# The problem and probability of marriage for alumnae in Progressive Era America 

## Question 1:

What is the late-nineteenth century female equivalent of a bachelor?


Mr. Grant Allen
(husband of two, father of one)

To the end of all time, it is mathematically demonstrable that most women must become the mothers of at least four children, or else the race must cease to exist. [...] A woman ought to be ashamed to say she has no desire to become a wife and mother. Many such women there are, no doubt it is to be feared, with our existing training, far too many; but, instead of boasting of their sexlessness as a matter of pride, they ought to keep it dark, and to be ashamed of it-as ashamed as a man in a like predicament would be of his impotence.

Plain Words on the Woman Question
Popular Science Monthly (1889)

1. College education for women
2. The problem
3. The probability
4. Conclusions



As Dr. Coulston has pointed out lately, (Popular Science Monthly for January, 1884), many girls become pale, some stinted in growth and nervous, from bad air, confinement, wearisome study, and a strained, cheerless, artificial school life. He more than hints at insanity as an occasional result of an overtaxed brain, with privation from the out-door exercise and joyousness which every young person should have.

Dr. James Rhoads
President of Bryn Mawr College
Annual Report to the Trustes (1884)

## 2. The problem



But he and other like writers, admit that all this is the exception, and that with reasonable care girls may pass through school life with good health. The experience of colleges for women has proven that if students enter free from disease and live under proper sanitary regulations, they enjoy good health as when at home.

Dr. James Rhoads
President of Bryn Mawr College
Annual Report to the Trustees (1884)

## College education for women

2. The problem

The probability

## Conclusions

" At first the effects were not much noticed, or they were attributed to the climate, or to the hurry of life, or to the national fondness for pastry; but soon the American physicians sounded the alarm about the way the New England girls were being educated."
— T. S. Clouston, M. D. (1883)

## 2. The problem

a. poor health
b. too particular
c. too studious


The whole process of education, as it exists in some schools, with its competition, long hours of work, short hours of recreation, enthusiasm for work, and conscientiousness in the doing of it, takes up all the available energy of the girl. [...] Blood is not formed in sufficient amount, and pale cheeks and flabby muscles are the result. Nature can not get material and force to build up the form toward the fair woman's ideal, and, therefore, personal beauty and grace of movement are not attained to the extent they should be. As for a store of energy being laid up, as it should be at that age, for the future, for woman's work of the future, for motherhood, for the race of the future, how can it be, when every available energy is taken up in this educative process?
T. S. Clouston, M. D.

Female Education from a Medical Point of View
Popular Science Monthly (1883)
2. The problem
a. poor health
b. too particular
c. too studious


There is no denial of the fact that too large a percentage of educated women, as well as of the cultivated classes generally, remain unmarried.
However, it has been shown in regard to the former, that "dulled instinct" is not a tenable cause. Some have attributed it more wisely to increased "nicety of choice." This may prove beneficial in the end, when man shall have become a more importunate suitor.

Alice B. Tweedy
Is Education Opposed to Motherhood?
Popular Science Monthly (1890)
2. The problem
a. poor health
b. too particular
c. too studious


These men are, as a rule, refused by the brilliant college graduate, and are either shipwrecked for life and for eternity by remaining single, or are only saved by marrying a woman who is their social inferior, but who, by reason of her contented mind, in the end makes them a much better helpmate then the faultfinding intellectual woman who is looking for an impossible ideal.

A. Lapthorn Smith, B.A., M. D.

Higher Education of Women and Race Suicide.
Popular Science Monthly (1905)
2. The problem
a. poor health
b. too particular
c. too studious


A girl may be a sound Grecian, a brilliant mathematician, a sharp critic, a faultless grammarian, yet be wanting in all that personal tact and temper, clear observation, ready sympathy, and noble selfcontrol which make a companionable wife and a valuable mother.

Mrs. E. Lynn Linton

The Higher Education of Women
Popular Science Monthly (1886)

# College education for women 

2. The problem
3. The probability

## Conclusions

"From a scientific point of view, I am well aware that the weak point of my argument is, that it is not founded on any basis of collated statistical facts."
— T. S. Clouston (1884)
3. The probability
a. student data at Bryn Mawr
b. alumnae data from Bryn Mawr
c. a national outlook

"If the future mothers of our country are being ruined physically by our methods of education, who would wish with such downright earnestness of purpose to remedy the impending evil as our educated women themselves? If a false cry is being raised which will hamper the just and wholesome intellectual development of women, who are more interested in showing it than the graduates of our women's Colleges? Truth, broad truth, is what we should seek. Individual experience is apt to be erroneous; only large numbers eliminate errors."

The Medical News
Quoted in Report of a Special Committee of the Association of Collegiate Alumnae (1885)
3. The probability
a. student data at Bryn Mawr
b. alumnae data from Bryn Mawr
c. a national outlook


Of the 705 graduates, 509 , or 72.2 per cent, are single at the present time, and 196 , or 27.8 per cent, are married. These 196 have been married, on the average, 6.7 years; 130 have had children, and 66 have had no children. Of the whole number of children, or 263, 232 are living, and 31 have died; of the children living, 208 are in good health, 15 in poor, and for 9 the health is not given. The average present age of children living is 6.0 years.

Health Statistics of Women College Graduates.
Report of a Special Committee of the Association of Collegiate
Alumnae (1885)

## Question 2:

## What kind of student data would prove that college educated women are healthy and marriageable?

## 3. The probability

a. student data at Bryn Mawr
b. alumnae data from Bryn Mawr
c. a national outlook


The health of the students generally has been remarkably good. With the exception of a few who were excused for special reasons, the students have used the Gymnasium. Of those who did so, 94 per cent. made a general gain in physical vigor during the year; 69 per cent. increased in weight; and 92 per cent. in strength of chest. If it be permitted to draw an inference from an experience so brief, it would be that college life with its regular habits and its occupations full of purpose, is positively favorable to health.

Dr. James Rhoads
President of Bryn Mawr College
Annual Report to the Trustees (1886) IN OCOURFIR, 1889.
(GANELPLEI) ACCORDING TO AGE AT ENTRANCE.
THE STVTWENT RELONGING TO THIS CLAES RECRIVED THE DEGRELS OE B. A. IN JUNE, 1893.


Tables of statistics prepared for the college exhibit at the World's Columbian Exposition in Chicago 1893


Tables of statistics prepared for the college exhibit at the World's Columbian Exposition in Chicago 1893

## 3. The probability

a. student data at Bryn Mawr
b. alumnae data from Bryn Mawr
c. a national outlook


DR. ALICE BERTHA FOSTER
Director of Gymnasium, Bryn Mawr College.
and Swedish, I selected the largest gain made by any one student in each item of second measurement. The result was as follows, in the significant items :


The greater gain on neck girth is typically Swedish and due directly to the form of exercise.

Alice Bertha Foster, M.D.

## 3. The probability

a. student data at Bryn Mawr
b. alumnae data from Bryn Mawr
c. a national outlook


Discriminative sensibility for pressure. Standard, 100 g .
Abscissas - weight just discriminable from the standard.
Ordinates - aumber of subjects.
... - women; - men.

A series of general mental tests was undertaken for the purpose of obtaining data for the comparative study of the mental processes of the college student, and bringing such data into relation with the results of physical examination made by the department of physical education. Over 100 students were examined, and satisfactory results were obtained on reaction time to sound, rate of movement, sensitivity to pain, fineness of discrimination for lifted weights, and minimal pressure stimuli.

Dr. Dickinson Miller, Dr. George Barton, Dr. Lightner Witmer

Report of the Department of Philosophy
Annual Report of the President of Bryn Mawr College 1896-1897
3. The probability
a. student data at Bryn Mawr
b. alumnae data from Bryn Mawr
c. a national outlook


Discriminative sensibility for lifted weights. Sunt dard 100 g .

The hearty cooperation and interest of the students in these tests will make it possible to continue them on a more extensive scale next year. It is hoped that the results will not only contribute data to comparative psychology, but may serve in conjunction with the measurements made by the department of physical training to render the various influences of college life more effective for the individual student's progress in mental and physical capability.

Dr. Dickinson Miller, Dr. George Barton, Dr. Lightner Witmer

Report of the Department of Philosophy Annual Report of the President of Bryn Mawr College 1896-1897

## 3. The probability

a. student data at Bryn Mawr
b. alumnae data from Bryn Mawr
c. a national outlook

Table showing number of physical defects noted at examination for treatment during the year.


In addition to those who graduated 37 undergraduates left during the year, or at its close, for the following reasons:
Needed at home ..... 7
On account of illness ..... 6
Not stated, probably low grades ..... 5
Withdrawn for a semester ..... 3
To study music ..... 3
For financial reasons ..... 2
For financial reasons and on account of illness ..... 2
For financial reasons and needed at home. ..... 2
To be married ..... 2
To attend another college nearer home ..... 1
Homesickness ..... 1
Married ..... 1
Withdrawn for one year ..... 1
Not stated ..... 1
Total ..... 37

The students who left were members of the following classes: Seniors, 3; Juniors, 11; Sophomores, 15; Freshmen, 8.

Isabel Maddison, PhD.
Report of the Assistant to the
President
Annual Report 1908-1909
3. The probability
a. student data at Bryn Mawr
b. alumnae data from Bryn Mawr
c. a national outlook

## VII. Occupations of 84 Graduate Students.

Of the 84 graduate students 39 have already taught or are teaching, and 15 of these have taught, assisted or demonstrated
in colleges and universities; 2 are librarians, 1 is a social worker, 1 a college warden. The remaining 41 have held no position, 16 of these intend to teach, 2 are married, 1 intends to study medicine, 3 plan to be scientific research workers, 1 to be a missionary, 1 to be a public lecturer, 1 to be a social worker, 11 to have no special occupation, 5 have not stated their plans.

Isabel Maddison, PhD.

Report of the Assistant to the President
Annual Report 1910-1911

## 3. The probability

a. student data at Bryn Mawr
b. alumnae data from Bryn Mawr
c. a national outlook

"He is probably of a deeply enquiring nature and will want statistics," Catherine mused. "I must review mine. Let me see. There are sixty-seven 'grads,' one hundred and nine freshmen, and - " But, alas! these were all she knew. [...] And then, of course, there was the seventeen per cent. statistic. How stupid in her to forget that! She had heard it often enough, at least twice a month since she entered.
[...]
"Yes, Mr. Livingston," Catherine finally droned forth absentmindedly. "There are one hundred and seven in the freshmen class, average age, eighteen, average height, five feet five inches, average weight, two hundred and eighty pounds, and only seventeen per cent. will marry!"
3. The probability
a. student data at Bryn Mawr
b. alumnae data from Bryn Mawr
c. a national outlook
$P$ is for Paxton of ethical mind, The source of her soul she is anxious to find.

Q is the Question (you know what is meant)
Which will only be asked of the 17 per cent.

3. The probability
a. student data at Bryn Mawr
b. alumnae data from Bryn Mawr
c. a national outlook

ANNUAL REPORT
of the

Alumne Association

BRYN MAWR COLLEGE

1892-1893

ELLSWORTH, ME.
hancock County Puairshina Co., Printers

The committee has carefully reviewed the two reports, one by the Association of Collegiate Alumnae, entitled: "Health Statistics of Women College Graduates," the other by Mrs. Henry Sidgwick, entitled "Health Statistics of Women Students of Cambridge and Oxford," and has looked over the list of questions that are answered by the entering students of Bryn Mawr, Smith, Vassar, and Wellesley colleges. At the fall meeting the committee will submit a proposed schedule of questions to be sent to every Bryn Mawr alumna.

Jane L. Brownell, Chairman
Report of the Committee on Health Statistics Annual Report of the Alumnae Association 1892-1893
3. The probability
a. student data at Bryn Mawr
b. alumnae data from Bryn Mawr
c. a national outlook

ANNUAL REPORT
of the

Alumne Association

BRYN MAWR COLLEGE

1892-1893
.

ELLSWORTH, ME.
hancock County Pubinhing Co., Prixters

The object of these questions is, of course, to obtain data from which, at some future time, to make out statistical tables that shall give accurate information as to the advantages and disadvantages of college life at Bryn Mawr, especially in reference to health. These tables maybe compared with those of other women's colleges.

Jane L. Brownell, Chairman<br>Report of the COmmittee on Health Statistics<br>Annual Report of the Alumnae Association 1892-1893

## 3. The probability

a. student data at Bryn Mawr
b. alumnae data from Bryn Mawr
c. a national outlook

REPORT OF COMMITTEE ON HEALTH STATISTICS. Sėts of answers previously reported; Sets of answers received since November 21st, 1896,

Total,
Jane L. Brownetl, Chairman

SUMMARY.

| Class. | $\begin{gathered} \mathrm{Not} \\ \text { in } \\ \text { inss. } \end{gathered}$ |  | ${ }_{\text {A }} \mathrm{No} . \mathrm{M}^{\prime}$ 's. | $\begin{aligned} & \text { No. of } \\ & \text { Ph.D. } \end{aligned}$ | $\begin{gathered} \text { Tock. } \\ \substack{\text { Tack. } \\ \text { ing. }} \end{gathered}$ | $\begin{aligned} & \text { Noor } \\ & \text { Mar- } \\ & \text { ricd. } \end{aligned}$ | $\begin{gathered} \text { No. } \\ \text { Cinild. } \\ \text { Cen. } \end{gathered}$ | No. Died, |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | Mary Grafton Patterson, A. B., 1888 ; died 1894. |
| '89 | 26 | I | 3 | 2 | 6 | 10 | ${ }^{1} 3$ |  |
| '90 | 13 | 1 | 2 |  | 4 | 5 | 3 | 1 |
| '91 | II | 4 | 3 |  | 5 | 1 | 2 | 1 |
| '92 | 19 | 2 | 1 | 3 | 8 | 5 | 4 | 1 |
| '93 | 27 | 3 | 3 | 1 | 12 | 4 | 1 |  |
| '94 | 20 | 2 | 4 |  | го | 2 | 1 |  |
| '95 | 25 | 6 | I | - | 12 | I | 1 |  |
| '96 | 39 | 11 | 6 |  | 19 | 1 |  |  |
|  | 180 | 30 | 23 | 6 | 76 | 29 | 25 | 4 |

## 16

## REPORT OF HEALTH STATISTICS COMMITTEE.

Sets of answers previously reported, . . . . . . . . . . . . . . . . . . . . . . 171
Received since February $22 \mathrm{~d}, 1901$. . . . . . . . . . . . . . . .
Total, . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 194

Distribution Among Classes.

| Class. | No. in Class. | No. of Answers <br> RECEIVED. | PERCENTAGE. |
| :---: | :---: | :---: | :---: |
| '88 | 1 | 0 |  |
| '89 | 26 | 17 | 0 |
| '90 | 13 | 9 | 65.4 |
| '91 | 11 | 7 | 69.2 |
| '92 | 19 | 11 | 65.6 |
| '93 | 30 | 14 | 57.9 |
| '94 | 20 | 8 | 46.6 |
| '95 | 25 | 7 | 40.0 |
| '96 | 39 | 15 | 28.0 |
| '97 | 46 | 16 | 38.5 |
| '98 | 48 | 18 | 34.8 |
| '99 | 44 | 13 | 37.5 |
| '00 | 54 | 33 | 29.6 |
| '01 | 62 | 22 | 61.1 |
| Ph.Ds. | 11 | 4 | 35.5 |
| Total, | 449 | 194 | 36.4 |

ISABEL MADDISON, Secrelary.
February 8th, 1902.

SUMMARY.

| Class. | No. in Class. | $\begin{gathered} \text { No. } \\ \text { Study'g } \end{gathered}$ | $\begin{aligned} & \text { No. of } \\ & \text { A. Ms. } \end{aligned}$ | No. of Ph.Ds. | No. Teaching. | No. Married! | $\begin{gathered} \text { No. } \\ \text { Children. } \end{gathered}$ | No. Died. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| '88 | 1 | - . | - . | . | . . . . | - . | . . . | 1 |
| '89 | 26 | . . . | 4 | 2 | 3 | 11 | 22 | . |
| '90 | 13 | . . | 2 | 1 | 2 | 6 | 9 | 2 |
| '91 | 11 | . | 4 | 1 | 4 | 2 | 3 | 1 |
| '92 | 19 | . . | 1 | 3 | . 6 | 7 | 8 | 1 |
| '93 | 30 | 1 | 3 | 1 | 9 | 13 | 10 | . . . |
| '94 | 19 | 2 | 5 | 2 | 8 | 6 | 3 | $\cdots$ |
| '95 | 26 | 2 | 2 | -. | 11 | 5 | 3 | . . |
| '96 | 39 | 2 | 8 | . | 12 | 9 | 9 | . . |
| '97 | 46 | 2 | 5 | . . . | 20 | 11 | 4 | 1 |
| '98 | 48 | 8 | 9 | . . | 11 | 1 | . . . | . . |
| '99 | 44 | 6 | 4 | - . | 9 | 6 | 2 | 1 |
| 1900 | 55 | 6 | 2 | - . | 14 | 1 | 1 | +. |
| 1901 | 61 | 8 | . . | . . . | 17 | 1 | . . . | . . |
| Hon. M'b'rs | 2 |  |  |  | 1 |  | . . . . | . |
| Ph.Ds. | 12 | 2 |  | 12 | 10 | 1 | - . |  |
| Total | 452 | 39 | 49 | 22 | 137 | 80 | 74 | 7 |

## OTHER OCCUPATIONS OF BRYN MAWR ALUIINAE.

Clerical work, 11 ; wardens of college halls, 6 ; college settlement work, 5 ; school directors, 4 ; deans of colleges, 3 ; library work, 2 ; secretary to Consumers' League, 1 ; expert agent of U. S. Industrial Commission, 1 ; physician, 1 ; nurse, 1 ; photographer, 1 ; artist in pathology, 1 ; special writer for McClure's syndicate, 1 ; junior bursar, Bryn Mawr College, 1 .

## 3. The probability

a. student data at Bryn Mawr
b. alumnae data from Bryn Mawr
c. a national outlook

STATISTICS OF OCCUPATIONS OF BACHELORS OF ARTS, B. M. C.
Number in Class. ..... 63
Number married ..... 31
Number teaching since 1902 ..... 32
Number now teaching ..... 8
Number studying since 1902 ..... 25
Number now studying ..... 5
Number with A.M. degrees. ..... 3
Students of music ..... 2
Students at schools of philanthropy ..... 2
Secretary in a college ..... 1
Wardens ..... 4
Bacteriologists ..... 2
Milliner ..... 1
Church soloist ..... 1
Wood-carving ..... 1
Farmer ..... 1
Director of out-door sports ..... 1
Resident workers in settlements ..... 3
Philanthropic worker ..... 1
Secretary, Y. W. C. A ..... 1
Secretary of a society for social hygiene ..... 1
Number married with paid occupation ..... 1
No paid occupation since 1902 ..... 20
Number reporting definite unpaid positions in clubs or philanthropic organizations ..... 28
Number dead ..... 1

## 3. The probability

a. student data at Bryn Mawr
b. alumnae data from Bryn Mawr
c. a national outlook

STATISTICS OF BACHELORS OF ARTS OF BRYN MAWI: COHLEGE.
II. Marbiage Table.


Isabel Maddison
Bryn Mawr College Calendar: Register of Alumnae and Former Students
3. The probability
a. student data at Bryn Mawr
b. alumnae data from Bryn Mawr
c. a national outlook

I can't write any letter because of dearth of material - nothing on earth has happened to me in years - and years and years!! Absolutely nothing. If only I could have joined that famous 69 per cent now - the girls that had babies without getting married - that would be something I might brag about, but I haven't even done that. Yet, of course, I have several diplomas and a few gold medals for research work in foreign universities, but that's nothing - pooh! And of course every one has read my Works - but those things are things too obvious to mention.
3. The probability

## a. student data at Bryn Mawr

b. alumnae data from Bryn Mawr
c. a national outlook

To show that the winning of undergraduate honours is followed by success in after life the present occupations of the twenty-six former holders of the fellowship, which has been awarded annually since 1889 have been investigated. Six of the former fellows arenow Ph.D.'s, four are teaching in colleges and two are working in college administration, one is a writer and lecturer, nine are teaching in or heads of schools, three are still studying, one is a private tutor and six are married and have no paid occupation. They have studied all over the continent and in England, at Paris, Berlin, Munich, Leipzig, Heidelberg, Göttingen, Zurich, Oxford, Cambridge, London (British Museum), Rome and Athens. Only two have failed to use their fellowships.

Isabel Maddison
Bryn Mawr Alumnae Quarterly 1916

## 3. The probability

a. student data at Bryn Mawr
b. alumnae data from Bryn Mawr
c. a national outlook


* Of theme thirteen are Bmelrelors of Arts of Bryn Mawr College.
$\dagger$ Of these all are also B.A.s of Bryn Mawr Colloge and six are also Doetors of Platiosoplay of Bryn Mawr College.

3. The probability
a. student data at Bryn Mawr
b. alumnae data from Bryn Mawr
c. a national outlook


Had it been possible to proceed as planned, there would undoubtedly have been collected a larger body of statistics than has yet been attempted relating to that muchdiscussed question, the comparative size of families of college and non-college graduates, men and women, and the size of the family would have been considered in its important relation to the number of years of marriage. The magnitude of the undertaking, however, and the difficult of proceeding single-handed, made it necessary to postpone the work indefinitely.

Alice Upton Pearmain

Report of the Publication Committee (1906)

## 3. The probability

a. student data at Bryn Mawr
b. alumnae data from Bryn Mawr

## c. a national outlook



## 3. The probability

a. student data at Bryn Mawr
b. alumnae data from Bryn Mawr
c. a national outlook

A Preliminary Statistical Study
of ceritais

WOMEN COLLEGE GRADUATES

## DESMTA witil the

HEALTH, MARRIAGE, CHILDREN OCCUPATIONS OF WOMEN GRADU ATING BETWEEN 1869 AND 1898 AND THEIR SISTERS AND BROTHERS

Compiled from information callected for the Asociation of Colimointe Alegnas $\%$ in 1900
bY takis punticafion committer
Puksodeat M. Careky Thomas, Chuirrean
Mea. Alece Dptos Pramain, Sec'y Dn. Maex Shenwono Mist. Helek Himence Backle Profichong Mary Rober Mes, Alece Foreman Palsiait Prormaco Aumy Leacil

Prepared for puhliation ual bow primted privately sulyejet
to the approvil of the Publisation Committex by
1SABEL. MADDISON, B.Sc., Ph.D.

## 3．The probability

a．student data at Bryn Mawr
b．alumnae data from Bryn Mawr
c．a national outlook

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## APPENDIX C．

Proof that the distribution of women graduates（unmarried）as to change in health conforms to the Curve of Error．The method adopted is a modification of Quetelet＇s and makes use of his seale of precision．＊

|  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| +4 +3 | 14 50 | 6 22 | 500 494 | 10 | 30＇8 | 500 494 | 6 23 | 0 |
| $+2$ | 172 | 76 | 472 | 30.2 | 29.8 | 471 | 75 | 1 |
| $+1$ | 373 | 164 | 396 | 20 | 19.8 | 306 | 164 | 0 |
|  |  |  | 232 | 9.8 | 9.8 | 232 |  |  |
| 0 | 1，183 | 520 |  |  |  |  | 620 | 0 |
| －-1 | ＇335 | 147 | 288 435 | 12.7 24.0 | 12.7 22.7 | 288 424 | 136 | 11 |
| －2 | 101 | 44 | 479 | 32.1 | 32.7 | 479 | 55 | 11 |
| $-3$ | 34 | 15 | 494 |  | 42.7 | 496 | 17 | 1 |
| －4 | 13 | 6 | 600 | ．．．． | ．．．． | 500 | 4 | 2 |
|  | 2，275 | 1，000 |  |  |  |  |  | 28 |

The misfit is 2.8 per cent．The fit is very close except at the lower end of the scale．

[^0]
## 3. The probability

a. student data at Bryn Mawr
b. alumnae data from Bryn Mawr
c. a national outlook

AMERICAN

## STATISTICAL ASSOCIATION.

NEW SERIES, Nos. 49, 50.
MARCH, JUNE, 1900.

STATISTICS OF COLLEGE AND NON-COLLEGE WOMEN.

By Mary Roberts Smith, Ph.D.,

associate Professor of Sociology in Leland Stanford Jr. University.
The oldest women college graduates are now about 65 years of age; until 1880, however, women did not go to college in any considerable numbers. Time enough has only just elapsed, therefore, to make statistics of marriage and child bearing possible. An acquaintance with several thousand college women and their families, and a residence in five colleges of different types, extending over a period of thirty years, has given the writer an opportunity of hearing all phases of women's education discussed. It can scarcely have failed to give a background for the interpretation of statistics bearing upon the comparative results of the generally prevalent systems of education for women. The following data have been collected, with the approval of the Association of Collegiate Alumnæ, a body of over 2000 women, of whom more than 600 are married. The inquiry has not been limited exclusively to them, but includes women graduates of other colleges than those admitted to membership. Heretofore the college women have been compared with that vague standard, the "average" women of the Census;

> The object of this paper is to show, so far as can be shown by the statistical method, whether college women differ as to age of marriage, child-bearing capacity, health, income, and the class of men they marry, from their sisters, cousins, and friends who were educated in other ways

Mary Roberts Smith (1900)
Statistics of College and Non-College Women
American Statistical Association

The tabulations and diagrams were made by Mr. Walter E. Nichols, Stanford, '99, a student of social statistics, to whom I am indebted also for many valuable suggestions. The schedule blank used was as follows:-

1. Where was your academic, collegiate, or later education obtained?

Degrees, if any ? Honors or scholarships, if any ?
2. At what age did you marry? How long married?
3. How many children have you had ?
(a) Now living (sex and age of each) ?
(b) Now dead (sex and age of each at death)? Cause of death ?
(c) Number still-born? Number of miscarriages ?
4. Are your children delicate, moderately well, or robust ?

If any are delicate, why?
5. Did you have delicate, fair, good, or robust health before marriage ?

If delicate or fair only, was there any special cause for it ?
6. Do you have delicate, fair, good, or robust health now ?

If this reply varies from question 5 , to what do you attribute the change?
7. Where was your husband's later education obtained ?

Degrees, if any?
What is your husband's occupation?
8. What was your own occupation before marriage ?

How many years pursued?
9. Is your average yearly joint income less than $\$ 2000$ ?

Between $\$ 2000$ and $\$ 5000$ ? Over $\$ 5000$ ?
10. Do you live in city, suburbs, or country?


## Question 3:

Who is missing from this picture?


# . College education for women 

"a somewhat excessive attention has been paid to the question of the marriage rate of college women"
— Elizabeth Kemper Adams (1912)

## 4. Conclusions

$P$ is for Paxton of ethical mind,
The source of her soul she is anxious to find.

Q is the Question (you know what is meant)
Which will only be asked of the 17 per cent.

A. Extraordinary surveillance

1. private life aggregated as public knowledge
2. underlying growth of eugenics movement
B. Economic rationality
3. income opportunities
4. anti-nepotism and unemployment
C. Beyond marriage as an occupation
5. the normal status
6. the womanly spinster

HENLTH STATISTICS OF MTERING CAASS, SEPTMABER 1909.

M. Carey Thomas Presidential Files (1909) columns: Name, Health, Period


The Harvard Venus (1893) sculpted by Theo Alice Ruggles based on data from ten years of college students collected by Dudley Sargent
$P$ is for Paxton of ethical mind, The source of her soul she is anxious to find.

Q is the Question (you know what is meant)
Which will only be asked of the 17 per cent.

A. Extraordinary surveillance

1. private life aggregated as public knowledge
2. underlying growth of eugenics movement
B. Economic rationality
3. income opportunities
4. anti-nepotism and unemployment
C. Beyond marriage as an occupation
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## COMMITTEE ON EUTHENICS

ELLEN H. RICHARDS

At the last annual meeting in Cincinnati, October 27, 1909, the Association voted to establish a Committee on Eugenics with Mrs. Ellen H. Richards as Chairman. The Committee on the Study of the Development of Children, of which Dr. Shinn was chairman, was made a subcommittee, and she was made a member of the new committee. Later Dr. Pearl Boggs, of Urbana, Ill., was appointed secretary, and Miss Wilcox, of Brown University, and Dr. Frances Davenport, of Washington, as members of the committee. The right to enlarge the committee as should seem best was vested in the three executive officers. There was some discussion as to the name of the committee, finally resulting in that of Euthenics, as Mrs. Richards felt very strongly that her time and energy must be given to Euthenics, and as the committee wanted her more than the name, the name was changed by the Executive Committee.

The first year's work of a committee is necessarily constructive and detailed, and so much time is taken for organization that the actual and practical results are very few, but the purpose and outlines for activity have been well worked out as follows. The aim of euthenics is to suggest immediate and practicable ways of increasing the efficiency of the present human race. The future will in large measure depend upon this. The lines of work to be followed out are:
I. The education of the public to esteem better environment; e.g., to esteem better control of personal habits, food, drinks, and to a belief in human power over human conditions.
2. Investigation of all proposed plans.
3. Study of fundamental principles.
4. Statements to the public of the waste of life and the possible saving in order to arouse in them a belief in the need of work and in its possible results.
5. Immediate improvements in care of children.
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The situation began to change during the 1880s. First, opportunities for teachers improved in terms of both salary and available positions. Secondly, new career options, both inside and outside education, emerged for female college graduates. Thirdly, the growth in opportunities for young middle-class men slowed in the 1890 s.


In essence, spinsterhood, on either a temporary or permanent basis, took on new meaning for women college graduates during the last years of the nineteenth century. It became a viable lifestyle, associated with financial independence, social reform, and productive work.

Mary E. Cookingham

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Edith Orlady, A.B., promoted to be Secretary of the College.
Abigall Camp Dimon, A.M., appointed Recording Secretary.
Maletha Gibrons Thomas, A.B., reapnointed Warden of Pembroke Hall
Helen Remington Calder, Warden of Radnor Hail, resigned on account of her marriage.

Edith Buell Wright, A.B., reappointed Warden of Merion Hall.
Jane Righter, Warden of Rockefeller Hall, term expired.
Alice Hill Byrne, A.B., Assistant Warden of Pembroke Hall, term expired.
Katherine Everett, Ph.D., appointed Warden of Rockefeller Hall. Dr. Everett received the degree of Bachelor of Arts from Brown University in 1908 and the degree of Master of Arts in 1910. In 1912 she received the degree of Doctor of Philosophy from Cornell University.
Susanne Carey Allinson, A.B., appointed Warden of Radnor Hall. Miss Allinson received the degree of Bachelor of Arts from Bryn Mawr Collowo in 1010

Maria Hawes Albee, resigned as Busincss Manager, March 1, 1912, on account of her marriage.
Maria Wilkins Smith, A.B., appointed Busmess Manager to fill the unexpired term of Maria Hawes Albee from March 1, 1912. Miss Smith received the degree of Bachelor of Arts from Bryn Mawr College in 1906. From 1907 to 1912 she conducted a class of girls in Philadelphia and from 1908 to 1909 attended Bryn Mawr College as a graduate student.
Margaret A. Procter, A.B., reappointed Junior Bursar.
Mary Letitia Jones, B.L., B.L.S., reappointed Librarian.
Constance M. K. Applebee, reappointed Director of Athletics and Gymnastics.
Elizabeth Lawrence Gray, reappointed Assistant Director of Athletics and Gymnastics.

Mary Ellen Baker, A.B., B.L.S., Head Cataloguer, resigned.
Helen Corey Geddes, A.B., B.S. appointed Head Cataloguer. Miss Geddes received the degree of Bachelor of Arts from Radeliffe College in 1905 and the degree of Bachelor of Science from Simmons College in 1910. From 1910 to 1912 she was Assistant in the Library of the University of Illinois.

Bessie Homer Jennings, reappointed Assistant Cataloguer.

We cannot help feeling that much of Bryn Mawr's success, certainly a tone on the academic side that is peculiarly her own, is due to the fact that in her wisdom the Dean chose as her Faculty the most promising scholars and teachers, and for the most part men, regardless of whether they were married or not. "I am not going to ask my Faculty to show a marriage certificate," she used to say.

"The Twenty-Fifth Anniversary"<br>Bryn Mawr Alumnae Quarterly

## 4. Conclusions



Such antinepotism rules were for many decades a common administrative device used by universities to protect themselves from having to consider employing qualified wives [...] What the loss of this professional opportunity meant to these women or to science as a whole, which by this wasteful and systematic disqualification lost the contributions of many highly talented persons, who found themselves blamed first for marrying and leaving science and then for trying to get back into it!

Margaret Rossiter
Women Scientists in America: Struggles and Strategies to 1940 (1982)
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I am quite ready to concede that marriage and motherhood are a normal status for woman, and other things being equal, she is happier in that condition than in any other. But this is far from saying that a woman's life is a failure because she has not married, and that her life may not be a failure because she has married.

President William Howard Taft
Speech to Bryn Mawr Alumnae 1910
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There are women who have a genuine call to scholarly work, and who not only remain womanly women, but become ever more womanly in the pursuit of their calling.

Ruth Gentry
A Winter in Berlin
The Lantern (1892)

## 1932

IHITE SCOTT Charlotte Angas of Carholme 2 Storeys Way Cambridge spinster died 8 November 1931 Probate Liverpool 24 February to Sidney Field gentleman. Effects £828 18s. 10d.

the end, thank you.


[^0]:    ＊Quetelot，Lettres aur la Thiorie det probabilites，pp， 375 et seq ．Bowley，Elements of Statistics，p． 273.

