Designing Vignette Studies in Marketing

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Abstract

In empirical marketing studies, vignettes are increasingly used to develop measurement scales, assess public/organizational policy, and study key variables in judging the decisions or actions of a protagonist. Despite their frequent use, integrated recommendations for creating vignettes are limited. A brief introduction to vignette methods and their previous applications in marketing is provided. This is followed by suggestions for designing vignettes and vignette-based studies based on a review of the literature. The suggestions form a checklist that should help researchers who conduct vignette-based studies to consider all relevant issues and thus obtain valid data.

Keywords: Vignettes, scenarios, organizational policy, public policy, ethics research

1. Introduction

Consumer and business decision-making is studied in different ways. For example, conjoint analysis can be used to study respondents' part-worth valuations of product attributes and their likely future purchases. When respondents lack product experience, or when moderating variables are important, vignettes are used to ease product evaluation. Nonetheless, vignette design is not well understood despite its widespread use.

Basic market research often examines which of multiple options consumers prefer. This type of research assumes that consumers can predict their own preferences and/or consumption patterns. Unfortunately, consumers' stated preferences are often inconsistent with their eventual behavior. For instance, taste testers indicated the sweeter New Coke tasted better than the traditional Classic Coke, yet they strongly rejected New Coke as a replacement for Classic Coke (Hartley 1992). In this case, either (1) testers did not or could not accurately assess their preferences, or (2) researchers conflated taste preference with purchase preference. Because one key fact--replacing the original Coke formula--was not revealed, testers answered the wrong question, i.e., Does this new formula taste better? rather than Do you want Classic Coke reformulated?

The goal of this illustration is not to disparage the Coca-Cola Company, but to illustrate a research limitation: the more levels of inference between the question asked and the question to be answered, the more potential validity problems. Thus asking people about hypothetical situations is problematic when multiple factors, that should or could be considered, are omitted.

Although scholars have previously examined the use of vignettes in academic research, and have made useful recommendations (Cavanagh et al. 1985; Weber 1992), they typically ignore the design process (Wason and Cox 1996) or describe non-generalizable approaches (Chonko, Tanner and Weeks 1996; Fredrickson 1986). Thus, while there are a range of recommendations within the literature for the development and use of vignettes, there have been few attempts to synthesize these various suggestions. We attempt to address this fragmentation within the literature by delineating a set of issues that should be considered and recommendations for marketing researchers who conduct vignette-based studies.

2. Vignette Methods

Scenarios have been defined as "stories which present hypothetical situations requiring action or judgment from respondents" (Wason and Cox 1996, p.155). In contrast, vignettes have been defined as "short descriptions of a person or social situation that contain precise references to what are thought to be the most important factors in the decision-making or judgement-making

processes of respondents" (Alexander and Becker 1978, p.94). Given this similarity of definitions, the term vignette will be used throughout.

Vignettes "can be particularly illuminating with respect to managerial implications; an appropriately constructed and relevant [vignette] can help management discern where specific action is necessary" (Dubinsky, Jolson, Kotabe, and Lim 1991, p.658). They can be used to evaluate ethical judgments and behavioral intentions (Dubinsky and Loken 1989), to test theories (Hunt and Vasquez-Parraga 1993; Mason and Mudrack 1996), to illustrate general themes in ethnographic research (Sherry 1990), and to develop survey measures (Hyman 1996; Kuo and Hsu 2001; Reidenbach, Robin, and Dawson 1991). Topics addressed in vignette-based marketing studies include salesforce supervision (DeConinck, Stephens, and Foster 1995), problematic selling practices (Dabholkar and Kellaris 1992), service recovery (Swanson and Kelly 2001), delay in service delivery (Marquis and Filiatraut 2002), deceptive marketing research practices (Schneider and Holm 1982), questionable retailing practices (Piron and Fernandez 1995), companion selling of complementary products (Polonsky et al. 2000), bribery (Tsalikis and LaTour 1995), ad claim efficacy (Koslow 2000), and cheating by marketing students (Haley 1991) (see Table).

Many business researchers argue that vignette-based studies are superior to direct-question-based studies because vignettes:

- 1. provide greater realism (Cavanagh and Fritzsche 1985; Haley 1991; Wason and Cox 1996) by offering "a range of situational or contextual factors" (Robertson 1993, p.592) that "approximate real-life decision making situations" (Barnett, Bass, and Brown 1994, p.473);
- 2. supply standardized stimuli to all respondents, which enhances internal validity, measurement reliability, and ease of replication (Alexander and Becker 1978; Cavanagh and Fritzsche 1985; Dubinsky, Jolson, Kotobe, and Lim 1991; Hyman and Steiner 1996; Lysonski and Gaidis 1991; Weber 1992);
- 3. improve construct validity by focusing "respondent attention upon specific features of the research question" (Cavanagh and Fritzsche 1985, p.283; Weber 1992);
- 4. bypass difficulties (e.g., time, expense) of studying real business decisions (Cavanagh and Fritzsche 1985; Fritzsche 1988):
- 5. reduce yea-saying/social desirability bias (Burstin,

Doughtie, and Raphaeli 1980; Dabholkar and Kellaris 1992; Kennedy and Lawton 1996), especially if behavioral intentions questions are phrased in the third rather than first person (Choong, Ho, and McDonald 2002), and

6. enhance respondent involvement and dramatize issues (Cavanagh and Fritzsche 1985; Fredrickson 1986; Kiselius and Sternthal 1984).

Most vignette-based studies rely on what Cavanagh and Fritzsche (1985) called the constant-variable-value vignette (CVVV) method (i.e., all respondents read identical vignettes), which is a correlational method for assessing intergroup differences in judgments (Hyman and Steiner 1996). Respondents in such studies typically reveal their judgments about identical sets of vignettes through their answers to multiple, forced-choice questions. Unfortunately, CVVV-based studies suffer from the following limitations.

- 1. Uncontrolled Respondent Projections. CVVVs do not provide a common reference because respondents "may differ in their perceptions of the available alternatives, the factual consequences of those alternatives to different groups and the probability that the consequences will occur" (Hunt and Vitell 1986, p.13). For typical, low-detail CVVVs, "if respondents must have a fact before they can reach a judgment . . ., they must invent that fact [and] every fact that is left to the respondent's invention is a variable that is outside the researcher's control" (Skipper and Hyman 1993, p.538). In other words, "[t]he problem situation is described so briefly . . . that it is difficult . . . to evaluate" (Randall and Gibson 1990).
- 2. Evaluation Process Unmeasured. Closed-ended responses to CVVVs can only summarize peoples' judgments. For example, responses to a closed-ended ethics scale may suggest that many people use utilitarian criteria to evaluate an ethically problematic behavior, but such responses cannot reveal the sequence of thoughts used to evaluate this behavior (Hyman and Steiner 1996).
- 3. Demand Artifacts. Respondents use vignette-specific rationales when they make judgments; thus, a general summary measure (i.e., a fixed set of scale items) will always omit important, vignette-specific rationales. Because a fixed set of items suggests the proper evaluative criteria, summary measures may disguise respondents' assessment criteria (Skipper and Hyman 1993).
- 4. Social Desirability Bias. Self-reports of either prosocial or unethical behaviors are susceptible because "[i]t may be easier for subjects to misrepresent their attitudes than to misrepresent what behavior they have or have not engaged

in" (Fernandes and Randall 1992, p.191). Even the promise of anonymity may fail to reduce such bias (Fernandes and Randall 1992; Randall and Fernandes 1991).

The CVVV method is a special case of the general vignette method described by Alexander and Becker (1978). Also known as the factorial survey method (Hox, Kreft, and Hermkens 1991; Rossi and Anderson 1982) or the contrastive vignette technique (Burstin, Doughtie, and Raphaeli 1980), this method "combine[s] ideas from balanced multivariate experimental designs with sample survey procedures" (Rossi and Anderson 1982, p.15). The general vignette method requires that "different versions of the same basic vignette are randomly allocated to different respondents" (Alexander and Becker 1978, p.94). "Vignettes can be altered by the insertion or removal of sentences designed to manipulate factors which previous research suggests can impact on individuals' choice" (Lysonski and Gaidis1991, p.143). Because each vignette version serves as a control for the other versions, this method allows researchers to assess differences in judgments caused by facts that differ across vignette versions (e.g., ceteris paribus, young male protagonists may be judged differently from elderly female protagonists). Thus, the general vignette method provides a causal method for assessing both intergroup differences in judgments about situations and the contingencies that influence such judgments.

3. Marketing Applications of Factorial Surveys

Factorial scenario-type surveys are often used in scholarly marketing studies. A full text search of the ProQuest bibliographic database from 1980 to 2002 (using the keywords {consumer, product, market?, brand, advertis?, price, ethic?} and [{study or survey} and {vignette or scenario}]) plus cross-referencing the bibliographies of articles identified by this search yielded 33 studies that used this method. The keywords consumer, product, and the like, are the six most frequent non-methodological words in the abstracts of ProQuest-listed marketing articles published in the most prestigious U.S.-based marketing journals (Hyman 2003). Many vignette-based studies explore ethical issues (Hyman and Steiner 1996) and thus the keyword ethic? was also included.

The Table, which summarizes these 33 studies, shows the following:

1. Journal of Business Ethics published the most studies (39%); no other journal contained more than 10% of published studies.

- 2. The mean vignettes per study was 2.6 (std. dev.=1.6); 38% of studies included only one vignette.
- 3. Almost all vignettes were author-only inspired (70%) or adapted/borrowed from previous studies (24%). Only 6% of studies included vignettes developed from insights/examples provided by people like the ultimate respondents.
- 4. Most studies (85%) focused on ethical issues, especially problematic selling practices (64%)
- 5. The most frequently manipulated variables in the vignettes were actor's appearance (e.g., age, weight), product type, actor's job performance, consequence of action, and motivation for the unethical behavior.
- 6. Respondents were typically asked to role play (33%) or judge the person responsible for the action in question (30%).
- 7. Questionnaires were either distributed in a controlled setting (61%) or by mail (39%). For mail questions, the mean response rate was 29% (std. dev.=18%), which is somewhat lower than the 43% for business ethics studies reported by Randall and Gibson (1990).
- 8. The mean sample size was 310 (std. dev.=212).
- 9. Only 24% of studies included non-U.S. respondents.
- 10. Respondents were typically undergraduate students (42%) or sales managers (27%).

As the summary suggests, vignette research has been used in divergent ways to address a range of marketing issues and will most likely increase in use as software for evaluating alternative choices (for example, conjoint analysis) becomes more readily available. The existing literature clearly shows that vignettes offer a robust approach for studying many aspects of marketing. As will now be discussed, the literature has highlighted some potential deficiencies or problems that should be considered when using vignettes.

4. Designing Vignette Studies

Although some of these issues are important to empirical research in general, all are either unique or especially critical to vignette-based studies in marketing.

4.1 Overall Study Issues

Select Appropriate Vignette Method

Vignette-based research in marketing has taken three directions: survey scale development (e.g., Hyman 1996),

Table 1: Vignette/Factorial Survey Studies in Marketing, 1980-2002

				s Used	
Article	Journal	#	Source	Content	Manipulation
Bellizzi (1995)	JPSSM	1	author	salesperson with chance to 'make quota'	(1) victim gender(2) victim status(3) compensation scheme (i.e., intra-firm competition vs. personal sales quota)
Bellizzi and Hasty (1998)	JPSSM	1	authors	sales manager with decision about hiring a new salesperson	(1) type of product(2) face-to-face versus telephonecontact by salesforce(3) hiree's gender(4) hiree's physical accommodation needs
Bellizzi and Hite (1989)	JM	4	authors	salesperson lying by commission and omission	(1) performance(top vs. poor salesperson)(2) gender(3) consequence to firm(none or negative)
Bellizzi and Norvell (1991)	JAMS	1	authors	subordinate sales- person oversells customers	(1) salesperson's gender(2) salesperson's height/weight(3) account level (no account, customers are unethical, competing reps act similarly
Boyle (2000)	JBE	1	author	real estate agent fails to disclose flooding problem	(1) customer gender(2) customer income (high/low)(3) likelihood customer will buy house
Boyle, Dahlstrom, and Kellaris (1998)	JBE	1	adapted from previ- ous study	salesperson gives customers gifts to encourage sales	priming vignettes about salesperson (1) distorting truth or favoring liked customer (2) ignoring company channels or asking customers about competitors
Dabholkar and Kellaris (1992)	JBR	1	authors	problematic sell- ing practice	(1) nature of a sales practice (does/does not involve money directly)(2) party toward whom practice directed (customer, employer, competitor)
DeConinck (1992)	JBE	2	detailed examples provided by sales mgrs	deceiving and lying to clients	(1) salesperson's performance(2) consequences of salesperson's actions

Dat	ta				Respondents
Task	Coll.	n	RR%	Place	Type
role play	Mail	510	20.8	US	sales managers from commercial mailing list
role play	Mail	755	7.3	US	sales managers from commercial mailing list
role play	Mail	452	31.4	US	sales executives and sales managers listed in AMA directory
role play	Mail	888	21.1	US	sales managers from commercial mailing list
judge other	Mail	80	7.7	US	midwest real estate agents
judge other	Ad.	165	na	US	undergraduates at large midwest university
judge other	Ad.	198	na	US	students in marketing classes at large urban university and small state college
role play	Mail	246	27.3	US	sales managers from national mailing list

	Vignettes Used						
Article	Journal	#	Source	Content	Manipulation		
DeConinck, Stephens, and Foster (1995)	ABR	2	authors	salesforce super- vision	(1) salesperson's performance(2) consequence of salesperson's action(3) nature of behavior (ethical/unethical)		
DeConinck and Thistle- thwaite (1995)	JABR	2	authors	salesperson offers excessive gift and lies to client about order status	(1) salesperson's performance(2) consequences of salesperson's actions		
Fritzsche (1988)	JMac	4	adapted from previ- ous study	bribe to enter market; lying by omission; pricing conflict-of-inter- est; faulty product	 (1) amount of bribe (vignette #1) (2) severity of lie (vignette #2) (3) severity of consequences for conflict of interest (vignette #3) (4) severity of consequences for whistle-blowing (vignette #4) 		
Haley (1991)	JPSSM	1	author	student cheating	(1) gender of cheater (2) age of cheater (23 vs. 33)		
Hunt and Vasquez- Parraga (1993)	JMR	4	adapted from previ- ous study	salesperson lying by commission and omission	positive vs. negative consequences for action taken		
Kellaris, Boyle, and Dahlstrom (1994)	ML	1	authors	backdoor selling	(1) consequences of choice expressed as gains or losses(2) consequences of selecting less ethical alternative(3) reference point: good vs. bad sales month		
Kennedy and Lawton (1996)	JBE	3	adapted from previ- ous study	bribe to enter market; pollute air; faulty product	level of reward associated with unethical behavior		
Koslow (2000)	JCA	1	author	ad claims vs. purchase and consumption experience	(1) product performance outcome (positive vs. negative)(2) repetition of the advertising/buying experience(3) involvement with product category		

Dat					Respondents
Task	Coll.	n	RR%	Place	Туре
role play	Mail	398	18.1	US	sales managers from national mailing list
ole play	Mail	212	26.5	US	sales managers from national list
behav. intent	Mail	717	54.0	US	marketing managers from a mailing-house list
role play	Ad.	55; 47	na	US	undergraduates in sales management class; members of local marketing association
role play	Mail	747	54.0	US	sales and marketing managers from commercial list
oehav. intent	Ad.	81	na	US	marketing MBA students
judge other	Ad.	145; 170	na	US; Ukraine	undergraduates and business students
third person	Ad.	165	na	US	undergraduate and graduate business students from large urban university

	Vignettes Used					
Article	Journal	Journal # Source JBE 4 authors	Source	Content	Manipulation	
Laczniak and Inderrieden (1987)	JBE		authors	formal company concern about ethical behavior	president's letter, letter plus code of ethics, letter plus code plus sanctions fo unethical behavior	
Laczniak, Lusch, and Strang (1981)	JMac	1	authors	ethicality of marketing prod- uct successfully	economic (dishwasher or hot lather machine) or social (political candidate or drug education program) product	
Maher and Bailey (1999)	JBE	4	adapted from previ- ous study	bribe to enter market; disclose trade secrets; pollute air; faulty product	transgressor's sex	
Marquis and Filiatrault (2002)	PM	1	authors	delay in service delivery	(1) cause of waiting (intruder or service provider) (2) proximity of event (in front of subject or away from subject)	
Mengüç (1998)	JBE	4	previous study	salesforce supervision (from Bellizi and Hite 1989)	positive vs. negative consequences for action taken	
Piron and Fernandez (1995)	JEP	6	authors	business practices of local retailers	(1) firm's price(2) distance to nearest alternative supplier(3) price charged by alternative supplier	
Pitts, Wong, and Whalen (1991)	JBR	1	authors	local butcher who overcharged customers	respondent personally affected or others are affected	
Polonsky et al. (2000)	IJRDM	2	authors	companion sell- ing of comple- mentary products	purchase of product at pharmacy (cold/flu medication) or cosmetics counter in department store (foundation)	
Schneider and Holm (1982)	CMR	5	authors	deceptive research practices	reason for using or conditions surrounding the use of a practice	
Swanson and Kelly (2001)	JMTP	3	CIT and other qualitative methods	service recovery process for airline, cable TV, and credit card	 service recovery stability (stable or unstable) service recovery locus (customer or service employee or service firm) 	
Tsalikis and LaTour (1995)	JBE	6	adapted from previ- ous study	bribery to access new international market	(1) businessman convinces official to take bribe or reluctantly pays bribe(2) native or foreign businessman	

Dat					Respondents
Task	Coll.	n	RR%	Place	Туре
judge other	Ad.	113	na	US	MBA students from urban university in midwest
judge action	Ad.	259	na	US	MBA students from three universities
judge other	Mail	178	18.2	US	undergraduate marketing alumni from two large universities
judge other	Ad.	159	na	Canada	undergraduates
role play	Mail	450	27.8	Turkey	sales and marketing managers from commercial list
judge action	Ad.	141	na	US	students and staff randomly selected from college phone book
behav. intent; judge other	Ad.	257	na	US	undergraduate students at large, urban university
behav. intent; judge other	Ad.	200	na	Australia	female university students age 18-25
judge action	Mail	256	64.0	US	random sample of residents in St. Cloud, MN SMSA
behav. intent; judge action	Ad.	183	27.6	US	convenience sample of day- care-center customers in large southeastern city
judge other	Ad.; Ad.	240;204	na; na	US; Greece	business students at major universities

		s Used			
Article	Journal	#	Source	Content	Manipulation
Tsalikis and Nwachukwu (1991)	ЈВЕ	6	authors	bribery to access new international market	(1) businessman convinces official to take bribe or reluctantly pays bribe(2) native or foreign businessman
Tsalikis, Seaton, and Shepherd (2001)	JBE	2	authors	selling worthless annual member- ship; overcharg- ing customer	(1) gender of transgressor(2) organizational status of transgressor(3) dollar magnitude of consequences
Tsalikis, Seaton, and Tomaras (2002)	ЈВЕ	2	authors	selling worthless annual member- ship; overcharg- ing customer	(1) gender of transgressor(2) organizational status of transgressor(3) dollar magnitude of consequences
Turner, Taylor, and Hartley (1995)	JBE	3	authors	purchasing agents accepting gratu- ities	accepting gratuities is or is not common practice
Vásquez- Párraga and Kara (1995)	JEuro	4	previous study	salesperson lying by commission and omission	positive vs. negative consequences for action taken
Whalen, Pitts, and Wong (1991)	JBE	2	authors	unethical sales behavior	whether seller's behavior had vicarious or personal effect on respondent
Mean Std. Dev.		2.6 1.6			

public/organizational policy assessment (e.g., Levy and Dubinsky 1983), and the study of key variables in judging the decisions or actions of a protagonist (e.g., Dabholkar and Kellaris 1992). CVVVs are acceptable for the first two applications, although adequately detailed and unambiguous vignettes are more critical to the second application. Specifically, projections into sketchy CVVVs should produce consistent intra-respondent answers to different generic scale items, which should not distort the resulting scale(s) (i.e., within-subject errors similar in direction and magnitude should cancel in this context). In contrast, inconsistent between-respondent projections to sketchy public/organizational policy

CVVVs should reduce the likelihood of statistically significant results (i.e., larger effect sizes are needed to overcome increased between-subject error variance). For previously discussed reasons—such as ignoring the evaluation process, demand artifacts, and social desirability bias—CVVVs are ill-suited for assessment of key variables in judging the decisions or actions of a protagonist. Thus, the decision to use a CVVV or factorial survey design depends on the broad purpose of the study.

Tailor Questions to the Vignettes

Previously developed and validated scales are preferred to new scales and this approach also holds for the use of

	Data				Respondents
Task	Coll.	n	RR%	Place	Туре
judge other	Ad.; Ad.	240; 194	na; na	US; Nigeria	business and non-business students
judge action	Ad.	146	na	US	convenience sample of non- students in major southern city
judge action	Ad.	143; 309	na	US; Greece	convenience sample of adults
judge action	Ad.	263	na	US	undergraduates enrolled in a marketing course
role play	Ad.	114	22.6	Turkey	sales and marketing managers from large companies
judge action/other	Ad.	163	na	US	university students
		311 218	28.6 18.2		
Abbreviation	s:				
CIT = Cri	Iministered survey itical incident hnique sponse rate in percent	JAMS = Jou	urnal of Applie search urnal of the Ac Marketing Scio	ademy	JMac = Journal of Macromarketing JM = Journal of Marketing JMR = Journal of Marketing Research
ABR = An Re	nerican Business view	JBR = Jon	urnal of Busine	ess Research	JMTP = Journal of Marketing Theory & Practice
Re $IJRDM = Int$	lifornia Management view ernational Journal Retail & Distribution	JEP = Jon Ps	urnal of Consu	mic	JPSSM = Journal of Personal Selling & Sales Management ML = Marketing Letters
	nagement	JEuro = Jou	urnal of Eurom	arketing	PM = Psychology and Marketing

vignette-based studies. Unfortunately, generic semantic differential items like 'violates/does not violate an unspoken promise' are problematic when considered in a scenario because "the salience of any item may be a function of the [vignette... for example] promptness is ethically relevant in some [vignettes] and for some people, yet 'prompt/not prompt' is not an item of the MES" (Skipper and Hyman 1993, p.537). Thus, researchers cannot blindly rely on extant vignettes. To truly understand respondents' beliefs, researchers must ensure that their questions exhaustively address all relevant issues broached by their vignettes.

Ensure All Relevant Variables are Covered

Understanding how all key variables interrelate is essential for controlling and measuring relevant variance in responses to vignettes. For example, in the context of gender research, Porter (2001) suggests that: "First, the researcher identifies dimensions (i.e., behaviors, actor characteristics, etc.) and the various levels included in each dimension (such as sex or marital status) that might affect the particular judgment (i.e., level of commitment). The interaction of all possible permutations of each dimension with the judgement being researched forms the factorial object universe. Either all of the elements of a relatively small factorial object universe, or a subset thereof, can be given to respondents for evaluation" (p.382-3).

Researchers should map their variables to ensure that all key combinations are included. The omission of a key combination could preclude examination of complex interactions; furthermore, if only a few vignettes are used, then examination of first-order direct effects may also be precluded. To avoid this problem, researchers should create a table to verify all key combinations.

Ignoring a key variable can be as problematic as omitting a key combination. For example, ethics researchers suggest that who is harmed (e.g., a faceless organization or an identifiable person) may affect evaluations of ethical vignettes (Mason and Mudrack 1996). If true, then much of the ambiguity in empirical ethics studies may be attributable to uncontrolled or unmeasured variables (Weber 1992; Hyman and Steiner 1996). Thus, researchers must carefully consider all relevant theory to avoid omission of key variables.

Use Adequate Number of Vignettes

Researchers must use an optimal number of different vignettes. "Too few [vignettes] could limit the

researcher's ability to manipulate critical variables and could result in responses biased by the few issues contained in the [vignettes]....[T]oo many [vignettes] could lead to information overload and fatigue for the respondent" (Weber 1992, p.142-143).

The number of manipulated variables and levels determines the necessary number of vignettes. For example, if three variables are manipulated on two levels (i.e., 2 x 2 x 2 design), then eight vignettes are needed for a full factorial design. Fortunately, a fractional design may provide an acceptable alternative. "Whenever the number of vignette versions is smaller than the number contained in a full factorial design . . ., some partial or complete confounding of effects occurs. . . . The fractional replication design provides an algorithm or procedure for selecting a subset of the complete list of vignette versions that minimizes the analytical errors. . . . In particular, effects caused by the simple factors of greatest interest are allowed to be confounded with the highest order (more complex) statistical interaction terms, whose true effects on the dependent variables are likely to be quite small" (Alexander and Becker 1978, p.96). Regardless, if multiple vignettes are administered, then they should be counterbalanced to control for sequence effects (Burstin, Doughtie, and Raphaeli 1980).

Intra-subject assessment required multiple vignettes. "[A]n individual is never exposed to both contrastive halves of any vignettes. Therefore, an assessment of either bias towards or bias against a given attitude-object, but not both, could be made for an individual. The manifestation of extreme performance over several related vignettes would serve to make an interpretation of individual bias more supportable than determinations made on the basis of a single situation" (Burstin, Doughtie, and Raphaeli 1980, p.162).

Control and Account for Social Desirability Bias

Social desirability bias is typically ignored in vignette studies. For example, of the 26 ethics studies reviewed by Weber (1992), only one included a scale to measure tendency toward social desirability (i.e., the Crowne-Marlowe Social Desirability Scale).

Although use of third-person vignettes—in which people project themselves into another person's situation—can reduce social desirability bias (Havlena and Holbrook 1986), vignette-based studies occasionally focus on respondents' propertied behaviors (i.e., what would you do in this situation). In such cases, first person vignettes, which may introduce attribution error because people

often believe that they have more control over their situation that they do, may be used (Ross 1977).

Survey the Appropriate Population(s)

Researchers must select respondents who can reply meaningfully to all vignettes, i.e., the manipulated variables and associated situations must be salient to respondents. In this vein, some researchers argue that student samples are unacceptable because such samples are non-representative. For example, vignette-based studies suggest that undergraduate students hold less ethical perceptions-especially in a retailing context--and are willing to act unethically for gain (Lane 1995; Norris and Gifford 1988). Other researchers argue that carefully crafted vignettes can be targeted toward students' work and consumer experiences, and that today's students are tomorrow's business professionals (Stevenson and Bodkin1998). Regardless, student samples may limit the validity of results unless future managers' perceptions are of interest. Pragmatically, this means that researchers may need to modify their vignettes for selected population(s).

Fit Vignettes to Respondents

One way to ensure that the scope and variables fit the respondents (Weber 1992) is to ask people like the eventual respondents to describe relevant situations (Levy and Dubinsky 1983). Moderated qualitative research methods like focus groups and Nominal Group Techniques can be used for this purpose (Schoemaker 1993). For policy-related vignettes, a researcher can ask group members if they believe their firm should/does have a formal policy that addresses this situation (Levy and Dubinsky 1983).

Apply Conjoint Analysis within a 'Theory and Practice' Framework

Conjoint analysis has been applied to several recent vignette-based studies. Relative to vignette design, the key issue in such studies is setting the attributes and their levels. As per all conjoint studies, attributes must be (1) determinant, (2) easily measured and communicated, (3) realistic, (4) compensatory, (5) such that some levels are preferred to other levels, (6) as a set, sufficient in defining the choice situation, and (7) non-redundant (Malhotra 1999). Unfortunately, such generic advice does not help to identify the attributes and their levels; theory and practice are needed.

The following two examples illustrate this point. In the context of ethics research, the Jones (1991) issue-contin-

gent model of ethical decision making in organizations has been applied to vignette-based conjoint analysis studies (Tsalikis, Seaton and Shepherd 2001; Tsalikis, Seaton and Tomaras, 2002). Consistent with this model, vignettes indicated (1) the transgressor/moral agent, (2) the issue and its intensity, and (3) the victim. Conjoint analysis was used to estimate the part-worths of different levels in these three variables (e.g., the gender or organizational status of the transgressor/moral agent) on judgments about the ethicality of an action.

In a medical context, Ryynänen, Myllykangas, Vaskilampi, and Takala (1996) showed respondents paired vignettes with varied patient profile variables (e.g., young or old, poor or rich, good or poor prognosis) and asked them which of the "pair they would choose if only one could be subsidised by society" (p.239). Via a somewhat primitive conjoint analysis procedure, cross tabulation and multivariate logistic regression was used to estimate how each variable affected care prioritization assessments.

4.2 Vignette Design Issues

Beyond conventional methods for ensuring reliable and valid surveys, like pre-testing (Levy and Dubinsky 1983) and validation by a panel of experts (Cavanagh and Fritzsche 1985; Fredrickson 1986), the following issues pertain specifically to vignette-based studies.

Make Believable

Researchers should assess and adjust vignettes for internal consistency and plausibility. By pre-testing their vignettes, they can ensure that respondents believe the situations are realistic and consistent (Finch 1987; Levy and Dubinsky 1983). Varying multiple vignettes in complex ways increases the possibility that some combination of variable levels will be omitted or unrealistic. Although a factorial design permits a subset of all possible combinations, respondents must only consider reasonable ones. Unreasonable vignettes must be removed and replaced with alternatives that do not compromise a balanced study design. Even if beyond respondents' experiences, a vignette must be believable.

Make Adequately but Not Overly Detailed

More detailed vignettes facilitate control of moderating variables. Vignettes should be sufficiently detailed to control as much as possible for respondents' idiosyncratic projections (Hyman and Steiner 1996), but not so detailed as to overburden respondents (Cavanagh and Fritzsche 1985; Hox, Kreft and Hermkens 1991).

Make Tone Consistent with Research Question(s)

The tone of the vignette should be consistent with the issue under investigation. For example, "[o]ne would not want to develop a highly emotional vignette to investigate the gardening habits of suburbanites" (Cavanagh and Fritzsche 1985, p.284).

Make Manipulated Variable(s) Obvious

If a manipulated variable is subtle, i.e., it may go unnoticed by respondents, then the vignette should be "creatively structured" to highlight it (Burstin, Doughtie and Raphaeli 1980, p.161). For example, instead of indicating sex differences merely by giving actors different names (e.g., Jane versus Jack), the actors could be described in greater detail (e.g., 'Jane, a 32-year-old mother and daughter of Bill Smith' versus 'Jack, a 32-year-old father and son of Bill Smith').

Guard Against Framing Effects

Empirical studies of mental accounting by consumers (e.g., Thaler 1985) suggest that the framing (i.e., the precise wording) of a vignette influences a respondent's answers; thus, wording vignettes precisely is important. Different versions of a vignette should be formally equivalent, which "ensures that any variation in wording has not changed the objective information in the [vignette] or the subject's perception thereof" (Bateman, Fraedrich and Iyer 2001, p.123). Formal equivalency is more difficult to achieve in low to moderate perceived ethicality (Bateman, Fraedrich and Iyer 2001).

5. Conclusion

Vignettes allow examination of complex situations while controlling for moderating variables. Although often used, the extant literature offers little guidance for constructing them. The preceding review indicates that researchers who use vignettes should consider the following thirteen issues:

- select the appropriate method (i.e., CVVVs versus factorial survey) ,
- 2. tailor their questions to their vignettes,
- 3. ensure that all relevant variables are covered,
- 4. develop and use an adequate number of vignettes,
- 5. control and account for social desirability bias,
- 6. survey the appropriate respondent population,
- 7. fit vignettes to respondents,

- 8. apply conjoint analysis techniques within a 'theory and practice' framework,
- 9. make vignettes believable,
- 10. make vignettes adequately but not overly detailed,
- 11. make the tone of the vignettes consistent with their research question(s),
- 12. make the manipulated variable(s) obvious, and
- 13. guard against framing effects.

Although the vignette approach has many advantages, the potential problems are substantial and should be systematically considered. Vignettes are simply stimuli used to collect survey data, and like all research tools, they must be appropriately designed; otherwise, they will yield invalid data. To ensure valid data, a researcher who uses vignettes should carefully consider how they are designed. Simply adapting previously published scenarios may be problematic, especially if the original researchers failed to consider all the development issues discussed here. Adapting an existing scenario may, in fact, be more complex than adapting an existing set of scales, as changing the context of the scenario may have multiple effects on the variables under study. Thus, researchers who wish to use existing scenarios are advised to consider the issues highlighted here. Such advice is comparable to the advice that researchers who adapt existing scales should check the reliability and validity of their "new" scales.

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