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Balancing healthy meals and busy lives: Associations between work, school and family responsibilities and perceived time constraints among young adults

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Abstract

Objective—To characterize associations between perceived time constraints for healthy eating and work, school, and family responsibilities among young adults.

Design—Cross-sectional survey.

Setting—A large, Midwestern metropolitan region.

Participants—A diverse sample of community college (n=598) and public university (n=603) students.

Main Outcome Measures—Time constraints in general, as well as those specific to meal preparation/structure, and perceptions of a healthy life balance.

Analysis—Chi-square tests and multivariate logistic regression ($\alpha=0.005$).

Results—Women, four-year students, and students with lower socio-economic status perceived more time constraints ($P<0.001$ – 0.002); students with lower socio-economic status were less likely to have a healthy balance ($P<0.001$ – 0.003). Having a heavy course load and working longer hours were important predictors of time constraints among men ($P<0.001$ – 0.004), whereas living situation and being in a relationship were more important among women ($P=0.002$ – 0.003).

Conclusions and Implications—Most young adults perceive time constraints on healthy dietary behaviors, yet some young adults appear able to maintain a healthy life balance despite multiple time demands. Interventions focused on improved time management strategies and nutrition-related messaging to achieve healthy diets on a low time budget may be more successful if tailored to the factors that contribute to time constraints among men and women separately.

Keywords

young adult; time constraints; meal structure; dietary behaviors

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INTRODUCTION

Young adults' dietary habits are among the poorest of all age groups, with high rates of fast food and soft drink consumption and low rates of adherence to national recommendations for fruit and vegetable intake.¹⁻⁴ Taking time to prepare and eat regular meals is associated with higher dietary quality and better weight outcomes among young adults,^{5,6} yet few young adults regularly engage in these behaviors.^{6,7} Lack of time is among the most commonly reported barriers to healthy eating among adults overall, including young adults,⁸⁻¹¹ and is also a reported barrier to physical activity.^{8,12} Perceptions of time constraints among this population may result in time deepening practices, such as efforts to reduce time spent preparing and consuming food in an attempt to increase time for other activities.¹³ Previous research has found that many time deepening practices reported by young adults experiencing time constraints, such as eating on the run,⁶ consuming fast food and convenience foods^{14,15} and multitasking while eating¹⁶ are associated with less healthful dietary intake and excess weight gain.^{6,16-19}

Recent advances in behavioral research emphasize the importance of understanding mediating variables when targeting health behavior change.²⁰ In the case of dietary practices, examining young adults' perceived time constraints may be useful in understanding how this age group constructs time and establishes positive health behavior patterns during a period of significant transition in work and school responsibilities, personal time, and family commitments.²¹ Given that reported time constraints appear to be an important mediator of dietary behaviors,^{6,8-11,13-16} research on the factors that contribute to perceived time constraints could assist in the development of more effective nutrition-related messaging and behavior change interventions.²⁰

Little research has directly examined the factors that contribute to perceived time constraints among young adults and how they may influence dietary practices.²² Working longer hours (Escoto KH, et al., unpublished data, 2011) and family commitments to children and other family members are frequently cited contributors to perceived time constraints, particularly among women¹¹ and parents.^{12,13, 23} Work responsibilities can also spill over into family life in the form of shifting family roles surrounding food preparation, indicating that in some cases high time demands in one area can be compensated by lowering demands in another.²⁴ In contrast, some young adults (e.g., college students) report that having too much unstructured time makes it difficult to plan time for exercise and healthy eating behaviors due to competing priorities or poor time-management skills.^{25,26}

A better understanding of the demographic characteristics and competing time demands of young adults who perceive the greatest time constraints will be useful to inform the design of strategies aimed at improving dietary behaviors and quality among this population. The purpose of this study was to 1) describe the prevalence of perceived time constraints among a diverse sample of young adult post-secondary students (including two-year community college students as well as four-year public university students), 2) compare the characteristics of young adults who perceive lower versus higher time constraints in general and time constraints specifically influencing food preparation and meal structure, and between those who perceive that they do or do not have a healthy balance in life, and 3) describe how these various perceptions of time constraints are associated with work, school, and family responsibilities among this age group.

METHODS

Participants And Recruitment

In the spring of 2010, a large, diverse, convenience sample of students enrolled at a two-year community college and a large, public four-year university in the Twin Cities metropolitan area, Minnesota, was recruited to participate in the Student Health and Wellness Study, a study of nutrition- and weight-related issues among college students. Data collectors approached students on campus and provided them with “pass codes” to enter a secure online survey. Participants received a \$50 gift card for their participation and were also entered in a lottery to win an Apple iTouch™ device. Details on the online survey design and study population have been described in detail elsewhere.²⁷ The final sample size of completed surveys was 1,201 (598 two-year community college students and 603 four-year public university students). The University of Minnesota Institutional Review Board approved the study protocol and all participants provided informed consent prior to completing the survey.

Participant characteristics yielded some differences from the overall enrolled student populations at each school. Study participants from both schools represented more racial/ethnic minorities (60 percent non-white at the two-year community college and 48 percent at the four-year public university), compared to all enrolled students (38 percent and 30 percent, respectively). At the two-year community college, study participants were younger than the overall student population, with 18 percent being under 19 years old compared to 6 percent among all enrolled students and 20 percent being over 24 years old compared to 41 percent among all enrolled students. Study participants at the four-year public university were also more likely to be under 24 than all enrolled undergraduate students (96 percent vs. 89 percent). Gender did not differ between study samples and enrolled students at either school.

Measures

Instruments—The survey took approximately 30–35 minutes to complete, after which participants had their height, weight, and body composition measured on campus. Height was measured using a Shorr height board (Irwin Shorr, Olney, MD, 2001) and body weight and composition was measured using a Tanita scale (Tanita TBF-300A, Body Composition Analyzer, Arlington Heights, IL, 2006).

Perceived time constraints—In the survey, perceived time constraints were measured by how much students agreed or disagreed with several statements using a five-point scale, with responses ranging from strongly agree to strongly disagree. Three items were adapted from the IDEA study, a large, longitudinal study of the determinants of obesity among adolescents and their parents (“I often feel too busy with school or other demands”, “I have a healthy balance between school, work, other demands on my time, and quality time for myself and/or the people I care about,” and “If I were less busy, I would be able to eat a healthier diet”).²⁸ Five additional items were adapted from a previous pilot study among young adults (“It is hard to find time to sit down and eat a meal”, “My hectic schedule makes it hard to eat regularly scheduled meals”, “It’s hard to find the time to go food shopping”, “If I spent more time preparing healthy meals, I wouldn’t have time to do other things that I want or need to do,” and “I feel confident that I could find time in my daily schedule to prepare healthy meals”);¹⁶ one-week test re-test evaluations (n=48 participants, 18–23 years) indicated moderate reliability, with a mean correlation of 0.60 (P<0.01).

Work, school, and family responsibilities—The association between young adult responsibilities and perceived time constraints was assessed using responses to questions on

the number of hours participants worked for pay per week (0, 1–19, 20–29, or 30 or more hours), the number of credits in which they were enrolled (part time/less than 12, full time/12–16, or heavy course load/17 or more), and three variables addressing family responsibilities: where they lived most of the time (parent/family home, on-campus housing, renting off-campus, or own home), whether they were in a committed relationship (single/casually dating or in a committed relationship/engaged/married), and whether they were a parent. In one-week test-retest evaluations, the living situation variable displayed a Pearson correlation of 0.89 ($P<0.001$) while the relationship and parenthood variables displayed kappa coefficients of 0.96 ($P<0.001$) and 0.92 ($P<0.001$), respectively.

Socioeconomic and demographic characteristics—Additional self-reported demographic characteristics, namely gender, age (17–20, 21–23, or 24 or more years), race/ethnicity (non-Hispanic white or non-white/Hispanic), two-year or four-year college student, and measures of socioeconomic status including how difficult it was to live on household income (not at all, somewhat, very, extremely difficult/impossible), whether students received public assistance, and the educational status of students' parents (less than high school, high school diploma/GED, vocational school, some college, college degree, more than college degree) were examined to further characterize students with perceived time constraints and adjust estimates of the effect of student responsibilities on perceived time constraints.

Data Analysis

A scale was developed to assess time constraints affecting diet-related behaviors by combining the five items from the young adult pilot study with one additional item from the IDEA study that also assessed diet-related time constraints ("If I were less busy, I would be able to eat a healthier diet") (Cronbach's $\alpha=0.70$). The two remaining statements did not specify diet-related behaviors and were therefore analyzed individually as constructs that are distinct from the diet-related measures: perceived general time constraints ("I often feel too busy with school or other demands") and perceived healthy balance ("I have a healthy balance between school, work, other demands on my time, and quality time for myself and/or the people I care about"). For bivariate and multivariate analyses, responses to the individual measures on general time constraints and healthy balance were dichotomized into strongly disagree/somewhat disagree/neither agree nor disagree and strongly agree/somewhat agree. The combined dietary behaviors scale was likewise dichotomized after averaging participants' responses to the six dietary time constraints statements. Agree responses were separated from neutral and disagree responses in order to examine those who perceived a positive level of time constraints.

Chi-square tests were used to examine differences in characteristics of students who responded they strongly or somewhat agreed that they often felt too busy (had time constraints in general), had a healthy balance, and had time constraints affecting diet-related behaviors compared to those who responded that they disagreed or were neutral. Multivariate logistic regression was used to assess the adjusted association between work, school, and family responsibilities and the presence of perceived time constraints for all students, controlling for all three measures of student responsibilities (work, school, and family) concurrently. A small number of observations with missing values for independent or dependent variables were omitted prior to analysis. Covariates were chosen based on previous literature finding associations between diet-related behaviors and time deepening practices and age, race/ethnicity, two-year or four-year college student, and socioeconomic status.^{6,24,29} Furthermore, because the literature suggests that women experience time demands differently than men,^{23–25} regressions tested for the presence of interactions between gender and work, school, and family responsibilities ($\alpha=0.20$). For main effects, a

conservative Bonferroni correction of 10 (number of independent variables tested in each model) was applied to an α of 0.05, yielding a significance level of 0.005. All analyses were conducted using Stata (version 10.1, StataCorp, College Station, TX, 2007).

RESULTS

More than half (57.9 percent) of young adult participants reported experiencing time constraints in general, that is, they often felt too busy with school or other demands, and only 37.1 percent felt they had a healthy balance in their lives (table 1). About a third to a half of participants reported that they had difficulty finding time to sit down and eat a meal, eat regularly scheduled meals, and go food shopping, while a similar proportion reported that they did not have difficulty finding time for these activities. Nearly half of all participants reported that preparing healthy meals took time away from other activities (46.4 percent) and that they would eat healthier if they were less busy (44.9 percent). However, a majority (57.6 percent) reported that they were confident they could find time to prepare healthy meals.

Significant associations were found between the three measures of perceived time constraints and several demographic characteristics (table 2). Being a woman and a four-year college student was associated with higher perceived time constraints in general ($P<0.001$ – 0.002) and time constraints affecting diet-related behaviors ($P<0.001$). Students with lower socioeconomic status, measured by difficulty living on household income and having parents with lower educational attainment, reported higher time constraints in general and were less likely to have a healthy balance in life ($P<0.001$ – 0.003). Age and race/ethnicity were not significantly associated with any of the measures of perceived time constraints.

A majority of young adults in the sample worked for pay (68.1 percent) and 80.2 percent had at least a full-time course load (12 credits) (table 3). Just under half (48.7 percent) of participants lived in their parent or family home and few lived on campus (10.9 percent) or were parents themselves (10.5 percent). Results from bivariate analysis indicated that a heavier course load was associated with both perceiving higher time constraints in general ($P<0.001$) and perceiving time constraints affecting diet-related behaviors ($P=0.003$). There were also significant differences in perceived time constraints in general by living situation ($P=0.001$). The number of hours worked for pay, being in a relationship, and being a parent were not significantly associated with any of the three measures of time constraints.

Regression models detected the presence of interactions between gender and several of the measures of work, school, and family responsibilities ($P<0.20$) after adjusting for socioeconomic and demographic characteristics. Models were therefore rerun in samples stratified by gender. The stratified models indicated that for men a heavier course load and/or working more hours each week was associated with perceived time constraints in general and perceived time constraints affecting dietary behaviors (table 4), while for women family responsibilities significantly predicted time constraints (table 5). Compared to men attending school part-time, those with a full-time or heavy course load had 2–3 times higher odds of perceived time constraints in general ($P=0.001$ – 0.003) and time constraints affecting dietary behaviors ($P=0.004$). In addition, men working 30 or more hours per week had nearly 3 times higher odds of perceived time constraints affecting dietary behaviors compared to men who did not work for pay ($P=0.004$).

In contrast, women in a committed relationship had 83 percent higher odds than single women of perceiving time constraints in general ($P=0.003$), while women renting an apartment off-campus had less than half the odds of perceiving time constraints in general as

those living at home ($P<0.001$). None of the measures examined was significantly associated with having a healthy balance for men or women.

DISCUSSION

While lack of time is among the most commonly reported barriers to healthy dietary habits and physical activity among young adults, little is known about specific factors that contribute to feelings of time scarcity among this age group. Over half of participants in this study reported experiencing general time constraints and not having a healthy balance in life, and between 37 and 46 percent reported experiencing time constraints affecting diet-related behaviors. These findings confirm results from qualitative and quantitative studies that show time constraints to be an important barrier to healthy dietary practices.^{8–11} Despite reported time scarcity, most participants reported that they were confident they could find time to prepare healthy meals. In light of previous literature indicating that few young adults manage to operationalize this sentiment into regular food preparation,^{6,7} young adults that display high self-efficacy but infrequent food preparation behaviors may be facing motivational barriers²⁶ or lack of meal preparation skills and/or facilities⁶ that prevent them from making time to prepare healthy meals.

Women, four-year students, and students of lower socioeconomic status appear to be particularly affected by high time constraints and not having a healthy balance in life. Prior research has shown that lower-income households may experience greater time scarcity because they cannot “buy time” (i.e., hire household help), and changes in women’s roles across generations may create an expectation that women continue traditional meal preparation roles while also working or attending school.²² There is some qualitative evidence that four-year students may experience difficulty structuring their time, which could lead to feelings of time scarcity for lower-priority activities such as healthy eating and physical activity.^{25,26} These groups may therefore represent higher-risk target groups for interventions designed to reduce time barriers to healthy dietary practices.

As hypothesized, the association between time constraints and work, school, and family responsibilities differed by gender, with a heavy course load and working longer hours associated with measures of time constraints for men, and living situation and relationship status associated with time constraints for women. The finding that men working longer hours experienced greater time constraints is consistent with a population-based study that examined the role of working on young adults’ meal structure (Escoto KH, et al., unpublished data, 2011), indicating that this effect is not unique to young adults who are students. However, the absence of this association among women in this study may indicate that women have different priorities, motivations, and *timestyles*, or ways of constructing time, in relation to meal preparation and structure that depend on their time commitments to family and friends rather than on hours spent working for pay.^{21,23} Previous work has shown that commitments to family and friends are a commonly reported barrier to healthy eating among women.¹¹ In addition, college students who live in their parent’s home tend to have lower socioeconomic status and poorer dietary habits than those living on their own,³⁰ suggesting that women who live in a rented apartment off-campus may experience lower time constraints due to a combination of having relatively higher socioeconomic status and fewer responsibilities for others given the absence of cohabitating family members.

An unexpected finding was that being a parent was not associated with any of the measures of time constraints among this sample of students, similar to what was found in a study of adult women¹¹ but in contrast to other studies examining time constraints among young female parents,¹² employed female parents,¹³ and single parents.²³ Given that parenthood is relatively rare among undergraduate and community college students compared to young

adults overall (6 percent of males and 14 percent of females in this sample vs. 14 percent of all males and 31 percent of all females age 18–24),³¹ this study's findings may indicate that parenthood is not an important contributing factor to perceptions of time constraints among two- and four-year college students. On the other hand, the study's sample was younger than the overall campus population at both institutions, which may have resulted in an underrepresentation of student parents in the sample. Future work examining how the transition to parenthood affects perceptions of time constraints and dietary habits could assist in the development of dietary interventions for young adults who become new parents.

In addition, the lack of significant associations between work, school, and family responsibilities and participants' perceptions of having a healthy balance in their lives could be due to a healthy balance being a result of internal coping strategies and priority setting rather than actual time demands. It appears that some young adults may be able to juggle many responsibilities and demands on their time and yet still feel that they have a healthy balance. If this type of resiliency is something that can be acquired by learning time management skills and healthy ways to react to stress, investments in teaching young adults these skills could have benefits that spill over into other lifestyle behaviors, including diet.

This study is among the first of its kind to characterize how multiple responsibilities faced by young adults contribute to perceptions of time constraints among this age group. However, there are also several limitations to this study, including the use of a sample from one Midwestern metropolitan area, which may limit generalizability to other geographic regions. In addition, the use of a convenience sampling approach may have resulted in a sample that is more interested in health than the general student population. Despite these limitations, however, the findings from this large, diverse young adult sample offer insights into the factors influencing perceived time constraints and related barriers to healthy eating among this important age group.

Implications for Research and Practice

Given the sizeable share of young adults who perceive having limited time to perform healthy dietary behaviors, this age group may benefit from nutrition-related messaging and programming that emphasizes how to maintain healthy dietary practices while limiting the time spent purchasing and preparing food. These could include promoting healthy meals with short preparation time and shared meals and preparation responsibilities with friends or roommates. In addition, improved coping and stress management strategies may assist young adults in balancing multiple demands on their time and reduce perceived time barriers to healthy dietary and other health practices. While other age groups may also benefit from this type of messaging, young adulthood may be a unique life stage due to competing responsibilities to work, education, and personal relationships and an age at which many individuals may lack prior experience and skills in time management and developing healthy dietary practices.¹ Interventions that address the sources of perceived time constraints among young adults may be more successful if tailored to men and women separately, with those targeting men focusing on managing work and school commitments and those targeting women focusing on managing commitments to the important people in their life.

More research is needed to better understand how young adults construct time and what types of interventions would be most effective. Few significant associations were found between work, school, and family responsibilities and measures of perceived healthy balance and diet-related time constraints, indicating that some important contributors to time scarcity may not have been measured in this study. Qualitative research would be particularly helpful to uncover constructs that may better predict perceived time barriers to healthy eating.

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Table 1
Prevalence of perceived time constraints among young adults, Student Health and Wellness Study, 2010

	Somewhat/strongly disagree		Neither agree nor disagree		Somewhat/strongly agree	
	n	%	n	%	n	%
Often feel too busy with school or other demands	165	13.9	336	28.2	689	57.9
Have healthy balance between school, work, other time demands, and quality time for myself/others	285	24.0	461	38.9	440	37.1
Hard to find time to sit down and eat a meal	531	44.6	218	18.3	442	37.1
Hectic schedule makes it hard to eat regularly scheduled meals	426	35.9	225	19.0	535	45.1
Hard to find time to go food shopping	503	42.4	273	23.0	410	34.6
If spent more time preparing healthy meals, wouldn't have time to do other things want/need to do	313	26.3	324	27.3	551	46.4
If less busy, would be able to eat healthier diet	291	24.5	364	30.6	534	44.9
Confident can find time in daily schedule to prepare healthy meals	276	23.2	229	19.2	685	57.6

Table 2

Socioeconomic and demographic characteristics of young adults with and without perceived time constraints, Student Health and Wellness Study, 2010

	All students	Time constraints in general [†]				Healthy balance [‡]			Time constraints affecting diet-related behaviors [§]			
		n	%	No (%)	Yes (%)	P-value	No (%)	Yes (%)	P-value	No (%)	Yes (%)	P-value
All students		1201	100.0	42.1	57.9		62.9	37.1		56.8	43.2	
Female		630	52.6	47.7	56.6	0.002	55.0	48.9	0.04	48.2	58.9	<0.001
Age												
17–20		706	59.0	59.0	59.4	0.13	59.3	58.6	0.61	58.5	59.8	0.12
21–23		313	26.1	24.0	27.4		26.6	25.2		24.9	27.7	
24 or older		178	14.9	17.0	13.2		14.1	16.1		16.6	12.6	
Non-white or Hispanic		697	58.5	62.0	55.5	0.02	60.3	54.2	0.04	61.1	54.5	0.02
Four-year student		603	50.2	41.7	56.7	<0.001	49.2	52.7	0.24	44.3	58.3	<0.001
Difficulty living on household income												
Not at all difficult		353	29.5	35.3	25.0	<0.001	23.6	39.2	<0.001	32.2	25.9	0.03
Somewhat difficult		612	51.1	49.7	52.3		52.9	48.3		50.9	51.5	
Very difficult		185	15.4	12.4	17.6		18.8	9.6		13.3	18.2	
Extremely difficult or impossible		48	4.0	2.6	5.1		4.7	3.0		3.7	4.4	
Receives public assistance		107	8.9	9.0	8.6	0.80	10.4	5.9	0.009	9.6	7.8	0.26
Highest parent educational attainment												
Less than high school		109	9.5	11.1	8.3	0.04	11.8	5.6	0.003	9.9	8.9	0.46
High school diploma or GED		191	16.6	18.6	15.1		17.4	15.0		16.8	16.4	
Vocational school		125	10.8	12.1	9.9		10.5	11.2		10.2	11.7	
Some college		119	10.3	11.3	9.8		11.1	9.1		11.3	9.1	
College degree		362	31.4	27.1	34.0		29.4	34.4		32.0	30.2	
More than college degree		247	21.4	19.8	22.9		19.8	24.6		19.7	23.7	

Sample sizes vary slightly due to a small degree of missing data. P-values are from χ^2 tests. Bold indicates statistically significant difference at $p < 0.005$.

[†] Students are considered to have time constraints in general if they responded that they somewhat or strongly agreed with the statement, "I often feel too busy with school or other demands."

[‡] Students are considered to have a healthy balance if they responded that they somewhat or strongly agreed with the statement, "I have a healthy balance between school, work, other demands on my time, and quality time for myself and/or the people I care about."

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⁸Students are considered to have time constraints affecting diet-related behaviors if their average response to six items measuring time constraints on meal preparation and structure is in the strongly/somewhat agree range.

Table 3
Young adults' work, school, and family responsibilities by perceived time constraints, Student Health and Wellness Study, 2010

	n	All students %	Time constraints in general [†]			Healthy balance [‡]			Time constraints affecting diet-related behaviors [§]		
			No (%)	Yes (%)	P-value	No (%)	Yes (%)	P-value	No (%)	Yes (%)	P-value
Hours worked for pay per week											
0 hours	382	31.9	33.7	31.0	0.08	32.6	30.9	0.53	35.7	27.1	0.01
1–19 hours	483	40.4	37.5	43.0		39.3	43.2		38.3	43.3	
20–29 hours	219	18.3	20.4	16.0		18.8	16.4		17.7	18.8	
30 or more hours	113	9.4	8.4	10.0		9.3	9.5		8.3	10.8	
Course load											
Part-time (11 credits)	228	19.8	22.8	16.0	<0.001	19.8	16.9	0.41	21.5	15.6	0.003
Full-time (12–16 credits)	789	65.7	68.1	65.4		66.1	67.3		66.4	66.6	
Heavy (17 credits)	173	14.5	9.1	18.6		14.1	15.8		12.1	17.8	
Living situation											
Parent/family home	579	48.7	50.2	47.6	0.001	50.9	44.6	0.02	52.2	44.4	0.02
On campus	130	10.9	7.5	13.6		9.2	14.0		9.1	13.4	
Rent/share rent off campus	413	34.7	34.6	34.6		34.8	34.6		32.9	36.8	
Own home	67	5.6	7.7	4.2		5.0	6.9		5.8	5.4	
In a committed relationship	442	36.9	32.8	39.6	0.02	37.7	35.0	0.35	36.4	37.5	0.72
Parent	126	10.5	11.8	9.6	0.22	10.9	9.8	0.55	12.3	8.3	0.03

Sample sizes vary slightly due to a small degree of missing data. P-values are from χ^2 tests. Bold indicates statistically significant difference at $p < 0.005$.

[†] Students are considered to have time constraints in general if they responded that they somewhat or strongly agreed with the statement, "I often feel to busy with school or other demands."

[‡] Students are considered to have a healthy balance if they responded that they somewhat or strongly agreed with the statement, "I have a healthy balance between school, work, other demands on my time, and quality time for myself and/or the people I care about."

[§] Students are considered to have time constraints affecting diet-related behaviors if their average response to six items measuring time constraints on meal preparation and structure is in the strongly/somewhat agree range.

Table 4

Adjusted association between work, school, and family responsibilities and perceived time constraints among young men, Student Health and Wellness Study, 2010

	Time constraints in general [†]			Healthy balance [‡]			Time constraints affecting diet-related behaviors [§]		
	OR	SE	P-value	OR	SE	P-value	OR	SE	P-value
Hours worked for pay per week									
0 hours	1.00			1.00			1.00		
1–19 hours	0.95	0.21	0.84	1.20	0.27	0.40	1.34	0.31	0.20
20–29 hours	0.80	0.22	0.41	0.86	0.24	0.58	2.01	0.56	0.01
30 or more hours	1.69	0.64	0.16	0.98	0.36	0.96	2.91	1.07	0.004
Course load									
Part-time (11 credits)	1.00			1.00			1.00		
Full-time (12–16 credits)	2.34	0.68	0.003	0.78	0.21	0.37	2.45	0.76	0.004
Heavy (17 credits)	3.38	1.29	0.001	0.73	0.27	0.39	3.02	1.17	0.004
Living situation									
Parent/family home	1.00			1.00			1.00		
On campus	1.03	0.38	0.93	2.60	0.94	0.008	1.21	0.43	0.60
Rent/share rent off campus	0.91	0.21	0.69	1.16	0.27	0.53	1.06	0.25	0.82
Own home	1.06	0.54	0.91	1.29	0.64	0.61	1.49	0.77	0.44
Relationship status									
Not in a committed relationship	1.00			1.00			1.00		
In a committed relationship	1.32	0.29	0.20	0.80	0.17	0.30	0.83	0.18	0.41
Parent status									
Not a parent	1.00			1.00			1.00		
Parent	0.99	0.50	0.99	1.09	0.54	0.86	0.63	0.33	0.38

Results from logistic regression models adjusting for difficulty living on income, public assistance receipt, parent education, two- or four-year student status, age, and race/ethnicity. Bold indicates statistically significant difference from reference group at $p < 0.005$.

[†] Students are considered to have time constraints in general if they responded that they somewhat or strongly agreed with the statement, "I often feel to busy with school or other demands."

[‡] Students are considered to have a healthy balance if they responded that they somewhat or strongly agreed with the statement, "I have a healthy balance between school, work, other demands on my time, and quality time for myself and/or the people I care about."

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⁸Students are considered to have time constraints affecting diet-related behaviors if their average response to six items measuring time constraints on meal preparation and structure is in the strongly/somewhat agree range.

Table 5

Adjusted association between work, school, and family responsibilities and perceived time constraints among young women, Student Health and Wellness Study, 2010

	Time constraints in general [†]			Healthy balance [‡]			Time constraints affecting diet-related behaviors [§]		
	OR	SE	P-value	OR	SE	P-value	OR	SE	P-value
Hours worked for pay per week									
0 hours	1.00			1.00			1.00		
1–19 hours	1.38	0.31	0.15	1.22	0.28	0.37	1.39	0.30	0.13
20–29 hours	0.95	0.27	0.87	1.23	0.37	0.48	1.29	0.35	0.35
30 or more hours	1.37	0.51	0.40	1.21	0.47	0.62	2.02	0.72	0.05
Course load									
Part-time (11 credits)	1.00			1.00			1.00		
Full-time (12–16 credits)	0.82	0.21	0.45	1.14	0.32	0.65	0.71	0.18	0.17
Heavy (17 credits)	2.12	0.87	0.07	1.36	0.52	0.43	0.78	0.28	0.49
Living situation									
Parent/family home	1.00			1.00			1.00		
On campus	1.24	0.45	0.56	1.59	0.52	0.16	1.12	0.35	0.71
Rent/share rent off campus	0.46	0.11	0.002	1.61	0.41	0.06	1.13	0.26	0.59
Own home	0.36	0.16	0.02	2.75	1.29	0.03	1.11	0.49	0.81
Relationship status									
Not in a committed relationship	1.00			1.00			1.00		
In a committed relationship	1.83	0.37	0.003	0.79	0.16	0.25	1.30	0.24	0.15
Parent status									
Not a parent	1.00			1.00			1.00		
Parent	1.10	0.40	0.79	0.67	0.27	0.32	1.14	0.40	0.71

Results from logistic regression models adjusting for difficulty living on income, public assistance receipt, parent education, two- or four-year student status, age, and race/ethnicity. Bold indicates statistically significant difference from reference group at $p < 0.005$.

[†] Students are considered to have time constraints in general if they responded that they somewhat or strongly agreed with the statement, "I often feel to busy with school or other demands."

[‡] Students are considered to have a healthy balance if they responded that they somewhat or strongly agreed with the statement, "I have a healthy balance between school, work, other demands on my time, and quality time for myself and/or the people I care about."

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⁸Students are considered to have time constraints affecting diet-related behaviors if their average response to six items measuring time constraints on meal preparation and structure is in the strongly/somewhat agree range.