

National Library of Canada Bibliothèque nationali du Canada

Canadian Theses Service

Services des theses canadiennes

Offewa Carada

CANADIAN THESES

THÈSES CANADIENNES

NOTICE

The quality of this microfiche is heavily dependent upon the quality of the original thesis submitted for microfilming. Every effort has been made to ensure the highest quality of reproduction possible.

If pages are missing, contact the university which granted the degree.

Some pages may have indistinct print especially if the original pages were typed with a poor typewriter ribbon or if the university sent us an inferior photocopy.

Previously copyrighted materials (journal articles, published tests, etc.) are not filmed.

Reproduction in full or in part of this film is governed by the Canadian Copyright Act, R.S.C. 1970, c. C-30. Please read the authorization forms which accompany this thesis.

AVIS

La qualité de cette microfiche dépend grandement de la qualité de la thèse soumise au microfilmage. Nous avons tout fait pour assurer une qualité supérieure de reproduction.

S'il manque des pages, veuillez communiquer avec l'université qui a conféré le grade.

La qualité d'impression de certaines pages peut laisser à désirer, surtout si les pages originales ont été dactylographiées à l'aide d'un ruban usé ou si l'université nous a fait parvenir une photocopie de qualité inférieure.

Les documents qui font déjà l'objet d'un droit d'auteur (articles de revue, examens publiés, etc.) ne sont pas microfilmés.

La reproduction, même partielle, de ce microfilm est soumise à la Loi canadienne sur le droit d'auteur, SRC 1970, c. C-30. Veuillez prendre connaissance des formules d'autorisation qui accompagnent cette thèse.

THIS DISSERTATION
HAS BEEN MICROFILMED
EXACTLY AS RECEIVED

LA THÈSE A ÉTÉ MICROFILMÉE TELLE QUE NOUS L'AVONS REÇUE



€.



National Library of Canada

Bibliothèque nationale du Canada

Canadian Theses Division

Division des thèses canadiennes

Ottawa, Canada K1A 0N4

PERMISSION TO MICROFILM — AUTORISATION DE MICROFILMER

Please print or type — Écrire en lettres moulées ou dactylograph	hier
Full Name of Author Nom complet de l'auteur	
Lynn Carol Huzen	
Date of Birth - Date de naissance	Country of Birth - Lieu de naissance
August 12, 1152 Permanent Address — Résidence fixe	and the
86 Lester Crescent	•
St Albert, Alti	
Title of Thesis — Titre de la these	
Testing Interpolation to the	Francisco de la companya della companya della companya de la companya de la companya della compa
freterance to be ream to be trade	
·	
University — Universite	
University - Alberta	
Degree for which thesis was presented — Grade pour lequel cette	these full presentee
Master of scheme	
Year this degree conferred — Annee d obtention de ce grade	Name of Supervisor — North du directeur de thèse
1983	Francis Lair
Permission is hereby granted to the NATIONAL LIBRARY OF CANADA to microfilm this thesis and to lend or sell copies of the film	L'autonsation est par la presente accordée à la BIBLIOTHÉ QUE NATIONALE DU CANADA de microfilmer cette these et de prêter ou de vendre des exemplaires du film
The author reserves other publication rights and neither the thesis nor extensive extracts from it may be primed or otherwise reproduced without the author's written permission.	L'auteur se reserve les autres droits de publication. Ai la théei ni de longs extraits de celle-ci ne doivent être imprimés oi autrement reproduits sans l'autorisation écrité de l'auteur.
Dete	Signature
Katalan ares	Mayre Mayer

THE UNIVERSITY OF ALBERTA

Testing Interpersonal Hypotheses: A Re-examination of the Preference for Confirming Evidence

by .

Lynn C. Hazen

A THESIS

SUBMITTED TO THE PACULTY OF GRADUATE STUDIES AND RESEARCH
IN PARTIAL PULPILMENT OF THE REQUIREMENTS FOR THE DEGREE
OF Master of Science

DEPARTMENT OF Psychology

EDMONTON, ALBERTA

Pall 1983

THE UNIVERSITY OF ALBERTA

RELEASE FORM

NAME OF AUTHOR

Lynn C. Hazen

TITLE OF THESIS

Testing Interpersonal Hypotheses: A

Re-examination of the Preference for

Confirming Evidence

DEGREE FOR WHICH THESIS WAS PRESENTED Master of Science
YEAR THIS DEGREE GRANTED Pall 1983

Permission is hereby granted to THE UNIVERSITY OF ALBERTA LIBRARY to reproduce single copies of this thesis and to lend or sell such copies for private, scholarly or scientific research purposes only.

The author reserves other publication rights, and neither the thesis nor extensive extracts from it may be printed or otherwise reproduced without the author's written permission.

(SIGNED) COPPER . HOW A
PERMANENT ADDRESS:
36 Neder Manert
At AU+t
Alberta TAN aci

DATED . A etaber 14 . . . 1983

THE UNIVERSITY OF ALBERTA FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled Testing Interpersonal Hypotheses: A Re-examination of the Preference for Confirming Evidence submitted by Lynn C. Hazen in partial fulfilment of the requirements for the degree of Master of Science.

Supervisor

Date September 19, 1983

Abstract

Time and time again, investigations of strategies for testing interpersonal hypotheses have demonstrated the average individual's marked preference for confirming evidence, a tendency which has generally been explained as illogical. In this research, however, it was proposed that the aforementioned bias is indeed reasonable when testing involves categories (e.g., extrovert/introvert) and traits which are continuous by nature. To test this notion, conditions involving dichotomous categories. Te.g., male/female) with continuous descriptive traits and dichotomous categories (e.g., Group A/Group B) with dichotomous descriptive traits were introduced, and strategy preferences observed. As predicted, the tendency to favor a confirmatory strategy decreased as categories and traits became more dichotomous. A further investigation concerning the informational equivalence of confirmation versus disconfirmation revealed that confirmatory evidence was regarded as highly superior to disconfirmatory evidence in a continuous category-continuous traits situation, but that this advantage virtually disappeared in a dichotomous category-dichotomous traits condition. Little behavioral impact of the findings of these investigations is anticipated, for the social domain is one comprised almost entirely of continua.

Table of Contents

	Page
INTRODUCTION	. 1
METHOD	14
Study 1	14
Subjects	14
Procedure and Materials	14
Study 2	16
Subjects	16
Procedure and Materials	16
RESULTS	18
Study 1	18
Study 2	
DISCUSSION	
REFERENCES	
APPENDICES	
Appendix 1(a): Materials for B/I	
condition of Study 1	32,
Appendix 1(b): Materials for M/F condition of Study 1	35
Appendix 1(c): Materials for A/B	••.
condition of Study 1	38
Appendix 2(a): Materials for B/I conditions of Study 2	41
Appendix 2(b): Naterials for M/F conditions of Study 2	45
Appendix 2(c): Materials for A/B conditions of Study 2	49

List of Tables

Table		Page
1.	Mean Number of Confirming Questions Selected as a Function of Assignment to Hypothesis-Testing Condition	19
2.	Number of Subjects Preferring Each Hypothesis-Testing Strategy as a Function of Assignment to Hypothesis Testing Condition	20
3.	Mean Combined Confidence and Informativeness Scores as a Function of Type of Hypothesis Tested and Type of Question and Answer Strategy Used	. 22

INTRODUCTION

In the course of interpersonal relationships, individuals are frequently in the position of having to assess, make judgments about, or form opinions and impressions of other people. Whether assessing the character or disposition of a new acquaintance, or attempting to validate an existing belief or expectation about an old friend, the individual is often placed in the position of an informal hypothesis-tester.

Like their professional counterparts, amateur hypothesis-testers have several testing options open to them. In the most simple case, a strategy of direct and unobtrusive observation may prove to be the most effective and powerful method of evaluating an expectation. Without altering or intervening in the natural course of events, the tester need merely be present and attentive to details relevant to the hypothesis under consideration. While this technique may work well when readily discernible and objective physical qualities or characteristics are in question, occasions requiring such simple hypothesis-testing techniques are relatively rare in the social sphere.

of more frequent occurrence in interpersonal situations are hypotheses concerning such largely unobservable and subjective qualities as character traits, attributes, or dispositions. When spontaneous

behavioral confirmation is excessively costly in terms of time or consequences, or where such evidence seems unlikely to be naturally forthcoming or unambiguous, more obtrusive and active testing methods may be indicated. In these more complex and complicated instances, it is often appropriate and useful to actively structure subsequent social interactions to elicit tentative solutions or answers. Rather than wait patiently, and possibly fruitlessly, for an opportunity which may or may not provide the necessary behavioral evidence, the individual may choose to adopt a more systematic and deliberate approach.

In particular, the individual faced with assessing an expectation about another person may actively seek relevant information through manipulating or directing subsequent social interactions involving that target person. For many, conversational encounters are a logical and sufficient means of conducting the investigation. In conversation, the individual might choose to proceed in a straightforward manner by simply asking the target person a series of carefully constructed questions designed to best assess the validity of the hypothesis to be tested. Such questions could, conceivably address any combination of behavioral, dispositional, and/or attitudinal issues.

In choosing appropriate and informative questions, several interrogatory strategies are

available to the hypothesis-tester. For example, this individual may formulate and enact a confirmatory strategy, whereby a preferential search for evidence whose presence would tend to confirm the tester's expectation is conducted. Conversely, the tester might devote most or all of his/her energies toward enacting a disconfirmatory strategy, such that a preferential search for evidence whose presence disconfirms the hypothesis is focal. Or finally, the hypothesis evaluator may adopt an equal opportunity strategy, whereby he/she actively devotes approximately equal amounts of conversational time and content to probes designed to elicit both confirming and disconfirming evidence.

The question as to which, if any, of these strategies individuals typically and preferentially employ in an interpersonal perception situation is one which has been examined in some detail in recent years. The search for generally favored hypothesis-testing techniques has been directly or indirectly explored not only in the realm of social perception and inference (Snyder, 1981; Snyder & Campbell, 1980; Snyder & Cantor, 1979; Snyder & Swann, 1978), but also in many non-social domains and contexts (Greenwald, 1975; Nisbett & Ross, 1980; Tversky, 1977; Wason & Johnson-Laird, 1972). With remarkable consistency, the majority of investigations have overwhelmingly implicated the confirmatory

hypothesis-testing strategy as a favored means of gathering information.

In an extensive series of empirical investigations of social hypotheses (reported in Snyder, 1981), Snyder and his colleagues present considerable evidence of the average individual's preferential solicitation of confirmatory behavioral evidence in personality assessment situations. Moreover, the perseverance of such confirmatory interrogatory strategies in the face of powerful inducements to utilize other questioning techniques is also well documented in this work.

Snyder and Swann (1978) provided participants with a hypothesis about the personality of an unknown target individual and instructions to test this hypothesis by devising a series of questions to ask the target in a subsequent interview. More specifically, individuals were first presented with a card outlining one of two global and abstract personality profiles. One profile described and characterized the prototypic extrovert, while the other provided a detailed personality profile of the prototypic introvert.

Participants were then informed that it was their task to uncover, by choosing and asking 12 questions from a list of 26, concrete and specific facts about the target individual which would help them decide whether this individual's beliefs, attitudes, and behaviors matched

the general characteristics outlined in the global profile.

Regardless of the hypothesis to be tested, participants in this task systematically and overwhelmingly selected a majority of questions in accord with a confirmatory testing strategy. That is, when testing an extrovert hypothesis, individuals were particularly likely to choose questions typically asked of extroverts (e.g., "What kind of situations do you seek out if you want to meet new people?"), while an introvert hypothesis frequently prompted the selection of questions whose answers would tend to confirm the presence of introverted tendencies (e.g., "What factors make it hard for you to really open up to people?").

Snyder and Swann then proceeded to determine the pervasiveness of the participants' commitment to confirmatory hypothesis-testing strategies given different situations with potential theoretical significance. More specifically, in a series of subsequent studies (see Snyder, 1981), an attempt was made to identify those circumstances in which a hypothesis-tester might actually avoid the preferred confirmatory testing strategy. Such diverse things as the origin of the hypothesis, the certainty of the hypothesis, the introduction of incentives for accuracy, the testing of competing hypotheses, and an increased awareness and knowledge of disconfirming attributes were

with no appreciable diminution in the perseverance and prevalence of the aforementioned propensity to preferentially solicit behavioral evidence of a confirmatory nature. The results of this exhaustive investigation lead Snyder et al. to conclude not only that the existence of a procedure for inducing individuals to abandon a confirmatory technique for a disconfirmatory or equal opportunity strategy has failed to appear as yet, but that such a procedure may very well not exist.

while the data and conclusions reported in this series of studies are not in dispute per se, it is interesting to note the several possible theoretical explanations, and their limitations, advanced for the marked preference of the hypothesis-tester. In attempting to answer the question as to why individuals substantially prefer a confirmatory hypothesis-testing strategy, Snyder (1981) presents a theoretical analysis which may have overlooked several essential points.

A central thesis of Snyder's analysis is, quite simply, that basic human thought and memorial processes cause, encourage, and virtually ensure the unhesitating adoption of confirmatory strategies by hypothesis-testers. Further, the fact that individuals in this social situation almost uniformly prefer such a strategy is said to reflect beliefs about what types of

evidence are particularly relevant and informative in the type of hypothesis-testing about others under scrutiny. Considerable evidence from the research literature on logical reasoning in non-social, task-oriented situations is cited as support for these assertions (Snyder, 1981: p. 295-296; p. 298-299). To this point, there is no argument with either the reported ubiquitousness of the phenomenon or the fact that participants would seem to believe a confirmatory strategy to be the best one available for assessing the personality hypothesis at hand.

A question concerning the further interpretation of the evidence and its analysis arises at this juncture, however. In the course of his speculations, Snyder suggests several tentative theoretical explanations, ranging from a simple, universal preference for positive instances; to a cognitive availability bias, such that testers selectively and predominantly recall target behaviors which confirm, rather than violate, the hypothesis in question; to an examination of the behavioral confirmation consequences associated with the enactment of a confirmatory testing strategy, whereby the target's ability and willingness to provide specific instances of hypothesis-confirming actions is highly rewarding to the tester (for a review and elaboration, see Snyder, 1981: p. 295-302; or Snyder & Swann, 1978: p. 1210-1212).

while these speculations cannot and should not be dismissed outright, they can and should be re-examined. All have one important feature in common: the hypothesis-tester's search for verification and consequent neglect of falsification suggest to Snyder and his colleagues a tendency toward slightly illogical preferences and indefensible behaviors on the part of the hypothesis-tester. According to this analysis, disconfirmatory and equal opportunity strategies are often logically appropriate and of value and relevance equal to confirmatory strategies, yet are unreasonably, stubbornly, pervasively, and mysteriously avoided.

In this paper, it is contended that several important theoretical speculations have been overlooked and omitted in this assessment of the situation, and it is hoped that the proposed research will rectify this omission and further clarify the situation. More specifically, it is suggested that a serious weakness in the work of Snyder and his colleagues lies in their failure to consider the significance of the distinction between those characteristics or descriptions that are continuous, and those that are dichotomous. To date, Snyder's research has dealt only with continuous variables and hypotheses while tacitly implying that research subjects should, can, and will perceive and treat them as though they are dichotomous.

As a personality variable, Snyder's

extrovert-introvert dimension can be visualized as forming a continuum with "extrovert" at one extreme of the scale and "introvert" at the other. Intermediate points on the continuum represent intermediate degrees of the characteristic, such that a point not lying at either extreme represents some lesser degree of both extroversion and introversion. Similarly, the various traits and attributes used by Snyder et al. to characterize the extrovert and introvert (e.g., outgoing, energetic, timid, reserved) are also continuous.

The most important implication, yet one totally overlooked by Snyder, is the fact that with any continuous variable a point that does not lie at one extreme cannot by inference be said to fall at the other. That is, to say that a target individual is not an introvert (cannot be characterized at the extreme "introvert" end of the continuum) does not imply that he/she is an extrovert (can be characterized at the extreme "extreme "extrovert" end of the scale), nor does this fact provide much or any information as to precisely where the target does fall on the scale. Indeed, even approximate knowledge of how far an individual is from the "introvert" end of the scale does not necessarily provide an equal amount of information as to how far that person is from the "extrovert" extreme.

The implications of the use of a continuous



dimension in this context are extensive. As mentioned previously, Snyder has argued implicitly, and at times explicitly, that the hypothesis-tester is demonstrating an illogical tendency in his/her preference for a confirmatory testing strategy. It has been suggested that a disconfirmatory or equal opportunity strategy could and would provide logically appropriate and adequate information if only the tester could overcome his/her mysterious malady. Considering the wording of the hypothesis to be tested, it is not unlikely that participants' interpretation of the instruction to "determine the extent to which the target's behavior and life experiences match those of a prototypic extrovert (introvert) suggests to them that their task is to locate the target's position relative to the extreme extrovert (introvert) end of the continuum, a task best handled by adopting a confirmatory testing strategy.

In this research, a position in direct opposition to Snyder's view is proposed. While recognizing the pervasiveness of the phenomenon, it is suggested that the hypothesis-tester is indeed behaving logically and reasonably given the continuous nature of the dimension with which he/she is working, and that in fact, the use of a disconfirmatory or equal opportunity strategy would not provide the information necessary to formulate an intelligent and confident answer to the question posed, nor would it provide as much information

as a confirmatory hypothesis-testing strategy. A dichotomous dimension, on the other hand, should be more amenable to testing using any of the earlier proposed testing strategies. By virtue of its definition, a dichotomous category with endpoints A and B can be said to exist such that "not A" means "B", and "not B" means "A". Consequently, the information necessary to test a hypothesis should be approximately equally informative regardless of whether it is expressed in a confirmatory or disconfirmatory context.

In order to test the validity of this argument, the first part of the study was designed to replicate Snyder and his colleagues, with several minor methodological changes, and included several new conditions in addition to the extrovert-introvert continuous dimension with its various defining continuous traits. The new conditions included a dichotomous category (male-female) with continuous defining variables (certain masculine and feminine traits); and a dichotomous category (identification of an individual as a member of Group A or Group B) with dichotomous defining variables (sex, religion,

nationality, etc.).4

It is important to note that this research did not actually manipulate the continuous vs. dichotomous format of either the category descriptions or the attribute questions. Rather, the format of materials across treatments was held as similar as possible, and the terms "continuum" and "dichotomy" refer to categories and attributes which are inherently either continuous or dichotomous.

It was hypothesized that the new conditions were more logically conducive to other than a confirmatory strategy, and so should result in progressively more willingness on the part of participants to employ other than a confirmatory strategy as variables become more dichotomous by nature. More specifically, it was predicted that the largest number of individuals and the greatest tendency to use a confirmatory strategy would be found in the extrovert-introvert condition; that fewer individuals and a lesser tendency to use a confirmatory strategy would be found among participants in the male-female condition; and that the fewest number of individuals and the smallest tendency to use a confirmatory strategy would be found among those in the Group A-Group B condition.

In the second part of the study, an initial investigation of the theoretical position outlined earlier was undertaken. That is, an attempt was made to determine how informative confirmatory and disconfirmatory evidence is, given a continuum/continuum situation (extrovert-introvert/selected personality traits), a dichotomy/continuum situation (male-female/selected personality traits), and a dichotomy/dichotomy situation (Group A-Group B/selected dichotomous characteristics). It was hypothesized that while confirming information should prove to be equally

informative and useful regardless of the continuous or dichotomous nature of the situation, disconfirming information would prove to be least informative in the extrovert-introvert case, slightly more informative in the male-female case, and of maximum informativeness in the Group A-Group B case.

In addition, two levels of support (strong vs. moderate) were included for the sake of completeness. The two levels of confirming and disconfirming evidence were selected such that the strongly supportive conditions provided almost unequivocal confirmation or disconfirmation, while the moderately supportive conditions furnished some, but slightly more ambiguous, confirmation or disconfirmation. The strong support conditions, it was hoped, would provide decisive positive evidence in support of the hypothesis, while the moderate support conditions were deemed more representative of typical and frequently encountered real world situations. Apart from the general expectation that strong support conditions would be perceived as more informative overall than moderate support conditions, no specific a priori hypotheses concerning this variable were advanced.

METHOD

STUDY 1:

Subjects

Participants were 60 undergraduate male and female students attending introductory courses in a variety of disciplines at the University of Alberta.

Participating individuals complied voluntarily and on a non-credit basis.

Procedure and Materials

Participants were tested during regular class sessions in groups ranging from 11-25 students. Subjects were randomly assigned to conditions, the sexes were equally represented in each of the experimental groups, and every individual participated in only one condition. Subjects were informed that they were participating in a study of how people come to understand and learn about others through testing hypotheses by means of direct questioning. Each participant was presented with a hypothesis to test and two related descriptions or profiles, such that some individuals in each group received descriptions of the prototypic extrovert and introvert with instructions to test either an extrovert hypothesis or an introvert hypothesis; others in the group received descriptions of the typical male and female with instructions to test either a male hypothesis or female hypothesis; and the remainder of

the group was given descriptions of members of fictitious Group A and Group B with instructions to test either a Group A member hypothesis or a Group B member hypothesis. Accompanying each set of descriptions was a list of 20 questions (of which 10 were judged to be confirming or typical of each description by a panel of 21 undergraduate raters during a pre-testing session), and participants were then asked to choose the 8 questions they believed would best test the hypothesis they had been given to assess. To avoid any unnecessary source of confounding, the structure of materials across treatments was kept as similar as possible, so that regardless of the continuous or dichotomous nature of the category and descriptors under consideration, questions were phrased to permit a more complex answer, but to require only a "yes" or "no" response. Instructions, hypotheses, and questions used in each condition appear as Appendix 1.

STUDY 2:

Subjects

Participants were an additional 100 undergraduates attending courses at the University of Alberta. As in Study 1, subjects were enrolled in a variety of introductory courses and participated on a voluntary, non-credit basis.

Procedure and Materials

Testing during class time in groups of between 20-44 students per session was conducted. As in Study 1, random assignment to conditions, an equal sex ratio in experimental groups, and the assignment of individuals to only one experimental condition was ensured. Subjects were told that they were participating in a study of how useful and informative question and answer techniques are in making judgments and testing hypotheses about others. Each participant was provided with a hypothesis to assess and 'two related descriptions or profiles. In addition, a set of questions and answers from a fictitious unknown target person was included, such that the questions employed either a confirmatory testing strategy or a disconfirmatory testing strategy, and the responses provided either strong support or moderate support for the hypothesis under consideration. While the questions were selected from those presented in Study 1, the answers were not simple "yes" or "no" responses. Rather, answers appeared on a 10-point scale,

such that strongly supportive responses were indicated at the extremes of the scale, while moderately supportive answers appeared at an intermediate position on the scale. Subjects were then asked to state: 1) how confident they were (on a 10-point scale) that the target person answering these questions actually fit the hypothesis they were testing; and 2) how informative and useful (on a 10-point scale) they found the question and answer material to be in assessing the hypothesis. The only exception to this procedure occurred in the Group A-Group B condition, where the dichotomous descriptors do not allow for the development of a moderately supportive confirming or disconfirming description.

Instructions, hypotheses, and questions and answers used in each condition are included as Appendix 2.

RESULTS

STUDY 1:

As expected, a comparison of the mean number of confirming and disconfirming questions selected in the continuous-category/continuous-descriptors experimental situation found no significant difference between participants' responses regardless of their assignment to the extrovert or introvert hypothesis-testing condition. Similarly, a comparison of means in the dichotomous-category/continuous-descriptors treatments (the male and female hypothesis-testing conditions) and in the dichotomous-category/ dichotomous-descriptors situation (the Group A and Group B hypothesis-testing conditions) proved statistically nonsignificant as well. As a consequence, the absence of treatment discrepancies permitted the pooling of data from the six original categories to a final three conditions for further analysis, with the combined results appearing as Table 1.

As predicted, an overall preference for the selection of confirming questions ($\underline{M}=5.2$) over disconfirming questions ($\underline{M}=2.8$) is apparent. This tendency is particularly pronounced in the extrovertintrovert (\underline{E}/I) condition ($\underline{t}(19)=4.31$, $\underline{p}<0.01$), slightly less marked in the male-female (\underline{M}/F) condition ($\underline{t}(19)=3.01$, $\underline{p}<0.01$), and considerably reduced in the

Group A-Group B (A/B) condition ($\underline{t}(19)=0.76$, ns).

•

/ TABLE 1

MEAN NUMBER OF CONFIRMING QUESTIONS SELECTED AS A FUNCTION OF ASSIGNMENT TO HYPOTHESIS-TESTING CONDITION ► (max.=8.0; n=20)

}		Mean	
Type of Hypothesis	E/I	5.9	
	M/F	5.5	
	A/B	4.2	

A comparison of the tendency to select confirming questions (or alternately, disconfirming questions) across the three hypothesis-testing treatments reveals a statistically significant difference ($\underline{F}(2,57)=7.54$, $\underline{p}<0.01$). Applying Duncan's multiple range test to these results reveals a nonsignificant difference between the M/F ($\underline{M}=5.5$) and \underline{E}/I ($\underline{M}=5.9$) values, but does point to a sizable difference between both A/B ($\underline{M}=4.2$) and \underline{E}/I ($\underline{M}=5.9$) values ($\underline{p}<0.01$), and A/B ($\underline{M}=4.2$) and M/F ($\underline{M}=5.5$) values ($\underline{p}<0.01$).

If a confirmatory (C) hypothesis-testing strategy is arbitrarily defined as the selection of 6,

7, or 8 confirming questions, an equal opportunity (E0) testing strategy as the choosing of 3, 4, or 5 confirming (and disconfirming) questions, and a disconfirmatory (D) testing strategy as one where 6, 7, or 8 disconfirming questions were selected, subjects can be categorized by preferred strategy and the data examined in yet another way. The results of this classification system appear in Table 2.

TABLE 2

NUMBER OF SUBJECTS PREFERRING EACH HYPOTHESIS-TESTING STRATEGY AS A FUNCTION OF ASSIGNMENT TO HYPOTHESIS TESTING CONDITION (max.=20)

		Preferred Strategy		
		C	ΕO	D
Type of Hypothesis	E/I.	, s 16	. 4	0
	M/F	11	9	0
	A/B	7	11	2,

An analysis of these data yields a statistically significant departure from expectation $(X^1(4)=10.85, p<0.05)$, suggesting that strategy preference does indeed vary as a function of type of hypothesis tested.

STUDY 2:

Again, as expected, pooling of data across hypothesis-testing conditions was possible, resulting in three categories (E/I, M/F, and A/B), and reducing from 20 to 10 the number of experimental conditions. A comparison of mean scores for confidence and informativeness of the questions and answers revealed nonsignificant differences in these measures within each of the three hypothesis conditions regardless of type of strategy (confirmatory or disconfirmatory) and degree of support (strong or moderate).

Further examination revealed a substantial correlation (<u>r</u>=0.74) between measures of respondents' reported confidence and their ratings of the informativeness of the question and answer information provided, permitting a further pooling of data. The mean values, collapsed across hypothesis type (E and I, M and F, A and B) and question and answer measures (confidence and informativeness), are reported in Table 3.

Of the many comparisons possible, some of the more interesting, both statistically significant and nonsignificant, are included in this analysis. As predicted, from the 2x2x2 analysis of variance involving the E/I and M/F treatments (excluding the incomplete A/B experimental condition), a significant main effect of strategy (confirmatory or disconfirmatory) was found (F(1,72)=10.49, p<0.01), while the main effect of

support (moderate or strong) was similarly significant $(\underline{F}(1,72)=7.13,\ \underline{p}(0.01))$. Although in the general direction predicted, the interaction effect of strategy x hypothesis proved to be nonsignificant in terms of both expressed confidence and informativeness $(\underline{F}(1,72)=2.99,\ ns)$. The only statistically significant interaction effect was that involving the strategy x support comparison $(F(1,72)=8.58,\ p<0.01)$.

TABLE 3

MEAN COMBINED CONFIDENCE AND INFORMATIVENESS SCORES AS A FUNCTION OF TYPE OF HYPOTHESIS TESTED AND TYPE OF QUESTION AND ANSWER STRATEGY USED (max.=10; n=10)

		Strategy			
		Confirmatory		Disconfirmatory	
		Moderate Support	Strong Support	Moderate Support	Strong Support
Type of Hyp.	E/I	7.1	8.2	4.6	6.8
	M/F	6.9	8.5	5.1	6.7
	A/B		8.8		8.9

A 3x2 analysis of variance of the strong support conditions only revealed a statistically significant main effect of strategy ($\underline{F}(1,54)=12.84$, $\underline{p}<0.01$) and hypothesis ($\underline{F}(2,54)=4.91$, $\underline{p}<0.05$), and a significant interaction effect of strategy x hypothesis

 $(\underline{F}(2,54)=8.39,\ p<0.01)$. A Duncan's multiple range test for the strong support confirmatory strategy conditions discovered no difference among mean values, whereas the same test for the strong support disconfirmatory strategy situations revealed a statistical equivalence between the E/I ($\underline{M}=6.8$) and M/F ($\underline{M}=6.7$) values, but a significant difference between the E/I ($\underline{M}=6.8$) and A/B ($\underline{M}=8.9$) scores ($\underline{p}<0.01$), and the M/F ($\underline{M}=6.7$) and A/B ($\underline{M}=8.9$) results ($\underline{p}<0.01$).

Ì

Finally, a comparison of mean scores for the A/B hypothesis-testing conditions of strong support confirmatory strategy ($\underline{M}=8.8$) and strong support disconfirmatory strategy ($\underline{M}=8.9$) revealed a nonsignificant difference in confidence and informativeness levels ($\underline{t}(18)=0.08$, ns).

DISCUSSION

On the basis of an extensive series of empirical investigations of social and interpersonal hypotheses, Snyder (1981) and his colleagues present considerable evidence in support of the average individual's bias toward the use of confirmatory hypothesis-testing strategies in personality assessment situations. While the evidence is not in question, several theoretical issues are clouded. It was the purpose of this research to examine these issues, propose an alternative explanation for the phenomenon in question, and reexamine the evidence in light of this new perspective.

More specifically, it was proposed that
Snyder, in his examination of preferred testing
strategies in interpersonal situations, overlooked one
possible explanation worthy of further investigation.
His data are based solely on a consideration of
variables that are continuous in nature with the tacit
assumption that subjects should and would regard these
variables as though they were dichotomous. In making
this assumption, Snyder further claimed that
disconfirmatory testing strategies are often equal in
informational content to confirmatory strategies, but
for some illogical reason are neglected and
underutilized by the amateur hypothesis-tester.

propose and provide support for an alternative explanation of the testing tendency observed. According to the rationale for this study, as outlined earlier, hypotheses about characteristics that are continuous by nature are more logically, and best tested, by means of a confirmatory strategy, while hypotheses concerning characteristics that are dichotomous by nature can be tested equally informatively by other testing strategies. It was suggested that as categories and descriptive traits became more dichotomous by nature, participants would recognize the increasing equivalence of confirming and disconfirming evidence and would correspondingly display less reluctance to adopt a non-traditional testing strategy.

In accordance with the general theoretical argument advanced in this paper, the research described provides considerable overall support. The portion of this study attempting to replicate previous research (continuous-category/continuous-descriptors condition) finds, like Snyder et al., a marked preference among subjects for the solicitation of confirming evidence. Not only do individuals in this situation actively ask more questions of a confirming nature, but a substantial number of them prefer a confirmatory strategy overall. To this point there is no disagreement with the observations or explanations presented by Snyder:

individuals seem to believe that confirming evidence in this instance is useful in testing hypotheses.

Somewhat contrary to expectation, subjects in the dichotomous-category/continuous-descriptors condition did not display a significant increase in willingness to solicit disconfirming information. These results, while not supportive, are not particularly devastating to the speculations advanced considering the nature of the task. While it is true that the male-female category is a dichotomous one, such that "not male" implies "female" and vice versa, the descriptors are wholly continuous and hence not as unambiguous as the category itself. More interesting, however, and in agreement with the research hypotheses, a greater number of these individuals were significantly more willing to adopt a non-confirmatory testing strategy than in the standard extrovert-introvert testing situation...

But of the most theoretical significance and interest to this study is the behavior of those subjects in the dichotomous-category/dichotomous-descriptors condition. Here, in accordance with expectation, individuals displayed considerable willingness to ask disconfirming questions and to use an equal opportunity or disconfirmatory hypothesis-testing technique. The fact that the results in the experimental conditions involving characteristics that are dichotomous by nature

were not exact mirror images of those found in the testing situations including characteristics that are continuous by nature does not substantially weaken the argument.

It must be remembered that the real world is structured almost entirely in terms of variables with continuous values, particularly so in the realm of social and interpersonal events. Simple dichotomies such as those presented in this research occur rarely in nature. The fact that a significant proportion of subjects even recognized such an unusual event, much less, responded to it in accord with prediction, is reasonably convincing evidence that people do act in a manner that is logical and appropriate to the situation at hand. Indeed, it may even have been slightly maladaptive for subjects to respond any more markedly or enthusiastically than they did. Whether we are assessing a strange situation, reacting to or forming an impression of a new acquaintance, or responding to an urgent condition which requires our immediate attention, we have learned that it is most adaptive and expedient to respond in the most proven, productive fashion in our behavioral repertoire.

It is in the findings of Study 2 that the basic thesis of this research is best supported. While conventional logic would predict that strongly supportive evidence should be more confidence-inspiring

than that which has only moderate support, as was indeed the case, it was found that a confirmatory strategy was perceived by subjects as more informative and useful than a disconfirmatory strategy. If, as Snyder and his colleagues propose, confirming evidence is informationally equivalent to disconfirming evidence, we might expect to find a recognition of this equivalence in the verbal responses of participants, even if this recognition is not behaviorally apparent in preference patterns. Instead, subjects in the E/I and M/F experimental conditions report that disconfirming evidence, regardless of the degree of support afforded a hypothesis, is substantially inferior to "equivalent" confirming evidence. That these results do not simply reflect a general confirmatory bias is effectively ruled out by the finding that subjects in the A/B condition rated confirming and disconfirming evidence as equally informative.

The significant interaction effect found between type of strategy and degree of support in the 2x2x2 analysis of variance is also theoretically interesting. Not only did subjects in the E/I and M/F conditions perceive an informational inequality between confirming and disconfirming information, but they also considered the difference between moderate and strong support to be greater in the disconfirming than in the confirming case. That is, while strongly supportive

confirming evidence was viewed as the most informative, moderately supportive confirming and strongly supportive disconfirming evidence as somewhat less informative and about equally useful, moderately disconfirming evidence was regarded as greatly inferior.

From the results of the 3x2 analysis of variance it was found, not surprisingly, that strongly supportive confirming evidence was about equally and extremely useful to subjects regardless of hypothesis condition. In the case of strongly supportive disconfirming evidence, however, it was only with the A/B hypothesis-testing situation that subjects reported a similar degree of confidence. In the E/I and M/F conditions, while the general trend was as predicted, subjects felt significantly less confident about their decisions.

The final comparison, involving the A/B means for strongly supportive confirming evidence and strongly supportive disconfirming evidence, offers substantial support for the contentions of this research. Here, in complete accord with expectations in dichotomous-characteristics situations, subjects recognized and reported an informational equivalence they flatly denied in continuous-characteristics situations.

And so, on the basis of the data collected for this study, it seems fair to conclude that perhaps an

alternate explanation does exist for the seemingly illogical preference of people for confirming evidence so well documented in previous research. While it was never the intention of this study to refute in any major way the theorizing of Snyder and others, the positive findings reported here suggest that a modified explanation of the phenomenon in question may be in order.

In terms of the significance of the findings in the area of interpersonal hypothesis-testing, little behavioral impact is anticipated. Clearly, most if not all variables in the social domain are continuous, as are most if not all descriptive personality traits or attributes. The intention of this research is not to provide a template for inducing or encouraging change in the way people characteristically assess each other, but rather to shed some light on a modern day enigma. In particular, it is hoped that the reported research results and their proposed explanation will lend support to the notion that the interpersonal hypothesis-tester is indeed behaving logically and reasonably in his/her decided preference for confirming evidence.

REFERENCES

- GREENWALD, A.G. Consequences of prejudice against the null hypothesis. <u>Psychological Bulletin</u>, 1975, 82, 1-20.
- NISBETT, R., & ROSS, L. <u>Human inference: Strategies and shortcomings of social judgment</u>. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1980.
- SNYDER, M. Seek, and ye shall find: Testing hypotheses about other people. In E.T. Higgins, C.P. Herman, & M.P. Zanna (Eds.), <u>Social cognition: The Ontario symposium</u>. Hillsdale, N.J.: Lawrence Erlbaum Associates, 1981.
- SNYDER, M., & CAMPBELL, B.H. Testing hypotheses about other people: The role of the hypothesis.

 Personality and Social Psychology Bulletin, 1980, 6, 421-426.
- SNYDER, M., & CANTOR, N. Testing hypotheses about other people: The use of historical knowledge. <u>Journal of Experimental Social Psychology</u>, 1979, 15, 330-342.
- SNYDER, M., & SWANN, W.B., Jr. Hypothesis-testing processes in social interaction. <u>Journal of Personality and Social Psychology</u>, 1978, 36, 1202-1212.
 - TVERSKY, A. Features of similarity. Psychological Review, 1977, 84, 327-352.
 - WASON, P.C., & JOHNSON-LAIRD, P.N. <u>Psychology of reasoning: Structure and content</u>. London: D.T. Batsford, 1972.

APPENDICES

Appendix 1(a): Materials for E/I condition of Study 1

This questionnaire is part of an investigation of how people come to know and understand each other. While this process can and does occur in many different ways, one way to learn about other people is to ask them questions about their likes and dislikes, abilities, habits, activities, and experiences.

The following paragraphs are brief descriptions of the main characteristics, mannerisms, and traits of the typical extrovert and the typical introvert. Please read each profile carefully and then select from the list of 20 questions which follows, a set of 8 questions which you believe would best test the assumption that an unknown person you have never met is an EXTROVERT/INTROVERT.

Extroverts are typically outgoing, sociable, energetic, confident, talkative, and enthusiastic. Generally confident and relaxed in social situations, this type of person rarely has trouble making conversation with others. This type of person makes friends quickly and easily and is usually able to make a favorable impression on others. This type of person is usually seen by others as characteristically warm and friendly.

Introverts are typically shy, timid, reserved, quiet, distant, and retiring. Usually this type of person would prefer to be alone reading a book or have a long serious discussion with a close friend rather than go to a loud party or other large social gathering. Often this type of person seems awkward and ill at ease in social situations, and consequently is not adept in making good first impressions. This type of person is usually seen by others as characteristically cool and aloof.

Questions

- Do others generally consider you the life of the party? (E)
- Would you say you make friends rapidly and easily?
 (E)
- 3. Do you have many casual friends and acquaintances?
 (E)
- 4. Are you typically self-assured and relaxed in social situations? (E)
- 5. Do you believe you usually make a positive first impression on others? (E)
- 6. Do you often behave impulsively and on the spur of the moment? (E)
- 7. Do you find it easy and enjoyable to engage in conversation with someone you just met? (E)
- 8. Would you describe yourself as active, outgoing, and energetic? (E)
- 9. Do you generally prefer to engage in social activities and hobbies involving many other people?
 (E)
- 10. Do you think others would describe you as warm, sociable, and interested in others? (E)
- 11. Do parties and large social gatherings generally make you feel awkward or uncomfortable? (I)
- 12. Do you usually find it hard to really open up to people? (I)
- 13. Would you prefer to have a few close friends rather than many casual ones? (I)
- 14. Do you think casual acquaintances would describe you as distant and reserved? (I')
- 15. Are you often bashful or timid around others? (I)
- 16. Would you prefer a quiet evening at home to a boisterous night on the town? (I)
- 17. Do you find it difficult to create a good impression when you meet others for the first time? (I)

- 18. Would you describe yourself as generally quiet, passive, and thoughtful? (I)
- 19. Do you generally prefer such solitary activities as thinking and reading? (I)
- 20. Are you generally more interested in your own thoughts and feelings than those of others? (I)

The 8 questions I would ask are:

Questions # ---, ---, ---, ---, ---, ---, ---.

Thank you very much for your time and cooperation.

This questionnaire is part of an investigation of how people come to know and understand each other. While this process can and does occur in many different ways, one way to learn about other people is to ask them questions about their likes and dislikes, abilities, habits, activities, and experiences.

The following paragraphs are brief descriptions of the main characteristics, mannerisms, and traits of the typical adult male and the typical adult female. Please read each profile carefully and then select from the list of 20 questions which follows, a set of 8 questions which you believe would best test the assumption that an unknown person you have never met is a MALE/FEMALE.

The adult male in our society is typically logical, assertive, practical, and self-reliant. Generally career oriented and ambitious, many men display considerable leadership ability. Traits such as perseverance, competitiveness, self-confidence, the willingness to take a stand and defend one's own beliefs, and the ability to make decisions easily frequently characterize the adult male. Men are often seen by others as dominant, forceful, and active representatives of the family in the outside world.

The adult female in our society is typically creative, kind, understanding, and sensitive to the needs and feelings of others. Usually family oriented and a major force in ensuring its stability, women generally perform well in such areas as providing nurturance and affection to family members, soothing hurt feelings, maintaining family harmony, and supplying the warmth, kindness, and gentleness all human beings require. Women are frequently seen by others as empathic and sensitive individuals who are essential to the emotional well being of their families.

Jues lons

- 1. Do vou generally prefer logical (e.g. mathematical, mechanical, scientific) hobbies and activities? (M)
- 2. Would others describe you as individualistic, independent, and self-sufficient? (M)
- 3. Do you usually withstand pressure well and thrive in competitive situations where quick thinking is essential? (M)
- 4. Are you typically willing to take risks and face the consequences of your actions? (M)
- 5. Would you describe yourself as outgoing, energetic, and athletic? (M)
- 6. Are you primarily responsible for the economic well-being of your family? (M)
- 7. Do you enjoy observing or participating in competitive sports activities? (M)
- 8. Is your orientation largely practical, with a preference for the factual and the real? (M)
- 4. In group settings, are you often formally or informally the appointed leader? (M)
- 10. Would others perceive you as the kind of level-headed person who would naturally take charge in an emergency? (M)
- 11. Do you generally defer to authority figures and powerful others? (F)
- 12. Would your friends describe you as more creative and inventive than rational and logical? (F)
- 13. Are you good at expressing yourself verbally and communicating with others? (F)
- 14. Are you generally comfortable around and protective toward children and small animals? (F)
- 15. Would others describe you as warm, compassionate, and sometimes emotional? (F)
- 16. Do others often turn to you in times of conflict to soothe hurt feelings and make the peace? (F)

- 17. Would you describe yourself as primarily family oriented? (F)
- 18. Are you primarily or solely responsible for household chores and tasks? (F)
- 19. Do you generally prefer activities involving sharing and cooperation to those which are individualistic and competitive? (F)
- 20. Do you usually avoid the risky and unknown, preferring the safety and security of the familiar instead? (F)

The 8 questions I would ask are:

Questions # ---, ---, ---, ---, ---, ---,

Appendix 1(c): Materials for A/B condition of Study 1

This questionnaire is part of an investigation of how people come to know and understand each other. While this process can and does occur in many different ways, one way to learn about other people is to ask them questions about their likes and dislikes, abilities, habits, activities, and experiences.

The following paragraphs are brief descriptions of the main characteristics, mannerisms, and traits of the typical Group A member and the typical Group B member. Please read each profile carefully and then select from the list of 20 questions which follows, a set of 8 questions which you believe would best test the assumption that an unknown person you have never met is a member of GROUP A/GROUP B.

Members of Group A are typically females 35 years of age or older. They are generally married, have children, and come from families where they were raised with 3 or fewer siblings. Typically, these individuals provide financial support for parents, grandparents, and/or other older relatives and usually live in an extended family situation. From non-Christian backgrounds, Group A members generally practice their religion and observe its customs and traditions. While not generally politically active nor a member or affiliate of any political party, these individuals are usually members of an ethnic club or organization. The offspring of non-European immigrants, Group A members are usually not Caucasians, were not born in Canada, nor were they raised in English speaking homes. Living primarily in rural locations, these people usually own or are purchasing their residences, have a high school education or less, work in blue collar type occupations, and earn an average annual income of less than \$20,000. Members of Group B are typically males under 35 years of age. They are generally unmarried, do not have children, and come from families where they were raised with 4 or more siblings. Typically, these individuals do not provide support for aged relatives, nor do they live in an extended family. From Christian backgrounds, Group B members generally do not practice their religion nor do they observe its customs and regulations. While not generally involved in any ethnic club or organization, these individuals are usually affiliates of some political party. The offspring of European immigrants, Group B members are usually Caucasian, born in Canada, and raised in an English speaking home. Living primarily in urban locations, these people usually rent their place of residence, have some or extensive post-secondary education, work in a white collar type job, and earn an average annual income of \$20,000 or more.

Questions

- 1. Are you 35 years of age or older? (A)
- 2. Are you married? (A)
- 3. Do you have children? (A)
- 4. Are you providing financial support for any of your older relatives? (A)
- 5. Do you live in an extended family situation? (A)
- 6. Do you generally observe the customs and traditions of your religion? (A)
- Are you a member of an ethnic club or organization? (A)
- 8. Do you live in a rural location? (A)

- 9. Do you own (or are you purchasing) your place of residence? (A)
- 10. Are you employed in a blue collar type job? (A)
- 11. Are you a male? (B)
- 12. Were you raised with 4 or more siblings? (B)
- 13. Do you come from a Christian home? (B)
- 14. Are you a member or affiliate of any policital
 party? (B)
- 15. Do you have European ancestors? (B)
- 16. Are you a Caucasian? (B)
- 17. Were you born in Canada? (B)
- 18. Were you raised in an English speaking home? (B)
- 19. Do you have any post-secondary education? (B)
- 20. Is your average annual income \$20,000 or more? (B)

The 8 questions I would ask are:

Questions # ---, ---, ---, ---, ----.

Thank you very much for your time and cooperation.

Appendix 2(a): Materials for E/I conditions of Study 2

This questionnaire is part of an investigation of how people come to know and understand each other. While this process can and does occur in many different ways, one way to learn about other people is to ask them questions about their likes and dislikes, abilities, habits, activities, and experiences.

The following paragraphs are brief descriptions of the main characteristics, mannerisms, and traits of the typical extrovert and the typical introvert. These paragraphs are followed by a set of 6 questions and answers provided by a person whom you have never met. Please read carefully all of the information provided and then answer the questions which follow.

Extroverts are typically outgoing, sociable, energetic, confident, talkative, and enthusiastic. Generally confident and relaxed in social situations, this type of person rarely has trouble making conversation with others. This type of person makes friends quickly and easily and is usually able to make a favorable impression on others. This type of person is usually seen by others as characteristically warm and friendly.

Introverts are typically shy, timid, reserved, quiet, distant, and retiring. Usually this type of person would prefer to be alone reading a book or have a long serious discussion with a close friend rather than go to a loud party or other large social gathering. Often this type of person seems awkward and ill at ease in social situations, and consequently is not adept in making good first impressions. This type of person is usually seen by others as characteristically cool and aloof.

Questions and Answers

For the Extrovert-Confirmatory Strategy conditions and the Introvert-Disconfirmatory Strategy conditions, 6 questions were selected from among the following:

- 1. Do others generally consider you the life of the party? (E) α
- Would you say you make friends rapidly and easily?
 (E)
- 3. Do you have many casual friends and acquaintances?
 (E)
- 4. Are you typically self-assured and relaxed in social situations? (E)
- 5. Do you believe you usually make a positive first impression on others? (E)
- Do you often behave impulsively and on the spur of the moment? (E)
- 7. Do you find it easy and enjoyable to engage in conversation with someone you just met? (E)
- 8. Would you describe yourself as active, outgoing, and energetic? (E)
- 9. Do you generally prefer to engage in social activities and hobbies involving many other people?
 (E)
- 10. Do you think others would describe you as warm, sociable, and interested in others? (E)

Each question was followed by a 10-point rating scale:

X X X X X X X X X X X No Yes

such that a strongly supportive answer was indicated by a circled rating of 9 or 10 (or, 1 or 2) on the scale, while a moderately supportive answer was indicated by a circled rating of 6 or 7 (or, 4 or 5) on the scale.

For the Extrovert-Disconfirmatory Strategy conditions and the Introvert-Confirmatory Strategy conditions, 6 questions were selected from among the following:

- 1. Do parties and large social gatherings generally make you feel awkward or uncomfortable? (I)
- Do you usually find it hard to really open up to people? (I)
- 3. Would you prefer to have a few close friends rather than many casual ones? (I)
- 4. Do you think casual acquaintances would describe you as distant and reserved? (I)
- 5. Are you often bashful or timid around others? (I)
- 6. Would you prefer a quiet evening at home to a boisterous night on the town? (I)
- 7. Do you find it difficult to create a good impression when you meet others for the first time? (I)
- 8. Would you describe yourself as generally quiet, passive, and thoughtful? (I)
- Do you generally prefer such solitary activities as thinking and reading? (I)
- 10. Are you generally more interested in your own thoughts and feelings than those of others? (I)

Each question was followed by a 10-point rating scale:

XXXXXXXXXXXXNo

such that a strongly supportive answer was indicated by a circled rating of 9 or 10 (or, 1 or 2) on the scale, while a moderately supportive answer was indicated by a circled rating of 6 or 7 (or, 4 or 5) on the scale.

Subjects were then asked to respond to the following questions:

How confident are you that the person described above is an EXTROVERT/INTROVERT?

How useful and informative were the questions and answers provided in helping you reach this decision?

Thank you very much for your time and cooperation.

Appendix 2(b): Materials for M/F conditions of Study 2

This questionnaire is part of an investigation of how people come to know and understand each other. While this process can and does occur in many different ways, one way to learn about other people is to ask them questions about their likes and dislikes, abilities, habits, activities, and experiences.

The following paragraphs are brief descriptions of the main characteristics, mannerisms, and traits of the typical adult male and the typical adult female. These paragraphs are followed by a set of 6 questions and answers provided by a person whom you have never met. Please read carefully all of the information provided and then answer the questions which follow.

The adult male in our society is typically logical, assertive, practical, and self-reliant. Generally career oriented and ambitious, many men display considerable leadership ability. Traits such as perseverance, competitiveness, self-confidence, the willingness to take a stand and defend one's own beliefs, and the ability to make decisions easily frequently characterize the adult male. Men are often seen by others as dominant, forceful, and active representatives of the family in the outside world.

The adult female in our society is typically creative, kind, understanding, and sensitive to the needs and feelings of others. Usually family oriented and a major force in ensuring its stability, women generally perform well in such areas as providing nurturance and affection to family members, soothing hurt feelings, maintaining family harmony, and supplying the warmth, kindness, and gentleness all human beings require. Women are frequently seen by others as empathic and sensitive individuals who are essential to the emotional well being of their families.

Questions and Answers

For the Male-Confirmatory Strategy conditions and the Female-Disconfirmatory Strategy conditions, 6 questions were selected from among the following:

- Do you generally prefer logical (e.g. mathematical, mechanical, scientific) hobbies and activities? (M)
- Would others describe you as individualistic, independent, and self-sufficient? (M)
- 3. Do you usually withstand pressure well and thrive in competitive situations where quick thinking is essential? (M)
- 4. Are you typically willing to take risks and face the consequences of your actions? (M)
- 5. Would you describe yourself as outgoing, energetic, and athletic? (M)
- 6. Are you primarily responsible for the economic well-being of your family? (M)
- 7. Do you enjoy observing or participating in competitive sports activities? (M)
- 8. Is your orientation largely practical, with a preference for the factual and the real? (M)
- 9. In group settings, are you often formally or informally the appointed leader? (M)
- 10. Would others perceive you as the kind of level-headed person who would naturally take charge in an emergency? (M)

Each question was followed by a 10 point rating scale:

 ${f X}$ ${f X}$

such that a strongly supportive answer was indicated by a circled rating of 9 or 10 (or, 1 or 2) on the scale, while a moderately supportive answer was indicated by a circled rating of 6 or 7 (or, 4 or 5) on the scale.

1,

For the Male-Disconfirmatory Strategy conditions and the Female-Confirmatory Strategy conditions, 6 questions were selected from among the following:

- 1. Do you generally defer to authority figures and powerful others? (F)
 - 2. Would your friends describe you as more creative and inventive than rational and logical? (F)
 - 3. Are you good at expressing yourself verbally and communicating with others? (F)
 - 4. Are you generally comfortable around and protective toward children and small animals? (F)
 - 5. Would others describe you as warm, compassionate, and sometimes emotional? (F)
 - 6. Do others often turn to you in times of conflict to soothe hurt feelings and make the peace? (F)
 - 7. Would you describe yourself as primarily family oriented? (F)
 - 8. Are you primarily or solely responsible for household chores and tasks? (F)
 - Do you generally prefer activities involving sharing and cooperation to those which are individualistic and competitive? (F)
 - 10. Do you usually avoid the risky and unknown, preferring the safety and security of the familiar instead? (F)

Each question was followed by a 10-point rating scale:

f X f X f X f X f X f X f X f X f X f X f X f Yes

such that a strongly supportive answer was indicated by a circled rating of 9 or 10 (or, 1 or 2) on the scale, while a moderately supportive answer was indicated by a circled rating of 6 or 7 (or, 4 or 5) on the scale.

Subjects were then asked to respond to the following questions:

How-confident are you that the person described above is a MALE/FEMALE?

X X X X X X X X X X X X X X Not at Very sure

How useful and informative were the questions and answers provided in helping you reach this decision?

X X X X X X X X X X X X X X X Not at Very useful

Thank you very much for your time and cooperation.

C3

Appendix I so Materials to A E modificos of study i

This questionnaire is part of an investigation of how people come to know and understand each other. While this process can and does occur in many different ways, one way to learn about other people is to ask them questions about their likes and dislikes, abilities, habits, activities, and experiences.

The following paragraphs are brief descriptions of the main characteristics, mannerisms, and traits of the typical Group A member and the typical Group B member. These paragraphs are followed by a set of 6 questions and answers provided by a person whom you have never met. Please read carefully all of the information provided and then answer the questions which follow.

Members of Group A are typically females 35 years of age or older. They are generally married, have children, and come from families where they were raised with 3 or fewer siblings. Typically, these individuals provide financial support for parents, grandparents, and or other older relatives and usually live in an extended family situation. From non-Christian backgrounds, Group A members generally practice their religion and observe its customs and traditions. While not generally politically active nor a member or affiliate of any political party, these individuals are usually members of an ethnic club or organization. The offspring of non-European immigrants, Group A members are usually not Caucasians, were not born in Canada, nor were they raised in English speaking homes. Living primarily in rural locations, these people usually own or are purchasing their residences, have a high school education or less, work in blue collar type occupations, and earn an average annual income of less than \$20,000.

Members of Group B are typically males under 35 years of age. They are generally unmarried, do not have children, and come from families where they were raised with 4 or more siblings. Typically, these individuals do not provide support for aged relatives, nor do they live in an extended family. From Christian backgrounds, Group B members generally do not practice their religion nor do they observe its customs and regulations. While not generally involved in any ethnic club or organization, these individuals are usually affiliates of some political party. The offspring of European immigrants, Group B members are usually Caucasian, born in Canada, and raised in an English speaking home. Living primarily in urban locations, these people usually rent their place of residence, have some or extensive post-secondary education, work in a white collar type job, and earn an average annual income of \$20,000 or more.

Questions and Answers

For the Group A Member-Confirmatory Strategy conditions and the Group B Member-Disconfirmatory Strategy conditions, 6 questions were selected from among the following:

- 1. Are you 35 years of age or older? (A)
- 2. Are you married? (A)
- 3. Do you have children? (A)
- 4. Are you providing financial support for any of your older relatives? (A)
- 5. Do you live in an extended family situation? (A)
- 6. Do you generally observe the customs and traditions of your religion? (A)
- Are you a member of an ethnic club or organization? (A)
- 8. Do you live in a rural location? (A)
- Do you own (or are you purchasing) your place of residence? (A)
- 10. Are you employed in a blue collar type job? (A)

Each question was followed by a 10-point rating scale:

such that a strongly supportive answer was indicated by a circled rating of 9 or 10 (or, 1 or 2) on the scale.

For the Group A Member-Disconfirmatory Strategy conditions and the Group B Member-Confirmatory Strategy conditions, 6 questions were selected from among the following:

- 1. Are you a male? (B)
- Were you raised with 4 or more siblings? (B)
- 3. Do you come from a Christian home? (B)
- 4. Are you a member or affiliate of any policital party? (B)
- 5. Do you have European ancestors? (B)
- 6. Are you a Caucasian? (B)
- 7. Were you born in Canada? (B)
- 8. Were you raised in an English speaking home? (B)
- 9. Do you have any post-secondary education? (B)
- 10. Is your average annual income \$20,000 or more? (B)

Each question was followed by a 10-point rating scale:

X X X X X X X X X X X X X X Yes

such that a strongly supportive answer was indicated by a circled rating of 9 or 10 (or, 1 or 2) on the scale.

Subjects were then asked to respond to the following questions:

How confident are you that the person described above is a member of GROUP A/GROUP B?

How useful and informative were the questions and answers provided in helping you reach this decision?

X X X X X X X X X X X X X Not at Very all useful

Thank you very much for your time and cooperation.

E) .