PERSUASION, PITCH AND PRESENTATION:
THE EFFECTS OF INFORMATION STYLE ON INDIVIDUAL DECISION MAKING

by

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ABSTRACT

The four experiments examined five issues relating to the use of information by decision makers. The first was time; second was descriptive words instead of university letter grades; third was the information source's credibility; fourth was persuasion technique; and fifth was type of appeal.

Time available was variously combined with letter grades, evaluative words, and differentially credible information sources. The first two experiments showed that time and evaluative words affect decisions, and that evaluative words were more effective when time was short. The third experiment showed that credible sources strongly influence a decision, but, when time is short, the effect of a credible source weakens.

The fourth experiment aimed to ascertain if one appeal type was more effective than another when used in conjunction with one of two persuasion techniques. Modified
versions of the persuasion techniques Foot In The Door (FITD), and Door In The Face (DITF), were crossed with two types of appeal common to public television, Mission and Transaction. Mission appeals discuss quality; Transaction appeals offer a return. The FITD and the DITF manipulated the magnitude of the initial donation request, with subjects then responding to either a Mission or a Transaction appeal.

There were no significant effects for pitch, or for persuasion technique. Significant interactions between pitch and sex, and pitch, persuasion, and sex were found. Males gave most when Transaction pitches were used with the DITF and least to Mission appeals with the DITF. Females by contrast responded most to Mission pitches used with the DITF persuasion technique.

The results of experiment four have practical implications for public broadcasting fundraising.
CHAPTER ONE
INTRODUCTION

Decision making involves selection between possible avenues of action: this strategy or that; this product or that; to act or not to act. If we have to select between alternative avenues of action then we may require information to help us choose, to help reduce uncertainty about the 'best' course to take. Thus, information may be required for decision making, and the way the information is presented and received may guide our actions.

Evidence to this effect has been presented in the consumer literature where mode of presentation of information was found to have an effect on the outcome of a decision (Bettman, 1979; Bettman & Park, 1980; Biehal & Chakravarti, 1982, 1983; Payne, 1976), in the decision literature where different faces of the same problem elicited different decisions (Tversky & Kahneman, 1981; 1986), and in the literature on persuasion, where different forms of information, combined with requests for differing
magnitudes of compliance, were correlated with different compliance rates and compliance of differing magnitudes (Dillard & Hale, 1992; O'Keefe & Figgé, 1997 & 1999; Schwarzwald & Bizman, 1983; Tusing & Dillard, 2000). Yet, what form of information influences a decision (celebrity endorsement? a high initial 'price' followed by a lower more acceptable level? Descriptions of the contents?)? What causes a person to pay selective attention to one piece of information, and less or none to another? Does selective attention influence decisions?

The purpose of this research is to find answers to some of these questions. I intend to see if wording, especially non-conventional, vivid wording will result in a decision different to that when the same problem is presented using more conventional terms. I intend to see if the level of credibility of a person endorsing an option will influence a decision. I also intend to see if lack of time, or feelings of time pressure, affect decisions, and if this lack of time interacts with the wording or the level of credibility to affect decisions. Time focuses attention, and when time is short, non conventional wording, or very high or very low
levels of source credibility, are characteristics of a
decision situation which conceivably attract attention. To
find these answers I conducted three initial experiments,
all of which will be discussed in the first part of this
chapter.

I also intend to compare the persuasion techniques known
as the Foot in the Door (FITD) and the Door in the Face
(DITF) to see a) whether initially asking a high price for
compliance with a request, which will undoubtedly be
rejected, followed by a low price, which will be accepted,
generates a higher rate of return than does initially asking
a low price and then a higher price, and b) which of Mission
or Transaction pitching, as used in the public television
arena, is more effective when used alone, and when combined
with the 'price' of compliance according to either the FITD
or the DITF persuasion technique. Since addressing these
issues requires a different and separate experimental
framework, I will discuss this experiment in the later part
of the paper.

This chapter will first address decision making
theories. The importance of time in decision making (in my
research specifically) will be discussed. Forms of information presentation and their potential impact on decisions will be presented.

**Decision theories**

Research in the field of decision making can be classified in several different ways. Commonly, decision research is distinguished as being either structural or process research, and either normative, prescriptive or descriptive research.

Structural decision research examines the connections between the various inputs to the decision task, and the outcome of the decision act. Process research, however, attempts to understand the cognitive processes underlying the decision. Although, at a simplistic level, the two approaches are distinct, the lines can be blurred and in fact are blurred in my research, as they are in the 'Prospect Theory' research of Tversky and Kahneman (Tversky and Kahneman, 1981; 1986; Maule and Svenson, 1993). My research attempts to understand the cognitive processes of the decision maker, and it does this by varying the information input used as the basis for the decision.
Blurring thus occurs easily when the decision input of interest is the information, and the selection and subsequent use of that information is dependent upon the cognitive processes of the individual making the decision. Not all individuals approach, select, and use information in the same way. The use of these variables is largely dependent upon the history, the experiences, and the knowledge of each individual, all of which make up their cognitions and which may lead to the individual using simplifying heuristics during the decision-making process which they have developed over time.

Use of heuristics is an internal cognitive property of an individual, and Waller (1995, p.34) suggests that

"knowledge of the [economic] actors' internal properties may moderate predictions about their behavior, especially in complex and unstable environments."

Reliance upon the credibility of a source of information, and paying attention to less conventional information, are two possible heuristic devices which, when used in decision making, could work to reduce the cognitive load of the
decision-maker. Thus, rather than having to spend cognitive effort on wondering whether an applicant for university is a quality applicant, a decision maker could look to the reference source. If that source is known and respected, then any further wondering is unnecessary. Accept the applicant. Similarly, if one applicant is described in such a way as to attract attention then, given time constraints, correspondingly less attention can be spent on the other applicant(s) and a decision in favor of the less conventionally described applicant is increased in likelihood.

Normative, prescriptive, and descriptive research can be separated more neatly than can structural versus process approaches to decision making. Normative decision research adopts the stance that a particular outcome should occur if the decision has been rationally made; prescriptive decision research assesses information use and the subsequently prescribed decision; and descriptive decision research attempts to understand and describe how individuals actually make decisions. My research falls into the last category: I do not assume a rational stance; I do not dictate a decision
based on the information provided; I am trying to understand what components of the information weighted most heavily in the decisions made. Following March and Simon (1958; 1993), I accept that information selection and use is a function of the subjective, bounded, cognitions of the decision maker. And, like March and Simon, I do not support the normative decision-making model with its concepts of objective rationality and maximization of expected utility.

From the above it can be seen that 'Information acquisition processes are often considered essential activities in organizational decision problems' (Hattrup & Ford, 1995). But, despite this, there has been some, but not much, attention given to the process of information seeking and information use in decision making. In the decision literature, we learn of the decision outcome, but not usually about the process of how the information was sought, obtained, and then used in the decision. Payne (1976, p.368) states that

"Most research on decision behavior has focussed on data which reflect only the end product of the decision process..."
What we learn from the management literature, though, is that time is important to the decision process: so important that it may in fact underpin the processes by which information is sought and used.

*Time and decisions*

The time available for a decision is a factor that needs to be considered in any decision-making equation (Waller, 1995). The time available may affect a decision by determining the span of attention given to it (March & Simon, 1993, p.175), and by determining which of the attributes in the decision are given attention. With sufficient time, all relevant information can be acquired or 'noticed' whereas with insufficient time then only information on hand (or that is noticed) will be used in the decision (March & Simon, 1993, p.190). Under time constraints, then, we may reduce our span of attention and attend only to those aspects of information which command our attention. In organizations, decision-making processes, including those relating to attribute use and weighting, have been found to be affected by the time conditions under which the decision must be made.
Decisions made by individuals in organizations are usually subject to some level of time constraint which may be more, or less, severe, depending on the situation. If time is short, then the effect on the decision process is to either cause a faster-paced implementation of a decision strategy, or to cause a switch to the use of a simpler decision strategy (Benson & Beach, 1996; Bronner, 1982; Maule & Mackie, 1990; Edland & Svenson, 1993; Payne, Bettman & Johnson, 1988; Smith, Mitchell, & Beach, 1982; Svenson & Benson, 1993; Svenson, Edland & Slovic, 1990; Wright, 1974).

Possibly, when operating under time constraints, decision makers could resort to 'screening out' options rather more rapidly than they would when operating without time constraints, when they would otherwise be able to compare, contrast, and compensate for deficiencies in the options. Thus, a decision maker could switch from a compensatory decision strategy (in which an applicant's poor score on one grade might be compensated for by a high score on another grade) to a non-compensatory, screening strategy (that is, if the applicant for a school is poor on the one subject which
is considered important by the decision maker then no compensation is allowed and the candidate is rejected outright). Benson and Beach (1996) did not, however, find such a switch in strategy, but they did find that the screening strategy was applied less consistently when operating under time pressure.

Svenson and Benson (1993) made an important contribution to the decision literature by recognizing that there is a distinction between time pressure and time constraint. Traditionally there seems to be the assumption that time constraint equals time pressure: that when a person is short of time to make a decision then they are also feeling pressured by this lack of time. Svenson and Benson (1993) clarified this misconception by proposing that constraint, like a time deadline, is defined objectively and is simply the length of time a decision-maker has in which to make the decision. By contrast, time pressure is a subjective experience. Two individuals may have the same deadline, but one may be experiencing more pressure about the deadline than is the other.
Svenson and Benson (1993) propose that pressure is a function both of the resources needed to complete the decision task (including time) and of the resources available for the task (including time). To reduce pressure a decision maker could either reduce the resources needed for the task, or increase personal investment and energy. Svenson and Benson (1993), in finding that time pressure and time constraint are not necessarily the same, suggest that strategies for making decisions vary across time constraint and time pressure conditions. Reducing the complexity of a decision, via use of simplifying strategies, is one way of reducing the (cognitive and time) resources needed to complete the task.

Stocks and Harrell (1995) propose that increased information load generates increased processing of the information - but only up to a point. After that point has been reached they propose that processing reverts to a lower level. Following this, I suggest that a person reverts to an information processing mode, or level, which uses heuristics when load increases, and load can increase either through a reduction in the resource 'time', or through an
increase in the amount of information to be processed. My view echoes that of Wright (1974, p.555) who suggests that

"A decision maker's need to simplify should become more urgent when he [sic] must operate under a heavy information load... an increase in information load could... result from either increasing the amount of data with which a person must cope, or decreasing the time available for processing".

FIGURE 1
PROPOSED RELATIONSHIPS BETWEEN INFORMATION PROCESSING, INFORMATION LOAD, AND TIME CONSTRAINTS.

Figure 1 demonstrates that as information load and time constraints increase, then the information processing level goes down.
Use of heuristics, by condensing the amount of attention paid to the information, allows the resource 'time' to be extended, and it can lead to a reduction in the load of information to be processed. Payne (1976, p.384) confirmed that, when faced with complex decisions, heuristics are used to reduce cognitive strain. In fact, Payne called for research to find out the heuristics that are actually used for structuring the information in a decision task (Payne, 1976, p.385).

Bronner (1982) suggests that when repetitive decisions are to be made, especially under time pressure, then the most ordinary way to go about the task is to develop policies and then rely upon these to guide (almost predetermine) the choice. This view is echoed in Mazzotta and Opaluch (1995) who note that when making multiple decisions of the same nature, and which involve uncertainty, then the decisions will over time become predictable simply because of the decision-maker's use of and reliance upon 'decision-heuristics'. In short, the suggestion is that heuristics, like policies, are relied upon in multiple judgment or decision tasks.
Wright (1974), for example, found that when under time pressure the judges in his experiments focused more upon negative information than upon the positive information. This represented a distinct change in strategy, as when they were without time pressure the judges had given more weight to the positive information. These findings have subsequently been supported by Svenson, Edland and Karlson in 1985 and by Edland in 1985, and disputed by Maule and Mackie in 1990, Svenson, Edland, and Slovic in 1990 (Edland & Svenson, 1993). Concurrently, Wright found that when under time pressure the judges used fewer attributes in their judgments. There have been similar findings with respect to decision-making: fewer attributes are used under time pressure and greater weight may be given to negative attributes (Edland & Svenson, 1993).

To see how a negative attribute could be used as a non-compensatory decision making heuristic, especially when under time constraints, consider a decision maker viewing a transcript which indicates the student has variety of grades, including an 'F'. Any 'F', for this time-constrained decision maker, means that the student is
inadmissible to the university. This particular decision maker does not look at the 'A' scored in another subject, and then compensate for the 'F' - as might have been done when time was ample. The operating heuristic when time is short is to discount any applicant with a failed grade in any subject.

FIGURE 2

Ample Time

Constrained Time

Think about the F; Compensate with the A; Maybe accept the applicant.

No time to think and compensate; Reject.

From literature other than that stemming from research into organizations, we see that time can affect decisions in at least two ways. First, more time spent attending to a
characteristic of information can lead to enhanced memory for that item of information, and hence to the greater likelihood of it being retrieved, rather than information with a less noticeable characteristic. Second, the shorter the time available for decision making, for example, then the greater may be the reliance on schemata (or a more simple schemata) to inform the decision, and information which is inconsistent with a schema will be given more attention (Fiske & Neuberg, 1990; White & Carlston, 1983) which, in turn will be more time consuming.

Time is a major decision constraint and may dictate the amount and type of information used in a decision and, when in short supply, time may also cause an adjustment of attention, leading to a focus on characteristics of the information that 'demand' attention. Such a strategy fits with that of 'abbreviation' outlined in Benson and Svenson (1992) and Benson and Beach (1996) who propose that abbreviation, as a decision strategy, comprises of attention being paid to only the most important attribute, or to that for which information is first received, and it enhances their concept of abbreviation by proposing that the decision
maker abbreviates attention by attending only to 'features' (to use Benson and Beach's term) which stand out. Thus unconventional words, in a context where conventional letters are expected, and in which time is short, should draw attention and be given more weight, whether consciously or unconsciously.

In summary, when time is short attention is selective, and further, as decision makers usually focus on only a small proportion of the available information when making decisions (Miller, 1956; Russo, 1977), I am lead to ask which portion of information is given attention when time is short. I propose that when time for a decision is short, then attention becomes focused on two major factors in the decision process: the way the information is presented (does it draw attention?), and the source of the information (is it credible or not? is it even a known source?).

Information presentation

The way in which information is presented - either conventionally or non-conventionally - has not been a major focus of the decision literature and so the effects on the
decision process of the way information is presented can only be predicted, not reported.

Anecdotal evidence for the results of non-conventional information presentation comes, however, from the University of California at Santa Cruz (UCSC). UCSC has chosen to offer its students the option of being graded conventionally (to use their term) via the use of letter grades, or less conventionally via the use of a pass/fail statement plus a written evaluation of the student's performance. The written evaluations range from single words used as alternatives to the letter grades, to several paragraphs of prose. UCSC describes the use of evaluative words as a success in terms of student motivation, focus, attitude, and morale, and suggests that use of the evaluations should be more predictive of subsequent student success than the more conventionally used letter-grades.

They also report that as a result of the less conventional evaluations students are seen

"more nearly as human beings rather than being stereotyped as "an A-student" or a "C-student". Out of the Santa Cruz transcripts...arises a picture of a flesh-and-blood human being -- uneven, multi-dimensional,
qualitative, unpredictable, incapable of summarization. " (Committee on Educational Policy, California University, Santa Cruz, 1970, p.4).

But how successful are UCSC undergraduate students at obtaining entry into graduate schools? How does the form of information presentation affect decisions made about UCSC students? The answer to this question is largely unknown: it appears that

'some schools express pleasure at UCSC transcripts...they have always sought to find out who the person was that lurked behind those A's and B's. Some however, have expressed frustration at their inability to compare some "quantitative" measure of UCSC student performances'. (Committee on Educational Policy, California University, Santa Cruz, 1970, p.5).

Miller (1967) argues that the system of letter grading is invaluable because of its administrative efficiency, but, in an argument against the system, suggests that schools could dispense with the use of conventional letter grades. Miller's main recommendation is for a system similar to that used at the UCSC - pass/fail and prose reports.

It appears from the UCSC experience that it is not just any sort of 'less' conventional information that is useful for judging a student's ability, but rather it is wording
that evokes an image of the flesh and blood student behind
the transcript. In seeking a term to describe this 'image
provoking', less conventional, information I turned to the
literature from social psychology to find that the concept
of 'vividness' provides a reasonable description of the type
of information that readers of UCSC's transcripts have found
useful.

Vivid information is that which is considered to be
concrete and image provoking (Nisbett & Ross, 1980), and has
its root stem in the latin 'vivo', or life. And UCSC
academics use terms on their transcripts that have drawn
responses suggesting that the terms they have used lead to
mental pictures of real, live, people behind the
transcripts. Images have been invoked. Is a person
academically described as 'outstanding' more easy to picture
than is one academically, but stereotypically, described as
'A'? The report from UCSC suggests that the answer to this
question would be 'yes' - UCSC uses 'outstanding' and they
have received the response that it is nice to be able to see
the person lurking behind the transcript. Vividness is also
defined, in the social psychological literature, as the
'inherent attention-getting features of a stimulus' (Fiske and Taylor, 1991, p.246), which leads to the questions: is a description on a transcript, which conjures up a concrete image of a real live student, attention-getting? and if the answer is yes, how does this affect the decision process? 

UCSC is using non-conventional grading words, but they are not just any words. They are words that conjure up an image of a student as a real live person. They are vivid images, according to the responses from other school. In light of the connection between the words that UCSC uses, the interpretation placed on the words by other schools, and the definition of vivid from the social psychological literature (and to find a concise word describing the non conventional evaluations used by UCSC) I have described the information presented in part of this research as 'vivid'. The term is merely shorthand for a more complex phenomenon. 

Source credibility is the other information factor which I believe has an impact on decision making, and which I anticipate becomes a focus of attention when decision makers are short of time. Source credibility has been examined mainly in the social psychology literature, with research
spanning several decades (see for example, Eagly & Chaiken, 1975; Gillig & Greenwald, 1974; Hovland, Janis & Kelley, 1953; Hovland & Weiss, 1951; Kelman & Hovland, 1953; Petty & Cacioppo, 1986). Source credibility is regarded as a function of liking, expertise and trust, and has also been connected to the concept of source status:

"source status, by influencing perceptions of source credibility, competence, or trustworthiness, can provide message recipients with a simple decision rule as to whether or not to agree with the message." (Petty, Priester, & Wegener, 1994, p. 103).

Kruglanski and Mackie (1990), and Mackie (1987) have discussed how source status can bias the processing of messages. Source status can lead to perceptions of credibility which in turn can lead to biased message processing and to the ultimate use of source as a decision rule.

Ellis (1992, p. 38) notes that

"it is doubtful...if any receiver of information can separate the message being communicated from the source of the communication".
Brewer and Crano (1994) concur, saying that the 'who' of the message is as important as the message itself.

Expertise is one of the foundations of source credibility (Hovland, Janis & Kelly, 1953; Hovland & Weiss, 1951; Petty & Cacioppo, 1986), and information coming from an expert should have more impact - and affect a decision more - than information coming from a person without such credentials.

Anderson (1983) notes that an association between cues occurs when cues are considered in conjunction with each other, or are being considered simultaneously. Looked at in this light, the association between the cue 'highly credible source' and the cue 'applicant quality' should be a positive one. Inferences about the credibility of the source will affect the way we process information, leading to our giving less weight to information that is offered by sources of low credibility, and more weight to the identical information originating in well-regarded sources (Hovland & Weiss, 1951).

Although source credibility has been the subject of research in social psychology, more than in the decision literature, various organization theorists have speculated
that credibility effects must exist (Ellis, 1992; Zalesny & Ford, 1990).

If the above theories about source credibility hold true, would a less qualified candidate - but with a highly credible referee - be more readily accepted into a school than a more highly qualified candidate with a less credible referee? Where lies the weighting of the information, and where lies the focus of attention? (Dawes, in his 1971 case study of graduate admissions, found that the faculty and the admissions committee assigned different weightings to the undergraduate institution of the applicant. He also found that the quality of the undergraduate institution was the best predictor of subsequent faculty ratings of individual undergraduates i.e., where a student comes from is important.)

When encoding information in an application for university entrance, a decision maker could selectively attend to the credibility of the referee, and time constraints may lead to just such limited attention.
Summary

Hattrup and Ford (1995, p.75) note that "there is clear evidence that...cognitive structures interact with informational characteristics...to affect attentional processes during social judgment".

The questions are: how does the interaction manifest itself? and how is time important in the process?

Understanding the effects of time upon decision making is intrinsic to understanding the process of decision-making itself, and I suggest that when working under time constraints or time pressure, decision-makers will be more affected by attention-getting features of the decision situation (such as vivid wording or high or low source credibility) than they would be if they were operating without time constraints or pressure.

The general research question that can be derived from the above discussion of time and information processing is: Under constrained, and unconstrained time conditions, does unconventional, image provoking information affect the decision process? And does information from a credible,
'expert' source also affect the decision process when under varying time conditions?

From the above, I thus propose to investigate the impact of unconventional, vivid wording, and perceived source credibility, on individuals' selection and use of information in decision making, and to investigate the interactions between these attributes and time constraints in decision making.

The importance of this research lies in its integrating two disparate research arenas: that of communication and social psychological research into attention-getting, and source credibility, and that of organizational research into time and decision making. Additionally, importance can be found in the attempt to establish if decision makers allow extraneous and possibly irrelevant factors, of which the decision maker may be unaware, to impinge upon the decision. Unconventional language may outweigh content and misdirected respect for a referee may color evaluation of an applicant. Additionally, time limitations may exacerbate any such effects.
HYPOTHESES

The relationships proposed above lead to the following positions. A decision will be swayed depending on the way in which the information, upon which the decision bears, is presented, such that a) vivid information will be given more weight than other information, and b) information from a credible source will be given more weight than will opinion from a less credible source, despite all other information being equal. Further, shortness of time for the decision task will result in a) increased reliance upon and use of the vivid characteristics of the information, and b) increased reliance upon the source of the information.

More formally stated:

Hypothesis One

Building on research which suggests that increased attention will be given to 'vivid' attributes of an object or event: The decision making process and subsequent outcome will be affected by unconventional, vivid, image provoking information.
Hypothesis Two

Given research findings that individuals abbreviate attention and focus when making decisions under time constraints: any effects outlined in hypothesis one will be stronger when the time frame for making the decision is short.

Hypothesis Three

Building on research into source credibility: Different levels of the source credibility of information will affect the decision making process, and outcome.

Hypothesis Four

Any effects outlined in hypothesis three will be stronger when the time frame for the decision is short.

Hypothesis Five

Following Svenson and Benson (1993) who find that time constraints and time pressure are experienced differently by individuals and have different effects on the decision making process: subjects who are manipulated to experience time pressure when making decisions will be influenced by
vividness and source credibility differently to subjects who are merely constrained by time.
CHAPTER TWO
RESEARCH METHOD

Boundary Conditions

This research, and its findings, applies only to decisions being made by individuals in organizations, and does not concern itself with group decisions, or with decisions being made in the social arena. Further, the research applies only to decision tasks which require use of information before a decision can be made.

Internal Validity: The design as described below should be internally valid given that the major problems of history, maturation, testing, instrumentation, selection bias, and regression (Campbell & Stanley, 1966) should not, by and large, be present. The same experimental 'lab' conditions will hold across all control and experimental groups (Sekaran, 1984).

External validity: The artificiality of a lab experiment, with student subjects and with artificial treatments does generate questions about the external validity of this and any similar research. Although there
has been substantial debate on this topic, it will not be rehearsed here. Let us simply state that this proposed research falls into the generally accepted paradigm of much of university research in business schools.

Being faced with vivid information, however, is a phenomenon wider than just in selection decisions. Selection decisions are merely a functional medium in which to locate vividness. Thus, although generalizability of findings to university decision makers might be limited, generalizability of findings about the influence of vividness, to a population potentially influenced by vividness, might be more apt. And the student body is not an inadequate representation of such a population.

Checks: As stated above, mood has been found to impact upon judgments. To see if there are any differences between groups, mood and stress levels of the subjects will be tested before the judgment tasks are undertaken. Mood will be re-tested after the experiment, to see if the tasks have had an impact upon the subjects.
Subjects will also be asked to answer questions about the difficulty level of the choices, and whether or not they felt constrained or pressured by time.

In the debriefing sessions after the experiments, subjects will be asked to state what if anything influenced their judgments.

ANALYSIS

The format of this research required that the data be collected in two ways. First, given that subjects had to choose between one of two applicants for entry to university, the responses required analysis of dichotomous data. Second, the subjects were asked to state their level of preference for the applicant that they selected into the business school. Subjects were required to do this via use of a 1 to 10 scale. This second level of analysis, as it used interval data, thus required a form of analysis different to the first.

For the first form of analysis, that of dichotomous choice, logistic regression was used as it allows for analysis when the dependent variable (choice) has only two values, which in this case are either choice or non-choice.
Logistic regression enables prediction of the 'odds' of an event occurring: that is, the ratio of the probability of an event occurring against the probability of its not occurring. In this case, I am looking for the probability of an applicant being selected against the probability of the applicant not being selected.

The second form of analysis was multiple regression as it allows for analysis of the interval-scaled variable 'preference level' against a variety of other variables such as the time allowed for the decision, and the vividness of the information, or the credibility of the source.

The significance level was set at .05 and, as the hypotheses do not specify a particular direction for the findings, the statistical tests were two-tailed (Kachigan, 1986).
CHAPTER THREE
EXPERIMENT ONE

The purpose of this experiment was to investigate the questions: does selection of applicants vary by the way in which they are described - either vividly or non-vividly - and by the time available for the decision? Further, is there an interaction between the way in which an applicant is described, and time?

Population and Sample

Ideally the population and sample should have been of individuals who are making decisions within the reality of an organizational environment. Instead, upper-level undergraduate students of the University of Arizona's School of Business and Public Administration served as subjects. Cooperation was freely invited, and students were advised that they would receive extra credits for their participation in the experiments. The students thus were a self-selected sample - a factor which introduces the possibility of bias into the results, and reduces if not removes their generalizability.
As demographic information is not required for the testing of the hypotheses, the characteristics of the sample were not obtained and cannot be described.

Method

Participants. Eighty-one upper-level undergraduate students in the Business College of a major university in the south-west of the United States volunteered to participate and were each assigned to one of two experimental groups, a time-constrained group (n = 43 Ss) or a group free of time constraints (n = 38 Ss). Students were awarded extra credits for participation. The upper level business studies students were mostly between twenty and thirty; and they were roughly equal in proportions of males and females. Minorities were represented among the upper-level undergraduates.

Materials. The experiments focused on accept/reject decisions for university entry to a hypothetical business school, paralleling the research undertaken by Svenson, Edland and Slovic (1990) and Svenson and Benson (1993). Ninety-six decision scenarios from those developed by Svenson, Edland and Slovic (1990) were selected, which meant
that information on one hundred and ninety two applicants was viewed by the subjects. See Appendix One for the complete set of decision scenarios developed by Svenson, Edland and Slovic were. Alterations to the decision scenarios were 1) the use of letter grades (A, B, C, D and F), to reflect local conditions, 2) the use of 'vivid', descriptors to parallel these standard letter grades, and 3) the use of courses which could have been taken by students in high schools in the United States applying for entry to a business school. Choosing to use conventional letters, and vivid word equivalents, allowed for control of content across conditions. The content of the information was exactly the same across conditions, it was just the method of information presentation which varied.

Synonyms for the words which matched conventional letter grades were chosen with reference to a thesaurus, and were based on grades given at the University of California at Santa Cruz which uses 'outstanding', for example, and suggests that the word carries greater distinction (is more vivid?) than the conventional 'A'. The final selection of vivid descriptors was
outstanding (equalling the conventional 'A')
proficient (equalling the conventional 'B')
solid (equalling the conventional 'C')
poor (equalling the conventional 'D')
unacceptable (equalling the conventional 'E' or 'F')

Conventional, or non-vivid terminology, was operationalized by use of the usual forms of grading, A, B, C, D, E, and F.

The courses taken by the hypothetical students, and for which they had grades recorded on their hypothetical transcripts, were Science and Technology, English, and Business Studies, all of which were course names taken from local high schools at the time of the research. The information in the transcripts was incomplete in order to increase the complexity of the decision and to decrease the possibility of the subjects simply 'adding up' the grades on the transcripts and choosing the candidate with the highest set of grades.

Although subjects had incomplete information for each applicant, there was always one course for which both applicants had results. The course common to both applicants
varied, and the courses were presented to the subjects in varying order. See Appendix Two for examples of the decision scenarios actually used in this research.

In one descriptive condition, only letter grades were used for comparison of the applicants. Hence subjects would see a pair of applicants both having their transcript grades showing A, B, C etcetera. In the second descriptive condition the subjects saw the pairs of applicants with one being described using vivid words, and the other being described via the use of more usual, and the more pallid letter grades.

Pre-test. The vivid descriptors were pre-tested using forty-seven undergraduate students in the Business School. Additionally, Management and Policy Faculty and Doctoral students were asked to comment on the descriptors to be used in the research. See Appendix Three for the pre-test questionnaires. The mean level of responses were from 2.40 for 'Outstanding' to 3.79 for 'Poor'. Overall, the responses were a sufficient indication that respondents viewed the word-descriptors as more vivid than the letters.
None of the students used for pre-testing were subjects in the subsequent experiments.

**Design:** Three features of the decisions were manipulated: time to view the stimulus; titles of courses taken by the applicants; and the grades achieved in the courses. The independent variables in the research were the vividness or non-vividness (pallidness) of the words used to describe the applicants' grades on the transcripts (refer again to Appendix Three to see the words which described the grades), and the time available for making the decisions. Vividness was operationalized, as per the earlier definition, as a descriptor which invokes a concrete image, and is inherent in the term itself. 'Outstanding', for example, was shown in the pre-test to be more image provoking than its equivalent, 'A'. (And 'outstanding' is used by University of California at Santa Cruz as a more vivid substitute for 'A').

Subjects made their decisions to accept or reject the applicants to the university based on the hypothetical grades for the courses taken in high school. The transcripts of the applicants were presented such that in
one condition both applicants in a pair had conventional letter grades, and in another condition one of the applicants was described in vivid terms while the other applicant was described using conventional letter grades. The conditions were randomly presented.

Time, the other independent variable of interest, was manipulated by altering the amount of time subjects were given to make their decisions. In one condition the subjects had no time constraints; in the other condition subjects had half of the time it took those in condition one to make the decisions. The time given to the half-time group was determined by averaging the amount of time taken by the respondents in the first group to answer each question and then dividing this time in half. The no-time-limit group took on average 24 seconds to complete each decision task. The half-time group was thus given 12 seconds. These times coincided fairly well with the 25 seconds used by Svenson et al (1990) and the 12 seconds used by Svenson and Benson (1993). Both time condition groups experienced the same vividness manipulations.
The research design was thus a mixed one: it was within subjects on the descriptive conditions, and between groups on the time conditions. Subjects were randomly assigned to time conditions.

The dependent variable was the choice of applicant into the business school. 'Choice' was analyzed at two levels: acceptance or rejection of either applicant x or y for the business school (a dichotomous choice), and examination of the level of preference each subject expressed for their selected applicant (this was subsequently analyzed as 'outcome').

Procedure. Data collection took place over a two-week period. In each session, subjects were asked to view the incomplete, hypothetical transcripts of pairs of applicants to a local business school. Subjects were advised that only 50% of the applicants could be accepted into the school and that they were to think carefully about which applicant they would choose. The information for each pair of applicants was then projected onto overhead at the front of the classroom, as were the instructions. See Appendix Four for the instructions given to subjects in experiment one. Use
of the overhead projector enabled me to control the time allowed for making the decisions in the time constrained condition.

Subjects were asked to circle, on their response sheets, their preferred applicant from each pair and along side each pair there was a scale of 1-10 on which they were to indicate the level of preference they had for their chosen applicant. Subjects were told that to circle the number one on the scale would indicate a low preference for the applicant they had chosen, whereas to circle the number ten would indicate a high preference for the applicant they had chosen. A high aggregate preference for a candidate would indicate the level of confidence the subjects in any one condition, had in their selections. If, therefore, an applicant from one particular selection decision received an aggregate score of 9, we can see that the subjects were highly collectively confident in their choice of this particular candidate 'x'.

See Appendix Five for a sample of the response sheet.

Subjects were presented with four practice selections before they started the real decision tasks.
Subjects were also asked to complete three mood questions in advance of the task; the same three mood questions at the end of the task, and five questions at the end of the task which asked for their opinion on the difficulty level of the decision, their satisfaction level with their choices, their feelings about the adequacy of time to make the decisions, their feelings of time pressure, and finally, they were asked if making the selections was more difficult than they expected. Apart from the question about expected difficulty, which required a yes/no answer, the questions all required a response on a scale from 1-10, with the lower end of the scale indicating, for example, low satisfaction, or low pressure experienced, and the high end of the scale indicating for example, high satisfaction, or extreme pressure of time. See Appendix Five for the mood and other questions asked of the subjects.

**Coding:** All choices of applicant 'y' were subsequently negatively scored so that a high negative score indicated high preference for applicant 'y'. Conversely, a positive score indicated a preference level for applicant 'x'. 
Results

All subjects completed the tasks.

Time and vividness: Significant results for 'time' and 'vividness' were obtained under the two forms of analysis. For 'choice', using logistic regression, there was an observed main effect for vividness (p = .000), and a main effect for time (p = .020). Using multiple regression for preference level, there were similar main effects for vividness (p = .000), and time (p = .000). For 'preference level', however, there were no significant interactions between time and vividness (p = .767).

R Squared: The multiple regression equation, for level of preference, returned an R² of .75103.

Courses of study: Differences in grades did not uniformly affect 'choice' of applicant: (Business: p = .110; English: p = .000; Science and Technology: p = .000). However, the differences in grades uniformly and significantly affected the 'level of preference' for the applicant (Business: p = .015; English: p = .000; Science and Technology: p = .000).
The presence of a grade in a course again showed various results. For choice of applicant, the presence of a Business grade was significant at \( p = .000 \); similarly for English, \( p = .010 \). Science and Technology was dropped from the logistic regression equation. For level of preference, Business was not significant at \( p = .938 \); English was significant at \( p = .003 \); again, Science and Technology was dropped from the multiple regression equation.

The level of a grade was significant in choice of applicant, for Business \( (p = .000) \); and for Science and Technology \( (p = .000) \). No significance was attained for English \( (p = .523) \). For level of preference, the Business grade level was significant \( (p = .003) \) and for Science and Technology \( (p = .000) \). It was not significant for English \( (p = .122) \).

*Pre-test and post-test questions*: T-tests of the mean scores of the questions asked in advance of the test, and then repeated after the test, showed that respondents in the different time conditions were unequal in all but the pre-test stress level. The respondents in the different time conditions differed in level of relaxation, nervousness, and
post-stress, and they also differed in terms of their perceptions of the level of difficulty of the decision, their satisfaction with their choices, the adequacy of time for the choices, and in the feelings of pressure. Means presented in the following paragraphs all show significance at the $p = .05$ level.

Of particular interest are the results which show that, on a scale of 1 - 10 with 1 being inadequate time and 10 being ample time, the half time condition respondents felt that the time was inadequate to make the choices (half-time mean = 3.48; no time limit mean = 7.60); and on a scale of 1 - 10 with 1 being not at all pressed, and 10 being extremely pressed, they felt far more pressed for time (half time mean = 6.62; no time limit mean = 3.60).
The results of Experiment 1 showed main effects for vividness and time, with these variables affecting both the choice of applicant for the business school and also the level of preference for the selected applicant.

However, following from Svenson and Benson (1993), and recognizing that time 'constraint' and time 'pressure' (which is a subjective feeling) may lead to different cognitive processes and thus different decision-making processes, another experiment was run to test the effects of vividness and time when making decisions under time pressure.

Method

Participants. Forty-one upper-level undergraduate students volunteered to participate and were each randomly assigned to one of two experimental conditions: one in which the subjects were led to believe there was adequate time for the task (n = 20 Ss), and one in which the subjects were led to believe that the time for the task was too short (n = 21
Ss). In fact, the times for the decision tasks were exactly the same. It was only a manipulation of the instructions that took place, not a manipulation of time. As in experiment one, students were awarded extra credits for participation. The sample subjects were again observed to be aged between twenty and thirty. The numbers of males and females were again roughly equal. No subject that had taken part in Experiment 1 took part in this second experiment.

**Materials:** The materials used for Experiment 2, and the number of decision tasks, were exactly the same as those used in Experiment 1.

**Pre-test.** Given that the materials were the same for both experiments, there was no need to do further pre-testing. Again, none of the students used for pre-testing were subjects in the Experiment 2.

**Design:** The design of Experiment 2 matched that of Experiment 1 except for the variable 'time pressure'. Time pressure was manipulated by altering the perceived amount of time subjects had in which to make their decisions. The objective time of 12 seconds was the same for all subjects.
In one condition random subjects were given written information advising them that the time they had in which to make the decisions was really 'too short'; the other randomly chosen students had written information advising them that the time was 'quite adequate' to make the decisions, and that other, prior, subjects had made the decisions in less time. The written information about the time being either too short or adequate was on the individuals subjects' response sheets. See Appendix Six for the cover sheet of the response sheet showing the information given to subjects in experiment two. The time given to the subjects in Experiment 2 was exactly the same as that given to the subjects in the 'half-time' condition in Experiment 1.

Again, the research design was a mixed one: it was within subjects on the descriptive conditions, and between groups on the time conditions.

The dependent variable (selection of applicant into the university business school) was the same as for Experiment 1, and was analyzed in the same way.
Procedure. Procedures were as for Experiment 1, and again, the overhead projector was used to control the time allowed for making the decisions. Subjects were presented with four practice selections before they started the real decision tasks, a procedure which, again, was the same as that in experiment one. Similarly, the same mood and task-related questions were asked in advance and at the end of the task (refer back to Appendix Five).

Coding: All coding of responses was done in the same manner as for experiment 1, with selection of applicant 'y' being coded negatively and selection of applicant 'x' being coded positively.

Results of Experiment Two

All subjects completed the tasks.

Time and vividness: Significant results for 'time' and 'vividness' were obtained under the two forms of analysis. Using logistic regression for 'choice', there was an observed main effect for vividness ($p = .000$), and a main effect for time ($p = .048$). Under multiple regression there were similar main effects for vividness ($p = .000$), and time ($p = .011$). However, the direction
of the effects differed: for choice of applicant there was a positive main effect whereas for level of preference there was a negative main effect. Interaction effects between time and vividness were not significant under either form of analysis.

*Courses of study:* Differences in grades for courses did not uniformly affect choice of applicant: (Business: \( p = .110 \); English: \( p = .000 \); Science and Technology: \( p = .000 \)). However, the differences in grades uniformly and significantly affected the level of preference for the applicant (Business: \( p = .015 \); English: \( p = .000 \); Science and Technology: \( p = .000 \)).

The presence of a grade in a course again showed various results. For choice of applicant, the presence of a Business grade was significant at \( p = .000 \); similarly for English, \( p = .010 \). Science and Technology was dropped from the logistic regression equation. For level of preference, Business was not significant at \( p = .957 \); English was significant at \( p = .003 \); again, Science and Technology was dropped from the multiple regression equation.
The level of a grade was significant in choice of applicant, for Business (p = .000); and for Science and Technology (p = .000). No significance was attained for English (p = .528). For level of preference, the business grade level was significant (p = .004) and for Science and Technology (p = .000). It was not significant for English (p = .110).

R Squared: An $R^2$ of .750 was obtained for the multiple regression equation which analyzed 'level of preference'.

Pre-test and post-test questions: T-tests of the mean scores of the questions asked in advance of the test, and then repeated after the test, showed that respondents in the different time conditions had unequal variances on all but the pre-test and post-test levels of relaxation. The respondents in the different time conditions differed in level of relaxation, nervousness, and post-stress, and they also differed in terms of the level of difficulty of the decision, their satisfaction with their choices, the adequacy of time for the choices, and in the feelings of pressure. Means presented in the following paragraphs all show significance at the $p = .05$ level.
Particularly interesting are the results which show that, on a scale of 1 - 10 with 1 being inadequate time and 10 being ample time, the short time condition respondents felt that the time was inadequate to make the choices (short-time mean = 5.28; adequate-time mean = 7.60); and on a scale of 1 - 10 with 1 being not at all pressed, and 10 being extremely pressed, they felt far more pressed for time (short time mean = 5.14; adequate-time mean = 3.25). Further, those who were told that the time was 'too-short' had higher mean post-test stress levels than did those who were told the time was 'adequate' (4.38 vs 3.40). The pre-test mean levels for stress were not so different. Remember, all respondents had equal objective time for the decisions. The differences in responses can have only occurred because of the instructions.

Further analysis was done to assess the similarities and differences in responses between those in the various time conditions. For choice of applicant, by holding 'adequate time' constant, we see that those in the too short time condition were operating in a similar fashion
to those who were led to believe they had adequate time. Also for choice of applicant we see that, by holding the 'too-short' condition constant, they and the 'half-time' respondents in Experiment 1, were operating similarly to each other.

For preference level: by holding 'adequate time' constant we found that these respondents were operating like those in the 'no time limit' condition; by holding constant those in the 'too-short' time condition we found they were also operating similarly to those without time limits, and by again holding the 'too-short' condition constant we saw that they were operating similarly to the 'adequate' time condition.

In short, when making choices of applicants, the 'adequate' and the 'too short' time conditions operated in ways similar to each other, and when deciding on the preference levels for candidates they both operated like the 'no-time limit' group. However for choice of applicant the results of the 'too short' and the 'half time' conditions were almost the same.
In looking at the two induced-pressure time conditions against the initial 'no time limit' condition a pattern of results was found under which there were significant main effects for 'choice' of candidate, but not for 'level of preference' (for choice of applicant, 'adequate time' condition: \( p = .000 \) and 'too short': \( p = .000 \); for level of preference, 'adequate time' condition: \( p = .310 \) and 'too short' \( p = .405 \)).

Interaction effects did not alter: none were significant under any form of analysis, although there may be an indication of an interaction, with the 'adequate time' condition achieving a level of significance of \( p = .081 \) for choice of candidate.

Further, both time conditions differed from the no-time limit condition for the pre and post test questions, except for the level of nervousness after the test, in which case the means for both 'adequate-time' and the 'no-time limit' conditions were not significantly different (\( p = .721 \)).

When looking at these two time conditions while holding the 'half-time limit' condition constant a pattern of
results was found under which there were no significant main effects for 'choice' of candidate, but there were for 'level of preference' (for level of preference, 'adequate time' condition: p = .000 and 'too short' p = .000). Interaction effects were significant for 'choice' with the 'adequate' condition attaining p = .033, and the 'too-short' p = .000. The interactions are in the negative direction. No interaction effects were significant for level of preference, although there may be slight interaction with the 'adequate time' condition achieving p = .095. The main effect results indicate that the 'short time' condition respondents may have been operating in a similar way to those in the 'half time' condition.

When comparing conditions 'adequate-time' and 'too-short' against the 'half time' condition, all three of which had objectively the same amount of time in which to complete each task, I found that all groups differed on all pre- and post-test questions.
Discussion of Experiments One and Two, into 'time' and 'vividness' of information

The two experiments described above were designed to see if vividness of information affected decision making, to see if there was an interaction between the time available for a decision and the vividness of the information upon which the decision was based, and to see if time pressure and time constraint differed in terms of their effects on decision making.

It was shown in Experiment 1 that both time and vividness independently and significantly affected the decision process, and that these variables interacted to jointly affect the decision making process. Decision makers were negatively affected by the time available for a decision, and they were affected by vividness, altering their decisions in the direction of the vividly described alternative.

Further, when time became shorter (specifically, to half of the time otherwise available) then there was an increased tendency by decision makers to make decisions in the
direction of the vividly described alternative. Or, to re-state this, as time available for decision making decreased then vividness had more of an effect on the decision makers. Conversely, the longer the time available then the less the impact of vividness. Once the choice was made, however, then vividness had less of an impact on the preference level for the candidate.

Vividness of information may be having an impact on the decision maker by causing a form of 'screening' and compatibility to take place:

"Screening involves serial consideration of available options in which each option's features are compared to a relevant set of standards." (Benson, & Beach, 1996, p. 223).

The relationship between vividness, compatibility, and screening is such that an option (or as in the case in this research, an applicant) is either screened out by virtue of the vividness of the fact that the applicant does not meet the standards, or it is screened in by virtue of the fact that the option does indeed meet the standards. Vividness can thus work in two directions. However, once the option
is accepted as compatible, and chosen, then vividness diminishes in impact. This fits with Beach (1990, p.99) who says

"information that had been used for the compatibility test had only a minor influence upon the outcome (of the profitability test). This in turn suggests that participants may have regarded the two tests as fairly separate decision tasks."

Perhaps then, as decision makers, we do choose other tests to determine our preference levels of options.

In terms of the course on the transcript with most impact, it was, as expected, the grade achieved for Business studies. This, at least, tell us that the subjects were aware that there may be a connection between applying for entry into a business school and having competence and a previous interest in the field. Again, once the choice was made, the grades achieved in the various course of study were of reduced importance in assessing the preference level of the applicant.

From Experiment 2, it appears that the effects of induced time pressure on decision making are still not clear, with respondents in the two different induced-
pressure time conditions (one condition being told that the time one has is 'too short' and the other being told that the time is 'adequate') operating in similar ways to each other for both the initial choice and the subsequent preference levels, but then with respondents in both the conditions also appearing to operate in a way similar to respondents in the 'no-time limit' condition.

What is of particular importance is the finding reported here that subjects in the 'too-short' condition operated in much the same way as did the subjects without any time constraints at all. This supports Svenson and Benson's (1993) finding:

"...subjects, who were given this instruction [that there was a scarcity of time] and who were confronted with the same constant objective deadline condition, chose a process for solving the decision problems of the same type as when there was plenty of time" (p. 165).

However in the research reported here, despite the same objective time being available for the decision making, the instructions to the respondents in the 'adequate-time' and the 'too-short' time conditions evoked different levels of stress and feelings of pressure.
This finding departs from that of Svenson and Benson (1993, p.165) who found that

"...genuine time pressure effects cannot be induced simply through an instruction that there is a scarcity of time".

It is clear that further research is needed to fully disentangle the issues of time constraint and time pressure, and whether or not mere instructions can induce feelings of pressure.
CHAPTER FIVE
EXPERIMENT THREE

The purpose of Experiment 3 was to investigate the questions: does information offered by a credible source affect a decision and, if so, is the effect more or less noticeable when the decisions are being made under conditions of time constraint? Impetus for this part of the research came from the knowledge that several university departments and schools, in different universities, and indeed in different countries, use reference sources to screen applicants (either in or out) for positions in graduate schools, and for faculty positions.

There are two lines of thought regarding the use of sources of information. One is to suppose that a decision maker will be swayed by the perceived credibility of an information source, particularly when operating under tight time constraints - that is, when both cognitive and time resources are limited and yet results must be produced. Another line of thought is to consider that the source will be of less interest and will exert less influence over the
decision maker than will the 'bottom-line' information, and that this reduced influence will be particularly noticeable when the decision maker is operating under tight time constraints. In the case of this experiment, the 'bottom line' was the performance of students who were applying to enter a graduate level business school.

This experiment sought to assess which method of operating was more evident in practice, and to see which method of operation was more prevalent when decision makers were working to tight deadlines.

Method

Participants. Seventy-one upper-level undergraduate students in the Business College of a major university in the south-west of the United States volunteered to participate and were each assigned to one of two conditions, a time-constrained group (n = 40 Ss) or a group free of time constraints (n = 31 Ss). Students were awarded extra credits for participation. The sample subjects were observed to be aged between twenty and thirty and, as with Experiments 1 and 2, the numbers of males and females were roughly equal.
Materials. This experiment, as before, used accept/reject decisions for university entry to a hypothetical business school. Forty-eight decision scenarios from those developed by Svenson, Edland and Slovic (1990) were selected, which meant that information about ninety-six applicants was viewed by the subjects. 

To reflect local conditions, alterations were made to the decision scenarios. The alterations in this experiment were first, to change the numerical grades in the original decision scenarios to letter grades (A, B, C, D and F), with the letters exactly matching the original numerical equivalents, and second, to alter the names of courses taken by Swedish students, to names of courses which conceivably could have been taken by students in undergraduate business school in the United States, who were subsequently applying for entry to a graduate business school. The third alteration was to use reference sources of varying levels of credibility to support the applicants' transcripts.

Source credibility is composed of expertise and trustworthiness (i.e., lack of stake in the issue) (Brewer & Crano, 1994). As the form of the experiment did not readily
allow for manipulation of 'trustworthiness', this left credibility to be operationalized as 'expertise'. Expertise refers to a source's credentials in that they are relevant to the matter in hand. A source in this experiment could thus have been a Chief Executive Officer or similar, who could testify to the applicants' value in academic terms; a source could also be a prior school of the applicant (the University of Arizona itself, or Harvard; Yale etc), with the higher the perceived prestige of the school, the higher the supposed credibility of the source. A 'non-credible' source could be operationalized either as a layperson, possessing no qualifications to justify the reference, or as an unknown or little known prior school.

Appending a reference source to each decision scenario was achieved by inserting, below each set of grades for each applicant, a brief comment that the applicant had received an 'excellent reference from...'. See Appendix Seven for a sample of the decision scenarios for Experiment 3. Half of the applicants had references from extremely well known and perceived to be high quality, high credibility, undergraduate schools. The high credibility schools were
Harvard, Yale, Princeton, and Stanford. The other half of the applicants had excellent references from lesser known schools. The schools used as sources of perceived lower credibility were:
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<th>Arizona State University</th>
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<td>Manhattan College</td>
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References from the less prestigious schools acted as the counterpoint to the highly credible sources. (I hesitate to describe references from these institutions as 'non-credible').

Each applicant had a highly credible reference source appended to their transcript at one point in the study and at another point in the study the same applicant had a reference from one of the less credible sources appended. Thus, all subjects saw each applicant twice - once with a highly credible source appended to the transcript and once with a reference source of lesser credibility appended to the transcript. Although the reference's credibility levels changed, the grades remained the same.

Applicant pairs were never separated: whenever applicant 'x' in a particular decision scenario was assessed against applicant 'y' in the same decision scenario, then that same applicant 'x' was compared with the same applicant 'y' in a later decision scenario. In one decision scenario 'x' had the highly credible source and 'y' the lower credibility reference; then in the other scenario 'y' had the highly
credible source and 'x' the less credible one. Their individual transcript details remained the same each time.

The decisions to accept or reject applicants were made, based on the hypothetical grades for courses taken as undergraduates and the references in support of the applicants. For ease of comparison, all applicants had the same courses listed on their transcripts: Statistics, Management Policy, and Organization Behavior, all at the 400 level.

As in Experiments 1 and 2, subjects saw incomplete information for each applicant, but there was always one course in common, for which both applicants had results. The courses common to both applicants varied, and the courses were presented to the subjects in varying order. Refer to Appendix Seven for examples of the decision scenarios.

Design: The independent variables were the level of source credibility on the applicants' transcripts, and the time available for making the decisions.

Time was manipulated by altering the amount of time subjects were given to make their decisions. In one
condition there were no time constraints; in the second condition subjects had half of the time it took those in the other condition to make the decisions. The time given to the half-time group was determined by averaging the amount of time taken by the respondents in the no-time-limit group to answer each question and then dividing this time in half. The no-time-limit group took on average 10 seconds to make each decision. The half-time group was therefore given 5 seconds for each decision task. Both time condition groups experienced the same manipulations of reference source credibility, grade content, and course titles.

The research design was thus, again, a mixed one: it was within subjects on the source credibility conditions, and between groups on the time conditions.

The dependent variable was the choice of applicant to select into the graduate school. 'Choice' was analyzed at the same two levels of acceptance or rejection of applicant x or y for the graduate school (the dichotomous choice), and of the 'level of preference' each subject expressed for their selected applicant.
Procedure. Data collection took place over a one week period. In each session, subjects were asked to view the incomplete, hypothetical transcripts of pairs of applicants who were applying to enter the graduate business school of the University of Aaarghberg. As for Experiments 1 and 2, subjects were advised that only 50% of the applicants could be accepted to the school and that they were to think carefully about which applicant they would choose. The information for each pair of applicants was again projected onto overhead at the front of the classroom, as were the instructions. The overhead projector again enabled the researcher to control the time, in the time constrained condition, for making the decisions.

All instructions given to the subjects were the same as used in Experiments 1 and 2. See Appendix Five for a sample of the response sheet.

In order to ensure that subjects in all three experiments were treated equally, subjects in experiment three were also presented with several practice selections before they started the real decision tasks. Subjects were also asked
to complete the same mood questions and the same task related questions as were the earlier experimental subjects.

Coding: All selections favoring applicant 'y' were subsequently negatively scored so that a high negative score indicated the subject's high preference for applicant 'y'. All decisions favoring applicant 'x' were scored positively, so that, conversely, a positive score indicated the subject's preference level for applicant 'x'.

Results of Experiment Three

Again, all subjects completed the tasks, and, as in the previous experiments, both logistic and multiple regression analyses were used for analysis of the data.

Time: Using logistic regression for 'choice', there was no significant main effect for time ($p = .795$), whereas there was a main effect for time under multiple regression analysis of the 'level of preference' ($p = .000$). The results show that when choosing applicants, respondents in time one (when there were no time limits) acted much like those in time two (who had only half of the time of those in time condition one of Experiment 3).
Source credibility: Significant results for 'source credibility' were obtained under both forms of analysis. For 'choice', there was an observed main effect for credibility \( (p = .000) \); and for 'level of preference' for the applicant, there were similar main effects for credibility \( (p = .000) \).

Time and source credibility: Interaction effects between time and source credibility were significant under both forms of analysis \( (p = .000 \text{ for 'choice'}; p = .058 \text{ for 'preference level'}) \). The interaction in both cases was in a negative direction.

Grades: The level of the grades attained in the three courses significantly affected both 'choice' of applicant and 'level of preference' for applicant, to the same levels of significance in two instances, and almost the same level of significance in the third: Management and Policy, \( p = .000 \); Organization Behavior, \( p = .000 \); Statistics, \( p = .010 \).

R Squared: An overall \( R^2 \) of .827 was obtained for the multiple regression equation.

Pre-test and post-test questions: T-tests of the mean scores of the questions asked in advance of the test, and
then repeated after the test, showed that respondents in the different time conditions were unequal on all but the question about adequacy of time. Means presented in the following paragraphs all show significance at the $p = .05$ level.

The means for adequacy of time show that respondents in the no time limit condition felt that time was quite ample (mean = 7.76), whereas the half time condition respondents felt substantially more pressed for time (mean = 4.52).

The respondents in the two different time conditions differed strongly on feelings of time pressure, with, as expected, the half time condition recording a much higher mean level of feeling time pressure (no time limit mean = 3.50; half time mean = 6.15).

There was also a noticeable mean difference in feelings of stress after the test (no time limit mean = 3.36; half time mean = 4.09).

Discussion

Experiment 3 was designed to see if the level of credibility of an information source affected decision making, if the time available for the decision affected the
decision, and to see if there was an interaction between the
time available for the decision and the credibility of the
source of the information.

It was shown that both time and source credibility
independently and significantly affect the decision process,
and that these variables interacted to jointly affect the
decision making process.

However, it must be noted that although credibility was
significant for both 'choice' of applicant and 'level of
preference' expressed for the applicant, time was
significant only in terms of the respondents' selection of
'preference level'. Time did not affect 'choice' of
applicant. Credibility of a source of information about the
applicant thus does clearly and strongly exert an influence
on decisions about applicants: with the subjects being more
likely to choose an applicant if there was a high level of
credibility attached to the applicant, and they were also
likely to have a high level of preference for the candidate
with associated high credibility. This finding supports the
conclusion of Zalesny and Farace (1986, p.287) that
"information obtained through a social source [eg. a reference] focuses a person's attention on selected aspects of the stimulus"

Time seemed to acquire its importance when the respondents were deciding on the level of preference for the applicant they had selected into the graduate school.

It must also be stressed, however, that the interaction between time and credibility was negative for both 'choice' of applicant and the 'level of preference' for the selected applicant. From the data it appears that when decision makers were making selections under time constraints they did not rely as heavily upon the credibility of the source as they did when making decisions without time constraints. This finding is counter to the view that reliance upon credibility would increase as time constraints also increased, that is, as time available for the decision was decreased.

Decision makers, in this research at least, relied instead upon the grades attained during the undergraduate studies, appearing to focus most specifically upon the course 'Organization Behavior', and the level of grade
achieved in that course. The applicant with the higher grade was invariably selected into the graduate school.

In tying these findings to extant theories of decision making, we find that they fit with Beach's Image Theory (1990), particularly the early section of the theory which deals with screening, violations, and rejection thresholds. Image Theory rejects assumptions that decision makers always work to maximize utility and suggests instead that decision makers seek (whether knowingly or otherwise) to reduce their cognitive load and to make their decisions in terms of their principles, their goals and their plans. There are various methods to reduce the cognitive load, and one such method could be that of relying upon the credibility of a source to inform the decision and to speed up the screening, or serial consideration, of the various options. Thus, when selecting an applicant for business school, and with ample time to consider the options, the subjects did indeed screen and make decisions based on the credibility of the reference source. If the applicant did not have a credible reference, then a violation of the set standard had occurred and the option (alternative applicant) was rejected - regardless of
whether the substantive grades attained during undergraduate study were high or low.

Once accepted into the school then the credibility of the reference source was of less importance: that feature of the information had been used and was no longer required to make subsequent judgments about the applicants. This fits again with Image Theory which suggests that once a decision is made, then different information is used for subsequent decisions - in this case, the decision about preference level of applicant.

The findings of this study are that strategies for decision making change under time constraints: whereas with plenty of time screening and choice was on the basis of source credibility, when short of time the attribute of credibility was given less consideration and the decision maker's strategy was to look instead at the grades on a particular course. I suggest that in this research 'time' came to the forefront of consideration when subjects were faced with the cognitive effort involved in thinking about and trying to decide on the level of credibility of the 'other' candidate's source (e.g. Slippery Rock University).
No time at all was spent on thinking about the quality of the 'credible' source (e.g. Harvard). When time is constrained, spending the extra cognitive effort of thinking about unknown schools is abandoned in favor of base-line information such as the grades attained in the courses taken. Thus, whereas there was not the time to rationally process the credibility of both the sources of information, there was the time to look at an 'A' versus a 'D' for the courses of importance. Further research is of course necessary to test this assumption.

It must also be made clear that the decision makers in this series of experiments faced no consequences whatsoever. Decision makers in real-world situations would surely be cognizant of consequences, either real or perceived (both for themselves and for those whom they select or reject) and would probably bring more central processing into their decision-making.
CHAPTER SIX

CONCLUSIONS DRAWN FROM EXPERIMENTS ONE, TWO AND THREE

The research reported here highlights several features of decision making:

- confirming earlier findings, the time available for a decision can alter the decision outcome, and the process of decision making.

- the way information is presented, that is, vividly or not, can alter the process and outcome of decision making.

- the perceived credibility of a source of information can alter the process and outcome of decision making.

- the time available for a decision interacts with the vividness of information, highlighting the effects of vividness when time is short.

- the time available for a decision interacts with the credibility of a source, reducing the effects of credibility when time is short.

In a nutshell, time, and vividness of information are both influential in changing the decision process, regardless of the time constraints; whereas high source
credibility is influential only when making decisions without time constraints. When there are time constraints then it appears that high credibility is less influential.

It would appear that source credibility is used, perhaps consciously, as a screening heuristic when we have time to think about the credibility levels of the various sources presented to us. If we do not have such leisure of the resource time, in which to think and to compare and contrast sources, then we revert to the use of other decision rules. I can deduce a logical, and rational, reason for why the use of credibility diminishes under time constraints - we do not have time to assess the credibility level of the unknown sources, and so we reduce use of the source.

Similarly, it would appear that vividness of information is used as a screening heuristic. However, given that the effect of vividness is noticeable under a range of time constraints (ie, always), the level of conscious use of vividness may be questioned. If we are conscious of the effect of something, we can to some extent control the effects and thus they will consistently appear under certain circumstances and not under others. If, however, we are not
aware of the effects of something then we cannot to any extent control them and they will appear in all circumstances. Thus I pose the suggestion that vividness of information acts upon decision makers in a way that is largely below the level of their awareness. If we were aware of its influence then surely we would counter its influence and, as per the findings from Experiment 3, resort to use of more substantial information such as the grades attained in earlier courses.

Once a decision is made, though, and subsequent decisions are required, we find that vividness and credibility have different effects upon the decision process. The influence of vividness diminishes (but still exists) when a decision maker has time to think during the next phase of the decision process, but it remains strong and actually increases when there is little or no time to think during the subsequent phase. By contrast the influence of credibility is strong during subsequent phases, when there is time to think, but it is weaker when there is less time.
PRACTICAL IMPLICATIONS ARISING FROM EXPERIMENTS ONE, TWO AND THREE

One practical implication from this research is that, given that significant differences for vividness were found, schools that use 'vivid' grading might be providing their candidates with an edge over candidates who originate from schools which use conventional grading systems. Similarly, when applying for positions in organizations, applicants who are described vividly by their referees, or who use vivid language in their applications, may have an edge for employment. And, from the results of this research, if the decision maker is operating under tight time limits then vividness in the applications (to school or organizations) may provide a strong advantage. And who, these days, is not operating to tight time limits?

Practical implications for the use of credible sources also exist, the main one being that if a person has access to a highly credible reference source then use of that source would work to the strong advantage of the person. This is not an unknown view - but what emerges new from this
research into credibility is that the source credibility levels of those against whom the person is being compared - and the time in which to make the comparisons - is important. Given equal levels of source credibility then time will not affect the process and the consideration given to the competing applicants; given unequal levels of credibility then a person with a credible source may be at a disadvantage if the decision maker is pressed for time. Rather than researching the credibility level of the unknown reference source, the decision maker might just decide to use an alternative decision rule.

FUTURE RESEARCH SUGGESTED BY EXPERIMENTS ONE, TWO AND THREE

Other avenues for future research, suggested by the studies reported here, would be: i) to test for the effects of time and vividness on decision-makers who are practicing in the field, and ii) to conduct similar research but with vivid paragraphs to describe applicants, rather than one-word euphemisms for conventional grades: in this way, a greater imitation of reality may be obtained (I am sure that few institutions, if they are going to use descriptors
rather than grades, limit themselves to using only one word).

A start is also being made to investigate the relationship between concepts within Image Theory, and time constraints (Benson & Beach, 1996). The study reported here shows that such a research direction is warranted.

LIMITATIONS OF EXPERIMENTS ONE, TWO AND THREE

The studies reported here are limited by several factors, all of which are worthy of noting. Perhaps the most important limitation is that which is introduced by the use of subjects who were not experts in the field of either decision making or, more specifically, in the field of accepting applicants into a university. No doubt those who are constantly making decisions of the sort used in this study would respond somewhat differently to the way the subjects used here did. However, this research examined the variable 'vividness of information' which operates, I propose, at a sub-conscious level - which means that even practiced decision makers may fall prey to the influence of the vividness of information which is before them. To the extent that this is true, then using inexperienced decision
makers who may be equally as influenced reduces the limitations otherwise introduced by their use.

A second limitation is that of the amount of information given to the decision makers in this research. In all three experiments they were given extremely limited information upon which to make their decisions - surely those making similar decisions would, in reality, have more to go on.

A third limitation may be the amount of time given for the decisions. 24, 12 and 5 seconds sounds unrealistic. But is it? It is well known that decisions are made about applicants during the first half minute or so of an interview. Is a similar time scale operating when faced with written applications? Conceivably, the decision process in an interview takes longer because the applicant has to be listened to, to be taken notice of, to be given due time. The same is not true of a written application - nobody has to be heard or given due process, which may of course lead to a shorter time frame for the decision. A written application may be easier to screen than a spoken interview - and of course, if an applicant has got to the interview stage, then there are more reasons to spend longer
on making the decision, as the applicant has already passed the compatibility test. So, maybe the time frames allowed in this research are not inconceivably short and unrealistic. Maybe they represent a limitation, but not an unrealistic one.

Fourthly, it may be charged that a limitation exists by virtue of using only subjects from one university in one location of the United States, thus decreasing generalizability. Although there is some truth to this, the subjects, as students at a major university, are in fact drawn from all over the nation and thus are probably more representative than would immediately be evident. Although the study was limited in its geographical range, the subject pool essentially was not.

Finally, it must be accepted that studies using students are helpful - but they are limited. Their main contribution, as I see it, is to illuminate future fruitful research directions. They have certainly done so in this case.
CHAPTER SEVEN
EXPERIMENT FOUR

An audience that does not give of its wealth spells death to public television as we know it. To survive at the level the public knows now and to which it has become accustomed, public television in the United States needs a generous audience. Since merely having an audience is inadequate, the operative word here is 'generous'. Simply put, individuals must contribute - they must become 'members' of public television for it to thrive. The goals of the first portion of this chapter are to describe current means by which public television acquires its members, to assess factors that encourage individuals of different generations to contribute to public television, and to explicate mechanisms which may lead to an increase in philanthropic contributions. The goal of the subsequent portion of the chapter is to describe an experiment which tested the mechanisms within a generation that is largely absent from the public television membership roll.
Background

How do public television stations go about the business of obtaining members and their contributions? To date, stations have conducted mail campaigns in which they ask for contributions, they have asked for contributions via 'pledge' programs on television and, relatively recently, they have started offering 'thank you gifts' of different magnitudes in return for contributions of varying amounts. It can readily be seen that, when soliciting contributions, there are many and various important aspects to be considered by public television stations before they can attain the level of success (contributors and contributions) they desire. Factors to be considered fall under the mantles of communication, psychology and donative behavior, at the very least.

A brief, and almost certainly incomplete, catalog of considerations with respect to donative behavior encompasses, at the broadest level, the person doing what is called 'the ask' and the person being asked. More finely, there are aspects such as the wording and content of the
letter requesting a contribution; the wording and content of the message spoken by the 'talent' (the person speaking on television) when pitching (speaking on camera); the credibility, age, appearance, and 'likeability' of the talent; the level of contribution being requested; the quality and genre of the show during pledge drives on television; the order in which the suggested contribution amounts are presented; and the demographic characteristics of the audience members being addressed - their education level, their socio-economic status, their marital status, their sex and their age. Remembering always that on television an audience, composed of individuals with a wide range of demographic characteristics, is being spoken to at any one time, whereas in a direct letter only one person with any one set of characteristics is being addressed. Mail correspondence thus enhances the degree to which the message can be personalized, whereas television is directed at a mass audience, allowing for less individualized personalization. As Bell says when discussing mass media and more, "speakers are designing their style for their audience" (1984, p. 197). Or, in other words, speakers gauge
their audience and address them accordingly by, for example, altering the accent being used. In mass media terms, the audience means a collective audience which means, effectively, that the audience, with its diverse characteristics, will be spoken to 'generically' - as a composite or an average. Bell suggests that media style necessarily becomes "institutionalized and hence largely predictable" (1984, p. 192). Clearly, many variables can be manipulated in an attempt to acquire contributions from the public, but one must question the likely success of attempts that are institutional, predictable, and designed for a collective audience.

Other variables of substantial importance are the public's view of 'public television', and the individual's expectation of a reciprocal return for a contribution. Regarding view: is public television a charity? No, not in the conventional sense; is it a commercial organization? No. Regarding reciprocity: Does a donor receive anything in return for a donation? The answer can be one of three: Yes: a 'thank you gift' - thus making the donation somewhat like a commercial Transaction; No: a donation was made that was
purely altruistic; Yes maybe: quality television stays available for all, a sense of duty-well-done is felt by the contributor.

Further, as Putnam (2000) discusses throughout his book *Bowling Alone: The Collapse and Revival of American Community*, different age groups (generations) have different frameworks within which they act with regard to 'charities', and have different expectations of returns. The older 'civic' generation contributes out of duty, according to Putnam, whereas the younger generation expects a return for its investment.

Additionally, it has long been known in public television that it is the woman in the household who donates, and that more women than men are members of public television.

No single piece of research could expect to address all of the variables outlined above. Some can, however, be fruitfully combined.

Public television is facing the reality that its audience is getting older and its membership file is declining as the older folk shed their mortal coil. Those of
us interested in preserving public television as a national and community asset are seeking new ways to grow the membership file, to keep public television alive for future generations. One of these ways is to ascertain mechanisms by which the new generation of potential members will respond to messages asking for financial contributions.

*Research Question*

The primary question asked, and then answered in this experiment, was: given the acknowledged success of the Door In The Face (DITF) persuasion technique in obtaining compliance (Dillard & Hale, 1992; O'Keefe & Figgé, 1997 & 1999; Tusing & Dillard, 2000), and the success of the Foot In The Door (FITD) persuasion technique (Schwarzwald & Bizman, 1983) at obtaining compliance rates, will one persuasion technique be better than the other? And will the effects hold for a youthful audience?

Other valuable compliance-gaining research has used methods such as low-balling (Cialdini, Cacioppo, Bassett, & Miller, 1978), and using a list of others who have already complied with the request (Reingen, 1982). The first of these research streams ascertains whether commitment to a
decision, made at a particular level, overrides subsequent increases in the level despite the expectation that the increase will lead to a negation of the earlier decision; and the second tests the effects on a prospective donor of knowing that others have already given to the solicitor. Despite the value of these compliance-gaining techniques, the DITF and the FITD techniques are to be tested in this research for the simple reason that on-air public television requests generally start high and then move down the financial scale, but there is recognition that starting low might encourage more viewers to donate and become members. Further, these two different strategies are compatible with the twin goals of public television, either one, or both, of which may be in operation at any time. These goals are to increase membership (arguing for a low level of commitment in the first instance, which may be better served by the FITD technique), and to increase revenue (arguing for a larger level of donation, which may be better served by the DITF technique).

Public television is chosen as the medium for the research in part because of my experiences with public
television fund raising, but also in part because earlier DITF and FITD research has focused on compliance being moderated by the prosocial nature of the requesting organization (O'Keefe & Figgé, 1997 & 1999) and, clearly, public television can be identified as a prosocial entity. The view that (public) television is a high prosocial entity can be extrapolated from Dillard and Hale's work which found that the fictitious organization, 'Parents for Good Television Programming' was rated as being high in prosocialness (Dillard & Hale, 1992). Public television's raison d'etre is good television programming: it 'helps society'. Results from this research could be used practically by public television stations when designing their membership drives, when writing the pitches the talent will use to ask for donations, and when drafting the pitches used in the letters.

To answer the research question, I describe and report the results of an experiment designed to investigate specific factor(s), as outlined above, which may impact an individual's decision to give money to public television.

Outline
I will first discuss influences upon an individual's decision to contribute philanthropically. After having made the decision to contribute, the next stage of the process is to decide on an amount to contribute. Thus I will then review research on contribution levels and compliance techniques. A discussion of different generational attitudes towards civic duty and philanthropy will be presented, the value of the research and its implications will be outlined; and I will then discuss mechanisms currently used by public television stations to acquire contributions.

Influences upon an individual's decision to contribute philanthropically.

The following factors have been found to affect an individual's decision to contribute: whether or not the request is 'prosocial' (Dillard & Hale, 1992); the amount of supporting information in a request (O'Keefe, 1998; Stiff, 1986); the type of communication received from the organization (Supphellen & Nelson, 2001); whether or not peripheral or central processing of the message occurs (Stiff, 1986); whether or not the individual identifies with the organization (Bhattacharya, Hayagreeva & Glynn, 1995);
the goal of the communication (Wilson, Greene & Dillard, 2000) and the amount of guilt felt by the individual upon receiving a request and then refusing to comply with the level at which the request is set (O'Keefe & Figgé, 1997 & 1999). Each of these factors will be discussed briefly:

Prosocialness. The prosocial nature of a request has been found to affect the level of compliance with the request, in that the greater the perceived prosocialness then the greater the likelihood of compliance (Dillard & Hale, 1992). Public television is arguably prosocial in that it exists to benefit wider society. Further, the prosocial nature of the request can act heuristically to influence the contribution decision: if it is prosocial the request will be considered, if not, it will not.

Supporting Information. Stiff (1986) finds that the level of involvement and the amount of supporting information presented in a message affects the attitude of the message recipient. When there is low involvement the depth or otherwise of the message is of no importance, but when there is high involvement the message content assumes prime importance and is processed centrally, that is,
serious thought is directed to the message. In terms of public television pledge pitching, versus public television mail campaigns, we could translate Stiff's findings into the following: that involved viewers and members will consider the messages regardless of the medium (television or mail), whereas viewers that are only lightly involved would be unlikely to apply deep thought or consideration to mail but they could, by contrast, be persuaded by the heuristic cues offered via television.

Identification with the organization. Bhattacharya et al., (1995, p. 46), in their investigation of museum membership, have found that 'member's identification [with the focal organization] is positively related to donating activity [and] tenure of membership'. It follows that, if this holds true, then viewers who identify with public television are more likely to contribute to and become public television members. In a similar vein, Supphellen and Nelson (2001) found that recipients of a letter from an organization are more likely to open the letter and direct attention to the message content if the name of the organization is recognized and identified with than if it
is not. Additionally, in their research into charities termed 'hybrid' (i.e. they are not solely dependent upon donations for their survival), Brady, Noble, Utter and Smith (2002) found that a message recipient's identification with an organization is influential in the decision to donate or not.

Goal of the communication. If an organization's goals accord with those of the recipient of the request there is a higher chance that the request for assistance will be complied with. Organizations, however, can have multiple goals, and as Wilson, Greene and Dillard state, "means for accomplishing one goal often conflict with other goals" (2000, p. 135). This is particularly in evidence in the public television arena: stations are desirous of encouraging as many members as they can, and find the easiest way to do this is by offering a thank you gift (a Transaction) in return for a contribution. Unfortunately this method of acquiring members does not enable the station to meet one of its other goals - that of acquiring long-term members. If a suitable 'gift' is not available in subsequent time periods then the member will, in all likelihood, lapse.
So, short term dollars are acquired, possibly at the expense of long term commitment.

*Guilt felt by the individual upon receiving a request.*

It has been noted by O'Keefe and Figgé (1997 & 1999) that the Door In The Face strategy may work by causing the potential contributor to feel a sense of guilt at not wanting to contribute at the requested level. To reduce this sense of guilt the contributor donates something to the cause - but a smaller something than was requested. At a wider level, economic theories of giving (e.g. Andreoni's theory of impure altruism), address reasons for giving, citing guilt, but also prestige, respect, and more, as influential factors in the decision process (Andreoni, 1990).

The specific research questions reported in this paper (assessing the various degrees of effectiveness of pitch and persuasion techniques upon youth), are supported by Smith and Berger (1996, p. 228) who call for analyses of the 'different consumer segments' (e.g. older versus younger generations) in order to assess their responses and attitudes to various marketing (persuasion) techniques. In
other words, do different generations respond in different ways to any one message or message type? This research reports on the findings with respect to one of the generations: the youthful one.

In the following section I will briefly discuss some relevant differences in generations.

**Generational attitudes towards civic duty and philanthropy**

"Giving time and money to help others is a long and distinguished tradition in American society. Both philanthropy and volunteering are roughly twice as common among American citizens as among the citizens of other countries". (Putnam, 2000, p. 117).

With the quote's framework in mind, Putnam examined philanthropy across generations. The most generous, according to him, are the well educated and the well off individuals, with education (college graduation) being the most influential of the two variables. He proceeds to lament, however, that in "the 1990s Americans donated a smaller share of our personal income than at any time since the 1940s" (p. 123), and that, "after 1960 our [American] generosity has steadily shriveled" (p.123), despite the income levels
of individuals, and the country, increasing enormously. When translating these dates and dollars into ages, we have to consider that children cannot, by and large, give philanthropically. Thus, we cannot say that those born after 1960 are likely to give less but, say, those born after 1945, assuming that by the age of 15 years they may have been in a position to begin charitable giving. Being born in 1945 puts an individual currently (2003) at 58 years of age. Thus, those who are 58 years of age or younger are, under Putnam's terms, less likely to give to charities than are those over 58. Are those even younger still, say, in their twenties, likely to give even less? Putnam (p. 127) would suggest so. So also, implicitly, would Arnett (2000) who, in writing on emerging adulthood, proposes that individuals around ages 18-25 years old are in a period of change and exploration of their identities and roles, and, in general, have not yet settled down nor accepted full adult responsibilities. Changing jobs, exploring life, traveling, not needing to yet make financial decisions: are these characteristics
conducive to donating philanthropically? No. Would these questions, if translated into predictions, hold true for giving to public television?

Current mechanisms used by public television stations to acquire contributions.

Public television stations use several mechanisms to elicit contributions from its audience. The primary methods are television appeals and personal mail. Television appeals are made during pledge drives, usually aired three times a year, in March, August, and December, but occasionally also in June.

During these drives the talent appeals to the viewers to send a contribution to the station, asking them to become members. In general the stated dollar amounts are tied to 'thank you gifts', which the contributor will receive in return for a contribution. Thus, for example, if a viewer sends in $75.00 they will receive a video of a particular show; for $150.00 they will receive a video and a CD. And so on. Currently, less emphasis is placed on encouraging viewers to contribute at levels such as $35.00, for which they would receive the station's monthly program magazine,
and 'at whatever amount they feel they can afford'. The above describes what those in the industry call a 'Transaction' request or pitch. Since fewer viewers can afford higher dollar levels than lower levels, the Transaction pitch should lead to acquisition of fewer members.

The alternative pitch is a 'Mission' pitch. A Mission pitch does not offer a thank you gift. Instead, it talks about how society needs good programming as shown on public television, or it may articulate society's need for commercial-free programs. In general, the view in the public television industry is that viewers who become members as a result of believing in the Mission of public television will be longer-term members than will those who become members in order to obtain a desirable video or CD. Because nothing tangible is being reciprocated, the level of 'ask' in a Mission pitch is likely to be lower than that in a Transaction pitch.

Necessarily, in the case of television appeals, the same words in an appeal are heard by all viewers whether they are old, young, or middle-aged, and regardless of their socio-
economic status, or their current status of public television membership. Personalization cannot be achieved. By contrast, letters are sent to individuals whose names are already on the membership files of the station. In all likelihood these names are those of individuals who are currently members, or who have lapsed (i.e. let their membership status drop) but whose names are still on the files. Letters are sent several times a year: to remind members to renew their membership, and to ask members to contribute additional amounts. The letters typically list several possible contribution amounts and, depending on the type of letter (renewal or 'add' gift request), will describe a possible reciprocal gift: for $75.00 one can elect to receive a membership card; and for $35.00 one will receive the program guide. The letters are personally addressed, leading to degrees of personalization not possible when on-camera.

What is it about the letters, as described, or the television appeals, that will encourage a viewer to contribute? Would more personalized letters encourage contributions? In particular, keeping in mind that we read
from left to right, and so start with the amount which is listed first to the far left, how does a presentation order with lowest suggested contribution amount listed first (essentially a version of the FITD format) affect the decision? Would a letter with the highest suggested amount listed first on the left (essentially a version of the DITF format) affect the amount given? Tentative answers to the question of the presentation order of the contribution levels may be found in the literature on compliance techniques, as outlined next.

Contribution levels, compliance techniques, and levels of persuasive articulation.

How does the order in which various possible contribution amounts are presented affect the individual's choice of contribution level? The question of order of presentation and influences upon the decision to contribute have been addressed by various researchers including Dillard and Hale (1992), Fraser, Hite and Sauer (1988), O'Keefe and Figgé (1997 & 1999), Reingen (1982), Schwarzwald and Bizman (1983), Tusing and Dillard (2000), and Weyant and Smith (1987). While some of these authors have addressed the Foot
In The Door Technique (FITD), others have addressed the Door In The Face Technique (DITF). Some of the research includes a comparison with a third 'technique', essentially a control, which is that of asking for exactly what you want: not higher, or lower, but a targeted amount. Similarly, in public television, one can ask for 'whatever can be afforded', parallel, perhaps, to saying 'even a penny will do'. I will first discuss the FITD, the earlier of the twin concepts, followed by the DITF technique.

At its most simple, the FITD technique requires that a contribution of any amount, but usually small, or a small action, such as signing a petition, be asked of the contributor, with that 'ask' then being followed by an ask for the desired amount (or action). The expectation is that once a contribution has been made, and thus the cause acknowledged, then subsequent requests for higher amounts can be made and will be fulfilled based on the previous acknowledgement of the cause. "Compliance with the first expedites responsiveness to the second." (Schwarzwald, Bizman, & Raz, 1983). The effect has been found to hold consistently (Dillard & Hale, 1992).
Smith and Berger (1996), in their investigation into direct marketing appeals and charities, concurred with Dillard and Hale (1992), finding that "Response rate was greater for low suggested anchors." (p. 226) and that, supporting Reingen (1982), "On average, donors were more likely to comply with appeals for lower, rather than higher, suggested anchors." (Smith & Berger, 1996, p. 228). Citing Dillard (1991), Smith and Berger described their finding as similar to "the foot in the door technique effect that begins with a small request followed by a large request." (p. 222).

By contrast, the DITF technique is one in which the initial request is unreasonably high and so, metaphorically speaking, it is expected that by way of refusal the door will close in the requester's face. The second request, by contrast with the unreasonable initial one, seems much more acceptable to the contributor and so compliance with the request is achieved. Again, Dillard and Hale (1992), report the reliability of the effect and so also do Tusing and Dillard (2000), in their research into the reasons for the effect.
Dillard and Hale (1992) make the point that either of the DITF or the FITD techniques work better to obtain the desired level of compliance than does simply asking in the first instance for the desired level. By contrast, Smith and Berger (1996, p. 227) found that the use of anchors (either high or low starting points), while affecting compliance rates, did not have any statistically significant effect on the magnitudes of compliance levels (i.e. dollar amounts) finally contributed.

How do the request techniques and processes used by public television, as evidenced by the letters and the on-camera appeals, compare with either the FITD or the DITF technique? The on-camera Transaction appeals start high then proceed down the scale: although this may not strictly be the DITF technique, it approximates it by presenting an initially high request (say, $250) then moving progressively down the scale to $35, a much more acceptable level. An individual may feel surprised at the $250 request and somewhat relieved at the $35 request. The mail (and sometimes the Mission appeals) may either start low at $35, then move higher, approximating a FITD technique: first join
at the low level then in later years, or with additional requests, build on the earlier commitment and contribute at a higher level. Thus, public television appeal processes seem to be varied - 'hedging their bets'.

To a large extent we are, here, discussing the process leading to a contributor's decision about the level at which to comply. There is an earlier stage in the decision process: whether to give or not. That is, any potential contributor passes through two stages in the contribution process. The first decision is whether or not to give. Those who choose not to give, drop out of consideration. Once the decision to give is made, the second stage, level at which to give, is activated.

Connecting the dots

Drawing from all that is written to this point, we can see that the DITF technique works to increase compliance rates at a higher level than simply asking for the desired amount and that the FITD technique works to increase rates of compliance; we see that public television stations use a somewhat scattergun approach to obtaining compliance (contributions and contributors); we see that public
television stations have a range of generations on their files, with a preponderance being of the older generation; we see that older and younger generations have different expectations regarding philanthropic contributions; and we see that various communication elements will affect message acceptance. Supporting information is influential, and public television offers such information in its Mission pitches; identification with the organization is important, and public television attempts to inculcate identification in its pitches; public television sets goals for its drives, some of which are communicated to the viewing audience; and, finally, making the viewer feel guilty about watching but not financially supporting public television is a common technique used in pitches. By developing DITF and FITD pitches, we can test to see their effects on the compliance rates of respondents, we can see their effects on the magnitude of the response levels, and, we can compare their effects on various age groups.

Rather than presuming to fully test the DITF and FITD effects, this experiment simply offered to compare the magnitude of the levels at which compliance is obtained when
pitches start at a high dollar level going down to a lower level (so approximating the DITF technique), against pitches starting low and going high (approximating the FITD technique), and to see which of the two techniques generated a higher magnitude of return.

Value of this research to practitioners and theoreticians

In this experiment I aimed to test the magnitudes of compliance obtained from individuals aged between 18 and 40 when applying (modified) DITF and FITD techniques to a current fundraising mechanism (mailed Mission and Transaction requests) used by public television, and to see which technique is more effective. At a practical level the results of this research will be useful to public television stations. They will be able to better craft their pledge letters and hopefully obtain increased revenues and/or membership, particularly from a younger audience, sorely needed by public television. I do not aim to fully ascertain the underlying reasons for the results that will be obtained, and it may be that practitioners are not fully concerned about underlying theories. However, I will offer theoretical underpinnings as to why mechanisms are effective
or ineffective, and I will provide pointers towards future research to fully determine reasons for effectiveness.

Asking for donations via hypothetical mail is necessarily going to present challenges to theoretical interpretations of the results. Prior research, for example, has suggested that the DITF technique possibly works because of guilt and/or expected guilt, which may be experienced more heavily if the organization requesting the donation is of a prosocial nature and if a presumed prosocial requester is standing right in front of a potential donor. Further, the FITD technique is presumed to work by encouraging commitment, which can then be escalated and, again, commitment to a cause is easier to obtain if a person requesting commitment is standing right in front of you.

The related earlier research has been conducted under one-on-one, face to face, circumstances: one researcher asking another individual for donations using one or other technique. Such face to face personal research will inevitably induce more of a sense of guilt, obligation, or commitment than will asking a mass television audience for a donation, even if by the more personal medium of mail, since
refusing a person standing in front of you is harder than putting the mailed request in the garbage (and certainly harder than not picking up the phone and calling the television station in response to a pitch). There is no one to see the inaction; only oneself.

Despite the above comments, I have formulated a preliminary research question: Within the public television sphere which technique, the DITF or the FITD, works better to generate revenue when used with Mission and Transaction pitching, with a young age group?

HYPOTHESES

Operationalizing 'young' as being 18 - 40, I offer the following.

From Putnam's findings that younger generations require a return on an investment (2000), (or some reciprocity at the very least), I suggest a very basic hypothesis.

Hypothesis One

That Transaction pitches, regardless of persuasion technique, will garner higher magnitudes of compliance than will Mission pitches.
Further, earlier research has called for tests of the DITF and the FITD techniques across generations. In the absence of any current information about the responses of older versus younger individuals to these techniques, and accepting that, having given for the initial low request, the FITD donor will subsequently donate again, and at a higher level in order to maintain a positive and consistent self-image, and accepting that by contrast, DITF donors, have no need to retain a consistent image and can feel able to give as low as they want to alleviate presumed guilt, the following hypothesis is proposed:

Hypothesis Two

That FITD regardless of pitch type will generate from youth a final magnitude of compliance greater than that attained using the DITF.

No prior research has examined possible and potential interactions of pitch (Mission and Transaction) and persuasion technique (FITD and DITF), so providing little or no basis to make predictions concerning any such interactions. It would appear self-evident, however, that interactions will occur since a pitch is always accompanied
by a persuasion technique. Donor responses to persuasion techniques thus may vary according to the type of return (Mission or Transaction) available to the donor in exchange for their donation. Thus, a research question is proposed:

**Research Question**

Do pitch type (Mission or Transaction) and persuasion technique (FITD or DITF) interact to influence magnitudes of donations to public television?

**Implications of the research**

At a theoretical level, the results will add to the body of knowledge about compliance mechanisms; it will also add to knowledge about differing age groups, specifically youth in this research, and the way they react to media communications. At a practical level, the results of this research can be used by public television stations to guide them as they implement techniques to increase compliance rates: they will have, for example, a better understanding of whether or not to use FITD or DITF techniques, or which to use, when soliciting contributions.
**Research Design**

**Study Type**

The aims of this experimental study were to ascertain the effect of type of pitch (Mission or Transaction), and persuasion technique used to obtain contributions (FITD or DITF), on level of contributions, when youth are the respondent group.

For the exploratory work I outline in this paper, the following variables, thought to affect the decision to contribute, and the magnitude of the amount to contribute, were manipulated by framing the request for a donation, variously, as a 'Transaction' or a 'Mission' request and by use of both a modified DITF and a modified FITD technique.

The independent variables then, were:

- The presentation of a requested amount using either a low introductory ask (a modified FITD) or a high introductory ask (a modified DITF) and
- A Mission or Transaction pitch.

The dependent variable was:

- Magnitude of (hypothetical) dollars donated.
Method

Data Collection

Data was collected from Communication students during two class sessions in the Fall 2003 semester. Students were not asked for identifying details so confidentiality was not at issue. At the start of the experiment, subjects were advised that the experiment broadly dealt with philanthropy as it relates to public television. A disclaimer form was handed to each student, advising them that participation was voluntary and they could ask questions at any time. My name was also given to them on the form, should they want to contact me afterwards. (See Appendix Nine). No debriefing was required as no deception was involved. Participants were thanked both orally and in writing for their participation in the research.

Population and Sample

The population from which the sample was drawn was that of undergraduate students in the Department of Communication at the University of Arizona. Students were invited to participate in the research and, in discussion with their professors, were offered extra credit for participation. It
is acknowledged that this sample, being largely self-selected and convenient, will limit the generalizability of the results.

A sample size of 174 was obtained. After excluding respondents who accepted the high ask in the DITF condition (therefore violating an essential DITF condition) and refused the low ask in the FITD condition (therefore violating an essential FITD condition), and also after removing three subjects who were over 40 (and were not therefore 'youth'), 127 respondents remained.

Subjects were randomly assigned to the four experimental conditions of Mission DITF, Transaction DITF, Mission FITD, and Transaction FITD, making this a between-subjects design:

**Persuasion**: 63 Ss were in the FITD condition; 64 Ss were in the DITF condition.

**Pitch**: 66 Ss received a Mission pitch; 61 Ss received a Transaction pitch.

**Persuasion x Pitch**: 36 Ss were in the Mission x FITD condition; 30 Ss were in the Mission x DITF condition;
27 Ss were in the Transaction x FITD condition; 34 Ss were in the Transaction x DITF condition.

Age: The average age of the respondents was 21.39. Since only slight variation of age is to be found across the cells, no further results for age need be reported. Respondents above 40 years of age were factored out of the analysis as they did not meet the target age requirement.

Sex: Seventy-three respondents were female; fifty-four were male.

Ethnicity: Eighty percent described themselves as White, 8.7% as Hispanic, 2.4% as Asian, 5.5% as African American, 0.8% as Native American, and 2.4% as 'other'.

Instrument

Prior to the instrument being handed out, I advised respondents that the research was about public television and reminded them of public television stations they may know of: WETA in D.C., WGBH in Boston, and KUAT in Tucson. I also reminded them of programs aired on public television, citing NOVA and British Mystery. I further advised them that one third of public television funding comes from viewers via donations, and I wanted to know how they felt about
supporting public television. Respondents were then allowed to turn to the first page of the instrument and begin answering the questions. Completing the questionnaire generally took less than 15 minutes.

*Manipulations*

Persuasion technique (FITD and DITF) and pitch (Mission and Transaction) were manipulated, allowing for four separate conditions. Four versions of the instrument were developed, one for each of the conditions of Mission FITD, Mission DITF, Transaction FITD and Transaction DITF; any one respondent could be in only one of the resulting cells. See Appendix Ten for the complete questionnaire; Appendix Eleven for the Mission letter; and Appendix Twelve for the Transaction letter.

The Mission FITD manipulation first asked respondents 'Would you give $1.00 to support public television?'. The $1.00 ask and the respondent's answer represented the first step in the FITD persuasion technique. Over the page, respondents then read a Mission pitch 'letter' that asked the respondent to 'help maintain and enhance the unique brand of quality programming that public television viewers
have come to expect'. Program titles that respondents would be familiar with were mentioned (e.g. Sesame Street, NOVA, Mystery) and respondents were asked to send a generous gift to support public television.

After the letter came a range of possible donation levels, starting at $0 and moving up to $150.00. This represented both the response to the Mission pitch, and the second stage of the FITD technique.

The Mission DITF manipulation first asked respondents 'Would you give $150.00 to support public television?'. The $150.00 ask and the respondent's answer represented the first step in the DITF persuasion technique. Over the page, respondents then read the same Mission pitch 'letter' as those in the FITD manipulation. After the letter came the same range of possible donation levels, starting at $0 and moving up to $150.00. This represented both response to the Mission pitch, and the second stage of the DITF technique.

The Transaction FITD manipulation first asked respondents 'Would you give $1.00 to support public television?'. The $1.00 ask and the respondent's answer represented the first step in the FITD persuasion technique.
Over the page, respondents then read a Transaction pitch 'letter' that said that donors deserve 'thank you gifts' for helping public television maintain and enhance the quality programming'. Program titles that respondents would be familiar with were mentioned (e.g. Sesame Street, NOVA, Mystery) and respondents were invited to donate in exchange for a CD or DVD of their favorite program.

After the letter came a range of possible donation levels, starting at $0 and moving up to $150.00. This represented both response to the Transaction pitch, and the second stage of the FITD technique.

The Transaction DITF manipulation first asked respondents 'Would you give $150.00 to support public television?'. The $150.00 ask and the respondent's answer represented the first step in the DITF persuasion technique. Over the page, respondents then read the same Transaction pitch 'letter' as those in the FITD manipulation. After the letter came the same range of possible donation levels, starting at $0 and moving up to $150.00. This represented both response to the Mission pitch, and the second stage of the DITF technique.
All respondents then answered the same questions in the instrument covering, in order: their demographic details (age, sex, and ethnicity); whether they knew if their close family members gave to charities; whether, if they had $10 to spare at the end of a month would they give it to public television, whether they thought it was reasonable of public television to ask for various amounts, and finally, whether they would be willing to give various amounts to public television when they had more disposable income.

Respondents that answered 'yes' to the question about whether or not they would give $150.00 to public television were factored out of the analysis, as were those who said they would not give $1.00 to public television. The former were removed because, if they would give $150 then their responses violated the DITF principle that proposes a person's final 'donation' is given out of guilt at having refused the initial high ask. In the latter case, if respondents would not give $1.00 then they had violated the FITD requirement that one first commit a small behavior before being approached with a larger ask.
Refusing to give even $1.00 amounted to a non-compliance rate of 23% of those who were in the FITD condition. After assessing the instrument the Human Subjects Committee exempt the research from review. See exemption letter, Appendix Thirteen.

Measures

The measure of the manipulations came after the Mission or Transaction letter. It asked 'If this were a real letter you had received, please circle the amount you would be willing to give to receive a gift of your choice (to keep great quality programs on the air)'. Specific dollar levels, were then stated: $0, $5, $10, $25, $50, $150. The measure was devised to ascertain if initially asking for $1.00 or $150.00 had an effect on the magnitude of the amount the respondent was willing to give from the range up to $150. Prior research has suggested that a respondent, after refusing to give $150.00 will be likely to give more, when faced with a second possible amount, than will somebody who accepts $1.00 and then is offered a chance to subsequently give at a higher level. The measure was also intended to
assess the effectiveness of the Mission or Transaction letter.

Other items in the questionnaire measured the reasonableness of public television requesting a variety of dollar amounts, and the willingness of the respondent to give specific dollar amounts when they have more disposable income. Question 5 was designed to tap respondents' assessments of how reasonable they thought it was for public television to ask specific amounts from its audience. The same range of dollars was used as was used in the pitch manipulation on page 2 of the questionnaire, except for the $0.00 option. Alongside each of $5, $10, $25, $50, and $150 there was a five point Likert type interval scale ranging from Very Reasonable (1) to Very Unreasonable (5).

Question 6 was designed to tap respondents' assessments of how willing they thought they would be to give specific amounts when they had more disposable income. The same range of dollars was used as was used in the pitch manipulation on page 2 of the questionnaire, and in question 5, again except for the $0.00 option. Alongside each of $5, $10, $25, $50, and $150 there was a five point Likert type interval scale
ranging from Very Willing (1) to Very Unwilling (5). See Appendix Fourteen for questions 5 and 6.

These two items, questions 5 and 6, had Cronbach's alphas of .75 and .86 respectively and so were collapsed and analyzed accordingly.

Data analysis

A feel for the data was acquired by initial assessment of the descriptive statistics. Statistical significance was set at a conventional 0.05.

Analysis of variance was used as this research was identifying relationships between variables, in which the independent variables (pitch types and persuasion mechanisms) are qualitatively different from each other (Mission v Transaction; DITF v FITD) and the dependent variables (amount willing to give, reasonableness of amount to ask, and likely amount that will be given with increased disposable income) are interval level (Kachigan, 1986, p. 272).
Results

The data were analyzed using a 2 (Pitch: Mission x Transaction) x 2 (Persuasion technique: FITD v DITF) ANOVA, with the independent variables being pitch (Transaction and Mission) and persuasion technique (FITD and DITF) and the dependent variable being the amount the respondent would be willing to give to receive a thank you gift of their choice (or to keep quality public television on the air). No results in this main analysis attained the designated level of significance.

(However, during exploratory analyses, a three way interaction of sex x pitch x persuasion was significant and will be reported later in the paper.)

Hypothesis One: This hypothesis stated that Transaction pitches would generate a higher magnitude of response than Mission pitches. The differences did not reach statistical significance, \( F(1, 123) = 1.26, p = .26 \). However, the direction of the means displayed a trend in the predicted direction. (Transaction: 2.79, SD = 1.36; Mission: 2.53, SD = 1.19).
Hypothesis Two: This hypothesis predicted that the FITD technique would generate a higher response than would the DITF technique. The difference was not statistically significant, $F(1, 123) = 1.74, p = .18$, and the mean responses displayed a trend opposite to that predicted (FITD: 2.51, SD = 1.10; DITF: 2.81, SD = 1.42).

Research Question 1: The case for interaction effects of pitch x persuasion on the amount donated was not supported at a level of statistical significance, $F(1, 123) = .578, p = .44$. The means of the interaction effect were:

<table>
<thead>
<tr>
<th></th>
<th>FITD</th>
<th>S.D.</th>
<th>DITF</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mission</td>
<td>2.47</td>
<td>1.02</td>
<td>2.60</td>
<td>1.38</td>
</tr>
<tr>
<td>Transaction</td>
<td>2.55</td>
<td>2.56</td>
<td>3.02</td>
<td>1.44</td>
</tr>
</tbody>
</table>

Data exploration

While exploring the data prior to its formal analysis I entered 'sex' as a variable, to see if sex may have affected responses to the manipulations. I had not anticipated this to be the case, but was willing to explore its possibility.
Two findings of significance were obtained as a result of exploring the data as a 2 (Pitch: Mission v Transaction) x 2 (Persuasion technique: DITF v FITD) x 2 (Sex: Male v Female), between subjects design, with 'amount willing to give to receive a gift (keep great quality programs on the air)' as the dependent variable. Significance was attained for sex x pitch, $F(1, 119) = 5.842, p = .017$, and for sex x pitch x persuasion, $F(1, 119) = 8.940, p = .003$. Neither sex, pitch, nor persuasion alone attained significance, and nor did sex x persuasion or pitch x persuasion.

The estimated marginal means for sex x pitch show a higher mean for women than for men in response to Mission pitching but a lower mean for women than for men in response to Transaction pitching. The means for each pitch type for women are quite close, and so are the magnitudes of the standard deviations, demonstrating little variance from one condition, Mission or Transaction, to the other. Means of the conditions for men are, relatively speaking, wide apart, making their responses ripe for discussion. Males received a much higher mean for the Transaction condition than for the Mission condition, as seen in the table below. Possible
reasons for this finding can be found in the discussion section later in this paper.

<table>
<thead>
<tr>
<th></th>
<th>Women</th>
<th>S.D</th>
<th>Men</th>
<th>S.D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mission</td>
<td>2.76</td>
<td>1.27</td>
<td>2.14</td>
<td>.98</td>
</tr>
<tr>
<td>Transaction</td>
<td>2.62</td>
<td>1.34</td>
<td>3.07</td>
<td>1.35</td>
</tr>
</tbody>
</table>

*In the three-way interactions:*

As shown in the table below, males responded better to a Mission x FITD appeal than they did to a Transaction x FITD, but reversed their positions under the DITF conditions, donating considerably more for a Transaction x DITF appeal than for a Mission x DITF appeal. In other words when males were asked first for a low amount, they preferred to give the subsequent amount for the 'goodness' of public television but when they were first asked for a high amount they subsequently wanted something in return for their money. The male preference for giving in return for something (Transaction) rather than giving for nothing (Mission), when faced with an initial high request, is the
most substantial difference in the displayed means and is probably responsible for the significance of the finding.

Females tended to respond better to Transaction x FITD than to Mission x FITD appeals and better to Mission x DITF than to Transaction x DITF. Females thus displayed the exact opposite to males: if they were first asked for a low amount they subsequently wanted something in return for their money whereas if they were first asked for a high amount they wanted to subsequently donate for the 'goodness' of public television, as can be seen below and over:

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D</td>
</tr>
<tr>
<td>Mission x FITD</td>
<td>2.47</td>
<td>1.07</td>
</tr>
<tr>
<td>Mission x DITF</td>
<td>3.05</td>
<td>1.43</td>
</tr>
<tr>
<td>Transact x FITD</td>
<td>2.69</td>
<td>1.31</td>
</tr>
<tr>
<td>Transact x DITF</td>
<td>2.55</td>
<td>1.39</td>
</tr>
</tbody>
</table>
Discussion

The questions asked, and then answered in this experiment, were related to the twin concepts of pitch (Mission versus Transaction) and persuasion (FITD versus DITF). Using youth as a sample, I wanted to find out which of the pitch techniques worked better with them to elicit a higher donation, which of the persuasion techniques worked better with them to elicit a higher donation, and finally, I
wanted to find out if there were any interactions between the levels of pitch and the levels of persuasion which could affect the youths' level of donation.

More specifically: given the acknowledged success of the Door In The Face (DITF) persuasion technique in obtaining compliance (Dillard & Hale, 1992; O'Keefe & Figgé, 1997 & 1999; Tusing & Dillard, 2000), and the success of the Foot In The Door (FITD) persuasion technique (Schwarzwald & Bizman, 1983) at obtaining compliance rates, will one persuasion technique be better than the other? And will the effects hold for a youthful audience?

Supplementarily, the research sought to assess the degrees of interaction (if any) between pitch methods and persuasion techniques with youthful respondents.

Persuasion Technique: FITD or DITF?

Although the findings from the portion of this research assessing persuasion techniques were not significant, the means indicated that the DITF technique may, overall, be slightly more effective at reaping a higher response that was the FITD technique (thus concurring with the findings of Dillard & Hale, 1992, O'Keefe & Figgé, 1997; 1999, and
The lack of significant difference between the two techniques is in itself a positive result, however, as it means that public television stations may be able to use either technique, comfortable in the knowledge that they are not doing their revenue generation a disservice. The finding of lack of significant difference between the persuasion techniques accords with Smith and Berger (1986) who found that the use of either high or low starting points (essentially used in this research) did not have any statistically significant effect on the magnitudes of compliance. Note that this research did not attempt to ascertain whether or not it was guilt or the contrast effect, both much-discussed rationales for the effectiveness of the DITF technique, that drove the decisions in the DITF conditions. It may have been either, both or neither.

*Pitch type: Mission or Transaction?*

Again, although not significant, the means indicate that Transaction pitching seems to be more effective than Mission pitching. The question remains, however, as to how long an individual, joining public television in response to the offer of a CD or video, will remain a member: will they, for
example, not re-join in subsequent years because there are no CDs or videos of interest to them? In the meantime, however, the goal of stations to attain increased revenues appears to be better served by matching the goals of the donors: the station wants money while individuals, especially men, want a tangible return for their donation of money. They want a Transaction. Sadly for public television stations desirous of moving more towards Mission pitching than Transaction pitching, the results of this research did not significantly indicate that one pitch type was more effective than the other.

*Pitch and Persuasion: their interaction*

Pitch and persuasion do not appear to interact with each other. That is, the donations attained using say, a Mission pitch, will not be differentially affected by use of either the FITD or the DITF persuasion technique.
Combined pitch and persuasion methods: Suggested hierarchy

Based on means only, the pitch and persuasion revenue generating techniques that could be considered by public television are, in descending order of possible effectiveness:

a. Transaction with DITF
b. Mission with DITF
c. Transaction with FITD
d. Mission with FITD

Pitch, Persuasion, and Sex

I now come to a short discussion of the findings with respect to the different sexes of viewers. The unexpected finding of this research was that the different pitches (Mission; Transaction), and the different persuasion techniques (FITD; DITF) interact differentially with men and women. From the separate pitch and persuasion discussions of means, earlier, I would have concluded that a station should use the DITF persuasion technique primarily, combined
strategically with either Mission or Transaction pitch. This is not the case, however, when we consider introducing the sex of the respondent. What works best to obtain a donation from women does not work best for men. On this basis, public television's most beneficial revenue generating techniques to use when appealing to the average 21 year old now become, in descending order of revenue generation:

<table>
<thead>
<tr>
<th>Females</th>
<th>Males</th>
</tr>
</thead>
<tbody>
<tr>
<td>DITF x Mission</td>
<td>DITF x Transaction</td>
</tr>
<tr>
<td>FITD x Transaction</td>
<td>FITD x Mission</td>
</tr>
<tr>
<td>DITF x Transaction</td>
<td>FITD x Transaction</td>
</tr>
<tr>
<td>FITD x Mission</td>
<td>DITF x Mission</td>
</tr>
</tbody>
</table>

From the results discussed earlier, it would appear that if women are going to give they are going to give regardless of whether it is in response to a Mission or a Transaction pitch. Why would this be so? Since there was little difference between giving in order to obtain something and giving out of the goodness of spirit, I can only conclude that women will give if they are but asked. Maybe they feel
the pro-social nature of public television? Maybe they just do not know how to say 'no'. Especially odd is that the second highest response for women was to the FITD x Transaction appeal: they were willing to give a little in return for something, but at the higher level, they were willing to give more for nothing. This apparent paradox is worthy of further investigation.

Males are the more interesting in that the means of the conditions they were in were, relatively speaking, wide apart. From the results, men are far more likely to give a higher donation when they are sure they are going to obtain a return. At first glance this seems like rational behavior but, on deeper reflection, it should be acknowledged that giving to public television to obtain a 'thank you gift' may actually be deemed somewhat irrational behavior. Why? Because a real world donation (as opposed to this hypothetical experimental donation) of, say, $75 to public television, to obtain a CD, would more than cover the cost of the same CD from the nearby music shop. The same CD may cost as little as $15.00. Why then would a male give 'too much' - an extra $60.00 (in real world terms) for a
transaction? I speculate that the whole transaction could be a cover: that is to say, the men wish to give a donation but do not want to be seen to (irrationally) give something for apparently nothing. Responding to a Transaction appeal allows the man to receive a tangible reward for the donation, a sense of 'feel-good' at having donated to a worthy cause, and a sense of having behaved rationally.

Further, we can question why it is that males responded vastly differently to the Mission and the Transaction pitches even when they were approached with the one persuasion technique, that of the DITF. (By way of contrast, there was almost no difference at all between the FITD Mission and the FITD Transaction conditions). With the persuasion technique remaining constant we must consider that the answer to the difference lies with the pitch type, Mission versus Transaction or, phrased differently, whether something is received in return for the high dollars being asked. At the simple level we can say that males, when faced with a DITF request in the Mission condition, which they refuse, will balk at then seeing that they get nothing in return for whatever they choose to give. A fabricated
internal conversation could go as follows 'You ask me for a really high amount which you know I can't give, then you tell me you're going to give me nothing even if I do give you something? No way!'. Could this be described as fit of pique?

By contrast the male that receives the DITF 'ask' knows he can not give it - and maybe is embarrassed at not being able to give it - but then he sees that he can indeed get something if he manages to donate at a reasonable level. Another internal conversation: 'No way! I can't afford to just give you $150! I'm embarrassed at having to refuse, but, hang on, if I can get something out of this deal, then maybe I will be able to give you something!'. Is such a reaction reasonable? rational? Probably not, but it serves the (presumed) male purpose of refusing a high request, yet being able to overcome embarrassment and feel good about having donated something to a good cause, with the added bonus of getting something in return.

The sex difference is important for public television fundraising since public broadcasting has different programs and genres that are targeted to the different sexes. In
other words, a station should decide judiciously whether the
program is for men or women and then they should
strategically decide whether pitches should be Transaction
or Mission, and which persuasion technique, FITD or DITF,
would work best.

As can be seen from above, if the program is for women
then asking initially for a high amount in conjunction with
a Mission pitch appears to be most beneficial. (Are women
more strongly affected by the pro-social nature of public
television than men?); If the program is for men then asking
first for a high amount - but offering something in return
- is apparently the more lucrative direction. Men almost seem
to be saying that they will give a high amount for
something, but they will not give a high amount if the
station only talks about its Mission. Males may be seeking a
return on their investment, concurring with Putnam's
assessment of youth (Putnam, 2000), although if Putnam is
correct, is he correct about only half of the young
population?

Public television stations are concerned not only with
generating as much revenue as they can but they are also
concerned with attracting members. With respect to this experiment, responding positively (complying) to either the DITF or to the FITD technique represented an hypothetical increase in public television membership. The FITD technique garnered a higher rate of compliance than did the DITF technique, albeit by only a small percentage, thus supporting public television's strategy of encouraging membership by getting viewers' foot in the door. The finding of higher compliance with the FITD than with the DITF fully supports that of Schwarzwald & Bizman (1983), and goes some way to supporting Weyent & Smith (1987) (The latter found that a higher compliance rate led to higher revenue. This experiment found the former, but not, on average, the latter.) In short, if a public television station wants to focus on membership increases then using the FITD technique will in all likelihood yield better results than will the DITF technique.
LIMITATIONS OF EXPERIMENT FOUR

This experiment's results are bounded by the usual limitations applicable to research with students. They were university students with an average age of 21, so no findings can be generalized to beyond a population with matching characteristics. Further, the experiment used hypothetical materials but its findings serve to justify further research, as outlined later in the paper.

All results may have been affected by the level of involvement with the organization or entity (public television) making the request: although the request was written and so could be read and re-read, considered and digested, compared to the request being a sound-bite on television, students - and maybe youth overall - are arguably not deeply involved with the issue of public television's survival. Such a perceived attitude may alter if and when they have children. Similarly, students may not, as yet, identify with public television as an organization worthy of their membership. Subsequent research may want to
include a measure of respondent identification with any organization being used.

A further and quite clear limitation is that the respondents were not using real money for the donations; they were in fact merely having to report what they thought they would give under certain circumstances. The results would no doubt alter drastically if the respondents had to open their wallets and hand over cash. Having said this, however, the results could be interpreted as indicative of youth's attitude towards public television and philanthropy.

The youth were also not faced with a real Mission or Transaction letter from a real public television station. I had considered using the local station's letterhead then realized that although it may resonate with some respondents, it would not resonate with the large number of out-of-town respondents. Thus I cannot say how respondents would react to a real letter from a real public television station.

The fact that youth did not have to give of their own monies, that they were not faced with a 'real' Mission or Transaction pitch, and that they did not have a period of
time in which to perceive of themselves as committed to the cause, means, in sum, that this research used only a weak FITD manipulation.

Further, the fact that there was no control condition in which only a specified target amount (not more and not less) was requested of the donor means that we cannot say that either of the modified FITD or DITF techniques, as used in this research, were or were not effective. We can merely say that they worked equally as well as each other; we have no knowledge of whether the results obtained were better (or worse) than would have been obtained if only the target amount had been requested.

With the above limitations in mind, the research served only to demonstrate that pitch and persuasion techniques may have an effect on magnitude of donation when and only when the sex of the audience is taken into account.

FURTHER RESEARCH SUGGESTED BY EXPERIMENT FOUR

The most intriguing direction for further research is into the differences found between the sexes and the amounts they would be willing to give when faced with different persuasion strategies and when, concurrently, they are given
different reasons for giving. Will adults in the community react in the same way that the students did? And why do these differences exist?

A second arena for further research would be a replication of this research, but with a variety of ages among the respondents. The research results I report focused on respondents with an average age of 21: will the results hold with individuals in their 30s? 40s, and 50s?

A third direction for research would be to see if the findings of this research also exist when the appeals are made on television, with talent speaking, as opposed to on paper in the hypothetical letter of this research.

A fourth avenue for research would be to replicate this work, with the added condition in which no specific amount to give is suggested. In other words, just asking to give 'whatever you think you would like to, or can afford'. Adding this element to the equation would answer the question of which works better with young people: the FITD or the DITF techniques and which, if either, works better than asking for no specific amount at all? Answering these questions would enable comparisons with earlier research
which compared either the FITD or the DITF and the 'whatever you can afford' condition. All three conditions would tell us whether really using one of the techniques is more effective than neither technique with young people.

The question of how long an individual, who has joined public television in response to an offer of a CD or video, will remain a member is a subject ripe for longitudinal research. A subsequent question relates to what it will take to bring them back. Another CD? And if, having joined when young, will maturity reap an effect, with the lingering memory of being a public television member encouraging - albeit delayed - a consistency of attitude response?

Finally, I would like to suggest that subsequent research investigate the notion that it is embarrassment driving the DITF effect, not guilt.

**CONCLUSION DRAWN FROM EXPERIMENT FOUR**

This research found that, by and large, it does not much matter whether a pitch is Mission based or Transaction; and nor does it seem to matter if a FITD or a DITF persuasion technique is used. What does seem to matter is whether the audience receiving the pitch and the persuasion is male or
female - if public television stations are able to match a) the technique of their 'ask', and b) their pitch, with c) the sex of their audience, they may be able to increase their revenues and generate a loyal member base.
CHAPTER EIGHT
OVERALL CONCLUSIONS

The four research experiments reported here highlight several features of decision making:

- That time available for a decision, the way information is presented (vividly or not), and the perceived credibility of a source of information can alter both the process and the outcome of a decision.

- That available time and vividness of information presentation interact, highlighting the effects of vividness when time is short, and that time available and the credibility of a source interact to reduce the effects of credibility when time is short.

- That the magnitude of donations from young people seems to be roughly equal when either the Mission or Transaction pitch techniques are used, and that the donation magnitudes are roughly the same when either the Foot in the Door or the Door in the Face persuasion techniques are used.

- That, when philanthropic requests are made using various combinations of pitch and persuasion techniques,
males and females appear to respond differently to each other. Men seem to prefer giving a lot, but only in return for something, whereas women seem to prefer to give without anticipation of a tangible return.

Time, and vividness of information influence the decision process, regardless of the time constraints; whereas high source credibility is influential only when making decisions without time constraints. When there are time constraints, high credibility is less influential.

It would appear that source credibility is used, perhaps consciously, as a screening heuristic when we have time to think about the credibility levels of the various sources presented to us. If we do not have such leisure of the resource time, in which to think and to compare and contrast sources, then we revert to the use of other decision rules. I can deduce a logical, and rational, reason for why the use of credibility diminishes under time constraints - we do not have time to assess the credibility level of the unknown sources, and so we reduce use of the source.

Similarly, it would appear that vividness of information is used as a screening heuristic. However, given that the
effect of vividness is noticeable under a range of time constraints (ie, always), the level of conscious use of vividness may be questioned. If we are conscious of the effect of something, we can to some extent control the effects and thus they will consistently appear under certain circumstances and not under others. If, however, we are not aware of the effects of something then we cannot to any extent control them and they will appear in all circumstances. Thus I pose the suggestion that vividness of information acts upon decision makers in a way that is largely below the level of their awareness. If we were aware of its influence then surely we would counter its influence and, as per the findings from Experiment 3, resort to use of more substantial information such as the grades attained in earlier courses.

Once a decision is made, though, and subsequent decisions are required, we find that vividness and credibility have different effects upon the decision process. The influence of vividness diminishes (but still exists) when a decision maker has time to think during the next phase of the decision process, but it remains strong and actually
increases when there is little or no time to think during the subsequent phase. By contrast the influence of credibility is strong during subsequent phases, when there is time to think, but it is weaker when there is less time.

Further, the way in which a decision is presented - either with or without a return for an investment, and with either a high or low initially asked amount - influences decision makers differentially according to their sex. This finding was unexpected and is counter-intuitive in at least one respect: that of rational decision-making. From an examination of the means alone, I would have concluded that a station should use the DITF persuasion technique primarily, but combined strategically with either Mission or Transaction pitch. I would have to change this conclusion, however, when we introduce the sex of the respondent into the equation. Public television's most beneficial revenue generating techniques to use when appealing to the average 21 year old now varies according to the sex of the potential decision-making donor, with the best technique to use with women being DITF combined with a Mission 'ask'; for men it is DITF combined with a Transaction 'ask'. Men
almost seem to be saying that they will give a high amount for something, but they will not give a high amount if the station only talks about its Mission. Males may be seeking a return on their investment and yet I would propose that they are being irrational in their decision-making. If we accept that men are seeking a return (why else would they give for a Transaction pitch?) we accept also that a far more rational action would be to go to the nearest music shop and commercially purchase the CD or video which they have just 'paid' public television $75.00 or more dollars. Women, by contrast, are giving in response to a 'Mission' request, nothing tangible is received in return, and that 'nothing' certainly cannot be purchased via another avenue. An alternative explanation could be that men are wanting to give to public television but want to be seen as rational by obtaining something in return for their investment.

The upshot of the four experiments into information presentation and decision making demonstrate that any person or group presenting information which is to be used to influence a decision needs to consider how vividly the information is presented, the time span during which the
decision must be made, the credibility of the source of the information, and the sex of the person making the decision. The latter point underscores the adage 'know thy audience' since knowing the sex of those receiving the message will inform the substantive content of the message (as opposed to the peripherals of color, presenter and time), at least in terms of whether the information should offer something in exchange for a positive decision, or should it merely appeal to the beneficence of the decision-maker?
APPENDIX ONE

Exemption Letter

and

Svenson, Edland and Slovic (1990) Decision Scenarios
6 January 1997

Margaret Higgins, Ph.D. Candidate
c/o Lehman Benson, Ph.D.
Department of Management/Policy
McClelland Hall, Room 405
PO BOX 210108

RE: DECISION CONSTRAINTS: TIME, VIVIDNESS, SOURCE CREDIBILITY

Dear Ms. Higgins:

We have received documents concerning your above cited project. Regulations published by the U.S. Department of Health and Human Services [45 CFR Part 46.101(b) (2)] exempt this type of research from review by our Committee.

Thank you for informing us of your work. If you have any questions concerning the above, please contact this office.

Sincerely yours,

William F Denny, M.D.
Chairman
Human Subjects Committee

WFD:js
cc: Departmental/College Review Committee
Grades of candidates (A and B) used in the experiment. Preferences within the pairs differentiate between different decision rules. The four decision rules are the following: choosing the candidate best on the common dimension (Com), having the highest grade (Max) or sum of grades (Sum) or not having the lowest grade (Min). The attributes I, II and III were assigned each of the 6 permutations of the labels Swedish, Psychology and Natural Science, which gave the full set of choice pairs (6 × 20).

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APPENDIX TWO

EXAMPLES OF DECISION SCENARIOS FOR EXPERIMENTS 1 and 2
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APPENDIX THREE

PRE-TEST QUESTIONNAIRES
Undergraduate Pretest

I would appreciate your help. I am trying to get a sense of the strength of a few words and to enable me to do this, could you please respond to a few simple statements below? thank you.

Please circle your response on the scales below each statement.

i) If a student is described as 'Proficient' then I have a stronger and more vivid image of that student than if that same students were described using the grade 'B'.

<table>
<thead>
<tr>
<th>Agree</th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Disagree</th>
</tr>
</thead>
</table>

ii) If a student is described as 'Outstanding' then I have a stronger and more vivid image of that student than if that same students were described using the grade 'A'.

<table>
<thead>
<tr>
<th>Agree</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Disagree</th>
</tr>
</thead>
</table>

iii) If a student is described as 'Solid' then I have a stronger and more vivid image of that student than if that same students were described using the grade 'C'.

<table>
<thead>
<tr>
<th>Agree</th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Disagree</th>
</tr>
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</table>

iv) If a student is described as 'D' then I have a stronger and more vivid image of that student than if that same students were described using the grade 'Poor'.

<table>
<thead>
<tr>
<th>Agree</th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Disagree</th>
</tr>
</thead>
</table>

v) If a student is described as 'Unacceptable' then I have a stronger and more vivid image of that student than if that same students were described using the grade 'F'.

<table>
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<tr>
<th>Agree</th>
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<th>Disagree</th>
</tr>
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</table>
Faculty and graduate student pretest

Vivid Info Pretest

To: Professors Beach, Ordonez, Rapoport, Connolly, Gilliland and to colleagues Troth, Bhappu, Olsen & various others.
From: Margaret Higgins

Re: Experiment.

May I prevail upon you?

Before I run an experiment I would greatly appreciate your assistance with the following. It should not take more than about 5 minutes of your time.

I’m asking you to provide me with two things. First, a very brief idea of the image of the work of a senior high school graduate conjured up by each word listed below. Just one sentence or a few select synonyms would suffice. Second, a letter grade which, to you, would most nearly match each listed word and your description. Note that the emphasis is on the work of the student and not on the student’s personality.

So, for example, - a high school graduate’s work is listed as poor. What does ‘poor’ mean to you? What letter grade would you assign to ‘poor’ work?

Your answers will help me to refine the descriptors and make any amendments that may be necessary as a result of your answers.

Thanks very much for your time. The words are:

Proficient
Poor
Outstanding
Unacceptable
Solid

The letter grades are: A B C D E F

Margaret Higgins
APPENDIX FOUR

INSTRUCTIONS FOR ALL EXPERIMENTS
The only alteration, for experiment three, was the insertion of the word 'graduate' to describe the nature of the school being applied for.

Written Instructions

Decision Tasks

Thank you very much for participating in this research.

You will be making a series of decisions about which individuals are to be accepted into the (Graduate) Business Program at the University of Aarghberg. Only 50% of all applicants can be accepted.

On the screen at the front of the classroom you will see the 'transcripts' of pairs of applicants. I need you to indicate, on your answer sheet, which of the pairs you would choose. If it is applicant X, then please circle the letter X. If it is Y, then please circle Y. Please - really think about it.

On your answer sheet you will notice that there is a 1 - 10 scale alongside each decision pair. Please indicate on the scale your level of preference for the applicant you have chosen. If, for example, you REALLY prefer applicant X then circle the 10; if you have a low level of preference for the one you selected (you don't really mind which of the two gets accepted), then circle the 1. Use any number in between to indicate your level of preference.

We will practice one or two decisions before we start the real work.

Remember:

The applicants are for (graduate) Business School.
You can choose only one person from each pair.
You must state your preference level for the applicant you selected.
Overhead Instructions:

Thank you very much for participating in this research.

You will be making a series of decisions about which individuals are to be accepted into the University of Aarghergh's (Graduate) Business School. Only 50% of the applicants can enter. On the screen at the front of the classroom you will see the 'transcripts' of pairs of applicants for the graduate school.

I would like you to think carefully about the candidates you will see on the slides.

I would like to know which ones you would select.

Think carefully and follow the instructions below.

The first few will be for practice only. I will tell you when we really start the selection process.
1 On your 'Response Sheet', please circle the candidate you select. If you choose X then circle X. Ditto for if you choose Y.

2 At the side of each selection please indicate the level of your preference for the candidate you have chosen. Circling the number '1' will indicate that there is little to choose between the candidates; circling '10' will show that you strongly prefer the one you chose.

Before we begin the candidate selections, could you please let me know how you are feeling? Similarly, at the end of the session, could you complete the last page and let me know how you are feeling then?

On the cover page of the response sheet there is a scale which I would like you to complete. It’s very short.

Question:
How do you feel?

#1 = not at all relaxed; #10 = highly relaxed.

Relaxed? 1..2..3..4..5..6..7..8..9..10

#1 = not at all nervous; #10 = highly nervous.

Nervous? 1..2..3..4..5..6..7..8..9..10

#1 = not at all stressed; #10 = highly stressed.

Stressed? 1..2..3..4..5..6..7..8..9..10
APPENDIX FIVE

EXPERIMENT 1 - RESPONSE SHEETS
Information Processing: Response Sheets

*Question:* How do you feel?

#1 = not at all relaxed;  #10 = highly relaxed.

Relaxed? 1...2...3...4...5...6...7...8...9...10

#1 = not at all nervous;  #10 = highly nervous.

Nervous? 1...2...3...4...5...6...7...8...9...10

#1 = not at all stressed;  #10 = highly stressed.

Stressed? 1...2...3...4...5...6...7...8...9...10
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<tr>
<td>Practice choice</td>
<td>x y</td>
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<tr>
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<td>x y</td>
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</table>

1 2 3 4 5 6 7 8 9 10

| Slide 1 upper        | x y              |
| Slide 1 lower        | x y              |
| Slide 2 upper        | x y              |
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And now ----- How do you feel?

#1 = not at all relaxed;  #10 = highly relaxed.

Relaxed? 1...2....3....4....5....6....7....8....9....10

#1 = not at all nervous;  #10 = highly nervous.

Nervous? 1....2....3....4....5....6....7....8....9....10

#1 = not at all stressed;  #10 = highly stressed.

Stressed? 1....2....3....4....5....6....7....8....9....10

Using a scale of 1-10, with 1 being low and 10 being high, please answer the following:

1. How difficult were the decisions?

Low in difficulty  1....2....3....4....5....6....7....8....9....10  Very difficult
2. In general, how satisfied were you with your choices?

Not very satisfied 1....2....3....4....5....6....7....8....9....10 Highly satisfied

3. Was the time for each choice adequate?

Inadequate 1....2....3....4....5....6....7....8....9....10 Ample

4. Did you feel pressed for time?

Not at all 1....2....3....4....5....6....7....8....9....10 Extremely pressed

5. Was it more difficult than you thought to make the selections?

Yes No
APPENDIX SIX

EXPERIMENT 2 - RESPONSE COVER SHEETS SHOWING INSTRUCTIONS FOR THE TWO DIFFERING CONDITIONS

(See Appendix Five for the full response sheet format)
Instructions for the 'too short' time condition:

Information Processing: Response Sheets

Question:: How do you feel?

#1 = not at all relaxed; #10 = highly relaxed.

Relaxed? 1...2...3...4...5...6...7...8...9...10

#1 = not at all nervous; #10 = highly nervous.

Nervous? 1...2...3...4...5...6...7...8...9...10

#1 = not at all stressed; #10 = highly stressed.

Stressed? 1...2...3...4...5...6...7...8...9...10

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Please note that the time you will have for candidate selections is rather too short for full judgment - it generally takes about twice as long as you will have. However, time is short these days and I would like to see how shortness of time affects selections.
Instructions for the 'adequate time' condition:

**Information Processing : Response Sheets**

*Question:* How do you feel?

#1 = not at all relaxed; #10 = highly relaxed.

Relaxed? 1...2...3...4...5...6...7...8...9...10

#1 = not at all nervous; #10 = highly nervous.

Nervous? 1...2...3...4...5...6...7...8...9...10

#1 = not at all stressed; #10 = highly stressed.

Stressed? 1...2...3...4...5...6...7...8...9...10

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Please note that the time you will have for candidate selections appears to be too short for full judgment. However, after you have made a few selections you will find the time to be actually adequate.
APPENDIX SEVEN

EXAMPLES OF DECISION SCENARIOS FOR EXPERIMENT 3
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APPENDIX EIGHT

EXPERIMENT 3 - RESPONSE SHEET
Information Processing : Response Sheets

Question:: How do you feel?

#1 = not at all relaxed;  #10= highly relaxed.

Relaxed?  1....2....3....4....5....6....7....8....9....10

#1 = not at all nervous;  #10= highly nervous.

Nervous? 1....2....3....4....5....6....7....8....9....10

#1 = not at all stressed;  #10= highly stressed.

Stressed? 1....2....3....4....5....6....7....8....9....10

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<td>Choice 36</td>
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<td>47</td>
<td>x</td>
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<tr>
<td>48</td>
<td>x</td>
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</tbody>
</table>
And now ---- How do you feel?

#1 = not at all relaxed; #10 = highly relaxed.
Relaxed? 1....2....3....4....5....6....7....8....9....10

#1 = not at all nervous; #10 = highly nervous.
Nervous? 1....2....3....4....5....6....7....8....9....10

#1 = not at all stressed; #10 = highly stressed.
Stressed? 1....2....3....4....5....6....7....8....9....10

Using a scale of 1-10, with 1 being low and 10 being high, please answer the following:

1. How difficult were the decisions?
Low in difficulty 1....2....3....4....5....6....7....8....9....10 Very difficult

2. In general, how satisfied were you with your choices?
Not very satisfied 1....2....3....4....5....6....7....8....9....10 Highly satisfied
3. Was the time for each choice adequate?

Inadequate

1...2...3...4...5...6...7...8...9...10  Ample

4. Did you feel pressed for time?

Not at all

1...2...3...4...5...6...7...8...9...10  Extremely pressed

5. Was it more difficult than you thought to make the selections?

Yes

No
APPENDIX NINE

Disclaimer Form
Disclaimer Form

The decision to 'give' to public television: an investigation into the responses of contributors to the Door in the Face Technique and the Foot in the Door Technique

You are being invited to voluntarily participate in this research study into philanthropy in the area of public broadcasting. The purpose of the study is to see how effective the letters are that are currently used by public television stations to encourage contributions. You are eligible to participate because you are over the age of 18. There is nothing in the study that represents any language barrier to university students.

Your participation will involve about 10-15 minutes of your class time in which you will read a letter, make a decision, and answer a few questions. Your name is not required in this study. Please do not identify yourself.

Any questions you have will be answered and you may withdraw from the study at any time. There are no risks from your participation and no direct benefit from your participation is expected. There is no cost to you except for your time. You will receive class credit (½ of 1% of total points in the class) for your participation.

Only myself, as the principal investigator, and Professor Harwood will have access to the information that you provide. All data will be totally confidential as your name or identifying information is not required. Data will be locked in a cabinet in a secure place.

You can obtain further information from me, the principal investigator, (Margaret Higgins, MBA, Ph.D. candidate), at (520) 299-1866 x 13. If you have questions concerning your rights as a research subject, you may call the University of Arizona Human Subjects Protection Program office at (520) 626-6721.

By participating in the research study you are giving permission for the investigator to use your responses for research purposes.

Thank you.

Signed: Principal Investigator Margaret Higgins Advisor Prof. Harwood
APPENDIX TEN

Complete Questionnaire for Condition Mission Foot in The Door
PBS  PBS  PBS  PBS  PBS  PBS  PBS  PBS  PBS

Would you give $1.00 to support public television?

YES  NO
Loyal viewers of public television help maintain and enhance the unique brand of quality programming all our viewers have come to expect. Because of your personal financial support we are able to air programs like NOVA, Sesame Street, Mystery, Mobil Masterpiece Theater, and more. Quality programs like these, which offer the community in-depth science, education, and arts information and entertainment, without commercial breaks, cannot be found anywhere else. Please, may we count on you to send a generous gift to support the programs on public television? By putting a circle around the amount you would be willing to donate, you will be helping to support the kind of television that's truly worth watching!

Sincerely,

Your local public television station.

If this were a real letter you received, please circle the amount you would be willing to give to public television to keep great quality programs on the air.

$0  $5  $10  $25  $50  $150
Now, by answering the following short questions, you will help us to understand the effectiveness of the request.

1. Please state your age and sex
   Age: ________  Sex: F  M

2. Please indicate your ethnicity
   White / Caucasian
   Hispanic/Latino
   Asian
   African American
   Native American
   Other, Please specify: ______

3. Do your parents or other close family members give to charities? Please circle your answer:
   Yes  No  Don't Know

4. If you had just $10.00 spare at the end of the month, to do anything with, would you use it to support public television? Please circle your answer:
   Yes  No
5. How reasonable is it, do you think, for public television to ask for each of the dollar amounts listed in the 'letter' on page 2, from people of your age? Please circle your answer for each amount:

<table>
<thead>
<tr>
<th></th>
<th>Very Reasonable</th>
<th>Very Unreasonable</th>
</tr>
</thead>
<tbody>
<tr>
<td>$5</td>
<td>1 2 3 4 5</td>
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<td>$150</td>
<td>1 2 3 4 5</td>
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</tbody>
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6. How willing do you think you will be to give each of the amounts when you have more disposable income?

<table>
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<th>Very Unwilling</th>
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Thank You very much for your participation. Your answers will go a long way to helping this research.
APPENDIX ELEVEN

Mission Letter
Loyal viewers of public television help maintain and enhance the unique brand of quality programming all our viewers have come to expect. Because of your personal financial support we are able to air programs like NOVA, Sesame Street, Mystery, Mobil Masterpiece Theater, and more. Quality programs like these, which offer the community in-depth science, education, and arts information and entertainment, without commercial breaks, cannot be found anywhere else. Please, may we count on you to send a generous gift to support the programs on public television? By putting a circle around the amount you would be willing to donate, you will be helping to support the kind of television that's truly worth watching!

Sincerely,

Your local public television station.

If this were a real letter you received, please circle the amount you would be willing to give to public television to keep great quality programs on the air.

$0  $5  $10  $25  $50  $150
APPENDIX TWELVE

Transaction Letter
Loyal viewers of public television deserve 'thank you' gifts for helping public television maintain and enhance the quality programming all our viewers have come to expect. If you want a video or a CD (or both!) of NOVA, or of Sesame Street, Mystery, or Mobil Masterpiece Theater, send a generous gift to your local public television station, and in return receive the gift of your choosing. After sending your contribution to the station, call and ask them about the unique thank you gifts you can receive. You could soon own a CD of your favorite music, or a DVD of your favorite program! By putting a circle around the amount you would be willing to donate, you will be helping to support the kind of television that's truly worth watching!

Sincerely,

Your local television station.

If this were a real letter you received, please circle the amount you would be willing to give to receive a gift of your choice.
APPENDIX THIRTEEN

Exemption Letter
28 August 2003

Margaret Higgins, MBA
Advisor: Jake Harwood, Ph.D.
Department of Communication
Communication Building, Room 201
PO BOX 210025

RE: THE DECISION TO 'GIVE' TO PUBLIC TELEVISION: AN INVESTIGATION INTO THE RESPONSES OF CONTRIBUTORS TO THE DOOR IN THE FACE TECHNIQUE AND THE FOOT IN THE DOOR TECHNIQUE

Dear Ms. Higgins:

We received documents concerning your above cited project. Regulations published by the U.S. Department of Health and Human Services [45 CFR Part 46.101(b)(2)] exempt this type of research from review by our Institutional Review Board. Note: A copy of your disclaimer form, with IRB approval stamp affixed, is enclosed for duplication and use in enrolling subjects.

Exempt status is granted with the understanding that no further changes or additions will be made either to the procedures followed or to the consenting instrument used (copies of which we have on file) without the review and approval of the Human Subjects Committee and your College or Departmental Review Committee. Any research related physical or psychological harm to any subject must also be reported to each committee.

Thank you for informing us of your work. If you have any questions concerning the above, please contact this office.

Sincerely,

Rebecca Dahl, R.N., Ph.D.
Director
Human Subjects Protection Program
RD/js
c: Departmental/College Review Committee
APPENDIX FOURTEEN

Questions 5 and 6
5. How reasonable is it, do you think, for public television to ask for each of the dollar amounts listed in the 'letter' on page 2, from people of your age? Please circle your answer for each amount:

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Thank You very much for your participation. Your answers will go a long way to helping this research.
REFERENCES


Committee on Academic Policy, University of California, Santa Cruz Division (1970). *Report on grading at the University of California, Santa Cruz: The grading system at UCSC -- A critique*. University of California, Santa Cruz.


Miller, G. (1956). The magical number seven, plus or minus two: some limits on our capacity for processing information. Psychological Review, 63, 81-97.


