



EFNEP

Connecting the Pieces

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What do our participants think about the 24-hour Diet Recall? A multi-state study.

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EFNEP Priority

“Participation should result in individuals and families experiencing improvements in....diet quality”

- Improvements in diet quality are assessed using:
 - Pre and post responses from the behavior checklist Nutrition Domain
 - Pre and post 24-hour Diet Recall data

24-hour Dietary Recall

- Gold Standard for Dietary Assessment
- Describe all foods and beverages consumed in the last 24 hour period or from midnight to midnight of the previous day
- Validity and reliability testing completed with **highly-trained professionals**, usually Registered Dietitians in a **one-on-one** setting
 - skilled in probing for forgotten foods and beverages and assisting with portion size estimation
 - avoid leading the respondent to state foods not eaten or to provide socially desirable responses as opposed to accurate reporting
- A major limitation of the 24HDR is the respondent's ability to recall all items.

EFNEP – 24 HDR

- EFNEP 24 HDR data collection is different from gold standard methodology
- **Paraprofessionals** are trained to conduct 24 HDR with **groups of participants**
- Training and approach varies by state (Auld and Gills)
- The steps of the multiple pass might include:
 - listing foods/beverages consumed,
 - probing for commonly omitted items,
 - memory trigger questions
 - stating time and place of food consumption,
 - probing for portion size and other food details, and
 - ending with a final review.
- A single paper forms the basis of this methodology

Food for thought...

What are your own perceptions,
thoughts and feelings about the 24
HDR?

NC2169 Evaluation of EFNEP's 24 HDR

- Currently inadequate evidence exists either supporting or refuting group 24-hour recall as an evaluation instrument
- Arm of NC(1)2169 24 HDR validity and reliability testing
- Qualitative data complements outcome-based research and serves as a vehicle to explore individuals' feelings and attitudes not easily captured through quantitative approaches

Objective

To explore, qualitatively, participant perceptions' of the 24 HDR as delivered by EFNEP paraprofessionals in group settings.



Focus Group Procedures

- Group development of discussion script
- All states used the same semi-structured moderator guide
 - Developed by NC1169 researchers
 - Aimed to investigate:
 - Is the 24 HDR delivered in a group setting by paraprofessionals collecting the last 24 hour's food intake or from midnight to midnight of the previous day?
 - What are the participants' perceptions about the tool?
- EFNEP participants recruited based on convenience
 - Time, location

Focus Group Procedures

- Timing after 2nd 24 HDR administered
- Participants received an incentive
- The focus group was audio-taped and notes were taken
- Auto tapes were transcribed verbatim
- Audio files and/or transcriptions were sent to University of Arkansas/Arizona for thematic analysis

Analysis Procedures

- Inductive, grounded theory approach
- Two researchers reviewed all transcripts
- Created preliminary codes via discussion and consensus
- Co-developed auto code book for use in Atlas Ti
- Individually auto coded transcripts to identify relevant quotes
- Single researcher made sense of individual quotes to identify themes
- Developed thematic framework

ENVIRONMENT		PROCESS		VALUE	
Auto Code in Atlas	Co-developed Codes	Auto Code in Atlas	Co-developed Codes	Auto Code in Atlas	Co-developed Codes
Class	Talk*, “pay attention”, smaller, “one on one”, label*, appreciate, people, group	Personal qualities of the instructor	Respectful, rush, nice, pressure, thorough, clear, explain*, show*	Benefit	Opened, aware, cognizant, helpful, realize, accountable, information, open
Physical Context	Chair*, Rehab, couch, table, choice, turnover	Delivery	Back, over, heads up, coached, write, confused, detail	Satisfaction	Enjoy*, like*, thought
	“	Form	“didn’t think”, change*, confusing, video, computer, television, morning, lunch, time, dinner, form, easy, simple, like*, space, clear	Recall of foods	“didn’t know”, remember, recall, knew, know, “what is in”, matched, accurate, “broke down”, salt, easy
		Suggestions for improvement	Space, time, lunch, dinner, paper, note	Recall of amounts	Amount*, cup, portion*, size, tablespoon, teaspoon, cup, remember, recall, didn’t know, exactly, ounces
		Props/visuals	Prop*, portion*, visual*, aid, kit, picture*		

Representative Quotes

Theme	Quote
Physical Context of Space	<i>“Another thing is we were sitting on the couch, we would have probably paid more attention if we were sitting at a table like in a classroom instead of sitting on a couch, because that’s where we go for our free time and we go and talk.”</i>
Physical Context of Space	<i>“Well of course we’re in rehab so we eat a lot of the same food, it’s very scheduled, versus if we were in the free world right now”</i>
Qualities of Class	<i>“She’s a nice person but most of us, you know the group is kind of large sometimes, you know should could probably be more excited or more detailed”</i>

Representative Quotes

Theme	Quote
Delivery method	<i>“I think she did really good with us, our instructor went back and she said okay can you remember what you guys had for supper, did you have a snack last night, what did you have for supper. So she just went from the most recent back with us and that kind of helped us all jog our memory.”</i>
Delivery method	<i>“Like I said she coached us through because when I was just filling out portions and she was like go one by one and then I was like oh I did eat this, and I ate that.”</i>

Representative Quotes

Theme	Quote
Qualities of the Educator	<i>“No pressure, just encouraging about if you didn’t remember.”</i>
Qualities of the Educator	<i>“She was very clear.”</i>

Representative Quotes

Theme	Quote
Suggestions for improvement for form/process	<i>“Yeah just getting the 24hour recall paper and trying to remember everything you ate in the last 24 hours was really hard, but having the paper where you could write notes, maybe a warning saying that you’re going to do this, so we can jot notes.”</i>
Suggestions for improvement for form/process	<i>“I think if I would just have a journal or something or piece of paper that I wrote down little things on I think that would have been a lot easier.”</i>
Suggestions for improvement for form/process	<i>“that we were supposed to write down that we put salt and pepper on our food and I don’t have any lines left to write that, I guess I could write over it but I don’t know.”</i>

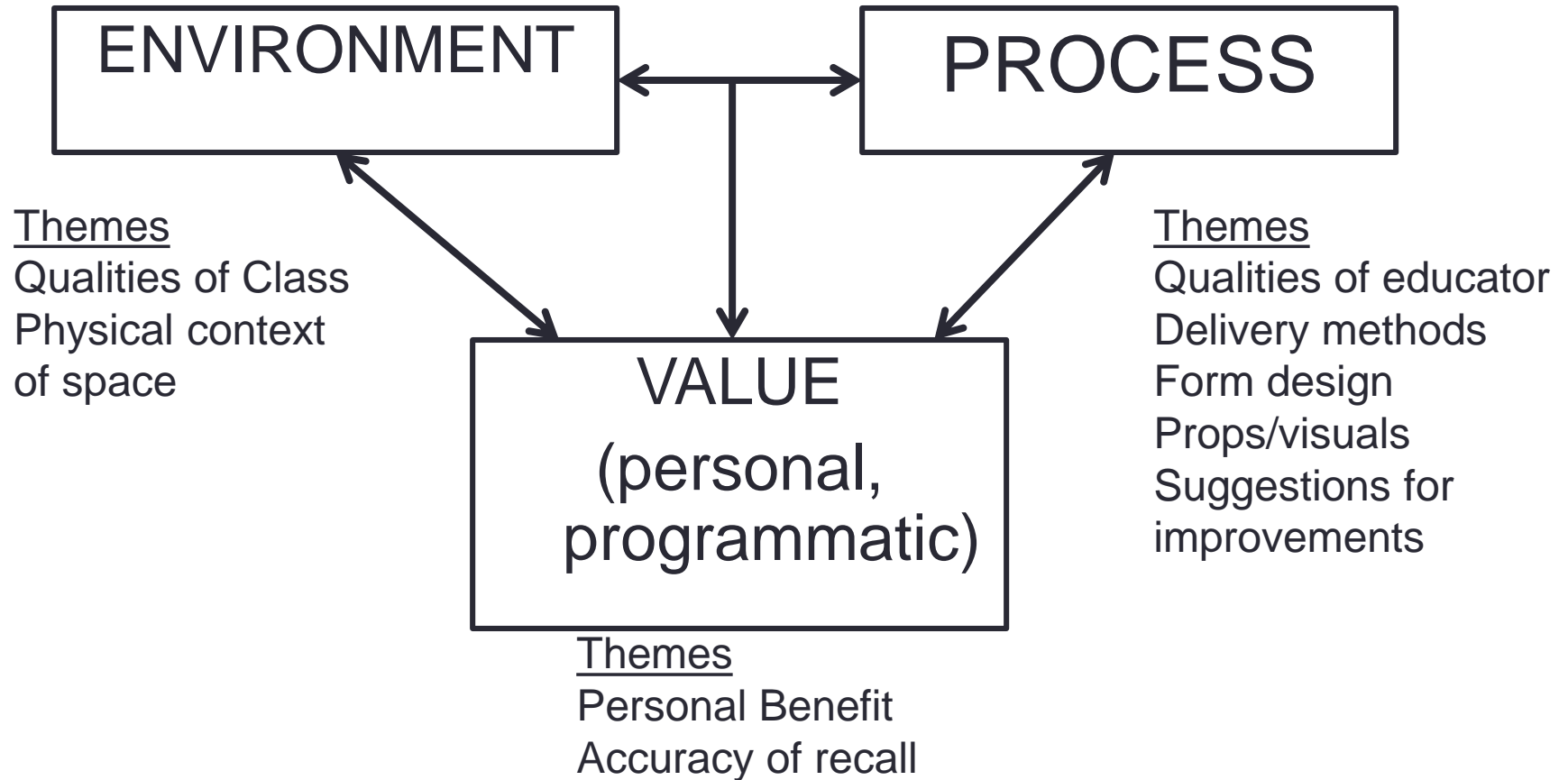
Representative Quotes

Theme	Quote
Accuracy of recall	<i>“It was hard to remember that’s what I would say too.”</i>
Accuracy of recall	<i>“It was hard for me to remember.”</i>
Accuracy of recall	<i>“I didn’t like having to remember, my memory.”</i>
Accuracy of recall	<i>“She helped us through it, and just made us think about it so we weren’t just trying to remember.”</i>

Representative Quotes

Potential Theme	Quote
Personal benefit	<i>“During the 24 hours of food recall it made me more cognizant of what I was putting in my mouth. It made me more aware of what I was doing because sometimes, you know, I would find in the past, you know, you would eat and a lot of the time it’s just I will eat and not because I’m hungry or anything, but snacking. It made me a lot more aware of what I was doing, think about it.”</i>
Personal benefit	<i>“It was good, I didn’t realize how much bad stuff I was eating until she actually asked me to write down in the last 24 hours what did I eat.”</i>
Personal benefit	<i>“every piece of bread, every soda, every teaspoon of sugar you put in there, it just makes you more accountable for what you’re putting in your body.”</i>

Proposed FRAMEWORK



Summary

- EFNEP participants predominately describe the 24 HDR as a tool they find value in as a means of increasing personal awareness about the foods they eat.
- They also describe the challenges of remembering the amounts of food they ate and the challenges presented by the classroom environment and form design as well as the delivery of the tool itself.

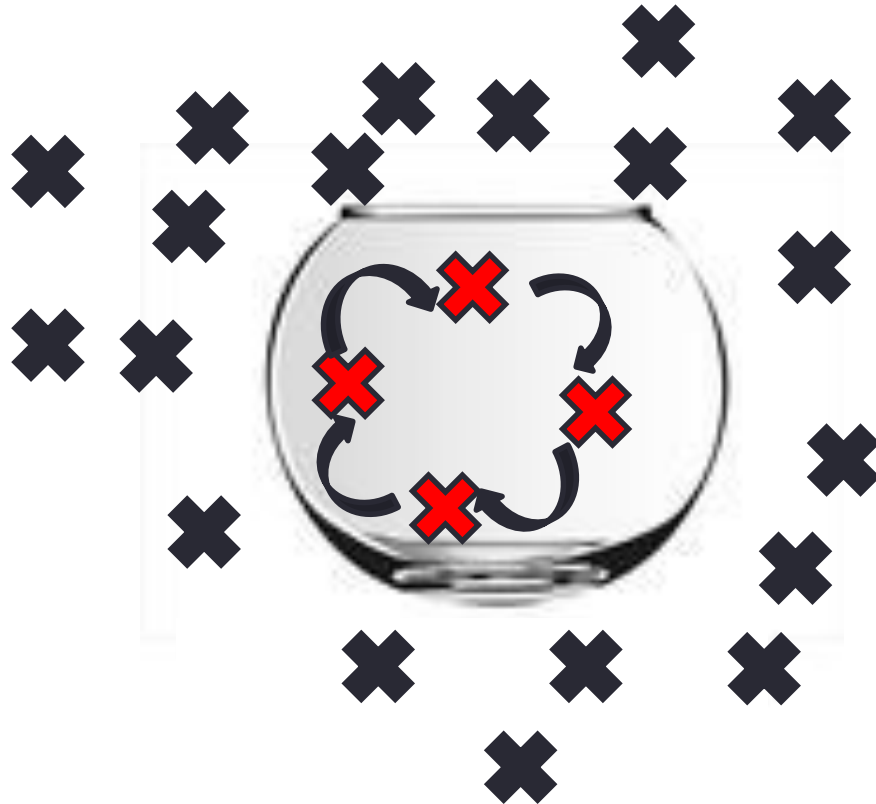
Summary

- Results revealed several opportunities for form redesign and paraprofessional delivery training.
- Complementary work being conducted in Colorado.
- Future studies may focus on testing the validity of group delivered 24-HDR using photo journals, food diaries, doubly labeled water, or other methods.

NC2169 Members

- Truly a team effort! We would like to thank the following members and recognize their important role in the design, data collection, and analysis of the study.
- **Susan Baker, EdD – Colorado**
- **Linda Boeckner, PhD, RD – Nebraska**
- **Hazel Forsythe, PhD, RD, CFCS, CPHE – Kentucky**
- **Josh Phelps, PhD – Arkansas/Oklahoma**
- **Jennifer Walsh, PhD, RD – Florida**
- **Mari Wilhelm, PhD – Arizona (emerita)**

Group Activity – User Generated Fishbowl



Activity: www.liberatingstructures.com

Photo : shutterstock