Socioeconomic, psychosocial, behavioural, and psychological determinants of BMI among young women: differing patterns for underweight and overweight/obesity

Sadiq Mohammad Ali, Martin Lindström*

**Objectives:** Underweight, overweight, and obese women aged 18–34 years were compared with normal weight women of the corresponding age according to socioeconomic, psychosocial, health behaviour, self reported global and psychological health, and locus of control characteristics. **Methods:** The 2000 public health survey in Scania is a cross-sectional study. A total 13 715 persons aged 18–80 years, of which 1967 were females of 18–34 years of age, were included in this study. They answered a postal questionnaire, which represents 59% of the random sample. A logistic regression model adjusted for age was used to investigate the association between socioeconomic, psychosocial, health behaviour, self reported global and psychological health, locus of control, and the BMI categories. **Results:** A 17.5% proportion of the women, aged 18–34 years, were underweight (BMI < 20.0), 18.4% were overweight, and 7.0% obese. The prevalence of underweight according to the BMI < 18.5 definition was 5.8% among women aged 18–34 years. Women who were underweight had significantly higher odds ratios for overtime work, being students, low emotional support, and poor self reported global as well as poor psychological health than normal weight women. Women who were overweight/obese were unemployed, had low education, low social participation, low emotional and instrumental support, were daily smokers, had a sedentary lifestyle, had poor self reported global health, and had lack of internal locus of control compared with normal weight women. **Conclusions:** Underweight women are more likely to have poorer psychological health than normal weight women. In contrast, overweight and obese women are more likely to have poor health related behaviours and lack of internal locus of control compared with normal weight women. These differing patterns suggest both different etiology and different preventive strategies to deal with the health risks of people who are underweight as opposed to those who are overweight/obese.

**Keywords:** health related behaviour, locus of control, obesity, psychological health, socioeconomic, underweight

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Obesity is a growing health problem in many countries.1–10 In Sweden an increase in the obesity prevalence was observed during the 1980s and 1990s in all socioeconomic groups.11,12 Obesity is a risk factor for hypertension,13,14 cardiovascular diseases,15–17 diabetes,18–19 and total mortality.16 Obesity (BMI 30.0 or more) and overweight (BMI 25.0–29.9) are positively associated with increasing age, low levels of leisure time physical activity,20 and in some groups differing dietary habits.21 In Sweden obesity and overweight are associated with lower levels of education and lower socioeconomic status.12,22

A much less investigated but also less prevalent health problem in modern Western countries like Sweden is underweight. There are varying definitions of underweight according to BMI. Although BMI probably would have to be ≤17 before physical activity is affected23 and although the recommended cut-off levels between underweight and normal weight have long revolved around BMI (18.5–19.0),24 underweight is sometimes defined with an underweight/normal weight cut-off of ~20.0–21.0, at least in relation to psychological problems and psychosocial conditions related to underweight and self perception of body and body weight.25 The somewhat higher cut-off point for underweight according to BMI is well motivated, considering the fact that the underweight problem in developed countries is not most importantly a matter of lack of nutrients, energy, or food, but rather a matter of psychosocial and psychological characteristics attributable both to the individual and the social context of the individual. Psychosocial and psychological factors, such as self esteem and sense of purpose,26 body image and body image distortion,27,28 and emotional status,29 seem to be associated with underweight among young women in the industrialised world. Anorexia nervosa and bulimia may be considered as the most severe and ultimate causes of underweight among young women. The prevalences of anorexia nervosa (1%) and bulimia (1%) among young women may be considered limited, but studies have suggested that another 5% of young female adolescents show some features of anorexia nervosa.29 To our knowledge, the extent of the underweight problem and its association with socioeconomic, employment/unemployment, social capital, psychosocial, health behaviour, general health, and psychological factors in a general population of young women has not been studied previously in Sweden. This is also the rationale for including a variety of socioeconomic, social capital (trust and social participation), social support (emotional and instrumental support), health related behaviour, self reported health, self reported psychological health, and locus of control variables in this study.

**Aim**

To compare underweight, overweight and obese women, all aged 18–34 years, with normal weight women of the corresponding age according to socioeconomic, psychosocial, health
behaviour, self reported global and psychological health, and locus of control characteristics.

Methods

Study population

The 2000 public health survey in Scania is a cross-sectional study. A total of 24,922 randomly selected persons born between 1919 and 1981 answered a postal questionnaire over the period November 1999 to February 2000. Two reminder letters were also sent to the respondents. A total of 13,715 persons answered the questionnaire. This represents 59% of the net selection of respondents, but 111 persons lacked information on sex and/or age. In this study, 1967 females, aged 18–34 years, were investigated.

Definitions

Dependent variables

Underweight was defined as BMI < 20.0, normal weight as BMI 20.0–24.9, overweight as BMI 25.0–29.9, and obesity as BMI ≥ 30.0. The BMI of the respondents was computed from the self-reported estimations of weight (kg) and height (m) in the questionnaire. The prevalence of underweight according to the physiological definition (BMI < 18.5) is shown in table 1 in order to make the data presentation complete.

Independent variables

Active workforce was defined as the part of the young female population that belongs to the currently employed (as employees) or self employed category as opposed to being a housewife/homemaker, pensioner, student, or unemployed. A fraction of the active workforce population work overtime. A fraction of the unemployed had been unemployed for more than a year.

Education was divided by its time duration into ≤9 years of education and ≥10 years of education.

Country of origin: All participants born in countries other than Sweden were merged into a single category which was compared with the category comprising participants born in Sweden.

Social participation (during the past year) describes how actively the person takes part in the activities of formal and informal groups in the society. Respondents were asked whether in the previous 12 months they had been involved in any of the following activities: study circle/course at workplace, other study circle/course, union meeting, meeting of other organisations, theatre/cinema, art exhibitions, church, sports event, letter to the editor of a newspaper/journal, demonstration, night club/entertainment, large gathering of relatives, and private party. It was measured as an index consisting of 13 items and dichotomised. If three alternatives or less were indicated, the social participation of that individual was classified as low. The social participation index variable in this study has been used to measure social participation in Sweden since the 1960s and the 1970s, and is a valid and reliable measure.

Generalised trust in other people is a self-reported variable that reflects the person’s perception of generalised trust in other people. It was assessed by the item ‘Generally, You can trust other people’ that contained four alternatives: ‘Do not agree at all’, ‘Do not agree’, ‘Agree’, and ‘Completely agree’. It was dichotomised with the first two alternatives as low trust and the latter two alternatives as high trust.

Emotional support reflects the opportunity for care, trust and confidence, and emotional contact. This item had four alternatives: ‘Yes, I am absolutely sure to get support’, ‘Yes, possibly’, ‘Not certain’, and ‘No’. The latter three alternatives were classified as low emotional support.

Instrumental support reflects the individual’s access to guidance, advice, information, practical services, and material resources from other persons. This item was measured by a four-alternative question: ‘Yes, I am absolutely sure to get such support’, ‘Yes, possibly’, ‘Not certain’, and ‘No’. The latter three alternatives were classified as low instrumental support.

The emotional and instrumental support items measure social support in private life.

The smoking item in this questionnaire contains four alternatives: never smoked, stopped smoking, daily smoker, and intermittent (non-daily) smoker. The association between daily smoking and obesity/overweight/underweight and between intermittent smoking, and obesity/overweight/underweight were investigated in this study.

High alcohol consumption was defined as a consumption of >100 g of 100% alcohol per week among women.

Low leisure time physical activity was assessed by four alternative questions. The first alternative entails a completely sedentary leisure time physical activity status. The second alternative involves at least 4 h of light leisure time physical activity (walking, bicycling etc.) a week. The third alternative involves regular physical exercise and training, and the fourth alternative involves hard and regular training at the elite level. In this study, leisure time physical activity was dichotomised into active (the latter three alternatives) and sedentary (the first alternative).

Self-reported global health was assessed by an item consisting of seven alternatives. The first alternative entails a completely bad health (‘bad, couldn’t be worse’). The second alternative is a straightforward ‘bad’, and the third ‘somewhat bad’. The fourth alternative is neutral, followed by ‘somewhat good’, ‘good’, and ‘good, couldn’t be better’. In this study, self-reported health is dichotomised into bad (the first three alternatives) and good (the latter four, remaining alternatives).

Self-reported psychological health (GHQ12) includes 12 items reflecting different aspects of psychological health. The items included in the GHQ12 are ‘Have you been able to concentrate on what you have been doing during the past weeks?’, ‘Have you had problems with your sleep during the past weeks?’, ‘Do you feel that you have been useful during the past weeks?’, ‘Have you been able to make decisions in different areas during the past weeks?’, ‘Have you felt tense during the past weeks?’, ‘Have you during the past weeks been able to appreciate what you have been doing during the days?’, ‘Have you been able to deal with your problems during the past weeks?’, ‘Generally speaking, have you felt happy during the past weeks?’. These eight items had four alternative answers: ‘More/better than usual’, ‘As usual’, ‘Less than usual’, and ‘Much less than usual’. The items were dichotomised with two alternatives denoting ‘good’ psychological health and two alternatives denoting ‘bad’ psychological health. The other four items had somewhat different alternative questions: ‘Have you felt unable

Table 1 Prevalences (%) of physiological underweight (BMI < 18.5) among men and women according to age

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<thead>
<tr>
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<th>Men</th>
<th>Women</th>
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<tbody>
<tr>
<td>18–34 years</td>
<td>1.6</td>
<td>5.8</td>
</tr>
<tr>
<td>35–44 years</td>
<td>0.2</td>
<td>2.0</td>
</tr>
<tr>
<td>45–54 years</td>
<td>0.6</td>
<td>1.8</td>
</tr>
<tr>
<td>55–64 years</td>
<td>0.4</td>
<td>1.7</td>
</tr>
<tr>
<td>65–80 years</td>
<td>1.0</td>
<td>2.7</td>
</tr>
<tr>
<td>Missing</td>
<td>163</td>
<td>290</td>
</tr>
</tbody>
</table>

N = 13,604. The public health survey in Scania 2000
to deal with your own personal problems during the past weeks?’, ‘Have you felt unhappy and depressed during the past weeks?’, ‘Have you lost faith in your self during the past weeks?’ and ‘Have you felt worthless during the past weeks?’. The four alternative answers to these four items were: ‘Not at all’, ‘No more than usually’, ‘More than usually’ and ‘Much more than usually’. The answers to these items were also dichotomised to denote either ‘bad’ psychological health or ‘good’ psychological health. If 3 or more of all the 12 items denoted ‘bad’ psychological health, the general psychological health (GHQ12) was denoted as ‘bad’. This method for the measurement of psychological health is the shortest (other GHQ measures contain for instance 28 or 60 items) but still a very robust measure of psychological health.32

Internal locus of control was assessed with the item ‘Do you believe that you can do anything yourself in order to preserve good health?’. The alternatives ‘Yes, to a very high extent’, ‘Yes, to some extent’, and ‘No, it is not possible to influence your own health’ were dichotomised with the first alternative depicting high belief in the possibility to influence health and the other two alternatives depicting lack of belief in the possibility to influence health to at least some extent.

The only age group investigated in this study was the female 18–34 year age group, because this group has a high prevalence of overweight. In table 4 the odds ratios (ORs) are still adjusted for age by dividing the female 18–34 year population into birth cohorts according to each separate year of birth.

Statistics

Table 2 shows that the prevalence of physiological underweight (BMI < 18.5) is 1.6% among men and 5.8% among women aged 18–34 years. The prevalences of underweight are lower in all other age groups.

Results

Table 1 shows that the prevalence of physiological underweight (BMI < 18.5) is 1.6% among men and 5.8% among women aged 18–34 years. The prevalences of underweight are lower in all other age groups.

Table 2 shows that the prevalence of underweight (BMI < 20.0) decreases with age among both men and women. Underweight is also much more prevalent among women compared with men. The respondents who were underweight constitute 17.5% of the female population, aged 18–34 years, as opposed to only 5.9% of the male population in the corresponding age group. In contrast, the prevalences of overweight and obesity increase with increasing age among both men and women. In the age group 18–34 years, 18.4 and 7.0% of the women are overweight and obese, respectively. Due to the high prevalence of overweight among women aged 18–34 years, this group was solely investigated in the subsequent statistical analyses.

Table 3 shows the prevalences of the socio-economic, social capital, psychosocial, health related behaviour, self reported global and psychological health, and locus of control variables in each of the normal weight, underweight, overweight, and obesity groups.
support, being daily smokers, having low leisure time physical activity, bad self reported global health, and having lack of internal locus of control are higher in the obese group compared with the normal weight group.

Conclusion

This study of young women in southern Sweden shows that the underweight (BMI < 20.0) group work overtime, are students, have low emotional support, low self reported global health, and low self reported psychological health to a higher extent than the normal weight group. The obese and overweight groups were also significantly more likely than the normal weight group to have low emotional support and low self reported global health. However, in contrast to the underweight group, the obese and overweight groups also were significantly more likely than the normal weight group to be unemployed; to be daily smokers; have low education, low social participation, low instrumental support, low leisure time physical activity, and have lack of internal locus of control. The obese also had a significantly increased risk of having been unemployed for more than a year than the normal weight group. In fact, there seems to be two important differences between the underweight as opposed to the obesity/overweight groups compared with the normal weight group. First, the obesity/overweight groups are characterised by higher risks of low education and being unemployed, which is not the case with the underweight group. Instead, the underweight are students and work overtime to a statistically higher extent than the normal weight group. Second, the obesity/overweight groups are characterised by higher risks of having lack of internal locus of control leading to less benevolent health related behaviours, such as daily smoking and low levels of leisure time physical activity, which is not observed for the underweight group. The underweight group seems to have a higher risk of having poor self reported psychological health.

The findings of a higher risk of lack of internal locus of control in the obesity/overweight groups but a higher risk of poor psychological health in the underweight group are interesting. Health related behaviours, such as smoking, alcohol consumption, leisure time physical activity and participation in screening programmes, are influenced by the health locus of control,44-38 health locus of control being defined as the individual’s beliefs in the possibility to influence one’s own health by adjusting various aspects of his/her own individual behaviour. Respondents with internal locus of control, who believed that behaviour is important, were shown by Mildred Blaxter to be more likely to have ‘healthy lifestyles’, although this depended on the type of behaviour being considered. Diet and leisure time physical activity, the two health related behaviours most closely related with obesity and overweight, were more clearly associated with strong beliefs in the possibility to influence one’s own health.44 In contrast, the underweight group seem to have psychological problems measured using the GHQ12, not present in the obesity/overweight groups, to a significantly higher extent than the normal weight group without any increased risk of either lack of internal locus of control or unhealthy health related behaviours. The obesity/overweight groups as opposed to the underweight group thus represent two differing patterns of psychological traits and consequent behaviours, a fact which may also point to two different strategies when it comes to prevention. The basic problem of a relatively large proportion of the respondents within the obese and overweight groups seems to be a psychological lack of belief in the possibility to influence one’s own health, and possibly also a lack of belief in the possibility to influence politics (although not studied in this study), social networks and social participation. The health

| Table 3 | Prevalence (%) of socioeconomic, social capital, psychosocial, health related behaviours, self reported health, self reported psychological health and locus of control among women aged 18–34 years |
|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Active workforce        | BMI 20.0–24.9 (%)       | BMI <20.0 (%)           | BMI 25.0–29.9 (%)       | BMI >30.0 (%)           | Missing (N)             |
|                         | 60.9                    | 48.0                    | 59.3                    | 56.6                    | 108                     |
| Often work overtime     | 26.7                    | 39.7                    | 24.0                    | 16.2                    | 144                     |
| Unemployed              | 5.8                     | 7.3                     | 9.8                     | 18.6                    | 109                     |
| Unemployed for more than a year | 1.8             | 1.9                     | 1.8                     | 6.2                     | 109                     |
| Students                | 26.7                    | 39.0                    | 21.6                    | 15.5                    | 111                     |
| Education—9 years or less | 5.1               | 6.1                     | 9.7                     | 14.5                    | 105                     |
| Born in other country than Sweden | 12.1               | 14.2                    | 13.9                    | 8.3                     | 77                      |
| Low social participation | 17.4                    | 21.2                    | 29.8                    | 24.2                    | 75                      |
| Low trust               | 49.5                    | 52.8                    | 52.2                    | 56.4                    | 83                      |
| Low emotional support   | 21.4                    | 28.5                    | 30.7                    | 31.1                    | 78                      |
| Low instrumental support| 14.3                    | 16.9                    | 22.2                    | 25.8                    | 79                      |
| Daily smoking           | 14.5                    | 16.7                    | 23.6                    | 31.6                    | 81                      |
| Intermittent, non-daily smoking | 7.9               | 10.5                    | 7.5                     | 3.8                     | 81                      |
| High alcohol consumption | 7.2                     | 6.7                     | 13.2                    | 1.6                     | 77                      |
| Low leisure-time physical activity | 11.8             | 15.3                    | 17.3                    | 26.5                    | 97                      |
| Low self reported global health | 9.5                  | 15.4                    | 16.3                    | 17.2                    | 121                     |
| Low self reported psychological health | 26.2             | 36.4                    | 31.7                    | 31.0                    | 115                     |
| External locus of control | 18.5                | 20.4                    | 29.3                    | 29.3                    | 67                      |

Table 4 Prevalences (%), OR, and 95% CI for socioeconomic, social capital, psychosocial, health related behaviour, self reported health, self reported psychological health, and locus of control characteristics among women aged 18–34 years, who are underweight, overweight, and obese, compared with normal weight women

<table>
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<tr>
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<th>Active workforce</th>
<th>Often work overtime</th>
<th>Unemployed</th>
<th>Unemployed more than a year</th>
<th>Students</th>
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<tbody>
<tr>
<td>BMI 20.0–24.9 and above</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>BMI &lt; 20.0</td>
<td>0.73 (0.56–0.953)</td>
<td>1.88 (1.08–3.26)</td>
<td>1.23 (0.75–2.01)</td>
<td>1.20 (0.47–3.06)</td>
<td>1.30 (1.00–1.70)</td>
</tr>
<tr>
<td>BMI 25.0–29.9</td>
<td>0.80 (0.62–1.05)</td>
<td>0.82 (0.99–1.39)</td>
<td>1.84 (1.18–1.86)</td>
<td>0.95 (0.38–2.40)</td>
<td>0.94 (0.68–1.29)</td>
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<tr>
<td>BMI &gt; 30.0 and above</td>
<td>0.71 (0.48–1.04)</td>
<td>0.59 (0.24–1.43)</td>
<td>3.78 (2.26–6.32)</td>
<td>3.19 (1.34–7.60)</td>
<td>0.61 (0.36–1.03)</td>
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<th>Education 9 years or less</th>
<th>Born in other country than Sweden</th>
<th>Low social participation</th>
<th>Low trust</th>
<th>Low emotional support</th>
<th>Low leisure-time physical activity</th>
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<tr>
<td>BMI 20.0–24.9 and above</td>
<td>1.00</td>
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<tr>
<td>BMI &lt; 20.0</td>
<td>1.00 (0.76–1.32)</td>
<td>1.23 (0.86–1.77)</td>
<td>1.30 (0.95–1.77)</td>
<td>1.02 (0.79–1.31)</td>
<td>1.43 (1.08–1.89)</td>
<td>1.66 (1.12–2.47)</td>
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<tr>
<td>BMI 25.0–29.9</td>
<td>1.80 (1.36–2.39)</td>
<td>1.10 (0.77–1.58)</td>
<td>2.01 (1.51–2.66)</td>
<td>1.16 (0.91–1.48)</td>
<td>1.63 (1.24–2.14)</td>
<td>1.67 (1.13–2.22)</td>
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<tr>
<td>BMI &gt; 30.0 and above</td>
<td>2.93 (1.82–4.71)</td>
<td>0.66 (0.35–1.24)</td>
<td>1.52 (0.99–2.34)</td>
<td>1.39 (0.96–2.01)</td>
<td>1.66 (1.12–2.47)</td>
<td>1.66 (1.13–2.22)</td>
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<tr>
<th></th>
<th>Low instrumental support</th>
<th>Daily smoking</th>
<th>Intermittent, non-daily smoking</th>
<th>High alcohol consumption</th>
<th>Low self reported global health</th>
<th>Low self reported psychological health</th>
<th>External locus of control</th>
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<tr>
<td>BMI 20.0–24.9 and above</td>
<td>1.00</td>
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<tr>
<td>BMI &lt; 20.0</td>
<td>1.21 (0.87–1.70)</td>
<td>1.22 (0.87–1.72)</td>
<td>1.22 (0.80–1.86)</td>
<td>0.65 (0.36–1.18)</td>
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<tr>
<td>BMI 25.0–29.9</td>
<td>1.71 (1.26–2.33)</td>
<td>1.86 (1.38–2.52)</td>
<td>0.99 (0.62–1.57)</td>
<td>0.89 (0.49–1.62)</td>
<td>1.58 (1.13–2.22)</td>
<td>1.58 (1.13–2.22)</td>
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<tr>
<td>BMI &gt; 30.0 and above</td>
<td>2.07 (1.35–3.17)</td>
<td>2.66 (1.77–3.98)</td>
<td>0.53 (0.22–1.30)</td>
<td>0.26 (0.06–1.22)</td>
<td>2.69 (1.57–4.13)</td>
<td>2.69 (1.57–4.13)</td>
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policy and preventive strategy in the case of these groups would be a strategy of ‘empowerment’, i.e. a strategy of mobilising and empowering these groups into different forms of social networks, social participation, civic participation, and social justice. Employment status in order to also increase their internal locus of control, i.e. their sense of being able to master their own lives and their own behaviours. The preventive strategy for the underweight group would be to deal with a distorted body image (although with internal locus of control) and to identify young individuals at risk at the individual psychological level, and also to deal with the body norms mediated by the mass media in a highly commercialised postmodern society.

Strength and limitations

The participation rate was 59%, which is acceptable. The study population showed similar prevalences of age, sex, and educational level as the general population of Scania when comparisons with general register data were conducted. The exception is the part of the population born in countries other than Sweden, which is underrepresented by ~3% units in this study. There are thus no strong reasons to believe that this study is subject to any serious selection bias.

Self reported height and weight may introduce misclassification problems as weight may be underestimated by those who are overweight and overestimated by those who are underweight. Respondents also tend to overestimate their height.59 This misclassification would result in an underestimation of the obesity and overweight prevalence in our study. The probable overestimation of weight in the underweight group would result in an underestimation of the prevalence of overweight. The prevalence of overweight of 17.5% among young women in our study is thus certainly not underestimated. Furthermore, the inclination to overreport weight in the underweight group is probably higher among underweight women with poor psychological health. The prevalences and trends in overweight/obesity and underweight are very similar to those found in the National Public Health Report (2005), which is based on the survey of living conditions, with an 80–85% participation rate.46 This probably results in an underestimation of the extent to which the underweight group have poor psychological health. In this study the respondents were not informed about the objective of studying underweight and overweight, a fact which might have limited the misclassification bias.

Confounding was controlled for by adjusting for age, and stratifying for sex.

This study is a cross-sectional study, which means that we cannot draw definitive conclusions concerning the direction of causality. However, the literature on psychological problems and underweight suggests that the direction of causality is from poor psychological health to underweight in this young group of women in Sweden (see above). Furthermore, there is also a good basis in the literature for the conclusion that the lack of internal locus of control results in poor health related behaviours and, in the next step in the chain of causality, overweight, and obesity (see above).

This study has only included young women aged 18–34 years. One reason is the high prevalence of the underweight phenomenon in this group. The second reason is that the lower prevalence of underweight in combination with increasing risks of underweight being caused by cancer and chronic diseases in the higher age groups make these age groups much more difficult to be investigated using items assessed by a public health postal questionnaire.

Underweight women are statistically more likely to have poor psychological health than normal weight women. In contrast, overweight and obese women have higher risk of poor health related behaviours and lack of internal locus of control compared with normal weight women. These differing patterns suggest both different etiology and different preventive strategies to deal with the health risks of underweight as opposed to overweight/obesity.

Acknowledgements

This study was supported by grants from the ALF Government Grant Dnr MB 1003/2004.

Key points

- Underweight and overweight/obese women aged 18–34 years are compared with normal weight women regarding social, psychosocial, behavioural, psychological, and health characteristics.
- The prevalence of underweight is 17.5%, overweight 18.4%, and obesity 7.0% among women aged 18–34 years in southern Sweden.
- Underweight women are students, work overtime, have low emotional support, and poor global and psychological health significantly more than normal weight women.
- The overweight/obese are unemployed, lack internal locus of control, have lower education, poorer psychosocial conditions, health behaviours, and global health.
- The preventive strategy suggested is to identify individual level psychological risk, and to deal with body norms in the media.

References

2 Zhang Q, Wang Y. Trends in prevalence and overweight prevalence in our study. The probable overestimation of weight in the underweight group would result in an underestimation of the prevalence of overweight. The prevalence of overweight of 17.5% among young women in our study is thus certainly not underestimated. Furthermore, the inclination to overreport weight in the underweight group is probably higher among underweight women with poor psychological health. The prevalences and trends in overweight/obesity and underweight are very similar to those found in the National Public Health Report (2005), which is based on the survey of living conditions, with an 80–85% participation rate.46 This probably results in an underestimation of the extent to which the underweight group have poor psychological health. In this study the respondents were not informed about the objective of studying underweight and overweight, a fact which might have limited the misclassification bias.

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Key points

- Underweight and overweight/obese women aged 18–34 years are compared with normal weight women regarding social, psychosocial, behavioural, psychological, and health characteristics.
- The prevalence of underweight is 17.5%, overweight 18.4%, and obesity 7.0% among women aged 18–34 years in southern Sweden.
- Underweight women are students, work overtime, have low emotional support, and poor global and psychological health significantly more than normal weight women.
- The overweight/obese are unemployed, lack internal locus of control, have lower education, poorer psychosocial conditions, health behaviours, and global health.
- The preventive strategy suggested is to identify individual level psychological risk, and to deal with body norms in the media.

References


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