the TQF due to their focus on rigor and a quality approach to investigate the lived experiences of OAs with type 1 diabetes.

To support rigorous research and reporting, we selected the Total Quality Framework (TQF), a comprehensive set of evidence-based criteria for limiting bias and promoting validity in all phases of the applied qualitative research process. (p. 2)

In this article, the authors provide a unique and useful table describing the rationale behind their methodological decisions pertaining to each component of the TQF, i.e., **Credibility**, **Analyzability**, **Transparency**, and **Usefulness**. For example, with respect to Credibility, the table offers a lengthy discussion of sample design, including the impact of limited resources on the recruitment process and why the size of each group discussion was kept to 4-5 participants. Other areas of discussion in the table include the coding format and identification of themes (Analyzability), complete disclosure of elements related to design, data collection, and analysis (Transparency), and "how the study should be interpreted, acted upon, or applied in other research context in the real world" (Usefulness). Importantly, readers are directed to areas within the article where they can read about the explanations of methodological decisions that go beyond the limited space of the table, e.g., definition of the target population.

This research "revealed, above all, the complex and dynamic nature of managing type 1 diabetes over the lifespan" and provided "valuable foundational information for future research efforts" (p. 13). In addition to the perceived strengths of the research, the

authors' quality approach also allowed for an informed discussion of the limitations (e.g., diversity in the sample). By way of the TQF Transparency component, the authors provide readers with the details they need to build on this research and move forward in defining care-management solutions for the OA population with type 1 diabetes. As the authors state, the TQF enabled them to "promote confidence in using results from our study to inform future decision-making" (p. 17).

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