It is well-recognised that obesity is a complex, multifactorial condition which includes both genetic and environmental factors. Although it is controversial, there is evidence that behavioural problems and being overweight are associated. Furthermore, relatively few studies have analysed the role of resilience in this relationship.

**Objective** To analyse the association between behaviour problems (BP) and the overweight condition (OW) among adolescents and to examine the role of resilience and gender.

**Methods** A cross-sectional study of 951 adolescents aged 11–18 years old who live in Monte Gordo district, a mixed rural-urban region in the northeast of Brazil. The overweight condition was defined as BMI/age z-score greater than +1SD (WHO, 2007). Behaviour problems were estimated by Youth Self Report (YSR/11–18). Resilience was measured by the Wagner & Young scale. The 90th percentile was used as the cut-off for behavioural problems and resilience scores below the 25th percentile was considered low resilience. OR was obtained using multiple logistic regression.

**Results** We observed an overweight prevalence of 14.7% and identified behaviour problems in 9.9% of subjects. The association between BP and the overweight condition remained after adjusting for gender, resilience, age, ethnicity and socio-economic level (OR: 2.06; 95% CI 1.23 to 3.46). Low resilience was not significant but following a stratified analysis for gender we observed an association between BP and OW only in females (OR: 2.54; 95% CI 1.41 to 4.55).

**Conclusion** The results demonstrate an association between behaviour disturbance and the overweight condition in female adolescents with no protective effect of resilience. We recommend greater incentives to reduce the stressors to which adolescents are exposed.

**P2-376** FAMILY HISTORY OF DIABETES: THE ROLE OF GRANDPARENTS DATA TO IDENTIFY ADOLESCENTS AT DIABETES RISK

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**Objective** To evaluate the role of grandparents’ history of diabetes on defining family history of diabetes in order to identify adolescents at high risk of diabetes.

**Study design and Setting** We evaluated 1276 population-based adolescents, aged 13-year-old, from Portugal. Data were collected by self-reported questionnaires and a clinical evaluation was performed, including a fasting blood sample.

**Results** The prevalence of impaired fasting glucose (IFG)/diabetes was 4.1% using American Diabetes Association (ADA) criteria and 0.94% using the WHO criteria. Using data only from Parental History, 105 adolescents (8%) were identified as having a positive family history of diabetes, while combining both parental and grandparental history (Total Family History), 468 adolescents was additionally identified as having a positive history, performing a total of 571 adolescents (45%). After adjusting for sex and parents education, the OR for having fasting plasma glucose ≥75th percentile considering only Parental History was 0.91 (95% CI 0.57 to 1.47) and combining data from parents and grandparents the OR was 1.17 (95% CI 0.83 to 1.65). Parental History’s sensitivity to identify IFG/diabetes by the ADA criteria was 2.6%, while total family history’s sensitivity (including grandparents’ data) was 62%.

**Conclusion** Although there’s no significant association between IFG and a positive family history, combining parental with grandparental history (total family history) lead to a 5.5-fold increase in the identification of adolescents with a positive family history. So, on adolescent screening, it seems better to use parental plus grandparental information instead of just relying on parental data.

**P2-374** BEHAVIOUR PROBLEMS AND OVERWEIGHT ADOLESCENTS: THE ROLE OF GENDER AND RESILIENCE

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It is well-recognised that obesity is a complex, multifactorial condition which includes both genetic and environmental factors. Although it is controversial, there is evidence that behavioural problems and being overweight are associated. Furthermore, relatively few studies have analysed the role of resilience in this relationship.

**Objective** To analyse the association between behaviour problems (BP) and the overweight condition (OW) among adolescents and to examine the role of resilience and gender.

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**Results** We observed an overweight prevalence of 14.7% and identified behaviour problems in 9.9% of subjects. The association between BP and the overweight condition remained after adjusting for gender, resilience, age, ethnicity and socio-economic level (OR: 2.06; 95% CI 1.23 to 3.46). Low resilience was not significant but following a stratified analysis for gender we observed an association between BP and OW only in females (OR: 2.54; 95% CI 1.41 to 4.55).

**Conclusion** The results demonstrate an association between behaviour disturbance and the overweight condition in female adolescents with no protective effect of resilience. We recommend greater incentives to reduce the stressors to which adolescents are exposed.