Career, Family and the Well-Being of College-Educated Women

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Goldin (2004) documents that recent female college graduates can find only few role models in prior generations that have achieved the "elusive goal of family and career."[*] But were they able to find these role models and talk to them, what would they learn? How would these role models evaluate their life? And if these role models could be observed over the course of a random day, what would the recent graduates infer about their well-being?

In this paper, I report on measures of life satisfaction and emotional well-being (experienced utility) across groups of college-educated women based on whether they have a career, a family, both, or neither. The biggest premium to life satisfaction is associated with having a family; while there is also a life satisfaction premium associated with having a career, women do not seem to be able to "double up" on these premiums. A qualitatively similar picture emerges from my analysis of the emotional well-being data. Among college-educated women with family, those with a career spent a larger share of their day unhappy, sad, stressed and tired compared to those that are staying at home.

I Data

I use two main sources of data. To document overall evaluation of life, I use the General Social Surveys (GSS), 1972 to 2010. I use answers to the question "Taken all together, how would you say things are these days - would you say that you are very happy, pretty happy or not too happy?" I construct a dummy variable that equals 1 if the respond answers "very happy," 0 otherwise. To document emotional well-being, I use the 2010 Well-Being module of the American Time Use Survey (ATUS WB). Respondents who completed a 24-hour ATUS diary were administered the well-being module. Three activities from the diary were randomly

selected and six affect questions related to quality of life were asked about each activity.[1] For each selected episode, respondents were asked to rate, using a scale from 0 to 6 (where a 0 means the feeling was not experienced at all and a 6 means the feeling was very strong), whether they felt: 1) happy, 2) tired, 3) stressed, 4) sad, 5) pain and 6) meaning. Following Krueger and Khaneman (2006), I construct an index which helps classify each particular episode into pleasant or unpleasant (U-index). Specifically, I classify a given episode as unpleasant if the maximum rating on any of the negative affect dimensions (stressed, pain, sad) is strictly greater than the maximum rating on any of the positive affect dimensions (happy, meaning).[2] For each individual, I compute average level of happiness, stress, sadness, pain, meaningfulness and tiredness over the course of the day, as well as fraction of the day spent in an unpleasant mood, weighting the affect for each activity by the length of time spent in that activity.

I restrict the GSS and ATUS WB samples to women that have at least completed a college degree, who are between 25 and 54 years of age, and who are either employed or keeping house. For each woman in the datasets, I determine whether she has achieved career, family, both or neither. I follow Goldin (2004)'s approach to define a "career." Specifically, using micro data from the March Current Population Surveys (CPS), I compute, for each year and for each five year age group (25-29, 30-34,.., 50-54), the 25th percentile of the distribution of annual and weekly earnings among men with at least a college degree that are employed full year.[3] A given woman in a given year and age group is defined to have a "career" if her annual (GSS) or weekly

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[1] The activities selected into the well-being module were required to be at least 5 minutes in duration; moreover, the following activities were not eligible for selection: sleeping, grooming, personal activities, don't know/can't remember, refusal/none of your business.

[2] While tiredness could reasonably be classified as a negative affect, I do not include it in the computation of the U-index.

[3] Goldin (2004)'s definition of career further relies on the individual's earnings being above the 25th percentile threshold for multiple years in a row. Unfortunately, neither the GSS nor the ATUS WB data have the panel structure that would allow me to observe earnings for multiple years in a row.

(ATUS WB) earnings are above the 25th percentile in the relevant year and age group. Depending on the specification, I assign as having a "family" those women that are currently married, or are currently married with children.[4]

Summary statistics are presented in Online Appendix Table A1. In the GSS, 38 percent of women report being very happy. The average woman in the sample is 38 years old and was born in 1956. Thirty-seven percent of the women in the sample are classified as having a career. Fifty-eight percent of the women are married, and 45 percent are married with children. Only 18 (13) percent are classified as having achieved both career and marriage (career, marriage and children).

In the ATUS WB sample, the average fraction of time a college educated woman spent in an unpleasant mood is 10 percent. The average level of happiness (meaningfulness) over the course of the day is 4.14 (4.09). The average level of stress (sadness; pain; tiredness) over the course of the day is 1.65 (.54; .60; 2.50).[5] The average woman in the sample is 39 years old and was born in 1971. Sixty-eight percent of the women are married, and 45 percent are married with children. Reflecting on the fact the ATUS WB covers more recent cohorts, I find a higher share of women with career with family than in the GSS sample: 29 (16) percent are classified as having achieved both career and marriage (career, marriage and children).

II Results

Are those women that have succeeded in "having it all" any more satisfied with their life than the women that have not met this double goal? Do they experience greater emotional well-being?

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[4] In the GSS, a woman is classified as having children if she *ever had* any children; in the ATUS WB, a woman is classified as having children if there are children *under 18* in her household.

[5] For the average respondent, these summary emotional well-being measures are based on 20 percent of the total time spent in activities eligible for the WB module, and about 12 percent of a full ATUS day.

Intuitively, the answers to these questions may seem obvious. Women that "have it all," by definition of having met both professional and personal goals, should report higher levels of well-being. Yet, there are multiple arguments as to why these intuitive answers may not be correct.

First, as discussed by Kahneman and Kruger (2006), one important finding of the well-being research is the relatively small effect of life circumstances, and changes in such life circumstances, on reported life satisfaction. One explanation for this is that individuals habituate to life circumstances very quickly, a phenomenon referred to as the "hedonic treadmill." Another possibility is that individuals adjust their well-being aspirations to the utility that they experience, a phenomenon referred to as the "aspiration treadmill." In this latter case, women that "have it all" may have higher level of emotional well-being, which we would observe in the ATUS WB, but this would not translate into higher reported levels of life satisfaction in the GSS.

Second, it is possible that measures of life satisfaction and emotional well-being are only imperfect proxies for utility and choice. Benjamin et al. (2012) document that while subjective well-being predictions are powerful predictors of choice, systematic discrepancies exist between the two. In particular, factors that appear to explain choices after controlling for subjective well-being include sense of purpose, control over life and social status. So, for example, it is possible that college-educated women that "have it all" have higher utility due to their higher social status and greater sense of purpose, even though their well-being scores may not be higher than that of other groups of college-educated women.

Third, and related, women that "have it all" may have systematic difficulties translating those economic and social achievements into superior well-being. This possibility is often discussed in

the media and other popular press coverage. Reports of negative affects such as guilt, sadness or stress can be found in popular paintings of the lives of women that are trying to combine what is often described as the competing needs of career and family (Slaughter (2012)). Under these second and third arguments, we might see no greater well-being for women that "have it all," either in the GSS or the ATUS WB data.

II.A GSS: Life Satisfaction

I start by tabulating the share of college educated women that are very satisfied with their life based on whether or not they have a career, and whether or not they are married with children. Consistent with expectation, the least happy group are those college-educated women that have neither career nor family: only 29 percent of these women report being very happy. The happiest group is women with family but no career: 47 percent of them report being very happy. Thirty-four percent of women with a career but no family report being very happy. While both career and family are individually associated with higher life satisfaction, it does not appear that these premiums are additive: only 43 percent of the women that "have it all" report being very happy.

Because the GSS covers nearly four decades, it is possible to ask whether this picture looks different across cohorts of female graduates. In Figure 1, I replicate the tabulation above but separate women into two groups: those born between 1944 and 1957 (Goldin (2004)'s Cohort IV; 40 percent of the sample), and those that were born after 1957 (47 percent of the sample).[6] In neither sub-groups of the data do I find evidence of a "double premium" for those having achieved career and family. In both sub-groups, the happiest college educated women are those with a family but no career. The biggest change across the two sub-groups is among women with

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[6] In doing so, I weight the data in the post-1957 cohorts so that the average age in this cohort corresponds to the age in the 1944 to the 1957 cohort (40 years old).

a career and no family: about 10 percent more of them report being very happy in the post-1957 cohorts compared to those that have neither career nor family; in contrast I fail to observe a happiness premium in this group for the 1944 to 1957 cohorts.

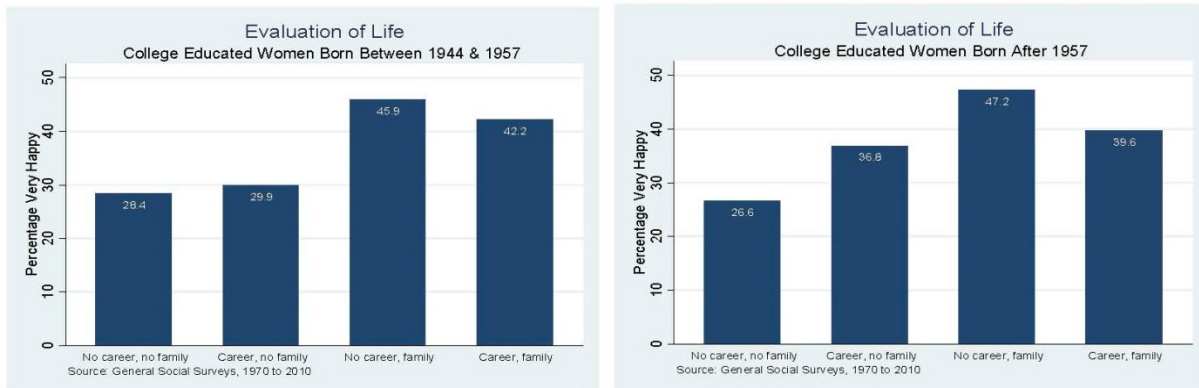**Figure 1: Evaluation of Life Among College-Educated Women, by Birth Cohort**

Table 1 extends these tabulations to a multivariate regression analysis. In particular, all regressions control for age (quadratic), 3 race dummies, year fixed effects and birth decade fixed effects. In Panel A, I define family based on marriage only; in Panel B, I define family based on marriage and children. The qualitative picture that emerged in the raw data carries through in the regression framework. While there are life satisfaction premiums for career and family individually, there is no additional premium associated with "having it all." This is true whether we use the 0/1 definition of happiness (column 1) or whether we use the 1-2-3 scale (column 2). When we focus on the subset of women that are over 40 years of age and have nearly all completed their fertile cycle (column 3), the career life satisfaction premium becomes smaller and is no longer statistically significant; again in this subgroup, the interaction term between career and family is negative and, while more noisily estimated, the point estimates are large enough to more than undo the small direct effect of having a career on life satisfaction.

While these descriptive patterns are interesting, they mask a lot of unaccounted for heterogeneity across these women and they certainly should not be interpreted causally. For example, the large difference in life satisfaction between women with family and those without may reflect systematic differences in personality traits between these two groups of women (such as agreeableness or extraversion), and those traits directly may directly influence well-being. Also, the comparison of well-being between women that just have a career and those that have career and family ignores the fact that those with family are also likely benefiting from the additional income of a husband. Moreover, the comparison of well-being between women that just have a family and those that have a family and a career may mask differences in their husband's work situation and income level that may systematically bias the analysis.

In order to tackle some of these issues, I focus the well-being analysis in Table 2 on the subset of college-educated women with family (defined as having husband in Panel A, and having husband and kid(s) in Panel B). In this more homogeneous subset of college-educated women, I can further control for husband's income (with a categorical variable for $5000 buckets of annual income, deflated to 1999, and a separate dummy variable for the husband having no income). The other controls in Table 2 are the same as in Table 1.

Column 1 of Table 2, where I do not control for husband's income replicate the main findings of Table 1, e.g. the absence of a life satisfaction premium among married women that also have a career. When I control for husband's earnings (column 2), a life satisfaction premium among career women starts emerging, even though the point estimates remain small (.046) and statistically insignificant.

Because this analysis focuses on married women, it is meaningful to further separate women without career into two sub-groups: those that are staying at home and those that are working but whose earnings are too low to qualify them as having a career. I do this in column 3, which replicates column 2 but further controls for whether the women is keeping house, the omitted category being non-career working women. The estimates in that column, while not precise, paint a picture of no differential well-being between stay-at-home and career wives (Panel A) or stay-at-home and career mothers (Panel B). The worst-off group according to this analysis appears to be those wives and mothers that are working but without a career.

II.B   ATUS WB Module: Emotional Well-Being

Table 3 follows the same structure as Table 1. I regress the various affect measures defined above on whether women have a career, a family, or both. The controls are the same as in Table 1, except that I further account for the day of the week the ATUS survey took place on. Importantly, for this analysis, I do *not* account for the nature of the activity survey respondents are being probed about. It is obvious, given the base rates, that career women are more likely to be asked about their affects while in the workplace, while non-career women (and especially those that are staying at home) are more likely to be asked about their affects while engaged in home production. This is part of the variation in affect across these groups of women that I am interested in capturing.

Across the 4 groups of women under study, women with family but no career appear to spend the smallest fraction of their day in a mainly negative affect (column 1, Table 3). I find no evidence of greater experiential utility for women that have managed to combine family with a career. Moreover, I find no evidence that women with a career but no family have any greater

experiential utility than women that have neither career nor family. In the remaining columns of Table 2, I study the various affect measures separately. Compared to women that have neither career nor family, those with only family appear happier, less sad, and less stressed (Panel A only); those with only career appear to experience a lower sense of meaning in their daily activities, maybe more pain (Panel B only), but maybe also less sadness (Panel A only). The interaction terms on "career and family" are much larger and more statistically significant in Panel A than Panel B. Focusing on Panel A, it appears that the combination of career and family tends to decrease positive affect (less happiness), increase sadness and stress, and increase tiredness. The only experiential well-being boost of combining career and family is with regard to average meaningfulness of the activities the respondents engage in.

Table 4 follows the same structure as Table 2. I focus on the more homogenous subsample of women with family (married in Panel A; married with children in Panel B), which allows me to directly account for differences in husbands' labor force participation and earnings, as well as to isolate women that are staying at home from the rest of the non-career women. Compared to working wives and mothers with earnings below career level (the omitted category), stay-at-home wives and mothers appear less stressed, less tired and less sad (Panel B only). Overall (column 1), compared to working wives or mothers without a career, those that stay-at-home spend about 4 percent less of their day in a mainly unpleasant affect while those with a career spend about 2 to 3 percent more of their day in such an unpleasant state. I statistically test and reject the hypothesis that career wives (career mothers) spend the same fraction of their day in a mainly unpleasant affect as stay-at-home wives (stay-at home mothers) (p value=.001 in Panel A; p value=.008 in Panel B).

III   Conclusion

In representative samples of US college-educated women, I find no evidence of greater life satisfaction or greater emotional well-being among those that have achieved the double goal of combining a successful career with a family life. This evidence should only be viewed as correlational because of the many dimensions of unobserved heterogeneity that I cannot address given the constraints imposed by the data and research design.

If one were to take a great leap of faith and put a causal spin on these findings, a natural interpretation might be that this analysis reveals the limitations of existing well-being measures as proxies for utility and choice. Building on the findings of Benjamin et al. (2012), women may strive to "have it all" because they predict it will improve on aspects of their life such as sense of purpose, sense control, prestige or social status, aspects of life which may not map well into current measures of happiness and emotions.

References

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Table 1: Evaluation of Life among College Educated Women

Dependent variable:	(1) Very happy with life (Y=1)	(2) Happiness with life (1 to 3 scale)	(3) Very happy with life (Y=1)
Sample Restriction:	none	none	age>=40
Panel A: Career and Husband			
Career	0.073	0.099	0.04
	[0.025]***	[0.030]***	[0.039]
Married	0.228	0.284	0.205
	[0.021]***	[0.026]***	[0.034]***
Career and married	-0.083	-0.093	-0.082
	[0.033]**	[0.040]**	[0.051]
Constant	0.759	2.83	3.65
	[0.352]**	[0.425]***	[1.650]**
Observations	3599	3599	1520
R-squared	0.06	0.07	0.08
Panel B: Career, Husband and Kid(s)			
Career	0.062	0.09	0.028
	[0.022]***	[0.027]***	[0.036]
Family	0.181	0.238	0.171
	[0.021]***	[0.025]***	[0.033]***
Career and family	-0.084	-0.1	-0.077
	[0.034]**	[0.041]**	[0.051]
Constant	0.927	3.061	3.657
	[0.356]***	[0.429]***	[1.658]**
Observations	3595	3595	1519
R-squared	0.05	0.06	0.07

Note: Source: General Social Surveys, 1972 to 2010. The following controls are included in all regressions: quadratic in age, year fixed effects, 3 race categories, and indicator variables for birth decade. Standard errors in brackets; * significant at 10 percent level; ** significant at 5 percent level; *** significant at 1 percent level.

Table 2: Evaluation of Life Among College Educated Women with Family

Dependent Variable:	(1)	(2)	(3)
		Very Happy with life (Y=1)	
Panel A: College Educated Women with Husband			
Career	-0.011	0.047	0.052
	[0.024]	[0.028]*	[0.028]*
Keeping house			0.072
			[0.033]**
Constant	1.191	1.419	1.416
	[0.473]**	[0.472]***	[0.472]***
Controls of husband income?	no	yes	yes
Observations	2104	2104	2104
R-squared	0.03	0.05	0.06
Panel B: College Educated Women with Husband and Kid(s)			
Career	-0.022	0.047	0.052
	[0.029]	[0.033]	[0.033]
Keeping house			0.066
			[0.037]*
Constant	1.025	1.119	1.045
	[0.537]*	[0.537]**	[0.538]*
Controls for husband income?	no	yes	yes
Observations	1620	1620	1620
R-squared	0.03	0.06	0.06

Note: Source: General Social Surveys, 1972 to 2010. The following controls are included in all regressions: quadratic in age, year fixed effects, 3 race categories, and indicator variables for birth decade. I control for husband's eanings with a categorical variable for each $5000 buckets of annual income (deflated to 1999); I also include a separate dummy variable for the husband having no income. Standard errors in brackets; * significant at 10 percent level; ** significant at 5 percent level; *** significant at 1 percent level.

Table 3: Emotional Well-Being Among College Educated Women

Dependent variable:	(1) Fraction of day where most intense affect is negative	(2)	(3)	(4)	(5)	(6)	(7)
		Over the Course of the Day, Average:					
		Happiness	Meaning	Sadness	Stress	Pain	Tiredness
Panel A: Career and Husband							
Career	0.009	0.088	-0.491	-0.357	-0.052	0.113	-0.21
	[0.023]	[0.121]	[0.147]***	[0.098]***	[0.141]	[0.114]	[0.151]
Married	-0.047	0.259	0.043	-0.406	-0.332	-0.119	-0.019
	[0.021]**	[0.109]**	[0.132]	[0.088]***	[0.127]***	[0.102]	[0.136]
Career and married	0.033	-0.317	0.384	0.567	0.349	0.04	0.379
	[0.028]	[0.146]**	[0.177]**	[0.118]***	[0.170]**	[0.137]	[0.181]**
Constant	0.035	2.711	4.498	-0.096	-2.897	-1.286	0.825
	[0.308]	[1.605]*	[1.952]**	[1.302]	[1.873]	[1.508]	[2.000]
Observations	1483	1482	1482	1483	1483	1483	1483
R-squared	0.03	0.03	0.04	0.04	0.05	0.02	0.04
Panel B: Career, Husband and Kid(s)							
Career	0.029	-0.123	-0.351	0.03	0.195	0.207	-0.051
	[0.018]*	[0.091]	[0.111]***	[0.075]	[0.107]*	[0.086]**	[0.114]
Family	-0.031	0.207	0.111	-0.124	-0.08	-0.077	-0.006
	[0.018]*	[0.096]**	[0.117]	[0.079]	[0.113]	[0.090]	[0.120]
Career and family	0.004	0.037	0.298	-0.014	-0.008	-0.18	0.211
	[0.027]	[0.138]	[0.168]*	[0.113]	[0.162]	[0.130]	[0.173]
Constant	-0.039	3.609	4.907	-0.627	-3.05	-1.787	0.686
	[0.312]	[1.626]**	[1.981]**	[1.330]	[1.903]	[1.527]	[2.032]
Observations	1483	1482	1482	1483	1483	1483	1483
R-squared	0.03	0.03	0.04	0.03	0.05	0.03	0.04

Note: Source: ATUS CPS Well-Being Module, 2010. The unit of observation is a respondent. Observations are weighted by the ATUS CPS weight. The following controls are included in all regressions: quadratic in age, year fixed effects (2009 or 2010), 3 race categories, indicator variables for birth decade, and indicator variables for the day of week the ATUS survey took place on. Standard errors in brackets; * significant at 10 percent level; ** significant at 5 percent level; *** significant at 1 percent level.

Table 4: Emotional Well-Being Among College Educated Women with Family

Dependent variable:	(1) Fraction of day where most intense affect is negative	(2)	(3)	(4)	(5)	(6)	(7)
		Over the Course of the Day, Average:					
		Happiness	Meaning	Sadness	Stress	Pain	Tiredness
Panel A: College Educated Women with Husband							
Career	0.031	-0.25	-0.147	0.195	0.111	0.108	-0.115
	[0.017]*	[0.094]***	[0.113]	[0.077]**	[0.108]	[0.089]	[0.116]
Keeping house	-0.042	0.191	0.079	-0.106	-0.566	0.007	-0.639
	[0.022]*	[0.118]	[0.142]	[0.097]	[0.136]***	[0.112]	[0.146]***
Controls for husband income?	yes	yes	yes	yes	yes	yes	yes
Constant	0.749	1.373	1.462	-0.52	-1.164	1.06	3.656
	[0.380]**	[2.089]	[2.506]	[1.712]	[2.398]	[1.975]	[2.568]
Observations	981	981	980	981	981	981	981
R-squared	0.1	0.11	0.09	0.11	0.11	0.06	0.13
Panel B: College Educated Women with Husband and Kid(s)							
Career	0.02	-0.109	-0.192	-0.046	-0.058	-0.007	-0.14
	[0.019]	[0.101]	[0.125]	[0.081]	[0.120]	[0.094]	[0.130]
Keeping house	-0.039	0.121	-0.118	-0.196	-0.607	-0.007	-0.597
	[0.022]*	[0.116]	[0.145]	[0.094]**	[0.139]***	[0.108]	[0.150]***
Controls for husband income?	yes	yes	yes	yes	yes	yes	yes
Constant	0.817	2.78	6.905	3.799	3.245	-0.364	9.565
	[0.441]*	[2.322]	[2.890]**	[1.882]**	[2.776]	[2.162]	[2.997]***
Observations	817	817	816	817	817	817	817
R-squared	0.08	0.11	0.09	0.09	0.11	0.07	0.11

Note: Source: ATUS CPS Well-Being Module, 2010. The unit of observation is a respondent. Observations are weighted by the ATUS CPS weight. The following controls are included in all regressions: quadratic in age, year fixed effects (2009 or 2010), 3 race categories, indicator variables for birth decade, and indicator variables for the day of the week the ATUS survey took place on. I control for husband's eanings with a categorical variable for each $5000 buckets of annual income (deflated to 1999); I also include a separate dummy variable for the husband having no income. Standard errors in brackets; * significant at 10 percent level; ** significant at 5 percent level; *** significant at 1 percent level.

Appendix Table 1: Summary Statistics

Panel A: GSS

Variable:	N	Mean	St. dev.
Year	3599	1993.50	10.24
Very happy (Y=1)	3599	0.38	0.49
Happy (1 to 3 scale)	3599	2.31	0.59
Career	3599	0.37	0.48
Married	3599	0.58	0.49
Family (married+kid(s))	3595	0.45	0.50
Career and married	3599	0.18	0.39
Career and family	3595	0.13	0.34
Age	3599	37.90	8.29
Birth year	3599	1955.60	12.03

Panel B: ATUS WB

Variable:	N	Mean	St. dev.
Year	1482	2009.75	0.43
Fraction of day where most intense affect is negativen (U-index)	1482	0.10	0.25
Over the course of the day, average:			
Happiness	1482	4.14	1.29
Meaning	1481	4.09	1.58
Sadness	1482	0.54	1.05
Stress	1482	1.65	1.52
Pain	1482	0.60	1.21
Tiredness	1482	2.50	1.62
Career	1482	0.48	0.50
Married	1482	0.68	0.47
Family (married+kid(s))	1482	0.45	0.50
Career and married	1482	0.29	0.45
Career and family	1482	0.17	0.37
Age	1482	38.54	8.61
Birth year	1482	1971.21	8.61

Note: Sources: Panel A: General Social Surveys, 1972 to 2010; Panel B: ATUS CPS Well-Being Module. In both panels, the sample is restricted to women with at least a college degree. In Panel B, observations are weighted by the ATUS CPS weight.