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Situational Determinants of a Crying Response: Their Interrelations with Cognitive Structure and Level of Sex-Role Identification

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Situational Determinants of a Crying Response:
Their Interrelations with Cognitive Structure and
Level of Sex-Role Identification

A Thesis

Presented to the Department of Psychology

and the

Faculty of the Graduate College
University of Nebraska

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

University of Nebraska at Omaha

by

Richard Paul Votta

July 12, 1976

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Thesis Acceptance

Accepted for the faculty of the Graduate College,
University of Nebraska, in partial fulfillment of the
requirements for the degree Master of Arts, University of
Nebraska at Omaha.

Thesis Committee

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	July 15 1976

Situational Determinants of a Crying Response:

Their Interrelations with Cognitive Structure and

Level of Sex-Role Identification

Running Head: Cry Response

Abstract

An attempt was made to assess the relationships between an individual's level of sex-role identification, degree of cognitive complexity or simplicity, and reported crying behavior. One hundred sixty six students from an introductory sociology class at the University of Nebraska at Omaha were administered three scales: the Bem Sex Role Inventory to assess their level of sex-role identification; the Millimet Rep Test (Version 1) to assess the degree of cognitive complexity, and the Votta Crying Scale-an instrument devised by the author to measure an individual's propensity to crying and the four major types of situations that will elicit the behavior.

A multivariate analysis was performed with gender and level of sexrole identification as independent variables, and the four factors on
the Votta Crying Scale (the four major eliciting situations of sadness,
aesthetics, nostalgia, and fear) as dependent variables. Level of sexrole identification (F(12,410)=6.17, p .0001), and gender (F(4,155)=14.7,
p .0001), were both found to have a highly significant effect on an individuals' crying behavior.

Pearson product-moment correlations were computed between the four factors of the Votta Crying Scale and two alternate measures of cognitive complexity. No significant correlations were observed.

The potential for future research into the area of emotional-response behaviors, and the possible effects of gender, and level of sexrole identification on the availability and variability of alternate response behaviors is discussed.

Sex-Role Stereotypes

Crying has long been considered a behavior to be naturally more within the behavioral repertoire of the female than the male (Lambert, 1972; Smith, 1971; Mooney & Tucker, 1975; Stefic & Lorr, 1974). Research has shown that with children this idea is quite erroneous. (1934) conducted an ethological study with pre-school children and found no sex differences in incidence of crying. Many other studies (Marvin, 1972; Coates, Anderson, & Hartup, 1972; Maccoby & Feldman, 1972; Kaminski, 1973) obtained similar results. In some studies (Landreth, 1941; Shirley & Poyntz, 1941) male children are actually shown to cry more often than These results point strongly to the role of social pressures and stereotyping in the apparent suppression of crying behavior in adult males. Young (1943) reports on the social pressures regarding males crying in public. This pr scription against any sort of emotional expression by a male constitutes just one portion of the extremely restrictive and narrowly defined male stereotype (Rommentrout, 1970; Gershman & Miller, 1973; Dubberman, 1975; Mooney & Tucker, 1975). The existence of sex-role stereotypes has been documented by many investigators (Sherif & Jarrett, 1953; Rosenkrantz, Vogel, Bee, Bee, Boverman & Boverman, 1968; Ellis & Bentler, 1973). This Stereotype, encompassing the restriction of emotional expression, is extremely resistant to any type of change. More recently research has shown that the provisions of the male stereotype are much more narrowly defined than the female stereotype (Brown, 1956; 1958; Fauls & Smith, 1959; Stevens, 1974; Mooney & Tucker, 1975), and that deviations from this norm are much more strongly discouraged (Hacker, 1967; Lansky, 1967; Fling & Manosevitz,

1972; Farrell, 1974; Fienman, 1974; Pleck & Sawyer, 1974; Stevens, 1974).

Since a high level of masculine identification is shown to be correlated with better psychological adjustment in adolescence (Mussen, 1961; Heilbrun & Fromme, 1965), one might question the reasons for a desire to behave contrary to the masculine stereotype. The subsequent correlation of this same high level of masculine identification with high anxiety and low self-esteem and acceptance in adulthood (Gray, 1957; Mussen, 1962; Harford, Willis, & Deabler, 1967) would seem to provide adequate justification. This change in the utility to the individual of high levels of masculinity causes one to question the value of sex-role differentiation (Kagan, 1964; Kohlberg, 1966; Ward, 1968).

Just as women have had to work hard and long to bring about a reevaluation of the female stereotype in many areas (Nisbett, & Gordon,
1967; Stricker, Messick & Jackson, 1970; Maccoby & Feldman, 1972; Jackson, Maccoby, & Dick, 1973; Marquiss, 1973) so too will men have to stop
and reinvestigate the basis of their sex-defined and sex-denied behaviors, especially in the area of emotional expression.

Crying Behavior

When investigating the area of emotional expression, crying seems like the important behavior to understand. In a small survey conducted with introductory psychology and introductory sociology students at the University of Nebraska at Omaha, (Votta, note 1) men were able to cite a mean number of 1.3 instances when they would cry while women were able to cite 5.4 instances. To accept this as glib proof of the socially accepted notion that men do not cry is I think missing the essential

point. What this data may also be showing us is the extent to which the masculing stereotype has influenced our means of expression. Beyond any questions of sex-defined or sex-denied behaviors we come to the question of crying itself. The answers to why, where, and when one cries have been attempted by numerous experimenters. Lund (1930) taking a physiological approach to the phenomenon, cites evidence regarding the stimulation of the fifth and seventh cranial nerves. Plessner (1940) hypothesized four types of crying characterized by their physical appearance, severity, and antecedant state of the person. Melinand (1971) attempts another explanation in terms of varying degrees of volition. Numerous psychoanalytic interpretations have been postulated.

The reasons for someone crying, or the situational cues that provoke or suppress it, need much further investigation. It seems logical to assume that we differ from one another on the cues or types of situations that will make us cry. Unfortunately, there has been no work done in the investigation of the likelihood of a persons' crying in different social situations. It was therefore necessary for the present author to develop a crying scale consisting of a collection of situations for which the subject indicated the probability that he would cry. Factor analysis of the crying scale revealed there to be four major types of situations that serve as the predominant elicitors of a crying response.

The major goal of this study is to investigate these different types of tear elicitors and the different personalities of the individuals sensitive to these cues. It is hoped that this study will cause one to look further than morphological make-up when considering emotion.

Morphology has translated poorly into psychology.

Continuum of Sex-Defined Characteristics

Masculinity and femininity have traditionally occupied opposite ends of a single dimension called sexuality (Gough, 1957). Any deviation from one end leads us directly to the other end, which when we equate anatomy and psychology seems abberent. The pervasive belief in the unidimensionality of sexuality has been the major difficulty facing a modification in the masculine stereotype. Recent research (Block, 1973; Constantinople, 1973; Bem, 1974) has pointed to the orthogonality of the two concepts of masculinity and femininity, stating that there actually exists two separate and independant continua and that males and females attain a point on both dimensions. Bem (1974) taking this multidimensional view of gender identity devised a scale to measure what she terms "androgyny" (p. 155), i.e., a persons' willingness to endorse both typically masculine and feminine character traits.

Stereotyping within Personal Construct Theory

When we look at sex-typing or sex-role stereotyping, we are tapping a very important personality trait. Stereotyping, as a "..rigid, biased perception of a novel object, animal, or group.." (Chaplin, 1975), has a personality correlate within the psychology of personal constructs (Kelly, 1955). In Kelly's system stereotyping is just one method of control or organization exerted over ones' personal constructs. According to Kelly's personal construct theory "..man actively attempts to comprehend, anticipate and control his world thru the use of personal constructs." (p. 155). Within this particular personality theory, certain

capabilities or qualities of constructs are defined. The inclusivity or exclusivity of the construct is one such qualitative dimension. Propositional constructs are defined as those that "..leave its elements open to construction in all other respects.. (p. 155). Constellatory constructs on the other hand are defined as those that "..permit its' elements to belong to other constructs concurrently, but fixes its membership" (p. 56). A stereotype is an example of a constellatory construct (Kelly, 1955). Based on Kelly's personal construct theory, Bieri (1955) proposed the concept of cognitive complexity. He defined complexity as "..the tendency to construe social behavior in a multidimensional way.." (p. 14). He stated that people vary in the number of personal constructs they have available. Those individuals with very highly differentiated construct systems, i.e., possessing a high degree of both propositional (independent) and constellatory (interdependent) constructs he called cognitively complex, while those individual systems marked by a predominance of interrelated constructs, with very little differentiation, he called cognitively simple. Using a measure to determine to what extent an indiv dual's construct system is predominated by either independent or interdependent constructs would I think give information that would parallel one's propensity to use stereotypes. We would expect a cognitively complex individual to view sexuality as a propositional construct, possessing a much more highly differentiated awareness of sexroles than a cognitively simple person; while expecting a greater preponderence of stereotyped structuring of constructs within the cognitively simple group.

In an attempt to investigate clinically a person's system of per-

sonal constructs, Kelly (1955) devised a test. The measure is known as the Role Construct Repertory Test. (rep Test). The test requires a subject to list individuals who occupy specific roles in relationship to him (e.g. mother, father, etc.). He is then asked to sort these individuals into groups of similarities and differences with respect to certain constructs (Kelly, 1955). Bieris' (1955) modification of the Rep Test was designed to assess an individuals level of cognitive complexity. Various scoring techniques have been used with the Rep Test (Leitner, Lanfield & Barr, note 2). Recent research (Millimet, note 3) has provided a modified Rep Test scored along semantic differential lines, with constructs provided.

Using these three measures, the specific hypotheses tested were:

Hypothesis I: There would be a significant relationship between an individual's reported crying behavior, as measured by the Votta Crying Scale, and an individual's level of sex-role identification, measured by the Bem Sex Role Inventory.

Hypothesis II: Mean scores on the four factors of the crying scale would differ significantly across classification on the Bem Sex Role Inventory.

Hypothesis III: Individual Sex Role Inventory scores and cognitive complexity scores would be highly related.

Hypothesis IV: There would be a significant positive correlation between an individual's score on the crying scale and their cognitive complexity score.

Method

Subjects

The initial sample consisted of 183 students from an introductory sociology course at the University of Nebraska at Omaha, 78 males and 105 females. In order to avoid a bias because of an unequal number of each sex, 27 females were randomly eliminated from the sample leaving a final sample of 156 subjects, 78 males, and 78 females.

Description of Measures

The Votta Crying Scale (note 1) was initially developed from a questionairre given to 50 students in an introductory psychology class and an introductory sociology class at the University of Nebraska at Omaha, in the Fall of 1975. Students were asked to respond to the following question with as many situations as possible "...the time I feel most like crying are...". The author added to this list 50 more items and gave the scale to 100 introductory psychology students and 135 high school seniors in late fall 1975. When given this scale of 70 items students were asked to respond to the following statement on a 5-point scale: "...the likelihood of my crying in this situation is...". At this time factor analysis revealed there to be four predominant types of situations that served as elicitors of a crying response. The four major factors were tentatively titled: Sadness or Relief-from-Sadness, Aesthetics, Nostalgia, and Fear or Pain. More items were then added to those already loading on these factors and the revised scale was administered to 250 introductory psychology students at the University of Nebraska at Omaha (the factors and the items loading on them can be

found on Table 1).

The different factors are believed to be sensitive to different cognitive levels of crying. The crying response to the beauty of an aria is believed to be different than the cry in response to pain. It seems that a cry in response to a thought or memory should differ from a cry in response to a physical occurence. The crying scale will be utilized to identify the types of crying most indigenous to defined groups (defined with regards to level of sex-role identification or cognitive complexity).

The Millimet version of the REP Test (Version I) consists of 26 bipolar constructs to be rated on a 7-point continuum. There are eleven role categories plus the subject himself/herself that these constructs are applied to (Table 2). Factor analytic work by Millimet (note 3) of the 26 constructs used in the test has isolated seven factors following semantic differential type lines. The same three semantic differentials of evaluative, activity, and potency (Osgood, 1956) are found, but the evaluative differential is divided into five factors each sensitive to a different evaluative nuance (Table 3).

A subjects' cognitive complexity score is usually calculated as the number of independent constructs they use in assessing their environment. If the intercorrelation between two constructs is below a criterion level they are considered to be relatively independent of one another. Since factor analysis of the Millimet scale has isolated seven factors, then the average intercorrelation of these factors (21 pairwise correlations) can likewise give us a measure of complexity.

The Bem Sex Role Inventory is a test devised to assess an indivi-

duals' system of self classification across sex-stereotyped lines. The test asks a person to indicate on a 7-point scale how well certain personality characteristics describes him/her. Some of these items are classified as typically masculine and others as typically feminine (Bem, 1974). Several scoring methods have been utilized when looking at this scale, e.g., the difference score (Strahan, 1975), the t-score (Bem, 1975), and most recently a median split method devised by Spence, Helm-reigh & Stapp (1975).

Procedure .

The subjects each were administered the three scales. The order of presentation was consistently, REP Test, Bem scale, and Crying scale. The administration took place during the regular class meetings of the introductory sociology class at 10:00 AM and 3:00 PM. On the class meeting following the testing the subjects were explained the nature of the experiment.

Scoring Procedure

Bem Sex Role Inventory

The scores on the BSRI were obtained using the BSRI scoring packet (note 5). In keeping with more recent literature the BSRI was scored using a procedure first reported by Spence et al (1975) which utilizes a median split to assign individuals to particular classifications. Individuals scoring above the median on both masculine and feminine items (in this study, the median score for masculine items was 4.5; feminine items was 4.9) are classified as androgynous; those with high masculine and low feminine are classified as masculine sex-typed; those with high

feminine and low masculine are classified as feminine sex-typed, and those with low masculine and low feminine are classified as undifferentiated. This last classification is the major contribution realized from this scoring method. Previous methods did not isolate this type of individual (Table 4).

Millimet Rep Test

The Millimet REP Test was scored using a package devised by the author (note 3). It consisted of a measure of both inter-person inter-correlation of trait dimensions, and inter-dimension intercorrelation across subjects. A mean trait factor score, which measures an individuals' degree of differentiation, and a standard deviation score, which some authors (Cronbach, 1955) have said is likewise a measure of differentiation were obtained (Table 5).

Votta Crying Scale

The Votta Crying Scale was scored using a packet devised by the author. It consisted of summing the score value on selected statements and dividing by the number of statements. A factor analysis was performed on the crying scale data and the same four factors found previously appeared. Only those items with a complexity of one, or with a significant istance between loadings, were used in the scoring (for complete information regarding the test construction and validation, see Votta, 1975, unpublished manuscript, University of Nebraska at Omaha).

Results

A multivariate analysis of variance was performed on the data,

using the four defined levels of sex-role identification, and the two levels of gender as independent variables, and the four factors of the crying scale as the dependent variables. The significant multivariate F for level of sex-role identification (F(12,410)=6.17, p .0001) indicated that female sex-typed individuals cry more overall than do male sex-typed individuals, with androgynous and undifferentiated individuals in between. The univariate F for effect of sex-role identification across each factor of the crying scale showed similar significant results for each factor (Table 6). The multivariate F for effect of gender, and the univariate F for each factor also showed significantly more crying by females (F(4,155)=14.7, p .0001).

Next the mean score on each of the factors of the crying scale was compared across each level of sex-role identification. On the <u>Sadness</u> and <u>Fear</u> factors of the crying scale masculine sex-typed individuals reported crying significantly less than androgynous and undifferentiated individuals (p .002), who reported significantly less crying than feminine sex-typed individuals (p .002). Androgynous and undifferentiated individuals were not significantly different from one another.

On the <u>Aesthetics</u> and <u>Nostalgia</u> factors feminine sex-typed, androgynous, and undifferentiated individuals report significantly more crying behavior than masculine sex-typed (p .005), but do not differ significantly from one another.

Lastly, Pearson product-moment correlations were computed between the scores on the individual factors on the crying scale and the two measures of cognitive complexity. High intercorrelations between the factors of the crying scale are observed, but no indications of relationship were found between the crying scale and the measures of cognitive complexity.

Discussion

The data shows that one's level of sex-role identification, or more specifically, one's internalization of the socially defined sex-stereotype, has a highly significant effect on an individuals crying behavior. Those masculine sex-typed individuals report the least amount of crying which the stereotype would predict, while the feminine sex-typed individuals show the greater amount of crying predictable on the basis of the stereotype. The androgynous individual seems to occupy a middle position on the frequency of crying continuum, suggesting that there is a continuum between the male and female sex role, i.e., that male and female roles are effectively poles of a continuum rather than orthogonal to each other, at least in the area of crying behavior. A person's gender also is significantly related to crying behavior, but sex role seems to provide a better classification in that it distinguishes a third intermediate category of individuals. The lack of any interaction between sex and sex role however would indicate that there is no conflict between sex role and gender for either sex, even among androgynous indi-The androgynous sex role in other words, is not a separate, distinct form of sex role identification that exists as an alternative to, or in opposition to the traditional sex roles or to one's ender. Also, the lack of any significant differences between androgynous and undifferentiated individuals with respect to crying behavior calls into question the utility of this fourth category in the study of sex roles.

It appears that whether an individual is cognitively complex or cognitively simple exerts little influence on a person's crying behavior. Across all levels of sex-role identification and also across gender, cognitive complexity is unrelated to an individuals reported crying propensity. Since the a priori assumption was that androgyny and cognitive complexity would be highly related, some possible explanations are po-The theoretical basis of cognitive complexity is that one uses many constructs indi idually and in an uncorrelated manner to investigate and understand his/her environment, while when looking at androgyny the BSRI investigates the willingness or perspicacity of an individual to recognize within herself/himself the presence of socially defined gender-correct and gender-incorrect behaviors or personal characteristics. Though one may in fact possess the ability to see and understand many constructs, the effect of socialization may be that the individual may never accept them within himself/herself. With cognitive complexity we have a measure of one's ability to look at the environment in a multifaceted way, while the BSRI measures a person saying to what extent these constructs apply to her/him. We have two distinct behaviors. The best way to look at the two is to say that cognitive complexity is a process, a behavior by which one looks at his/her environment using differentiated evaluative measures, while androgyny is a content area, that is the result of differentiation on but one plane of personality traits. stated, a person who utilizes considerable differentiation in the observation of her/his environment may choose as one of these differentiated planes, sex-role identification, but androgyny is not a sine qua non for cognitive complexity.

One way we can look at crying is as one of a series of emotionalresponse behaviors. If we do so, many questions arise. If crying is one behavior of many called up in response to an emotional arousal, and it is not permitted expression (as in masculine sex-typed individuals) what methods are employed to deal with this state of arousal. Possibly masculine sex-typed individuals have developed a whole series of alternative emotional-response behaviors, that are called up whenever needed; while feminine sex-typed individuals, since crying is a socially acceptable behavior, have not developed these alternative emotional-response behaviors. Future research into the availability and variability of alternative emotional-response behaviors across gender might give us greater insight into the different ways one can deal with emotional stimuli. Another direction for future research should certainly be the determination of whether there are distinctive characteristics of androgynous males versus androgynous females. The lack of any interaction between gender and sex role would argue that there are differences.

Notes

- 1. Votta, R.P., Factor analytic study of crying. <u>Unpublished manuscript</u>, University of Nebraska at Omaha, 1975.
- 2. Leitner, L., Lanfield, A., Barr, M. Cognitive complexity: A review and elaboration within personal construct theory. Personal Communication.
- 3. Millimet, C.R., The Millimet version of Kellys' REP Test (Version I).

 Personal Communication.
- 4. Millimet, C.R., Scoring packet for the Millimet REP Test. Personal Communication.
- 5. Bem, S.L., Korla, C.W. Scoring packet for the Bem Sex Role Inventory. Personal Communication.

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Table 1

Factors and individual item loadings

on the Votta Crying scale

Factor 1-Sadness				
Variable number	Factor 1	2	3	4
. 001	.499	.052	.071	.061
005	.691	.132	.195	.001
009	.651	.041	.106	.101
013	.624	.098	.153	.114
017	.739	.116	.030	.016
021	.579	.175	,192	.210
024	.629	.090	.124	.162
029	.709	.044	.262	.201
030	.670	.084	.177	.207
031	.516	.130	.080	.168
037	.610	.059	.296	.149
042	.465	.018	.138	.166
044	. 662	•149	.108	.079
046	.514	.232	.324	.172
048	. 655	. 07 9	.138	.089
Factor 2-Aesthetics				
010	.073	. 227	.051	.191
014	.160	.350	.040	.249
018	.083	.310	.048	.136
022	.250	.370	.035	.152
036	.047	.497	.112	.320
041	.021	. 640	.084	.044
043	.016	.756	.052	.084

Table 1 (continued)

	·.				
Factor 2-Aesthetics					
Variable number	Factor 1	2	3	4	
045	.222	. 479	.122	.202	
7	* a				
Factor 3-Nostalgia					
003	.250	. 084	.322	.014	
007	.132	.150	.281	.058	
011	. 204	.060	. 585	.077	
015	. 225	. 074	. 549	.144	
020	.560	.078	.378	.180	
028	.307	.030	. 645	.078	
034	.351	.059	.627	.113	
Factor 4-Fear					
016	.216	. 247	.151	.385	
019	.296	.284	. 07 9	.502	
032	.278	.101	.136	.601	
033	.206	.168	.165	.349	
047	.487	.212	.146	.350	
049	.231	.216	.155	.545	
Factor	Eigen valu	<u>1e</u>		Pct of Vari	ance
1	16.38	•		65.8	
2	3.42			13.7	
3	1.22			4.9	
4	.998	:		3.9	

Table 2

Role Categories for the Millimet Rep Test

- 1. Yourself.
- 2. The most interesting person you know.
- 3. Sister nearest your age. If you do not have a sister choose a person most like a sister to you.
 - 4. Person you dislike.
 - 5. Close friend who is the same sex.
 - 6. Father, or the person most like a father to you.
 - 7. Person who makes you feel uncomfortable.
- 8. Brother nearest your age. If you do not have a brother choose a person most like a brother to you.
- 9. Husband or wife. If you are not married, choose a close friend who is the opposite sex from you.
 - 10. Boss or person who holds some position of authority over you.
 - 11. Mother or the person who is most like a mother to you.
 - 12. Person who seems to dislike you.

Table 3

Factors and Item Loadings for the

Millimet Rep Test. Version T

Factor 1 Social Interest								
	1	2	3	4	5	6	7	h
inconsiderate-considerate	.78	.23	. 04	.18	. 07	. 05	.00	.75
unsympathetic-sympathetic	.75	.18	.13	20	.00	.01	.06	.66
insincere-sincere	.74	.27	. 07	.27	.00	.18	.03	•7·5
thoughtless-thoughtfull	.73	.32	. 09	.24	. 08	.05	. 04	.73
Facto	r 2 Task I	Perform	nance					
inefficient-efficient	.32	. 68	.06	.21	• 00	•17	.01	.58
disorganized-organized	.13	. 63	.00	.14	.09	• 09	.00	.47
lazy-industrious	.35	.61	.12	.20	.00	.10	.09	.58
careless-careful	.32	.60	.09	.15	.06	.08	.14	•53
Factor 3	Introversi	lon-Ext	trovers	sion				
shy-outgoing	.00	.09	. 68	•05	•18	.05	.01	.51
introverted-extroverted	.05	.12	.66	.04	.21	.01	.04	.51
silent-talkative	.05	.00	. 64	.01	.00	.03	.06	.42
passive-active	.18	• 24	.59	.23	.06	.18	.00	.53
Fa	ctor 4 Uni	Lquenes	3 S					
unattractive-attractive	.33	.12	.15	.60	.05	. 07	.02	.52
ugly-good looking	. 27	.15	.12	•53	.06	. 07	.00	.41
average-unique	.28	.14	.12	. 52	.02	.11	.11	.41
simple-complex	.12	.10	. 04	.51	.02	.17	.16	.35

Table 3 (continued)

	Factor 5 Emotio	nal Sta	abilit	<u>y</u>				
	.1	2	3	4	5.	6	7	8
nervous-calm	.26	. 09	.05	.12	. 67	.16	.03	. 58
tense-relaxed	.31	. 03	.17	. 07	. 65	.13	. 07	.59
worried-carefree	.11	. 07	. 29	.09	.61	.14	.09	.52
excitable-easy going	.34	.15	. 07	.03	. 53	.07	.10	.45
	Factor 6 Physic	cal Pro	wess					
feeble-rugged	.02	.11	. 24	.15	.10	.51	.00	.37
weak-strong	.10	.32	.27	.17	.21	.50	. 03	.56
powerless-powerful	.02	.34	.19	.20	.20	.46	.10	.46
frail-hearty	.15	.14.	. 27	.16	.16	.41	.12	.36
	Factor 7 Author	ritaria	ınism					
unpatriotic-patriotic	.16	.32	.01	. 03	.05	. 07	.40	.30
nonreligious-religious	.04	.21	.03	. 08	.01	.18	.38	.30

<u>Table 4</u>

Classification of level of sex-role identification

using the Spence classification system

Scores on the feminine items

High

Low

High

Scores on

Androgynous

Masculine sex-typed

masculine

63(.34)**

55(.30)

items

Low

Feminine sex-typed

Undifferentiated

30(.16)

35(.18)

** N of cases and proportion of the total sample

Table 5

Mean trait factor score and

Cronbach standard deviation score across levels of

sex-role identification

Level of sex-role identification

	Androgynous	Masc sex-type	Fem sex-type	Undif
Mean trait	15.10	15.17	15.20	15.15
Cronbach	1.33	1.28	1.28	1.30

Table 6

Multivariate Analysis of Variance

with level of sex-role identification and gender

predicting scores on factors of Crying scale

Sex-Role effect on crying F(12,410)=6.17,p.0001)

Variable	Mean square	<u>Univariate F</u>	P less than	
Sad	46.36	109.68	.0001	
Aes	5.623	25.29	.0001	
Nos	11.36	23.82	.0001	
Fear	35.27	51.62	.0001	

Gender effect on crying F(r,155)=14.7, p.0001)

Variable	Mean square	Univariate F	P less than	
Sad	1.92	4.55	.0001	
Aes	. 248	1.11	.0002	
Nos	.437	.92	.0002	
Fear	1.04	1.52	.0001	

Write your answers on the answer sheet provided. Use pen or pencil. (pencil preferred)

Please respond to the following question for each of the below listed situations. "The likelihood of my crying in the following situations is...."

Very unlikely	Unlikely	Can't say	Likely	Very likely
1.	2.	3.	4.	5.

- 1. When I hear that a person I once knew died.
- 2. When I see strangers on the street who appear very happy.
- 3. When I go to the doctor with stomach pains.
- 4. When I think back to my first date.
- 5. When I fail out of school.
- 6. When I play with my dog.
- 7. When I walk into a very dark room.
- 8. When I remember my wedding.
- 9. When I go to a funeral.
- 10. When someone spontaneously helps me carry some heavy packages.
- 11. When I hit my hand with a hammer.
- 12. When I think of Christmases past.
- 13. When I work hard on a project and someone comes in and breaks it.
- 14. When I listen to classical music.
- 15. When I stick myself with a pin.
- 16. When I hear familiar old songs.
- 17. When I learn that my closest friend has cancer.
- 18. When I go and watch the animals at the zoo.
- 19. When I hear of a friends' good fortune.
- 20. When I am afraid.
- 21. When I get accepted to graduate school after trying for so long.
- 22. When I watch the sun setting behind the mountains.
- 23. When I remember my sixteenth birthday.
- 24. When I witness a fatal auto accident.
- 25. When I read about the death of children in India due to starvation.
- 26. When I think about Peace on earth.
- 27. When I think of my old pets that have died.
- 28. When I fall and hurt myself.
- 29. When I have a fight with my girlfriend (boyfriend).
- 30. When I feel lonely.
- 31. When an unmarried daughter (sister) becomes pregnant.
- 32. When I see movies that end up happy.
- 33. When I remember my first prom.
- 34. When I burn myself.
- 35. When a son (brother) goes away to war.
- 36. When I see little children playing.
- 37. When I break the vase that my great-grandmother gave me.
- 38. When I think about racial harmony.
- 39. When I remember watching Howdy Doody on TV long ago.
- 40. When I hear a loud knock on my bedroom door at 3 in the morning.
- 41. When I visit the paintings in a museum.
- 42. When I read in the newspaper about a mother of three children dying of cancer.
- 43. When I go to a greenhouse and see the beautiful plants.
- 44. When I think about loved ones who have died.
- 45. When I see the first bloom of a new Spring.
- 46. When I burn the main course of a special dinner.
- 47. When I think of times that were happier.
- 48. When I come home and find an ambulance at my front door.
- 49. When I watch old movies.