

Post-Millennial Filipinos: Renewed Hope vs Risks

Further Studies of the 2013 Young Adult Fertility and Sexuality (YAFS) Study

*Physical Activity and
Food Consumption of
Young Adults in
SOCCSKSARGEN*



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Eddelyn D. Gupeteo and Josefina N. Natividad

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Message from the Executive Director

Since the turn of the century over fifteen years ago, the Philippines has seen the rise of the millennial generation of young Filipinos who are currently shaping the political landscape in late 2016 as they take a committed stand on the issues of the day.

It is appropriate for those concerned with Philippine development work to now start looking at the next generation of Filipinos and the Commission on Population has had a tradition of producing studies concerning young people.

“Post-Millennial Filipinos: Renewed Hope vs Risks” compiles 17 regional papers based on the dataset of the 2013 Young Adult Fertility and Sexuality (YAFS) Study. These studies explore and discuss the emerging issues and concerns of the youth that need appropriate policy and program responses.



The latest YAFS comes more than a decade after the 2002 YAFS. The 2002 YAFS showed the concerns of the millennial Filipino much like the latest YAFS of 2013 marks the rise of the Filipinos born around the turn of the century and could foretell the shape of things to come for the 21st century young Filipino.

The post-millennial Filipino is focused on screens (smart phone, tablet and monitor) and the media is full of “hashtag-worthy” statements of 140 words.

The studies we are presenting continue to note and update matters such as sexual risk behaviors, early sexual involvement, teen pregnancy, reproductive health problems including sexually-transmitted infections as well as non-sexual risk behaviors such as smoking, alcohol abuse and drug use as well as suicide ideation and lifestyle.

We invite you to tune in to the latest findings about the post-millennial Filipino. It can only result in a more informed thread of interaction with the shapers of our country’s future.

A handwritten signature in black ink, appearing to read 'Juan Antonio A. Perez III'.

Juan Antonio A. Perez III, MD, MPH

Executive Director

Commission on Population

Background

The 2013 Young Adult Fertility and Sexuality (YAFS) Study is the fourth installment of a series of nationally representative cross-sectional surveys on Filipino youth aged 15-24 (for YAFS 1 and 2 and 15-27 for YAFS 3). The YAFS has yielded valuable information about young people's sexual and non-sexual behavior, education, labor force participation, family relationships, attitudes and values regarding certain issues concerning them, personal characteristics like self-esteem, and adverse conditions like suicidal ideation and depression symptoms, all of which are of pertinence to one's understanding of this significant sector of society. The 2013 YAFS or YAFS 4 in particular was a response to the need of updating information on the situation of today's young people. From YAFS 3 in 2002, there have been many important new developments in the environment where young people are situated that need to be studied as these affect not just their sexual and non-sexual risk taking behaviors but also their total well-being. For instance, the changes in communication and information technology such as the prevalent use of cellular phones and the internet and the new forms of communication that these have produced like social networking were not explored in the previous YAFS. The foregoing expansion in technology is presumed to have resulted to notable changes in the patterns and topographies of courtship, dating and relationships among young people. The upsurge in the incidence of HIV infection primarily among men who have sex with other men (MSMs) requires more recent reliable data on male sexual and non-sexual risk behaviors which is currently not available because regular survey rounds like the National Demographic and Health Surveys conducted every five years does not routinely include men. Moreover, with YAFS 4, core behaviors that have been monitored over time in YAFS 1, 2 and 3 were also updated. Among these are the sexual risky behaviors, such as the prevalence of early sexual involvement, teen pregnancy and reproductive health problems including sexually transmitted infections (STIs) as well as non-sexual risk behavior like smoking, drinking and drug use.

With the wealth of information yielded by the YAFS 4, the Commission on Population (POPCOM) in partnership with the Demographic Research and Development Foundation, Inc. (DRDF) came up with seventeen (17) regional papers (Regions 1-13, 4B, CAR, NCR and ARMM) that explore and discuss the emerging issues and concerns of the young people that need appropriate policy and program responses.

Physical Activity and Food Consumption of Young Adults in SOCCSKSARGEN

Eddelyn D. Gupeteo¹ and Josefina N. Natividad²

Abstract

This paper examined physical activity and food consumption among the youth in SOCCSKSARGEN. Physical activity was measured as engaging in physical exercise at least twice a week, while food consumption was measured through an index that counted the frequency of consumption of food and drink considered to be of poor nutritional value (high salt, sugar, or fat). Results show that only four in ten youth in the region engaged in physical exercise at least twice a week. The average food consumption score was 12.3 out of a total possible score of 20. There was no apparent synergistic effect between engaging in physical exercise and healthy food consumption, as the predictors of physical exercise (being male, chubby/fat/obese self-perceived weight) were also positive predictors of unhealthy food consumption. It is recommended that the Commission on Population regional office adopt a health promotion campaign among the youth in the region concentrating on the promotion of healthy diets and physical activity to complement its programs on sexual and non-sexual risk behaviors.

Keywords: physical activity, food consumption, young people

Background and context

SOCCSKSARGEN or Region XII is strategically located at the heart of Mindanao. It has a total land area of 19,165.87 square kilometers or about 17 percent of the total land area of Mindanao. The region is composed of four provinces, five cities, 45 municipalities, and 1,192 barangays. The provinces are Cotabato, South Cotabato, Sarangani, and Sultan Kudarat. The cities are Cotabato, General Santos, Kidapawan, Koronadal, and Tacurong. SOCCSKSARGEN is located within the second largest basin in the Philippines, the Mindanao River Basin. It is also among the leaders in the country in rice and corn production. It is the top producer of high-value crops such as coffee, banana, asparagus, and oil palm. General Santos City is host to 80 percent

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of the tuna industry in the country, and the region is ranked seventh in terms of livestock inventory.

The actual regional development performance indicates a low and erratic economic growth trend and high poverty incidence. Over the years, the gross regional domestic product (GRDP) has posted irregular trends and recorded a slight shift in the structure, which remains predominantly agricultural. From 2004 to 2009, the GRDP grew at an average annual rate of 4.6 percent, and the SOCCSKSARGEN GRDP ranked third among the Mindanao regions in terms of its contribution to the total Mindanao gross domestic product.

The 2007 census reported that the population of Region XII was about 3.8 million. Among the 17 regions nationwide, Region XII ranked 12th in terms of population count. Its population is also about 18 percent of the total population of the country. The population of the region grew at an annual average of 2.41 percent between 2000 and 2007, which is 0.37 percentage points higher than the national growth rate of 2.04 percent.

Poverty incidence among families in 2009 was estimated at 28.1 percent; this means that out of the total 321,370 families of the region, 28.1 percent or about 90,305 families were living below the poverty threshold or had earnings that were not enough to meet their basic needs.

The Region XII Development Plan 2011–2015 states that in general, the region shall endeavor to improve human security as individual entitlements are provided, protected, and promoted. Furthermore, the region shall ensure equal access to productive opportunities and basic social services, curb poverty, empower communities, and produce socially and economically healthy and productive members of society. The region shall vigorously promote the health and well-being of the population and prevent diseases, disabilities, and premature deaths.

The 2013 Young Adult Fertility and Sexuality Study (YAFS4) collected data on the physical activity and food consumption of young adults to get a glimpse of their health and lifestyle. This data can inform policies and programs to improve the youth's health.

Key findings of YAFS4 revealed that young adults in SOCCSKSARGEN are among the lowest consumers of unhealthy food. The youth of the region have the country's second lowest prevalence of current smoking, current drinking, and premarital sex.

Exercise and dietary intake are both important determinants of child growth and development. They can also influence adult health behaviors and patterns. This is in consonance with the overall goal of the strategy of the World Health Organization to promote and protect health through healthy eating and physical activity. YAFS4 was the first YAFS survey round to

include a health and lifestyle component as part of the questionnaire that provides access to important information such as the extent of young adults' consumption of unhealthy food and their physical activity.

Young adulthood is a key formative period in the development of eating habits (Walsh & Nelson, 2010). The eating habits developed at this stage are likely to continue into adulthood. Thus, it is imperative to study the physical activity and food consumption of young adults.

Objectives of the study

The main objective of this study is to understand the physical activity and consumption of unhealthy food and drinks of the youth in SOCCSKSARGEN and their possible correlates.

Specifically, the objectives of the study are as follows:

1. To present the physical activity profile of young adults in SOCCSKSARGEN
2. To present the perception of body weight by youth in SOCCSKSARGEN
3. To determine the factors affecting exercise
4. To describe the young adults' consumption of unhealthy food
5. To determine the factors affecting consumption of unhealthy food among young adults
6. To examine the link between physical activity and unhealthy food consumption

Review of related literature

Effects of physical activity on the body

Physical activity is any bodily movement produced by skeletal muscles that requires energy expenditure. Physical inactivity has been identified as the fourth leading risk factor for global mortality, causing an estimated 3.2 million deaths globally (World Health Organization, 2004).

Physical activity or exercise has a favorable effect on virtually all risk factors of cardiovascular disease (Ballantyne, 2009). When a person exercises, the heart muscle contracts forcefully and frequently, increasing blood flow through the arteries, which leads to a lower resting heart rate, lower blood pressure, and a more variable heart rate—all factors that lower the risk of developing cardiovascular disease. Exercise also limits inflammation associated with heart trouble, such as arteriosclerosis or hardening of the arteries around the heart, which may lead to heart attacks.

Numerous studies have suggested that fitness enhances cognition in humans as well. A randomized clinical trial found that people aged 50 and over with memory problems scored higher on cognitive tests after a six-month workout regimen and maintained their edge over the sedentary control group one year after the trial ended (Ballantyne, 2009). Exercise increases levels of some molecules in the brain that are crucial to cognition (Gomez-Pinilla, as cited by Wolpert, 2008).

Physical activity is also recognized as an effective tool for treating and preventing depression. There is consistent evidence that physical activity boosts happiness and prevents future depression. Moreover, even very moderate levels of physical activity (e.g., walking 20–30 minutes a day) can prevent future depression (Bergland, 2013).

Unhealthy food consumption

What the youth are eating now is far different from the diet of earlier generations. The youth's intake of fresh, nutritious, and locally produced foods is much lower, while their intake of fat, sugar, and additives is much higher. This is because of food production and manufacturing techniques, coupled with changing lifestyles and increasing access to processed foods. The move toward less healthy food consumption has been most pronounced in the developed countries where there is aggressive marketing and sales of energy-dense, nutrition-poor food and drinks. In the Philippines, there is likewise a ubiquitous presence of unhealthy food and beverage marketing in the local media and other advertising venues.

Drinking sugar-sweetened beverages contributes to rising obesity levels in all age groups, especially among the youth. Preventing weight gain in this age group is important, as beginning early adulthood with a healthy body weight means one is much more likely to maintain a healthy weight later in life.

Young adults are a highly desirable target population for junk food marketing. But little research, resources, and policy action have been directed at this age group. We do know, however, that factors such as identity development and shifting interpersonal influences differentiate young adulthood from other life stages and influence the adoption of both healthy and unhealthy behaviors (Freeman, Kelly, Vandevijvere, & Baur, 2015).

In terms of evolution, we show preference for high-calorie foods because they are an important source of energy. We tend to crave these rich, tasty foods when we are hungry, as well as when we are emotional, bored, or stressed out. We show a preference for these sugary and fatty foods not only because they are energy dense, but also because our brain releases neurotransmitters that produce desirable feelings when they are eaten (Reichelt, 2014).

Conceptual framework

Figure 1 depicts the conceptual framework that guided the study.

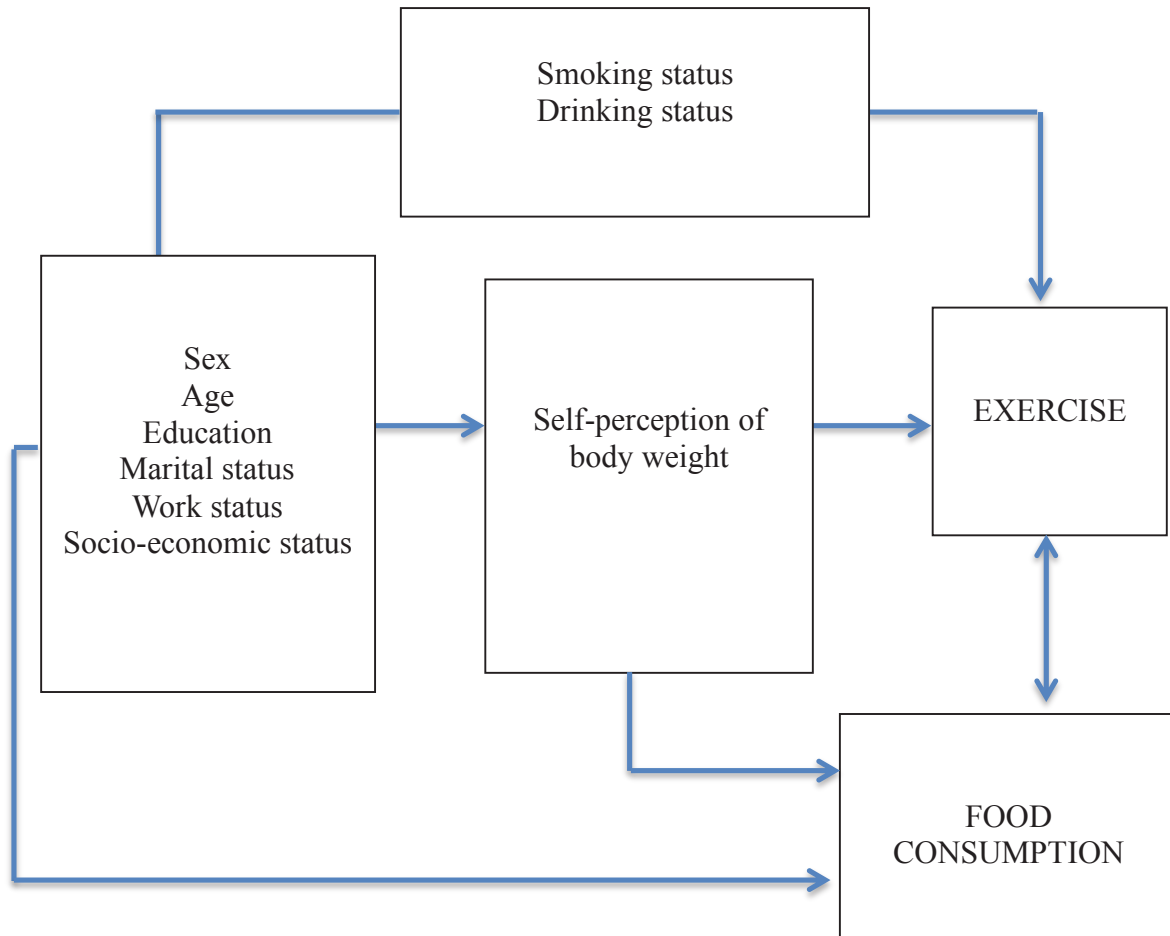


Figure 1. Conceptual framework of the study

The variables of interest in this paper are exercise and food consumption. The framework proposes that a person's background characteristics such as age, sex, education, marital status, work status, and socio-economic status have a direct link to one's diet or food consumption. Another way by which background characteristics affect food consumption is through the link of these variables to one's self-perception of one's body weight. In this link, the effect of background characteristics on food consumption is mediated by the perception of one's body weight. This type of indirect link is also hypothesized for exercise. The effect of background characteristics on physical exercise is mediated by the self-perception of one's body. An additional mediating factor for exercise is engagement in the non-sexual risk behaviors of smoking and drinking.

Data and methods

Data for this paper come from the latest round of the YAFS, a series of national surveys on the Filipino youth conducted since 1982 by the University of the Philippines Population Institute and the Demographic Research and Development Foundation. The latest YAFS survey (YAFS4) was conducted in 2013.

YAFS4 contains the same basic data gathered in previous rounds, the last of which was conducted in 2002. YAFS4 has also expanded its range of topics as well as added new questions to previously existing topics. It has a new block of questions on health and lifestyle, which is the focus of this further analysis.

As in previous rounds, YAFS4 covered all regions of the country, 78 provinces, 681 cities and municipalities, and 1,121 barangays. The total sample size is 19,178, with 9,353 male and 9,825 female respondents. Of these, 1,113 are from SOCCSKSARGEN. This subsample of SOCCSKSARGEN youth aged 15–24 constitutes the study population for this analysis.

Data analysis consists of univariate analysis to show the profile of the youth from SOCCSKSARGEN in terms of basic socio-demographic characteristics, exercise status, consumption of unhealthy food, and self-perception of body weight. Bivariate analysis was used to examine the relationship of each characteristic with the main dependent variables of exercise and food consumption. Lastly, multivariate analysis was performed, namely logistic regression to determine the factors that are predictive of exercise and ordinary least squares (OLS) regression to examine the factors affecting food consumption.

Results

Table 1 presents the socio-demographic profile of the respondents according to sex, age, education, marital status, work status, wealth index, type of residence, smoking status, drinking status, and self-perception of body weight.

Table 1. Profile of young adults in SOCCSKSARGEN

Socio-economic factors	Percent	N of cases
Sex		
Female	50.9	566
Male	49.1	547
Age		
15–19	64.9	722
20–24	35.1	391
Marital status		
Ever been in union	21.4	875
Never been in union	78.6	238
Highest level of schooling		
Elementary and lower	16.2	180
High school undergraduate	45.0	501
High school graduate/vocational college	23.5	262
college	15.3	170
Place of residence		
Rural	82.2	915
Urban	17.8	198
Socio-economic status		
Poorest	36.5	406
Second	23.8	265
Middle	18.6	207
Fourth	13.7	153
Wealthiest	7.4	82
Work status		
Not working	76.3	848
Working	23.7	263
Drinking status		
Drinking	20.7	230
Not drinking	79.3	881
Smoking status		
Smoking	13.7	152
Not smoking	86.3	959
Perception of body weight		
Skinny/thin	23.5	259
Just right	67.3	742
Chubby/fat/obese	9.2	101
Total	100.0	1,113

There are slightly more females (50.9%) than males (49.1%). Those in the younger ages of 15–19 (64.9%) outnumber those in the 20–24 (35.1%) age bracket. Those who have never been in a marital union (78.6%) are substantially greater than those who have ever been in a union (21.4%). This measure of marital status defines being in a union as inclusive of live-in arrangements. For the highest level of schooling, it can be gleaned that the majority of respondents are high school undergraduates (45.0%), followed by high school graduates or vocational graduates (23.5%). Those with no schooling/pre-school/elementary education constitute 16.2 percent, while those with college education make up 15.3 percent. About three in four SOCCSKSARGEN youth are not working, mainly because many youth are still in school. The majority of the population (82.2%) reside in rural areas.

The socio-economic status (SES) is derived by pooling all the respondents at the national level to arrive at a classification for SES that will show the comparative distribution of SES by regions. The SES divides the total sample into quintiles ranked from poorest to wealthiest based on information derived from the household characteristics. Applying the SES ranking based on the total sample, Table 1 shows that in SOCCSKSARGEN, about a third belong to the poorest quintile (36.5%), while only 7.4 percent belong to the wealthiest quintile.

In terms of the non-sexual risk behaviors of smoking and drinking, only 13.7 percent reported themselves to be currently smoking, while 20.7 percent are currently drinking. The majority of SOCCSKSARGEN youth perceived their body weight to be just right (67.3%), 23.5 percent said they are either thin or skinny, and 9.2 percent reported themselves to be chubby/fat/obese.

Physical exercise

The first of the two main dependent variables is physical exercise. To measure exercise, we classified respondents into those who said they do physical exercise at least two times per week and those who exercise less often than that or never exercise. The decision to classify the respondents in this manner with a twice-a-week frequency as the cut point is based on studies that demonstrate this frequency of exercise as showing beneficial effects.

Table 2 presents the percentage distribution of youth from Region XII who exercise at least twice a week by the background characteristics of sex, age, marital status, highest level of schooling, place of residence, socio-economic status, work status, drinking status, smoking status, and perception of body weight. Out of 1,109 respondents, 42.2 percent said they exercise at least twice a week.

Table 2. Percentage distribution of SOCCSKSARGEN youth who exercise at least twice a week by background characteristics

Socio-economic factors	Percent	N of cases
Sex		
Female	24.0	563
Male	60.8	546
Age		
15–19	43.5	719
20–24	39.5	390
Marital status		
Ever been in union	45.8	873
Never been in union	28.4	236
Highest level of schooling		
Elementary or lower	44.4	180
High school undergraduate	42.4	498
High school graduate/vocational	44.4	261
College	35.3	170
Place of residence		
Rural	41.5	911
Urban	44.9	198
Socio-economic status		
Poorest	39.6	404
Second	44.9	265
Middle	43.4	205
Fourth	40.5	153
Wealthiest	45.1	82
Work status		
Not working	40.5	844
Working	47.5	263
Drinking status		
Drinking	56.5	230
Not drinking	38.4	878
Smoking status		
Smoking	58.6	152
Not smoking	39.5	956
Perception of body weight		
Skinny/thin	37.5	259
Just right	44.1	741
Chubby/fat/obese	40.0	100
Total	42.2	1,109

Table 2 shows a marked gender difference in physical exercise, with 60.8 percent of males reporting exercising at least twice a week compared with only 24 percent of females. As for age, a slightly higher percentage of the younger youth exercise twice a week (43.5%) compared with the older youth (39.5%).

A greater portion of the respondents who have ever been in a union exercise (45.8%) compared with those who have never been in a union (28.4%). By educational attainment, there is no clear pattern of difference, as the proportions are about equal among education levels, except for the college educated who had the lowest percentage who exercise at least twice a week (35.3%). There is no significant difference by residence (41.5% in rural vs. 44.9% in urban areas) and by SES in the percentage who exercise, except for the poorest quintile, which had the lowest proportion who exercise twice a week (39.6%).

Since exercising regularly is considered a positive health behavior, it comes as a bit of a surprise to find that a much higher percentage of those who currently drink exercise at least twice a week (56.5%) compared with those who do not currently drink (38.4%). Similarly, a higher proportion of those who currently smoke also exercise (58.6%) compared with those who do not currently smoke (39.5%).

As for self-perception of body weight, the highest percentage who exercise are those who perceive their weight to be just right (44.1%), followed by those who perceive themselves to be chubby/fat/obese (40.0%). Among those who perceive themselves to be skinny/thin, only 37.5 percent exercise at least twice a week.

Table 3 presents the results of the logistic regression analysis where we examined the combined effects of the background characteristics, the non-sexual risk behaviors, and the self-perception of body weight on the odds of exercising twice a week.

Results show that only sex and perception of body weight significantly predicted the odds of engaging in physical exercise at least twice a week. Males are five times more likely than females to exercise. Those who perceive their body weight as just right are 1.5 times more likely to exercise, while who perceive themselves to be chubby/fat/obese are 1.94 times more likely to exercise than those who perceive themselves as thin/skinny. All the other examined factors did not have a significant effect on the odds of exercising when all the predictors were taken into account simultaneously.

Table 3. Logistic regression analysis of the physical activity (exercise at least twice a week) of young adults in SOCCSKSARGEN

Characteristics	B	SE	Odds ratio	p
Male	1.645	0.159	5.183	.000
15–19	-0.090	0.173	0.914	ns
Ever been in union	-0.291	0.200	0.748	ns
Highest level of schooling				
High school undergraduate	-0.012	0.204	0.988	ns
High school graduate	0.292	0.231	1.339	ns
College or higher	-0.239	0.268	0.787	ns
Urban	0.068	0.177	1.070	ns
Socio-economic status				
Second	0.036	0.181	1.036	ns
Third	-0.055	0.205	1.056	ns
Fourth	-0.152	0.226	0.859	ns
Wealthiest	0.107	0.286	1.113	ns
Currently working	-0.278	0.174	0.757	ns
Currently smoking	-0.071	0.217	0.931	ns
Currently drinking	0.196	0.187	1.217	ns
Perception of body weight				
Just right	0.405	0.163	1.499	.013
Chubby/fat/obese	0.661	0.270	1.938	.014
Constant	-1.431	0.253	0.239	.000

Note. ns = not significant.

Food consumption

Similar to the data on physical exercise, food consumption is also a new feature of YAFS4. Respondents were asked how frequently in a week they consume food and drinks from a given list. The food and drinks in the list were specifically chosen to represent those that are high in fat, sugar, or salt content and are considered unhealthy in their effects when consumed often. In the study of the consumption of unhealthy food among SOCCSKSARGEN youth, we selected only a number of food and drinks from the full list used in the YAFS4 questionnaire. Specifically, we selected the food and drinks that may be considered widely available to all youth in the region and eliminated food that are available only in urban areas (e.g., burgers and fries) as well as foods that may not be available in all barangays (e.g., fried or grilled street food). The final list of food and drinks included in the analysis consists of instant noodles, chips,

carbonated (soft) drinks, bottled sweet drinks, and energy drinks. Each item was scored based on the frequency with which it is consumed in a week: 1 for *never*, 2 for *less than once a week*, 3 for *once a week*, and 4 for *two to seven times a week*. The total food consumption score was obtained by summing the scores for the five items. The total possible score can range from 5 to 20. The higher the food consumption score, the more frequent the consumption of unhealthy food and drinks.

Table 4 presents the mean food consumption score across the background characteristics. The mean food consumption score for all SOCCSKSARGEN youth is 12.27 out of a possible highest total score of 20. The comparison of mean food consumption scores by each background characteristic shows the following results.

Table 4. Mean food consumption scores among SOCCSKSARGEN youth by background characteristics

Socio-economic factors	Mean	N of cases
Sex***		
Female	11.66	556
Male	12.87	543
Age		
15–19	12.31	712
20–24	12.16	387
Marital status***		
Ever been in union	11.42	234
Never been in union	12.48	865
Highest level of schooling***		
Elementary or lower	11.48	179
High school undergraduate	12.23	493
High school graduate/vocational	12.60	257
College	12.64	170
Place of residence***		
Rural	12.09	903
Urban	13.02	196
Socio-economic status***		
Poorest	11.16	400
Second	12.36	263
Middle	12.95	205
Fourth	13.54	151
Wealthiest	13.25	80
Work status**		
Not working	12.10	836
Working	12.81	261
Drinking status***		
Currently drinking	13.47	228
Not currently drinking	11.94	870

** $p < .01$. *** $p < .001$.

Table 4. Mean food consumption scores among SOCCSKSARGEN youth by background characteristics (con't)

Socio-economic factors	Mean	N of cases
Smoking status***		
Currently smoking	13.61	150
Not currently smoking	12.04	948
Perception of body weight		
Skinny/thin	12.18	255
Just right	12.23	735
Chubby/fat/obese	12.80	100
Frequency of exercise***		
At least twice a week	12.61	462
Occasionally	12.63	168
Does not exercise	11.79	467
Total	12.27	1,098

** $p < .01$. *** $p < .001$.

Males have a significantly higher food consumption score than females, which means males consume more unhealthy food and drinks compared with their female counterparts. By age, the mean scores of those aged 15–19 and 20–24 do not differ significantly. Those who have never been in a union, urban residents, and the currently working have significantly higher food consumption scores than their respective counterparts. The food score increases monotonically as education level and socio-economic status rise. Again, a higher food consumption score indicates more frequent consumption of unhealthy food and drinks.

Those who currently drink and those who currently smoke have significantly higher food consumption scores than those who do not currently engage in these risk behaviors. Those who perceive themselves to be chubby/fat/obese have the highest food consumption score, followed by those who perceive their body weight to be just right. Youth who perceive themselves as skinny/thin have the lowest food consumption score. The difference in mean scores by self-perceived weight is statistically significant.

To link food consumption with physical exercise, we compared the mean food consumption scores across exercise categories. Results show that those who never exercise have a significantly lower food consumption score than those who exercise at least twice a week or only occasionally.

In Table 5, we present the results of the OLS regression analysis to predict the total food consumption score using the same predictors as in the regression analysis of exercise. Again,

gender emerged as a significant predictor but this time in a negative way. While being male increases the odds of engaging in physical exercise, a positive health behavior, being male significantly increases one's food consumption score by 0.582 points. Being a high school undergraduate or high school graduate also significantly increases one's food consumption score, as does being a resident of an urban area. As to SES, the regression results indicate that each increase in SES level results in a significant increase in the food consumption score. Region XII youth who belong to the fourth quintile have the highest predicted addition to their food consumption score at 1.972 points. Currently drinking and currently smoking also significantly add to the food consumption score. Finally, a self-perceived weight of chubby/fat/obese also significantly increases the food consumption score by 0.782 points.

Table 5. Ordinary least squares regression model for the factors affecting food consumption scores of young adults in SOCCSKSARGEN

Factors	Beta	SE	p
(Constant)	10.070	.331	.000
Male	.582	.223	.009
15–19	-.334	.230	ns
Ever been in union	-.145	.260	ns
Highest level of schooling			
High school undergraduate	.581	.274	.034
High school graduate	.816	.310	.009
College	.444	.352	ns
Urban	.514	.237	.030
Socio-economic status			
Second quintile	.940	.243	.000
Third quintile	1.407	.272	.000
Fourth quintile	1.972	.303	.000
Fifth quintile	1.637	.383	.000
Not working	.349	.234	ns
Currently smoking	.749	.306	.015
Currently drinking	.748	.257	.004
Perception of body weight			
Just right	.133	.215	ns
Chubby/fat/obese	.782	.357	.029
Exercise at least twice a week	.174	.196	ns

Note. ns = not significant.

Applying the beta coefficients derived in the OLS regression to a hypothetical case of a SOCCSKSARGEN youth who possesses all the qualities that are found to significantly predict the food consumption score, we predict that a male high school graduate who belongs to the fourth quintile in SES, who currently drinks and smokes, and who perceives himself to be chubby/fat or obese will have a food consumption score of 15.8 points out of a total possible highest score of 20. This composite picture is the profile of a young person in Region XII with the most unhealthy food consumption pattern based on the food and drinks in the list we analyzed.

Summary and recommendations

In general, regular physical exercise of a frequency that can have beneficial effects, which in this study is defined as twice a week or more, is not highly prevalent among youth in Region XII, as only four in ten reported exercising at this frequency. This healthful activity is found to be much more likely to be done by males than females and by those who perceive themselves to be chubby, fat, or obese. Only these two factors of the many that were explored in the study significantly predicted the odds of engaging in physical exercise at least twice a week.

For this study, we constructed an index of consumption frequency of unhealthy food and drinks, with 20 as the score indicating the highest frequency of consumption of unhealthy food and drinks and thus the unhealthiest diet. In this index, the total mean score of SOCCSKSARGEN youth is 12.3. The factors that significantly increase the food consumption score are being male, being a high school graduate or undergraduate, belonging to a socio-economic quintile higher than the first quintile (the poorest), currently smoking and drinking, and a self-perception of being chubby, fat, or obese. Relating these two findings together, we conclude that there is no apparent synergistic link between exercising and consuming the right food and drink, because males and chubby youth are more likely to exercise but also have more unhealthy food consumption habits.

A healthy diet and regular exercise are two of the most common health promotion messages that are currently being advocated as preventive measures for lifestyle diseases such as diabetes, heart disease, and some cancers, all of which are on the rise in many countries including the Philippines. The promotion of acquiring the habit of regular physical exercise and mindfulness about healthy eating habits are two campaigns that can be adopted by the regional Commission on Population (POPCOM) offices as part of their health promotion campaigns targeting the youth. The promotion of positive behaviors will be a welcome addition to POPCOM's current programs that tend to be heavy on negative behaviors such as teen pregnancy and the non-sexual risk behaviors of smoking, drinking, and drug use.

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