Age, Birth Cohort, Monotony and Sex Frequency Among U.S. Adults in the NORC General Social Surveys 1989-2000

Abstract

Frequency of sex is measured in successive cross sections of U.S. adult householders in the NORC General Surveys, 1989-2000 (effective N= 11,697). The design enables one to look at the effects of Birth Cohort and Monotony (duration of marriage) along with the powerful variable Age. With or without controls, among Married and Not-Married sexual Activity among Actives declines steadily with Age. Net of Age, Cohort (Year of birth) has no effect among the married but among the Not-Married earlier cohorts are less active and show lower frequencies. Among first marriages Duration (monotony) has no effect, net of Age. The impact of Sex norms and ideology is limited to the lower activity rates of those who are both extremely religious and extremely conservative on sex norms.

(Apology: Figures are all first drafts)

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Introduction

General population studies always show a negative association between age and frequency of sexual intercourse (e.g. Laumann, et. al. 1994 p. 98, Smith 1994 p.55, McKinlay and Feldman 1994 p. 271, Wellings, et. al. 1994 p. 137).

It is short and seemingly obvious leap from this association to the conclusion that frequencies decline as we age. Scholars assume this and it is an endless source of ribaldry. But, as McKinlay and Feldman (p. 273) point out it is logically possible that the association masks a "cohort effect", perhaps even like this : sexual frequencies are essentially constant throughout the life span but more recent cohorts, growing up in a more permissive society, start at higher frequencies and maintain them. Such a process would produce the negative age/frequency correlation in any cross-sectional study. In this extreme form the hypothesis is clearly dubious but it is not unthinkable that frequencies vary mostly with age and partly with cohort.

Interesting as the possibility might be McKinlay and Feldman note it is impossible to dis-entangle Age and Cohort effects in a one shot study[1]. In a longitudinal study, however, one can examine both effects simultaneously, following cohorts as they age and examining cohort differences in frequency within age and time combinations.

The NORC General Social Survey or GSS (Davis, Marsden, and Smith, 2000) is a unique source of appropriate data. The GSS is an annual/bi-annual, multi-stage probability, personal interview sample representing US, English speaking householders, 18 years of age and older. Since 1988 respondents have been asked to complete a brief, self-administered sex behavior

[1] It is logically impossible to dis-entangle Age, Cohort and Period (Time) in any empirical design. (Glenn. 1976).

questionnaire at the end of the interview. Since almost all the items are repeated year to year the cumulative data file contains 9603 respondents' answers to the sex frequency item spread across seven surveys, 1989 to 2000. (The frequency question used here wasn't asked in 1988). Unlike most sex surveys the GSS has no age cutoff, though respondents 89 and older are all coded "89". (26 respondents were coded "89", 25 of whom reported no sex in the last year,)

This report will (1) describe the age/frequency association in some detail since it is a basic behavioral fact and these are probably the best general population sex data ever collected (2) explore correlates, in particular, education, and religiosity. (3) attempt to separate Age and Cohort effects and (4) attempt to separate Age and "monotony", the hypothesis that sexual frequency declines with sheer duration of marriage.

The Frequency Distributions

The basic frequency question is "About how often did you have sex during the last 12 months?". For a discussion of variations on this wording see Michaels and Giami (1999). Although we tend to take at face value survey responses to much less countable matters, sex behavior items have received considerable scrutiny. (For a good summary see Smith, 1999). Nothing in this literature implies any special problems for age and frequency. (It is "number of partners" that draws most of the fire) The analyses here add little to measurement issues, but the following observations may be relevant. There seem to be two problems, cognitive and normative. On the cognitive side we are asking for a summary of quite a few, brief, normally unscheduled events over a whole year, a challenging cognitive task. However, it is also fair to assume - at least for married respondents and those in a permanent relationship - there are few wild fluctuations over twelve months. Furthermore, the individual events are pretty unambiguous. Nevertheless, I think it is fair to assume that respondents will tend to forget random interruptions in a steady pattern (e.g. illness, travel, family crises and the like). Consequently it is

probably safe to say the answers over-state total annual frequencies a bit. On the normative side it is tempting to assume that people brag a bit and tempting to assume in a puritanical nation they are shy about admitting high frequencies - as we know they are about truly taboo behaviors.

In the absence of "objective" criterion measures, there can be no definitive answer here. My personal judgment is that the data are quite satisfactory for group comparisons, if not for exact frequency totals.

Causal order is a more serious methodological question. While it is obvious that age affects frequency rather than vice versa, one may argue both ways about other predictors. I shall assume marital status influences frequency rather than the other way around, but a reasonable person might argue that marriages with low frequencies tend to produce divorce and non-married couples with high frequencies are motivated to tie the knot.

Table 1. gives the case bases for the analyses.

(Table 1. here).

The original total of 17,577 individuals was adjusted as follows;

(1) The GSS, like all similar surveys, is designed to represent households rather than individuals. Consequently adults in larger households are slightly under-represented. After re-weighting to give each adult the same selection chance, N becomes a trivially different 17,544.

(2) As is well known, cluster samples create "design effects" such that the statistically effective N's are less than the number of raw cases. (The economies of concentrating cases in the immediate neighborhood more than compensate so that such samples are quite cost effective.) The design effect for Age in the GSS is 1.39 (Smith, Shin, and Tong, 1996, p. 7). As a conservative correction I re-weighted each case by .6667 (DEFF=1.5), reducing the effective N to 11,697.

(3) In 1990, to save money the sex questions were asked only of a random sub-

sample, reducing the effective N by 1218. Of the remainder, 12 percent either did not complete the sex module (self-administered at the end of the interview) or skipped the frequency question.

These 11,697 cases (6821 Married, 4876 Not Married) constitute a representative probability sample of U.S. householders near the end of the 20th century.

Table 2 gives the sex frequencies for the total sample.

(Table 2 here)

The answer wording jumps around from years to months to weeks. For calculations I recoded to a monthly scale as shown in the left hand column of figures. All in all (Married, Not-Married):

Three quarters of adults claim a frequency of once a month or more.
About half claim once a week or more
About a quarter claim twice a week or more
Less than ten percent claim more than three times a week.

The mean, 5.0 times per month is distinctly higher than the (interpolated) median, 3.1, and is smaller than the standard deviation 5.5. That is, the distribution is highly skewed with cases piling up at the lowest levels (in part because values below zero are impossible) and stretching out to thin, though eye catching high frequencies. (The British survey reports a high of 130 occasions in the last four weeks. Wellings, et. al. p. 137.)

A more realistic perspective comes from splitting the "Actives" and "Not-Actives". The "not at all" respondents are clearly non-active and, after some hesitation I added the "once or twice during the last 12 months" cases. The decision, which can be debated, inflates the percentage Not-Active from 17.5 to 25.0 and conversely raises the rate among the actives from a mean of 6.0 to one of 6.6.

The right hand columns of Table 2 display the distributions among the Actives (mean=6.6, median=4.5)[2]. Among sexually active American adults at the end of the 20th century:

[2] This is very close to the means for active men, 6.5, and women 6.3 in Laumann et al.'s 1992 survey, hardly a surprise since the two studies have the same basic design, same field organization

The vast majority, 86 percent, report two or more times per month.
About two thirds, 64 percent, report weekly or more.
About one third, 38 percent, report twice a week or more.

Table 3 breaks the distributions by activity and marital status producing both obvious and non-obvious results: Marital status makes a big difference in activity, with 88 percent of the married and 58 percent of the non-married coded as active. Among the actives the rates are actually higher (median of 5.2 versus 4.2) among the non-married. Taken at face value these numbers suggest that proponents of non-marital chastity have their work cut out for them. Before drawing inferences about tidal waves of promiscuity, two observations: first, we haven't looked at age yet and second, when the GSS question "The last time you had sex was it with someone you were in an ongoing relationship with...." is cross-tabbed against marital status, among the Actives 87 percent of the non-married and 96 per cent of married said "yes". That is, American sex is almost entirely within some sort of on-going relationship.

Age and Active/Not-Active

We first consider Age and Active/Not-Active. Figure 1 plots the activity percentages for married, not married, in 12 age groups (18-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-89. Categories are plotted at their mean age.)

(Figure 1. here)

The differences are impressive producing a range from 98 percent among young marrieds ages 18-24 to five percent among Not-Marrieds 75 and older.

Among the Married:

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and comparable years . Without going in detail one can say the basic findings agree almost perfectly with the discussion in Laumann et. al. pp. 86-93. What will be added here is the longitudinal perspective and greater detail.

Activity is almost universal among those 18-39, with percentages of 97 or more.
From age 40 to 50 there are slight but discernable drops slipping to 90 percent among those 50 to 54.
Around ages 55-57 activity starts to drop off at a rapid rate so that by age 75 about half are active.
Among the oldest, those 75 plus, the rate drops to a low but perhaps surprising 30 percent.

Among the Not-Married (Single, Divorced or Separated, Widowed):

Two thirds of the very youngest (18-24) are active,
The percentage rises quickly to a high of 77 among those 30-34.
From age 35 on the percentage declines in a rather steady fashion
Prior to around age 50 half or more of the non-married are active,
After age 50 the percent drops rapidly reaching a low of 5 per cent among those 75 and older..

Considering the total population:

Below age 65 a majority are sexually active
Below age 55 three quarters are sexually active.
From 25 to 45 about 85 per cent are sexually active.

In sum:

At every age activity rates are higher among the Married although the Not-Married have substantial activity rates up to age 50.

Starting around age 32 activity rates decline steadily in both groups.

Age by Marital Status combinations show a wide range in activity - from near 100 percent among the youngest Married to near zero among the oldest Not-Married.

Frequencies Among the Actives

Figure 2 plots the mean and median rate per month for the total sample among actives - those with frequencies greater than "once or twice a year". Both means and medians show steady declines from the earliest adulthood. Taking the median (middle) value as the best descriptor, the range is from 7.2 times per month in the early 20s to 2.4 per month among those 75 and older. In capsule: below age 45 once or twice a week is the statistical norm. After that it is weekly to bi-weekly.

(Figure 2 here)

Figure 3 separates the Married and Not-married among Actives.

(Figure 3 here)

There is no consistent marital status difference. Rather:

> In the early 20's the Married have distinctly higher rates than the not-married.
>
> Between ages 25 and 60 the two groups are almost identical.
>
> After age 60 the rare Not-Married Actives seem to have a higher rate than the Married.

Neither exception from strict linearity is a real surprise, the lesser sexual activity of the very youngest singles[3] being pretty much "catch as catch can", the elderly non-married actives being a very small and highly selected group.

Table 4 puts Figure 3 in Regression terms.[4]

> Among the married each decade sees a reduction of about one-episode-per month. (b*10= -1.18.)
> Among the non-married each decade sees a reduction of about one-half-episode-per-month (b*10= -.64)
> Although both curves decelerate a bit, the declines are pretty much linear with R squares of .85 in both groups[5].

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3 Since GSS eligibility begins at age 18 nothing in this report sheds light on the highly controversial issue of sex behavior among those of high school age or younger.

4. The regressions in Figures such as Figure 3 will run much larger than in raw data with Age grouped since R in the raw data is sensitive to departures of cases from the subgroup means and departures of subgroup means from linearity. The latter, however, is the issue here

5 Working with the complete sample when one compares the regressions with Age and with Age in 12 dummies the R^2 differ by only 1 point in the third decimal.

Take at face value the regressions say the decline is quite a bit larger among the married. However, inspection of Figure 3 shows us that over most of the span (ages 27 to 62) the lines are almost identical. Married Actives start at higher rates and continue on to comparatively low rates at ages were Actives are sparse.

Practically speaking Figure 3 says that among actives there is very little marital status difference and no indication of interesting bumps or bends. Among actives the rate of sexual intercourse declines steadily with age and that's that.

Combining Actives and Non-actives

The division between Actives and Not-Actives adds perspective but, as noted, is somewhat arbitrary. Figures 4, 5 and 6 give the complete picture by displaying cumulative figures for the full range of answers..

(Figure 4 here)

(Figure 5 here)

(Figure 6 here)

Figure 4 combines the Married and Non-Married, i.e. the total population of adult householders. From which:

> For the total population the lines are curvilinear rising from ages 18 to 30 and declining steadily thereafter.
>
> Zero activity is rare (10 percent or less) in ages 25 to 50 but statistically normal After age 70.
>
> Up to age 70 rates of monthly or biweekly are statistically normal.
>
> Up to age 50 half or more of adults, married or not, report rates of weekly or more.
>
> Rates of twice weekly or more never reach the 50 per cent level at any age.

Figure 5 is a similar display for the non- married. From which:

All levels of non-zero frequency are maximal in the late twenties and early thirties and decline sharply after that.

The majority show rates of:
At least monthly - up to age 55.
At least bi-weekly - up to age 45
Weekly or more only in the late 20s and early 30s.

After age 50 the majority of the non-married are not sexually active.

Figure 6 treats married respondents. From which:

Rates decline from the beginning (ages 18-24)

The majority show rates of:
At least monthly - up to age 75
At least biweekly - up to age 65
At least weekly - up to age 55

Statistically the folk norm of "twice a week" applies only to those 18 to 30.

Even among the youngest Married, frequencies of more than three times per week are statistically rare (22 per cent for those 18-24).

Social Factors

Sheer description, as in the previous section, is an under-rated payoff of social research. Nevertheless it is informative to move beyond it and ask the degree to which these rates are shaped by social forces. The numbers so far could reflect a purely physiological process akin to declining vision or they might be profoundly shaped by social factors - since sex, as measured here[6], requires the cooperation of two people.

To begin with the obvious, the clear cut marital status difference in activity trumps any purely physiological claim. Marital status, of course, goes beyond Married/Not-Married. When the Not-Married are divided into three categories - Divorced and Legally Separated , Single, and

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6. The results here include both homosexual and heterosexual activity. Among the married actives 98.8 percent reported only opposite sex partners, 1 per cent only same sex, and 0.2 percent mixed. Among the non-married actives the percentages are 94.0, 4.7 and 1.3. With only 151 active homosexuals further breakdowns would not give persuasive results.

Widowed - net of Age the Single are somewhat less likely to be active than the two groups of ex-married, as shown in Table 5.

(Table 5 here)

Note that in the youngest ages the very rare widowed have relatively high activity percentages, about the same as the divorced..

To go beyond this important but hardly amazing relationship we can examine;

Education (EDUC: Years completed, 0-20)

Religiosity (RELITEN: 3 categories from "strong (name of religion)"=3 through "not very or "somewhat" strong combined=2 to "None" on religion=1.

Sexual Permissiveness Attitude: mean on 4 point scales from "always wrong"=1 to "not wrong at all"=4 for :

HOMOSEX "sexual relations between two adults of the same sex"
PREMARSX "sex relations before marriage"
TEENSEX "sex relations before marriage if 14 to 16 years old
XMARSEX "married persons having sex with someone other than the marriage partner"

One would expect that greater schooling and more permissive attitudes would line up with greater frequencies and religiosity would line up with lesser. (I inspected the frequencies for specific religions and denominational groups but found no coherent frequency differences.) Age and self-rated Health (Excellent, Good, Fair, Poor) are added as controls.

Table 6 summarizes the results for four analyses:

Active v. Not-Active among non-married
Active v. Not-Active among married
Frequency among Active non-married
Frequency among Active married.

(Table 6 here)

The main story is that chronological Age dominates. It has the highest coefficients in every column and in the multiple regressions R is only a point or two larger than the beta for age alone. Clearly Age is not fronting for social and cultural forces.

Self-rated health does decline with age (r= -.237) and "common sense" says poor health would lower sexual activity, good health facilitate it. Among the married health is related to Active/Non-Active with betas around .10. Nevertheless, among the other three groups there is no linear relationship once Age is controlled. Doubtless detailed measures on specific physical conditions would give a more nuanced picture but the nil results here suggest that declining rates of activity are not seen by the participants as part of the general aging process.

We can treat permissive attitudes and religiosity together as signs of conservative sex norms. In three of the four sub-tables they make no difference Where ideology does makes a difference is for activity/non-activity among the non-married.. This is hardly surprising since it is exactly this which is the focus of traditional standards. While the betas are modest, the differences are non-trivial, as shown in Table 7.

(Table 7 here)

Table 7 displays the per cent sexually active among the single (never married) by religiosity and answers to the question about premarital sex. The result is an interaction effect. Among those whose religious identification is strong and who claim pre-marital sex is always wrong just 17 per cent are active. In all other combinations the majority (60 per cent or more) are active. Since just 7 per cent of the Not-Married sample are in the Always Wrong/Strong cell, conservative religious sex norms are only a minor factor in explaining activity among the vast majority of single adults[7].

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7 We remind the reader that these respondents are all 18 and older, while the policy debates about chastity, condoms, etc. focus on younger teenagers. The issue of chastity for unmarried thirty year olds seems theologically clear to social conservatives but fraught with practical conundrums.

Although Education may play a role in selection of sexual practices (Laumann, et. al. pp. 98-99) it does not seem important for frequencies, or perhaps its role is extremely complex - two of the four partial coefficients are insignificant and the two significant but small ones have opposite signs. Scrutiny of the raw data simply did not reveal any comprehensible patterns.

In sum: with one exception - the very low activity of the small minority of single adults committed to conservative religious norms - "social factors" seem to have little effect on sexual activity and contribute nothing to understanding the Age gradient.

Age and Cohort

In any one year Age and Birth Cohort (year of birth) are perfectly related. Indeed the GSS and many other surveys just ask year of birth and get age by subtraction. With data from multiple years the relationship declines so it is possible to examine different cohorts among persons of a particular age and different ages among persons in a given birth year. Thus it is statistically possible to examine the effects of Age or Cohort while holding the other constant. In practice, however, even the decade long (1989-2000) span of these GSS data leaves the two variables with so strong a relationship ($r = .978$) that the reliability (though not the validity) of regression analyses will be reduced considerably. Nevertheless, our large sample size is insurance against wild unreliability.

With no strong theory or previous cohort analyses to guide us the common sense expectation is that the more recent the cohort the greater the activity at any age. This would follow from the common assumption that conservative sex norms and inhibitions have been eroding throughout the century.

We can improve the multiple correlations a bit, examine non-linearities and generate multi-variate graphs by treating Age and Cohort as dummy variables. Each was divided into 12

even frequency categories[8] and the youngest category (18-24 for Age and 1973-1975 for Cohort) was used as base.

Figures 7 and 8 display the results for Activity/Non-activity and for High Rates among Actives among the Not-Married.

(Figure 7 here)

(Figure 8 here)

In both raw calculations, the later the Cohort the greater the per cent who are sexually Active and the greater the percentage with high rates among the Actives. Newer cohorts, of course, are younger so the important line is the solid one for cohort net of age. For Activity the Cohort effect is reduced (the two lines show the classic "scissors" pattern) but not eliminated. Net of Age the newer the cohort the greater percentage of Not-Married who are sexually active. The net line seems fairly straight with no bumps or lumps indicative of historical turning points.

For frequency among the active Not-Married the the story is similar but not quite identical. Both the raw and net lines slope up, but the net line hits a plateau of roughly 40 percent with the birth cohort of 1936 (who reached age 18 beginning in 1950). Putting it another way the cohort effect on frequency among actives is limited to the older generations . Remembering that the older Not-Married cohorts are a very small group, the conservative generalization would be that among the Not Married newer cohorts are more active but among the actives frequency

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8 For cohort the categories are: 1900-1922, 1923-1931, 1932-1939, 1940-1944, 1945-1949, 1950-1953, 1954-1956, 1957-1960, 1961-1963, 1964-1967, 1968-1972, 1973-1975. In graphs the categories are labeled by their means.

doesn't vary much among those reaching adulthood after World War II. .

Figures 9 and 10 display the same variables for the Married.

(Figure 9 here)

(Figure 10 here)

Quite simple: Both graphs show classic spurious correlations: a definite curve for the bivariate and a flat line for the net. That is, newer cohorts of the Married are more likely to be Active and more likely to show high frequencies among the Actives - but this is entirely due to Cohort (Generation)..

In sum;

. (1) Among the Not-Married, net of Age newer birth cohorts are more likely to be sexually Active and among the Actives high frequencies increased with year of birth until reaching a plateau among the post Word war II generations.

(1) Among the married, net of Age there is hardly any generational difference in activity or frequency , another support for the claim that sexual frequency among the married is not much shaped by cultural factors and trends.

Monotony.

Folklore and French farce assume that sexual passion, all other things equal, erodes with the passage of time - i.e. monotony threatens monogamy. Learning theory, however, suggests that sex is a powerful reinforcer and unlikely to erode short of physical changes. The very low rates of extra-marital sex reported in all technically competent studies suggest the monotony effect, if present, is not terribly powerful but it is still possible that frequencies decline with duration of the relationship.

The GSS variable AGEWED (If ever married: "How old were you when you first married?") allows us to measure duration by subtracting AGEWED from AGE. The question

doesn't apply to the never married and I excluded the re-married by the variables DIVORCE ("Have you ever been divorced or legally separated?") and WIDOWED ("Have you ever been widowed?) which leaves us with 75 per cent of the currently Married. AGEWED was dropped after 1994 as another cost cutting move. This still leaves us with 4876 respondents in their first marriage.[9]

Among first marriages durations range from zero years (two newlyweds) to 73 with a mean of 25.8 and standard deviation of 16.2. For multi-variate analysis I divided durations into 12 even frequency dummies[10] entered them with the 12 age dummies as predictors of frequency in ordinary least squares regression . As before we can look for effects of monotony (Duration) on Activity/Not-Activity and rate among the Actives. Figures 11 and 12 display the results..

(Figure 11 here)

(Figure 12 here)

Neither figure provides any support for the hypothesis. The "scissors patterns" say both Activity and Frequency decline steadily with Duration in the raw data, but net of Age neither shows any trend. The correlations with Duration appear to be totally spurious. .

Summary

Analysis of self-reported sex frequencies among U.S. householders 1989-200 yields these main conclusions:

> (1) Among the Married: sexual activity is almost universal up to age 35, after which it declines sharply to a low of about 30 per cent among those 75 and older...Among the Active married, frequency declines steadily from the beginning with typical rates of

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9. It is possible that exclusion of the ever-divorced biases the results. If the monotony effect is so powerful it can dissolve unions, we have selected heavily on our dependent variable. Perhaps, but we have such a wide range of durations in the data that the effect has plenty of chances to show itself.

10. The grouping for Duration: 0-4, 5-8, 9-12, 13-16, 17-19, 20-23, 24-27, 28-32, 33-38, 39-43, 44-50, 51-73.

twice a week or more in the early 20's, weekly from ages 25 to 45 and bi-weekly among the oldest.

(2) Among the Not-Married about two thirds of those 18-25 are active, the percentage rising to about 75 at age 30 and declining steadily to a negligible 5 per cent among those 75 and older...Among the Actives frequencies are much the same for those age 35 to 65, lower among those less than 30 and higher among those 65 and older.

(3) While social factors may influence particular sex practices, aside from Marital status their impact is quite small, as summarized in Table 8.

(Table 8 here)

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Tables and Charts

Table 1.
Case N's GSS 1989-2000

Total completed cases*		17577		
Weighted by ADULTS**		17544		
Effective N***		11697		
		Total	Not Married	Married
Sex Frequency	Inapplicable****	1218	508	710
	No answer	876	331	545
	Item asked	96043	4037	5566
		11697	4876	6821

* Median response rate for nine surveys = 77%.
** makes data representative of adults rather than households
*** N * .6667 to correct for Design effects in multi-stage sample
**** To save money a random sub-sample of cases was not asked this question in 1990.

Table 2.
Sex Frequency Distributions: Total Sample, 1988-2000

Original Responses	Recode*	N	%	Cum.	Omit 0.0 and 0.1 %	Cum.
More than 3 times a week	19.6	603	6.3	6.3	8.4	8.4
2 or 3 times a week	10.9	2096	21.8	28.1	29.1	37.5
About once a week	4.3	1899	19.8	47.9	26.4	63.9
2 or 3 times a month	2.5	1613	16.8	64.7	22.4	86.3
About once a month	1.0	992	10.3	75.0	13.8	100.1
Once or twice	0.1	720	7.5	82.5		
Not at all	0.0	1681	17.5	100.0		
		9603			N=7202	
Mean			5.0		6.6	
Median			3.1		4.5	
Std. Dev.			5.5		5.4	

* Adjusted to times per month assuming 30.4 days per month (365/12=30.4) and 4.345 weeks per Month (30.4/7 = 4.345).

Table 3.
Sex Frequency Distributions by Marital Status: GSS 1989-2000

Times Per month	N	%	Cum.		%	Cum.
				Married		
19.6	320	5.8	5.8		6.6	6.6
10.9	1387	24.9	30.7		28.4	36.0
4.3	1390	25.0	55.7		28.5	63.5
2.5	1133	20.4	76.1		23.2	86.7
1.0	651	11.7	87.8		13.3	100.0
0.1	334	6.0	93.8			
0.0	351	6.3	100.1			
	5566	100.1%			N=4881	
Mean		5.5			6.3	
Median		3.8			4.2	
Std. Dev.		5.2			5.1	
				Not Married		
19.6	282	7.0	7.0		12.2	12.2
10.9	709	17.6	24.6		30.5	42.7
4.3	509	12.6	37.2		21.9	64.6
2.5	480	11.9	49.1		20.7	85.3
1.0	341	8.4	57.5		14.7	100.0
0.1	386	9.6	67.1			
0.0	1330	32.9	100.0			
	4037	100.0%			N= 2321	
Mean		4.2			7.3	
Median		1.5			5.2	
Std. Dev.		5.8.			5.9	

Table 4
Linear Regressions for Values in Figure 3

	Not Married	Married
R^2 adj.	.851	.856
Contstant	7.566	10.485
b	-.064	-.118
β	-.930	-.932
t	8.0	8.1

Table 5.
Per Cent Active by Age and Marital Status

Marital Status	18-29	30-39	40-49	50-59	60-69	70-85
Married	98% (N=653)	97 (1417)	94 (1445)	87 (925)	71 (619)	45 (453)
Divorced*	88 (105)	79 (287)	65 (411)	51 (232)	32 (104)	14 (65)
Widowed	85** (33)		66 (41)	33 (70)	17 (130)	4 (329)
Single	68 (1405)	69 (431)	53 (167)	34 (68)	23 (35)	11 (36)

* and legally separated
** 18-29 and 30-39 combined because of small case bases

Table 6.
Social Correlates of Sexual Activity and Frequency by Marital Status
(Standardized Partial Regression Coefficients, GSS 1989-2000)

1) Y= Active v. Non-Active

1A) Not Married

X=	Bivariate r	N	Net β			
Age	**-..415**	(4031)	**-.409**	**-.384**	**-.366**	**-.365**
Health	**+.131**	(3179)	.018	.023	.015	.013
Reliten	**-.192**	(3845)		**-.098**	**-.062**	**-.063**
Permissive	**+.254**	(4016)			**.124**	**.123**
Education	**+.110**	(4028)				.007
		R=	.414	.423	.438	.438

1B) Married

X=	Bivariate r	N				
Age	**-.442**	(5564)	**-.409**	**-.414**	**-.413**	**-.408**
Health	**.187**	(4252)	**.110**	**.109**	**.109**	**.098**
Reliten	**-.050**	(5293)		-.001	.000	-.005
Permissive	**..078**	(5542)			.004	-.006
Education	**.143**	(5553				**.052**
		R=	.443	.448	.438	.450

2) Y = Frequency Among the Actives

2A) Not-Married

X=	Bivariate r	N				
Age	**-.158**	(2318)	**-.148**	**-.141**	**-.139**	**-.137**
Health	.015	(1824)	-.008	-.011	-.014	-.003
Reliten	-.036	(2206)		-.017	-.006	-.004
Permissive	**.063**	(2309)			.047	**+.057**
Education	.038	(2316)				-.048
		R=	.147	.142	.148	.157

2B) Married

X=	Bivariate r	N	R=	.313	.315	.315	.323
Age	**-.316**	(4880)		**-.311**	**-.310**	**-.310**	**-.315**
Health	**.054**	(3720)		.016	.021	.019	.033
Reliten	**-.036**	(2206)			-.013	-.010	-.002
Permissive	**.058**	(4862)				.001	.014
Education	**-.046**	(4869)					**-.074**
			R=	.313	.315	.315	.323

Bold = significant at the .05 level.

Table 7.
Per Cent Sexually Active by Religiosity and Attitude to Premarital Sex (Single Respondents GSS 1989-2000)

	Religiosity (RELITEN)							
PREMARSEX	Strong	(N)	Less	(N)	No Religion	(N)	Total	(N)
Always Wrong	**17%**	(136)	60	(57)	-	(11)	30	(204)
Almost always	51	(33)	63	(42)	-	(8)	57	(83)
Sometimes	69	(90)	63	(178)	66	(51)	66	(319)
Not wrong at all	73	(135)	76	(401)	74	(198)	75	(734)
Total	51	(394)	70	(678)	70	(268)	64	(1340)

Table 8
Summary of Correlations With Sex Frequency

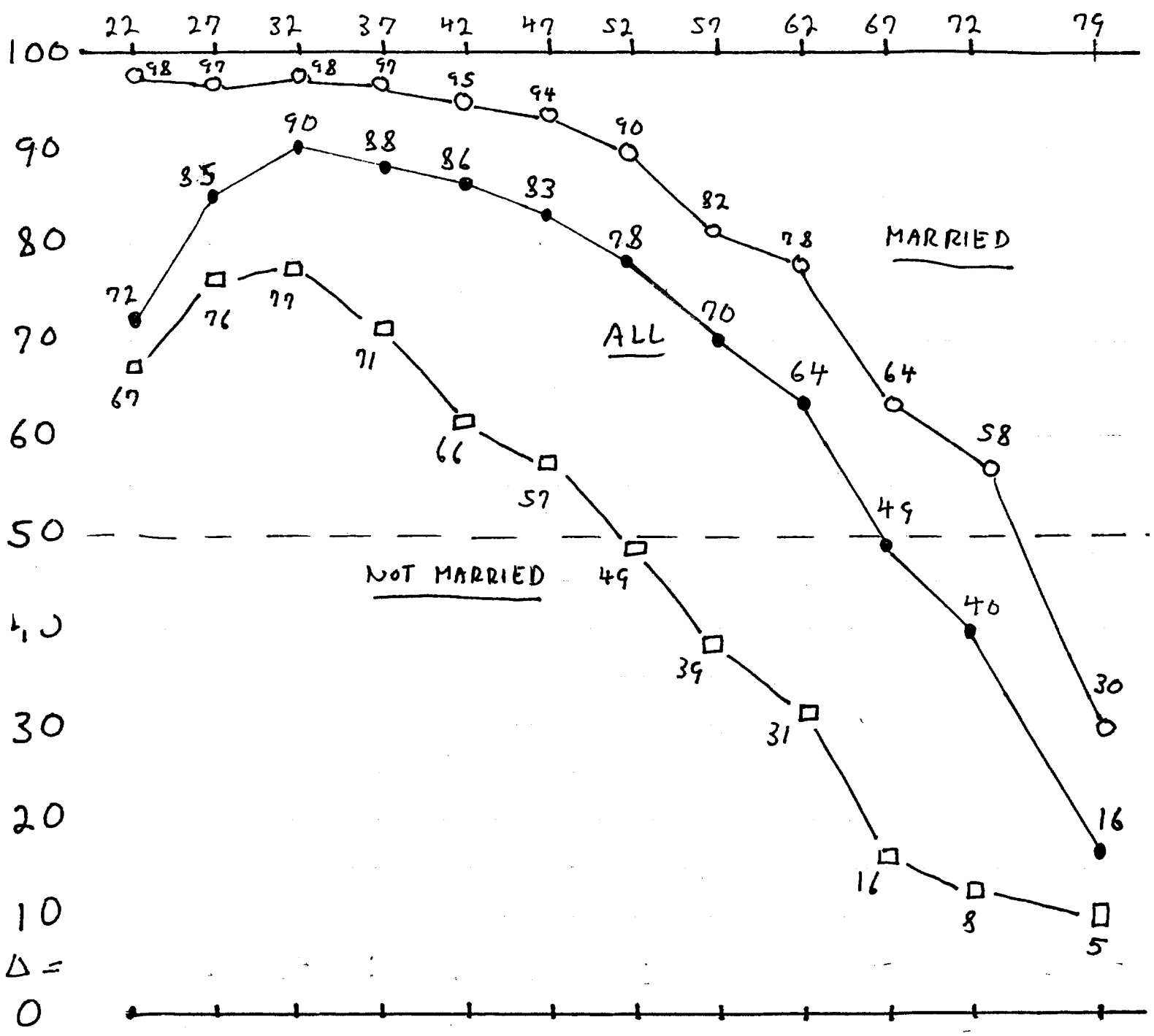
Among	Not Married		Married	
IndDependent Variable	Active v.. Not	Frequency If Active	Active v. Not	Frequency If Active
Age	**Yes**	**Yes**	**Yes**	**Yes**
Cohort	**Yes**	**Yes*** **	No	No
Health*	No	No	**Yes**	No
Ideology**	**Yes**	No	No	No
Education	No	No	No	No
Duration	-	-	No	No

* self-rated
** Religiosity and Attitude to Premarital Sex
*** in older cohorts only

Figures 1-12

Figure 1

PERCENT ACTIVE BY AGE AND MARITAL STATUS (65S 1989-2000)

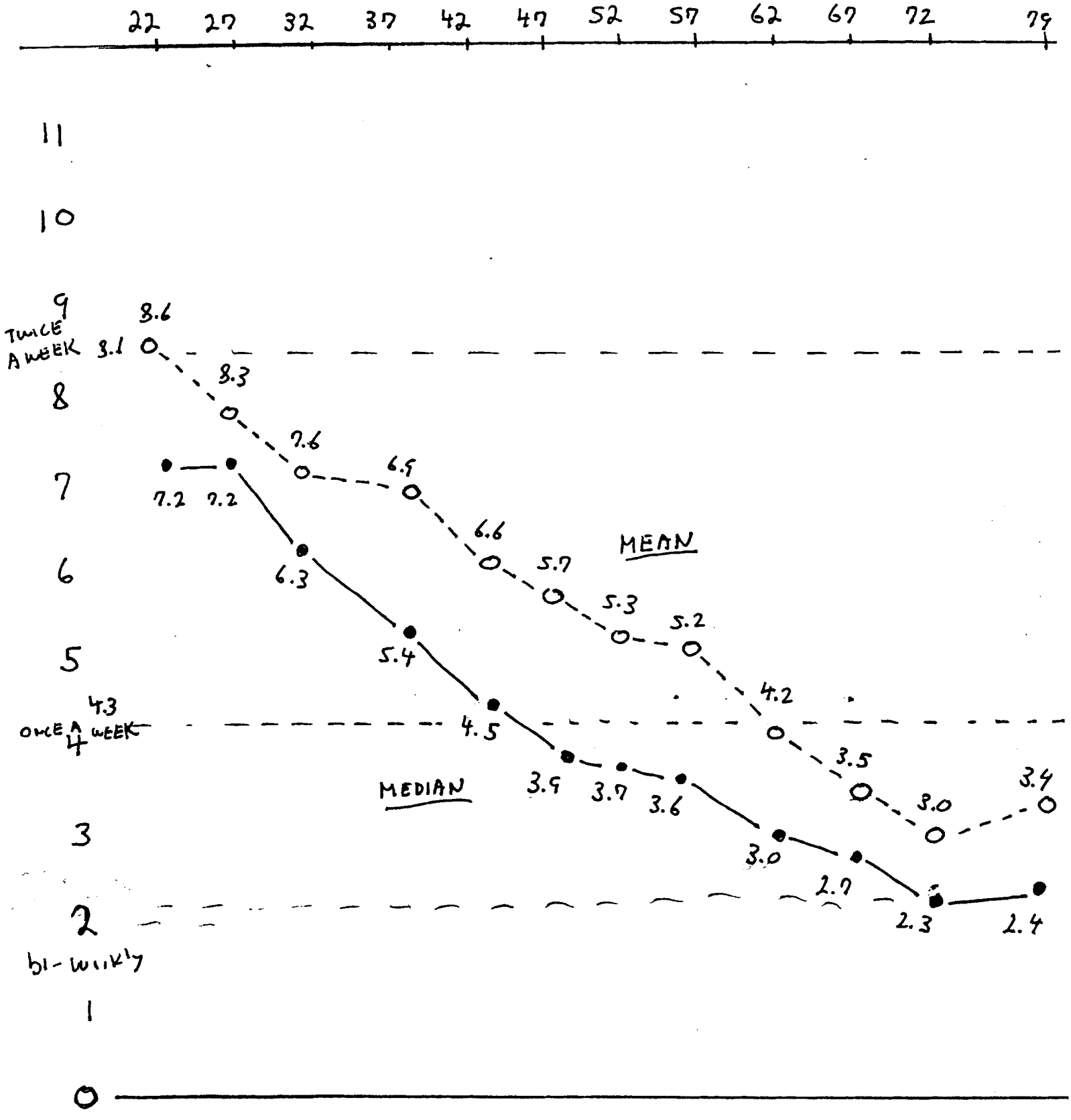


N

MARRIED	201	468	703	752	762	683	537	387	326	295	241	210
NOT	978	558	446	373	346	273	213	158	131	137	142	287
All	1179	1026	1149	1125	1108	956	750	545	457	432	383	497

Figure 2

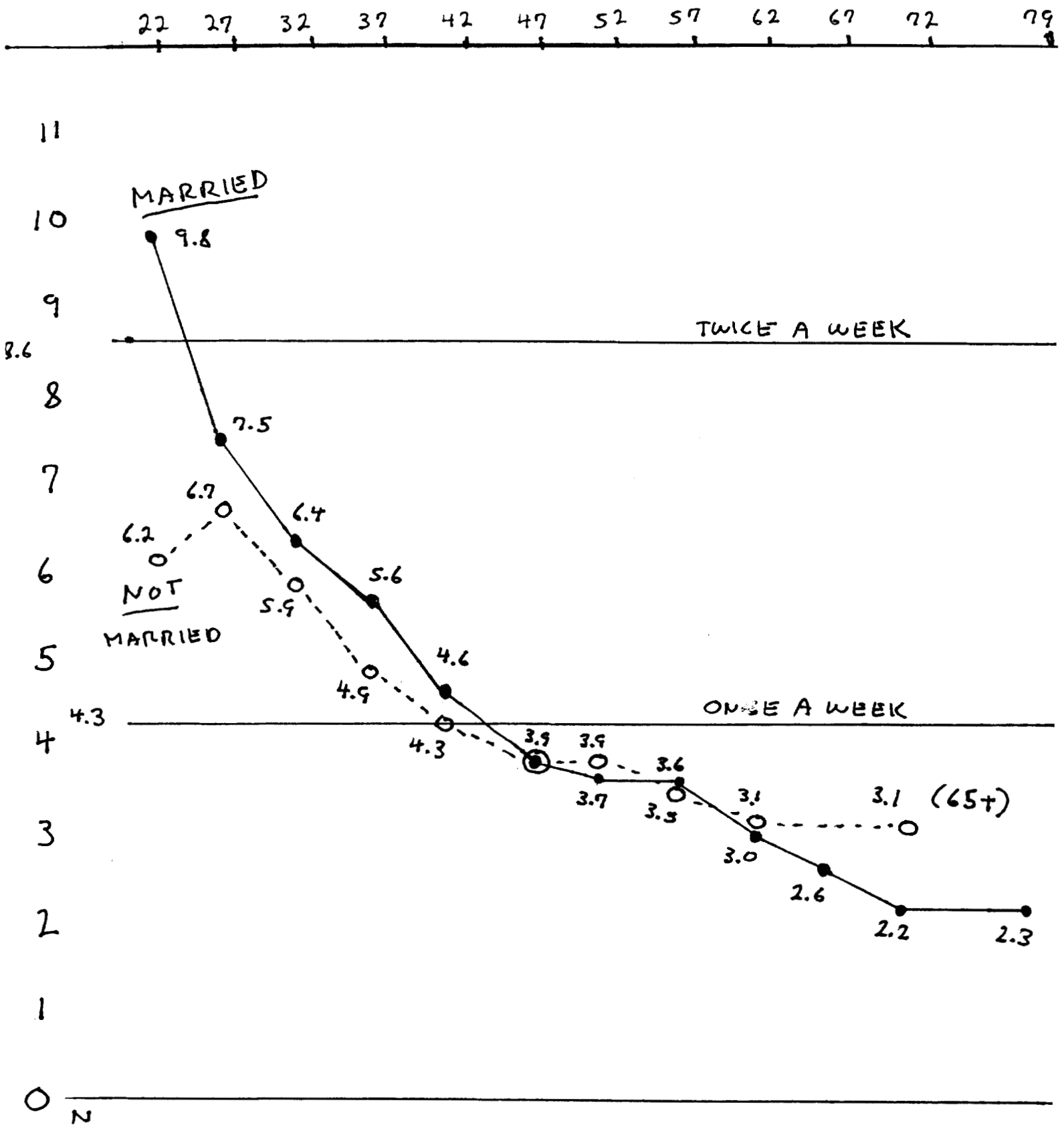
MEAN AND MEDIAN FREQUENCY AMONG ACTIVES - ALL CASES



N = 851 879 1032 993 952 797 586 380 292 213 152 78

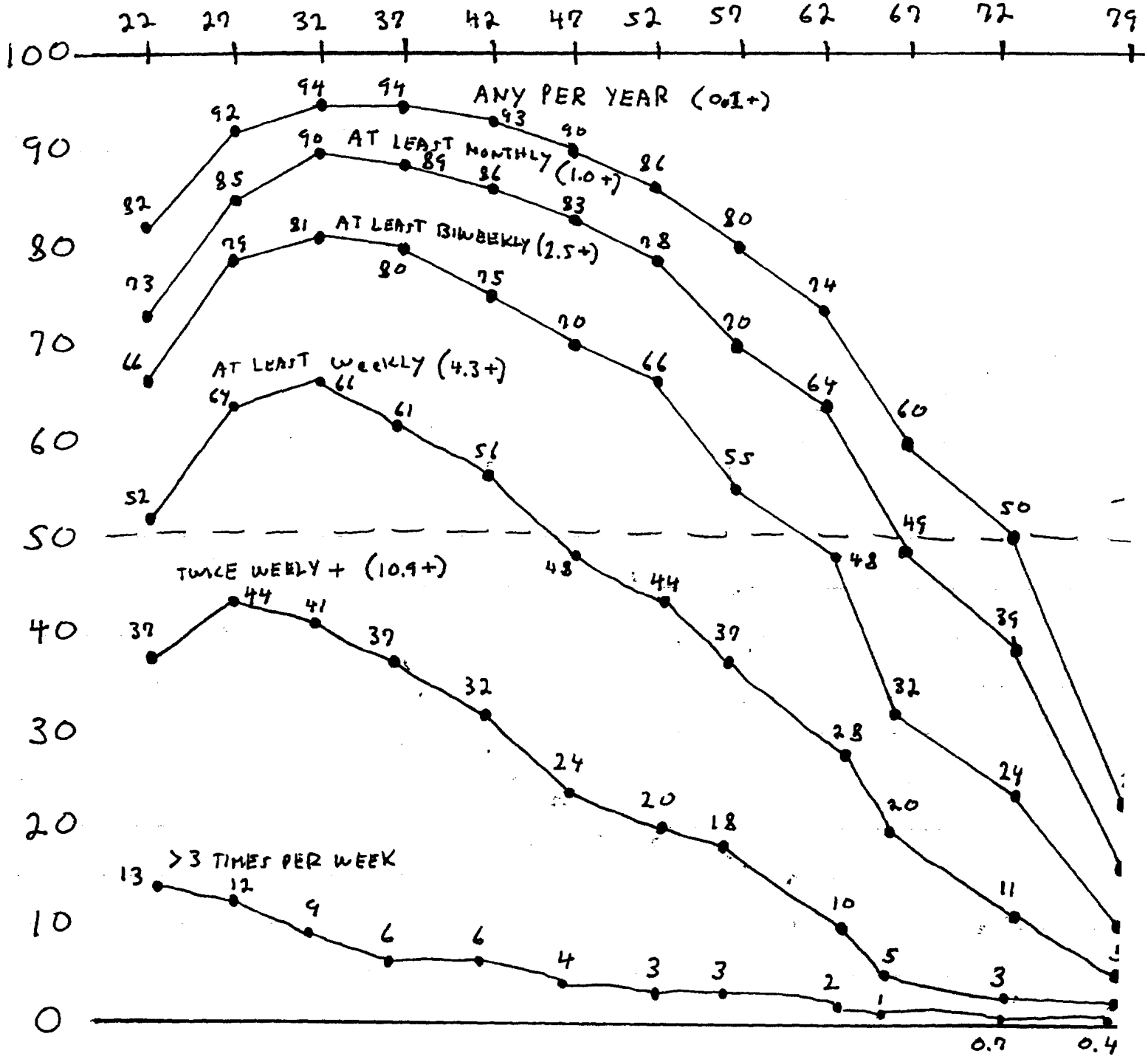
Figure 3

MEDIAN FREQUENCY BY AGE AND MARITAL STATUS (SEXUALLY ACTIVE, GSS 1989-2000)



	N												
MARRIED	198	455	688	729	724	641	483	319	252	190	140		63
NOT	652	422	344	264	229	156	104	61	40	23	11		15
												49	

FIGURE 4
FREQUENCIES TOTAL SAMPLE (CUMULATIVE) (655 1989-2000)



N = 1179 1026 1145 1125 1108 956 750 545 457 432 383 497

Figure 5

FREQUENCIES NOT-MARRIED (CUMULATIVE) (GSS 1989-2000)

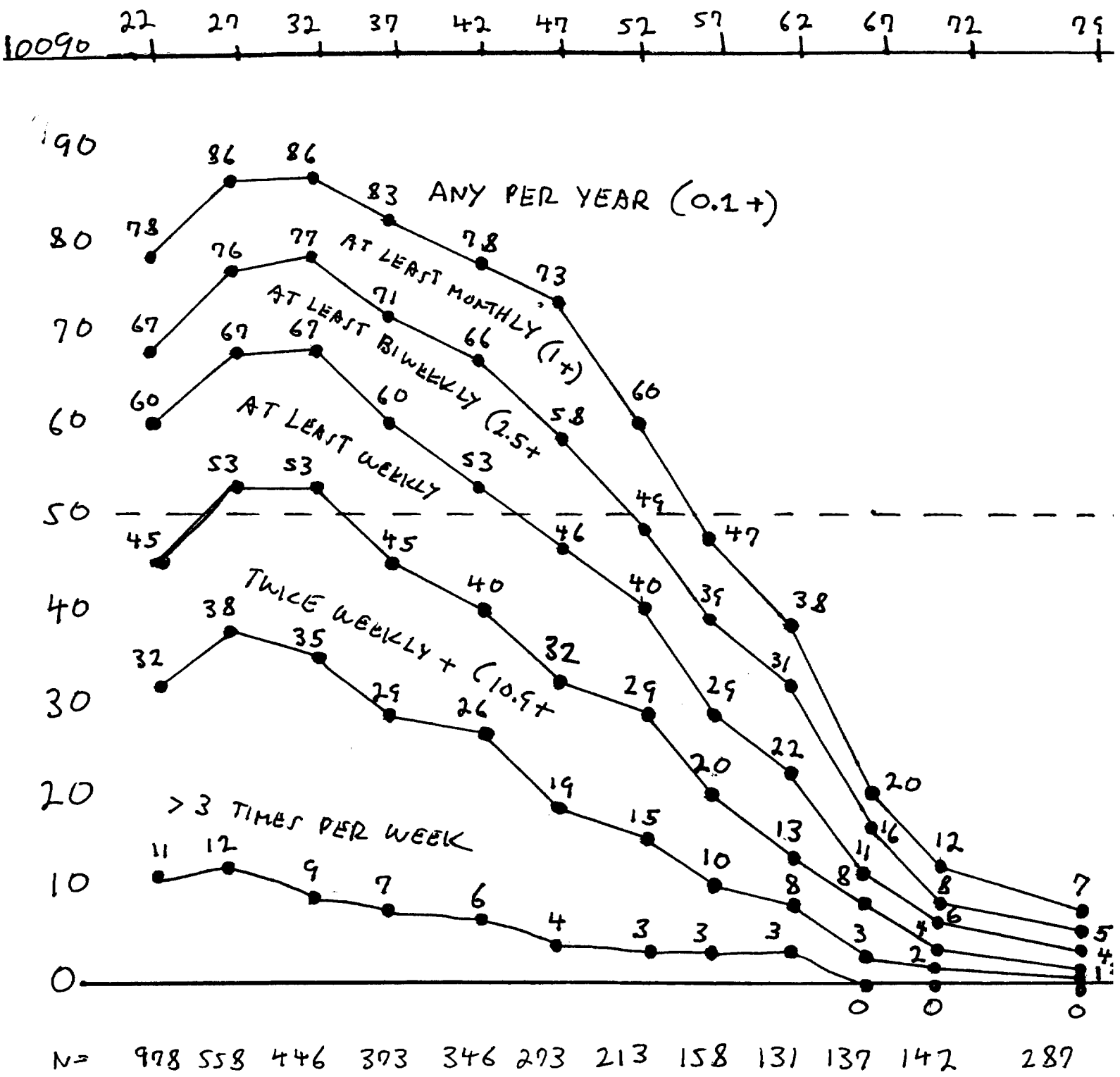
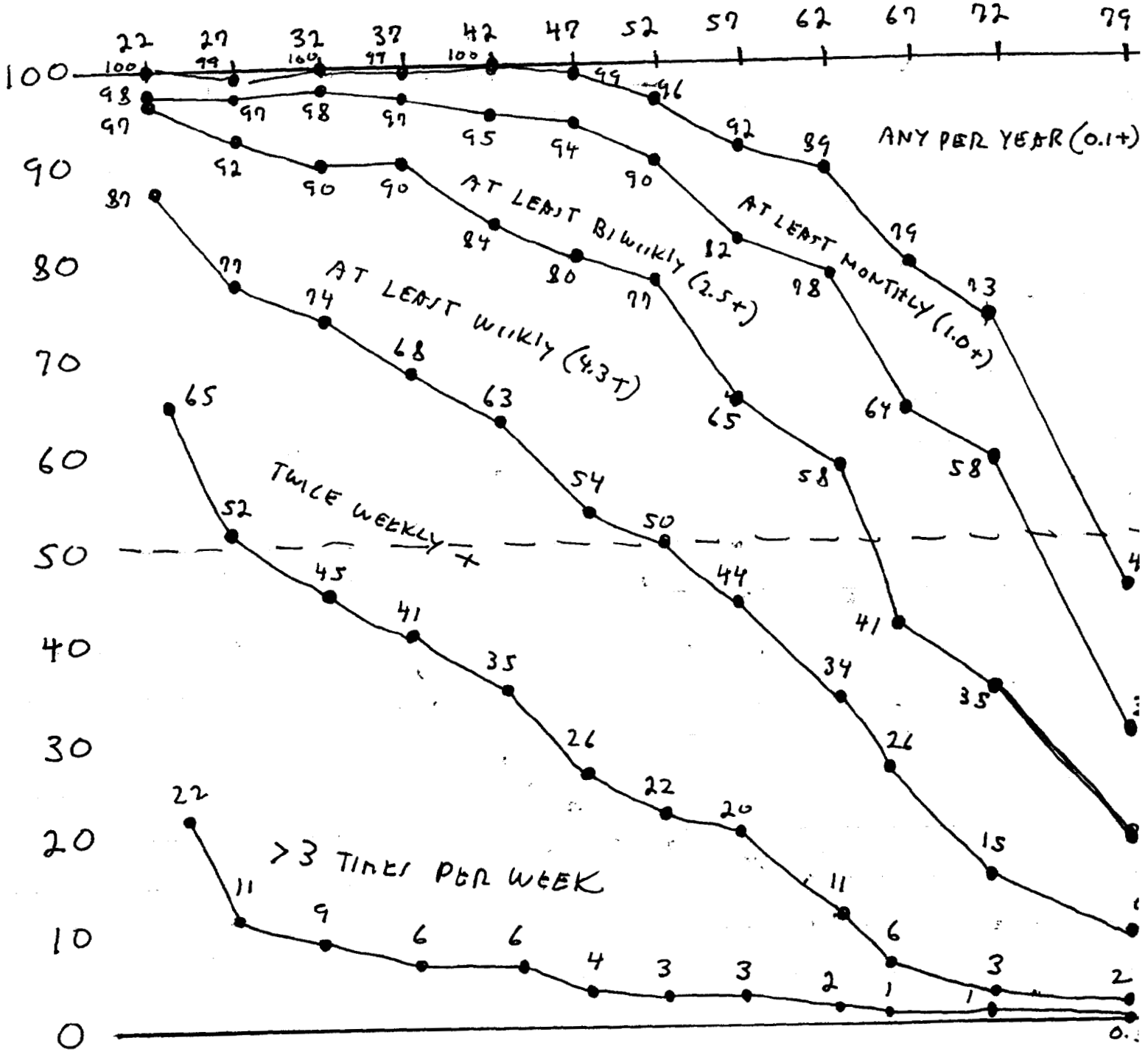


Figure 6

FREQUENCIES MARRIED (CUMULATIVE) (GSS 1985-2000)



N =	201	468	703	752	762	683	537	387	326	295	241	210

FIGURE 7

PERCENT ACTIVE BY BIRTH COHORT – RAW AND NET of AGE
(NOT MARRIED, GSS 1989-2000)

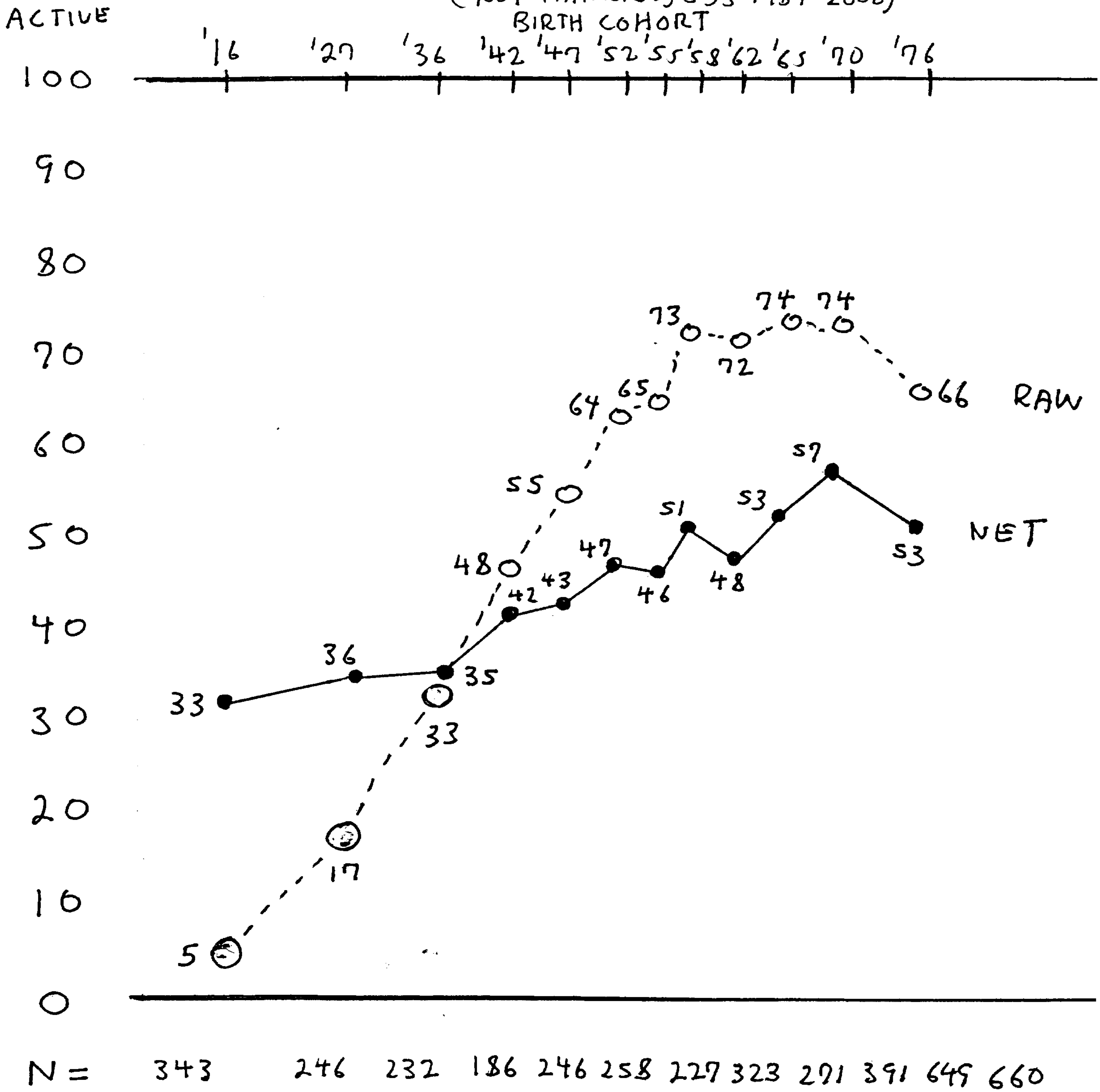


Figure 8

PERCENT TWICE WEEKLY OR MORE BY BIRTH COHORT-RAW AND NET of Age (NOT MARRIED ACTIVES, GSS 1988-2000)

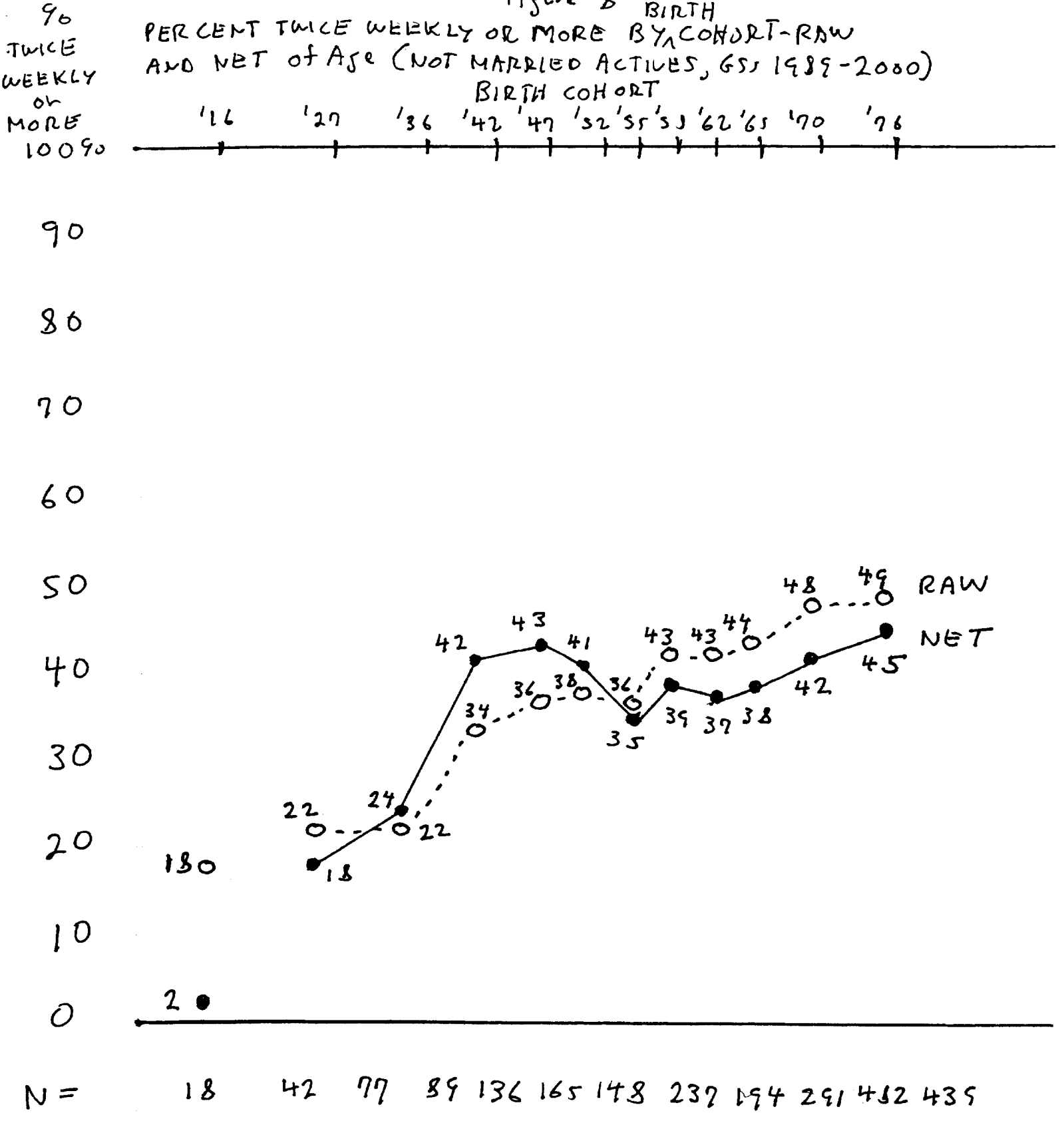


Figure 9

PERCENT ACTIVE BY BIRTH COHORT - RAW AND NET of AGE

(MARRIED, 65 1989-2000)

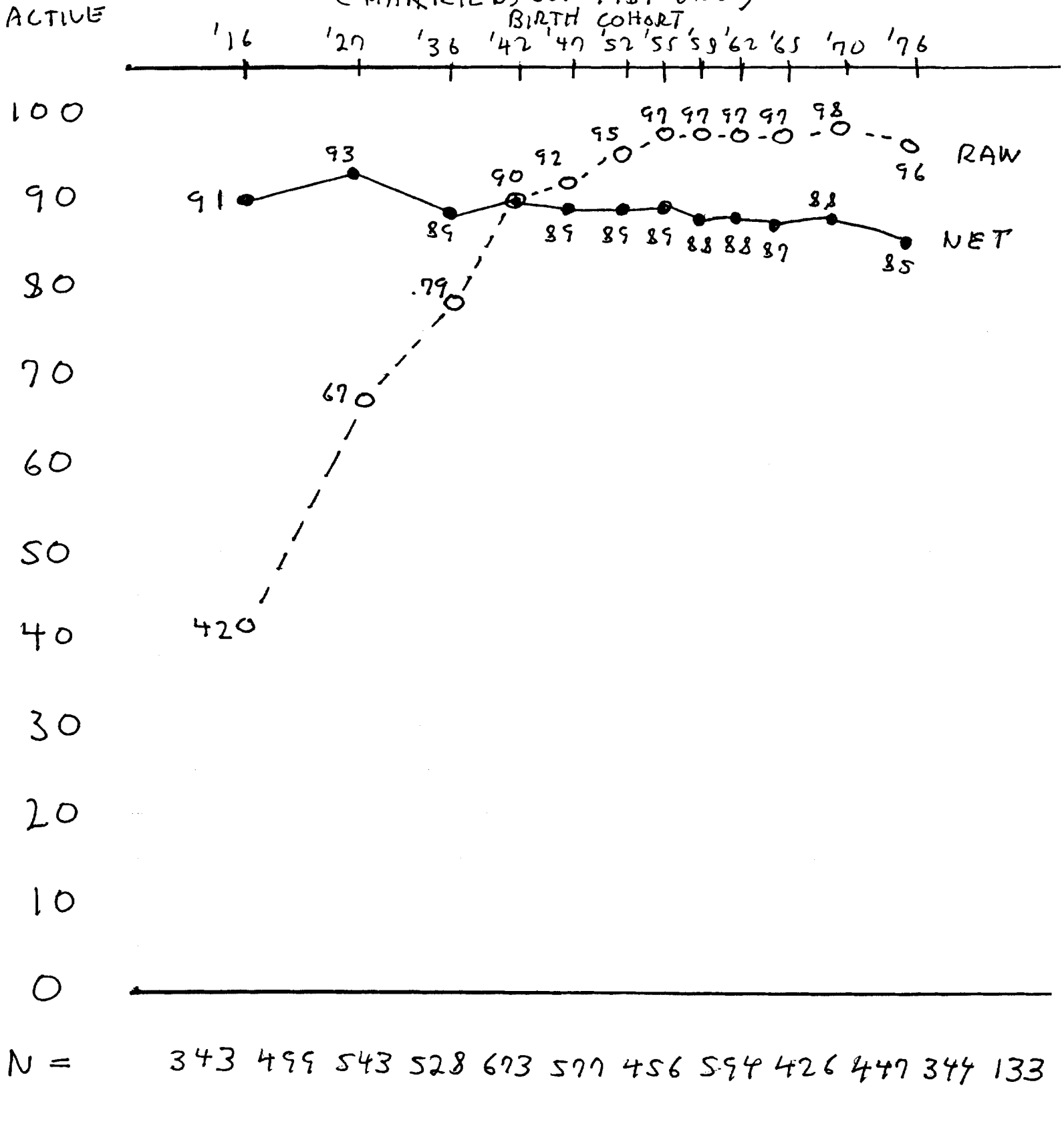


FIGURE 10

PERCENT TWICE WEEKLY OR MORE BY BIRTH COHORT, RAW AND NET of AGE (MARRIED ACTIVES, 65 1988-2000)

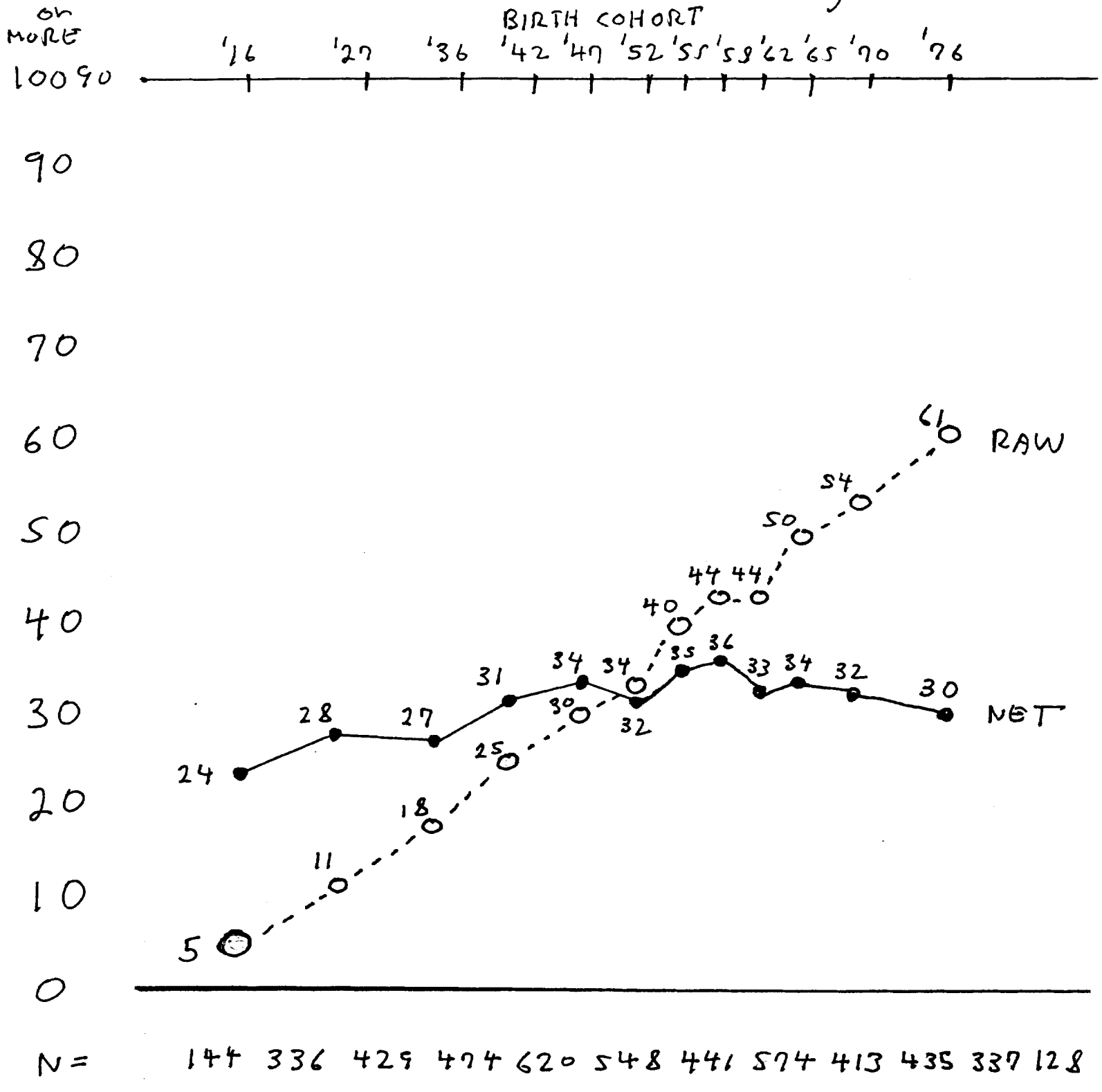


FIGURE 11

PERCENT ACTIVE BY DURATION OF MARRIAGE, RAW AND NET OF AGE (1ST MARRIAGE, GSS 1988-1994)

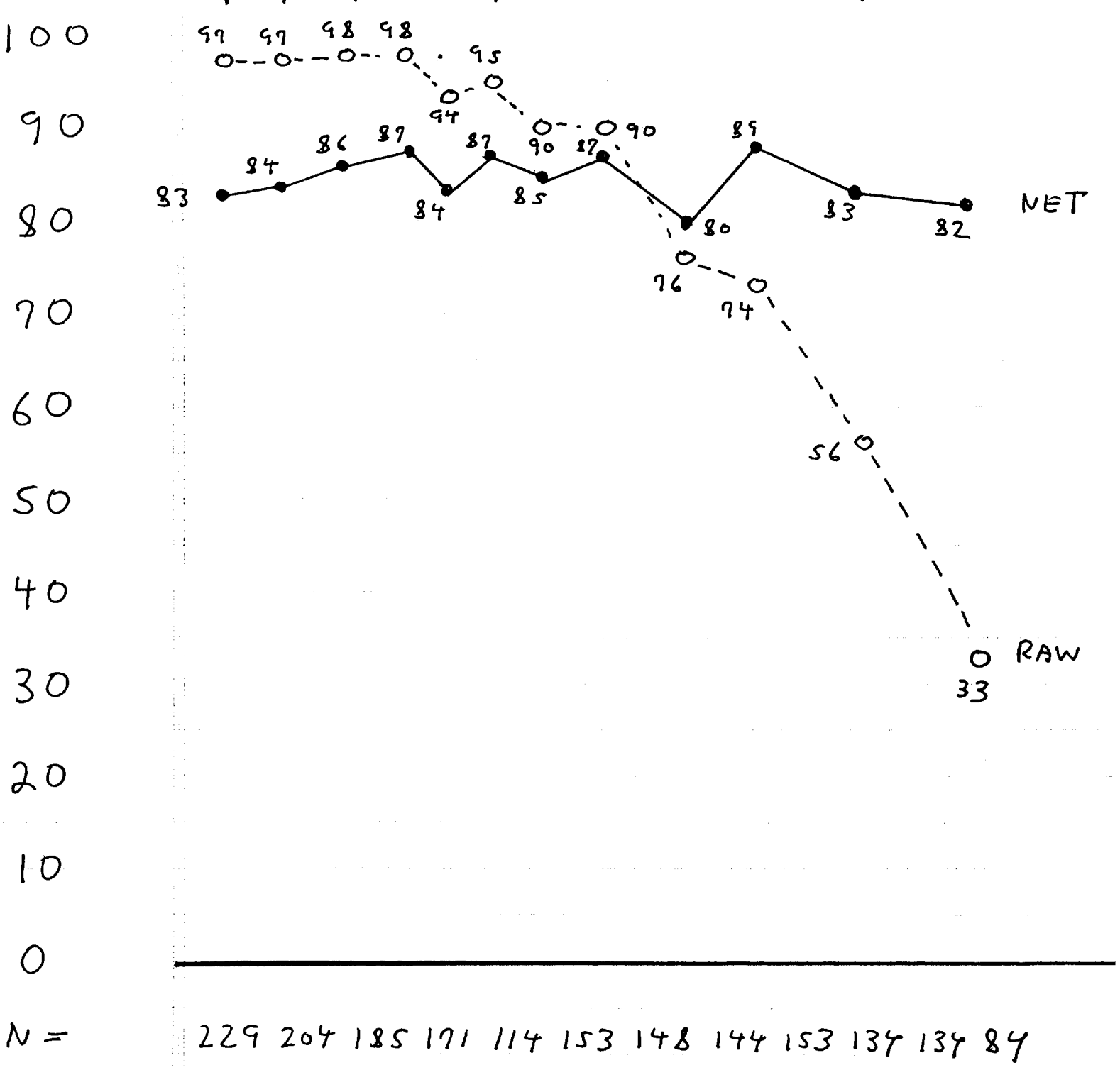


FIGURE 12

PER CENT TWICE WEEKLY OR MORE BY DURATION OF MARRIAGE (ACTIVES, 1ST MARRIAGES, GSS 1989-1994)