



This is to certify that the
thesis entitled
SEX DIFFERENCES IN OPINION CHANGE: A CROSS
SECTIONAL STUDY AND A TEST OF THE
UNBOUNDED GENERAL PERSUASIBILITY TRAIT
presented by
RONALD SCHWAB JONES

has been accepted towards fulfillment
of the requirements for

_____ PH.D. degree in Counseling, Personnel
Services and Educational
Psychology

Harvey F. Clorizio

Major professor

Date 2-24-76



68 — 068

51 — 170

12 — R328

A — 345

3-155

ABSTRACT

SEX DIFFERENCES IN OPINION CHANGE: A CROSS
SECTIONAL STUDY AND A TEST OF THE
UNBOUNDED GENERAL PERSUASIBILITY
TRAIT

By

Ronald Schwab Jones

The theory that females are more easily influenced by persuasive communications than males has not been consistently substantiated. There are presently two major hypotheses concerning this theory which illustrate two different explanations for the idea that women typically alter their opinions more frequently and more easily than men. One hypothesis, which emulates from general trait theory, states that there exists in most females a personality characteristic which accounts for their tendency to alter their opinions in the direction of persuasive communications. The second hypothesis, which is derived from social learning theory, suggests that much of the research in persuasibility may have been biased against the female subjects because of the types of topics presented in the persuasive communications.

The purpose of this investigation was to determine the sex differences in opinion change when the topics of

100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400
401
402
403
404
405
406
407
408
409
410
411
412
413
414
415
416
417
418
419
420
421
422
423
424
425
426
427
428
429
430
431
432
433
434
435
436
437
438
439
440
441
442
443
444
445
446
447
448
449
450
451
452
453
454
455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
484
485
486
487
488
489
490
491
492
493
494
495
496
497
498
499
500
501
502
503
504
505
506
507
508
509
510
511
512
513
514
515
516
517
518
519
520
521
522
523
524
525
526
527
528
529
530
531
532
533
534
535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593
594
595
596
597
598
599
600
601
602
603
604
605
606
607
608
609
610
611
612
613
614
615
616
617
618
619
620
621
622
623
624
625
626
627
628
629
630
631
632
633
634
635
636
637
638
639
640
641
642
643
644
645
646
647
648
649
650
651
652
653
654
655
656
657
658
659
660
661
662
663
664
665
666
667
668
669
670
671
672
673
674
675
676
677
678
679
680
681
682
683
684
685
686
687
688
689
690
691
692
693
694
695
696
697
698
699
700
701
702
703
704
705
706
707
708
709
710
711
712
713
714
715
716
717
718
719
720
721
722
723
724
725
726
727
728
729
730
731
732
733
734
735
736
737
738
739
740
741
742
743
744
745
746
747
748
749
750
751
752
753
754
755
756
757
758
759
760
761
762
763
764
765
766
767
768
769
770
771
772
773
774
775
776
777
778
779
780
781
782
783
784
785
786
787
788
789
790
791
792
793
794
795
796
797
798
799
800
801
802
803
804
805
806
807
808
809
810
811
812
813
814
815
816
817
818
819
820
821
822
823
824
825
826
827
828
829
830
831
832
833
834
835
836
837
838
839
840
841
842
843
844
845
846
847
848
849
850
851
852
853
854
855
856
857
858
859
860
861
862
863
864
865
866
867
868
869
870
871
872
873
874
875
876
877
878
879
880
881
882
883
884
885
886
887
888
889
890
891
892
893
894
895
896
897
898
899
900
901
902
903
904
905
906
907
908
909
910
911
912
913
914
915
916
917
918
919
920
921
922
923
924
925
926
927
928
929
930
931
932
933
934
935
936
937
938
939
940
941
942
943
944
945
946
947
948
949
950
951
952
953
954
955
956
957
958
959
960
961
962
963
964
965
966
967
968
969
970
971
972
973
974
975
976
977
978
979
980
981
982
983
984
985
986
987
988
989
990
991
992
993
994
995
996
997
998
999
1000

interest being presented to the subjects were systematically varied. Sex differences in persuasibility were examined when both masculine and feminine topics of interest were presented in the written communications used to test for opinion change.

This study was conducted with randomly selected ninth, tenth, eleventh, and twelfth grade high school students from the Byron, Michigan High School. The subjects included in the study ranged from fourteen to eighteen years of age. The Byron High School serves a rural and agricultural community located in the southeastern portion of the lower peninsula of Michigan.

The instrument utilized in this study was originally developed by Yale University researchers Irving L. Janis and Peter B. Field. In the present study, three forms of the persuasibility test were utilized. The three forms of the instrument were generally similar with the exception of the topic of interest being discussed in the written communications. The masculine form of the test presented topics which were judged to be of interest to males while the feminine form of the test presented topics which were judged to be of interest to females.

Additional measuring instruments included the Geist Picture Interest Inventory, the M-F scale of the Minnesota Multiphasic Personality Inventory, and the Woodcock Reading Mastery Tests. These measures were

utilized to determine the relationships between persuasibility scores and interest patterns and persuasibility scores and reading abilities.

Four hypotheses were presented in this study. It was hypothesized that sex and form of persuasibility test would interact such that males would score higher persuasibility scores than females when exposed to feminine oriented persuasive communications. In a similar manner, it was hypothesized that females would score higher persuasibility scores than males when exposed to masculine oriented persuasive communications. The trends expressed in the first hypothesis were expected to be manifested across the four grade levels tested. Femininity and feminine interest patterns were hypothesized to correlate positively with persuasibility scores. The final hypothesis suggested that reading abilities would correlate positively with persuasibility scores.

The data collected were primarily analyzed using analysis of variance procedures for a three-factor fixed effects design. The Scheffé method of post hoc comparisons was used for testing specific hypotheses. Pearson product moment correlations were calculated to determine the relationship between interest orientations and persuasibility. Multiple t test comparisons were made to measure differences in reading abilities.

The results indicated that there were significant sex differences in persuasibility with the female subjects achieving higher persuasibility scores than the male subjects. This sex difference was the result of the male subjects' significant lower persuasibility scores on the feminine oriented form of the persuasibility test. The sex difference across the four grade levels suggested in the second hypothesis was not manifested. The third hypothesis was not confirmed due to the fact that there were no significant correlations between interest orientations and persuasibility scores. The final hypothesis suggesting a positive relationship between reading abilities and persuasibility scores was not confirmed.

There is still much research required to assess the nature of sex differences in persuasibility when the topics of interest are manipulated. There is a need for longitudinal studies conducted in a variety of geographical locations, across a variety of age levels and with a wide sampling of masculine and feminine topics of interest.

The results and conclusions of this investigation will require further study. Methodological limitations of the present study are discussed as are the implications for future research. This dissertation also suggests and discusses several implications for education. Emphasis is placed upon educational procedures which might minimize potential sex differences in persuasibility.

SEX DIFFERENCES IN OPINION CHANGE: A CROSS
SECTIONAL STUDY AND A TEST OF THE
UNBOUNDED GENERAL PERSUASIBILITY
TRAIT

By

Ronald Schwab Jones

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Counseling, Personnel Services
and Educational Psychology

1976

To my wife, Ellen

whose support never waivered

To my parents

whose guidance I will always appreciate

ACKNOWLEDGMENTS

Particular appreciation is extended to my advisor and doctoral committee chairman, Dr. Harvey F. Clarizio. He has offered his interest, time and support throughout my doctoral education. His influence has both increased my knowledge of and professionalism in the field of educational psychology.

I want to thank Drs. John Schweitzer, Henrietta Barnes, Don E. Hamachek, and Eugene Jacobson for their attention and guidance. Their thoughtful and clarifying comments were significant contributions in the preparation of this final copy.

To Dr. James Green, Director of Special Education, special thanks for providing me the opportunity to conduct this study while employed as a school psychologist in Shiawassee County, Michigan.

Very special thanks are extended to Mr. William Ross, Superintendent; Mr. Dave McNeil, Principal; and Mr. Harry Whitehead, Assistant Principal for allowing me to work with Byron, Michigan high school students. I am also grateful to the teachers and students of the Byron High School for their time and participation in this study.

Appreciation is extended to Captain Dale L.
Collie of the United States Military Academy for his aid
in preparing and editing this final copy.

TABLE OF CONTENTS

	Page
LIST OF TABLES	viii
LIST OF FIGURES	x
CHAPTER	
I. INTRODUCTION AND REVIEW OF THE LITERATURE . .	1
Purpose of the Study	1
Theoretical Research Issues	6
Sex Differences Paradigm Shifts	11
Unbounded Persuasibility Trait Theory . .	18
Global Trait Theory of Persuasibility . .	22
General Trait Theory of Persuasibility . .	23
Specific Learning Theory of Persuasibility	29
Personality Correlates of Yielding Behavior	31
Sex Differences in Persuasibility	34
Summary	36
II. METHODOLOGY	40
Overview of the Study	40
Hypotheses	42
Schedule of Experimental Procedures . . .	43
Subjects	45
Treatment	47

CHAPTER	Page
Measuring Instrument	52
The Modified Persuasibility Forms	62
Test Form Reliabilities	68
Validation of the Modified Persuasibility Forms	69
Relating Masculine and Feminine Interest Patterns and Persuasibility	75
Assessing the Relationship Between Reading Abilities and Persuasibility	81
Treatment of the Data--Analysis Procedures	83
Summary	84
III. RESULTS AND DISCUSSION	87
Part One--Sex by Form Interaction	89
Part Two--Analysis of Persuasibility Scores Across Grade Levels Nine Through Twelve	97
Part Three--The Relationship Between Masculine and Feminine Interest Orientations and Persuasibility Scores	103
Part Four--The Relationship Between Reading Abilities and Persuasibility	107
Summary	113
IV. SUMMARY AND CONCLUSIONS	116
Summary	116
Conclusions and Limitations of the Study	121
Implications for Further Research	128
Implications for Education	130

	Page
BIBLIOGRAPHY	139
APPENDICES	146
I. ORAL AND VERBAL DIRECTIONS, QUESTIONNAIRES AND PERSUASIVE COMMUNICATIONS FOR THE THREE FORMS OF THE PERSUASIBILITY TEST . .	146
II. VALIDATION QUESTIONNAIRE FOR FORM M AND FORM F	198
III. MMPI MASCULINITY/FEMININITY QUESTIONNAIRE	204
IV. GEIST INTEREST AREAS QUESTIONNAIRE	207
V. BIOGRAPHICAL DATA AND GEIST INTEREST AREA RANKINGS FOR MICHIGAN STATE UNIVERSITY JUDGES	210

LIST OF TABLES

Table	Page
1.1. Sex differences in aggression: Partial summary of studies	12
1.2. Developmental theory of persuasibility	27
1.3. Studies investigating sex differences in persuasibility	35
2.1. Breakdown of days between test administrations for the total sample	53
2.2. Subject matter and special appeals used in the original persuasibility test communications	58
2.3. Communication topics for the three forms of the persuasibility test	67
2.4. Estimated reliability coefficients for the three forms of the persuasibility instrument	68
2.5. Comparison of topics in terms of male vs. female interest	72
2.6. Comparison of topics in terms of male vs. female knowledge	73
2.7. Comparison of topics in terms of male vs. female persuasibility	73
2.8. Weighting of the 4 highest masculine and feminine interest areas as determined by the 38 university male judges	79
2.9. Weighting of the 4 highest masculine and feminine interest areas as determined by the 83 university female judges	80

Table	Page
3.1. Analysis of variance of persuasibility scores across the two sexes, the four grade levels, and the three forms of the persuasibility test	89
3.2. Post hoc comparisons for the sex by form interaction effect contrasting males with females on similar test forms	90
3.3. Post hoc comparisons for group mean differences across the three forms of the persuasibility test	93
3.4. Persuasibility score group means for the sex by grade interaction effects	99
3.5. Correlations between the <u>Geist</u> scale, the <u>MMPI</u> scale and persuasibility scores for the total eleventh grade sample	103
3.6. Correlations between the <u>Geist</u> scale, the <u>MMPI</u> scale and persuasibility scores for the eleventh grade male and female subjects who were administered Form M and Form F	104
3.7. Comparisons of male and female word recognition and passage comprehension skills for ninth through twelfth grade subjects	108
3.8. Correlations between word identification, passage comprehension and persuasibility scores for subjects taking Form O	109
3.9. Mean persuasibility group score comparisons of the ten highest word identification and passage comprehension achievers and the ten lowest word identification and passage comprehension achievers for each sex	111

LIST OF FIGURES

Figure	Page
1.1. Major factors in attitude change produced by means of social communications	19
2.1. Outline for experimental procedure	44
2.2. Design matrix for persuasibility study	48
2.3. Experimental procedure for measuring persuasibility	54
3.1. Sex by form interaction effects	92
3.2. Mean grade level persuasibility scores for both males and females	98
3.3. Sex by grade interaction effects	100

CHAPTER I

INTRODUCTION AND REVIEW OF THE LITERATURE

Purpose of the Study

This study examines the relationship between the masculinity and femininity of interest topics presented in written communications and sex differences in opinion change or persuasibility. Persuasibility is defined as an individual's tendency to consistently alter his or her opinion in the direction of a viewpoint presented in one or more classes of influential communications. Janis and Hovland (1959) define a "persuasibility factor" as a variable within a population that is correlated with consistent individual differences in responsiveness to one or more classes of influential communications. The general unbounded theory of persuasibility is discussed in this paper and persuasibility is differentiated from conformity and suggestibility.

This research was designed to investigate four specific issues.

- (1) The study investigates the effect upon sex differences in opinion change by systematically varying the masculinity and femininity of the

interest topics presented in the Janis and Field persuasibility test format (Janis and Field, 1956). Critics of the Janis and Field studies (Bem and Bem, 1970; Aronson, 1972) have questioned the topics used in the original Janis and Field test because the topics appeared to be predominantly oriented toward topics of interest to males rather than females. In the current study, two modified versions of the test were developed. The masculine version of the test presents topics oriented toward traditional male interests, and the feminine version of the test presents topics usually associated with female interests. By varying the topic of interest, it is possible to determine empirically the extent to which persuasibility should be considered as an unbounded personality trait among the subjects tested.

- (2) The cross-age level trends of sex differences in persuasibility, as measured by the Janis and Field persuasibility test, are also explored in the present study. Previous research utilizing the Janis and Field methodology indicates that girls are apparently more persuasible during older or younger age periods (Janis and Field, 1959; Whittaker, 1965; Whittaker and Meade, 1967). These previous findings of specific age differences

may have been influenced by the fact that all previous studies, with the exception of the Whittaker and Meade study (1967), utilized only one specific age group. The present study was designed to overcome this research limitation by testing 14-18 year old students in grades nine through twelve.

- (3) The third issue investigated in the current study examines the general social learning theory of persuasibility presented by Janis and Field (1959) and Abelson and Lesser (1959). Basically, this social learning theory proposes that boys and girls are socialized differently within American society; girls are generally taught to be more conforming and more yielding to social influence, while boys are taught to be less yielding and more intellectually independent. This theory has been used to explain the hypothesis that females tend to be more easily influenced by written communications than are males. Personality traits, such as feelings of social inadequacy, social inhibitions, richness of fantasy and argumentativeness, all show significant correlations with persuasibility for males but not for females (Janis, 1954; Janis and Field, 1959). This is interpreted by some social learning theorists as an indication

that the influence of cultural sex roles for girls outweighs individual personality differences in relation to persuasibility (Macfarlane, Allen and Honzik, 1954; Beloff, 1958; King, 1959; Lesser and Abelson, 1959). It is suggested that individual personality differences may serve as indications of the level of persuasibility in boys, since the cultural sex role for boys is less definitive in prescribing how to react to persuasive influences (Janis and Field, 1959). The present study compares this general social learning theory hypothesis with a more specific topic bounded learning theory hypothesis by having the eleventh grade subjects complete the Geist Picture Interest Inventory and a truncated version of the Minnesota Multiphasic Personality Inventory masculinity/femininity scale. The specific hypothesis to be tested in this study examines the correlations between sex role orientation patterns and persuasibility for both sexes to determine whether consistent correlations were manifested across all three forms of the persuasibility test or whether the correlations varied as the masculinity and/or femininity of the topics varied.

- (4) The final topic investigated in this study concerns the relationship between reading ability

level and opinion change. All of the previous persuasibility studies incorporating the Janis and Field approach have failed to evaluate the subjects' reading levels. There is evidence that the developmental rate of reading achievement is somewhat slower for males than it is for females (Gates, 1961; Dwyer, 1973), and males demonstrate more reading difficulties than females during the elementary school years (Tyler, 1947; Bentzen, 1963; Asher and Gottman, 1973; Maccoby and Jacklin, 1974). Research indicates that elementary boys may lag as much as one-half year behind girls on reading achievement tests (Asher and Gottman, 1973). Gates (1961) has found greater variability and lower reading scores among males than among females in grades two through seven. Also, Blom (1971) has found that between 60 and 90 percent of the elementary school children referred for remedial reading instruction are male. In terms of secondary school age students, there is little evidence to suggest that sex differences in reading ability and achievement exist. Several sources have suggested that males may actually out-perform females in many competitive academic areas among high school subjects (Milton, 1958; Sontag, Baker and Nelson, 1958; Kagan and Moss,

1962). In the present study two specific areas of reading ability, word recognition and passage comprehension, were measured in a portion of the ninth, tenth, eleventh and twelfth grade subjects, and the relationships between the reading achievement scores and persuasibility were examined for both male and female subjects.

Theoretical Research Issues

Theoretically, the Kuhnian model of scientific structure and paradigm (Kuhn, 1970) is a useful framework for investigating the nature of studies concerning sex differences in opinion change. The role of the scientist, as viewed by Kuhn, is to study and understand the world to the precision and scope with which it is ordered. To accomplish this role, scientists have derived sets and networks of conceptual, theoretical, instrumental and methodological commitments which form the specific scientific paradigms. These scientific paradigms provide rules which help the researcher in a mature specialty discover what both the world and his specific science are like. Working within these established paradigms, a science becomes a highly cumulative enterprise which steadily expands the precision and scope of scientific knowledge. However, the dimension involving innovations in theory is absent in this type of scientific progression. A "normal" science, as described by Kuhn (1970), does not

attempt to discover novelties of fact or new theories which may be present outside of the established paradigm, and as a result, no such "planned" discoveries are made. This lack of external paradigm investigation prevents competing paradigms or segments of these paradigms from being properly validated and/or invalidated.

The present study was developed as a result of a theoretical research concern related to the social learning theory of sex role differences in persuasibility and in many ways is characteristic of Kuhn's criticism of a "normal" science. Although persuasibility does not exhaust the sample space of a "normal" science, it does represent a sample space of studies which exists within an accepted paradigm. This accepted research paradigm states that our culture has specific sex roles and that differences in these sex roles can be measured by numerous dependent variables. Persuasibility represents one such dependent variable which has been utilized to illustrate that distinct sex role socialization differences exist.

The question which motivated the present study is to what extent has research on persuasibility been effected and directed by the existing paradigm which states that men and women are reared differently and therefore should behave differently on a test of persuasibility. A review of the literature on differences in persuasibility illustrates that most studies have focused on independent variables

which tend to be located within the established sex role paradigm. For example, Abelson and Lesser (1959) utilize the following independent variables:

- (1) Method of presentation (i.e., tape recordings, persuasive essays, verbal presentations, etc.).
- (2) Design of experiment (i.e., pre- and post tests or simply post test).
- (3) Type of communicator (i.e., peers, parents, teachers, experimenter, anonymous experts, etc.).
- (4) Multiple topics of communication.
- (5) Initial opinion present in subjects.
- (6) Position taken in the communication (i.e., extremely pro- or con, varied pro- or con, etc.).

Janis and Hovland (1959) have also listed the major factors which produce attitude change as the result of social communication. The factors included in this listing are:

- (1) Content characteristics (i.e., appeal, style, argument, etc.).
- (2) Communicator characteristics (i.e., status of communication, affiliation with communicator, etc.).
- (3) Media characteristics (i.e., direct social interaction, magazines, television, etc.).
- (4) Situational characteristics (i.e., in groups, in pleasant vs. unpleasant situations, etc.).

The independent variables presented above illustrate the types of variables which are the same independent

variables that might typically appear in a "normal" science approach for studying sex differences in persuasibility. Previous researchers have attempted to find the causes and explanations for the apparent and presumably accepted sex differences in persuasibility doctrine. The choice of these independent variables illustrates how a "normal" science might be metaphorically described as "puzzle solving." The paramount question in these studies revolves around how the sex differences might result and be developmentally explained and not around the question concerning the validity of such sex differences. This type of research questioning is working within the conceptual paradigm which stresses differences in sex development, socialization and rearing. A research paradigm which emphasizes discovering the nature and propensity of sex differences in persuasibility is adequate and scientifically acceptable for maintaining a segment of a "normal" science, but such a paradigm lacks the ability to systematically and empirically test the original proposition that sex differences in persuasibility are unconditionally present.

A true test of a conceptual and research paradigm requires what DeGroot (1965) has referred to as the search for "negative proof." By "negative proof," DeGroot means that researchers must not only look for proof which supports a particular theory, but they must also look for

proof which empirically disproves viable alternative hypotheses. T. C. Chamberlin (1965) has referred to this procedure as "The Method of Multiple Working Hypotheses." Chamberlin describes the nature of scientific evolution as premature conception passing into tentative theory, then into adopted theory, and finally into a ruling theory. When the last stage is reached, unless the theory happens to be true, all hope for the scientific expansion of knowledge is lost because there is no longer a search for "negative proof." Kuhn, by means of a "normal" science, and Chamberlin by means of a ruling theory both support the contention that scientific research must constantly be looking for alternative paradigms and hypotheses to prove the validity of accepted and established theories.

The present study is specifically designed to search for such "negative proof." One of the key independent variables manipulated in this study is the masculinity and femininity of the topic of interest presented in each of the written communications. The hypothesis being tested is that males will appear more persuasible than females on feminine interest topics and females will appear more persuasible than males on masculine interest topics. If the results of this study do not substantiate this hypothesis, an alternative theory will have been considered, and the unconditional sex differences in persuasibility theory will be sustained.

Sex Differences Paradigm Shifts

A review of the literature on sex typing and socialization reveals several areas of research in which earlier studies confirmed and supported a more traditional sex role difference paradigm, while later research challenged the established paradigm, and through an analysis of the data and/or reformulations of design, found that either the sex differences were not as great as they first appeared or that the sex differences were bounded to the specific methodology utilized in a study. In these specific areas, the expansion of scientific knowledge occurred not as a result of what Kuhn has called the earlier "puzzle solving" studies, but as a result of the later studies which introduced different methodologies and research definitions. Two areas of research which illustrate this type of analysis concern studies on sex differences in aggression and sex differences in fear of success.

The study of sex differences in aggression is one area of research in child development which has had a long and productive history. Most of these studies define aggression and then compare the sexes with numerous observation, rating, projective, experimental and/or self report techniques. Listed in Table 1.1 are some of the key studies which utilized various techniques and age levels in measuring sex differences in aggression. Table 1.1

Table 1.1.--Sex differences in aggression: Partial summary of studies.

Study	Age	Sex Group With Higher Aggression Scores	Comments
<u>Observational Studies</u>			
Green, 1933	Nursery School	Boys	Boys had more quarrels
Sears et al., 1965	Nursery School	Boys-- No diff.	In 7 out of 10 types of aggression verbal dis- approval, tattling, and prosocial aggression
Muste and Sharpe, 1947	2-5	No. diff.	Boys slightly more physical and girls slightly more verbal aggression
Walters et al., 1957	2-5	Boys	Aggressive contacts with peers
<u>Rating Studies</u>			
Digman, 1963	6-7	Boys	Teachers' ratings--more negativistic, aggres- sive, noisy
Tuddenham, 1952	8 and 10	Boys	Considered more quarrel- some by peers
Sanford et al., 1943	5-14	Boys	Teachers attributed aggression more to boys
<u>Experimental Studies</u>			
Bandura et al., 1961	Nursery School	Boys No. diff.	Imitative physical aggression
Bandura, 1965	Nursery School	Boys	Aggressive acts
Jegard and Walters, 1960	4-6	Boys	Hitting a punch toy after frustration

Table 1.1.--Continued.

Study	Age	Sex Group With Higher Aggression Scores	Comments
Buss, 1963	College	Men	Aggressive to a frustrating "victim"
<u>Projective Tests</u>			
Spache, 1951	6-13	Boys	Outward aggression toward peers on the Rosenzweig P-F Test
Lindzey and Goldberg, 1953	College	No. diff.	TAT protocols
<u>Self-Report</u>			
Sears, 1961	12	Boys Girls	Antisocial aggression Prosocial aggression
Rothaus and Worchel, 1964	College	Men	Hostile to an E before and after hostility arousal
Bennett and Cohen, 1959	15-64	Men Women	Overt aggressiveness Covert hostility
<u>Fantasy Aggression in Doll Play</u>			
Sears, 1951	Preschool	Boys	Direct physical aggression
Sears et al., 1965	Nursery School	Boys	Antisocial and total thematic aggression
Durrett, 1959	4-6	Boys Girls	Total and physical aggression - verbal aggression

represents a partial replication of Oetzel's (1966) review of the literature on sex difference aggression studies.

The data in Table 1.1 shows that in the majority of studies finding boys more aggressive than girls, the dependent variables were antisocial and/or physical measures of aggression. This core of studies confirms the traditional sex role stereotype which states that boys are taught to be more aggressive and independent. In terms of a research paradigm, these studies illustrate a limited search for "negative proof" and test only for the dependent variables which would indeed confirm the existing sex role stereotype. Few studies have attempted to validate or invalidate this stereotype by looking at other competing forms of dependent variables. Generally, it appears that reversals and the absence of sex differences in aggression tend to occur when verbal and indirect forms of aggression are measured. Additional evidence reported by N. Feshbach (1965) suggests that girls make greater use than boys of indirect forms of aggression such as unfriendly and rejection behaviors. This finding was supported by a series of studies performed by Sones (1968) in which children's responses to group newcomers were measured. In both 6-7 year olds and junior high school students, it was found that the girls engaged in less social interaction with the newcomer, more often rejected the newcomer's suggestions, and were more frequently critical of the newcomer.

Several studies have shown greater verbal aggression in girls than in boys (Bach, 1945; Muste and Sharp, 1947; Durrett, 1959). Sears (1961) and Sears, Rau and Alpert (1965) made a distinction between the forms of aggression behavior which are approved by society and forms of aggressive behavior which are disapproved of or considered antisocial by society. This distinction illustrates the point that although boys may display stronger antisocial aggressive tendencies, girls generally display stronger prosocial aggression. Mallick and McCandless (1966) stated further that third grade girls are as likely to be as aggressive physically as boys if they are assured no adult will find out about or observe their aggressive behaviors. Bandura, Ross and Ross (1961) found that, although there was a greater incidence of direct, physical aggression among boys, there was no sex difference in verbal aggression. From the studies on the spontaneous copying of model aggression, Bandura (1965) has found that sex differences in performing aggressive behaviors are greatly reduced when rewards and positive reinforcements were offered for performing the aggressive behaviors. Mischel (1970) has hypothesized that males and females may be similar in their knowledge of aggressive responses, but that they may differ in their willingness to manifest or perform these responses overtly.

The point of the above discussion is that the typical finding that boys are more aggressive than girls must be adjusted and revised. This revision is not the result of the core studies which measured the more traditional sex role dependent variables (i.e., physical aggression) but is, instead, the result of the studies which broke from this traditional research paradigm and selected new types of aggression variables, such as prosocial aggressive behaviors and social isolation behaviors. In this particular area of study, the growth of knowledge results from a challenging of the accepted sex differences and a searching for variables which existed outside of the traditional sex role paradigm.

A second area to be reviewed in this section deals with sex differences in "fear of success." This is another area which illustrates how one paradigm may so completely dominate the empirical arena that research may be designed only to find confirming proof while little effort is provided to investigate other potential alternative paradigms. Horner's (1968) original work on women's motives to avoid success in situations requiring intellectual competence and leadership skills is a case in point. Basically, Horner's work involved administering thematic cues to male and female undergraduates and then identifying themes which indicated "fear of success." The subjects were then measured in a competitive condition. The two findings

generated from this research are that women show more "fear of success" imagery than men and women who show "fear of success" imagery do worse in competition than women who do not show such imagery. These findings support the traditional sex role stereotype which states that women are less aggressive, less competitive and more docile than men. Thus, the Horner study represents a case in which the study was designed to test only the positive proof for an existing socialization paradigm.

Likewise, Hoffman's (1972) re-creation of the Horner study utilized four different types of thematic cues and found that in nonmasculine areas of success, males manifested more "fear of success" than females. The claim that women "fear success" more than men appears to be true only in specific "success" situations. The masculinity and/or femininity of the success situation greatly influenced the "fear of success" manifested by the subjects. Tresemer (1974) has also analyzed Horner's data and has found coding irregularities which may have resulted in larger "fear of success" scores for women. The net result of these findings is that the original Horner position on women's "fear of success" was extremely popular but unproven. It appears that "fear of success" is related to a number of moderator variables and the sex differences are not as distinct as they first appeared to be.

These discussions of sex differences in aggression and "fear of success" have been utilized to illustrate how existing stereotypes and paradigms can influence the methods of scientific investigation. Aronson (1972) refers to this as "a subtle form of prejudice" while Bem and Bem (1970) refer to this prejudice against women as a "non-conscious ideology" or as a set of beliefs which are accepted implicitly because alternative conceptions of the world cannot be conceived.

Unbounded Persuasibility Trait Theory

A number of investigations have been concerned with the individual differences in responsiveness to persuasive communications and have raised the possibility that there may be a general personality trait of susceptibility to persuasion or persuasibility (Ferguson, 1944; Hovland, Janis and Kelley, 1953; Janis, 1954, 1955; Janis and Feshbach, 1954; Janis and Field, 1959). Persuasibility does not refer to attitudes predisposing the individual to accept or reject a communication which favors a particular type of conclusion, but rather to those attitudes and personality factors leading to low or high resistance to a wide variety of persuasive communications on many different communication topics.

Figure 1.1 gives a schematic outline of some of the major factors which enter into attitude or opinion change produced by means of social communications. The

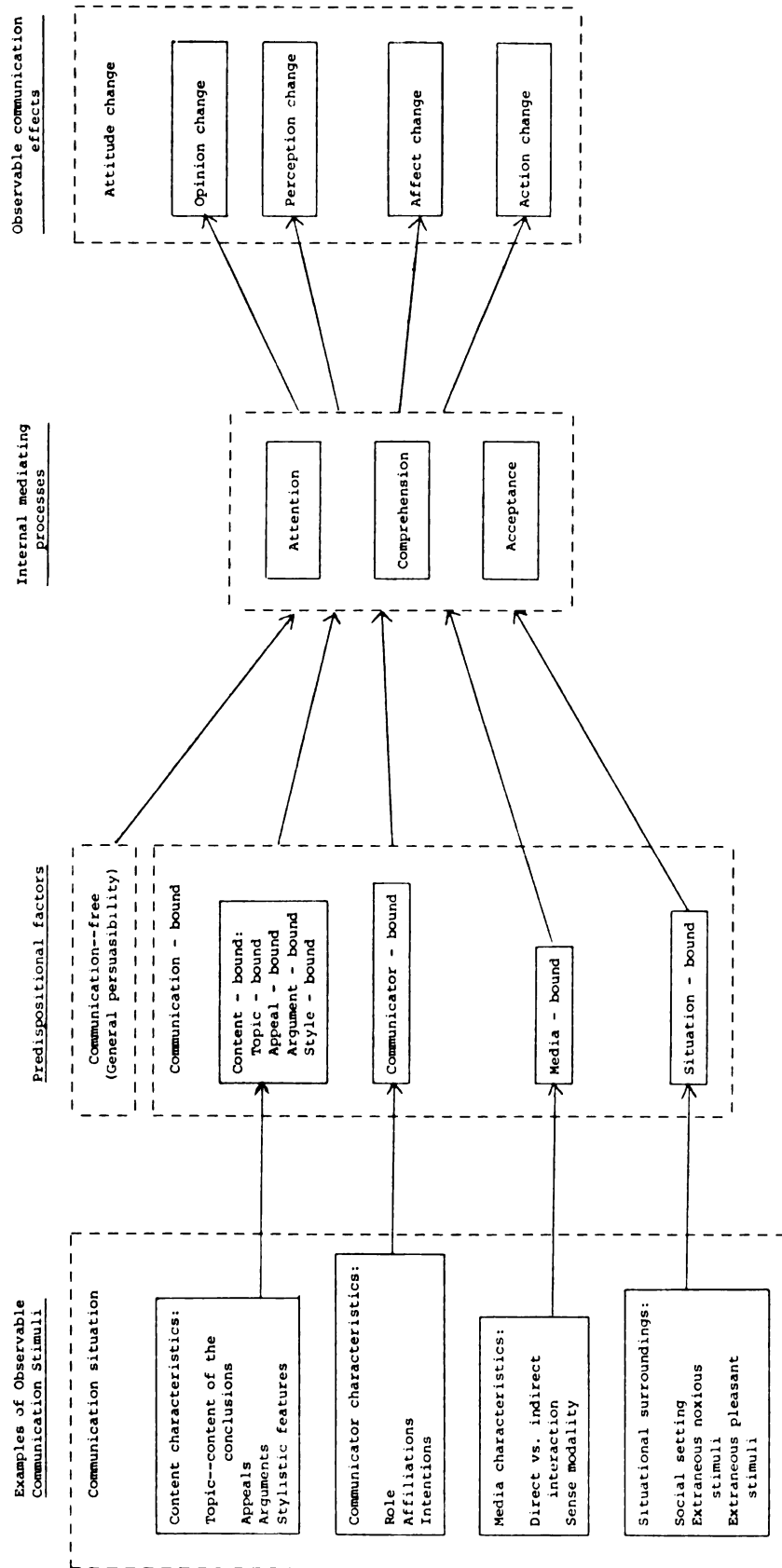


Fig. 1.1.--Major factors in attitude change produced by means of social communication.

observable communication stimuli column describes the possible variations in such elements as communication topics, style of argument, writing style, type of communicator, form of media used in the presentation, and situational factors. The predispositional factors include the specific tendencies or predispositions individuals might possess which will influence their responsiveness to a particular social communication. Janis and Hovland (1959) specifically describe two broad categories of predispositional factors. The first of these is called "topic bound," or "communication bound," and includes all of those factors which affect a person's readiness to accept or reject a given point of view on a particular topic. An example of research directly related to the empirical investigation of "topic bound" factors is the Hovland, Lumsdaine and Sheffield (1949) study concerning the organization of arguments in social communications. The relative effects upon opinion change, as it is modified by one sided communication (presenting only those arguments favoring the recommended conclusion) and two sided communication (presenting both the favoring and opposing arguments to the position advocated), were the central issues questioned in this 1949 research. The results of this study indicated that there were predispositional factors which were in fact bounded to the type (one sided vs. two sided) of communication presented and that these predispositions

influenced the type of opinion change. More specifically it was found that more highly educated individuals, who initially opposed the communicator's view, were more likely to accept the arguments of a two sided presentation than arguments of a one sided presentation. In terms of the model presented in Figure 1.1, this finding supports the contention that the type of argument utilized in the communication is directly related to specific predispositional factors.

The second class of predispositional factors is referred to as "topic free" or "communication free" factors. This class represents personality traits which are relatively independent of the specific communication and traits which affect a person's readiness to accept or reject a given point of view on a particular topic. "Communication free" persuasibility factors include an individual's general susceptibility to many different types of persuasion and social influence. It is this unbounded general persuasibility dimension which is of interest in the present study. Hovland, Janis and Kelley (1953) point out that many "topic free" factors may prove to be bound to specific characteristics of the communication. The present study examines the "unbounded" general persuasibility trait theory between the sexes by presenting one set of topics judged to be oriented toward masculine interests and a second set of topics judged to

be of greater interest to females. If the sex differences appear across topics in favor of higher female persuasibility scores, the unbounded general persuasibility will be empirically sustained.

The internal mediating processes (Figure 1.1) represent internal mental prerequisites necessary for the communication to have an impact upon the attitude and opinion systems of the individual. The observable communication effects represent the specific behavioral manifestations from which attitude change can be inferred.

Global Trait Theory of Persuasibility

The theoretical and conceptual study of persuasibility has relied heavily upon the tenets of social learning theory. Several theorists have utilized a global approach by indirectly describing persuasibility and clarifying the most salient differences in male and female socialization. Barry, Bacon and Child (1957) and Kagan and Moss (1962), after studying large samples, describe how boys are more firmly taught to strive for achievement and to be self-reliant and independent. Girls are trained more for obedience, responsibility and dependence. As early as 1942, the sex role socialization differences between boys and girls were studied, and girls appeared to be more docile, more conforming, and more fearful of discipline and social pressures (Talcott Parsons, 1942). Boys, on the other hand, appeared to be more recalcitrant

to discipline and adult authority and more independent in their beliefs and behavior. These types of global social learning theories generally describe the basic differences in sex role socialization and in many ways adequately describe general socialization patterns. They do not, however, describe the particular parent or adult-child interactions which bring about the noted sex role differences. A more systematic set of social learning theory propositions are required to describe how sex role distinctions are learned. When studying sex role differences in persuasibility, it is important that a theory be developed which helps explain how boys and girls learn to be resistant or non-resistant to social communications through interactions with parent and other models.

General Trait Theory of Persuasibility

In 1959 Abelson and Lesser constructed a general developmental theory of persuasibility as a function of the past interactive experiences between the child and his parents which is much more specific than the global theories described earlier. These researchers have conducted numerous studies on the measurement of persuasibility in children and have developed a set of propositions which relies heavily upon social learning theory. In this theory, persuasibility is distinguished from conformity and suggestibility. Persuasibility represents a general personality trait by which an individual strives

to relate himself or herself to a communicator in such a way that their opinions agree or are consonant. Conformity and suggestibility both involve decision situations in which there exists a reality basis for making judgments and the tasks involve not only social conformity but also the motive to be in agreement with objective reality.

McGuire (1968), in writing about personality and susceptibility to social influence, differentiates between suggestibility, conformity and persuasibility in the following manner. Suggestibility represents a general trait of doing what is requested by another individual. Conformity represents an individual's tendency to alter his behavior in the direction of some source which holds a particular position on an issue. Finally, McGuire defines persuasibility as the degree to which an individual changes his opinion after being presented with a source position and various arguments, based on emotional or rational considerations as to why this particular position is correct.

A parallelism can also be drawn between Kelman's (1959) three processes of opinion change and suggestibility, conformity, and persuasibility. Kelman postulated three distinct types of conformity processes--compliance, identification and internalization. Compliance represents an overt but not necessarily covert agreement with an authority who manipulates rewards and punishments.

Identification represents the individual's attempt to maintain opinions concordant with those of some model, either another individual or a group. Internalization represents the integration of new opinions into an established value framework with an emphasis upon seeking agreement between the individual and the communicator. Comparing the McGuire and Kelman susceptibility to social influence typologies, it becomes apparent that suggestibility, conformity and persuasibility correspond respectively with compliance, identification and internalization. Thus, persuasibility is viewed as more than external compliance and conformity, it also involves an internal trait tendency to seek agreement between the individual and the communicator.

Abelson and Lesser define the degree of persuasibility for an individual as the probability that the individual's response will be an attempt to produce agreement between himself and the communicator. The degree of persuasibility will vary to some extent with the various communication situations, topic of discussions, communicators and a variety of other specific communication characteristics. However, across the various settings, topics, and communications, there exists a general persuasibility tendency or a general unpersuasibility tendency which remains fairly stable and constant. It is to these general tendencies that Abelson and Lesser directed their

attention and developed a set of eleven propositions which explain their general developmental theory of persuasibility. The first three propositions, as shown in Table 1.2, constitute the general theory and illustrate the authors' belief that the tendency to seek agreement or disagreement with others is learned. Propositions four and five describe how persuasibility tendencies are influenced by parent child interactions which Abelson and Lesser label as "control situations." "Control situations" are typified as one or both parents demanding that the child do something different from what he would have done had the parental demand not been made. Propositions six and seven focus upon parent-child interactions which are labeled "acceptance situations." These are situations in which the child initiates a request or suggestion that a parent do something other than what would have been done if the request or suggestion had not been made. The final four propositions presented in the theory emphasize various personality traits and how they correlate with measures of persuasibility.

The propositions presented in Table 1.2 concern the development of a global personality trait which increases or decreases an individual's tendency to yield or not to yield to persuasive communications. It is important to emphasize the terminology "global personality trait" because this theory recognizes that traits are

Table 1.2.--Developmental theory of persuasibility
(Abelson and Lesser, 1959).

Definition.	The degree of persuasibility of an individual is the probability, defined on a population of possible communication situations varying in topic and communicator, that the individual's response will be an attempt to produce agreement between himself and the communicator.
Proposition 1.	The degree of persuasibility of an individual is the result of a series of implicit comparisons between his own opinions and the opinions of others. The outcome of each comparison may be categorized either as agreement or as disagreement.
Proposition 2.	The circumstances surrounding the incidence of agreement or disagreement may be either positively reinforcing or negatively reinforcing.
Proposition 3.	Positively reinforced instances of agreement or negatively reinforced instances of disagreement tend to increase persuasibility; positively reinforced instances of disagreement or negatively reinforced instances of agreement tend to decrease persuasibility.
Definition.	The degree of firmness of parental control is the conditional probability, defined over a population of control situations, that the parent will reinstate a demand once the child has expressed disagreement with it.
Proposition 4a.	Low firmness of parental control operates to decrease persuasibility.
Proposition 4b.	Firmness of parental control correlates positively with persuasibility.

Table 1.2.--Continued.

Proposition 5.	The greater the frequency of control attempts by parents, the higher will be the relationship between firmness of control and persuasibility.
Definition.	The degree of acceptance of the child by the parent is the probability, defined over a population of acceptance situations, that the parent will agree to a request initiated by the child, provided that the child's request is not one that challenges prior control attempts.
Proposition 6a.	Parental acceptance operates to increase persuasibility.
Proposition 6b.	Parental acceptance correlates positively with child persuasibility.
Proposition 7.	In young children, persuasibility tendencies toward the parents generalize widely to other communicators; the older the child, however, the greater the differentiation between communicators.
Proposition 8.	Self-esteem correlates negatively with persuasibility.
Proposition 9.	Overt aggressiveness correlates negatively with persuasibility.
Proposition 10.	Social isolation correlates positively with persuasibility.
Proposition 11.	Persuasibility of children correlates positively with the persuasibility of their friends.

relatively stable and consistent over time and across subject matter. In spite of the fact that this global trait theory employs social learning theory principles, it does not possess the specific attributes needed to explain the inconsistent sex difference findings reported in numerous areas of study. It has been suggested that a more behaviorally oriented social learning theory, which avoids describing performance in terms of broad personality trait dimensions, is required to describe the development of persuasibility.

Specific Learning Theory of Persuasibility

Behavior across subjects and settings is far from homogeneous and indicates that personality organization is much more subtly differentiated than the broad unitary dispositional theories would suggest. Likewise, global personality traits, such as those Abelson and Lesser (1959) describe in the area of persuasibility, are too general to describe the variety of subject reactions and responses. The popular strategy of personality study which attempts to identify broad trait dimensions has been rejected by social learning theorist Walter Mischel (1970). According to Mischel, a more adequate conceptualization of personality development must focus upon man's adaptiveness and capacities for discrimination learning because man, as an organism, is capable of learning specific responses to numerous discrimination stimuli. His behavior is determined

not by some dominant personality trait but instead by his history of reinforcements to a specific subject matter and/or a specific setting. Within the guidelines of this theory, it is entirely possible for two subjects to have the same potentiality for yielding to persuasive communications and yet manifest differing degrees of this yielding because of the specific nature of the communication.

The learning theory orientation supported by the investigator in the present study is aligned very closely with the Mischel social learning orientation. The major hypothesis tested in this study is concerned with the interaction effect between the masculinity or femininity of a topic and persuasibility. More specifically, the hypothesis states that males will manifest higher persuasibility scores than females when males are given feminine topics and that females will score higher on persuasibility than males when females are given masculine communication topics. These predictions are the result of two general theoretical conceptions. The first conception is that an individual is more likely to alter his/her opinions after reading a persuasive communication if he/she is either uninvolved in or uninformed about the issue presented in the communication. And the second conception is that the specific issues or interests with which an individual becomes involved depend upon the reinforcements the individual has received or not received

in his/her socialization process. This second conception is what Mischel might describe as discrimination learning. Instead of being described as the degree of persuasibility in terms of a global unbounded personality trait, yielding to written communications might be described in terms of the individual's past reinforcements and specific discrimination learnings. If additional studies support this hypothesis, persuasibility would then be bounded to a specific topic, characteristic and/or other specific attributes of the communication.

Personality Correlates of Yielding Behavior

The study of sex differences in the relationship between personality correlates and yielding behavior has generally developed along two main lines. The first and the most expansive area of research concerns determining the specific personality correlates of yielding behavior. These studies have typically involved the general trait hypothesis that females in our society are socialized to be more dependent and less resistant to influences than males (Coffin, 1941; Terman, Johnson, Kuznets and McNemar, 1946; Grimes, 1948). Within this area, a group of Yale researchers has devoted a great deal of conceptual and empirical activity to the search for "topic free" personality correlates of what they refer to as unbounded "topic free" persuasibility (Hovland, Janis and Kelley, 1953; Janis and Field, 1959; Janis and Hovland, 1959).

The major attempt of these investigators has been to test for the presence of a general unbounded personality trait which has been labeled persuasibility and then to determine what specific personality traits are significantly correlated with this general trait. For example, Linton and Graham (1959) performed extensive studies on unbounded personality correlates of persuasibility by utilizing autokinetic situation responses, embedded-figures tests, authoritarian personality questionnaires, human figure drawing tests, inner vs. outer directed questionnaires and Rorschach tests. Cohen (1959) contributed to this area of research by studying the implications of self-esteem for susceptibility to social influence and reporting that high self-esteem is related negatively to susceptibility to social communication and positively with a defensive mode when these communications are presented. It is interesting to note that many of the studies which have investigated the personality correlates of yielding to social communications or group norms depict the individuals who yield as also being those individuals who are more conventional in behavior and values, more socialized, more nurturant, more affiliative, and more submissive (Tuddenham, 1959; DiVesta and Cox, 1969). Grouped together, these personality variables resemble the traditional sex role model to which females are typically socialized within our present society. Thus, it can be summarized

that the research along this line has generally completed its full cycle. The initial research began with hypotheses stating that sex differences were evident in the socialization process, and the studies conducted related personality dimensions and yielding tendencies that supported the initial hypotheses. None of these tests took into account the possibility of error in these basic hypotheses. None of them appeared to test or challenge the validity of the assumptions on which they based their research. In terms of Kuhn's model, this represents "puzzle solving" within an established research paradigm.

A second line of research which emphasizes sex differences in yielding to social or communication influences concerns personality trait correlational relationships for males and females. The findings of this research usually explain that personality variables are significantly related to male acceptance of influence, but the findings fail to predict the responses of females (Tuddenham, 1959; Lesser and Abelson, 1959; Baron, 1965; Eagley, 1969). These findings have been utilized to support the theory that the female sex role orientation is much more structured and consistent than the male sex role in our society. The net result of these theorized sex role differences is that specific personality traits which correlate with persuasibility are allowed to develop in males while the same traits are not allowed to develop

individually in the female due to strict sex role typing. Numerous studies have been concerned with personality correlates of persuasibility while a fewer number of studies have been concerned directly with studying the general question of sex differences in persuasibility (Janis, 1954; Janis and Rife, 1959; Janis and Field, 1959).

Sex Differences in Persuasibility

There have been relatively few studies concerning sex differences in persuasibility, and the pioneering work in the area has been performed by a group of Yale University researchers who have developed several instruments to measure persuasibility (Janis, Field, Abelson, Lesser, Cohen, and King). In this section, only those studies concerning sex differences in persuasibility will be examined, and it should be remembered that persuasibility is being differentiated from suggestibility and conformity. Table 1.3 lists the studies and the general findings.

The Janis and Field (1959) study utilized the original Janis and Field persuasibility test with the results indicating that sixteen year old girls are more persuasible than sixteen year old boys. King (1959) utilized an exclusion method in which arguments and appeals were eliminated, and communications on particular topics were restricted to the mere opinion position of the source with a wide variety of topics being covered. King's study, which tested adolescent boys and girls, also found

Table 1.3.--Studies investigating sex differences in persuasibility.

Study	Method	Age of Subjects	General Findings
Janis and Field (1959)	Janis and Field Persuasibility Test (JFPT)	16	Girls more persuasible than boys
King (1959)	Exclusion method	15-18 high school students	Girls more persuasible than boys
Abelson and Lesser (1959)	Persuasibility booklet	6-7	Girls equal boys in persuasibility
Whittaker (1965)	JFPT	19-20	Girls more persuasible than boys
Whittaker and Meade (1967)	JFPT (modified)	14	Girls equal boys in persuasibility
		16	Girls more persuasible than boys
		19	Girls equal boys in persuasibility
		28-32	Women equal men in persuasibility

that girls are more easily persuaded by exclusive type communications. King failed to clearly define the age groupings utilized in his study. Abelson and Lesser (1959) utilized a persuasibility booklet with which the adult presented a pair of unfamiliar pictures to the child and told the child which picture of the pair he or she preferred. The child was then asked to circle his or her favorite picture. Testing six and seven year old boys and girls, Abelson and Lesser did not find any significant differences between the sexes in persuasibility. Whittaker (1965) tested 19-20 year old boys and girls with the Janis and Field persuasibility test and found that the girls are more persuasible than the boys. A cross sectional developmental study conducted by Whittaker and Meade (1967) examined sex differences in persuasibility for 14, 16, 19 and 28-32 year old subjects. The instrument used in this study was a modified form of the Janis and Field persuasibility test in which Whittaker and Meade substituted a topic discussing the responsibility for the war in Viet Nam for the original topic which discusses the size of the Civil Defense Program. The only significant sex differences in persuasibility found by Whittaker and Meade were with the sixteen year old subjects.

Summary

Little empirical research has been done in the specific area of sex differences in persuasibility when

the topics of interest have been systematically varied. The primary purpose of this study is to investigate the influence various topics have upon persuasibility as measured by the Janis and Field format. Because subjects were selected from grades nine through twelve, this study represents a cross-sectional study of persuasibility. Previous studies have failed to test more than one age group or test chronologically continuous age groups. An investigation of the relationship between sex role interests and persuasibility is also undertaken in this study, and emphasis is placed upon determining the correlations between a measure of masculinity and femininity and persuasibility scores. It is hypothesized that if females in our society are socialized to be more susceptible to opinion change, positive correlations would be expected to exist between femininity and persuasibility scores as measured by the Minnesota Multiphasic Personality Inventory and the Janis and Field persuasibility test respectively. Following a similar line of thought, feminine interest preferences and patterns, as measured by the Geist Interest Inventory, would also be anticipated to correlate positively with persuasibility scores. These two correlational procedures are utilized in an attempt to determine the direction and degree of relationship between a subject's general sex role orientation and interest patterns and persuasibility. Previous persuasibility studies have not

included these types of measurements within their design. Finally, the present study looks at the relationship between two reading abilities and persuasibility. All of the previous researchers who have utilized the Janis and Field format have failed to report the reading levels of the subjects involved in their studies. Since the Janis and Field format involves reading one page articles and because initial sex differences in reading ability may be present in the sample of subjects being evaluated, the investigator believes that an analysis of this type should be included in the present study. If sex differences did exist in reading ability, any sex differences in persuasibility should be viewed cautiously because the persuasibility measure involves having the subjects read written communications. The two areas that were utilized in these reading comparisons were word recognition and passage comprehension as measured by the Woodcock Reading Mastery Tests.

The results of this investigation should provide some information concerning the viability of the general unbounded persuasibility trait proposed by several researchers. The theorized unbounded persuasibility trait doctrine will either be strengthened or weakened by the results of this investigation which challenges the idea that such a global trait exists. Implications for future research in this area would include a search for what

DeGroot called "negative proof" in an attempt to support this theory. The findings should be of interest to researchers who are challenging existing scientific paradigms and individuals who are interested in comprehending the nature of sex differences in social influence susceptibility.

CHAPTER II

METHODOLOGY

Overview of the Study

This study was designed to investigate four issues as explained below.

- (1) The effect upon sex differences in persuasibility, of systematically varying the masculinity and femininity of the topics of interest presented in the Janis and Field type persuasive communications was examined.
- (2) The cross age trends of sex differences in persuasibility, as measured by the Janis and Field method, were investigated by testing freshman, sophomore, junior, and senior high school students.
- (3) The relationship between masculinity and femininity interest patterns and persuasibility was examined by utilizing the Minnesota Multiphasic Personality Inventory and the Geist Picture Interest Inventory.
- (4) The relationships between persuasibility and word recognition and passage comprehension reading abilities, as measured by the Woodcock Reading Mastery Tests, were also investigated.

This study was conducted in the Byron High School in Byron, Michigan, a community of approximately one thousand inhabitants. Byron is primarily an agricultural and farming community located sixteen miles southeast of Flint and thirty-one miles northeast of Lansing. In the class of 1975, approximately 14 percent of the graduates continued their education at four year institutions of higher learning. The majority of the students graduating from Byron High School attend some type of two year professional school, find employment directly, or enlist in the armed forces. Within the past five years, Byron has experienced an influx of citizens from the metropolitan areas of Flint and Detroit. The average level of academic achievement of the Byron area students has generally been within the state's average range as determined by state assessment procedures.

As part of the validation procedure for the masculine and feminine oriented forms of the persuasibility test, approximately fifty students from the Corunna, Michigan High School served as judges. Corunna, like Byron, is located in Shiawassee County. The general economic, social, educational, and cultural background of the Corunna students closely resembles the characteristics of the Byron students. Additionally, a group of Michigan State University undergraduate and graduate Education 200 students were utilized to judge the masculinity and

femininity of the interest areas presented in the Geist Picture Interest Inventory. These judges were 1974 summer term students who were pursuing a teaching career and who were enrolled in Education 200 as a part of the teacher certification procedure.

Hypotheses

Based on the review of the literature presented in Chapter I, it has been suggested that sex differences in persuasibility do exist when the Janis and Field method is utilized. These differences have typically been illustrated between eleventh grade males and females while younger and older subjects have not demonstrated these persuasibility sex score differences. As a result of these research findings, the present study was designed to examine the nature of the previously explained sex differences. A variety of specific sex oriented topics, two independent measures of masculinity and femininity, and a reading achievement test were used to establish the following hypotheses concerning sex differences in persuasibility. In the hypotheses presented below, Form O includes the original Janis and Field articles, Form M includes the masculine interest topic articles, and Form F includes the feminine interest topic articles which are presented in Appendix I.

- (1) Sex and form of persuasibility test will interact on persuasibility scores such that the male subjects will receive higher persuasibility scores

than the female subjects on Form F. Similarly, the female subjects will receive higher persuasibility scores than the male subjects on Form M.

- (2) The interaction effects between sex and form of test stated in hypothesis 1 will be manifested across all four grade levels included in the study.
- (3) Femininity, as measured by the Minnesota Multiphasic Personality Inventory and the Geist Picture Interest Inventory, will correlate positively with persuasibility scores for both the male and female subjects.
- (4) Word recognition and passage comprehension skills as measured by the Woodcock Reading Mastery Tests, Form A, will correlate positively with persuasibility scores for both sexes.

Schedule of Experimental Procedures

The research procedures are presented in graphic form in Figure 2.1. The total research schedule was completed during the period of June 1974 to July 1975. The various components of the experiment were completed according to the following schedule.

- (1) The modified forms of the Janis and Field persuasibility test were written during June and July 1974.
- (2) The masculinity and/or femininity of the Geist Interest areas was judged by Michigan State University Education students during August 1974.
- (3) The sampling and assignment of the Byron High School students to treatment groups was completed in October 1974.

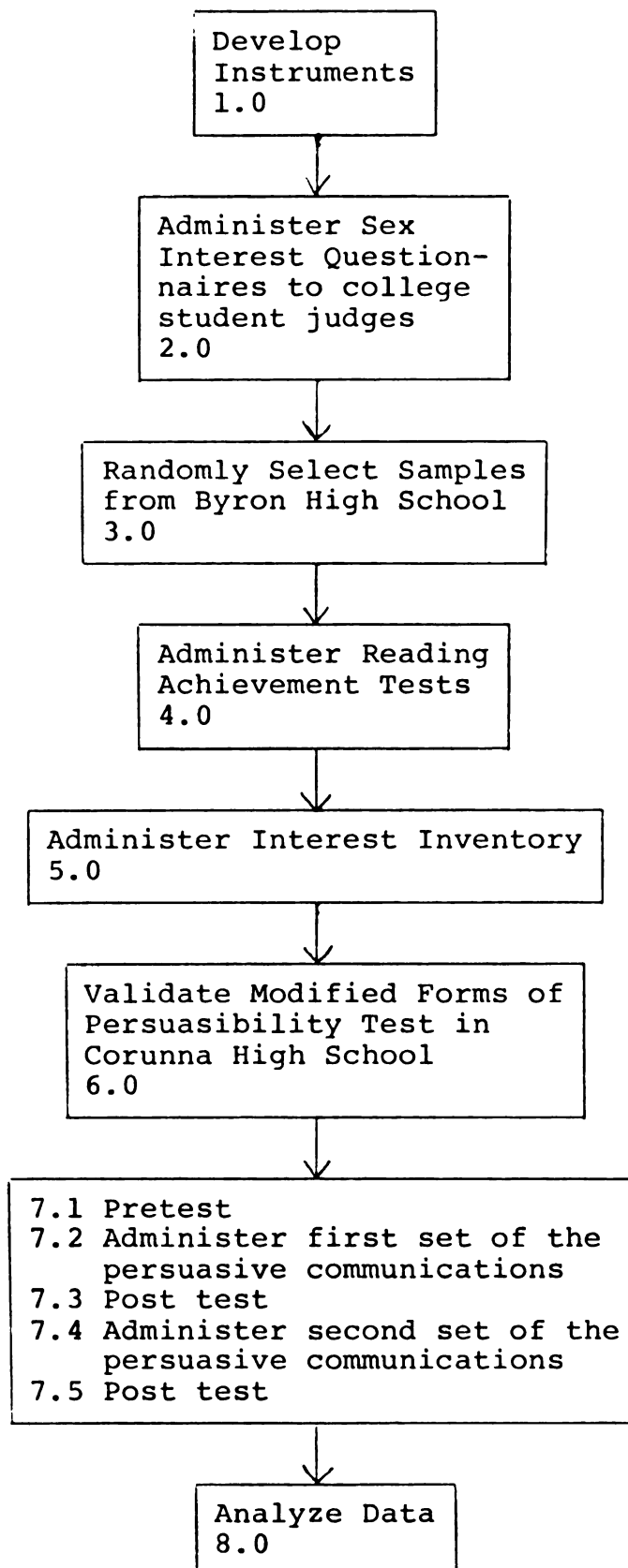


Fig. 2.1.--Outline for experimental procedure.

- (4) Reading achievement testing with the Byron High School students was conducted in November 1974.
- (5) The Minnesota Multiphasic Personality Inventory masculinity/femininity scale and the Geist Picture Interest Inventory were administered to the Byron eleventh grade subjects in January 1975.
- (6) The masculine and feminine orientations of the topics presented on the modified forms of the persuasibility test were judged by the Corunna High School students in February 1975.
- (7) The persuasibility tests were administered during March and April of 1975.
- (8) Scoring and data analysis procedures were conducted during May, June and July of 1975.

Subjects

The subjects tested in this study included Byron High School students from the ninth, tenth, eleventh and twelfth grades. These students were selected at random from the total school population as listed in the attendance records as of October 1, 1974. Strict age and grade guidelines were established to insure that each grade sampled included only students within the appropriate age ranges for a particular grade level. Therefore, students who were younger or older than their grade level classmates at the time of the persuasibility testing were excluded from the study. There were 22 students who were excluded from

selection in this study because of their age; the total school population prior to these exclusions was 374. Also, students who had been legally placed in a special education resource room or a mentally impaired classroom were not included in this study. The total number of students excluded from the study because of this type of educational placement was eight. The result of these subject selection guidelines was that only ninth grade subjects who were within the fourteen to fifteen year age range at the time of the testing were included within the ninth grade sample. Correspondingly, the tenth graders were all within the fifteen to sixteen age range, the eleventh graders were all within the sixteen to seventeen age range and the twelfth graders were all within the seventeen to eighteen year old age range.

Each subject was assigned a number from one to three hundred and forty four and with the use of random number tables seventy-two students from each grade level were assigned to a treatment group. A stratified random sample was conducted to ensure that an equal number of male and female subjects were drawn from each grade level. Within each sex, by grade level classification, subjects were randomly placed in one of the three treatment groups depending upon whether they received the original form of the Janis and Field persuasibility test or the modified masculine or feminine oriented forms of the persuasibility

test. The design of the study is presented in graphic form in Figure 2.2. It was originally intended that each sex, by grade, by form of test cell would include twelve subjects, but due to differing class sizes and student relocations, this goal was not achieved. The twelfth grade girls numbered thirty, and as a result, only ten subjects per cell could be maintained. Therefore, the total number of potential subjects to be tested across all four grade levels included 280 subjects instead of the proposed 288 subjects. Included in the original sample, which was drawn in October 1974, were six students who had either moved or quit school. These subjects were replaced by the use of the random number selection procedure until the testing began. Once the testing started, there were no additional student substitutions.

Treatment

The general testing procedures utilized in this study were identical to the Janis and Field techniques which were employed in earlier persuasibility studies. Basically, there were three forms of the persuasibility test. The original Janis and Field communication topics were used along with two modified forms of the test. One of the modified tests included topics related to masculine knowledge and interests, and the second modified test included topics related to feminine knowledge and interests. Subjects were assigned at random to one of these three

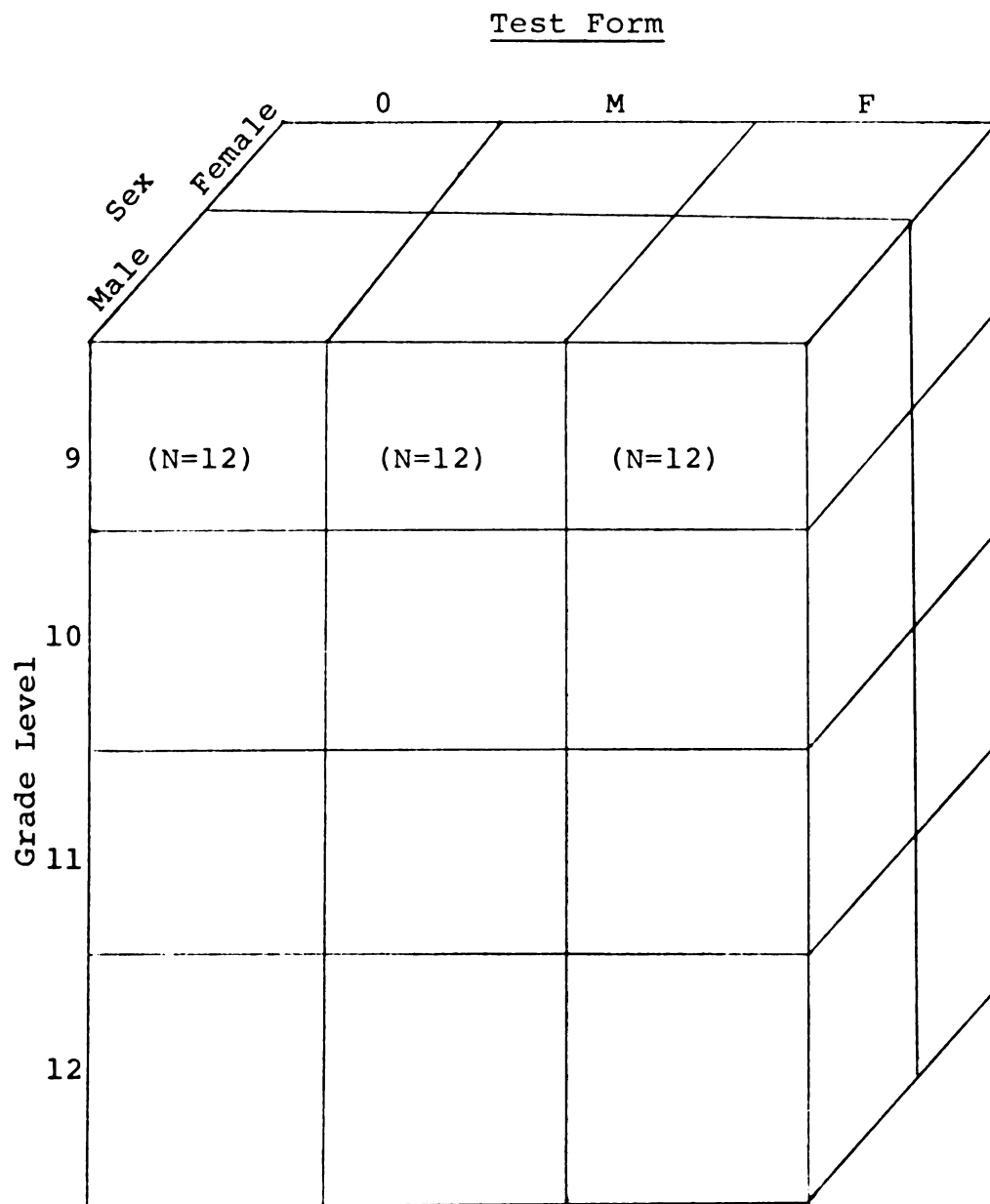


Fig. 2.2.--Design matrix for persuasibility study.

different persuasibility measures. The first step in this procedure was a pre test that asked the subjects to answer three opinion questions on each of five different topics which might commonly be found in the news. After these questions were answered, the subjects were asked to read five one page articles that presented one opinion for each topic, and immediately after each reading, the subjects were asked to answer the same opinion questions which were presented in the initial questionnaire. Approximately one week later, the subjects were exposed to a second set of five articles on the same topics but this time the articles presented the opposite opinions. Finally, immediately after reading each article, the subjects were again asked to answer the opinion questions. The primary independent variable manipulated by the investigator was the form of the persuasibility test administered to the subjects.

The large group testing sessions were conducted in the Byron High School cafeteria during the first two morning class periods. The subjects were seated at pre-arranged tables with the test materials placed in front of them, and the investigator read the instructions presented in Appendix I over a mobile microphone set which was placed at the front of the cafeteria. The April 2 testing was conducted three days after the Byron students had returned from their one week spring vacation. Twelve student monitors, who had completed the testing one week

prior to the spring vacation, were utilized by the investigator to insure that the subjects filled in all of the questions presented on the three forms of the questionnaire. The twelve student monitors were students from the Byron High School college algebra class, and they were not told of the nature of the study until after they had completed the testing themselves. The original Janis and Field persuasibility study included subjects who failed to fill in all of the blanks on some of the opinion questions, and a prorating system was devised to correct for the missing data. In the present study, students who failed to fill in all opinion question blanks were not included in the study. Because the student monitors encouraged completion of all the questions, only three subjects had to be excluded because of missing data. The three subjects included a tenth grade girl, an eleventh grade boy and twelfth grade boy. Subjects who were absent or unable to attend the large group testing sessions were tested as soon as possible in either small group or individual sessions. Approximately 12 to 15 percent of the students on each major testing date were absent and had to be tested on succeeding days.

The time period between the first testing session and the second testing session was initially designed to be one week. The original time schedule for the present study planned for the eleventh and twelfth graders to be

tested on April 2 and April 9, with the ninth and tenth grade subjects being tested on April 3 and again on April 10. However, due to a heavy snowfall, the Byron area schools were closed on April 3 and 4, and as a result of these closings the ninth and tenth graders were tested on April 10 and 17. The investigator anticipated some absenteeisms and scheduling conflicts and established two specific guidelines prior to the first testing session on April 4, 1975.

The first time guideline stated that no testing would be conducted after May 1, 1975, to keep peer influence on untested subjects to a minimum and to avoid conflicts with other school scheduling commitments. Of the 280 subjects who were included in the study on April 3, 1975, six subjects were removed from the study because they were unable to complete one or both of the tests within the thirty day time period. A breakdown of the characteristics of these six subjects indicate that three boys, one each in the ninth, tenth and eleventh grades, were not tested because they had moved or left school. One tenth grade girl was excused because of illness, and one twelfth grade boy was not tested due to a scheduling conflict with a vocational training program. Finally, one tenth grade boy was not tested because of an error in his name on the list of students to be involved in the study.

The second time guideline established for the present investigation concerned the range of days allowed between the first and second persuasibility testings. The time period of seven days between testings was not achieved for all subjects due to illnesses, early and extended spring vacations, and scheduling conflicts, and as a result, a time period of plus or minus four days was established as an acceptable period between testings. This guideline excluded subjects who were unable to take the second test within a period of three to eleven days after the first test. Of the original 280 subjects included in the study, five subjects were excluded because the tests could not be completed within the eleven day period. These five students included two ninth grade boys, two tenth grade boys and one twelfth grade boy. Illnesses accounted for these subjects missing their testing dates.

The total breakdown of the time periods between testings for all of the subjects sampled is presented in Table 2.1. The total number of subjects remaining in the study after all guidelines were taken into consideration was 266.

Measuring Instrument

The original persuasibility test, which was utilized in the present study, was developed by Janis and Field in 1956. Janis and Field were interested in developing a new behavioral and objective assessment of persuasibility

Table 2.1.--Breakdown of days between test administrations for the total sample.

Grade	Days Between Tests							Total Number of Students
	3	4	5	6	7	8	9	
9	0	0	0	1	63	5	0	69
10	0	0	0	1	62	3	0	66
11	1	6	0	0	49	12	0	68
12	0	4	0	2	43	14	0	63
Total	1	10	0	4	217	34	0	266

because of the limited characteristics of previous measures of general persuasibility. The small number of communications, relatively homogeneous argumentations and types of persuasive appeal limited the scope of generality of earlier persuasibility instruments, and in an attempt to overcome these limitations, Janis and Field developed a multi-topic, multi-argumentative and multi-appeal instrument. The method utilized in this instrument follows the Janis and Field method and includes several specific steps. During the first testing session, the subjects are given an initial opinion questionnaire which is followed by a series of persuasive communications and then they are given the opinion questionnaire again. During the second testing session, the subjects are given another set of communications, taking the opposite position of the first communications but dealing with the same topic, and finally, the opinion questionnaire is again given. The basic experimental procedure is presented in Figure 2.3. It should be noted that the same opinion questionnaire is used at all three opinion check points.

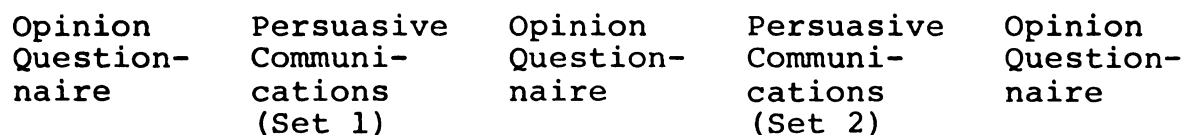


Fig. 2.3.--Experimental procedure for measuring persuasibility.

The persuasibility test consists of three components: (1) the initial questionnaire, designed to measure initial opinion on fifteen different items; (2) Booklet I, containing five persuasive communications on five topics each of which is followed by the three pertinent questions from the initial questionnaire; and (3) Booklet II, a second set of five persuasive communications on the same topics as the first series. After each communication in Booklet II the subjects are given the same opinion questions they answered earlier in both the initial questionnaire and after each article in Booklet I. Thus, at three different times, the subjects are asked to express their opinions: first, before any communication is presented, a second time after reading the initial set of communications (Booklet I), and a third time after reading an opposing set of communications (Booklet II).

In Booklet I, the articles present various types of arguments and persuasive appeals in support of the following main conclusions:

- (1) The U.S. Civil Defense organization should be greatly expanded--to include 25 million men and women.
- (2) An effective cure for cancer can be achieved within one or two years if an all-out research effort is made; about 50 percent of all medical research specialists should concentrate on this task.

- (3) General Von Hindenburg, president of the German Republic after the First World War, was a democratic leader and a great statesman.
- (4) Radio stations should (and soon will) cut down on the amount of classical music they dish out because it is dull stuff, strictly for the long-haired highbrows and stuffed shirts.
- (5) Jack O'Keefe, a corny comedian who is trying to break into TV, is not worth watching, and his TV show will be a complete flop.

In Booklet II, the same types of argumentation and persuasive appeal are utilized to support the opposite conclusions. These are:

- (1) The Civil Defense organization should be cut down to about 2,000 well-trained people so our main defense effort can be concentrated on using our air power.
- (2) A cure for cancer cannot be expected for at least 30 years, and it would be a mistake to take scientists away from other, more promising tasks to work on this one.
- (3) General Von Hindenburg was basically a Prussian tyrant who aided Hitler.
- (4) Classical music appreciation is growing in the United States, and predictions are that much more classical music will be played on the radio.

- (5) Jack O'Keefe, a new star, is planning a smash review on one of the TV networks. Jack is proclaimed to be one of the best comedians to come along in years.

These topics indicate that Janis and Field were interested in developing communications from a variety of diverse topics, and in utilizing a variety of special persuasive appeals. An attempt was made by Janis and Field (1956) to include representative examples of major types of persuasive appeals currently found in mass media communications, ranging from the logical argumentation employed in the cancer research communications to the hyperbolic stereotyped language in the articles about the television comedian. Table 2.2 summarizes the Janis and Field topics and the main appeals utilized in each set of persuasive communications. Care was also taken by Janis and Field to avoid a possible confounding dimension such as a consistent "liberal" or "intellectual" position or a consistent tendency to believe the good or bad about people. By presenting both the pro and con positions on each communication issue and including scores from both sets of articles in the total persuasibility score, specific ideological predispositions were considered to be counterbalanced. The rationale was that a person agreeing with both the pro and con communications on a given issue would be doing so not because of some specific ideological

Table 2.2.--Subject matter and special appeals used in the original persuasibility test communications.

Topic	Communicator's Position: Booklet I Booklet II	Special Appeal Used in Pro and Con Communications
1. Public participation in civil defense effort	Pro	Fear-arousing threat statements (e.g., danger of unpreparedness, destructiveness of atomic warfare)
2. Expansion of cancer research	Pro	Logical arguments and specialized information (citing expert scientific opinion)
3. General Von Hindenburg	Pro	Stereotyped characterizations (overidealized hero or exaggerated villain)
4. Classical music	Con	Social incentives (predictions that the given preference will be a means of attaining social approval)
5. A new television comedian	Con	Hedonic incentives (predictions that the given choice will lead to enjoyment or nonenjoyment)

preference for one side of the issue, but probably because of a general tendency to accept communications regardless of the initial attractiveness of their conclusions.

Table 2.2 presents the order of presentation of the pro and con articles for each set of communications.

Another concern was the position taken in each article. Janis and Field took what they referred to as "sufficiently extreme" positions to ensure that few of the subjects would completely agree with the positions advocated by the communications. By presenting extreme and controversial positions, the authors attempted to avoid communications which might be completely accepted or rejected by all of the subjects. A final element of the persuasibility test should also be mentioned. Janis and Field were concerned with an unbounded general persuasibility trait, which is to some extent effected by previous subject knowledge or familiarity. Two relatively unfamiliar communications were included within the test because the authors hypothesized that unstructured topics (i.e., those for which initial opinions are not based upon familiarity with the nature of the issue or on prior information about the pros and cons) would be the best indicators of general persuasibility. The Von Hindenburg and the fictitious television comedian articles are the two most unstructured communications presented in the original Janis and Field persuasibility test.

The persuasibility scores obtained from the test are based on a total of thirty questions (three questions for each of the ten communications). A persuasibility score is assigned to each individual to represent his opinion changes in response to the communications in the two booklets. The scoring is based upon an ordinal type scale in which only the direction of change is recorded and totaled to determine each subject's persuasibility score. Janis and Field adopted this procedure for scoring due to their belief that there is no simple way to equate the magnitude of change on one question with that on another question, especially since approximately half the questions required the subjects to express their opinions as quantitative estimates while the rest of the questions required the subjects to place a check opposite one of the verbal answer categories presented in a check list.

The actual scoring procedures are as follows. A baseline of each subject's opinions on each of five topics is determined by the Initial Questionnaire which is administered prior to the subjects reading any of the persuasive communications. After each article in Booklet I, the three questions on the respective topic are again answered by the subjects. These fifteen questions account for the first half of the total persuasibility score. A subject receives a score (one point) for persuasibility if his response to a question in Booklet I moves in the direction

of the persuasive communication relative to the initial questionnaire, which is utilized as the subject's base opinion position. The scoring of the opinion change following Booklet II is somewhat more complex. Due to a possible regression effect, as the result of forgetting or other processes, the simple directional method utilized for Booklet I must be modified. Without modifying the scoring system, it might be possible to observe a change in opinion even without an intervening opposing communication. To minimize this source of error, the criterion for change after Booklet II is defined as a shift from the answer given on the initial questionnaire. For example, if a subject shows a positive change following the Booklet I communication, then, following the Booklet II communication, the subject would have to change all the way back to his/her original position, and beyond, to be scored (one point) as having changed in the direction of the latter communication. The final fifteen questions presented in Booklet II account for the final half of the thirty item persuasibility scale. The entire set of persuasive articles and opinion questions for the original form of the Janis and Field instrument are presented in Appendix I. Also presented in Appendix I are the oral and verbal directions given to the subjects prior to each testing session.

The Modified Persuasibility Forms

One of the empirical questions generated by the present study concerned the masculinity and femininity of the topics presented in the persuasive communications. In an attempt to ascertain the effect of the type of topic on persuasibility, two modified forms of the original Janis and Field Test were developed. To avoid confusion, the original Janis and Field Test will be referred to as Form O; the masculine modification of the test will be referred to as Form M, and the feminine revision of the original test will be labeled as Form F. Forms M and F are both modeled completely after the original Form O. The identical writing styles, special appeals, pro-con presentations and extreme positions are employed in both Forms M and F. Table 2.2 reviews these characteristics, which are similar for the three forms of the persuasibility test. The only variable which was purposefully altered between Forms O, M and F was the masculinity-femininity of the topics presented. Form M utilizes topics which have been traditionally associated with male occupations and male interests. Form F presents persuasive communications which concern occupations and interests predominantly associated with females.

Booklet I of Form M presents persuasive communications in support of the following conclusions:

- (1) The U.S. military organization should be greatly expanded to include 4 million men.
- (2) An effective cure for "black lung" disease in male coal miners can be achieved within one or two years if an all-out research is made; a greater percent of medical research specialists should concentrate on this task.
- (3) King Arthur, the English ruler during the Round Table era, was a democratic leader and great statesman.
- (4) Radio stations should (and soon will) cut down on the amount of business and financial news they dish out because it is dull stuff, strictly for long-haired highbrows and stuffed shirts.
- (5) Jack O'Keefe, a corny male sportscaster who is trying to break into TV, is not worth watching, and his TV show will be a complete flop.

In Booklet II of Form M, the same type of arguments and persuasive appeals are utilized to support the opposite conclusions. The order of pro and con presentations in Form M correspond to the order in the original Janis and Field test which is presented in Table 2.2. In Booklet II, the issue topics are:

- (1) The U.S. military force should be cut down to about one million well-trained men so that our

main defense can be concentrated on developing a large supply of military equipment.

- (2) A cure for "black lung" disease in male miners cannot be expected for at least thirty years, and it would be a mistake to take scientists away from other more promising tasks to work on this one.
- (3) King Arthur was basically an English tyrant who supported war.
- (4) Interest in and appreciation for business news is growing in the United States, and predictions are that much more business reporting will be broadcast on the radio.
- (5) Jack O'Keefe, a new male sports announcer, is planning to broadcast the football games on one of the TV networks. Jack is proclaimed to be one of the best announcers to come along in years.

The articles used in Form M are presented in their entirety in Appendix I, along with the opinion questions utilized to measure opinion change. The same oral directions were given to all subjects regardless of the form of the persuasibility test administered.

Form F followed the same rules as Forms O and M with the exception of the femininity of the topics. Form F presents communications oriented toward traditional women's occupations and interests. The following arguments are presented in Booklet I of Form F.

- (1) The U.S. Registered Nurse organization should be greatly expanded to include 1.5 million women.
- (2) An effective cure for breast cancer in women can be achieved within one or two years if an all-out research effort is made. About 50 percent of all medical research specialists should concentrate on this test.
- (3) Queen Elizabeth I of England was a democratic leader and a great stateswoman.
- (4) Radio stations should (and soon will) cut down on the amount of women's fashion news they dish out because it is dull stuff, strictly for the long-haired highbrows and stuffed shirts.
- (5) Sandra O'Keefe, a corny female actress who is trying to break into TV, is not worth watching, and her TV show will be a complete flop.

In Booklet II of Form F, the same types of argumentation and persuasive appeal are utilized to support the opposite conclusions.

- (1) The female Registered Nurse organization should cut down to about 500,000 well-trained women so that our readiness to handle a major disaster can be staffed by professionals.
- (2) A cure for women's breast cancer cannot be expected for at least thirty years and it would be a mistake

to take scientists away from more promising tasks to work on these diseases.

- (3) Queen Elizabeth I was basically a female tyrant who aided the wealthy.
- (4) Womens' fashion appreciation is growing in the United States, and predictions are much more women's fashion news will be presented on the radio.
- (5) Sandra O'Keefe, a new soap opera actress, is planning to break into television on one of the TV networks afternoon shows. Sandra is proclaimed to be one of the best actresses to come along in years.

Form F of the persuasibility test is presented in Appendix I. Table 2.3 presents a comparison of the communication topics used on all three forms of the persuasibility test.

In addition to the main topic alterations presented in Form M and Form F of the persuasibility instrument, three additional modifications were made in the original Janis and Field format. First, the verbal directions, which preceded the initial questionnaire for all three forms of the test, were condensed from the original Janis and Field directions. This condensation was the result of the investigator's observation that the original directions were longer than necessary and somewhat

Table 2.3.--Communication topics for the three forms of the persuasibility test.

Original Test (Form O)	Masculine Test (Form M)	Feminine Test (Form F)
1. Size of Civil Defense Force	1. Size of Modern Volunteer Army	1. Size of Registered Nurse Force
2. Amount of money spent on cancer research	2. Amount of money spent on black lung research	2. Amount of money spent on research on breast cancer in women
3. General Von Hindenburg	3. King Arthur	3. Queen Elizabeth I
4. Desirability of classical music on the radio	4. Desirability of radio reports on industry and business trends	4. Desirability of women's fashion news on the radio
5. Pro and con critics on fictitious new comedian	5. Pro and con critics on fictitious new male sportscaster.	5. Pro and con critics on new female soap opera actress

redundant. The second alteration involved deleting any discussion of a cure for polio which Janis and Field (1956) had included. Since a cure for polio had not been achieved in 1956, Janis and Field included this topic in their original communication. By deleting the polio issue, the instrument was updated and subject confusion was hopefully avoided. The final modification involved the concern that the sex of the author listed at the top of each communication article might become a confounding variable when the data was analyzed. To avoid this potential difficulty, the first names of the authors were not used, only a first initial and a last name were presented. This change was made across all three forms of the modified persuasibility instrument.

Test Form Reliabilities

When the reliabilities of the three forms of the persuasibility test are examined in Table 2.4, it may be noted that Form M manifested the lowest reliability coefficient relative to Form O and Form F. The reliability

Table 2.4.--Estimated reliability coefficients for the three forms of the persuasibility instrument.

	Form O (N=86)	Form M (N=90)	Form F (N=90)
Reliability coefficient	.76	.53	.63

coefficients presented in Table 2.4 were calculated by the split half procedure and then corrected for length with the Spearman Brown prophecy formula. The original Janis and Field (1956) raw reliability coefficient was found to be .69 with the estimated value of the reliability coefficient to be .81 when corrected by the Spearman Brown formula.

Validation of the Modified Persuasibility Forms

The two modified forms of the original persuasibility instrument presented topics hypothesized to be of interest to males and females. The writing of Form M and Form F entailed a precise replication of the wording and writing presented in Form O. In most instances, only key words were changed while the wording of the original articles remained intact. Wherever possible, the words male and female or men and women were added to Forms M and F respectively. A review of the three forms, which are presented in Appendix I, will indicate the similarity in wording and style that was present across all three forms of the persuasibility measure. In an attempt to verify the consistency of the wording across the different persuasibility tests for each set of articles, two independent judges were asked to read the articles. One judge was a male English instructor at Michigan State University, and the second judge was a free lance female writer from

the metropolitan Detroit area. Both judges read all of the articles to verify that the wording and the writing style were consistent across corresponding articles presented in each respective form of the persuasibility test.

A second validation procedure involved determining the masculine and feminine orientations of the topics presented in Form M and Form F respectively. It was important to determine empirically if the topics presented in Form M were truly more male oriented than the corresponding topics which were presented in Form F. The content validity of Forms M and F was determined by asking high-school students to judge the various communication topics. The fifty-two student judges, twenty-six boys and twenty-six girls, were drawn from two Corunna High School English literature classes. These judges ranged in age from sixteen to eighteen years and in grade level from the tenth to the twelfth grade. Approximately 81 percent of the student judges were sixteen to seventeen years old and eleventh grade students.

The specific steps employed in this validation procedure involved asking the judges to read the twenty articles which were utilized in Form M and Form F of the persuasibility test. The twenty articles were presented in ten topic sets, each containing the pro and con articles for a particular topic. For example, the first set of articles the judges were asked to read contained the article suggesting a decrease in fashion reporting and the

article suggesting an increase in fashion news reporting. The order of presentation of the ten topic sets was randomly determined. This prevented the judges from reading all of the masculine topics prior to reading all of the feminine topics or vice versa. The order of opinions presented within each set corresponds to the order in the questionnaires presented in Appendix I.

After reading each two-article set, the student judges were asked to respond to three questions concerning each topic. The total questionnaire is presented in its entirety in Appendix II. Each question involved having the student judge rank his or her answer on a five point scale ranging from one, which represented definitely men, through five which represented definitely women. For the first response, the judges were asked to rank their answer to the question about whether men or women would probably be more interested in reading about the particular topic. On the second question, the judges were asked to rate which sex would probably know the most about the particular topic discussed in the previous articles, and the final question for each topic set asked the judges to indicate which group, men or women, would probably be most easily influenced by reading the articles on the particular topic.

The statistical procedure employed in this topic validation stage involved a comparison between the rankings of corresponding masculine and feminine topics. The basic

technique involved subtracting the masculine topic ranking from the feminine topic ranking on each question for each judge. The topics compared in this manner are listed in Table 2.3. For example, the ranking given by each judge concerning the interest question for topic 1 of Form M was subtracted from the ranking given by that same judge on the interest question concerning topic 1 of Form F. In other words, for each judge the ranking of which sex would be most interested in the size of the male armed force was subtracted from the ranking of which sex would probably be most interested in the size of the female nurse force. This feminine minus masculine ranking of topics for each of the fifty-two judges was computed across all three questions in all ten sets of topic articles; the results of this statistical comparison are presented in Tables 2.5, 2.6, and 2.7.

Table 2.5.--Comparison of topics in terms of male vs. female interest.

Topic Comparisons	Mean Difference
(F1) - (M1)	1.846**
(F2) - (M2)	1.962**
(F3) - (M3)	.846**
(F4) - (M4)	1.577**
(F5) - (M5)	2.731**

**Significant at the .01 level.

Table 2.6.--Comparison of topics in terms of male vs.
female knowledge.

Topic Comparisons	Mean Difference
(F1) - (M1)	2.231**
(F2) - (M2)	2.000**
(F3) - (M3)	.500**
(F4) - (M4)	2.423**
(F5) - (M5)	2.808**

**Significant at the .01 level.

Table 2.7.--Comparison of topics in terms of male vs.
female persuasibility.

Topic Comparisons	Mean Difference
(F1) - (M1)	1.731**
(F2) - (M2)	1.577**
(F3) - (M3)	.038
(F4) - (M4)	1.308**
(F5) - (M5)	2.500**

**Significant at the .01 level.

In Tables 2.5, 2.6, and 2.7, the letters M and F represent Form M and F respectively, and the numbers following M and F represent the specific article numbers which correspond to the topics presented in Table 2.3. The mean difference in each table was statistically examined to determine if the respective value differed from zero. A mean difference of zero would indicate that the judges did not rank the topics differently in terms of masculinity or femininity. A negative mean difference would indicate that the judges ranked the Form F topics as being more masculine than the corresponding Form M topics while a positive mean difference would indicate that the judges ranked the Form F topics as being more feminine than the corresponding Form M topics.

The mean differences presented in Table 2.5 concern the issue of which sex would probably be most interested in reading about a particular topic. The results indicate that all of the mean differences are positive and significantly different from zero at the .01 level of significance. Table 2.5 confirms the statements that the topics presented in Form F would be of more interest to females than to males and that the topics presented in Form M would be of more interest to males than to females.

The mean differences presented in Table 2.6 focus upon the issue concerning which sex would probably know the most about a given subject or topic. The results

indicate that all of the mean differences are positive and significantly different from zero at the .01 level. These results support the belief that females would probably know more than males about the topics presented in Form F and that males would probably know more than females about the topics presented in Form M.

The issue concerning which sex would probably be more easily influenced by the articles was not a key component in the validation of the modified instruments. The judges were asked to respond to this question for all of the articles in an attempt to compare the student judges opinions with the hypothesis expressed in the present study. It is interesting to note that the student judges responded in a direction opposite to that of the sex by form interaction hypothesis suggested by the investigator. With the exception of the (F3) - (M3) comparison, the student judges predicted that females would be more easily influenced by all of the topics. Table 2.7 presents the mean differences, and all are significant at the .01 level except the third comparison which related to the Queen Elizabeth-King Arthur comparison.

Relating Masculine and Feminine Interest Patterns and Persuasibility

An issue investigated in the present study which relates directly to the boundness or unboundness of persuasibility tendencies concerned the relationship between

traditional measures of masculine and feminine interests and persuasibility. If persuasibility is truly an unbounded characteristic, correlations between persuasibility scores and masculine and/or feminine scores should remain consistent across all types of interest topics. If, on the other hand, persuasibility is bound to the type of topic being presented, the correlations should manifest a different pattern, with masculine interests correlating positively with persuasibility on feminine topics and negatively on masculine topics. Female interest patterns should illustrate a similar type of pattern with feminine interests, correlating negatively with persuasibility on the feminine topics and positively on the masculine topics.

The eleventh grade subjects in the present study were used in an attempt to ascertain the degree of relationship between traditional interest orientations and persuasibility. Two specific instruments were utilized as a means of determining each eleventh grade student's masculine and/or feminine orientation. The first instrument was a truncated version of the masculinity/femininity scale of the Minnesota Multiphasic Personality Inventory. The modified version of this scale is presented in Appendix III along with the instructions given to the subjects for completing this questionnaire. The questionnaire includes forty-two of the original sixty true/false questions present on the complete MMPI scale. The

questions which were deleted included the MMPI item numbers 28, 69, 74, 115, 133, 179, 187, 203, 204, 214, 226, 231, 239, 249, 260, 262, 282, 297. These items were deleted because of the investigator's belief that these questions measured personal information, and as a result of these types of questions, the students might have reacted negatively to these items during a one time testing session. The forty-two items included in the questionnaire were scored on an ordinal scale with higher scores representing more feminine interests and lower scores more masculine oriented interests and concerns. By including the MMPI scale, masculinity and femininity could be judged from a single questionnaire and direct comparisons of masculine and feminine interest patterns could be determined.

A second method of measuring the masculinity and femininity of interest patterns was also employed in the present study. The eleventh grade Byron subjects were administered the Geist Picture Interest Inventory after they had completed the MMPI questionnaire. The Geist Inventory is a standardized interest inventory which directs the subjects to choose one picture from a set of three pictures. Each picture depicts a specific type of work or job activity and the subject is asked to make a preference as to the activity he or she would be most interested in doing. The male form of the inventory includes forty-four items and samples job listings from

eleven different interest areas. These interest areas are listed in Appendix IV. The personal service interest area is included only on the female form of the inventory. The female form of the Geist Inventory is comprised of twenty-seven item choices, depicting the twelve interest areas presented in Appendix IV.

Prior to administering the Geist Inventory to the Byron eleventh grade subjects, it was necessary to independently determine which interest areas were judged to be relatively masculine and which areas were judged to be relatively feminine. One hundred and twenty one 1974 summer term Michigan State University undergraduate and graduate education students were utilized as judges and were given the questionnaire presented in Appendix IV. The definitions of the twelve interest areas presented in this questionnaire were taken directly from the Geist manual. Each judge was asked to indicate his or her sex, age group and educational status. This biographical information for the 121 judges is presented in Appendix V. The judges were then asked to determine, for each of the twelve Geist interest areas, whether the areas were more related to masculine or feminine interests. An additional option was to rank an interest area as being of interest to both males and females. The data concerning the ratings of the twelve interest areas is also presented in Appendix V.

A weighting system was then established based upon the judgments made by the Michigan State University judges. The opinions expressed by the male and female groups of judges were tabulated separately, and a weighted scoring was formulated by employing the top four masculine and the top four feminine interest areas for each group. The four most masculine and feminine interest areas, as determined by the male judges, is presented in Table 2.8. The corresponding data for the female judges is presented in Table 2.9. A complete description of the judges ratings for all the Geist Interest areas is presented in Appendix V.

Points were assigned to each of the four key interest areas, and these point assignments are also presented in Tables 2.8 and 2.9. Each Byron eleventh grader's Geist Picture Interest Inventory scores were evaluated in terms of his or her scores on the key masculine and feminine interest areas. The Geist norms tables utilized the T

Table 2.8.--Weighting of the 4 highest masculine and feminine interest areas as determined by the 38 university male judges.

Masculine Interest Areas		Feminine Interest Areas	
Mechanical	- 8	Clerical	- 8
Persuasive	- 6	Social Service	- 6
Computational	- 4	Dramatic	- 4
Scientific	- 2	Artistic	- 2

Table 2.9.--Weighting of the 4 highest masculine and feminine interest areas as determined by the 83 university female judges.

Masculine Interest Areas		Feminine Interest Areas	
Mechanical	- 8	Clerical	- 8
Computational	- 6	Social Service	- 6
Scientific	- 4	Personal Service	- 4
Persuasive	- 2	Literary	- 1
		Artistic	- 1

score method for comparing the relative strength and weakness of the twelve interest areas. In the present study, a T score of plus or minus one standard deviation from the mean on any of the key masculine and/or feminine interest areas was utilized in the weighted scoring. The actual scoring system included the following steps.

- (1) Each Byron eleventh grade student was given a score of forty.
- (2) If a student scored plus one standard deviation above the mean on a key feminine area or minus one standard deviation below the mean on a key masculine area points were added to his initial score of forty. The number of points added corresponded to the weighted points assigned to the particular interest area.

- (3) If a student scored one standard deviation above the mean on a key masculine area or one standard deviation below the mean on a key feminine interest area the corresponding number of points was subtracted from the original score of forty.
- (4) The net result of this weighting procedure was a Geist masculinity/femininity score for each subject falling within a zero to eighty potential point range. The higher the score the more feminine the interest pattern and the lower the score the more masculine the interest pattern.

Assessing the Relationship Between
Reading Abilities and
Persuasibility

Considering the nature of the persuasibility test utilized in the present study, it was decided that an important feature to investigate would be the reading ability of the subjects. In the present study, an estimate of the reading abilities of the sexes was made. Reading achievement was measured by The Woodcock Reading Mastery Tests which tested two specific reading abilities. The subjects were tested on their word recognition skills and their passage comprehension skills. Previous studies utilizing the Janis and Field persuasibility test have not estimated the reading abilities of the subjects involved in the testing. The scores of the eighty-one subjects who had completed Form O of the persuasibility test and the

Woodcock Reading Tests, in individual testing sessions during November of the same school year, were utilized in this section of the present study. These reading scores were used in a correlational analysis to determine the relationship between reading abilities and persuasibility. Sex differences in the two key reading abilities across all four grade levels were also examined. Finally, t test comparisons were made between persuasibility scores of the top ten and bottom ten word identification and passage comprehension achievers within each sex group.

The reading tests were conducted by a male undergraduate university student. On the word recognition test, each student was presented a list of words and asked to pronounce each word. The basal level was five continuous successes, and the ceiling level was five consecutive failures. The reading comprehension passages were presented in a cloze format with one word missing from each passage (Taylor, 1953). Previous research with the cloze procedure has found that it is reliable and correlates well with standardized reading comprehension tests (Bormuth, 1967; Rankin and Culhane, 1969). The basal level for the reading comprehension test was five consecutive successes and the ceiling was five consecutive failures. The average testing time per student was between fifteen and twenty-five minutes.

Treatment of the Data--Analysis Procedures

The responses of the subjects were analyzed using the analysis of variance for a three factor fixed effects design. The three independent variables were sex, grade level, and form of persuasibility test. The dependent variables were the scores obtained on the three persuasibility measures. In this study, the eleventh grade subjects were also administered the Geist Interest Inventory, and a shortened version of the masculinity/femininity scale on the Minnesota Multiphasic Personality Inventory. These interest and personality scores were correlated with the persuasibility scores for this sampling of subjects. The subjects in grades nine through twelve who were administered the original form of the persuasibility test (Janis and Field, 1956) were also measured on their word recognition and passage comprehension skills. These reading scores were correlated with persuasibility scores. Also, high ability readers were compared with low ability readers for each sex in terms of persuasibility score differences.

The level of significance for testing all hypotheses was set at the .05 level. The Scheffé post hoc technique was performed in those instances where the analysis of variance test revealed significance and comparisons of the groups were necessary. Pearson product moment correlations were performed to obtain correspondence

between persuasibility scores and interest/personality inventory scores and reading ability levels. Testing differences between group means for the reading levels of the two sexes and high and low readers within each sex were performed using a pooled variance t test procedure. This statistical method was employed since the population variances were unknown but presumed equal and n_1 , and/or n_2 were less than thirty.

Summary

This study on sex differences in persuasibility was conducted in a small farming community located in the northeastern portion of the lower peninsula of Michigan. Two hundred and sixty-six Byron, Michigan area high school students from grades nine through twelve participated in the study. Validation procedures for the Geist Inventory and the modified forms of the persuasibility instrument also included the responses of Michigan State University students and Corunna, Michigan high school students.

The design of the study involved a three factor fixed effects model with the key independent variables being sex, grade and form of test. Two modified forms of the original Janis and Field persuasibility test were developed so that Form M presented masculine oriented topics and Form F presented feminine oriented topics. By means of a stratified random sample, male and female

students were assigned to one of the three forms of the persuasibility test in grades nine through twelve.

In addition to the three forms of the persuasibility measure, the eleventh grade subjects were administered the Geist Picture Interest Inventory and a truncated version of the masculinity/femininity scale from the Minnesota Multiphasic Personality Inventory in an attempt to measure interest orientations. The subjects who were administered Form O in grades nine through twelve were also administered the word recognition and passage comprehension subtests of The Woodcock Reading Mastery Tests battery.

Four specific hypotheses were presented. First, the sex by form interaction effect would be such that males would be more easily persuaded relative to females when presented feminine oriented topics, and females would score higher persuasibility scores relative to males when presented masculine oriented persuasive communications. Second, the sex by form interaction effect would be prevalent across all four grade levels. Third, feminine orientation patterns for both sexes would correlate positively with persuasibility scores on Form M and negatively with persuasibility scores on Form F. Fourth, reading achievement levels will correlate positively with persuasibility scores on Form O of the persuasibility instrument.

The data for hypothesis one and two was analyzed using a 2 x 3 x 4 fixed effects analysis of variance procedure. Hypotheses three and four were analyzed by Pearson product moment correlations and t test group mean comparisons. The level of significance for testing the hypothesis was determined at the .05 level.

CHAPTER III

RESULTS AND DISCUSSION

The findings of this study are based upon the data of the three forms of the persuasibility instrument, the interest and personality inventories and the two reading achievement tests. Group differences on the persuasibility instrument were determined by means of a three factor analyses of variance procedure. The relationships between the persuasibility scores, the two inventories, and the reading test scores were calculated by Pearson product moment correlations. Group differences between high and low reading ability subjects on the persuasibility instrument were determined by the pooled variance t test statistical method.

The hypotheses for this study can be divided into four main sections. Part One of this chapter will cover the general hypothesis that sex and form of persuasibility test will interact on persuasibility scores so that males will score higher than females on the feminine oriented persuasibility test and females will score higher than males on the masculine oriented form of the persuasibility test. Part Two will examine the general trends and the

sex difference trends of persuasibility scores across the four grade levels participating in the study. Additionally, this section will examine the sex by form of test interaction across the four grade levels. Part Three will analyze the relationships between persuasibility scores of the eleventh grade subjects and their persuasibility score and the masculine and/or feminine orientations, as measured independently by The Geist Interest Inventory and The Minnesota Multiphasic Personality Inventory masculinity/femininity scales. Part Four will discuss the correlations between reading achievement levels and persuasibility for the subjects who were administered the original form of the Janis and Field persuasibility test.

Analysis of variance techniques for a three factor experiment were used to test the main effects--sex, form of test, grade level and their interactions. This three way analysis of variance was a fixed effects model because the levels of each of the three key variables were either arbitrarily specified (form, grade) by the investigator or the entire population of levels of a variable (sex) was included in the study. The Scheffé post hoc method of comparisons was carried out when significant F ratio differences existed between group means (Hays, 1963). The Michigan State computer programs were utilized in the statistical computations.

Part One--Sex by Form Interaction

The general hypothesis concerning the sex by form interaction stated that males would score higher persuasibility scores than females on feminine oriented topics and females would score higher persuasibility scores than males on the masculine oriented topics. Table 3.1 presents the analysis of variance in this study. Of particular interest, is the fact that when sex differences are measured across all four grades and all three forms of the test, the female subjects scored significantly (.05) higher persuasibility scores than the male subjects. The mean persuasibility score for the male subjects (N=132) was 10.04 and

Table 3.1.--Analysis of variance of persuasibility scores across the two sexes, the four grade levels, and the three forms of the persuasibility test.

Sources of Variance	df	MS	F
Sex	1,242	214.9555	14.3978*
Grade	3,242	30.8509	2.0664
Form	2,242	87.8968	5.8874*
Sex x Grade Interaction	3,242	29.2491	1.9591
Sex x Form Interaction	2,242	51.7730	3.4678*
Grade x Form Interaction	6,242	19.1401	1.2820
Sex x Grade x Form Interaction	6,242	5.6190	.3764

*Significant at .05 level.

the mean persuasibility score for the female subjects (N=134) was 11.84. Also, Table 3.1 indicates that significant (.05) mean differences exist between group means within the sex by form interaction source of variance. A post hoc analysis was calculated utilizing the Scheffé method because this method has the advantages of simplicity and applicability to groups of unequal sizes. In the Scheffé post hoc method, a specific comparison is said to be significant if the lower and upper limits fail to cover zero. Table 3.2 presents the post hoc comparisons for the sex by form interaction source of variance. As Table 3.2 indicates, sex differences for Forms O and M are not significantly different; however the males responding to

Table 3.2.--Post hoc comparisons for the sex by form interaction effect contrasting males with females on similar test forms.

	Males Form O	Males Form M	Males Form F
Females Form O	-4.0342 ¹ .1141 ²		
Females Form M		-2.2318 1.8518	
Females Form F			-5.2693 -1.2107*

¹Lower limits of contrast at .05 level.

²Upper limits of contrast at .05 level.

*Contrast significant at .05 level.

Form F were significantly (.05 level) less persuasible than the females who were administered the same feminine oriented test form. Figure 3.1 represents this sex by form interaction graphically. It is interesting to note that the female subjects maintained a fairly stable persuasibility pattern across all three forms of the test while the male subjects manifested a more irregular pattern. The male subjects who were administered the feminine oriented test yielded less (.05 level of significance) to the persuasive communications than the male subjects who were administered Form O and Form M. These findings do not support or substantiate the first hypothesis offered in this study which states that sex will interact with form of test so that males will score higher persuasibility scores than females on Form F and that females will score higher persuasibility scores than males on Form M. Compared to the male subjects, the female subjects maintained a relatively stable pattern of scores for the three forms. This finding is contrary to the speculation by Maccoby and Jacklin (1974) that an individual is more likely to change his views following a persuasive communication if he is either uninvolved with or uninformed about the issue discussed in the communication. The data indicates that the male subjects tested in the present study actually were less likely to change their views after reading

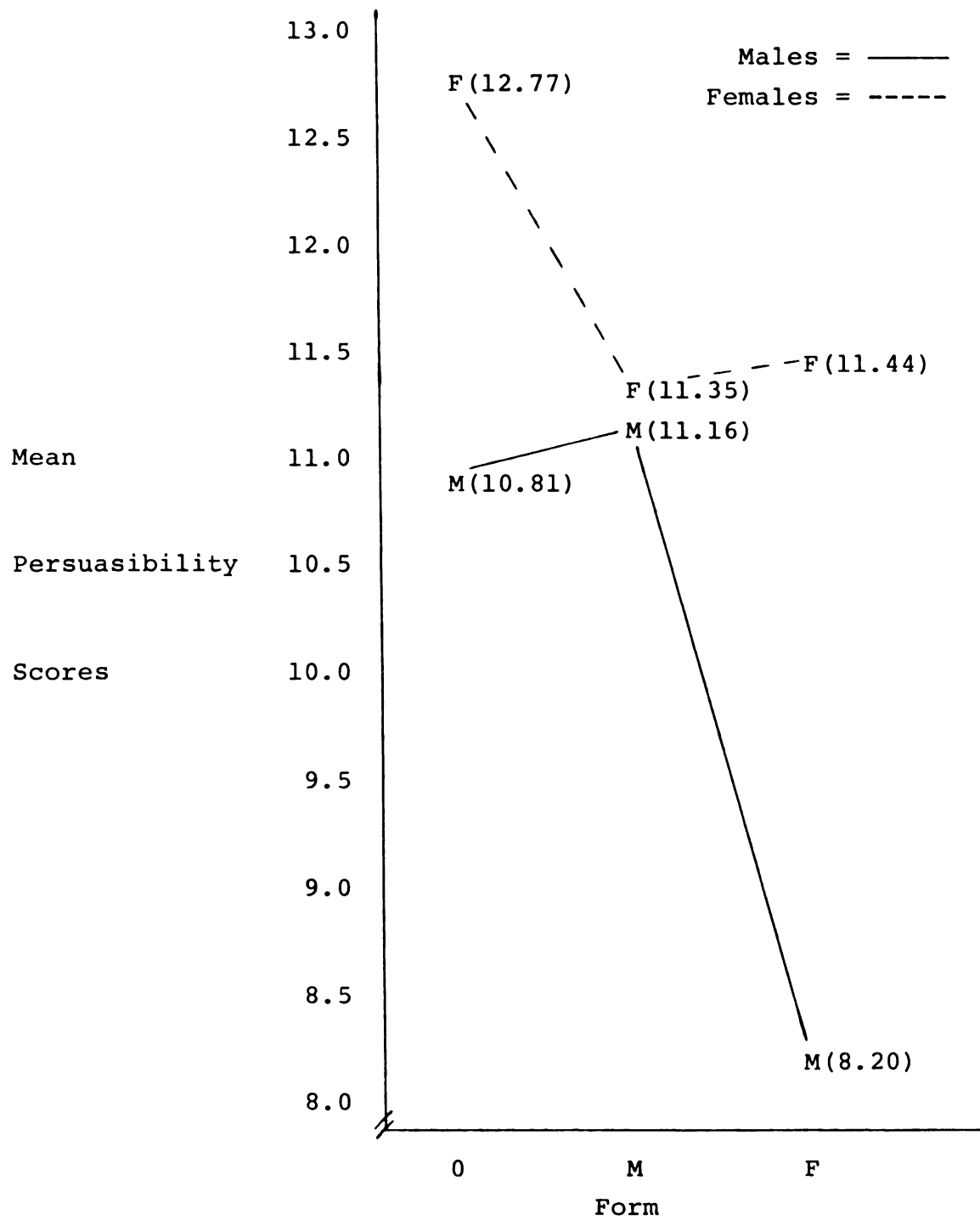


Fig. 3.1.--Sex by form interaction effects.

communication topics with which they probably have little knowledge and/or interest.

The data presented in Table 3.1 also indicates that the three forms of the test were not equal in terms of the group means for the subjects who were administered the respective tests. The mean persuasibility scores for the subjects administered Form O, Form M and Form F were 11.79, 11.26 and 9.82 respectively. The F test analysis of variance procedure indicates group form effect mean differences significant at the .05 level. A post hoc Scheffé analysis, which is presented in Table 3.3, indicates that the subjects who were administered Form F scored significantly lower (.05 level) persuasibility scores than either the subjects who were given Form O or the subjects who were given Form M. This finding appears to be the

Table 3.3.--Post hoc comparisons for group mean differences across the three forms of the persuasibility test.

	Form M	Form F
Form O	-.9000 ¹ .3706 ²	.5400 3.3960*
Form M		.0282 2.8481*

¹Lower limits of contrast at .05 level.

²Upper limits of contrast at .05 level.

*Comparison significant at .05 level.

result of the lower Form F male persuasibility scores observed in the sex by form interaction analysis. It appears that the overall general sex differences in persuasibility in the direction of higher persuasibility scores for the female subjects can also be accounted for by the fact that the male subjects scored significantly lower persuasibility scores on Form F of the test. There was no significant difference between the mean performances of the subjects who responded to Form O and the subjects who responded to Form M.

In summary, Hypothesis I, as presented by the investigator, is not supported by the data. The belief that individuals will be more easily influenced by persuasive communications when they are believed to be less familiar with the topics presented in the communications is not supported by the results of the present study. The females maintained higher persuasibility scores across all three forms of the test although the only significant (.05) level difference appeared on Form F. This significant sex difference on Form F of the present study indicates the males who were administered the female oriented communications were actually less likely to be influenced when they read topics with which they were thought to be less familiar and knowledgeable.

The data available concerning sex difference in socialization offers potential support for and explanation

of the lower persuasibility scores manifested by the male subjects who were administered the feminine oriented topics. Previous research indicates that boys experience more social pressure against inappropriate sex typing and sex role behavior than girls (Maccoby and Jacklin, 1974). Hartup and Moore (1963) found that boys were more likely to avoid inappropriate toys than were girls, noting that this sex difference tendency was more prevalent when an experimenter was present. Lansky (1967) studied parental reactions to hypothetical situations in which a boy or girl chose either a masculine or feminine activity. The results indicated much stronger negative parental reactions for inappropriate sex role behaviors for boys than for girls. Fling and Manosevitz (1972) found similar parental objections when they studied how strongly parents would object to their children engaging in inappropriate sex role behaviors. Likewise, parent interviews conducted by E. Goodenough (1957) indicated that parents, especially fathers, are disturbed by indications of "femininity" in male offspring. The consistent finding appears to be that more social pressure is manifested against inappropriate sex typing in boys than in girls, causing most males to tend to engage in less inappropriate sex role behavior than females. This sex difference tends to be further increased when the males are in the presence of public groups comprised of either peers or adults.

The finding that the male subjects in the present study were less influenced by the feminine oriented topics may, in part, be the result of past cultural sex role orientations which are a part of the male socialization process in our society. It was judged that females would be more interested and knowledgeable than males about the topics on Form F. These characteristics of the topics presented on Form F may have represented less appropriate sex role orientations for the male subjects in the present study, and it might be hypothesized that the male subjects were less influenced by the Form F articles because the articles were more oriented toward feminine interests.

An additional variable involving the sex differences in the amount of restriction placed upon the male or female child may also help explain the lower male persuasibility scores on the feminine oriented communications. This variable probably offers a less direct explanation of this study's findings than does the inappropriate sex role theory presented earlier; however, there is some research which indicates that boys may be exposed to more restrictions than girls (Hatfield, 1967; Baumrind, 1971; Armentrout and Burger, 1972). These findings indicate that males may experience more restrictiveness and may, as a result, become less autonomous. This could very well produce the effect of a decreased probability for males to explore their environments as freely as females. As a

result of these findings, it could be hypothesized that the male subjects responded to feminine topics in a rigid manner because their initial input and knowledge of these topics was limited. The female subjects, being less structured in their socialization process and exploratory behaviors, may respond more openly and, therefore, show signs of being influenced by persuasive communications.

These interpretations, although plausible, do require empirical investigation. The appropriate sex role behavior shaping and the restrictions placed upon males in our society could very well contribute to a plausible explanation of male rigidity in opinions when presented feminine topics, but theory must be supported by empirical research. The implications for further research would entail attending to the topic of interest variable and should investigate directly the relationship between sex role standards and persuasibility. Mazurkiewicz (1960) and Dwyer (1974) offer empirical research models for this type of investigation in their studies which investigated sex role orientation of reading materials and reading achievement.

Part Two--Analysis of Persuasibility
Scores Across Grade Levels
Nine Through Twelve

Hypothesis II in this study suggested that the sex by form interaction effect described in Hypothesis I would be present across all four grade levels tested. The data

presented in Table 3.1 and the post hoc analysis procedures discussed in Part One do not support the sex by form interaction hypothesis across the four grade levels. The data presented in Table 3.1 suggests a trend (.11 level of significance) toward lower persuasibility scores as a function of the grade level of the subjects. The trend toward lower persuasibility scores as grade levels increased, as presented graphically in Figure 3.2, supports the idea that the tendency to yield to persuasive communications decreases with age.

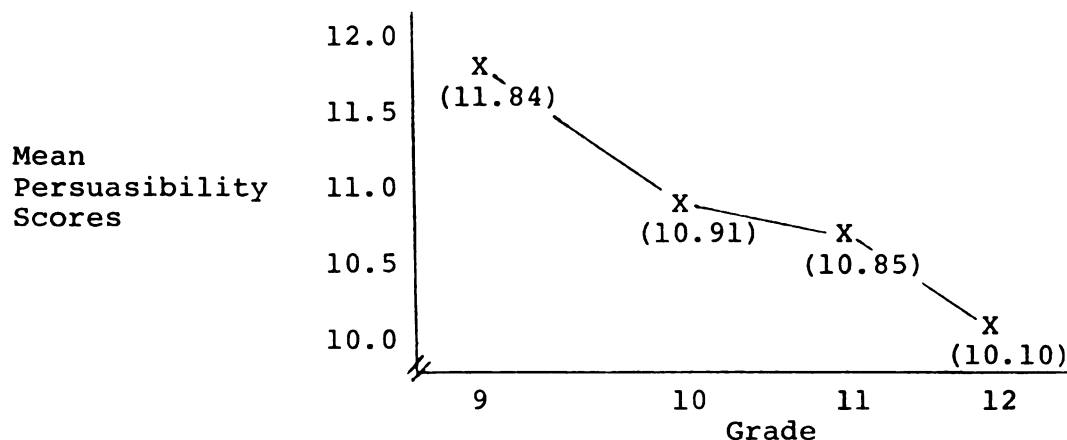


Fig. 3.2.--Mean grade level persuasibility scores for both males and females.

Figure 3.2 includes both sexes within its subject pool and does not delineate any sex differences which might exist in this increasing grade/decreasing persuasibility trend. When the sex by grade interaction effect is examined, a trend (.12 level of significance) in sex differences across grade levels becomes evident. Table 3.4

Table 3.4.--Persuasibility score group means for the sex by grade interaction effects.

	Grade			
	9	10	11	12
Males	11.48 (N = 33)	10.53 (N = 32)	9.74 (N = 34)	8.42 (N = 33)

Females	12.17 (N = 36)	11.26 (N = 34)	11.97 (N = 34)	11.93 (N = 30)

lists the mean persuasibility scores for each sex by grade group present in the sex by grade interaction, indicating that a sex difference trend begins to appear when the male and female subjects are studied separately across all four grade levels. Figure 3.3 represents this sex difference trend graphically.

The female subjects manifested a tendency to maintain a fairly constant level of persuasibility across all four grade levels, while the male subjects tended to indicate a decreasing persuasibility trend as the grade level increased. This set of findings supports the hypothesis that the female subjects tested in the present study show signs of a relatively stable unbounded persuasibility personality trait. The data discussed in Part One also supports the female unbounded persuasibility trait theory by indicating that the females persuasibility scores also maintained a fairly stable level across all three forms of

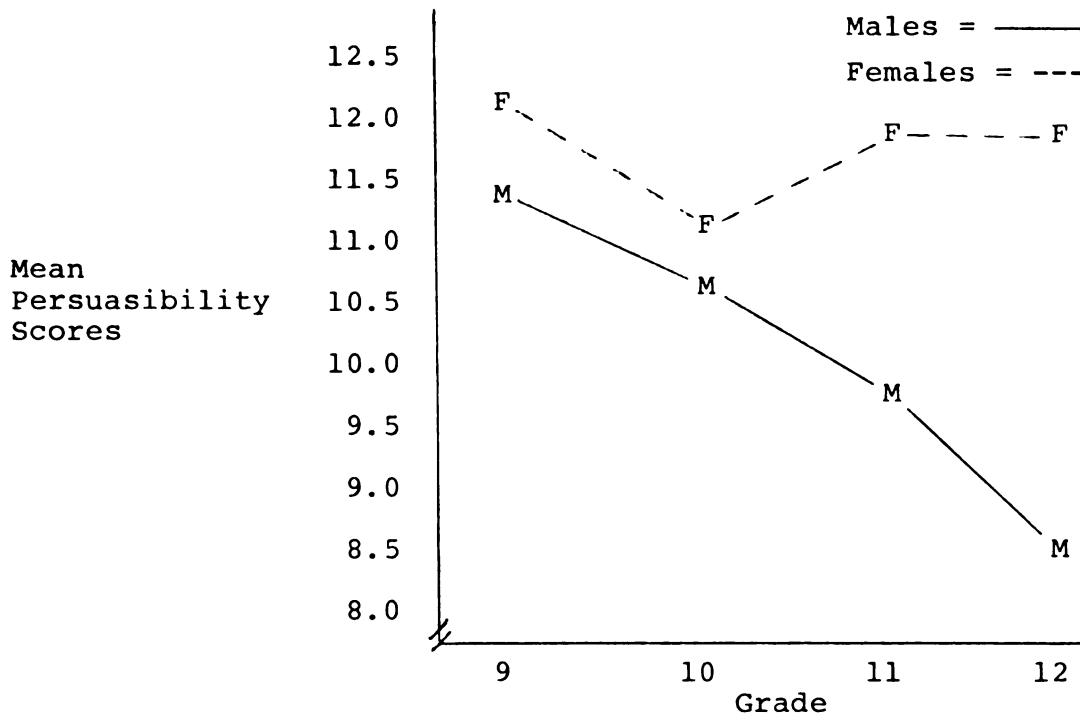


Fig. 3.3.--Sex by grade interaction effects.

the persuasibility instrument. As Table 3.1 illustrates, there are no significant effects reflected in the grade by form interaction or in the sex by form by grade interaction.

In summary, the data presented in this section does not support the second hypothesis offered by the investigator. Instead, the results presented above illustrate the sex difference trend that, among the subjects tested, the male subjects tended to decrease their probability of yielding to persuasive communications as the grade level increased, while the female subjects maintained a relatively stable level of persuasibility across all four grade levels. This sex difference in persuasibility

across the four grade levels appears to be accounted for by the sex of the subjects and not by the form of test or the form by grade interaction.

The data discussed in this section support the global trait theorists who present the view that males and females differ along several global personality dimensions (Parsons, 1942; Kagan and Moss, 1960). An interesting point is that the female persuasibility tendencies may be established earlier than the male persuasibility tendencies; however, longitudinal studies would be required to support this belief. There are several different methodological and theoretical considerations concerning the trend toward male-female differences in persuasibility across the four grade levels. First, it must be emphasized that the present study represents a cross sectional design and not a longitudinal design. Therefore, it is possible that the changes across the four grade levels were particular to only the sample utilized in the study. This possibility can be refuted only with further research. Second, this type of longitudinal sex difference finding would also support the notion that there are developmental differences in the rates with which each sex develops the appropriate sex role standard for particular personality dimensions (Kagan, 1964). Third, the sex differences trend across the four age groupings could also be considered from a developmental point of view. Erikson's

(1950) eight ages of man clearly could be applied. The subjects utilized in the present study were teenagers whose ages would correspond to Erikson's identity versus role confusion age. It is hypothesized that during this period of development the individual is learning to internalize and organize the values and behaviors which guide ego and identity formation. The male subjects tested could be described as learning the appropriate role in terms of persuasibility while the female subjects may have already identified with a particular sex role standard. If longitudinal studies confirmed these findings it would be reasonable to question the applicability of Erikson's developmental theory for both of the sexes. Properly conducted research could very well support the theory that females typically establish their sex role identities prior to males. In terms of cognitive development, Piaget's (1969) theory of egocentrism in adolescent thought may also come under sex differences scrutiny. The hypothesis that females maintain consistent persuasibility patterns while males decrease in influencibility may support the theory that the male sex role becomes progressively more egocentric in terms of persuasibility. However, these propositions will all require further longitudinal and cross sectional studies.

Part Three--The Relationship Between
Masculine and Feminine Interest
Orientations and Persua-
sibility Scores

Earlier in the study, it was hypothesized that a feminine interest orientation would correlate positively with persuasibility scores on all forms of the persuasibility instrument. The data analyzed in this section are based upon the eleventh grade sample, and Table 3.5 presents the correlations that were calculated between the Geist, the MMPI, and the persuasibility scores for this sample. These correlations indicate the lack of any substantial relationships between the three variables for the total eleventh grade sample. The relative independence of the Geist and MMPI measures is supported by the .01 correlation coefficient between the two measures. Also, it appears that the MMPI is a slightly better predictor of persuasibility scores than is the Geist. This is not surprising since the MMPI was designed to measure orientation patterns while the Geist is an interest inventory, and the

Table 3.5.--Correlations between the Geist scale, the MMPI scale and persuasibility scores for the total eleventh grade sample (N = 68).

	Geist	MMPI
Persuasibility Scores (all forms)	-.02	.20
<u>MMPI</u>	.01	

original purpose of this inventory was intentionally modified by the investigator to measure masculine and/or feminine interest orientations.

When the data are analyzed further, in terms of the correlations between the Geist, the MMPI and persuasibility scores for Forms M and F, consistent sex difference directional trends began to appear. Table 3.6 presents a breakdown of the eleventh grade male and female subjects on Form M and Form F. In spite of the fact that each cell only contained eleven to twelve subjects, direction correlational trends appeared.

Table 3.6.--Correlations between the Geist scale, the MMPI scale and persuasibility scores for the eleventh grade male and female subjects who were administered Form M and Form F.

	Form M		Form F	
	Males (N = 12)	Females (N = 12)	Males (N = 11)	Females (N = 12)
<u>Geist</u>	.20	-.05	-.19	.32
<u>MMPI</u>	.11	-.19	-.47	.46

The correlations presented in Table 3.6 were analyzed in terms of direction as well as the magnitude of the relationship. Only two of the correlations are moderately high, yet the positive and negative correlations maintain a consistent pattern across the four groups. In general, the data illustrates that the correlations between interest

orientations and persuasibility scores are in different directions for the male and female subjects on both Form M and Form F.

On Form M, persuasibility scores for the male subjects correlated positively with a feminine orientation on the Geist and MMPI scales. For the female subjects on Form M, persuasibility scores correlated negatively with feminine orientations on both the Geist and the MMPI. The relationship between Form F and the Geist and MMPI were the reverse of those manifested on Form M. For the male subjects, there was a negative relationship between a feminine orientation and persuasibility scores on Form F, and for the females, there was a positive correlation between a feminine orientation and persuasibility. Since the magnitude of these correlations are not significantly different, there can be little meaningful discourse as to the rejection of the null hypothesis for the third hypothesis presented in this study.

The lack of any significant correlations between persuasibility scores and measures of masculinity and femininity is interesting in light of previous findings relating traditional masculine and feminine sex role socialization patterns with sex differences in persuasibility scores (Terman, Johnson, Kuznets and McNemar, 1946; Janis and Field, 1959). These researchers relied heavily upon the explanation that the male sex role

socialization standard in our society, particularly with respect to intellectual independence and docility, produces males who are more independent and therefore less persuasible (Diggory, 1953; Parsons, 1953; Janis and Field, 1959). The point to be established is that these theorists would probably predict significant correlations between measures of masculinity and femininity and persuasibility scores. The results of the present study do not support this trend. It should be noted that the present study utilized only one grade level and a small number of subjects for this part of the study. Any further interpretations must await further research, but the Kuhnian (1970) notion of "puzzle solving" within a particular research paradigm offers an hypothetical explanation for these inconsistent findings. Previous research (Janis and Field, 1959) investigated personality characteristics traditionally assumed to be related to the specific sex role standard, and only a limited number of personality dimensions were evaluated because definitive investigations of sex role orientations and opinion change were never empirically determined. Interest patterns and personality orientation, as measured by the Geist and MMPI, are two measures which examine the relationship between sex role standards and persuasibility. Future research should emphasize these types of empirical measures since it can also be assumed that interest and personality orientations are heavily

influenced by the socialization process for males and females in our society.

Part Four--The Relationship Between Reading
Abilities and Persuasibility

The final area investigated in the present study concerns the relationship between reading skills and persuasibility. Two specific reading abilities, word recognition or identification and passage comprehension, were evaluated for all the subjects who were administered Form O of the persuasibility instrument. It was hypothesized that subjects with higher reading abilities would yield more to persuasive communications than subjects who were poorer readers. This hypothesis was based upon the premise that the communications would have a greater impact upon the subjects who were able to read each article with comprehension.

The first analysis of the reading data examined the differences between the male and female subjects across the four grade levels. Table 3.7 presents the comparisons made between males and females for the word recognition and passage comprehension tests. These twelve subject samples were drawn at random from the four grade levels. As the data indicates, there are no significant sex differences in word recognition or passage comprehension although the female subjects out-performed the male subjects in five of the eight cells. The scores in Table 3.7 are

Table 3.7.--Comparisons of male and female word recognition and passage comprehension skills for ninth through twelfth grade subjects (Scores represented by Woodcock mastery scores).

	Grade					
	9		10		11	
	M (N=12)	F (N=12)	M (N=12)	F (N=12)	M (N=12)	F (N=12)
Word Recognition (t test)	192 (t=-1.53)	209	204 (t=-1.58)	216	207 (t= .27)	205 (t= -.27)
Passage Comprehension (t test)	118 (t= .00)	118	122 (t= -.81)	127	120 (t= -.52)	123 (t= 1.28)

presented in Woodcock mastery scores which represent derived scores on an equal interval scale.

The second area examined emphasized the correlational relationships between word recognition scores, passage comprehension scores and persuasibility scores. This analysis was based upon the eighty-one subjects who completed the reading tests and Form O. These subjects included ninth through twelfth grade students inclusively, and Table 3.8 presents the correlational data relating

Table 3.8.--Correlations between word identification, passage comprehension and persuasibility scores for subjects taking Form O (N = 81).

	Persuasibility Score	Word Identification
Word Identification	.09	
Passage Comprehension	.18	.67

reading and persuasibility scores of these students. Neither word recognition nor passage comprehension skills are highly correlated with persuasibility scores for the subjects tested; the word recognition with passage comprehension correlation is moderately high, however, and expresses a direct positive relationship between the subjects' word recognition and passage comprehension skills.

The final data analysis focused upon the persuasibility score differences between the highest reading achievers and the lowest reading achievers within each sex. The persuasibility scores of the highest 25 percent male and female reading achievers were compared with the scores of the lowest 25 percent male and female reading achievers. Table 3.9 presents the data from this comparison by presenting the mean score of the top ten (25 percent) reading achievers and the mean score of the bottom ten (25 percent) reading achievers for each sex. As Table 3.9 indicates, there were no significant differences found between high and low ability readers (word recognition and passage comprehension) in terms of their tendency to yield to persuasive communications.

In conclusion, the data presented in this section does not support the hypothesis which states that reading ability will relate to persuasibility in a positive manner. The findings presented failed to find any sex differences in the two reading skills tested. There was no significant correlational relationship between either word recognition or passage comprehension and persuasibility scores. Finally, within each sex, there were no significant differences in persuasibility scores between high and low reading achievers.

Table 3.9.--Mean persuasibility group score comparisons of the ten highest word identification and passage comprehension achievers and the ten lowest word identification and passage comprehension achievers for each sex.

	Top Ten Mean	MALES Bottom Ten Mean	t test
Word Identification	13.5	10.2	t=1.56
Passage Comprehension	12.7	10.2	t= .47

	Top Ten Mean	FEMALES Bottom Ten Mean	t test
Word Identification	13.1	13.4	t=-.09
Passage Comprehension	13.0	13.0	t=0.00

There is considerable evidence that elementary school boys read more poorly than girls (Asher and Gottman, 1973). There is also evidence that young boys view reading as a sex inappropriate activity (Stein and Smithells, 1969). Asher and Mashell (1974) report findings which indicate that the interest level of the reading material can significantly reduce the sex differences in reading achievement. Mazurkiewicz (1960), using a sample of eleventh grade males, found that sex appropriate topics tended to increase reading ability. Thus, it appears that boys read as well as the girls on high interest material, but that boys are significantly poorer readers than the girls on material that is of little interest to either group. McCarey (1958) shows that for male and female college students, sex differences in problem solving proficiency were, in part, a reflection of the attitudes toward the sex-appropriateness of the problem solving activity. Milton (1959) also illustrates that problem solving abilities are influenced by the perceived sex appropriateness of the task.

The reading evaluation performed in this study did not find any significant sex differences across the four grade levels on word identification and passage comprehension skills. This finding may suggest that the subjects did not view the reading testing as an inappropriate sex role behavior. A test of the appropriateness or

inappropriateness of the Form F topics for the male subjects, as it might affect reading performance, will require further research. The Mazurkiewicz (1960) study supports the hypothesis that sex differences in persuasibility may be influenced by the sex role perceptions of the subjects.

Summary

The results of this study are as follows.

- (1) A significant difference at the .05 level in persuasibility scores was found between the male and female subjects. This difference was found when the subjects were compared across the variables grade level and form of the test.
- (2) The overall sex difference appeared to be the result of the significantly (.05) lower persuasibility score of the male subjects who completed Form F compared to the female subjects who completed Form F. This finding was offered as a challenge to the Maccoby and Jacklin (1974) theory that individuals are more likely to yield to persuasive communications which discuss unfamiliar or uninteresting topics.
- (3) Due to the lower persuasibility scores of the males on Form F, the persuasibility instrument produced significantly (.05) lower persuasibility scores than did either Form O or Form M.

- (4) The male subjects in the present study tended to be less yielding toward communications with which they were probably uninterested and/or uninvolved. The female subjects appeared to be equally influenced by all types of articles presented in the persuasive communications.
- (5) Across the four grade levels the total sample suggested a trend of decreasing persuasibility scores. This trend was not significant (.11) at the .05 level.
- (6) There was a sex by grade interaction trend (.12 level of significance) in persuasibility scores across the four grade levels. The female subjects manifested relatively consistent persuasibility scores across the four grade levels while the male subjects tended to decrease in persuasibility scores as the grade level increased.
- (7) The correlations between masculine and/or feminine interest orientations and persuasibility for the eleventh grade subjects were not significant in degree but were consistent in terms of direction. The male and female subjects manifested positive correlations between the Geist and the MMPI and persuasibility scores on Form M and F respectively. On Form M and F respectively, the females and males

manifested negative correlations between these same variables.

- (8) There were no significant differences between the equal grade male and female subjects in terms of word recognition and passage comprehension reading abilities.
- (9) Reading level as measured by word recognition and passage comprehension skills are not directly related to the persuasibility scores. There appeared to be no differences in persuasibility scores between high and low achievers within either sex.

CHAPTER IV

SUMMARY AND CONCLUSIONS

Summary

The study of sex differences in various personality and social dimensions is currently under intense examination. Beliefs about the impact of traditional sex role standards have influenced the nature of these studies both directly and indirectly. The direct influence has been that beliefs about traditional sex role patterns have provided researchers with a multitude of key independent variables which have been operationally defined and measured empirically; measures of dependency, anxiety, social conflict, social aggressiveness, and affection are a few examples of these types of independent variables, that have produced many credible research studies and theoretical models. A second influence of the sex role beliefs has been more indirect and may be considered as a detrimental influence.

Traditional sex role theories work from within a common and well established scientific paradigm which tends to presuppose that sex differences exist. The role of the researcher becomes one of empirically testing and

demonstrating that a sex difference exists in a particular personality dimension for a particular sample. Therefore, much of this traditional research methodology in sex differences may actually be what Kuhn (1970) has referred to as "puzzle solving." The final conclusions are known and it is simply a matter of placing the pieces of research together to arrive at an expected conclusion. One method of strengthening scientific theory without remaining within the confines of a more traditional paradigm is the testing of alternative hypotheses which might replace the more accepted hypotheses. DeGroot (1965) has referred to this methodology as a search for "negative proof." The study of sex differences in persuasibility represents an area of research which could be described as a traditional research paradigm and as such, it is an area of study which should incorporate the challenge of testing alternative hypotheses.

The purpose of this investigation was to examine sex differences in persuasibility using the Janis and Field test of persuasibility and two modified forms of this test. The key independent variable was the topic of interest presented in the two modified forms of the instrument. Form M included topics judged to be significantly more related to male interests and knowledge, and Form F included topics judged to be significantly more related to female interests and knowledge. The topics were judged by

eleventh and twelfth grade students from the Corunna, Michigan public high school. Sex differences in persuasibility were measured across the three forms of the test to determine if the general sex role theory of sex differences in persuasibility could be accounted for by a more specific topic of interest theory. The relationships between reading abilities, sex role interest patterns and persuasibility were also examined to investigate the degree to which these variables correlate with opinion change.

This study was conducted with ninth, tenth, eleventh and twelfth grade students from the Byron, Michigan area school system. The sample included approximately thirty to thirty-six males and females from each of the four grade levels. Strict age and grade standards were maintained. The subjects were stratified by sex and grade and then randomly assigned to one of the three treatment groups which received either Form O (original form), Form M or Form F.

The subjects were tested following the Janis and Field procedure which included one baseline opinion check plus two reading sessions with opinion checks separated by a one week time period. All subjects who were administered Form O were also administered the word recognition and passage comprehension reading subtests of the Woodcock Reading Mastery Tests. Additionally, the eleventh grade

subjects were administered the Geist Picture Interest Inventory and a truncated version of the Minnesota Multiphasic Personality Inventory masculinity/femininity scale. These instruments were used to measure an individuals' interest patterns along the global traits of masculinity and femininity. The degree of "maleness" and/or "femaleness" of the Geist Interest areas was judged by a group of undergraduate and graduate Michigan State University education students.

This study hypothesized that the topics of interest presented to the subjects would generally affect the direction of sex differences in persuasibility, and it was suggested that males would manifest higher persuasibility scores than females when both sexes were exposed to female oriented topics of interest. It was further hypothesized that on the male interest oriented test female subjects would score higher persuasibility scores than the male subjects. These sex by form of test interactions hypotheses were expected to be prevalent across the four grade levels tested. Correlational hypotheses concerning the subjects' reading abilities and persuasibility predicted that reading abilities and persuasibility would correlate positively, and that high reading achievers would have higher persuasibility scores than low reading achievers.

The data collected were primarily analyzed using a three way analysis of variance procedure with the key

independent variables being sex, grade, and form of test. The Scheffé method for post hoc comparisons was used for testing specific hypotheses. The Pearson product moment correlations were performed to obtain the correspondence between Geist, MMPI, reading ability and persuasibility scores, and multiple t-tests were used to determine group differences in reading abilities.

The results of the investigation indicate that there is a sex difference in persuasibility when sex differences are measured across grade and form of test. This overall persuasibility difference indicates that the female subjects manifested significantly (.05) higher persuasibility scores than did the male subjects. Similarly, it appears as though the general sex difference was influenced by the fact that the subjects who were administered Form F of the persuasibility instrument had significantly (.05) lower persuasibility scores than did the subjects who were administered Form O and Form M. When the sex by form of test interaction effect is examined, the results indicate that the male subjects who were administered Form F scored significantly (.05) lower persuasibility scores than the females who were administered the same form and the male subjects who were administered Form O and Form M. The three significant findings are the result of the male subjects scoring significantly low persuasibility scores on Form F. On the original and male

interest oriented forms of the test, no sex differences in persuasibility appear. The sex difference finding on Form F contradicts the commonly held belief that individuals are more susceptible to written communications influence when the topic being discussed is unfamiliar or uninteresting to the individual.

The correlations relating the Geist Interest Inventory scores, the Minnesota Multiphasic Personality Inventory scores, and persuasibility scores on Forms M and F also fail to indicate any significantly high relationships. Consistent correlational directions were maintained with the Geist and MMPI and persuasibility scores, but the magnitude of these correlations is too low to warrant meaningful analysis.

The findings measuring reading abilities and persuasibility scores on Form O do not include any significantly high correlations. The t test comparisons between high reading achievers and low reading achievers also fail to indicate any significant group mean differences.

Conclusions and Limitations of the Study

The limitations of this study were as follows.

1. The Subjects.--Because of the size of the high school participating in the study, the number of students per cell ranged from ten to twelve students. This was a smaller number of subjects than was desired but resulted

because of the smaller number of students in the eleventh and twelfth grades.

The fixed effects model utilized in the study prevents generalizations beyond the population of students in the Byron High School. This limited the interpretations to the students who were attending the Byron High School at the time of the testing.

The Byron area is a rural community, and therefore, this study did not examine persuasibility in a more urban or suburban type setting. The effects of this limitation cannot be discussed without further investigation, but it might be suggested that urban and/or suburban students would illustrate different persuasibility sex difference patterns. It seems reasonable to hypothesize that differences in family membership, family intactness, peer interactions, and exposure to the women's rights movement may produce different socialization experiences for the urban and/or suburban students as compared with the rural students. The testing for these hypotheses awaits further empirical investigation.

2. The Persuasibility Questionnaire.--Because the topics were not selected at random, generalizations from this study to other types of sex role related topics cannot be justified.

The repetition of the same questionnaire appeared to produce some negative side effects. Several of the students tested stated overtly that they disliked answering the same questions on three separate occasions.

Another limitation of the questionnaire was that the readings were consistently one page in length. Many of the subjects stated that these five articles were too long to read and to respond to in a one hour setting. This might suggest that some of the subjects did not read the articles thoroughly due to their belief that the readings were too long and cumbersome. It might be hypothesized that these subjects were less easily influenced by the articles because they had not been exposed to the full impact of some of the readings.

3. The Testing Procedure.--Due to uncontrollable weather conditions, the testing was conducted over a longer period of days than was originally planned. This produced two negative consequences. Because the test took place over a longer time frame than was originally planned, the likelihood of peer communication about the testing was increased. Thus, the distinct possibility existed that the students communicated about the testing session, and that the untested subjects became familiar with the procedure and materials thereby entering the sessions as semi-knowledgeable subjects. This may have resulted in

some students becoming more resistant to change or more easily influenced because they were aware of the nature of the task.

Because the monitors of the testing sessions were classmates, there was a tendency to visit with one another as opposed to maintaining attention on the tasks at hand. It was observed that when the subjects were tested in small groups the completion time was generally longer than that which was observed for the large group sessions. In the large group setting, the noise level of the students leaving the testing room was higher than that of smaller groups and this may have distracted some of the students who were working.

Scheduling conflicts also interfered with testing procedures. Two behaviors were particularly troublesome. On the one hand, students (especially male subjects) hurried through the testing session because they were missing gym class. On the other hand, some students worked slowly because they did not want to return to a particular class.

The testing sessions also appeared to place pressure on slower working students and some students manifested signs of hurried work behaviors as the majority of subjects began to leave the testing room. These hurried work behaviors may have prevented some subjects from reading completely all of the articles presented. The

failure to read each article thoroughly may have resulted in lower persuasibility scores of some of the hurried subjects because the total impact of the article was not experienced.

4. Measures of Interest and Knowledge.--The testing method utilized in the present study did not include a measure of the subjects' interest in the stimulus material. The judgments that a particular topic was "masculine" or "feminine" oriented were made by a group of students from another high school. A direct measure of student interest might have been employed with the subjects participating in the study to increase validity. This might be performed by having the experimental subjects indicate their general areas of interest. The experimenter could then generate a series of persuasive communications from these interest areas.

Following a similar approach, it might also be recommended that the experimental subjects provide information as to their knowledge about the topics presented in the written communication. A pre and post questionnaire format asking each subject to answer specific knowledge questions about a specific topic might have been utilized to directly measure how knowledge and persuasibility are related. This type of an approach would examine more directly the relationship between knowledge of a particular

topic and opinion change concerning issues about the particular topic.

5. Differential Appeal of the Topics.--The topics and subject matter presented on Form M and Form F may not have been significantly different in terms of appeal. An attempt was made in this study to select masculine and feminine topics; however, there was no attempt to measure the appeal of these topics as judged by the subjects studied. It is possible that the topics could be judged to be either masculine or feminine, but it was not clearly determined if the two sets of readings were equally appealing to the readers. A short survey of the original subjects might have been utilized to determine the differential appeal of the ten modified articles presented in Forms M and F. This measure of topic appeal is important because it would help assure the researcher that the various forms of the test were generally equal in appeal and that the only significant variable being manipulated in each article is the topic of interest.

Further investigation might also have been conducted to determine if the articles were dissimilar enough in gender to produce sex differences in persuasibility scores. The modified forms of the original Janis and Field test were altered only slightly by including appropriate nouns and pronouns, disguising the sex of the author, and changing the specific topic discussed. These

types of changes may have been too limited. Future research should investigate the role of writing style, vocabulary, and other potential communication alterations to determine the extent to which these types of changes affect sex differences in persuasibility.

6. Measures of Masculinity and Femininity.--The use of the Geist Inventory as a measure of masculine and feminine interest patterns has not been standardized. The reliability and validity of the Geist as a measure of masculinity and femininity has not been established across a large number of randomly selected subjects. Alternative approaches might have employed an interest inventory which included a masculinity/femininity scale as a component of the instrument. This procedure would gather data directly from the experimental subjects and would not depend upon independent judgments made by undergraduate and graduate university students.

The use of university students to judge the masculinity and femininity of interest areas as they are applied to high school students has not been validated. This may represent a limitation of the present study since attitudes toward interest patterns may differ between chronological age levels and between individuals involved in higher education and individuals not involved in higher education programs.

Implications for Further Research

The review of the literature on sex differences in persuasibility has illustrated that previous studies utilizing the Janis and Field methodology have failed to determine the effect upon persuasibility of the topics of interest utilized in the persuasive communications. This study indicates that for the sample of students tested, sex differences in persuasibility appeared only when female interest oriented topics were presented. On these types of topics, the males had significantly lower persuasibility scores than did the female subjects.

Further research needs to be conducted to determine if these results will be manifested across other female interest oriented topics. Research of this type would entail a large sample of subjects. A wide range of topics would also be utilized with measures of interest, knowledge and persuasibility calculated by the subjects to be tested as opposed to the independent judging method which was utilized in this investigation.

This study was conducted using small groups in a generally rural setting. Suburban and urban students might have different interests, knowledges, and sex role standards. Given these potential differences, research should be conducted in both rural and urban settings. It is conceivable that the opinion change tendencies of one or both sexes may differ in urban, suburban and rural

settings. For example, it might be suggested that the women's liberation movement, which generally developed in the urban and suburban settings, would have delayed or minimal impact upon rural females. This might lead to a hypothesis that rural females would achieve higher persuasibility scores than urban females since traditional sex role standards might be more prevalent in less populated areas.

Additional research utilizing a variety of persuasibility methodologies should also be conducted to determine if there should be a revision in the assumption that individuals are more susceptible to the influence of social communications when these communications present unfamiliar and/or uninteresting topics for a particular sex. Research should be directed specifically at female oriented interest topics.

There is still much to be accomplished in assessing sex differences in persuasibility when the topics of the persuasive communication are varied. The general rule that should guide future research suggests that sex differences in persuasibility may not be simple and consistent group mean differences. Significant variables such as the topic of interest presented to male subjects may determine the presence or absence of sex differences in persuasibility.

Implications for Education

The present study provides some evidence that among high school students, females may be more easily influenced by written persuasive communications than males. This finding tends to support the hypothesis that women can be more easily persuaded than men. However, until further research has been conducted, it would be extremely tenuous to conclude that women are more easily persuaded across all types of topics and all age levels. For example, the present study illustrates evidence that the male students obtained significantly lower persuasibility scores when given feminine oriented topics than male subjects who were given masculine oriented topics. Due to the limitations of previous studies, as well as the limitations of the present study, it is difficult to determine if sex by communication topic interaction effects exist. Therefore, the implications for education must be offered in the form of tentative "if . . . then . . ." statements.

The recommendations offered to educators in this section are based upon the idea that students should be taught to make choices and to form opinions concerning unfamiliar topics by means of what the author has chosen to call an objective decision making process. This process is furthermore based upon the assumption that helping students to form opinions objectively has survival value. In our present society, individuals are surrounded by

many types of persuasive appeals and advertisements. For an individual to make responsible choices, it is suggested that he or she be taught a methodology for evaluating the "pros" and "cons" of the ideas, people, and/or products being presented.

The specific format for a decision making education will require more investigation and task analysis. However, there are a few general characteristics which the author believes should be incorporated into such a program.

An education in decision and opinion making would help students to evaluate and estimate the credibility of the material being presented. This type of pedagogy would reinforce different student opinions and encourage students to verbalize their opinions in public. It would teach students to question statements made in persuasive communications and encourage them to offer alternative explanations for specific outcomes. This method would also encourage students to formulate opinions and maintain these beliefs until objective information was discovered which altered these opinions. Finally, this type of education program would help students to question the intent of the author in the communications being presented. By objectively teaching decision making skills it is hypothesized that easily influenced individuals will become more resistant to the effects of persuasive communications and advertising campaigns. In a similar view,

this type of decision making process should also benefit students who may be consistently less influenced by opinion change appeals and persuasive communications.

The suggestions presented in the final pages of this paper are grouped under three headings. The first heading emphasizes that if sex differences in persuasibility do exist then educators and students should be made aware of these differences. The second heading discusses active interaction procedures which might be utilized by educators as strategies for increasing independent decision making skills. If females are more easily influenced by persuasive appeals, then a proposed outcome of this training would be to decrease the persuasibility of female high school students. The final heading proposes that textbook authors and curriculum programmers should be aware of the possible effects of different types of materials upon individuals and/or groups of individuals who vary in their susceptibility to persuasive communications.

Awareness of Sex Differences

The first implication that might be drawn from this study and other studies on persuasibility is that if sex differences in persuasibility do consistently exist, then this information should be utilized by teachers in classrooms and teacher education programs in better preparing teachers for the classrooms. This knowledge should be presented so that teachers are made aware of the sex

differences in persuasibility that exist. It is hoped that from this awareness a teacher will be more able to select appropriate materials and to counsel individual students or groups of students in developing objective decision making strategies. By providing empirical data on sex differences in persuasibility, it is suggested that teachers may be more able to provide experiences geared toward individualized instruction and toward helping students become prepared for the persuasive appeals he or she will be exposed to as a member of our society.

In addition to making teachers aware of the sex differences in persuasibility, it is further suggested that the students be made aware of these differences. If a goal of educators is to develop objective decision making skills in students then it seems reasonable to begin by describing and clarifying instances in which these decision making skills have been discovered to be least likely utilized. A description of these instances would include types of topics, types of students and any other variables which might provide information for the student as to when and under what circumstances one group of students might be more or less easily influenced by written communications or persuasive appeals. The idea behind this effort is that before an educator can meaningfully develop a skill in a student it may be helpful to make the student and the teacher aware of the instances in which the skill is least

likely to be utilized by a particular group. This type of feedback may provide some motivation for students who wish to become more objective in their decision making skills.

Active Intervention Procedures

The following activities are offered in an attempt to provide suggestions for developing objective and rational decision making skills in students. If consistent sex differences in persuasibility do exist and these are manifested predominately during the high school years, then it appears appropriate to develop activities which help to minimize these differences and increase objective decision making skills.

1. Adult Modeling.--First, it appears that teachers should make every effort to model the appropriate decision making skills when confronted with unfamiliar material. This process would require the teacher to objectively and overtly determine which position he or she favored by openly discussing his or her value system and the nature of the material being analyzed. With the teacher modeling appropriate decision making behaviors, students are more likely to become familiar with the appropriate questions to be asked before one changes his or her opinion.

2. Group Interactions.--Group interactions between males and females are also recommended. These groups should also include individuals who have histories of being easily influenced as well as individuals who tend to be less easily influenced. Several small group activities have been developed which aid group members in analyzing their decision making skills and tendencies to change their beliefs when subjected to public pressure. Emphasis in these group settings might be upon providing feedback to group members indicating their degree of persuasibility or opinion change as determined by the other group members. The group interactions should provide three important elements in the decision making education program. First, they would provide the student with peer and adult feedback as to his or her decision making skills. Second, they would provide peer modeling of appropriate decision making skills. Finally, the group interactions would afford the student the opportunity to practice appropriate decision making skills.

3. Role Play.--Decision making role play activities might also be incorporated into the classroom activities so as to provide students with the opportunity to practice overtly specific opinion and decision making skills. This type of activity might entail exposing a student to an unfamiliar topic presented in a written communication. The student would be asked to play the role

of a "researcher," "editor," etc. and to formulate an opinion on the topic. Debate teams in many ways would serve the same functions as would these role play activities.

4. Persuasibility Counseling.--Students might be counseled as to the techniques which are utilized to change an individual's opinion. This form of counseling would be beneficial in two ways. First, it would expose students to techniques which might prove helpful in future occupations. Second, it would help people who are easily influenced to become more aware of the techniques that could be utilized when someone wants to present a favorable impression of themselves or their product.

5. Utilization of Leadership Positions.--It seems logical to assume that leadership and decision making skills typically go hand in hand. Frequently, when an individual is placed in a leadership position and is responsible for other individuals, he or she is required to make appropriate decisions. Therefore, it appears that educators must make certain that the leadership positions in the classroom be utilized appropriately. This implies that students who tend to be easily influenced should be placed in decision making positions as frequently as possible. Classroom leadership positions offer an excellent opportunity for students to practice decision making

skills in real life situations with peers and authority figures. Likewise, students who are less easily influenced and consistently fail to manifest appropriate decision making skills should also be placed in leadership positions which help shape objective decision making skills.

6. Interest Inventories.--If the topic of interest presented does influence male and female subjects differently then it seems logical to suggest that interest inventories be utilized to determine the interests present within the class. This proposal is based upon the premise that the same material does not effect all students in a similar manner. By establishing the interest patterns of the students, the teacher may be better able to prepare and plan for each student's educational experience. These interest patterns might prove to be particularly useful in teaching male subjects the objective decision making process if the finding of the present study is reported in future research. This finding illustrates that males may be less resistant to opinion change when feminine interest topics are presented or discussed.

7. Direct Reinforcement.--Finally, it seems appropriate that if educators should attempt to develop objective decision making skills in students, then teachers and school personnel should utilize direct reinforcement to increase the probability of these behaviors

occurring. The type of reinforcement utilized can vary from social rewards such as smiles and praise to tangible rewards such as team medals and ribbons for effective debating and questioning activities. Reinforcement should be made contingent upon a student's manifesting objective decision making skills. The reinforcement should be given as soon after the behavior as possible and the teacher should indicate verbally to the student the specific behaviors that are being rewarded.

Educational Curriculum

If specific materials and topic of interest have an impact upon student opinion change and student involvement, then it seems reasonable to suggest that textbook authors and curriculum directors become involved in opinion change research. Textbooks and curriculum materials might be analyzed to determine their influence upon male vs. female subjects. Target groups of students who manifest high opinion change tendencies and students who manifest low opinion change tendencies could be utilized to determine the potential impact of educational materials before these materials are introduced into the classroom setting. Hopefully, the net result of this type of curriculum planning would be to produce a range of materials which would not only meet the cognitive needs of the students but also effectively interact with the persuasibility tendencies of the students.

BIBLIOGRAPHY

BIBLIOGRAPHY

- Abelson, R. P. and Lesser, G. S. "A Developmental Theory of Persuasibility." In Personality and Persuasibility. Edited by I. L. Janis, C. I. Hovland, et al. New Haven, Connecticut: Yale Press, 1959, 167-187.
- Armentrout, J. A. and Burger, G. K. "Children's Reports of Parental Child-Rearing Behavior at Five Grade Levels." Developmental Psychology 7 (1972), 44-48.
- Aronson, E. The Social Animal. New York, N.Y.: The Viking Press, 1972.
- Asher, S. R. and Gottman, J. M. "Sex of Teacher and Student Reading Achievement." Journal of Educational Psychology 65 (1973), 168-171.
- Bach, G. R. "Young Children's Play Fantasies." Psychological Monographs 59 (1945), No. 2.
- Bandura, A. "Influence of Model's Reinforcement Contingencies on the Acquisition of Imitative Responses." Journal of Personality and Social Psychology 1 (1965), 589-595.
- Bandura, A., Ross, D., and Ross, S. "Transmission of Aggression Through Imitation of Aggressive Models." Journal of Abnormal Social Psychology 63 (1961), 575-582.
- Baron, R. M. "Cognitive Basis of Attitude Change as a Function of Motivational, Stylistic and Stimulus Factors." Journal of Personality and Social Psychology 2 (1965), 219-230.
- Barry, H., Bacon, M. K., and Child, I. L. "A Cross-Cultural Survey of Some Sex Differences in Socialization." Journal of Abnormal Social Psychology 55 (1957), 327-332.

- Baumrind, D. "Current Patterns of Parental Authority." Developmental Psychology Monograph 4 (1971).
- Beloff, H. "Two Forms of Social Conformity: Acquiescence and Conventionality." Journal of Abnormal Social Psychology 56 (1958), 99-104.
- Bem, D. and Bem, S. "We're All Non-conscious Sexists." Psychology Today (November 1970), 22-26, 115-116.
- Bentzen, F. "Sex Ratios in Learning and Behavior Disorders." American Journal of Orthopsychiatry 33 (1963), 92-98.
- Blom, G. E. "Sex Differences in Reading Disability." In Reading Forum. Edited by E. Calkins. Bethesda, Md.: National Institute of Neurological Disease and Stroke, 1971.
- Bormuth, J. R. "Comparable Cloze and Multiple-Choice Comprehension Test Scores." Journal of Reading 10 (1967), 291-299.
- Carey, G. "Sex Differences in Problem Solving as a Function of Attitude Differences." Journal of Abnormal and Social Psychology 56 (1958), 256-260.
- Chamberlin, T. C. "The Method of Multiple Working Hypotheses." Science (May, 1965).
- Coffin, T. E. "Some Conditions of Suggestion and Suggestibility: A Study of Certain Attitudinal and Situational Factors Influencing the Process of Suggestion." Psychological Monographs 53 (1941), 1-219.
- Cohen, A. R. "Some Implications of Self-Esteem for Social Influence." In Personality and Persuasibility. Edited by I. L. Janis, C. I. Hovland, et al. New Haven, Connecticut: Yale Press, 1959, 102-121.
- DeGroot, A. D. "Thought and Choice in Chess." In Thinking and Reasoning. Edited by P. C. Wason and P. N. Johnson-Laird. Baltimore: Penguin Press, 1970.
- DiVesta, F. J. and Cox, L. "Some Dispositional Correlates of Conformity Behavior." Journal of Social Psychology 52 (1960), 259-268.

- Durrett, M. D. "The Relationship of Early Infant Regulation and Later Behavior in Play Interviews." Child Development 30 (1959), 211-216.
- Dwyer, C. A. "Influence of Children's Sex Role Standards on Reading and Arithmetic Achievement." Journal of Educational Psychology 66 (1974).
- Eagly, A. H. "Sex Differences in the Relationship Between Self-Esteem and Susceptibility to Social Influence." Journal of Personality and Social Psychology (1969), 581-591.
- Erikson, E. H. Childhood and Society. New York: Norton & Company, 1950.
- Ferguson, L. W. "An Analysis of the Generality of Suggestibility to Group Opinion." Character and Personality 12 (1944), 237-243.
- Feshbach, N. "Sex Differences in Children's Modes of Aggressive Responses Toward Outsiders." Merrill-Palmer Quarterly 15 (1969).
- Fling, S. and Manosevitz, M. "Sex Typing in Nursery School Children's Play Interests." Developmental Psychology 7 (1972), 146-152.
- Gates, A. I. "Sex Differences in Reading Ability." Elementary School Journal 61 (1961), 431-434.
- Goodenough, E. W. "Interest in Persons as an Aspect of Sex Differences in the Early Years." Genetic Psychology Monographs 55 (1957), 287-323.
- Grimes, F. V. "An Experimental Analysis of the Nature of Suggestibility and of its Relation to Other Psychological Factors." Studies of Psychology, and Psychiatry, Catholic University of America 7 (1948), No. 4.
- Hartup, W. W. and Moore, S. G. "Avoidance of Inappropriate Sex-Typing by Young Children." Journal of Consulting Psychology 27 (1963), 467-473.
- Hatfield, J. S., Ferguson, L. R., and Alpert, R. "Mother-Child Interaction and the Socialization Process." Child Development 38 (1967), 365-414.
- Hays, W. L. Statistics. New York: Holt, Rinehart and Winston, 1963.

- Hoffman, L. "Fear of Success in Males and Females: 1965 and 1972." Journal of Consulting and Clinical Psychology, in press.
- Horner, N. S. "Sex Differences in Achievement Motivation and Performance in Competitive and Non-Competitive Situations." Unpublished doctoral dissertation, University of Michigan, 1968.
- Hovland, C. I., Janis, I. L., and Kelley, H. H. Communication and Persuasion. New Haven: Yale University Press, 1953.
- Hovland, C. I., Lumsdaine, A. A., and Sheffield, F. D. Experiments on Mass Communication. Princeton: Princeton University Press, 1949.
- Janis, I. L. "Anxiety Indices Related to Susceptibility to Persuasion." Journal of Abnormal Social Psychology 51 (1955), 663-667.
- Janis, I. L. "Personality Correlates of Susceptibility to Persuasion." Journal of Personality 22 (1954), 504-518.
- Janis, I. L. and Feshbach, S. "Personality Differences Associated with Responsiveness to Fear-Arousing Communication." Journal of Personality 23 (1954), 154-166.
- Janis, I. L. and Field, B. "A Behavioral Assessment of Persuasibility: Consistency of Individual Differences." Sociometry 19 (1956), 241-259.
- Janis, I. L. and Field, P. B. "Sex Differences and Personality Factors Related to Persuasibility." In Personality and Persuasibility. Edited by I. L. Janis, C. I. Hovland et al. New Haven, Connecticut: Yale Press, 1959, 55-69.
- Janis, I. L. and Hovland, C. I. "Postscript: Theoretical Categories for Analyzing Individual Differences." In Personality and Persuasibility. Edited by I. L. Janis, C. I. Hovland et al. New Haven, Connecticut: Yale Press, 1959, 255-281.
- Janis, I. L. and Rife, D. "Persuasibility and Emotional Disorder." In Personality and Persuasibility. Edited by I. L. Janis, C. I. Hovland et al. New Haven, Connecticut: Yale Press, 1959, 121-141.

- Kagan, J. "The Child's Sex Role Classification of School Objects." Child Development 35 (1964), 1051-1056.
- Kagan, J. and Moss, H. A. Birth to Maturity: A Study in Psychological Development. New York: Wiley, 1962.
- Kelman, H. C. "Effects of Success and Failure on Suggestibility in the Autokinetic Situation." Journal of Abnormal Social Psychology 45 (1950), 267-285.
- King, B. T. "Relationships Between Susceptibility to Opinion Change and Child Rearing Practices." In Personality and Persuasibility. Edited by I. L. Janis, C. I. Hovland et al. New Haven, Connecticut: Yale Press, 1959, 207-225.
- Kuhn, T. S. The Structure of Scientific Revolutions. Chicago: The University of Chicago Press, 1970.
- Lansky, L. M. "The Family Structure Also Affects the Model: Sex Role Attitudes in Parents of Preschool Children." Merrill-Palmer Quarterly 13 (1967), 139-150.
- Lesser, G. S. and Abelson, R. P. "Personality Correlates of Persuasibility in Children." In Personality and Persuasibility. Edited by I. L. Janis, C. I. Hovland et al. New Haven, Connecticut: Yale Press, 1959, 187-207.
- Linton, H. and Graham, E. K. "Personality Correlates of Persuasibility." In Personality and Persuasibility. Edited by I. L. Janis, C. I. Hovland et al. New Haven, Connecticut: Yale Press, 1959, 69-102.
- MacFarlane, J. W., Allen, L., and Honzik, M. P. A Developmental Study of the Behavior Problems of Normal Children Between Twenty-One Months and Fourteen Years. Berkeley: University of California Press, 1954.
- McGuire, W. J. "Personality and Susceptibility to Social Influence." In Handbook of Personality Theory and Research. Edited by E. F. Borgatta and W. W. Lambert. Chicago: Rand McNally, 1968, 1130-1187.
- Maccoby, E. and Jacklin, C. The Psychology of Sex Differences. Stanford, California: Stanford University Press, 1974.

- Mallick, S. K. and McCandless, B. R. "A Study of Catharsis of Aggression." Journal of Personality and Social Psychology 4 (1966), 591-596.
- Mazurkiewicz, A. J. "Social-Cultural Influences and Reading." Journal of Developmental Reading 3 (1960), 254-263.
- Milton, G. A. "Sex Differences in Problem Solving as a Function of Role Appropriateness of Problem Content." Psychological Reports 5 (1959), 705-708.
- Mischel, W. "Sex Typing and Socialization." In Carmichael's Manual of Child Psychology. Edited by P. H. Mussen. New York: Wiley, 1970.
- Mussen, P. H. Carmichael's Manual of Child Psychology. New York: Wiley, 1970.
- Muste, M. and Sharpe, D. "Some Influential Factors in the Determination of Aggressive Behavior in Pre-School Children." Child Development 18 (1947), 11-28.
- Oetzel, R. "Classified Summary of Research in Sex Differences." In The Development of Sex Differences. Edited by E. E. Maccoby. Stanford, California: Stanford University Press, 1966.
- Parsons, T. "Age and Sex in the Social Structure of the United States." In Personality in Nature, Society and Culture. Edited by C. Kluckhohn, H. A. Murry and D. M. Schneider. New York: Knopf, 363-375.
- Piaget, J. The Psychology of the Child. New York: Basic Books, 1969.
- Rankin, E. F. and Culhane, J. W. "Comparable Cloze and Multiple-Choice Test Scores." Journal of Reading 13 (1969), 193-198.
- Sears, R. R. "Relation of Early Socialization Experiences to Aggression in Middle Childhood." Journal of Abnormal Social Psychology 63 (1961), 466-492.
- Sears, R. R., Rau, L., and Alpert, R. Identification and Child Rearing. Stanford, California: Stanford University Press, 1965.

- Sones, G. K. "Sex Differences in Adolescents in Direct Aggression." Unpublished Master's Dissertation, University of California, Los Angeles, 1968.
- Sontag, L. W., Baker, C. T., and Nelson, V. L. "Mental Growth and Personality Development: A Longitudinal Study." Monographs Social Research Child Development 23 (1958), No. 68.
- Stem, A. H. and Smithells, J. "Age and Sex Differences in Children's Sex Role Standards About Achievement." Developmental Psychology 1 (1969), 252-259.
- Taylor, W. L. "Cloze Procedure: A New Tool for Measuring Readability." Journalism Quarterly 30 (1953), 415-433.
- Terman, L. M., Johnson, N. D., Kuznets, G., and McNemar, O. W. "Psychological Sex Differences." In Manual of Child Psychology. Edited by L. Carmichael. New York: Wiley, 1946.
- Tresemmer, D. "Fear of Success: Popular But Unproven." Psychology Today 7 (March 1974), 82-86.
- Tuddenham, R. E. "Correlates of Yielding to a Distorted Group Norm." Journal of Personality 27 (1959), 272-284.
- Tyler, L. E. The Psychology of Human Differences. New York: Appleton-Century-Crofts, 1947.
- Wadsworth, B. J. Piaget's Theory of Cognitive Development. New York: David McKay Company, 1971.
- Whittaker, J. O. "Consistency of Individual Differences in Persuasibility." Journal of Communication XV (1965), 28-34.
- Whittaker, J. O. and Meade, R. D. "Sex and Age as Variables in Persuasibility." Journal of Social Psychology 73 (1967), 47-52.

APPENDICES

APPENDIX I

ORAL AND VERBAL DIRECTIONS, QUESTIONNAIRES
AND PERSUASIVE COMMUNICATIONS FOR THE
THREE FORMS OF THE PERSUA-
SIBILITY TEST

APPENDIX I

ORAL AND VERBAL DIRECTIONS, QUESTIONNAIRES AND PERSUASIVE COMMUNICATIONS FOR THE THREE FORMS OF THE PERSUA- SIBILITY TEST

Oral Directions

First Administration

Please read the directions for questionnaire I and answer the fifteen questions on the questionnaire you have been given. Be sure to answer all questions with your own opinion and do not leave any blanks.

Now I am going to ask you to read some articles on the topics that I have just asked you about. I would like you to answer some more questions about your opinions after you have read these articles.

I am giving you the articles to show you what some other people are thinking about these matters. You are perfectly free to agree or disagree with these articles, of course. After you have read each article you will be asked whether you agree or disagree with it. Remember, I want to know what you think, so give me your own personal opinion.

The articles that you're going to read have been taken from a professional news service. This news service brings together articles about opinions in the news today.

There are many different opinions about these different subjects. The reporters who wrote the articles you're going to read have put down their own points of view. There are other people, of course, who think differently about these topics. For instance, my own personal views do not happen to agree with certain of these articles, although there are some other articles with which I am inclined to agree.

Now if I showed these articles to a lot of people in Byron including, for instance, all the teachers in this high school, I would get a good deal of disagreement. The average person would probably agree with some of the articles and disagree with others. These articles are on matters of opinion, you see, and some people have one opinion while others have a different opinion about each topic. So feel free to decide for yourself whether you agree or disagree with each of these articles.

Please read these articles the same way you would read an article in a magazine or a newspaper, and then answer the questions about your own opinion.

Oral Directions

Second Administration

Now I am going to ask you to read some more articles on the topics that I have just asked you about. I would like you to answer some more questions about your opinions after you have read these articles.

Again, I am giving you the articles to show you what some other people are thinking about these matters. You are perfectly free to agree or disagree with these articles, of course. After you have read each article you will be asked whether you agree or disagree with it. Remember, I want to know what you think, so give me your own personal opinion.

The articles that you're going to read have been taken from a professional news service. This news service brings together articles about opinions in the news today.

There are many different opinions about these different subjects. The reporters who wrote the articles you're going to read have put down their own points of view. There are other people, who think differently about these topics. For instance, my own personal views do not happen to agree with certain of these articles, although there are some other articles with which I am inclined to agree.

Please read these articles the same way you would read an article in a magazine or a newspaper, and then answer the questions about your own opinion.

Directions for Questionnaire I

Please read carefully:

This is a survey to find out what opinions people have on several different subjects.

This is not a "test" or "examination." There are no "right" or "wrong" answers to these questions. They are just matters of personal opinion on which some people have one idea while other people have a different idea. What we want is just for you to give your own honest, personal opinion on these questions.

What We Want You To Do:

1. Read every question carefully to make sure you understand it before you mark your answer.
2. Mark one answer to every question. DON'T SKIP ANY QUESTIONS.
3. If you are not sure of an answer, make the BEST GUESS you can.
4. Raise your hand if you want to ask any questions about what to do.

FORM O

1. During the past year, there have been several million men and women serving as volunteers in the United States Civil Defense Program. During the coming year, how many people do you think the United States should have as volunteers in civil defense work?

About _____ people.

2. Do you think the United States ought to spend more money or less money than it spends at present on civil defense? (Check one)

_____ We ought to spend a great deal more.
 _____ We ought to spend a little more.
 _____ We ought to spend about the same amount as at present.
 _____ We ought to spend a little less.
 _____ We ought to spend a great deal less.

3. If it ever happens that American cities are attacked by atomic bombs, how much help do you think a large civil defense organization would be with respect to saving lives? (Check one)

_____ It would be of tremendous value--and would save millions of lives.
 _____ It would be of great value.
 _____ It would be fairly valuable.
 _____ It would be slightly valuable.
 _____ It would be of very little value.
 _____ It would be of no value at all, and might do more harm than good.

4. How long do you think it will be before a really effective cure is found for cancer?

About _____ years from now.

5. At the present time, 5% of our medical research specialists are working on a cure for cancer. What percent of medical research specialists do you think should be working on a cure for cancer?

About _____ percent.

6. Do you think we should spend more, less, or the same amount of money on cancer research during the coming year as we did during the past year? (Check one)

_____ We should spend a lot more money than we do now.
 _____ We should spend a little more than we do now.
 _____ We should spend the same amount as we do now.
 _____ We should spend a little less than we do now.
 _____ We should spend a lot less than we do now.

7. Do you agree or disagree with the following statement about Paul von Hindenburg, the man who was Commander-in-Chief of the German Army during the First World War and who later became the President of the German Republic from 1925 to 1934:

"Paul von Hindenburg was an enemy of everything that American democracy stands for and he should be regarded as an evil and vicious German ruler."

(Check one)

- ☐ I strongly agree with this statement.
☐ I am inclined to agree, though not entirely.
☐ I am completely undecided--can't make up my mind whether I agree or disagree.
☐ I am inclined to disagree, though not entirely.
☐ I strongly disagree with this statement.

8. Some people have made the suggestion that the cities throughout democratic Germany should hold memorial services to honor Paul von Hindenburg. Do you think this is a good or a bad idea?

(Check one)

- ☐ Very good
☐ Fairly good
☐ Slightly good
☐ Undecided
☐ Slightly bad
☐ Fairly bad
☐ Very bad

9. Do you think that Paul von Hindenburg was humane and democratic or cruel and dictatorial? That is, was he a good or bad person?

(Check one)

- ☐ Extremely good
☐ Fairly good
☐ Slightly good
☐ Undecided
☐ Slightly bad
☐ Fairly bad
☐ Extremely bad

10. At present, the average radio station in large American cities presents about seven hours of classical music each week. What is your own opinion as to how much time the average radio station should devote to classical music each week?

About _____ hours a week.

11. During the next six months, about how much time would you like to spend listening to classical music on the radio each week?

About _____ hours a week.

12. How many hours a week of classical music do you think the average radio station will present ten years from now?

About _____ hours a week.

13. A new variety show starring the comedian Jack O'Keefe might be shown on TV from 10:00 PM to 11:00 PM every Saturday night. If this program is carried by your local TV station, how many times do you think you would like to watch the Jack O'Keefe show during the coming year?

About _____ times during the year.

14. How do you think Jack O'Keefe would compare with most of the other comedians on TV today? (Check one)

☐ Better than any other comedian on TV
☐ Much better than the average comedian on TV
☐ A little better than average
☐ About average
☐ A little worse than average
☐ Much worse than average
☐ Worse than any other comedian on TV

15. How popular do you think the Jack O'Keefe show would be in New York City--that is, about what percentage of the people in New York who have TV sets would actually tune in on this show each Saturday night?

About _____ percent would tune in on the Jack O'Keefe show each week.

Large Civil Defense Program Urged

By L. Wooding

There is a real danger facing us today. This is the possibility that Russia will wage atomic war on the United States. Everybody knows that Russia already has huge fleets of bombers and is building up large stockpiles of atomic and hydrogen bombs.

There is no doubt about what these bombs can do. Just one bomb will destroy a city. Most people who live in a bombed city will be trapped, burned, and die in pain. The few people who are not killed immediately in an atomic bombing may die in a few weeks because of the invisible radiation in the air.

If a real A-bomb attack comes, the United States will have a great many difficulties in defending our population. It is well known that no completely effective shelters are now being built, and that millions of lives may be lost if the Russians bomb our cities. Our radar network--which is not at all complete--cannot be sure of detecting airplanes which fly lower than 1,000 feet.

The civil defense system as it is now set up just doesn't have enough members to spot the planes that get through the radar network. Moreover, there aren't enough volunteers to function as emergency fire-fighters or rescue teams, and to do the many other important things that need to be done to save lives.

There is one plan we should have that will really protect the United States from the danger of atomic warfare. This plan calls for spending enough money to build and train an effective civil defense organization of 25,000,000 men and women.

These men and women would set up warning systems throughout the entire United States. They would build shelters in each city to which everyone can go in case of attack. This large team of civil defense workers could arrange to evacuate cities and towns that are threatened.

There is another important reason why we should build up our civil defense strength. If the Russians realize that they can't catch us by surprise, they will be much less likely to attack us.

We won't really be prepared until we have 25,000,000 men and women in our civil defense organization. By spending enough time and money to create a powerful civil defense team, we shall be investing in an insurance policy against disaster. It is a small price to pay for safety from atomic attack.

(Please answer questions 1-3 of questionnaire II in back of book)

Medical Writer Favors All-Out Attack on Cancer

By T. W. Haynes, B.A.

Because of recent advances medical scientists are becoming increasingly confident about the chances of finding a cure for cancer in the next one or two years. Many of them feel that a cure for cancer can be achieved soon--perhaps even within the coming year--if we concentrate a large number of doctors and research specialists on this problem.

Few people realize that at the present time only about 5% of medical research is being carried on in a search for a cure for cancer. Many cancer specialists are sure that it will take only one or two years to find the cure if medical research centers in this country spend more time and money and assign more men to work on this problem. Perhaps 40 or 50% of all medical research ought to be devoted to finding a cure for cancer.

It is true that this will temporarily delay work on other illnesses such as tuberculosis and heart disease. But wouldn't it be worthwhile to make temporary sacrifices in these other fields if it means that we can rapidly find a cure for cancer?

There are already many ways to help people who are suffering from tuberculosis and heart disease; but the only treatments we have for cancer at the present time are surgery or radium treatments. A famous physician recently stated that there are large numbers of cancer victims every year who cannot be cured by any available treatment. The best way to cut down on suffering and deaths is to spend enough money to have a giant research program that will concentrate on finding a cure for cancer as soon as possible.

There is no doubt, of course, that when we finally succeed in curing cancer, we will have wiped out one of the worst killers in the whole world. The American Cancer Society estimates that cancer strikes at one out of every eight Americans. And yet only 5% of the people who are qualified to do medical research are trying to find new ways to cure this deadly disease. Obviously, if we want to destroy cancer within a couple of years, we should have close to 50% of our medical research specialists devote themselves to combating this disease.

Hindenburg Called German Hero, Democratic Leader

By G. H. Connelly

The recent ceremonies in the democratic sectors of Germany marking the anniversary of the death of Paul von Hindenburg have made me realize that the character and achievement of this outstanding leader are not as well known to the American people as they ought to be.

Paul von Hindenburg, the most famous president of the German Republic, began his career as a brilliant and well-liked officer whose bravery won him the esteem of military men all over the world. When Germany entered the First World War, he was made Commander-in-Chief of the German Army because of his great leadership ability.

After the Americans entered the war, Hindenburg realized that the odds against Germany were now too great, and he agreed to an armistice. He retired to a simple country life, but the German people, who recognized that he was a great leader, elected him President of the new German Republic.

Although he had been a friend of kings, he became a champion of democracy. It is my opinion that he did his best to serve the German people and to restore the German economy.

In 1932 the friendly, warm-hearted old General they called "Father Hindenburg" defeated a politician named Adolf Hitler for President. In spite of Hindenburg's opposition, however, Hitler's strength was growing every day. The German people demanded that Hitler be given a position in the Government. Hindenburg refused to consider "that Austrian paperhanger" and swore that he would never deal with Hitler on any terms. But finally Hindenburg bowed to the will of the people and appointed Hitler to a position where he could keep a close watch on him and where he thought Hitler would do the least damage.

It seems to me that Hindenburg vigorously fought Hitler's growing influence, and did everything in his power to stop the Nazis. When Hindenburg died in 1934 (many people think that Hitler had him killed) Hitler seized absolute power at once. The old, honored General had been the last man in Germany who stood in the dictator's way. I believe that Hindenburg should be honored as a great man and the first democratic leader of Germany.

Phony Musical "Highbrows" Blasted

By S. Cobb

Have you ever seen a fake "highbrow" who is trying to impress other people? As a newspaper reporter, I've had to meet plenty of them--crooked lawyers, grafting politicians, vicious social climbers. But to listen to them talk you'd think they were the finest and most respectable characters in town.

Well, here's what I want to get off my chest. Some of the worst phonies I've ever met are the so-called "music-lovers." These are the people who like to talk about their favorite symphonies, concertos, sonatas and such, all of which are supposed to be thrilling, uplifting, and ennobling. Their pet complaint is that radio programs play too much popular music. They are always trying to argue that there ought to be more programs devoted to classical music.

Of course, I wouldn't say that all classical music is dull and highbrow. Some of the best melodies have been used in popular songs. But symphonic music by Beethoven, by Brahms, and by other classical composers doesn't have the kind of appeal that all of us find in popular songs and music. In fact, classical music is actually dull and boring to almost all Americans.

Everyone in the radio industry who is familiar with the Hooper ratings on the popularity of different programs has learned one important thing: that the vast majority of Americans enjoy popular music and actually dislike classical music. Only 5% of the people in the United States like to listen to serious classical music, while 95% of the public prefer other kinds of programs.

Now that those figures are becoming known, you can be sure that radio stations will cut way down on the amount of classical music they dish out every day. Someone told me that the average radio station wastes about seven hours a week on long-hair music. I'll give you odds that a few years from now the average will be down to only one hour a week or less.

Naturally, there are some serious musicians who seem to get real pleasure out of complicated symphonies. But only a very few people who spend a lot of time studying music can really get something out of it and most of these seem to be rather queer individuals--the arty, highbrow type.

If you want the advice of an old hand at detecting phonies, here it is: stay away from the stuffed-shirts who pretend to like classical music--and don't let anybody think that you are one of them.

(Please answer questions 10-12 of questionnaire II in back of book)

Predicts Corny Comic Will Flop on TV

By J. H. Allinson

Jack O'Keefe's studio has been sending out a lot of press releases about Jack's attempts to break into TV. They've been trying to build him up as a great comedian. Well, take it from me, he isn't. All he's got is a lot of corny gags and some heavy slapstick. Frankly, he would be a colossal flop if he ever got on TV.

Jack's main audience appeal is actually to the people who haven't really grown up. The people who like him are mainly the young children, and not the adults who make up most of the television listening audience.

Naturally his press agents are trying to build him up. They say that his success on the stage was tremendous, and that he will have a great time on television. But I've seen him on the stage, and take it from me, he's nothing special. At the tryout for his TV show, it seemed to me that most people who saw his act were bored. The man who laughed loudest at O'Keefe's jokes was his manager.

Even if he gets some new jokes, O'Keefe is going to have a lot of trouble shifting from vaudeville to television. His funnyman routine is tailored to fit the stage and nightclubs, where comedians can get by with a lot of things that you couldn't put on television. So he's going to have to work out a whole new type of act. I don't think he can do it successfully, at least not with the kind of show he's planning now. Anyhow, in my judgment his TV try-out was a flop and I don't see how he will ever get a sponsor.

People today don't want corny puns and out-of-date tap dancing and all the stuff that died with old-time vaudeville. They want new ideas, new jokes, and originality. They want to see the best new talent. They want to enjoy themselves, but they won't have much of a chance if they bother to watch Jack O'Keefe.

Danger Seen in Huge Civil Defense Plan

By H. Cole

As more and more Americans become concerned about the dangers of A-bomb and H-bomb attacks, they are beginning to show a peculiar reaction. This reaction is the belief that all we need to do to protect our cities against an atomic attack is to have millions of people join the U.S. Civil Defense organization. This is really a very dangerous myth because it gives Americans a false feeling of security and makes them think they are protected when they really aren't.

A very large civil defense program may actually increase the chance of a deadly atomic attack, because we will be spending defense money where it doesn't do any good. Some irresponsible bureaucrats have been trying to sell the American public on an unrealistic plan to have millions and millions of men and women in civil defense. If we want to wreck our nation's economy, this is the way to do it. A huge, ineffective civil defense program is just what our enemies want us to have.

Of course, some kind of civil defense program is absolutely necessary. But our program must be set up properly. It could be completely ruined by being made too large. If we expend too much of our national energies on civil defense there is a good chance that this will lead to all the horrors of atomic warfare.

Remember this: the more money we spend on huge civil defense organizations, the less money we will be able to spend on the most valuable parts of our nation's defense, such as radar warning nets, a plane-spotter system, and huge squadrons of interceptor planes.

We must devote as much of our defense money as possible to building up a large-well-equipped Air Force. We must prevent planes from attacking, rather than trying to do something after the bombs have already destroyed our cities. Anyway, if we are attacked by the giant hydrogen bomb, large numbers of shelters and civil defense teams won't help the thousands of people who will be burned, maimed, or blown to pieces.

A small civil defense system could work closely with the Air Force, give warnings of attacks, prepare fire-fighting units in case some planes get through, and maintain a system of plane spotters. But a large civil defense organization made up of untrained volunteers would cost our country billions of dollars and might prove to be absolutely worthless.

Our civil defense system probably should be limited to about 2,000 well-trained people who would work with the Air Force. If we have millions of unqualified people in civil defense, the really essential work will suffer and some day many American citizens may needlessly die in an atomic attack.

(Please answer questions 1-3 of questionnaire III in back of book)

Science Reporter Predicts Over 30 Years
Before Cancer Cure

By B. R. Hilford

Some poorly informed people believe that a cure for cancer can be found in only a few years. The real facts about cancer research show that these people are wrong. There are so many obstacles to be overcome that we cannot expect a cure for cancer within the next 30 years.

Dr. Rhoads, head of the famous Sloan-Kettering Institute, says this: "There are many theories about the cause and cure of cancer, but to date there is no single sound theory to guide researchers toward its cure. At present, we must use a trial and error method of screening, hoping that somewhere . . . there may exist an effective agent." As long as this trial and error method has to be used it would be foolish to count on a cure for cancer in our lifetime.

Perhaps you have heard that we might be able to speed up progress on finding a cure for cancer by spending more money on this kind of research. But scientists point out that this idea is very misleading for two important reasons.

First of all, if more doctors and research specialists spend their time doing research on cancer it would take them away from research on heart disease, tuberculosis, and multiple sclerosis where they have a much better chance of finding cures that could really save thousands of lives.

Secondly, we are such a long way from finding a really effective cure for cancer that spending the extra money probably wouldn't make any real difference. Most medical experts agree that the best we can hope for in the coming years is to find an improved cure for one or two of the many different types of cancer.

In fact, the experts say that it is very unlikely that there ever will be a single cure that will work on all types of cancer. A separate cure will undoubtedly have to be found for each of the many different types of cancer. This is one of the main reasons why it will take such a very long time before medical science will be able to cure the majority of cases suffering from all the different forms of cancer.

All things considered, it certainly looks as though it will be at least 30 or 40 years before there will be a cure for most cases of cancer, whether we spend a lot more money on it right now or not. So let's not make the mistake of setting up a very large and expensive program on cancer research which would prevent our scientists from finding cures for other diseases.

(Please answer questions 4-6 of questionnaire III in back of book)

Hindenburg Seen as Prussian Tyrant,
Aided Hitler

By R. R. McNally

Some Americans have been impressed by the ceremonies recently held in Germany to honor General von Hindenburg. In my opinion, these people just don't know what sort of man Hindenburg really was.

Instead of praise, I am convinced that Paul von Hindenburg should be given our strongest condemnation. His character was exactly what you expect from his appearance. In his photographs he always appears as an arrogant, domineering German officer with a closely-shaved head, cold harsh eyes, and a typical German mustache. He was brought up to be a true German officer. He spent his life to the goose-step; the drill book was his bible.

I think it was mainly because of his ruthlessness that he was the General the Kaiser chose to be head of the German Army in World War I. Some accounts of the war place the blame directly on Hindenburg for crimes and atrocities committed by the German Army against civilians in Belgium and France.

Hindenburg, for all his bluster and cold-blooded brutality, was defeated in several important battles. In 1918 the Americans and their Allies defeated him for good and he was forced into retirement.

After the war was over, the old German families, who had always wanted a strong Army man as a ruler, nominated him for President and helped him get elected. It looks to me as though Hindenburg was a stern ruler who loved power, and who took credit for many things which his assistants actually did. Perhaps his main accomplishment was that he built up the German Army and Navy, which helped Germany get ready to attack other nations.

In 1933 Hindenburg appointed Adolf Hitler to a top government position as Chancellor. This enabled Hitler to win more and more power and to make himself the real head of the German government. I believe that Hindenburg will always be remembered as a harsh general and ruler and as the man who allowed Hitler to become dictator of Germany.

Survey Shows Classical Music Growing
Rapidly in U.S.

By G. Kleeman

Fifty years ago the only people who could develop a real appreciation of fine classical music were the professional musicians. But today classical music by great composers like Mozart, Beethoven, and Brahms is listened to by millions of Americans.

In recent years the demand for good music has steadily increased. Ten years ago the average radio station devoted only three hours a week to classical music. Today it is up to seven hours a week.

Taking account of the recent trend, we can confidently predict that ten years from now there will be at least three times as much classical music on the radio. In other words, because of the rapidly growing audience, it is most likely that in ten years the average radio station will be presenting about 25 hours of classical music each week.

It is rather interesting to consider some of the important facts revealed by research studies of the radio-listening audiences. Who are the main listeners? Surveys conducted by radio stations show that it is the business executives, attorneys, physicians, and other outstanding professional and business people who are highly regarded by everyone in the community. In fact, it seems as though the more a person develops a liking for classical music, the more he will be looked up to by his neighbors and respected by his circle of friends.

Another interesting finding is that many people express a sense of regret about not having developed an interest in classical music. Some parents of growing children feel that they have missed something in life, especially when they notice that their children may grow up feeling a little ashamed of them for not appreciating good music.

Perhaps the most important fact of all is that anyone who really wants to can develop a genuine liking for classical music. All that it takes is a certain amount of deliberate listening to classical music in order to begin to enjoy it. These days, and more so in the next few years, the increasing number of symphonic programs on the radio will make it easy to appreciate good music.

(Please answer questions 10-12 of questionnaire III in back of book)

O'Keefe Clicks, Plans Smash Revue

By J. Paige

A new star has been born in the entertainment world. His name is Jack O'Keefe, and he's been wowing audiences in nightclubs and on the stage from coast to coast.

One of the TV networks wants to give him a top Saturday night spot. If the plan goes through, he will be on the air every Saturday evening at 10 PM (EST) for a full hour.

Critics who have seen his great new act call him one of the best comedians to come along in years. He packed them in by the hundreds at one of New York's famous nightclubs, and he's been a smash hit in a tour through Chicago and points west.

For his new TV show Jack will play the part of a hotel manager who has a hotel full of some of the funniest characters you've ever seen on television. There is Mrs. Bascombe, the wealthy Southern widow; Jeb Carruthers, the Ozark hillbilly; Harry the Hack, the Brooklyn taxi driver; and many others. Jack himself has to try to run the hotel and keep all the characters in it happy. There will be many well-known singers and dancers as guest stars who will stay at the hotel every week and add to the fun.

Jack himself is an expert at playing many different characters. He has one act in which he plays a politician--Honest Abe McScoundrel--and another act where he plays a dumb wrestler. He is also a great soft-shoe dancer, and they say he has one of the world's wackiest dances.

We'll all be looking forward to a great time when his television show starts. For a lot of laughs, tune in "The Jack O'Keefe Show." Your local newspaper will give you the time and station. We'll be seeing you, Jack.

Form M

1. During the past year, there have been several million men serving in the United States volunteer military force. During the coming year, how many men do you think the United States should have in its military force?

About _____ men.

2. Do you think the United States ought to spend more money or less money than it spends at present on its military force? (Check one)

☐ We ought to spend a great deal more.
☐ We ought to spend a little more.
☐ We ought to spend about the same amount as at present.
☐ We ought to spend a little less.
☐ We ought to spend a great deal less.

3. If it ever happens that American cities are invaded by a foreign enemy, how much help do you think a large military organization would be with respect to saving lives? (Check one)

☐ It would be of tremendous value--and would save millions of lives.
☐ It would be of great value.
☐ It would be fairly valuable.
☐ It would be slightly valuable.
☐ It would be of very little value.
☐ It would be of no value at all, and might do more harm than good.

4. How long do you think it will be before a really effective cure is found for "black lung" disease in male coal miners?

About _____ years from now.

5. At the present time, 5% of our medical research specialists are working on a cure for "black lung" disease. What percent of medical research specialists do you think should be working on a cure for "black lung" disease in coal miners?

About _____ percent.

6. Do you think we should spend more, less, or the same amount of money on "black lung" disease research during the coming year as we did during the past year? (Check one)

☐ We should spend a lot more money than we do now.
☐ We should spend a little more than we do now.
☐ We should spend the same amount as we do now.
☐ We should spend a little less than we do now.
☐ We should spend a lot less than we do now.

7. Do you agree or disagree with the following statement about King Arthur, an English knight who became King of England in the early 500s A.D.:

"King Arthur was an enemy of everything that American democracy stands for and he should be regarded as an evil and vicious English ruler."

(Check one)

- ☐ I strongly agree with this statement.
☐ I am inclined to agree, though not entirely.
☐ I am completely undecided--can't make up my mind whether I agree or disagree.
☐ I am inclined to disagree, though not entirely.
☐ I strongly disagree with this statement.

8. Some people have made the suggestion that the cities throughout democratic England should hold memorial services to honor King Arthur. Do you think this is a good or a bad idea? (Check one)

- ☐ Very good
☐ Fairly good
☐ Slightly good
☐ Undecided
☐ Slightly bad
☐ Fairly bad
☐ Very bad

9. Do you think that King Arthur was humane and democratic or cruel and dictatorial? That is, was he a good or bad person? (Check one)

- ☐ Extremely good
☐ Fairly good
☐ Slightly good
☐ Undecided
☐ Slightly bad
☐ Fairly bad
☐ Extremely bad

10. At present, the average radio station in large American cities presents about four hours of business and industrial news each week. What is your own opinion as to how much time the average radio station should devote to business and industrial news each week?

About _____ hours a week.

11. During the next six months, about how much time would you like to spend listening to business and industrial news on the radio each week?

About _____ hours a week.

12. How many hours a week of business and industrial news do you think the average radio station will present ten years from now?

About _____ hours a week.

13. A new football sports announcer named Jack O'Keefe might be on the TV Saturday afternoon game. If this program is carried by your local TV station, how many times would you like to watch Jack O'Keefe during the coming year?

About _____ times during the year.

14. How do you think Jack O'Keefe would compare with most of the other sports announcers on TV today? (Check one)

☐ Better than any other sports announcer on TV
☐ Much better than the average sports announcer on TV
☐ A little better than average
☐ About average
☐ A little worse than average
☐ Much worse than average
☐ Worse than any other sports announcer on TV

15. How popular do you think Jack O'Keefe would be in New York City-- that is, about what percentage of the people in New York who have TV sets would actually tune in on this show each Saturday?

About _____ percent would tune in on Jack O'Keefe each week.

Large Male Volunteer Military Force Urged

By L. Wooding

There is a real danger facing us today. This is the possibility that some foreign country will wage war on the United States. Everybody knows that several foreign countries like Russia and China, already have huge numbers of men in their armed forces.

There is no doubt what a large and powerful army can do. A large male military force allows a country the opportunity to invade other nations at any time. The people in the invaded country will be trapped, tortured and most likely die in pain. The people who are not killed in defending their country will be treated as prisoners and slaves.

If a real invasion comes, the United States will have a great many difficulties in defending our population. It is well known that our border is not completely protected and guarded and that millions of lives may be lost if some foreign nation decides to invade our country. For example, our radar network--which is not at all complete--cannot be sure of detecting airplanes which fly lower than 1,000 feet.

The military system as it is now set up just doesn't have enough men to defend our country against a foreign invasion or act of war. Moreover, there aren't enough men to both defend our country and function in national disasters such as hurricanes or floods and to do the many important things that need to be done to save lives.

There is one plan we should have that will really protect the United States from the danger of a foreign invasion. This plan calls for spending enough money to build and train an effective volunteer military force of well-trained men.

A large military force would be capable of setting up a more complete defense system throughout the entire United States. Such a force would allow men to be properly stationed so that our defense would not depend entirely upon machines. Also a large manned force would allow time for cities to be evacuated in time of war to save lives.

There is another important reason why we should increase the number of men in our military force. If the Russians and Chinese realize that they can't catch us by surprise, they will be much less likely to attack us.

We won't really be prepared until we have 4 million men in our military forces organizations. By spending time and money to create a large professional military force, we will be investing in an insurance policy against disaster. It is a small price to pay for safety from an enemy invasion.

(Please answer questions 1-3 of questionnaire II in back of book)

Medical Writer Favors All-Out Attack on Coal
Miner's "Black Lung" Disease in Men

By T. W. Haynes, B.A.

Because of recent advances medical scientists are becoming increasingly confident about the chances of finding a cure for male coal miner's "black lung" disease in the next one or two years. Many of them feel that a cure for "black lung" can be achieved soon--perhaps even within the coming year--if we concentrate a large number of doctors and research specialists on this problem.

Few people realize that at the present time only about 5% of medical research is being carried on in a search for a cure for "black lung" disease. Many research specialists are sure that it will take only one or two years to find the cure if medical research centers in this country spend more time and money and assign more men to work on this problem. Perhaps 40% or 50% of all medical research ought to be devoted to finding a cure for "black lung" disease in men.

It is true that this will temporarily delay work on other illnesses such as tuberculosis and heart disease. But wouldn't it be worthwhile to make temporary sacrifices in these other fields if it means that we can rapidly find a cure for "black lung" disease in miners?

There are already many ways to help people who are suffering from tuberculosis and heart disease; but the only treatments we have for "black lung" in male miners at the present time are retirement from mining and surgery. A famous physician recently stated that there is a high degree of "black lung" disease in men every year that cannot be cured by any available treatment. The best way to cut down on suffering and deaths is to spend enough money to have a giant research program that will concentrate on finding a cure for "black lung" disease as soon as possible.

There is no doubt, of course, that when we finally succeed in curing "black lung" disease, we will have wiped out one of the worst killers in the mining world. The American Medical Society estimates that "black lung" disease strikes at one out of every eight American male coal miners. And yet only 5% of the people who are qualified to do medical research are trying to find new ways to cure this deadly disease. Obviously, if we want to destroy "black lung" within a couple of years, we should have close to 50% of our medical research specialists devote themselves to combating this male miner's disease.

(Please answer questions 4-6 of questionnaire II in back of book)

King Arthur Called Male Idol, English Hero
and Democratic Leader

By G. B. Connelly

The recent ceremonies in the democratic sectors of England marking the anniversary of the death of King Arthur have made me realize that the character and achievement of this outstanding man are not as well known to the American people as they ought to be.

King Arthur, the most famous King of the English Empire, began his career as a brilliant, and well-liked knight whose bravery won him the esteem of all men during the Middle Ages. When England was in turmoil and many groups were struggling for power he became the King who brought order and peace to England because of his great leadership ability.

After fighting in many wars as a knight, Arthur realized that war in England was destroying the country, and he agreed to the establishment of a court to settle matters peacefully. He attempted to retire to a simple country life several times, but the English people who recognized that he was a great leader, wanted him to remain as head of his court known as the Round Table.

Although he had been a King he became a champion of democracy. It is my opinion that he did his best to serve the English people and to restore peace to England during the years of the A.D. 500s.

Around 512 A.D. the friendly warm-hearted knight called "King of the Round Table" defeated his nephew, Modred, who had led a group of rebels against the throne. After this battle, peace and order were restored to England due to King Arthur's democratic desires. The English people loved their King Arthur because he treated all men equally. Arthur refused to consider war as a solution to problems unless it was a last resort. But, finally Arthur died of wounds received while protecting England, the country he loved.

It seems to me that Arthur vigorously fought for democracy and did everything in his power to prevent war. When Arthur died, strict and undemocratic rule returned to England. The old honored King has been the first man in England who stood for democracy for all people. I believe that Arthur should be honored as a great man and the first democratic leader of England.

(Please answer questions 7-9 of questionnaire II in back of book)

Phony Businessmen "Highbrows" Blasted

By S. Cobb

Have you ever seen a fake "highbrow" who is trying to impress other people? As a newspaper reporter, I've had to meet plenty of them--crooked lawyers, grafting politicians, vicious social climbers. But to listen to them talk you'd think they were the finest and most respectable men in town.

Well, here's what I want to get off my chest. Some of the worst men phonies I've ever met are the so-called "business-experts." These are the men who like to talk about their favorite companies, stocks, mutual funds and such, all of which are supposed to be thrilling, uplifting, and ennobling. Their pet complaint is that radio programs don't have enough regular business world reports. They are always trying to argue that there ought to be programs devoted to financial matters.

Of course, I wouldn't say that all financial matters are dull and highbrow. Some of the best news concerns financial dealing. But constant financial reports concerning GM or IBM or other business companies, don't have the kind of appeal that most of us find in other news stories. In fact, business matters are actually dull and boring to almost all American men.

Everyone in the radio industry who is familiar with the Hooper ratings on the popularity of different programs has learned one important thing: that the vast majority of American men enjoy regular news and actually dislike financial news. Only 5% of the male population in the United States like to listen to serious financial news, while 95% of the males prefer other kinds of programs.

Now that these figures are becoming known, you can be sure that radio stations will cut way down on the amount of financial news they dish out every day. Someone told me that the average radio station wastes four hours a week on financial reports. I'll give you odds that a few years from now the average will be down to one hour a week or less.

Naturally, there are some serious male financiers who seem to get real pleasure out of complicated financial news. But only a very few men who spend a lot of time studying the financial world can really get something out of it and most of these seem to be rather queer individuals--the arty, highbrow type.

If you want the advice of an old hand at detecting phony businessmen, here it is: stay away from the stuffed-shirts who pretend to like business and industrial reports--and don't let anybody think that you are one of them.

(Please answer questions 10-12 of questionnaire II in back of book)

Predicts Corny Male Football Sportscaster Will Flop on TV

By J. H. Allinson

Jack O'Keefe's studio has been sending out a lot of press releases about Jack's attempts to break into TV. They've been trying to build him up as a great sportscaster. Well, take it from me, he isn't. All he's got is a lot of corny comments and lack of football sportscasting experience. Frankly, he would be a colossal flop if he ever got on TV.

Jack's main audience appeal is actually to the men who haven't really grown up. The people who like him are mainly the young boys and not the adults who make up most of the television listening audience.

Naturally his press agents are trying to build him up. They say that his success in football sportscasting was tremendous, and that he will have a great time on television. But I've seen him broadcast several football games, and take it from me, he's nothing special. After his first TV football broadcast, it seemed to me that most of the men who saw him were bored. The man who liked O'Keefe the best was his manager.

Even if he gets some new ideas, O'Keefe is going to have a lot of trouble shifting from small time announcing to national television. His play by play commentary is tailored to fit small local sports events, where announcers could get by with a lot of things that you couldn't put on national television. So he's going to have to work out a whole new type of commentary. I don't think he can do it successfully, at least not with the kind of announcing he's planning now. Anyhow, in my judgment his TV tryout was a flop and I don't see how he will ever get a sponsor.

Men today don't want out-of-date sports announcing and all the oldtime sports shows. They want new ideas, new comments, and originality. They want to see the best new talent. They want to enjoy themselves, but they won't have much of a chance if they bother to watch Jack O'Keefe.

Danger Seen in a Large Number of Men
in Armed Forces

By H. Cole

As more and more male Americans become concerned about the dangers of a third World War and international unrest, they are beginning to show a peculiar reaction. This reaction is the belief that all we need to do to protect our nation against another nation's forces is to have millions of American men volunteer and form the armed forces (Army, Navy, Air Force and Marines). This is really a very dangerous myth because it gives American men a false feeling of security and makes them think they are protected when they really aren't.

A large number of men in our armed forces plan may actually increase the chance of a deadly international conflict, because we will be spending defense money on supplying men instead of upon new military equipment which will be needed to protect against an invasion. Some irresponsible bureaucrats have been trying to sell American men on an unrealistic plan to have millions and millions of men in our volunteer armed forces. If we want to wreck our nations' economy and weaken our defenses, this is the way to do it. A huge, ineffective military force is just what our enemies want us to have.

Of course, some military force proper is absolutely necessary. But our program must be set up properly. It could be completely ruined by being made too large. If we expend too much of our national budget on maintaining a large military force there is a good chance that this will lead to all the horrors of atomic warfare.

Remember this: the more money we spend on a huge military force the less money we will be able to spend on the most valuable parts of our nation's defense, such as radar warning nets, new automatic weapons, tanks and aircraft.

We must devote as much of our defense money as possible to building a large, well-stocked supply of military equipment. We must have the modern equipment necessary to prevent an enemy from attacking, rather than maintaining a large military force. It must be pointed out that if we are attacked by a giant hydrogen or atomic bomb, a large number of men in our military force will not help the thousands of people who will be burned, maimed or blown to pieces.

A smaller armed force of men would become more highly trained and professional. But a large armed force made up of untrained volunteers would cost our country billions of dollars and might prove to be absolutely worthless.

Our volunteer armed force probably should be limited to about one million well-trained men who are interested in becoming professionals. If we have millions of unqualified men in our armed forces, the really essential work of providing protection will suffer and some day many Americans may needlessly die in an atomic attack.

(Please answer questions 1-3 of questionnaire III in back of book)

Science Reporter Predicts Over 30 Years Before a Cure
for "Black Lung" Disease in Men is Achieved

By B. R. Hilford

Some poorly informed people believe that a cure for coal miner's "black lung" disease in men can be found in only a few years. The real facts about "black lung" research show that these people are wrong. There are so many obstacles to be overcome that we cannot expect a cure for "black lung" disease within the next 30 years.

Dr. Rhoads, a head of the famous Sloan-Kettering Institute, says this: "There are many theories about the cause and cure of "black lung," but to date there is no single sound theory to guide researchers toward its cure. At present, we must use a trial and error method of screening, hoping that somewhere--there may exist an effective agent." As long as this trial and error method has to be used it would be foolish to count on a cure for "black lung" in our lifetime.

Perhaps you have heard that we might be able to speed up progress on finding a cure for "black lung" in male miners by spending more money on this kind of research. But scientists point out that this idea is very misleading for two important reasons:

First of all, if more doctors and research specialists spend their time doing research on "black lung" disease it would take them away from research on heart disease and tuberculosis where they have a much better chance of finding cures that could really save thousands of lives.

Secondly, we are such a long way from finding a really effective cure for "black lung" disease in male miners that spending extra money probably wouldn't make any real difference. Most medical experts agree that the best we can hope for in the coming years is to find an improved cure for one or two of the many different types of "black lung" disease.

In fact, the experts say that it is very unlikely that there ever will be a single cure that will work on all types of "black lung." A separate cure will undoubtedly have to be found for each of the many different types of this male miner's disease. This is one of the main reasons why it will take such a very long time before medical science will be able to cure the majority of men suffering from all the different forms of "black lung."

All things considered, it certainly looks as though it will be at least 30 to 40 years before there will be a cure for most cases of "black lung" disease in men, whether we spend a lot more money on it right now or not. So let's not make the mistake of setting up a very large and expensive program on "black lung" research which would prevent our scientists from finding cures for other diseases.

(Please answer questions 4-6 of questionnaire III in back of book)

King Arthur Seen as English Tyrant, Supported War

By R. R. McNally

Some Americans have been impressed by the ceremonies recently held in England to honor King Arthur. In my opinion, these people just don't know what sort of man King Arthur really was.

Instead of praise, I am convinced that King Arthur should be given our strongest condemnation. His character was exactly what you would expect from his appearance. In drawings he always appears as an arrogant, domineering man with a closely-shaven head, cold harsh eyes, and a typical unkept beard. He was brought up to be a true English knight. He spent his life studying war; the drill book was his Bible.

I think it was mainly because of his ruthlessness that all the knights were forced to join the Round Table. Some accounts of the wars in England place the blame directly on Arthur for crimes and atrocities committed by the English knights in foreign countries.

King Arthur, for all his bluster and cold-blooded brutality, was not a truly great warrior. In his battle with Modred, Arthur was wounded and was forced to retire to recover from his wounds.

After Arthur's early wars, the old English families, who had always wanted a strong army man as a ruler, were very happy when he became King and supported him. It looks to me as though King Arthur was a stern ruler who loved power, and who took credit for many things which his assistants actually did. Perhaps his main accomplishment was that he built up the strength of the English knights, which helped England get ready to attack other nations.

In the A.D. 500s King Arthur made himself King of the Round Table. This enabled Arthur to win more and more power and to make himself the real head of the English warriors. I believe that King Arthur will always be remembered as a harsh King and warrior and as the man who taught England to fear the knights of the Round Table.

Survey Shows Male Oriented Business Trend Reports
Growing Rapidly in U.S.

By G. Kleeman

Fifty years ago the only men who could develop a real appreciation of big business were the professional businessmen. But today industrial and business reports of great companies such as General Motors, AT&T, and IBM can be obtained by millions of Americans.

In recent years the demand for good business trend reports has steadily increased. Ten years ago the average radio station devoted only two hours a week to news concerning business trends. Today it is up to four hours a week.

Taking account of the recent trend, we can confidently predict that ten years from now there will be at least 2 times as much business trend reporting on the radio. In other words, because of the rapidly growing audience, it is most likely that in ten years the average radio station will be presenting about 8 hours of programs each week concerning stock market reports and business and industrial trends.

It is rather interesting to consider some of the important facts revealed by research studies of the radio-listening audience. Who are the main listeners? Surveys conducted by radio stations show that it is the business executives, attorneys, physicians, and other outstanding professional and business men who are highly regarded by everyone in the community. In fact, it seems as though the more a man develops an interest in business, the more he will be looked up to by his neighbors and respected by his circle of friends.

Another interesting finding is that many men express a sense of regret about not having developed an interest in finances and business. Some parents of growing children feel that they have missed something in life, especially when they notice that their children may grow up feeling a little ashamed of them for not appreciating the importance of the business world.

Perhaps the most important fact of all is that anyone who really wants to can develop a genuine liking for and understanding of financial affairs. All that it takes is a certain amount of listening to financial reports in order to begin to enjoy it. These days, and more so in the next few years, the increasing number of business programs on the radio will make it easy to appreciate and understand our industrial society.

(Please answer questions 10-12 of questionnaire III in back of book)

Jack O'Keefe Clicks, Plans Great Football Coverage

By J. Paige

A new male sports announcer has been born in the sports broadcasting world. His name is Jack O'Keefe, and he's been wowing sport audiences on both radio and television from coast to coast.

One of the TV networks wants to give him a top position on their football telecasts. If the plan goes through, he will be on the air every Saturday for the college football game of the week.

Critics who have seen this great new telecaster call him one of the best sports announcers to come along in years. Television surveys have indicated that the number of viewers increased by the thousands when he has broadcasted football games in New York, and he's also been a smash in Chicago and points west.

For his new TV job, Jack will handle the play by play coverage of some of the most exciting games you've ever seen on television. In addition to Jack, Dale Smith, a retired defensive end will analyze the defenses of both teams and Fred Joyce, a former offensive coach, will describe and comment on the offensive plays used by each team. Jack will be the center of this broadcasting team and draw both Dale and Fred's comments into the telecast. There will be many well-known sports figures and celebrities who will appear as guests every week and add to the excitement.

Jack himself is an expert at play by play announcing for football games. He has covered a wide variety of games and played football in the semi-pro leagues. He also has great insight into the type of game each coach is playing.

We'll all be looking forward to a great time when his game of the week broadcasting begins. For a well televised game, tune in to the game of the week with Jack O'Keefe. Your local newspaper will give you the time and station. We'll be seeing you, Jack.

Form F

1. During the past year, there have been several million women serving as registered nurses in the United States. During the coming year, how many women do you think the United States should have as volunteers in the registered nurse force?

About _____ women.

2. Do you think the United States ought to spend more money or less money than it spends at present on the registered nurse force? (Check one)

____ We ought to spend a great deal more.
 ____ We ought to spend a little more.
 ____ We ought to spend about the same amount as at present.
 ____ We ought to spend a little less.
 ____ We ought to spend a great deal less.

3. If it ever happens that American cities are struck by a national disaster, how much help do you think a large registered nurse force would be with respect to saving lives? (Check one)

____ It would be of tremendous value--and would save millions of lives.
 ____ It would be of great value.
 ____ It would be fairly valuable.
 ____ It would be slightly valuable.
 ____ It would be of very little value.
 ____ It would be of no value at all, and might do more harm than good.

4. How long do you think it will be before a really effective cure is found for breast cancer in women?

About _____ years from now.

5. At the present time, 5% of our medical research specialists are working on a cure for breast cancer in women. What percent of medical research specialists do you think should be working on a cure for women's breast cancer?

About _____ percent.

6. Do you think we should spend more, less, or the same amount of money on breast cancer research during the coming year as we did during the past year? (Check one)

____ We should spend a lot more money than we do now.
 ____ We should spend a little more than we do now.
 ____ We should spend the same amount as we do now.
 ____ We should spend a little less than we do now.
 ____ We should spend a lot less than we do now.

7. Do you agree or disagree with the following statement about Queen Elizabeth I, the woman who was an English leader and who became Queen of England in the late 1500s:

"Queen Elizabeth I was an enemy of everything that American democracy stands for and she should be regarded as an evil and vicious English ruler."

(Check one)

- ☐ I strongly agree with this statement.
☐ I am inclined to agree, though not entirely.
☐ I am completely undecided--can't make up my mind whether I agree or disagree.
☐ I am inclined to disagree, though not entirely.
☐ I strongly disagree with this statement.

8. Some people have made the suggestion that the cities throughout democratic England should hold memorial services to honor Queen Elizabeth I. Do you think this is a good or a bad idea? (Check one)

- ☐ Very good
☐ Fairly good
☐ Slightly good
☐ Undecided
☐ Slightly bad
☐ Fairly bad
☐ Very bad

9. Do you think that Queen Elizabeth I was humane and democratic or cruel and dictatorial? That is, was she a good or bad person? (Check one)

- ☐ Extremely good
☐ Fairly good
☐ Slightly good
☐ Undecided
☐ Slightly bad
☐ Fairly bad
☐ Extremely bad

10. At present, the average radio station in large American cities presents about three hours of women's fashion news each week. What is your own opinion as to how much time the average radio station should devote to women's fashion news each week?

About _____ hours a week.

11. During the next six months, about how much time would you like to spend listening to women's fashion news on the radio each week?

About _____ hours a week.

12. How many hours a week of women's fashion news do you think the average radio station will present ten years from now?

About _____ hours a week.

13. A new afternoon TV show starring the actress, Sandra O'Keefe, might be shown on TV every weekday afternoon. If this program is carried by your local TV station, how many times do you think you would like to watch Sandra O'Keefe during the coming year?

About _____ times during the year.

14. How do you think Sandra O'Keefe would compare with most of the other actresses on TV today? (Check one)

☐ Better than any other actress on TV
☐ Much better than the average actress on TV
☐ A little better than average
☐ About average
☐ A little worse than average
☐ Much worse than average
☐ Worse than any other actress on TV

15. How popular do you think the Sandra O'Keefe show would be in New York City--that is, about what percentage of the people in New York who have TV sets would actually tune in on this show each afternoon?

About _____ percent would tune in on the Sandra O'Keefe show each afternoon.

Large Female Registered Nurse Program Urged

By L. Wooding

There is a real danger facing us today. This is the possibility that our country will be struck by a national disaster such as a war, a major flood, or an earthquake. Everybody knows that these events could occur at anytime without warning.

There is no doubt what these disasters can do. Just one earthquake, for example, will destroy a whole city. Most people who live in a destroyed city will be trapped, burned and die in pain. The few people who are not killed immediately in the quake may die in a few weeks because of a lack of professional medical care.

If a real national disaster comes, the United States will have a great many difficulties in providing adequate health care for our population. It is well known that no completely effective health plans have been made and that millions of lives may be lost if a national disaster strikes one of our major cities. Our present medical units--which are not all at full strength--cannot be sure of supplying all the medical services needed in a major disaster.

The medical health plans as they are now set up just don't have enough registered nurses to care for the people who will need medical attention. Moreover, there aren't enough qualified women volunteers to function as nurses or medical assistants, and to do the many other important things that need to be done to save lives.

There is one plan we should have that will really prepare the United States for the possibility of a tragic national disaster. This plan calls for spending enough money to build and train an effective registered nurse organization of women.

These registered nurses would set up complete medical stations throughout the United States. They would build medical evacuation plans in each city in case of a national disaster. This team of registered nurses could arrange to evacuate and administer medical treatments in the cities and towns involved in the disaster.

There is another important reason why we should build up our registered nurse force. If foreign nations realize that we have an effective medical force of professional nurses to care for casualties, they will be much less likely to attack us.

We won't really be prepared until we have 1.5 million women in our registered nurse organization. By spending enough time and money to create a powerful medical nurse team we shall be investing in an insurance policy against disaster. It is a small price to pay for being prepared for a national disaster.

(Please answer questions 1-3 of questionnaire II in back of book)

Medical Writer Favors All-Out Attack on
Breast Cancer in Women

By T. W. Haynes, B.A.

Because of recent advances, medical scientists are becoming increasingly confident about the chances of finding a cure for breast cancer in women during the next one or two years. Many of them feel that a cure for breast cancer in women can be achieved soon--perhaps even within the coming year--if we concentrate a large number of doctors and research specialists on this problem.

Few people realize that at the present time only about 5% of medical research is being carried on in a search for a cure for the various forms of breast cancer found in women. Many cancer specialists are sure that it will take only one or two years to find the cure if medical research centers in this country spend more time and money and assign researchers to work on this problem. Perhaps 40% to 50% of all medical research ought to be devoted to finding a cure for women's breast cancer.

It is true that this will temporarily delay work on other illnesses such as tuberculosis and heart disease. But wouldn't it be worthwhile to make temporary sacrifices in these other fields if it means that we can rapidly find a cure for breast cancer in women.

There are already many ways to help people who are suffering from tuberculosis and heart disease; but the only treatments we have for the various forms of breast cancer in women at the present time are surgery or radium treatments. A famous physician recently stated that there are large numbers of women whose breast cancer cannot be cured by any available treatment. The best way to cut down on suffering and deaths for women is to spend enough money to have a giant research program that will concentrate on finding a cure for breast cancer in women as soon as possible.

There is no doubt, of course, that when we finally succeed in curing women's breast cancer, we will have wiped out one of the worst killers in the whole world. The American Cancer Society estimates that breast cancer strikes at about one out of every eight women in America. And yet only 5% of the people who are qualified to do medical research are trying to find new ways to kill this deadly disease for women. Obviously, if we want to destroy breast cancer in women within a couple of years, we should have close to 50% of our medical research specialists devote themselves to combating this disease in women.

(Please answer questions 4-6 of questionnaire II in back of book)

Queen Elizabeth I Called Female Idol,
Democratic Leader

By J. H. Connelly

The recent ceremonies in democratic England marking the anniversary of the death of Queen Elizabeth I have made me realize that the character and achievement of this outstanding woman are not as well known to the American people as they ought to be.

Queen Elizabeth I, the most famous Queen of the English Empire, began her career as a brilliant and beautiful woman whose bravery and trust won her the esteem of all the people during the late 1500s. When Elizabeth became Queen, England was at war with France and as a result of Elizabeth's leadership, England defeated their enemy.

After defeating France, Elizabeth cured England's bankrupt treasury and placed England's finances on a solid basis. She was a simple woman, but the English people who recognized that she was a great female leader realized that she had made England's well-being the chief aim of her life.

Although she had been a Queen she became a champion of democracy. It is my opinion that she did her best to serve the English people and restore faith in the English economy.

In 1587 the friendly warm-hearted old Queen they called "Good Queen Bess" defeated her political enemy, Mary Stuart, Queen of Scots. After this political struggle, peace and order were restored to England due to Elizabeth's democratic desires. The English people loved their Queen Elizabeth because she treated all people equally. Elizabeth refused to consider war as a solution to problems unless it was a last resort. Elizabeth became a living legend to the great majority of her subjects.

It seems to me that Elizabeth I fought for democracy and did everything in her power to prevent war. When Queen Elizabeth died, strict and undemocratic rule returned to England. The old honored Queen had been the first woman in England who stood for democracy for all people. I believe that Queen Elizabeth I should be honored as a great woman and the first democratic female leader of England.

Phony Women Fashion "Highbrows" Blasted

By S. Cobb

Have you ever seen a fake woman "highbrow" who is trying to impress other people? As a newspaper reporter, I've had to meet plenty of them--crooked, grafting women, vicious social climbers. But, to listen to them talk you'd think they were the finest and most respectable ladies in town.

Well, here's what I want to get off my chest. Some of the worst women phonies I've ever met are the so-called "women's fashion-lovers." These are the people who like to talk about their favorite styles, necklines, cuts and such, all of which are supposed to be thrilling, uplifting and ennobling. Their pet complaint is that the media, especially radio, do not have enough women fashion news. They are always trying to argue that there ought to be more programs devoted to women's fashions.

Of course, I wouldn't say that all women's fashion news is dull and highbrow. Some of the most expensive fashions have been developed into popular medium priced clothing. But the exclusive fashions of Mollie Parnis, Edith Head and Vera and other designers don't have the kind of appeal that all of us find in regular everyday clothing. In fact, the world of women's fashion is actually dull and boring to almost all Americans.

Everyone in the radio industry who is familiar with the Hooper ratings on the popularity of different programs has learned one important thing: that the vast majority of Americans enjoy regular news and actually dislike women's fashion news. Only 5% of the people in the United States like to listen to serious fashion news, while 95% of the public prefer other kinds of programs.

Now that these figures are becoming known, you can be sure that radio stations will cut way down on the amount of fashion news they dish out every day. Someone told me that the average radio station wastes three hours a week on women's fashion news. I'll give you odds that a few years from now the average will be down to one hour a week or less.

Naturally, there are some serious women fashion designers who seem to get real pleasure out of complicated designs. But only a very few women who spend a lot of time studying fashion can really get something out of it and most of these seem to be rather queer individuals--the arty, highbrow type.

If you want the advice of an old hand at detecting phonies, here it is: stay away from the highbrows who pretend to like women's fashions--and don't let anybody think that you are one of them.

(Please answer questions 10-12 of questionnaire II in back of book)

Predicts Corny Female Actress Will Flop on TV

By J. H. Allinson

Sandra O'Keefe's studio has been sending out a lot of press releases about Sandra's attempts to break into afternoon TV. They've been trying to build her up as a great actress. Well, take it from me, she isn't. All she's got is a lot of corny lines and weak acting. Frankly, she would be a colossal flop if she ever got on TV.

Sandra's main audience appeal is actually to the people who haven't really grown up. The people who like her are mainly the young children, and not the adults who make up most of the television listening audience.

Naturally her press agents are trying to build her up. They say that her success on the stage was tremendous, and that she will have a great time on television. But I've seen her on the stage, and take it from me, she's nothing special. At the tryout for her TV show, it seemed to me that most people who saw her acting were bored. The woman who raved the most about Sandra's performance was her manager.

Even if she gets some new lines, Sandra is going to have a lot of trouble shifting from local theatre to afternoon television. Her normal acting is tailored to fit the stage and traveling theatre, where actresses can get by with a lot of things that you couldn't put on television. So she's going to have to work out a whole new type of acting. I don't think she can do it successfully, at least not with the kind of show she's planning now. Anyhow, in my judgment her TV tryout was a flop and I don't see how she will ever get a sponsor.

People today don't want corny female actresses and out-of-date performers and all the stuff that died with old-time vaudeville. They want new ideas, new acting, and originality. They want to see the best new talent. They want to enjoy themselves, but they won't have much of a chance if they bother to watch Sandra O'Keefe.

Danger Seen in Large Number of Women
in Registered Nurse Force

By H. Cole

As more and more female Americans become concerned about the dangers of some type of national disaster, they are beginning to show a peculiar reaction. This reaction is the belief that all we need to do to be prepared for emergencies is to have millions of women become registered nurses. This is really a very dangerous myth because it gives American women a false feeling of security and makes them think they are prepared when they really aren't.

A very large registered female nurse force may actually decrease our readiness to handle a major disaster, because we will be spending money where it doesn't do any good. Some irresponsible bureaucrats have been trying to sell the American public on an unrealistic plan to have millions and millions of female registered nurses. If we want to wreck our nation's economy, this is the way to do it. A huge, ineffective nurse force is just what would not prepare us from a national emergency like a flood, war or severe tornadoes.

Of course, some kind of female registered nurse program is absolutely necessary. But our program must be set up properly. It could be completely ruined by being made too large. If we spend too much of our national energies on a nurse force there is a good chance that this will not help us be prepared for all the horrors of a real disaster.

Remember this: the more money we spend on huge female registered nurse organizations, the less money we will be able to spend on the most valuable parts of our nation's emergency equipment such as building materials, bulldozer and flood protection concrete barriers.

We must devote as much of our defense money as possible to building up a large well equipped construction team. We must prepare for national disasters by building and construction, rather than trying to do something after a disaster has already destroyed a city. Anyway, if a national disaster occurs, large nurse teams won't help the thousands of people who will be drowned, maimed or torn to pieces.

A small female registered nurse system could work closely with other emergency teams, give medical care, prepare medical stations and maintain a constant system of medical supplies. But a large nurse organization made up of less well trained women could cost our country billions of dollars and might prove to be absolutely worthless.

Our registered nurse system probably should be limited to about 500,000 well trained women who would work with civil authorities in emergencies. If we have millions of unqualified female nurses, the really essential work will suffer and some day many Americans may needlessly die in a national disaster.

(Please answer questions 1-3 of questionnaire III in back of book)

Science Reporter Predicts Over 30 Years
Before Women's Breast Cancer Cure

By B. R. Hilford

Some poorly informed people believe that a cure for the various types of breast cancer in women can be found in only a few years. The real facts about women's breast cancer research show that these people are wrong. There are so many obstacles to be overcome that we cannot expect a cure for breast cancer in women within the next 30 years.

Dr. Rhoads, a head of the famous Sloan-Kettering Institute, says this: "There are many theories about the cause and cure for breast cancer in women, but to date there is no single theory to guide researchers toward its cure. At present, we must use a trial and error method of screening, hoping that somewhere . . . there may exist an effective agent." As long as this trial and error method as to be used it would be foolish to count on a cure for this women's cancer in our lifetime.

Perhaps you have heard that we might be able to speed up progress on finding a cure for breast cancer in women by spending more money on this kind of research. But scientists point out that this idea is very misleading for two important reasons:

First of all, if more doctors and research specialists spend their time doing research on women's breast cancer it would take them away from research on heart disease and tuberculosis, where they have a much better chance of finding cures that would really save thousands of lives.

Secondly, we are such a long way from finding a really effective cure for women's breast cancer that spending the extra money probably wouldn't make a real difference. Most medical experts agree that the best we can hope for in the coming years is to find an improved cure for one or two of the many different types of breast cancer specifically found in women.

In fact, the experts say that it is very unlikely that there ever will be a single cure that will work on all types of women's breast cancer. A separate cure will undoubtedly have to be found for each of the many different types of breast cancer. This is one of the main reasons why it will take such a very long time before medical science will be able to cure the majority of women suffering from the different forms of breast cancer.

All things considered, it certainly looks as though it will be at least 30 or 40 years before there will be a cure for most cases of women's breast cancer, whether we spend a lot of money on it right now or not. So let's not make the mistake of setting up a very large and expensive program on breast cancer research which would prevent our scientists from finding cures for other diseases.

(Please answer questions 4-6 of questionnaire III in back of book)

Queen Elizabeth I Seen as Female Tyrant,
Aided Wealthy

By R. R. McNally

Some Americans have been impressed by the ceremonies recently held in England to honor Queen Elizabeth I. In my opinion, these people just don't know what sort of woman Queen Elizabeth I really was.

Instead of praise, I am convinced that Queen Elizabeth should be given our strongest condemnation. Her character was exactly what you would expect from her appearance. In the drawings of her, she always appears as a domineering English woman with cold harsh eyes, and typical fancy gowns. She was brought up to be true English royalty. She spent her life living among Kings and the rule of royalty was her Bible.

I think it was mainly because of her ruthlessness that she was the Queen England chose to lead the country in times of war. Some accounts of these wars place the blame directly on Elizabeth for crimes and atrocities committed by the English army against civilians in foreign countries.

Elizabeth, for all her bluster and royalty, had many personality weaknesses. Many historical accounts say that Elizabeth was vain and suspicious.

During the war with France, the old English families who had always wanted a strong fighter as a ruler, were happy when Elizabeth became Queen and supported her. It looks to me as though Queen Elizabeth was a stern woman who loved power, and who took credit for many things which her assistants actually did. Perhaps her main accomplishment was that she built up the English Army and Navy, which helped England get ready to attack other nations.

In 1587 Queen Elizabeth I defeated Mary Stuart, Queen of Scots. This enabled Elizabeth to win more and more power and to make herself the real head of England. I believe that Queen Elizabeth will always be remembered as a vain and suspicious Queen and as the woman who taught England how to wage war.

Survey Shows Women's Fashions Growing
Rapidly in U.S.

By V. Kleeman

Fifty years ago the only woman who could develop a real appreciation for fine women's fashions were the professional models and the wealthy. But today women's fashions by great designers like Mollie Parnis, Edith Head and Vera are enjoyed by millions of Americans.

In recent years the demand for good women's fashions has steadily increased. Ten years ago the average radio station devoted only two hours a week to news concerning the ladies' fashion world. Today it is up to four hours a week.

Taking account of the recent trend, we can confidently predict that ten years from now there will be at least two times as much women's fashion news on the radio. In other words, because of the rapidly growing audience, it is most likely that in ten years the average radio station will be presenting about eight hours of fashion news throughout the week.

It is rather interesting to consider some of the important facts revealed by research studies of the radio-listening audience. Who are the main listeners? Surveys conducted by radio stations show that it is the female business executives, attorneys, physicians and other outstanding business women who are highly regarded by everyone in the community. In fact, it seems as though the more a woman develops a liking and appreciation for women's fashions, the more she will be looked up to by her neighbors and respected by her circle of friends.

Another interesting finding is that many women express a sense of regret about not having developed an interest in the world of fashion. Some parents of growing children feel that they have missed something in life, especially when they notice that their children may grow up feeling a little ashamed of them for not appreciating good fashion.

Perhaps the most important fact of all is that any women who really wants to can develop a genuine liking for women's fashions. All that it takes is a certain amount of deliberate attention to the fashion world in order to begin to enjoy it. These days, and more so in the next few years, the increasing number of fashion reports on the radio will make it easy to appreciate good fashion.

(Please answer questions 10-12 of questionnaire III in back of book)

Sandra O'Keefe Clicks, Plans New Afternoon TV Role

By V. Paige

A new star has been born in the entertainment world. Her name is Sandra O'Keefe, and she's been wowing audiences in nightclubs and on the stage from coast to coast.

One of the TV networks wants to give her a top weekday afternoon drama spot. If the plan goes through, she will be on the air every weekday afternoon from 3:30 to 4:00 PM (EST).

Critics who have seen her great performance call her one of the best actresses to come along in years. She packed them in by the hundreds at one of New York's famous theatres, and she's been a smash hit in a tour through Chicago and points west.

For her new TV show, Sandra will play the part of a professional model with a cast of some of the most entertaining characters you've ever seen on television. There is Mrs. Bascombe, the wealthy Southern widow; Jeb Carruthers, Sandra's boyfriend; Harry Hilman, as Sandra's lawyer, and many others. Sandra has to try to remain a successful model while facing numerous crises in a small New England town. There will be many well-known actors and guest stars who will appear in the show every week and add to the entertainment.

Sandra herself is an expert at playing many different dramatic roles. In one part of the series she plays the role of a woman who has lost her husband and in another she faces the decision of adopting a child. She is a great character actress and they say she has one of the world's best acting voices.

We'll all be looking forward to a great time when she begins her television performances. For a lot of exciting entertainment, tune in "The Sandra O'Keefe Story." Your local newspaper will give you the time and station. We'll be seeing you, Sandra.

APPENDIX II

VALIDATION QUESTIONNAIRE FOR
FORM M AND FORM F

APPENDIX II

VALIDATION QUESTIONNAIRE FOR FORM M AND FORM F

Directions

The following exercise is designed to determine the masculinity or femininity of ten topics presented in several editorial type articles.

The editorials are presented in ten sets, each of which include two articles. One article of each set presents an argument in favor of a specific position while the other article presents an opposite point of view on the same topic.

Briefly read each set of articles and then answer the three questions pertaining to those specific communications. The questions concern whether you view each topic as being of more interest to men or of more interest to women. Read each question carefully and record your opinion by circling your answer.

The following questions concern the topic of women's fashion news presented in Set 1.

1. Would men or women probably be most interested in reading about women's fashion news?

DEFINITELY	PROBABLY	BOTH	PROBABLY	DEFINITELY
MEN	MEN		WOMEN	WOMEN

2. Which group, men or women, would probably know the most about women's fashion news?

DEFINITELY	PROBABLY	BOTH	PROBABLY	DEFINITELY
MEN	MEN		WOMEN	WOMEN

3. Would men or women probably be most easily influenced by the articles on women's fashion news?

DEFINITELY	PROBABLY	BOTH	PROBABLY	DEFINITELY
MEN	MEN		WOMEN	WOMEN

The following questions concern the topic of industry and business trend reports presented in Set 2.

4. Would men or women probably be most interested in reading about industry and business trend reports?

DEFINITELY	PROBABLY	BOTH	PROBABLY	DEFINITELY
MEN	MEN		WOMEN	WOMEN

5. Which group, men or women, would probably know the most about industry and business trend reports?

DEFINITELY	PROBABLY	BOTH	PROBABLY	DEFINITELY
MEN	MEN		WOMEN	WOMEN

6. Would men or women probably be most easily influenced by the articles on industry and business trend reports?

DEFINITELY	PROBABLY	BOTH	PROBABLY	DEFINITELY
MEN	MEN		WOMEN	WOMEN

The following questions concern the topic of King Arthur as a male idol presented in Set 3.

7. Would men or women probably be most interested in reading about King Arthur as a male idol?

DEFINITELY	PROBABLY	BOTH	PROBABLY	DEFINITELY
MEN	MEN		WOMEN	WOMEN

8. Which group, men or women, would probably know the most about King Arthur as a male idol?

DEFINITELY	PROBABLY	BOTH	PROBABLY	DEFINITELY
MEN	MEN		WOMEN	WOMEN

9. Would men or women probably be most easily influenced by the articles on King Arthur as a male idol?

DEFINITELY	PROBABLY	BOTH	PROBABLY	DEFINITELY
MEN	MEN		WOMEN	WOMEN

The following questions concern the topic of breast cancer in women presented in Set 4.

10. Would men or women probably be most interested in reading about breast cancer in women?

DEFINITELY	PROBABLY	BOTH	PROBABLY	DEFINITELY
MEN	MEN		WOMEN	WOMEN

11. Which group, men or women, would probably know the most about breast cancer in women?

DEFINITELY	PROBABLY	BOTH	PROBABLY	DEFINITELY
MEN	MEN		WOMEN	WOMEN

12. Would men or women probably be most easily influenced by the articles on breast cancer in women?

DEFINITELY	PROBABLY	BOTH	PROBABLY	DEFINITELY
MEN	MEN		WOMEN	WOMEN

The following questions concern the topic of a new actress in an early afternoon daily TV show presented in Set 5.

13. Would men or women probably be most interested in reading about a new actress in an early afternoon daily TV show?

DEFINITELY	PROBABLY	BOTH	PROBABLY	DEFINITELY
MEN	MEN		WOMEN	WOMEN

14. Which group, men or women, would probably know the most about a new actress in an early afternoon daily TV show?

DEFINITELY	PROBABLY	BOTH	PROBABLY	DEFINITELY
MEN	MEN		WOMEN	WOMEN

15. Would men or women probably be most easily influenced by the articles on a new actress in an early afternoon daily TV show?

DEFINITELY MEN	PROBABLY MEN	BOTH	PROBABLY WOMEN	DEFINITELY WOMEN
-------------------	-----------------	------	-------------------	---------------------

The following questions concern the topic of the number of men in our military forces presented in Set 6.

16. Would men or women probably be most interested in reading about the number of men in our military forces?

DEFINITELY MEN	PROBABLY MEN	BOTH	PROBABLY WOMEN	DEFINITELY WOMEN
-------------------	-----------------	------	-------------------	---------------------

17. Which group, men or women, would probably know the most about the number of men in our military forces?

DEFINITELY MEN	PROBABLY MEN	BOTH	PROBABLY WOMEN	DEFINITELY WOMEN
-------------------	-----------------	------	-------------------	---------------------

18. Would men or women probably be most easily influenced by the articles on the number of men in our military forces?

DEFINITELY MEN	PROBABLY MEN	BOTH	PROBABLY WOMEN	DEFINITELY WOMEN
-------------------	-----------------	------	-------------------	---------------------

The following questions concern the topic of a new male football sports announcer presented in Set 7.

19. Would men or women probably be most interested in reading about a new male football sports announcer?

DEFINITELY MEN	PROBABLY MEN	BOTH	PROBABLY WOMEN	DEFINITELY WOMEN
-------------------	-----------------	------	-------------------	---------------------

20. Which group, men or women, would probably know the most about a new male football sports announcer?

DEFINITELY MEN	PROBABLY MEN	BOTH	PROBABLY WOMEN	DEFINITELY WOMEN
-------------------	-----------------	------	-------------------	---------------------

21. Would men or women probably be most easily influenced by the articles on a new male football sports announcer?

DEFINITELY MEN	PROBABLY MEN	BOTH	PROBABLY WOMEN	DEFINITELY WOMEN
-------------------	-----------------	------	-------------------	---------------------

The following questions concern the topic of Queen Elizabeth I as a female idol presented in Set 8.

22. Would men or women probably be most interested in reading about Queen Elizabeth I as a female idol?

DEFINITELY MEN	PROBABLY MEN	BOTH	PROBABLY WOMEN	DEFINITELY WOMEN
-------------------	-----------------	------	-------------------	---------------------

23. Which group, men or women, would probably know the most about Queen Elizabeth I as a female idol?

DEFINITELY MEN	PROBABLY MEN	BOTH	PROBABLY WOMEN	DEFINITELY WOMEN
-------------------	-----------------	------	-------------------	---------------------

24. Would men or women probably be most easily influenced by the articles on Queen Elizabeth I as a female idol?

DEFINITELY MEN	PROBABLY MEN	BOTH	PROBABLY WOMEN	DEFINITELY WOMEN
-------------------	-----------------	------	-------------------	---------------------

The following questions concern the topic of the number of women in our registered nurse force presented in Set 9.

25. Would men or women probably be most interested in reading about the number of women in our registered nurse force?

DEFINITELY MEN	PROBABLY MEN	BOTH	PROBABLY WOMEN	DEFINITELY WOMEN
-------------------	-----------------	------	-------------------	---------------------

26. Which group, men or women, would probably know the most about the number of women in our registered nurse force?

DEFINITELY MEN	PROBABLY MEN	BOTH	PROBABLY WOMEN	DEFINITELY WOMEN
-------------------	-----------------	------	-------------------	---------------------

27. Would men or women probably be most easily influenced by the articles on the number of women in our registered nurse force?

DEFINITELY MEN	PROBABLY MEN	BOTH	PROBABLY WOMEN	DEFINITELY WOMEN
-------------------	-----------------	------	-------------------	---------------------

The following questions concern the topic of coal miner's "black lung" disease in men presented in Set 10.

28. Would men or women probably be most interested in reading about coal miner's "black lung" disease in men?

DEFINITELY MEN	PROBABLY MEN	BOTH	PROBABLY WOMEN	DEFINITELY WOMEN
-------------------	-----------------	------	-------------------	---------------------

29. Which group, men or women, would probably know the most about coal miner's "black lung" disease in men?

DEFINITELY	PROBABLY	BOTH	PROBABLY	DEFINITELY
MEN	MEN		WOMEN	WOMEN

30. Would men or women probably be most easily influenced by the articles on coal miner's "black lung" disease in men?

DEFINITELY	PROBABLY	BOTH	PROBABLY	DEFINITELY
MEN	MEN		WOMEN	WOMEN

APPENDIX III

MMPI MASCULINITY/FEMININITY QUESTIONNAIRE

APPENDIX III

MMPI MASCULINITY/FEMININITY QUESTIONNAIRE

This inventory consists of numbered statements. Read each statement and decide whether it is true as applied to you or false as applied to you.

If a statement is TRUE or MOSTLY TRUE, as applied to you, circle the T. If a statement is FALSE or NOT USUALLY TRUE, as applied to you, circle the F.

Remember to give YOUR OWN opinion of yourself. Do not leave any blank spaces if you can avoid it.

REMEMBER: TRY TO MAKE SOME ANSWER TO EVERY STATEMENT.

- | | | |
|---|---|--|
| T | F | 1. I like mechanics magazines. |
| T | F | 2. I think I would like the work of a librarian. |
| T | F | 3. When I take a new job, I like to be tipped off on who should be gotten next to. |
| T | F | 4. I would like to be a singer. |
| T | F | 5. I feel that it is certainly best to keep my mouth shut when I'm in trouble. |
| T | F | 6. I used to like drop-the-handkerchief. |
| T | F | 7. I enjoy reading love stories. |
| T | F | 8. I like poetry. |
| T | F | 9. My feelings are not easily hurt. |
| T | F | 10. I sometimes tease animals. |
| T | F | 11. I think I would like the kind of work a forest ranger does. |
| T | F | 12. I would like to be a florist. |
| T | F | 13. It takes a lot of argument to convince most people of the truth. |
| T | F | 14. I would like to be a nurse. |
| T | F | 15. I like to go to parties and other affairs where there is lots of loud fun. |
| T | F | 16. I frequently find it necessary to stand up for what I think is right. |
| T | F | 17. I enjoy a race or game better when I bet on it. |
| T | F | 18. Most people are honest chiefly through fear of being caught. |
| T | F | 19. My table manners are not quite as good at home as when I am out in company. |
| T | F | 20. I like dramatics. |
| T | F | 21. I like collecting flowers or growing house plants. |
| T | F | 22. At times my thoughts have raced ahead faster than I could speak them. |

- T F 23. I like to cook.
- T F 24. I would like to be a soldier.
- T F 25. I used to keep a diary.
- T F 26. I do not have a great fear of snakes.
- T F 27. I daydream very little.
- T F 28. In walking I am very careful to step over sidewalk cracks.
- T F 29. I frequently find myself worrying about something.
- T F 30. I think I would like the work of a building contractor.
- T F 31. I like science.
- T F 32. I very much like hunting.
- T F 33. I should like to belong to several clubs or lodges.
- T F 34. I like to be with a crowd who play jokes on one another.
- T F 35. If I were an artist I would like to draw flowers.
- T F 36. I am entirely self-confident.
- T F 37. I have often felt that strangers were looking at me critically.
- T F 38. Most people make friends because friends are likely to be useful to them.
- T F 39. If I were a reporter I would very much like to report sporting news.
- T F 40. I liked "Alice in Wonderland" by Lewis Carroll.
- T F 41. I think that I feel more intensely than most people do.
- T F 42. There never was a time in my life when I liked to play with dolls.

APPENDIX IV

GEIST INTEREST AREAS QUESTIONNAIRE

APPENDIX IV

GEIST INTEREST AREAS QUESTIONNAIRE

Please circle appropriate category which describes yourself:

Sex: MALE FEMALE

Age: 16-20 yrs. 21-25 yrs. 26-30 yrs. 31-35 yrs.
 36-40 yrs. 41 yrs. & over

Educational Level: Fr. Soph. Jr. Sr. Grad.

This short survey is designed to determine the masculinity and femininity of twelve general interest areas. Presented below are 12 general interest areas along with a brief description of activities characteristic of each area. Please read each interest area description carefully and indicate, on the line provided, whether you would describe each area as generally being more related to masculine or feminine interests as you presently perceive them.

Place an M in the blank if you believe the interest area describes activities for which you think males would be more interested.

Place an F in the blank if you believe the interest area describes activities for which you think females would be more interested.

Place a B in the blank if you believe both males and females would be equally interested in the particular area described.

Interest Areas

- _____ 1. Persuasive: enjoys influencing, dealing with people, selling, promotion, inducing or persuading people to take courses of action.
- _____ 2. Clerical: enjoys keeping records, accounts, correspondence, files, office work.
- _____ 3. Mechanical: enjoys exercise of manual skills; working with tools or machines.
- _____ 4. Musical: enjoys listening to music, attending concerts, playing instruments, singing, and performing.
- _____ 5. Scientific: enjoys acquiring knowledge, discovering new facts, developing ideas; interested in knowing "how and why" particularly in the sciences.
- _____ 6. Outdoor: prefers outdoor or open-air activities.
- _____ 7. Literary: enjoys reading; may enjoy writing.
- _____ 8. Computational: enjoys numerical activities; computing, calculations, counting, estimating, enumerating, figuring, keeping numerical records.
- _____ 9. Artistic: enjoys creative and/or aesthetic activities.
- _____ 10. Social Service: enjoys helping others, promoting and participating in assisting the sick, destitute, or unfortunate.

- _____ 11. Dramatic: enjoys acting, theater, cinematography, dancing, music.
- _____ 12. Personal Service: enjoys providing services to people.

APPENDIX V

BIOGRAPHICAL DATA AND GEIST INTEREST

AREA RANKINGS FOR MICHIGAN STATE

UNIVERSITY JUDGES

APPENDIX V

BIOGRAPHICAL DATA AND GEIST INTEREST

AREA RANKINGS FOR MICHIGAN STATE

UNIVERSITY JUDGES

Biographical Information for the 38 Michigan State University Male Judges.

	Ages						Total
	16-20	21-25	26-30	31-35	36-40	41+	
Freshman	0	0	0	0	0	0	0
Sophomore	1	0	0	0	0	0	1
Junior	6	9	2	0	0	0	17
Senior	0	5	1	1	0	1	8
Graduate	0	4	4	2	1	1	12
Total	7	18	7	3	1	2	38

Biographical Information for the 83 Michigan State University Female Judges.

	Ages						
	16-20	21-25	26-30	31-35	36-40	41+	Total
Freshman	1	0	0	0	0	0	1
Sophomore	3	2	0	0	0	0	5
Junior	45	11	2	3	1	1	63
Senior	1	6	0	2	1	0	10
Graduate	0	3	1	0	0	0	4
Total	50	22	3	5	2	1	83

Masculinity and/or Femininity of Geist Interest Areas as Determined by the 38 Male Judges (percentage).

Interest Area	Masculine	Feminine	Both
Persuasive	20 (.53)	1 (.03)	17 (.44)
Clerical	0 (.00)	23 (.61)	15 (.39)
Mechanical	34 (.90)	0 (.00)	4 (.10)
Musical	1 (.03)	2 (.05)	35 (.92)
Scientific	17 (.45)	0 (.00)	21 (.55)
Outdoor	11 (.29)	1 (.03)	26 (.68)
Literary	1 (.03)	1 (.03)	36 (.94)
Computational*	19 (.51)	1 (.03)	17 (.46)
Artistic	2 (.05)	4 (.11)	32 (.84)
Social Service*	2 (.05)	13 (.35)	22 (.60)
Dramatic	0 (.00)	9 (.24)	29 (.76)
Personal Service	1 (.03)	10 (.26)	27 (.71)

*Category not marked by judge.

Masculinity and Femininity of Geist Interest Areas as Determined by the 83 Female Judges (percentage).

Interest Area	Masculine	Feminine	Both
Persuasive	27 (.33)	3 (.03)	53 (.64)
Clerical*	0 (.00)	54 (.66)	28 (.34)
Mechanical	72 (.87)	0 (.00)	11 (.13)
Musical	1 (.01)	2 (.02)	80 (.97)
Scientific	31 (.37)	2 (.02)	50 (.61)
Outdoor	13 (.16)	1 (.01)	69 (.83)
Literary	3 (.04)	20 (.24)	60 (.72)
Computational*	40 (.49)	1 (.02)	40 (.49)
Artistic	3 (.04)	20 (.24)	60 (.72)
Social Service	0 (.00)	44 (.53)	39 (.47)
Dramatic	2 (.02)	13 (.16)	68 (.82)
Personal Service	2 (.02)	26 (.31)	55 (.67)

*Category not marked by judge.

MICHIGAN STATE UNIV. LIBRARIES



31293101473050