

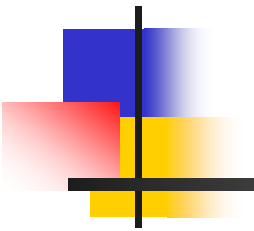
Mixed Methods in Applied Contexts



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Basic Comparison of Qualitative and Quantitative Research



	Qualitative Research	Quantitative Research
Basic research objective	To gain a broad qualitative understanding of the underlying reasons and motivations; As a first step in multistage research	To quantify the data and generalize the results from the sample to the population of interest; Recommend a final course of action
Type of sample used	Small numbers of non-representative cases	Large number of representative cases
Data collection Method	Unstructured	Structured
Nature of data analysis	Non-statistical	Statistical



Advantages of Focus Groups

1. Synergism. When people with similar interests discuss an issue, they may produce richer insights, a wider range of information, and more innovative ideas than will individual responses obtained privately.
2. Snowballing. In a group discussion, one person's comment often triggers a chain reaction from the other respondents..
3. Stimulation. Once the focus group discussion is underway, general level of excitement over the topic increases, and many respondents may express their ideas and expose their feelings.



Advantages of Focus Groups

4. **Security.** Because of homogeneity of composition, focus group participants have similar feelings, enabling them to feel comfortable and uninhibited to express their ideas/feelings.
5. **Spontaneity.** Respondents are not required to answer specific questions. Their responses can be spontaneous, unconventional, and reflect an accurate idea of their views
6. **Speed.** Because people discuss issues simultaneously, data collection and analysis in focus group proceed relatively quickly.
7. **Inexpensive.** Considering the richness of output, it is a relatively inexpensive method of data collection.



Disadvantages of Focus Groups – and of many other methods as well...

1. Nonrepresentativeness. Focus groups usually not representative of the general population. Results not necessarily generalizable.
2. Misjudgment. Focus groups may be susceptible to client and researcher biases. These biases are critical, and difficult to fix.
3. Misuse. Focus group results should be considered exploratory, not conclusive.
4. Moderator. Skill of the moderator is a major determinant of focus group success and the quality of results. Requisite skills are rare.
5. Difficult to analyze. The unstructured nature of the responses in focus group discussions makes coding, analysis, and interpretation difficult.



Applied Mixed Methods

- Two examples
 - Adding quantitative and behavioral measures to a focus group.
 - Adding open-ended questions to a survey.



Increasing the utility of focus groups with mixed methods techniques

- Pretest surveys
 - Opinions of the group members can change as soon as the first comment is made
 - Collecting data before the groups begin may provide information on baseline beliefs and behaviors



Increasing the utility of focus groups with mixed methods techniques

- Three common examples of imbedding behavioral measures
 - Research involving tactics to increase organ donor registration
 - Take coupons for a product (anti-smoking tool, condoms, etc.)
 - Ask participants to provide a phone number, email, or other contact information for follow up – or provide url to obtain more information



Increasing the utility of focus groups with mixed methods techniques

- Post-test survey at the conclusion of the focus groups
 - Measure changes in attitudes, perceptions, evaluations, from pre- to post-group.
 - Provide opportunity for comments not made comfortably during the session.
 - Measure changes in intentions.
 - If information was implicitly or explicitly provided during the group, which was associated with measureable changes?



A Mixed Method Focus Group: An applied example

- Passive-positive organ donor registration behavior: A mixed method assessment of the IFF Model.
- 12 focus groups conducted (Chicago, Phoenix, Seattle, Miami)
- Pre-group questionnaire
 - Demographic Information
 - Global Attitudes Toward Donation
 - Intentions
 - Knowledge
 - Reasons for Non-Registration



A Mixed Method Focus Group: An applied example

- Focus group beginning question
 - “Everyone here is in favor of donation, yet no one here is a registered donor. Why not?”



A Mixed Method Focus Group: An applied example

- Post-group questionnaire
 - Global Attitudes Toward Donation
 - Intentions
 - Knowledge
 - Reasons for Non-Registration



A Mixed Method Focus Group: An applied example

- Behavioral Measure
 - Opportunity to register as a donor

- Follow-up Question
 - Did you fill out the donor card?
 - If yes, why now but not before?
 - If not, why not?

Table 2. Reasons provided for non-registration: Pre-group survey and focus group discussion.

Response category						
Categories of written reasons for non-registration (pre-group survey, $n = 71$)						
Doctor not saving life	16.9%, $n = 12$					
Lack of general knowledge	15.5%, $n = 11$					
Lack of opportunity	12.7%, $n = 9$					
Don't know how	9.9%, $n = 7$					
Eligibility	9.9%, $n = 7$					
Donor status uncertainty	8.5%, $n = 6$					
Death thought discomfort	7.0%, $n = 5$					
Do not think about it	7.0%, $n = 5$					
Religious barriers	7.0%, $n = 5$					
Family barriers	5.6%, $n = 4$					
		PHX	CHI	MIA	SEA	Total
Categories of verbal reasons for non-registration (focus groups, $n = 13$ groups)						
Donor status uncertainty	4/4 ^a	3/3	3/3	3/3	3/3	13/13
Lack of opportunity	3/4	2/3	2/3	2/3	3/3	10/13 ^b
Lack of general knowledge	4/4	2/3	2/3	2/3	2/3	10/13
Doctor not saving life	4/4	1/3	3/3	1/3	1/3	9/13
Don't know how	4/4	2/3	2/3	2/3	1/3	9/13
Do not think about it	3/4	1/3	2/3	2/3	2/3	8/13
Eligibility	3/4	2/3	1/3	2/3	2/3	8/13
Death thought discomfort	3/4	3/3	1/3	1/3	1/3	8/13
Other medical mistrust ^c	2/4	2/3	2/3	2/3	0/3	6/13
Family barriers	0/4	0/3	3/3	2/3	2/3	5/13
Religious Barriers	2/4	0/3	1/3	0/3	0/3	3/13

PHX, Phoenix; CHI, Chicago; MIA, Miami; SEA = Seattle.

^aThe verbal response occurred at least once in each of the four groups.

^bThe verbal response occurred in 10 of the 13 groups.

^cMedical mistrust other than a fear that doctors let donors die, so organs can be taken.

Table 3. Passive-positive questions about organ donation raised during the focus groups.

Question	PHX	CHI	MIA	SEA	Total
What is the procedure once I start dying and once I die?	4/4	3/3	3/3	3/3	13/13
Am I eligible?	3/4	3/3	2/3	3/3	11/13
Who gets organs and how is that decided?	3/4	1/3	3/3	2/3	9/13
Can my family override my decision to donate?	3/4	1/3	2/3	2/3	8/13
What happens to my organs if they are donated? ^a	2/4	2/3	2/3	2/3	8/13
What organs can I register and for what purpose?	2/4	2/3	1/3	2/3	7/13
Does it cost anyone anything?	2/4	3/3	1/3	1/3	7/13
Can I trust the medical establishment?	0/4	2/3	3/3	2/3	7/13
How long can an organ last?	2/4	1/3	2/3	2/3	7/13
I saw this thing on TV	2/4	2/3	1/3	1/3	6/13
How do I register?	1/4	1/3	1/3	2/3	5/13
Will donating interfere with my funeral plans?	1/4	0/3	2/3	2/3	5/13
What happens once I register?	0/4	1/3	1/3	0/3	4/13
What if I register and then change my mind?	1/4	1/3	1/3	1/3	4/13
How do they identify my donor status?	0/4	0/3	0/3	3/3	3/13
Will my life be saved?	0/4	0/3	1/3	2/3	3/13
How can I be sure my organs will not hurt my recipient?	0/4	0/3	1/3	2/3	3/13
Can I decide whom my organs go to?	1/4	1/3	1/3	0/3	3/13
What are the benefits to the donor/donor family?	0/4	0/3	1/3	1/3	2/13
Who has access to this registry?	0/4	0/3	0/3	2/3	2/13

^aRefers to non-distribution related queries.

Table 4. Intervention fidelity.

Construct	Pretest		Posttest		<i>F</i>	Partial η^2
	M	S.D.	M	S.D.		
Favorable Activation	6.19	1.28	6.61	0.82	14.82***	0.11
Registration Knowledge	4.11	2.17	6.36	1.25	111.85***	0.47
Intentions	5.11	1.67	5.73	1.49	22.07***	0.17

*** $p < 0.001$.

Table 5. Pre- and post-group differences blocked on registration behavior.

Construct	Registered ($n = 62$)		Non-registered ($n = 70$)		<i>t</i>	η^2
	M	S.D.	M	S.D.		
Global attitudes toward donation						
Pre	6.55	0.87	5.87	1.48	3.25**	0.07
Post	6.86	0.40	6.39	1.00	3.56***	0.08
Registration knowledge						
Pre	4.02	2.06	4.21	2.24	-0.052	0.00
Post	6.66	0.92	6.02	1.55	2.90**	0.06
Intentions						
Pre	5.62	1.36	4.39	1.89	4.18***	0.12
Post	6.51	0.86	5.07	1.57	6.12***	0.24

** $p < 0.01$, *** $p < 0.001$.



A Mixed Method Focus Group: An applied example

- Registration Results
 - 46.6% of participants registered as organ donors.

Table 6. Written responses to pre-group survey item.

Post-group registrants ($n = 27$)	
Lack of knowledge	25.9%, $n = 7$
Lack of opportunity	18.5%, $n = 5$
Donor status uncertainty	18.5%, $n = 5$
Don't know how	14.8%, $n = 4$
Eligibility	11.1%, $n = 3$
Family barriers	3.7%, $n = 1$
Lack of salience	3.7%, $n = 1$
Doctor not saving life	3.7%, $n = 1$
Death thought discomfort	0.0%, $n = 0$
Religion	0.0%, $n = 0$
Post-group non-registrants ($n = 44$)	
Doctor not saving life	25.0%, $n = 11$
Death thought discomfort	11.4%, $n = 5$
Religion	11.4%, $n = 5$
Lack of salience	9.1%, $n = 4$
Eligibility	9.1%, $n = 4$
Lack of knowledge	9.1%, $n = 4$
Lack of opportunity	9.1%, $n = 4$
Don't know how	6.8%, $n = 3$
Donor status uncertainty	1.3%, $n = 1$
Family	6.8%, $n = 3$

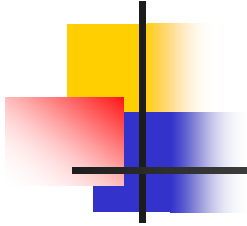
Table 7. Post-group reasons for registration or non-registration.

Registrants (<i>n</i> = 62)		
Immediate opportunity provided	37.1%	<i>n</i> = 23
Right thing to do	16.1%	<i>n</i> = 10
No reason given	11.3%	<i>n</i> = 7
Gained knowledge: General	9.7%	<i>n</i> = 6
Gained knowledge: How to register	8.1%	<i>n</i> = 5
Gained knowledge: Eligibility	6.5%	<i>n</i> = 4
Thought I was	4.8%	<i>n</i> = 3
Other	6.5%	<i>n</i> = 4
Non-registrants (<i>n</i> = 70)		
Need to speak with my family	32.9%	<i>n</i> = 23
Need more time to think/not ready	15.7%	<i>n</i> = 11
No reason given	14.3%	<i>n</i> = 10
Will do later/signing up elsewhere	8.6%	<i>n</i> = 6
Need more information	7.1%	<i>n</i> = 5
Not eligible	5.7%	<i>n</i> = 4
Want money	1.4%	<i>n</i> = 1
Can do a later time if I choose	1.4%	<i>n</i> = 1
Medical mistrust	1.4%	<i>n</i> = 1
Other	11.4%	<i>n</i> = 8



Conclusions

- Can profitably mix qualitative & quantitative methods without destroying natural advantages of either
- Creates greater research efficiency
- Provides better data of both types
- Does not add appreciably to costs



Thanks for your kind attention