
Shifts in the Content of Fears and Worries Relative to Chronological Age

HENRY ANGELINO and CHARLES L. SHEDD,
University of Oklahoma, Norman

There is little doubt that the content of fears and worries shifts in the course of growth and development. The early investigations by Calkins (2), Binet (1), Mosso (10), Hall (3), and others, added considerably to our knowledge of the rather obscure phenomenon subsumed under such terms as fears, worries, anxieties, apprehension, vulnerability, and the like, and pointed out that changes may be expected relative to age levels. While these works were stimulative and suggestive, it was not until some 25 years later that these shifts became the specific area of investigation. In 1924-25 M. C. Jones in a series of experiments (8, 9) found that in children from two to five years there is an irregular increase in the display of fears toward animals, imaginary creatures, the dark, being abandoned, and bodily injury through accidents. At the end of this pre-school period these fears began to decline and fears of humiliation and failure increased. These general findings were supported and elucidated by the work of Jersild and Holmes (6), Jersild, Markey, and Jersild (7), Holmes (4), Jersild (5), and others.

While shifts in the content of fears and worries have been thoroughly investigated in children two to ten years of age, little systematic work has been done from this age period onward. Those studies which have been made were concerned with isolated age groups only, such as college freshman, high school seniors, and the like. The methods involved have been so varied that attempts to construct anything like an adequate picture is impossible. The present study was designed to determine the shift in the content of fears as related to chronological age, i.e., from ten through 18.

PROCEDURE

The subjects of this experiment were students of a public school located in southeastern Oklahoma. Data concerning the subjects are shown in Table I.

TABLE I
Distribution of Population by Age and Sex

AGE	10	11	12	13	14	15	16	17	18	Total
MALE	23	29	36	28	32	30	32	23	20	336
FEMALE	30	32	30	37	31	41	23	24	44	253
TOTAL	53	61	66	65	60	61	73	46	64	589

Information was taken during the regular classroom period. The subjects were given paper on which they were asked to write their age, grade, and sex. They were then asked to list the fears and worries which they felt people their own age had. It was stressed that no identifying information was desired.

TREATMENT OF DATA

Previous investigation by the authors and bibliographic reference indicated that all fears and worries reported might, for convenience, be placed into ten categories.

These categories are: 1. School, 2. Health, 3. Economic and Political, 4. Social Relations, 5. Personal Appearance, 6. Personal Conduct, 7. Safety, 8. Natural Phenomena, 9. Animals, and 10. Supernatural.

Examples of statements regarding fears placed in each category are:

1. School: "Getting admit to class", "taking report cards home", "making grades", "failing in school".
2. Health: "Being ill", "becoming deaf", "tapeworms", "disease", "crippled".
3. Economic and Political: "Getting a job", "about daddy's crop", "poverty", "that country will be invaded", "feeding livestock through winter".
4. Social Relations: "Large children", "parties", "girls", "lack of friends", "starting a conversation".
5. Personal Appearance: "Clothes", "about looks", "neatness", "clean clothes".
6. Personal Conduct: "Mistakes", "getting somewhere special on time", "young people drink", "stealing", "not making basketball team".
7. Safety: "Being left home at night", "dope addicts", "brother in Korea", "going to Army", "murders and kidnappers", "wrecks".
8. Natural Phenomena: "Thunder storms", "clouds", "water", "bad wind storms".
9. Animals: "Whales and sharks", "dogs", "spiders", "skunks", "horses", "gorillas", "snakes".
10. Supernatural: "Everlasting life", "people in sin", "ghosts", "mysteries", "graveyard at night", "God", "Medicine Men".

The numbers of fears reported by each age level were separated into two groups, male and female. Totals were taken for each of these. The percentage which each category contributed to these totals was then computed.

RESULTS AND DISCUSSION

Each of the ten categories is presented by means of a table showing the age and sex distribution in percentages (Tables II-XI).

TABLE II

Category 1 (School) by Age in Percentages

AGE	10	11	12	13	14	15	16	17	18
MALE	10.23	7.99	18.40	53.33	51.61	24.03	13.07	15.66	4.16
FEMALE	19.64	12.24	24.16	46.16	43.87	9.92	2.43	3.06	4.65

At ten years roughly ten per cent of the fears reported by males and 20 per cent of those reported by females are concerned with school. There is a slight decrement for the males and a rather large one for the females at age 11. At 12 there is an increase of ten per cent for the males and 12 per cent for the females. Increment continues to age 14 at which time the males exceed the females by seven per cent. A gradual decrease is noted the following year continuing to age 16, reaching a minimum at 18 with four per cent for both male and female.

Broadly speaking we find more concern over school affairs by females from ten to twelve and the reverse from 13 to 16, with males taking the lead. This is compatible with interpretations generally given to the purpose of schooling, as indicated by the sexes. It may be noted, however, that the peak is reached by both sexes at the thirteenth and fourteenth years.

TABLE III

Category 2 (Health) by Age in Percentages

AGE	10	11	12	13	14	15	16	17	18
MALE	0.0	1.33	1.60	5.55	3.22	1.92	2.30	0.0	4.16
FEMALE	5.35	2.04	1.66	2.58	5.10	0.0	5.00	3.06	0.0

There is a slight increase for the males from year 11 through 13. From this point there is a slight decrease until the eighteenth year at which time there is a rise somewhat smaller than the high found at 11. For the females, concern with health is approximately as high at ten years as the peak obtained by males at 13. Beginning with ten years of age we see a decrease through age 13, then an increase at 14 almost equal to the amount at ten years of age. At 15 this levels off to zero from whence there is a rise to five per cent at age 16, then a gradual leveling off to age 18, where again it is zero. Throughout the age span represented, concern is sporadic and low. This does not agree with the general assumption that there is a preoccupation with health at the pre-pubescent and pubescent periods.

TABLE IV

Category 3 (Economic and Political) by Age and Percentages

AGE	10	11	12	13	14	15	16	17	18
MALE	3.40	21.33	6.40	4.44	12.90	5.76	29.22	53.01	57.91
FEMALE	3.57	12.24	2.49	1.77	10.20	3.00	20.45	35.71	46.50

There is extreme variation in this category for both sexes. At ten years only slight concern is evidenced, at 11 years there is a dramatic seven-fold increase for males and a four-fold increase for females. From this peak the percentage gradually decreases for males until the fourteenth year, at which time there is a marked rise. The same is true, generally, for the females at 12 and 13 years of age with the exception that the decrease is much greater. At 14 a sudden increase is evidenced. A drop occurs the following year. Percentages increase for both male and female at 16 years.

29 per cent for males and 20 per cent for females, and progress upward to 53 per cent for males and 35 per cent for females at 17, and 57 per cent and 46 per cent for males and females at 18 years. The high percentage found at age 11 is not anticipated; neither are the slumps at age 15.

TABLE V

Category 4 (Social Relations) by Age and Percentages

AGE	10	11	12	13	14	15	16	17	18
MALE	1.13	0.0	3.20	6.66	9.67	3.84	6.15	12.04	10.41
FEMALE	0.0	4.08	3.33	6.03	12.24	9.02	6.94	20.40	6.97

There are only minimal numbers of fears and worries associated with interpersonal relations till age 17, contrary to what might be expected from the literature. There is a gradual increase for males from three per cent at 12 to 12 per cent at 17, at which time there is a slight decrease. Females indicate stronger concern one year earlier than the males. For them increase is seen to age 14 followed by a slight decrease at 15 and another at 16. At 17 there is an increment to 20 per cent. This is followed by a decrease at age 18.

TABLE VI

Category 5 (Personal Appearance) by Age and Percentages

AGE	10	11	12	13	14	15	16	17	18
MALE	0	0	.80	0.0	0.0	0.0	0.0	1.20	0
FEMALE	0	0	.83	3.44	7.14	3.00	1.38	2.04	0

There is absolutely no concern with personal appearance by males throughout the age range. This, too, is contrary to expectations. The females do not reach the level that might be expected at any time. The pattern, however, conforms to general developmental material even though the rate is exceedingly low.

TABLE VII

Category 6 (Personal Conduct) by Age and Percentages

AGE	10	11	12	13	14	15	16	17	18
MALE	2.27	1.33	5.60	11.11	1.61	24.03	0.0	7.22	20.83
FEMALE	1.78	0.0	8.33	13.79	1.02	7.51	.34	0.0	16.27

There is only slight concern with personal conduct as manifested in reported fears and worries by males until 12 and 13 years of age. There is, again, apparent unconcern at 14. At 15, there is a large increase to 24 per cent. At 16 we find that concern has vanished. There is slight evidence, seven per cent at 17 and an increase to 21 per cent at 18. A gradual increase is evidenced for females from ten to 13 years, reaching 14 per cent at this time. This is followed by a decrease at 14 to one per cent and an increase to seven per cent at 15. Concern is lacking at 16 and 17. At 18 years for the female, as for the male, there is a great increase.

TABLE VIII

Category 7 (Safety) by Age and Percentages

AGE	10	11	12	13	14	15	16	17	18
MALE	7.95	10.68	16.80	5.55	9.67	9.61	24.40	3.61	6.24
FEMALE	14.48	10.20	14.99	6.89	10.20	8.26	26.38	15.30	0.0

For males the category "safety" looms pretty important in their lives. At ten years eight per cent of the content of fears and worries can be placed in this category. There is a gradual increase to age 12, then through the next three years we find a decrease. At 16 we see a sudden increase to 24 per cent, followed by a rapid decrease at 17. At 18 we see a slight rise again. For females at age ten we find that a total of 14 per cent of the content can be placed in this category. With slight variation this continues through the twelfth year. At 13 the percentage decreases to nearly seven, and then increases to ten at the next age level. There is a decrease to eight per cent at age 15, followed by a tremendous increase to 26 per cent at age 16. There follows at 17 another decrement to 15 per cent; then at 18 the percentage drops to zero.

TABLE IX

Category 8 (Natural Phenomena) by Age and Percentages

AGE	10	11	12	13	14	15	16	17	18
MALE	14.77	2.66	10.40	5.55	1.61	6.73	14.61	1.20	2.08
FEMALE	0.0	2.04	10.83	11.20	1.07	6.01	19.84	2.04	9.30

Males at ten years demonstrate a relatively high degree of concern over natural phenomena, one which is entirely lacking for females. At 11 years of age this appears as nominal for both sexes. There is an increase to approximately ten per cent of the total reported fears at age 12, no sex difference being observed. At age 13 the percentage continues to increase to 11 for the females, but for the males it drops to slightly above five. There is again only nominal appearance at age 14 followed by increased attention at 15, reaching a high of 15 per cent for males and 20 per cent for females at age 16. Again at 17 there is only nominal appearance, but at 18 we see an increase to nine per cent for females. The low obtained by males at 17 years varies upward only slightly at age 18.

TABLE X

Category 9 (Animals) by Age and Percentages

AGE	10	11	12	13	14	15	16	17	18
MALE	56.81	63.99	33.60	7.77	3.22	11.53	7.69	3.6	1.2
FEMALE	32.14	46.93	29.99	6.89	7.14	31.57	10.80	0.0	16.27

The "animal" category contains the highest levels reported for any save "school". Beginning at ten years with 56 per cent for males and 32 per cent for females, the percentages rise to a high at age 11 with 64 per cent for males and 47 per cent for females. There is a decrement of 30 per cent for males and 18 per cent for females at age 12. The sex differences which were so marked at ages ten and 11 tend to disappear at this level, becoming even less marked at age 13. The figure for the males continues to decrease through 14. For the females, at 14, we note a slight increase over the previous year, which is then built up rapidly to 31 per cent at age 15. There is also a noticeable increase for the males at 15, but it is not as striking as the increment for the females. At 16 we find a decrement for both sexes, slight for the males and great for the females. This trend continues through ages 16 and 17 for males and through 17 for females. At 18 the females increase the score by 16 per cent.

It is generally believed that animal-connected fears decrease with age until a rather minimal level is reached, at which time increase or decrease is not to be expected. This, however, is not the case, for while we find a gradual decrease, we find also several substantial increases after the low

has been obtained. Of interest is the higher level of fear maintained throughout by males as against females. This is definitely contradictory to the usual beliefs.

TABLE XI

Category 10 (Supernatural) by Age and Percentages

AGE	10	11	12	13	14	15	16	17	18
MALE	3.40	3.99	3.20	0.0	6.45	7.49	2.30	2.40	2.08
FEMALE	7.14	6.72	2.33	0.86	2.04	22.55	1.38	12.24	0.0

There are consistent but low percentages reported by males from ten to 13 years varying slightly upward at 14 and 15. At ten years for females we are sampling apparently the tail end of a general concern with supernatural phenomena which reached a peak in earlier years, for, at ten, we find seven per cent; at 11, six per cent; at 12, two per cent; and at 13, less than one per cent. This increases only slightly at 14 years. At 15 years we see a maximum concern evidenced by an increase of 23 per cent. This then decreases to practically no concern at age 16, reviving to about one-half the high at 17, and then dropping to zero at 18.

SUMMARY

We find that contrary to expectations there are no gradual shifts in the content of fears and worries. Each category is marked by increases and decreases from one age group to another. There can, therefore, be no general conclusions. Very broadly and only with reservation can we state that at age ten, 11, and 12 we find a preponderance of fears connected with animals. At 13 we find a shift to school-connected content. At age 15 this content appears to give way to economic and political interest which increases through age 18. Social Relationships, Personal Appearance, and Personal Conduct never did reach the levels which might be expected from material available on growth and development. These conclusions, however, are tentative and are not offered in contradiction to the body of existing literature.

Of special interest were the increases in fear of natural phenomena with age. This questions the general notion that contact with or knowledge of phenomena will reduce fear of those phenomena.

The increase with age in fears and worries connected with Safety was also contrary to anticipation. We are led to believe that with age content becomes more personally connected relative to opinions and attitudes of others, i.e., interpersonal injury. Our findings indicate the opposite.

The sharp increase with age in the concern over the Supernatural was not expected and must have more evidence before any statement can be made. Our definition probably accounts for the high incidence for females at age 15, for Supernatural includes all spooks, goblins, ghosts, etc., as well as theological references.

At this time no interpretation of these shifts can be proffered. Some obviously exist, which, for some apparent reason, cannot be removed; others seem to come from an accumulation of wrongs and slights over which the individual has no direct control. Most, however, seem to spring not from direct contact with the external precipitating agent, but from the feeling, and the object of the feeling appears to be learned from the group of which the individual is a member.

We are of the opinion that our findings indicating shifts relative to chronological age are of sufficient significance to merit extensive research. This research should be concerned with the shifts in fears and worries as

well as with the particular situations in which the shifts occur; for even though in some instances the pattern is that which might be expected, it is in most cases antithetical to the already established materials.

LITERATURE CITED

1. BINET, ALFRED. 1895. La peur chez les enfants. *Annee Psychol.* 2:222-254.
2. CALKINS, M. W. 1894-96. The emotional life of children. *Ped. Sem.* 3:319-330.
3. HALL, G. STANLEY. 1897. A study of fears. *Am. J. Psychol.* 8:147-249.
4. HOLMES, F. B. 1935. An experimental study in the fears of young children. In A. T. Jersild and F. B. Holmes, *Children's Fears. Child Development Monographs No. 20:167-290.*
5. JERSILD, A. T. 1935. The nature and prevention of childhood fears. In A. T. Jersild and F. B. Holmes, *Children's Fears. Child Development Monographs No. 20:297-350.*
6. ———, AND F. B. HOLMES. 1935. *Children's Fears. Child Development Monographs No. 20:356.*
7. ———, F. V. MARKEY, AND C. L. JERSILD. 1933. *Children's Fears, Dreams, Wishes, Day Dreams, Likes and Dislikes, Pleasant and Unpleasant Memories. Child Development Monographs No. 12:172.*
8. JONES, M. C. 1924. A laboratory study of fear: The case of Peter. *Ped. Sem.* 1:308-316.
9. ———. 1925. A study of emotions of pre-school children. *School and Society* 21:755-758.
10. Mosso, A. *Fear.* 1896, New York: Longmans, Green and Co.