

# HCI Professions: Differences & definitions

## Pilot Study Research questions:

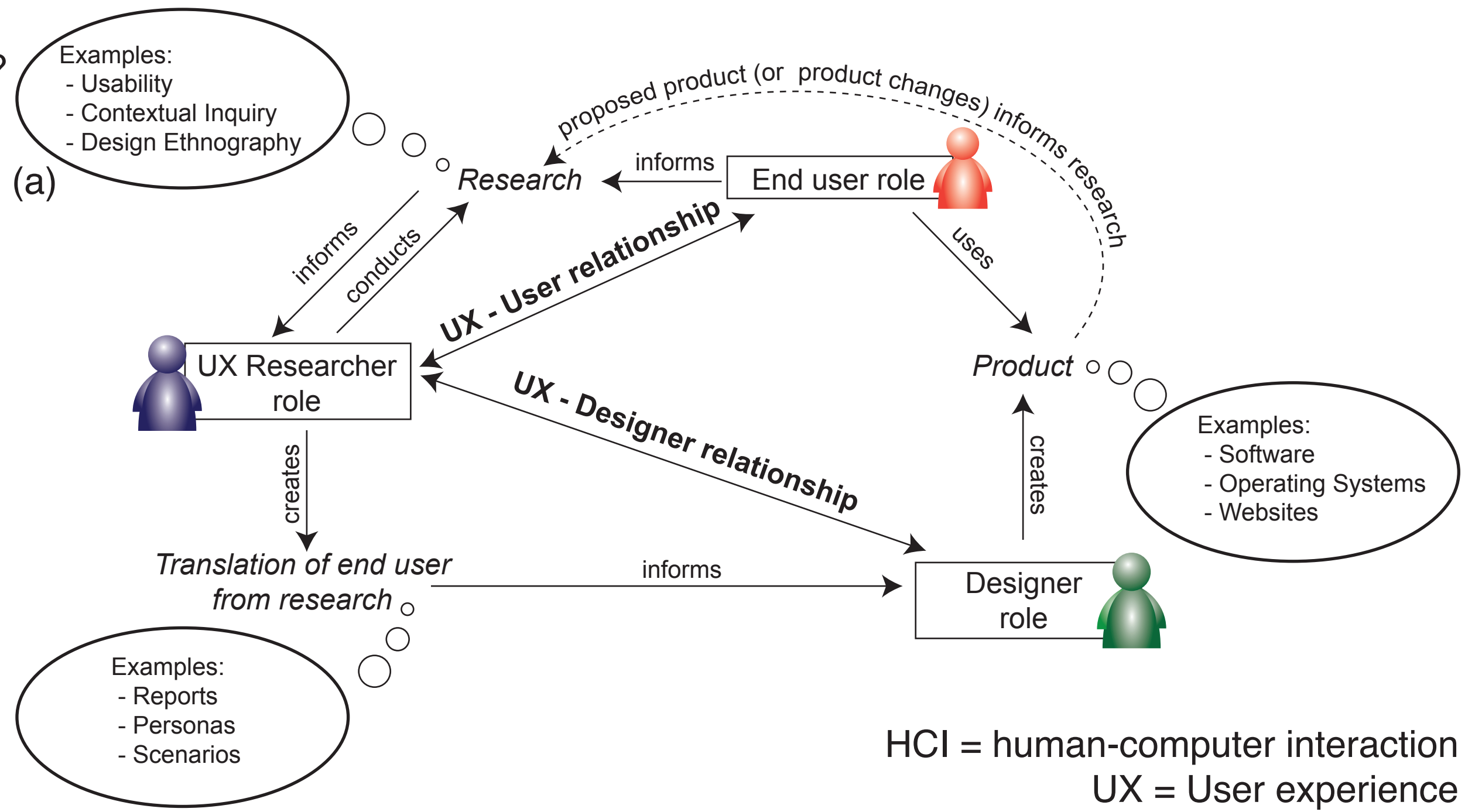
1. How do HCI professionals in industry define their job responsibilities?
2. How do professionals in different job titles consider end users?
3. What common HCI methods do professionals in industry use, to both (a) investigate and (b) and communicate about end-users?

### Premise: triad of communication roles

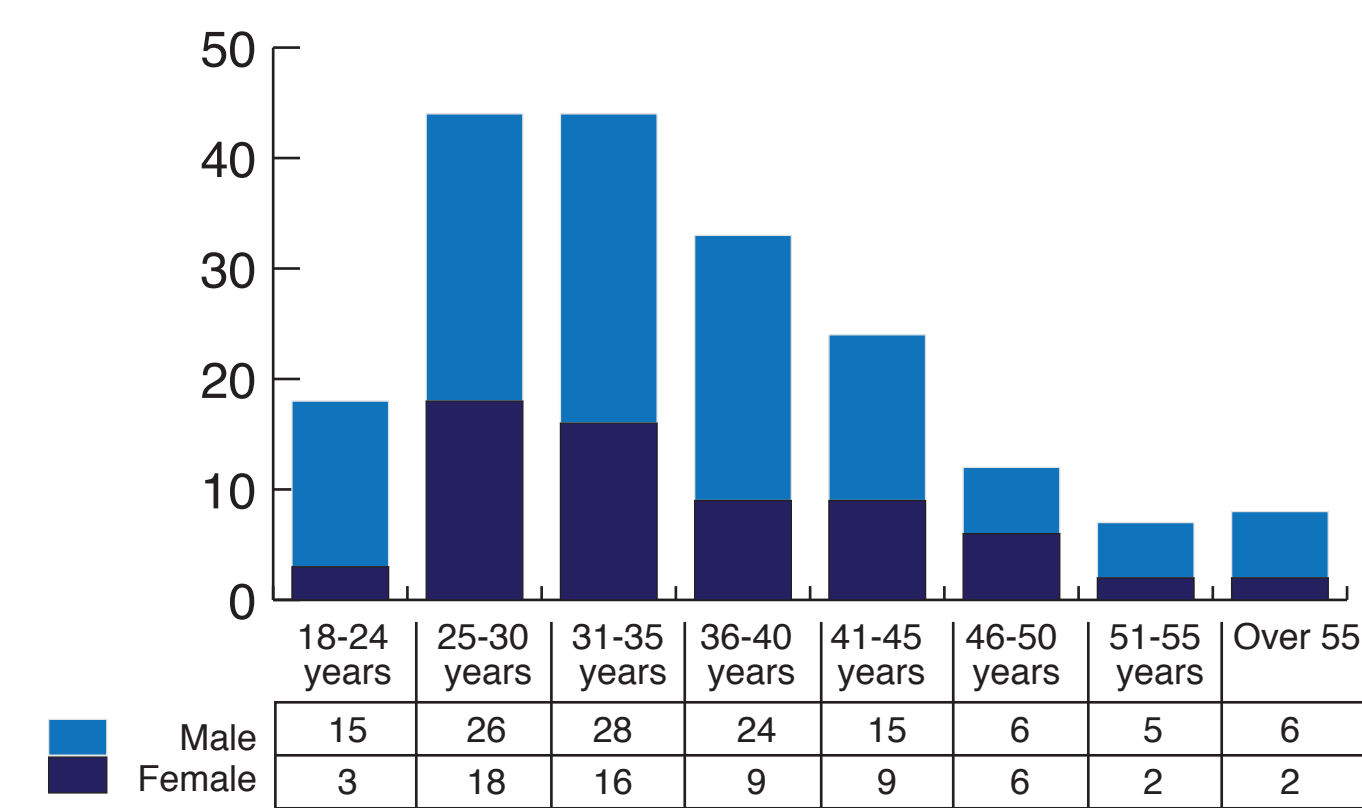
How is the message communicated?

**End-users = negotiated message between research and design**

4. How do HCI professionals vary in attributes that are related to how they consider users? We explored **empathy** = key concept for 'walking in the user's shoes'.



## Method: Survey (snowball sample) 190 usable responses



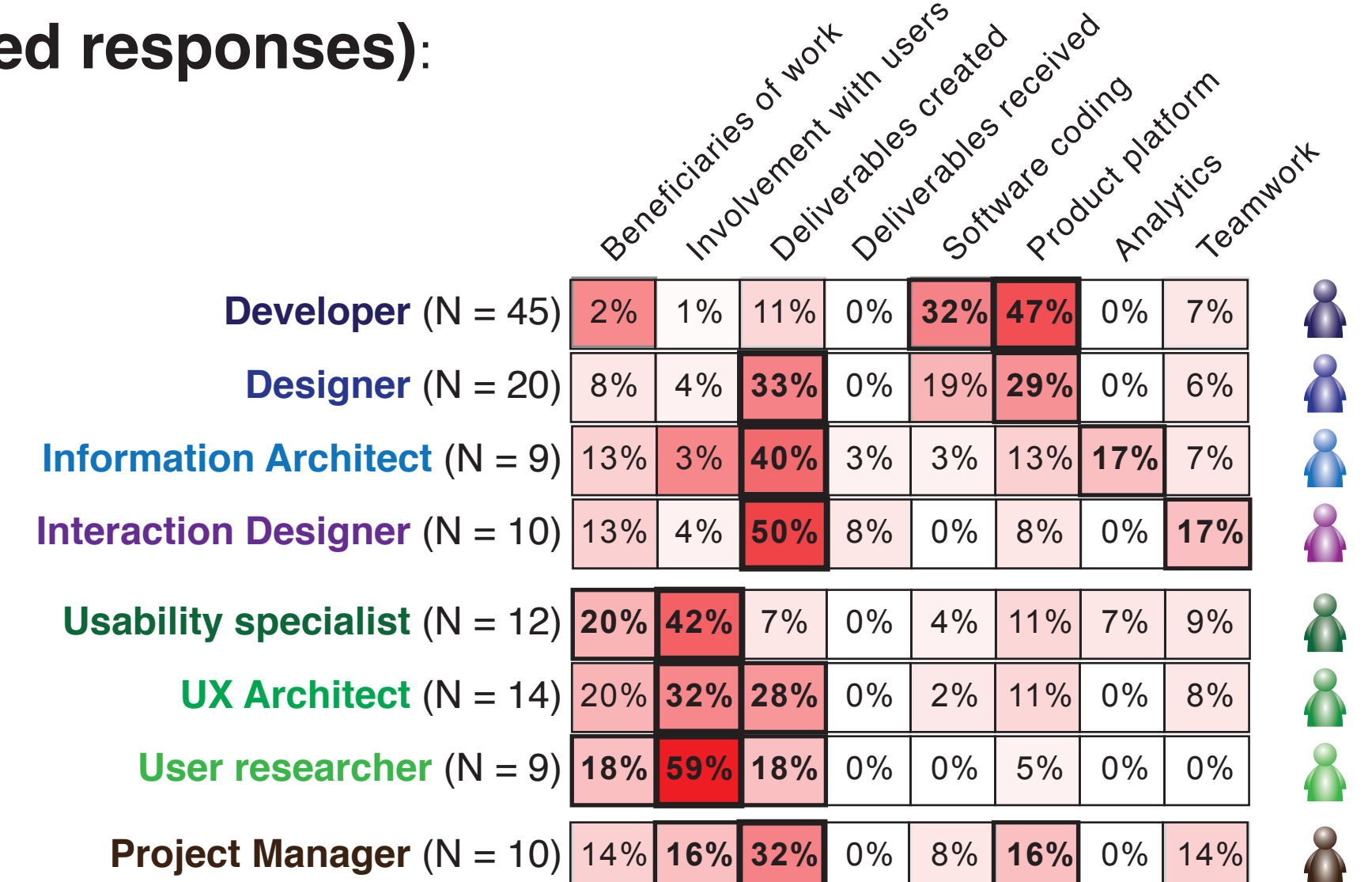
## Job responsibilities (N = 135 detailed responses):

1. How do HCI professionals in industry define their job responsibilities?

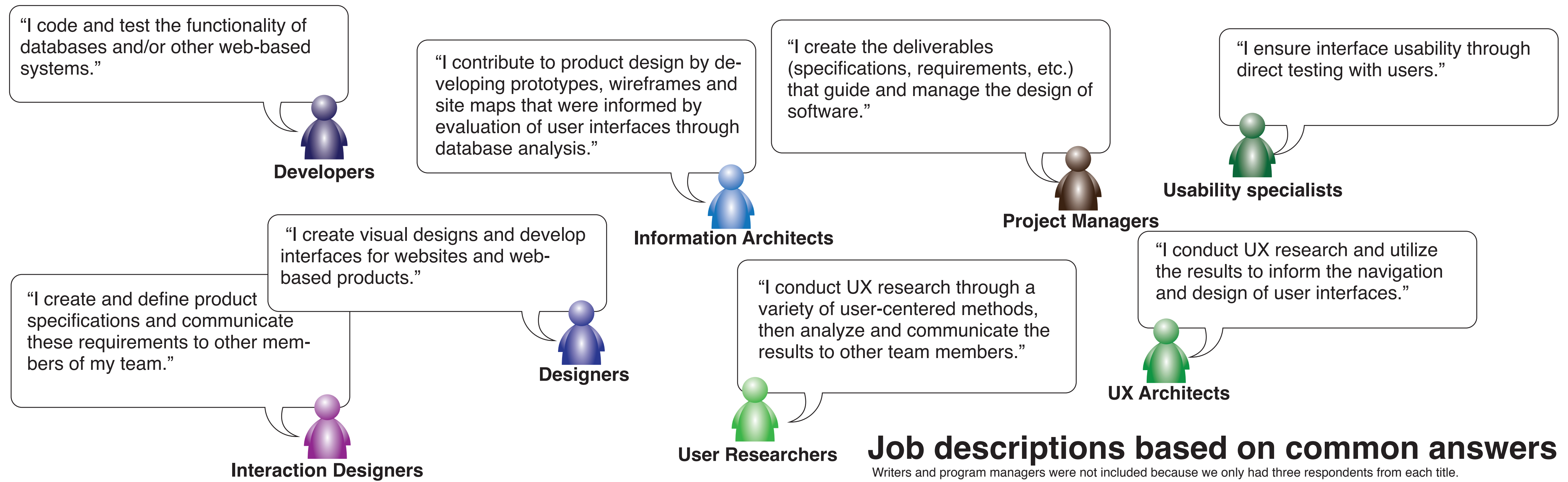
- (1) In-vivo code for repeated keywords/phrases
- (2) Placed in eight categories

Category	Example keywords or phrases/ideas
Beneficiaries of work	Users, consumers, stakeholders, clients
Involvement with users	Usability, user research, eye tracking
Deliverables created	Graphics, interface, prototypes, documentation
Deliverables received	Requirements, specifications, specs, uses cases
Software coding	Coding, bugs, testing, function
Platform	Software, web-based, website, mobile, PDA
Data considerations	Analytics, database
Teamwork	Team, manager, or any reference to co-workers

Grouping job-titles according to heat map similarity = three groups: (1) designer-centric, e.g. developer, designer; (2) UX-centric, e.g. usability specialist; and (3) Management.



\*\*Writers and program managers were deleted from the heat map because we only had three respondents from each title.

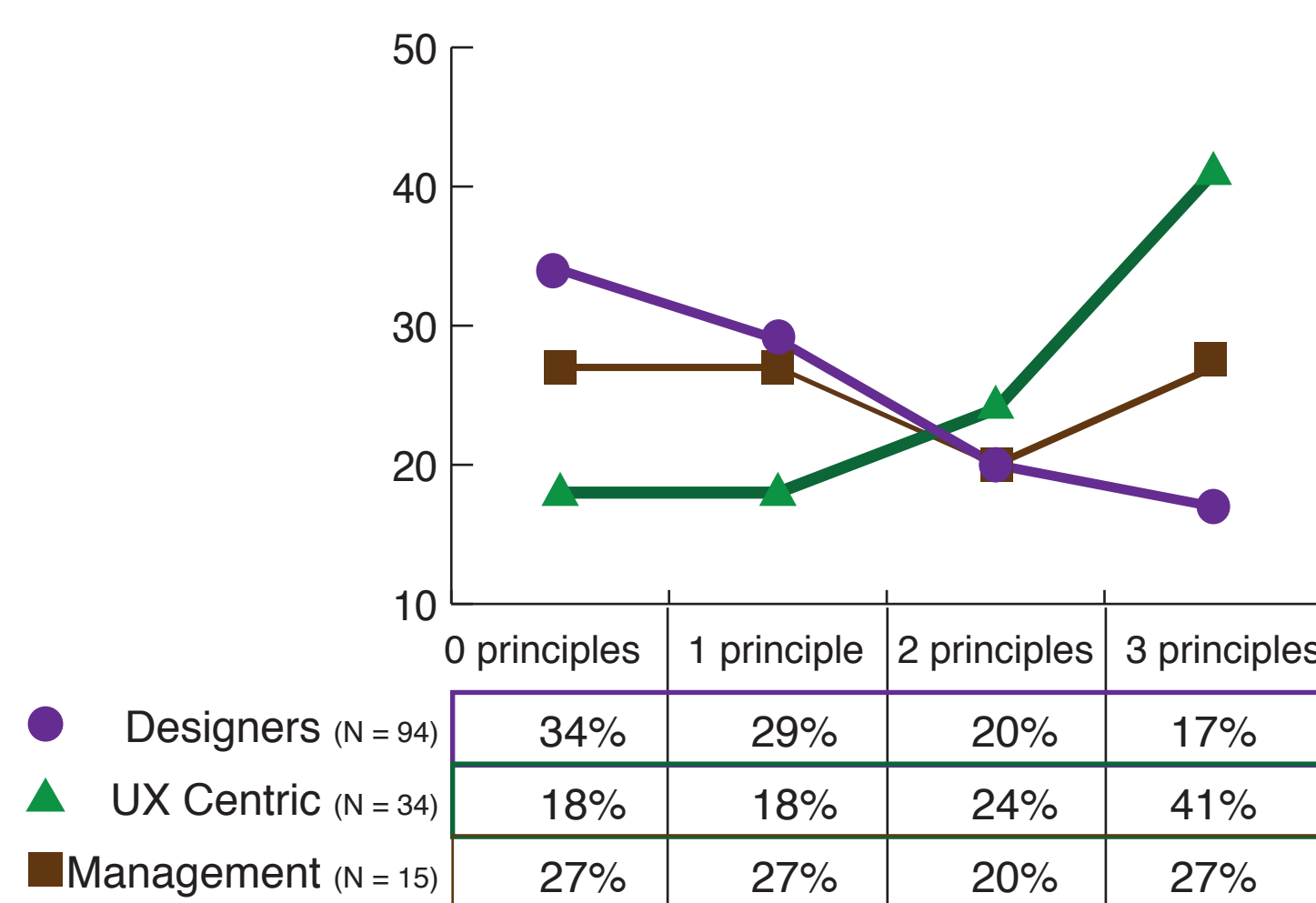


## Alignment to UCD principles

2. How do professionals in different job titles consider users? (UCD = user-centered design)

Gould and Lewis (1985): "describe approximately three to five major steps you consider good practice for designing, developing and evaluating a new computer system for users"

Coded for adherence to three user-centered design (UCD) principles: (1) early focus on the user; (2) empirical measurement, e.g. usability; (3) iteration



Differences were significant,  $F(2,140) = 4.67, p < .05, f = .33$ , indicating that job title-type was significantly associated with mention of UCD principles

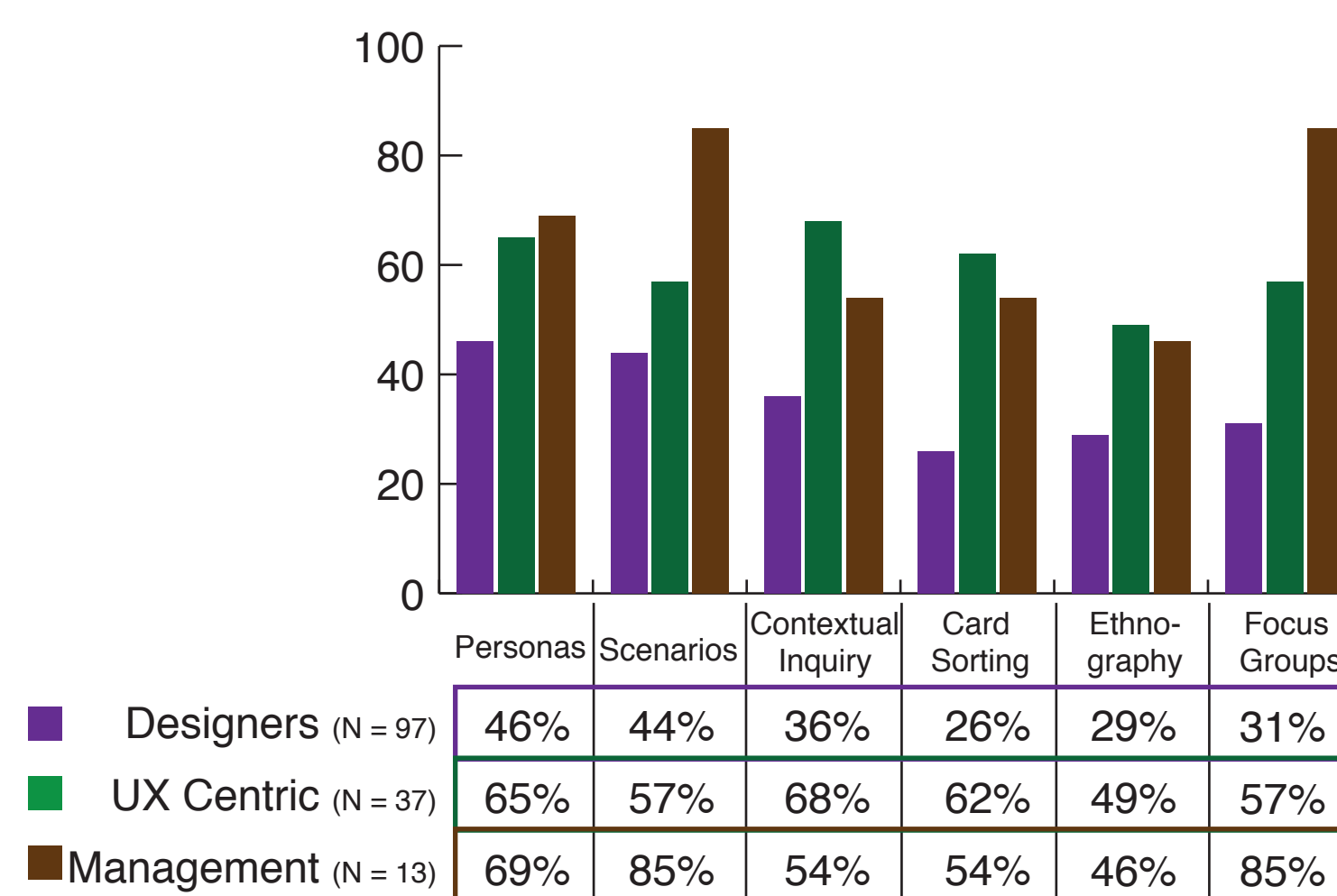
Gould, J. D. and Lewis, C. Designing for Usability: Key Principles and What Designers Think. Communications of the ACM 28, 3 (1985), 300 - 311.

## HCI/UX methods

3. What HCI methods do professionals use, to both (a) investigate and (b) communicate about end-users?

Respondents who had conducted or been give user research conducted by someone else (N = 157, 83%) were asked about HCI/UX methods.

Below were the most common methods mentioned by respondents.

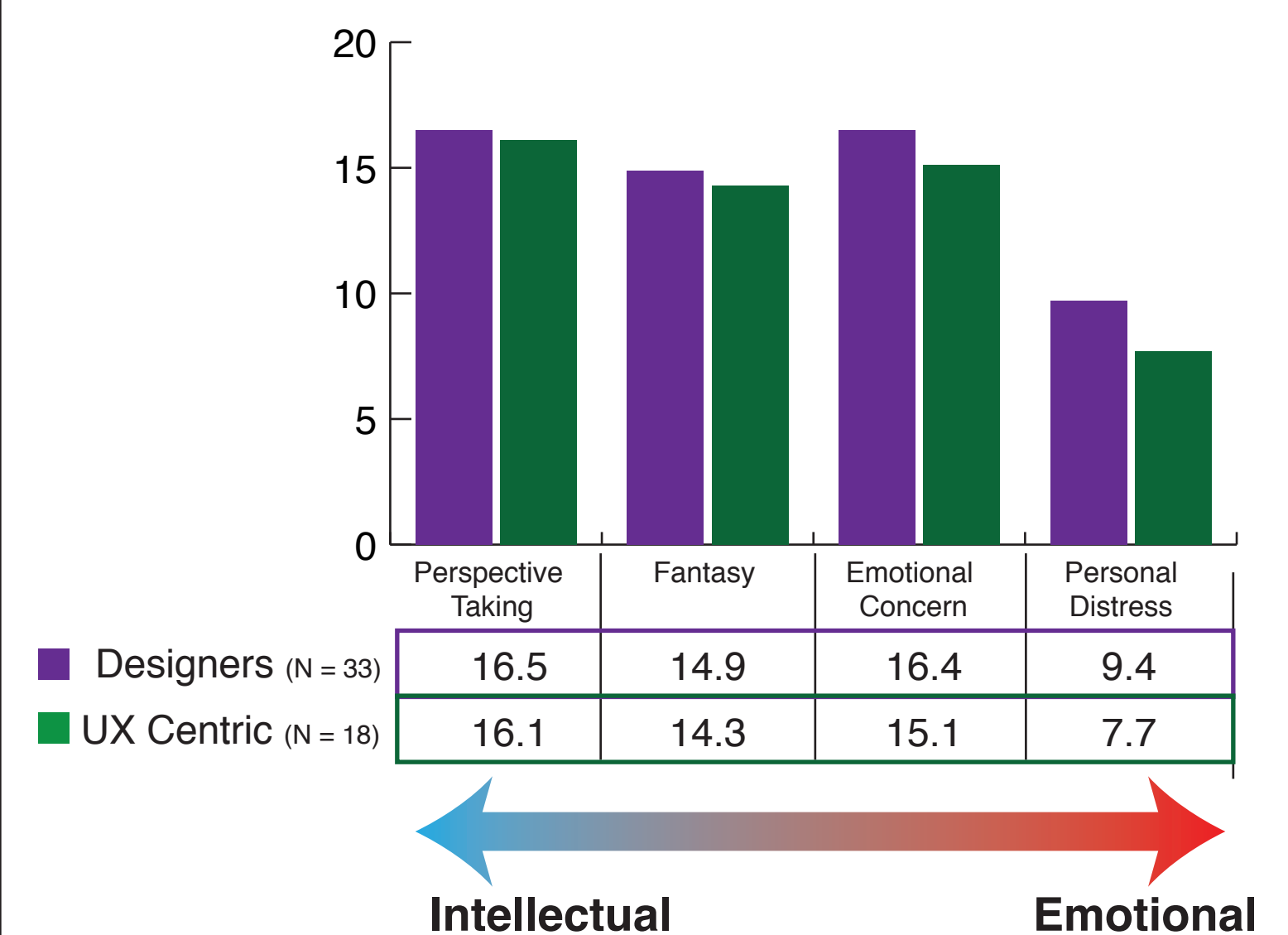


Differences among job title groups were significant in every category of method (using ANOVA).

## Empathy

4. How do HCI professionals vary in attributes that are related to how they consider users: empathy?

Used Davis (1985) 'Interpersonal Reactivity Index':  
**PT** = tendency to adopt psychological viewpoint of another  
**FS** = propensities to transport oneself imaginatively into the feelings of fictitious characters  
**EC** = levels of sympathy and concern for another in an unfortunate situation  
**PD** = appraises feelings of personal anxiety and unease in response to a tense situation involving other people



Differences were significant at the .10 level for both empathetic concern,  $t(48) = 1.95, p = .057$ , and personal distress,  $t(48) = 1.71, p = .093$ . (Management sample too small)

Davis, M. H. A multidimensional approach to individual differences in empathy. JSAS Catalog of Selected Documents in Psychology, 10, (1985).

## Current work

Total over 1000 responses, over 300 detailed responses. We will attempt to verify findings with a larger and more diverse sample, investigate how methods are used in more depth, explore regional differences among HCI professionals, and investigate how accessibility issues are considered.

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