

DEVELOPMENT OF THE
JUVENILE LOVE SCALE

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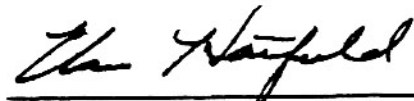
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We certify that we have read this thesis and that in our opinion it is satisfactory in scope and quality as a thesis for the degree of Master of Arts in Psychology.

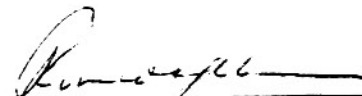
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I. Introduction

Almost every adult remembers feeling passionate love at a very young age. Parents and teachers dismiss such feelings in children as merely a "crush" or "puppy love", yet the experience is usually so memorable that, when we think about it later in life, names, dates and situations from kindergarten days or even before spring readily to mind. In 1886 Sanford Bell (1902) polled his students who were teachers attending normal school in Indiana and assembled over 2500 cases of childhood passion. Clearly we all know very well when we first fell in love. It is something we never forget.

Despite the universality of the experience of early passion, since Dr. Bell most of the psychological literature has been strangely silent on the topic. The subject of love in children appears neither in the table of contents nor the index of over fifty of the current text books in child and developmental psychology and a search of The Psychological Abstracts was equally fruitless. Drs. Spock (1968) and Gesell (1946) do not give advice to parents about the love attachments of their young children. Piaget (1971, 1973) limits his field of study to the cognitions of children, and Kohlberg (1969) talks of moral development.

Psychologists and psychiatrists of the Freudian persuasion do discuss childhood passion, but only as Oedipal attachments to parents

to be outgrown, or as regressive attempts to relive the original frustrating "family romance". We find psychoanalytic therapists (Schafer, 1977, Tyson, 1980) treating young patients who "love" them as if the child were suffering from a failure of early parenting and needed to begin over again with the therapist playing the role of surrogate parent. Such an attitude implies that normal children with good parents will not suffer the derangements of passionate love. Freudians also postulate a latency period (age 6 to 11) during which children temporarily abandon their attempts to handle sexuality and turn their attention outward to school work and same-sex friendships.

In Childhood and Society (1963), Erikson describes a child's growth in terms of functions such as nursing and elimination which are seen as concrete manifestations of the wider tasks of building assumptions of trust and mastery. The phenomenon of passionate love in children does not appear directly as a separate entity. He says of adult sexuality:

(The stage of) genitalia, then, consists in the unobstructed capacity to develop orgasmic potency so free of pregenital interferences that genital libido (not just the sex products discharged in Kinsey's 'outlets') is expressed in heterosexual mutuality, with full sensitivity of both penis and vagina, and with a convulsionlike discharge of tensions from the whole body....A human being should be potentially able to accomplish mutuality of genital orgasm, but he should also be so constituted as to bear a certain amount of frustration in the matter without undue regression whenever emotional preference or considerations of loyalty call for it. (p. 265)

For Erikson, ideal adults find outlet for their "genital libido" in mutually orgasmic heterosexual activity and then go on about life without "undue regressions" or "pregenital interferences". Passion

apart from orgasm would seem to be a failure in maturity, and passion in children, therefore, a pregenital, inferior, and hopefully temporary stage in development.

Medical authorities (Money, 1980, Gadpaille, 1975) assume that true longing for a reciprocal love relationship appears full-blown after puberty as a response to physiological hormonal changes. Also adopting this view, Farber, in a chapter in a recent anthology called On Love and Loving, (1980) says:

(Our) adult conceptions of romantic love emerge primarily from the experiences we have had during adolescence- experiences that range from early adolescent "crushes" to mid-adolescent premarital relationships. (p.45)

After his review of the available research on the subject, Farber still places the onset of first romantic passion during early adolescence, and dismisses previous love attachments as merely "crushes". He assumes there is a difference between real passion and transient crushes. Such an attitude seems to ignore the many similarities between childhood love relationships and the mature sexual encounters of later life. The physiological changes of puberty are so visible they seem to have blinded many observers to the underlying continuity of emotional experience at all age levels.

A study just published entitled Children's Sexual Thinking (Goldman and Goldman, 1982) thoroughly reviews the psychological literature and bewails the almost total lack of studies on the subject of children's ideas about sex, but, then itself omits "love" from a very extensive subject index. When one of the most common answers given by children to the question, "Why do people get married" was

"because they love each other", the authors admit that "supplementary probing (is required) to discover what the children meant by this statement and why marriage would then be necessary" (p.127). Finally, a computer search on the subject "children/love" produced no applicable references.

The psychological literature, then, has largely ignored the subject of passionate love in children or has attempted to deal with the phenomenon theoretically as a failure in maturity or an Oedipal regression. The current study attempts to provide an empirically validated scale to measure passionate love in young children (The Juvenile Love Scale). It is our hope that the use of the scale in further studies will increase our understanding of the genesis and resolution of these feelings in children and add substantial depth to our knowledge of the emotional dynamics of childhood which in turn may suggest appropriate interventions for helping children when normal development first begins to go awry.

II. Methods

The Juvenile Love Scale is based on The Passionate Love Scale which is a thirty item questionnaire developed by Sprecher and Hatfield and currently being validated at the University of Wisconsin (personal communication). Passionate love was defined as:

A state of intense longing for union with an other. Reciprocated love (union with the other) is associated with fulfillment and ecstasy. Unrequited love (separation) with emptiness; with anxiety or despair. A state of profound physiological arousal.

The Passionate Love Scale is designed to assess passionate love in adults (Sprecher, dissertation research, University of Wisconsin).

Construction of The Passionate Love Scale

The adult scale was constructed in the following way. An original set of 200 items was designed to measure the "desire for union." These items were generated via suggestions in the psychological literature, especially Tennov (1979), Rubin (1970, 1980), Lee (1973, 1972), Lasswell (1980), Fromm (1974), Reik (1957) and Freud (1953, 1957), reading of philosophy (Plato, Aristotle) and from suggestions from undergraduate honors students at the University of Wisconsin. Several aspects of the desire for union appeared in these sources:

Components of Love

A. Cognition

- 1.) Intrusive thinking: Thoughts of the loved one are frequently on one's mind

- 2.) Idealization of the other
 - 3.) Knowledge: Desire to know the other and be known
- B. Emotion
- 1.) Intensity of pleasant feelings for the other
 - 2.) Ambivalent feelings: worrying about things going wrong
 - 3.) Longing for reciprocity
 - 4.) Feeling of dependency
 - 5.) Desire for permanence
- C. Behavior
- 1.) Altruism
 - 2.) Physical touching and movements toward physical closeness
 - 3.) Actions toward exclusiveness
 - 4.) Actions toward determining other's feelings

These 200 questions were then presented to 135 students. After further testing and statistical analysis, 30 items were finally chosen as most representative of the entity in question. It was determined that a nine step scale was most acceptable to those answering the items. All items were written in a positive direction as it was too difficult to reverse items written about passionate love.

Construction of The Juvenile Love Scale

The Juvenile Love Scale was designed to exactly parallel the 30 items on the adult scale. With the advice of a team of researchers (Hatfield, McIntosh, Shiziru and Suzuki), I rewrote each item in language which I felt a five-year-old could understand. The resultant questionnaire was then given by interview to seven children who ranged in age from 4 to 13. The older children were included to see if they were able to answer both the adult and child scale, while the younger ones were interviewed using the child scale and were asked what they thought about each item and if it made sense to them. If there was a question, the child was asked to suggest a better word or sentence.

The children responded enthusiastically and seemed to know exactly what I was talking about. Their responses were taped.

Validation of the Scale

We planned to validate the questionnaire by interviewing a sample of 10, 11, 12 and 13 year olds who would also complete the adult questionnaire. However, it was not possible to find an institution which would allow us to interview children on such a sensitive or (as some said) "useless" subject. A second plan was developed which involved asking undergraduate psychology students to take the two questionnaires themselves and then take home a set to give to a relative or neighbor of the appropriate age. The introductory explanations were written so that the child could read them himself and respond without help from the interviewer. Items on both scales were presented in the same order in each questionnaire and all subjects took the child scale first and then the adult as it was felt that the talk about sexual arousal in the introduction to the adult scale might cause anxiety in both the child who was responding and the parents who gave permission for him to participate.

Each experimenter/student was provided with directions for administering the questionnaires and none reported any difficulty. Students who participated received bonus points; children were paid \$5.00 upon return of the questionnaires. (See Appendix B for the questionnaires, instructions, and permission form). Permission for this project was granted by the Committee on Human Studies of the University of Hawaii.

Our original plan had been to photograph the children and have expert judges rate their physical maturity, but this could not be done when interviews proved impossible. As a substitute measure, in addition to returning the questionnaires from the child, each student filled out a single item estimate of the physical maturity of the child who had taken the scales. Physical maturity was rated on a scale of 1 to 9 with 1 being "Physically still a child" and 9 being "Physically mature, an adult" (See Appendix B).

All subjects were asked their age, sex and whether or not they were currently in love, used to be in love, or never had been in love with the person described in the questionnaire.

The Sample

Fifty-six children and 87 adults returned completed questionnaires. There were 2 ten-year-olds, 23 eleven-year-olds, 18 twelve-year-olds and 11 thirteen-year-olds in the child sample. Adults ranged in age from 16 to 27 with a mean age of 19.2. About the same number of males (28) as females (27) were in the child sample, with one child failing to register sex. In the adult sample there were twice as many females (59) as males (28).

The college students, of course, represent a biased sample of those qualified, motivated and financially able to attend college, and their acquaintances might represent a similar bias, but it was not felt that this was a serious handicap in estimating the comparability of two questionnaires about love.

III. Results and Discussion

Number of Factors

Once the data was collected, our first interest was in determining whether The Juvenile Love Scale (the child scale) and The Passionate Love Scale (the adult scale) had many factors or were unidimensional. To find this out, we subjected our data to a principal components analysis with unities in the main diagonal using the University of Hawaii implementation of "Release 9.1" of the Statistical Package for the Social Sciences (SPSS) (Nie, et., al., 1975). We analyzed each sample (adult and child) and each scale separately (that is, adult sample, child scale; adult sample, adult scale; then child sample, child scale; and child sample, adult scale). We then assessed how all subjects performed on each scale (that is, whole sample on child scale and whole sample on adult scale), and finally we performed a principal components analysis on all sixty items from both questionnaires using the adult and child samples together. The results showed that in every case one major factor accounted for the plurality of the variance: in the different analyses the first factor accounted for between 38% to 53% of the variance (see Tables of Eigenvalues, Appendix A).

When we examined the subsidiary factors which did appear item by item, the items seemed to have no logical relationship to each

other, and bore no obvious relationship to the components of passionate love as originally suggested by the theory (see pages 5 & 6 above). Both the child scale and the adult scale seem to measure one single cohesive entity and all the dimensions which we included were equally weighted.

Internal Consistency and Reliability

Once we had established that both the scales were unidimensional, we wanted to see if they were internally consistent and reliable, both independently and when combined into a single questionnaire of sixty items. If the thirty items in each scale were highly related to each other, and when combined into one scale they were still highly related, we felt we could say that all items were measuring the same entity: the two scales were both measuring passionate love. A coefficient alpha was calculated for each sample on each scale, for all subjects on each scale, for each sample on the combined scale, and for all subjects on the combined scale. The resulting alpha were uniformly high under all conditions, ranging from .94 to .98 (see Table 1). Clearly the items on both scales are measuring the same domain.

Subjects' Responses

We then examined the data to see if subjects received similar scores on both scales. If a person was describing the same experience on both scales, the responses should sum to a similar total. We compared these totals using a Pearson product moment correlation coefficient. We analyzed each sample separately and then combined the two groups. Correlations were very high. The correlation of the

two total scores for the children was .88; for the adults it was .87.

Table 1
Coefficient Alpha for Child Scale, Adult Scale and
Child and Adult Scales Combined

Child Sample (N=48)	Child Scale	.95
	Adult Scale	.96
Adult Sample (N=85)	Child Scale	.94
	Adult Scale	.96
All Subjects (N=133)	Child Scale	.96
	Adult Scale	.97
Child Sample (N=48)	Combined Scales	.98
Adult Sample (N=85)	Combined Scales	.97
All Subjects (N=133)	Combined Scales	.98

When all subjects were treated as a single group the resulting correlation was .90. Subjects obviously responded in a similar fashion

Table 2
Pearson Correlation Coefficient of Each Subject's Total Score
on Child and Adult Scales

Child Sample (N=56)	.88
Adult Sample (N=87)	.87
All Subjects (N=143)	.90

on the two scales (see Table 2).

In addition to the two total scores, each subject had a factor score on each scale which measured how much his answers contributed to the central factor delineated in the factor analysis (Nunnally, 1967). Factor scores should also be similar for each subject on each scale and the correlation of factor scores between the two scales were also very high (see Table 3).

Table 3
Correlation of Factor Scores: Child Scale with
Adult Scale

Child Sample (N=56)	.88
Adult Sample (N=87)	.87
Whole Sample (N=143)	.90

Item by Item Correspondences

Once we had established that the scales were unidimensional, measured the same domain, and produced a similar overall response in our subjects, we turned to an analysis of item by item correspondences. The high intercorrelation of each item with every other item is indicated by the results of the factor analysis and the high coefficient alphas described above. When only one factor emerges, items by definition must be highly intercorrelated.

We also correlated each item with its own scale totals, the

totals of the other scale and the combined totals of all sixty items. All items correlated very highly with all totals ($p < .001$) with 67 items in the .25 to .50 range, 221 in the .51 to .75 range, and 59 in the .76 to 1.00 range. The one exception was item one on both the child scale and the adult scale. This item on the child scale achieved a correlation of .19 with the total of 60 items combined; .26 compared with its own scale total, and .12 compared with the adult scale total. The same item on the adult scale correlated at .31 with its own scale total and .20 with the child scale total. This would suggest that the child scale item one could be rewritten to more closely parallel the adult item one, but also that the adult item one is less effective in its own right than the rest of the items (see Appendix B for the actual items). Such complaints seem of interest, however, only in comparison to the extremely high correlations of the other items with all totals.

Each item had a factor loading which indicated how highly related it was to the major factor which had emerged in the original analysis. It occurred to us that if these factor loadings for each scale were highly correlated, we would know that the scales were operating in an exactly parallel manner, item by item. All scale by scale comparisons were made. All were correlated beyond the .01 level of significance except for three (see Table 11, Appendix A) but several correlations were quite low indicating that item by item correspondences between the scales are not as exact as the overall total passion score correlations might suggest. When we looked at

and compared the loadings item by item few major differences appeared, however (see Appendix A, Tables of Factor Loadings). As the scales are designed to produce a single score, small item by item variations in factor loadings may not be important in the face of so much other evidence of inter- and intra-scale reliability.

Construct Validity

Our statistical analysis had shown us that the two scales are unidimensional, reliable and produce comparable results when taken by a child or an adult. Are they both in contact with a real world experience called "being in love"? We had postulated three predictions before the data collection began which were designed to test for construct validity.

1.) We suggested that children would have had fewer chances to fall in love than adults and that those experiences might have been less intense and produce lower scores on our scales.

2.) We asked subjects to state whether the feeling they were describing was for a person whom they had passionately loved, currently loved, or was somebody who was only close to being a loved one and they had never really been in love. We predicted that people who have experienced passion would score higher on both scales than those who had not.

3.) Finally, student/experimenters were asked to rate child subjects on a physical maturity scale of 1 to 9 (see Appendix B for scale used). As suggested in the introduction (page 3), both medical and Freudian authorities place great emphasis on the arrival

of the menses and ejaculation as heralds of heterosexual interests. Our child sample spanned this age period as children ranged in age from 10 to 13 and we expected that those who were more physically mature would be more passionate.

Item Means for Adults and Children

As we expected, children's scores on both questionnaires were lower than adults as represented by the mean scores on the items. The child sample had a mean score for items on the child scale of 5.85 and on the adult scale of 5.71. Adults, on the other hand, scored a mean of 7.30 on the child scale and 7.25 on the adult scale. The scales are close to equivalent within the samples, but adults obviously register higher in passion. The standard error and the standard deviations are also lower for adults for both scales suggesting greater unanimity in their response. It is hard to say if greater

Table 4
Mean Score for Items on Child and
Adult Scales

		Mean ^a	Standard Error	Standard Deviation
Child Sample (N=56)	Child Scale	5.85	0.21	1.59
	Adult Scale	5.71	0.24	1.77
Adult Sample (N=87)	Child Scale	7.30	0.12	1.11
	Adult Scale	7.25	0.14	1.27

^a Each item was followed by a rating scale of 1 to 9. Highest agreement with the item was 9, lowest was 1.

variance in the range of responses represents a more or less serious

attitude toward the test-taking itself (see Table 4).

As predicted, the means for items on the child scale when compared with the means for items on the adult scale for both samples were not significantly different: children, $t(55)=1.20$, $p>0.05$; adults, $t(86)=.64$, $p>0.05$. When the adult sample was compared with the child sample, however, the samples were significantly different, $t(141)=6.42$, $p<.001$ (child scale) and $t(141)=6.06$, $p<.001$ (adult scale).

In-Love or Never-in-Love

Subjects' replies to the questions about whether or not they had experienced passionate love were coded as "having been in love" or "never-in-love" and a correlation was run between these categories and the subjects' total scores on the two scales. People who had been in love did score higher on the passion scales as we had predicted (see Table 5).

Table 5
In-Love or Never-in-Love Correlated with Total
Passion Scores

	Total Passionate Love Score			
	Child Sample	Adult Sample	Child Sample	Adult Sample
			Adult Scale	
			Child Sample	Adult Sample
In-Love/ Never-in- Love	0.55 ^a (N=56)	0.45 ^a (N=86)	0.60 ^a (N=56)	0.49 ^a (N=86)

^a $p<.001$.

Physical Maturity

When the scaled estimate of physical maturity for each child was correlated with the total score on each scale, the results were very low (see Table 6). Either our method of measuring physical

Table 6
Children's Physical Maturity Rating Correlated
with Total Passion Scores

	Child Scale	Adult Scale
Physical Maturity	.11 ^a (N=56)	.12 ^a (N=56)

^aNeither correlation was significant at the .05 level.

maturity is inadequate, or the love experience is not different before and after the appearance of facial hair or breasts. If the latter is the explanation, the adults' higher passion scores may be due more to having lived longer and having had more contact with the popular culture than to the blossoming of hormones at puberty. This is an area for further study.

IV. Summary

Factor analysis and calculations of reliability coefficients have shown that The Juvenile Love Scale and The Passionate Love Scale are measuring a unified and comparable entity. Subjects respond to the two scales in a highly similar manner as is shown by the high correlations of their total scores and factor scores on each scale. Item by item correlations and item to total correlations are very high with only a few exceptions.

Passionate love varies between the two age groups as we expected and subjects who admit they have never been in love do indeed score lower when using our scales to report about their love experiences. Further research will clarify whether or not physical maturity effects passion.

It now remains to take The Juvenile Love Scale out to the population for which it is intended: children from five to ten. For the first time we can begin to map out the territory of passionate love among children. It is a new frontier begging to be explored.

APPENDIX A

Supplementary Tables

Table 7
Eigenvalues and Percent of the Variance Explained by the
Unrotated Factors: Child Scale

Factor	Child Sample (N=56)		Adult Sample (N=87)		Whole Sample (N=143)	
	Eigenvalue	% of explained variance	Eigenvalue	% of explained variance	Eigenvalue	% of explained variance
1	12.24	40.8	11.47	38.2	13.27	44.2
2	2.28	7.6	2.31	7.7	1.65	5.5
3	1.70	5.7	1.80	6.0	1.38	4.6
4	1.56	5.2	1.66	5.5	1.20	4.0
5	1.43	4.8	1.33	4.4	1.13	3.8
6	1.25	4.2	1.30	4.3	1.90	3.0
7	1.02	3.4	1.14	3.8	0.90	3.0
8	1.01	3.4	1.06	3.5	0.89	3.0

Table 8
 Eigenvalues and Percent of the Variance Explained by the
 Unrelated Factors: Adult Scale

Factor	Child Sample (N=56)		Adult Sample (N=87)		Whole Sample (N=143)	
	Eigenvalue	% of explained variance	Eigenvalue	% of explained variance	Eigenvalue	% of explained variance
1	14.30	47.7	14.87	49.6	15.96	53.2
2	2.61	8.7	2.04	6.8	1.85	6.2
3	1.50	5.3	1.63	5.4	1.34	4.5
4	1.21	4.0	1.28	4.3	1.10	3.7
5	1.15	3.8	1.25	4.2	0.94	3.1
6	1.09	3.6	1.00	3.3	0.82	2.7
7	1.05	3.5	0.86	2.9	0.72	2.4
8	0.87	2.9	0.84	2.8	0.66	2.2

Table 9
Eigenvalues and Percent of the Variance Explained by the
Unrotated Factors: Combined Scales

Factor	Child Sample (N=56)		Adult Sample (N=87)		Whole Sample (N=143)	
	Eigenvalue	% of explained variance	Eigenvalue	% of explained variance	Eigenvalue	% of explained variance
1	24.97	41.6	24.69	41.1	27.77	46.3
2	3.87	6.5	3.67	6.1	2.91	4.8
3	2.92	4.9	3.14	5.2	2.27	3.6
4	2.54	4.2	2.58	4.3	1.92	3.2
5	2.21	3.7	2.28	3.8	1.81	3.0
6	1.88	3.1	1.98	3.3	1.52	2.5
7	1.81	3.0	1.78	3.0	1.33	2.2
8	1.60	2.7	1.69	2.8	1.26	2.1
9	1.52	2.5	1.43	2.4	1.19	2.0
10	1.44	2.5	1.39	2.3	1.14	1.9
11	1.36	2.3	1.25	2.1	1.07	1.8
12	1.20	2.0	1.17	2.0	0.99	1.7
13	1.12	1.9	0.93	1.6	0.94	1.6
14	1.05	1.8	0.86	1.4	0.90	1.5

Table 10
 Factor Loadings for the Unrotated First Principal Component;

		Adult and Child Samples, both Scales		Adult Scale	
		Child Scale		Adult Scale	
Item No.	Child Sample	Adult Sample	Item No.	Child Sample	Adult Sample
1	.49	.20	1	.55	.29
2	.45	.62	2	.60	.71
3	.53	.34	3	.79	.63
4	.46	.52	4	.62	.64
5	.28	.40	5	.73	.79
6	.43	.57	6	.48	.60
7	.71	.77	7	.60	.65
8	.66	.52	8	.72	.71
9	.68	.71	9	.66	.72
10	.61	.61	10	.78	.61
11	.76	.64	11	.69	.77
12	.58	.50	12	.70	.67
13	.79	.72	13	.75	.80
14	.57	.70	14	.67	.83
15	.73	.57	15	.72	.72
16	.62	.76	16	.72	.76
17	.61	.57	17	.74	.74
18	.78	.79	18	.79	.66
19	.77	.71	19	.66	.82
20	.67	.71	20	.64	.80
21	.61	.79	21	.68	.79
22	.64	.61	22	.70	.60
23	.61	.59	23	.70	.66
24	.78	.40	24	.61	.61
25	.52	.40	25	.50	.39
26	.72	.61	26	.71	.74
27	.77	.66	27	.78	.78
28	.67	.79	28	.60	.62
29	.79	.72	29	.61	.74
30	.54	.57	30	.74	.75

Table 11
 Correlations of Factor Loadings on the Unrotated First
 Principal Component

	Child Sample/ Child Scale	Adult Sample/ Child Scale	Child Sample/ Child Scale	Adult Sample/ Adult Scale
Child Sample/ Child Scale	1.00	.53	.41	.30
Adult Sample/ Child Scale	.53	1.00	.18	.68
Child Sample/ Adult Scale	.41	.18	1.00	.44
Adult Sample/ Adult Scale	.30	.68	.44	1.00

	All Subjects/ Child Scale	Adult Sample/ Combined Scale
All Subjects/ Adult Scale	.61	.49

Table 12
 Mean of Items: Adult and Child Samples, both Scales

Item No.	Child Scale		Item No.	Adult Scale	
	Child Sample	Adult Sample		Child Sample	Adult Sample
1	4.1	6.4	1	4.8	6.4
2	5.0	6.0	2	5.9	7.1
3	5.2	5.9	3	5.6	6.8
4	5.6	6.8	4	4.8	6.6
5	5.4	7.4	5	5.6	6.6
6	7.1	8.3	6	7.0	8.3
7	5.9	7.4	7	5.7	7.6
8	6.6	7.7	8	6.3	7.9
9	5.6	6.8	9	5.2	6.7
10	6.6	7.9	10	6.1	7.4
11	5.6	7.1	11	5.3	7.4
12	6.9	7.9	12	5.6	7.4
13	6.8	8.1	13	5.3	7.0
14	5.6	6.7	14	5.0	7.2
15	5.4	7.2	15	5.4	7.1
16	6.2	7.5	16	6.2	7.4
17	4.9	8.1	17	5.2	7.7
18	6.8	7.8	18	5.8	8.0
19	6.5	7.2	19	6.0	6.9
20	5.5	7.2	20	5.5	7.2
21	4.5	6.5	21	5.5	6.6
22	5.9	7.2	22	5.5	7.5
23	6.6	7.9	23	6.6	7.9
24	6.4	6.6	24	6.0	7.1
25	7.3	8.1	25	6.5	8.2
26	5.7	7.4	26	5.6	7.2
27	5.3	7.6	27	5.2	7.2
28	5.2	7.0	28	5.5	6.4
29	5.3	7.5	29	5.9	7.5
30	6.2	7.5	30	6.6	7.2

APPENDIX B

The Questionnaires



University of Hawaii at Manoa

Department of Psychology
2430 Campus Road • Honolulu, Hawaii 96822
Cable Address: UNIHAW

Love Study

Thank you for helping with this research project. The information which we collect will be used to develop a scale for measuring love which will be used nationwide. You will fill out two different questionnaires, both asking about your passionate love feelings for a special person in your life. Please think about the same person for both questionnaires. One of the questionnaires has been written for children age five and six and the other for adults. There are no "right" or "wrong" answers to the questions, but it is very important that you answer honestly and seriously. Take as much time as you need. Everything you say will be kept secret. You do not even have to show this to your parents. If the questionnaires are returned by the due date, you will receive \$5.00 for your participation. Please also return the parental permission form.

Thank you!

Name _____

Number _____

Age _____

Boy or Girl _____

Please turn the page and begin!

AN EQUAL OPPORTUNITY EMPLOYER

QUESTIONNAIRE -

THE JUVENILE LOVE SCALE

Number _____

Questionnaire I: The Juvenile Love Scale.

Instructions to the participant:

We are trying to find out how children feel when they love somebody in a very special way. Some children think about a special person a lot, get very excited about him or her and want to get very, very close. Sometimes we call this a "crush". Please list on the lines that follow the names of the eight people you have most loved or liked in your life:

<u>name</u>	<u>male or female</u>
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____
6. _____	_____
7. _____	_____
8. _____	_____

Now draw a circle around the name of the person you'd feel most excited about seeing right now or used to get excited about seeing if that person isn't around any more. Do not choose mother, father or brother or sister. If you aren't excited about him/her right now, try to remember how you felt when you did feel the most excited. If you don't think you have ever felt very excited, try to answer anyway, remembering how you did feel.

Each question is followed by a nine point rating scale. If you circle the 9 it means you agree very much with what the item says. If you circle the 1, it means you agree very little with what the item says. Try to circle the number which most closely explains how you do feel.

Please turn the page and begin.

Questionnaire B.

Number _____

1. When _____ is around I laugh and cry more often.

agree very little								agree very much
1	2	3	4	5	6	7	8	9

2. I feel like things would always be sad and gloomy if I had to live without _____ forever.

agree very little								agree very much
1	2	3	4	5	6	7	8	9

3. Sometimes I feel shakey all over when I see _____.

agree very little								agree very much
1	2	3	4	5	6	7	8	9

4. Did you ever think it was fun just to watch _____ move around?

agree very little								agree very much
1	2	3	4	5	6	7	8	9

5. Did you ever keep thinking about _____ when you wanted to stop and couldn't?

agree very little								agree very much
1	2	3	4	5	6	7	8	9

6. I feel happy when I am doing something to make _____ happy.

agree very little								agree very much
1	2	3	4	5	6	7	8	9

7. I would rather be with _____ than with anybody else.

agree very little								agree very much
1	2	3	4	5	6	7	8	9

8. I'd feel bad if I thought _____ liked somebody else better than me.

agree very little								agree very much
1	2	3	4	5	6	7	8	9

9. No one else could like _____ as much as I do.

agree very little								agree very much
1	2	3	4	5	6	7	8	9

10. I want to know all I can about _____.

agree very little								agree very much
1	2	3	4	5	6	7	8	9

Number _____

11. I'd like _____ to belong to me in every way.

agree very little _____ agree very much
1 2 3 4 5 6 7 8 9

12. I will always like _____.

agree very little _____ agree very much
1 2 3 4 5 6 7 8 9

13. I feel all happy inside when _____ looks at me and I look at _____.

agree very little _____ agree very much
1 2 3 4 5 6 7 8 9

14. I'd like it a lot if _____ played with me all the time.

agree very little _____ agree very much
1 2 3 4 5 6 7 8 9

15. If I could, when I grow up I'd like to marry (live with for same sex person) _____.

agree very little _____ agree very much
1 2 3 4 5 6 7 8 9

16. _____ is the person who can make me feel the happiest.

agree very little _____ agree very much
1 2 3 4 5 6 7 8 9

17. When _____ hugs me my body feels warm all over.

agree very little _____ agree very much
1 2 3 4 5 6 7 8 9

18. I feel all soft and happy inside about _____.

agree very little _____ agree very much
1 2 3 4 5 6 7 8 9

19. I am always thinking about _____.

agree very little _____ agree very much
1 2 3 4 5 6 7 8 9

20. If I were away from _____ for a long time I would be very lonely.

agree very little _____ agree very much
1 2 3 4 5 6 7 8 9

21. Sometimes I can't do my school work because I am thinking about _____.

agree very little _____ agree very much
1 2 3 4 5 6 7 8 9

Number _____

22. I want _____ to know me, what I am thinking, what scares me, what I am wishing for.

agree very little _____ agree very much
1 2 3 4 5 6 7 8 9

23. Knowing that _____ cares about me makes me feel more like I am OK.

agree very little _____ agree very much
1 2 3 4 5 6 7 8 9

24. I look at _____ a lot to see if he (she) likes me.

agree very little _____ agree very much
1 2 3 4 5 6 7 8 9

25. If _____ needed help from me, I'd stop what I was doing, even if it was lots of fun and go help him (her).

agree very little _____ agree very much
1 2 3 4 5 6 7 8 9

26. _____ can make me feel bubbly, like coke.

agree very little _____ agree very much
1 2 3 4 5 6 7 8 9

27. When _____ is around I really want to touch him (her) and be touched.

agree very little _____ agree very much
1 2 3 4 5 6 7 8 9

28. Living without _____ would be very, very sad.

agree very little _____ agree very much
1 2 3 4 5 6 7 8 9

29. I want to hug _____ very, very tight.

agree very little _____ agree very much
1 2 3 4 5 6 7 8 9

30. When I think _____ might be mad at me, I feel really sad.

agree very little _____ agree very much
1 2 3 4 5 6 7 8 9

This is the end of Questionnaire E. Please go back and check to make sure you have answered all of the questions.

QUESTIONNAIRE II

THE PASSIONATE LOVE SCALE

LOVE QUESTIONNAIRE

We are interested in learning more about how people feel when they are in love. Many people become preoccupied with the other person, feel very intense emotions---including sexual excitement. They long for complete union. Some common terms for this feeling are passionate love, infatuation, love sickness or obsessive love.

Please think of the person whom you love most passionately right now. If you are not in love right now, please think of the last person you loved passionately, and how you felt at the time when your feelings were the most intense. If you think you have never felt passionate love, think of the person whom you came closest to caring for in that way. Keep this person in mind as you complete the questionnaire. All of your responses will be strictly confidential.

Number _____

PASSIONATE LOVE SCALE

Following are several statements about thoughts and feelings and behaviors that you may experience for _____ (the person you love/have loved most passionately.) For each statement, circle the number which best expresses how true the statement is for you.

1. Since I've been involved with _____, my emotions have been on a roller coaster.

1 2 3 4 5 6 7 8 9
not at all true moderately true definitely true

2. I would feel deep despair if _____ left me.

1 2 3 4 5 6 7 8 9
not at all true moderately true definitely true

3. Sometimes my body trembles with excitement at the sight of _____.

1 2 3 4 5 6 7 8 9
not at all true moderately true definitely true

4. I take delight in studying the movements and angles of _____'s body.

1 2 3 4 5 6 7 8 9
not at all true moderately true definitely true

5. Sometimes I feel I can't control my thoughts; they are obsessively on _____.

1 2 3 4 5 6 7 8 9
not at all true moderately true definitely true

6. I feel happy when I am doing something to make _____ happy.

1 2 3 4 5 6 7 8 9
not at all true moderately true definitely true

7. I would rather be with _____ than any one else.

1 2 3 4 5 6 7 8 9
not at all true moderately true definitely true

8. I'd get jealous if I thought _____ were falling in love with someone else.

1 2 3 4 5 6 7 8 9
not at all true moderately true definitely true

9. No one else could love _____ like I do.

1 2 3 4 5 6 7 8 9
not at all true moderately true definitely true

Number _____

10. I yearn to know all about _____.

1	2	3	4	5	6	7	8	9
not at all true			moderately true			definitely true		

11. I want _____...physically, emotionally, mentally.

1	2	3	4	5	6	7	8	9
not at all true			moderately true			definitely true		

12. I will love _____ forever.

1	2	3	4	5	6	7	8	9
not at all true			moderately true			definitely true		

13. I melt when looking deeply into _____'s eyes.

1	2	3	4	5	6	7	8	9
not at all true			moderately true			definitely true		

14. I have an endless appetite for affection from _____.

1	2	3	4	5	6	7	8	9
not at all true			moderately true			definitely true		

15. For me, _____ is the perfect romantic partner.

1	2	3	4	5	6	7	8	9
not at all true			moderately true			definitely true		

16. _____ is the person who can make me feel the happiest.

1	2	3	4	5	6	7	8	9
not at all true			moderately true			definitely true		

17. I sense my body responding when _____ touches me.

1	2	3	4	5	6	7	8	9
not at all true			moderately true			definitely true		

18. I feel tender toward _____.

1	2	3	4	5	6	7	8	9
not at all true			moderately true			definitely true		

19. _____ always seems to be on my mind.

1	2	3	4	5	6	7	8	9
not at all true			moderately true			definitely true		

20. If I were separated from _____ for a long time, I would feel intensely lonely.

1	2	3	4	5	6	7	8	9
not at all true			moderately true			definitely true		

Number _____

21. I sometimes find it difficult to concentrate on work because thoughts of _____ occupy my mind.

1	2	3	4	5	6	7	8	9
	not at all true		moderately true				definitely true	

22. I want _____ to know me... my thoughts, my fears, and my hopes.

1	2	3	4	5	6	7	8	9
	not at all true		moderately true				definitely true	

23. Knowing that _____ cares about me makes me feel complete.

1	2	3	4	5	6	7	8	9
	not at all true		moderately true				definitely true	

24. I eagerly look for signs indicating _____'s desire for me.

1	2	3	4	5	6	7	8	9
	not at all true		moderately true				definitely true	

25. If _____ were going through a difficult time, I would put away my own concerns to help him/her out.

1	2	3	4	5	6	7	8	9
	not at all true		moderately true				definitely true	

26. _____ can make me feel effervescent and bubbly.

1	2	3	4	5	6	7	8	9
	not at all true		moderately true				definitely true	

27. In the presence of _____, I yearn to touch and be touched.

1	2	3	4	5	6	7	8	9
	not at all true		moderately true				definitely true	

28. An existence without _____ would be dark and dismal.

1	2	3	4	5	6	7	8	9
	not at all true		moderately true				definitely true	

29. I possess a powerful attraction for _____.

1	2	3	4	5	6	7	8	9
	not at all true		moderately true				definitely true	

30. I get extremely depressed when things don't go right in my relationship with _____.

1	2	3	4	5	6	7	8	9
	not at all true		moderately true				definitely true	

That's all! Thank you very much!

We asked you to say how you felt about "someone you love passionately."

Who is that special person?

- 1. Someone I feel passionately about right now.
- 2. Someone I used to feel passionately about.
- 3. I never felt passionately about anybody, so I chose that person who came closest to being someone I loved.

Please check to make sure you have answered all the questions on the two questionnaires.

THANK YOU VERY MUCH!!!!!!!

INSTRUCTIONS FOR ADMINISTERING THE LOVE QUESTIONNAIRES.

1. You must administer the questionnaires to a child age 11, 12, or 13.
2. The child must fill out both.
3. The child should not choose mother or father or brother or sister to "think about".
4. Please make sure the child takes it seriously. That is your responsibility as a psychologist. It will help if he/she knows you are not going to read the answers. You might put it right into an envelope so he can see you mean it.
5. Return the questionnaire on one of the due dates posted.
6. You must return the permission slip also.
7. You may show him how to use the scale if he needs help, but don't tell him which numbers to circle.
8. Any problems? Call me at home-- 988-6319-- after 4 P.M.

FRIENDSHIP/LOVE STUDY: PERMISSION FORM

The Department of Psychology at the University of Hawaii, Manoa, would like to request your permission for your son or daughter to participate in a social science research project. We are comparing the friendship and love feelings of children and adults. Your child is asked to answer the attached questionnaires. The total time required will be no more than one hour, and the information will be kept entirely confidential. The questionnaires have been approved by the committee on Human Studies and the Chairman of the Psychology Department. The data which we collect will be used to validate a new questionnaire that we anticipate will be used nationwide, so please tell your child how important it is that he be truthful and serious in his responses. However, there are no "right" or "wrong" answers. Your child will receive \$5.00 when the questionnaires have been returned. We hope to gain knowledge from this experiment which will help us to design more effective school programs for teaching children to understand and respect their feelings about their close friends. Please call me if you have any questions: 988-6319 after 4 P.M.

AGREEMENT TO PARTICIPATE IN FRIENDSHIP/LOVE STUDY

I certify that I have read and understand the foregoing, that I have been given satisfactory answers to my inquiries concerning project procedures and other matters and I have been advised that I am free to withdraw my consent and to discontinue participation in the project or activity at any time without prejudice.

I consent to the participation of my minor child or ward _____, in this project with the understanding that such consent does not waive any legal right, nor does it release the principal investigator or the institution or any employee or agent thereof from liability for negligence or for any wrongful act or conduct.

signature of minor

signature of parent or guardian

date

date

PLEASE RETURN THIS PERMISSION FORM WITH COMPLETED QUESTIONNAIRES

TO: Marilyn Easton Greenwell
Department of Psychology
2430 Campus Road
University of Hawaii
Honolulu, Hawaii 96822

PHYSICAL MATURITY SCALE

Children change physically as they mature. Girls fill out into a womanly shape, boys grow beards and their voices change. Would you please rate the physical maturity of the child who filled out this form on the scale below?

1 2 3 4 5 6 7 8 9

Physically
still a child.

Completely mature;
physically an adult.

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