



“Not too fat and not too thin”: A mixed methods analysis of the physical health and well-being of nine-year-olds

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Introduction

- **Health and physical activity of nine-year-olds**
 - Overweight and obesity
- **Qualitative study design and methodology**
- **Children's perspectives on health**
 - Diet
 - Exercise
 - Body image
- **Influences on behaviour and attitudes**
- **Case study**



Qualitative study

- **Design**
 - Concurrent nested
 - Secondary analysis on data archived with IQDA (Williams et al., 2011)
- **Methodology**
 - Semi-structured interviews with 122 nine-year-olds and their parents
- **Data collection methods**
 - Draw-and-Write technique
 - Visual prompts: Children's Body Image Scale (Truby & Paxton, 2002)
 - Essay writing: Letter to the Minister for Children



Sample

- **Quantitative survey of 8,568 nine-year-olds and their families**
 - 65.9% consented to participate in qualitative study
- **Stratified random sampling of 120 families**
 - SES – income terciles
 - Gender – 58 girls (47.5%)
 - Location – 21 counties
 - Rurality – 55% rural
 - Family structure – 70.5% two-parent families
- **122 children, including two pairs of twins**
 - 57 mothers and fathers (47.5%)**
 - 57 mothers only (47.5%)**
 - 4 fathers only (3.3%)**
 - 2 excluded from analysis (1.7%)**



Mixed methods analysis

- **Triangulation**
 - Same question with two methods and compare answers
- **Explanatory analysis**
 - Qual analysis based on patterns in quant results
- **Narrative**
 - Participants' experience
- **Case study**
- **Hypothesis generation**



Risk factors for obesity

- **Patterns of eating behaviour in childhood can persist into adulthood**
- **Family environment**
 - Food availability (Hearn et al., 1998)
 - Behaviour modelling (Scaglioni et al., 2008)
- **Cognitive dissonance**
 - Eating disorders (Becker et al., 2006)
 - Obesity (Stice, 2002)
- **Pre-natal smoking** (Hesketh et al., 2009; Mizutani et al., 2007)
- **Social class**
 - Stronger effect than diet or activity (Layte & McCrory, 2011)

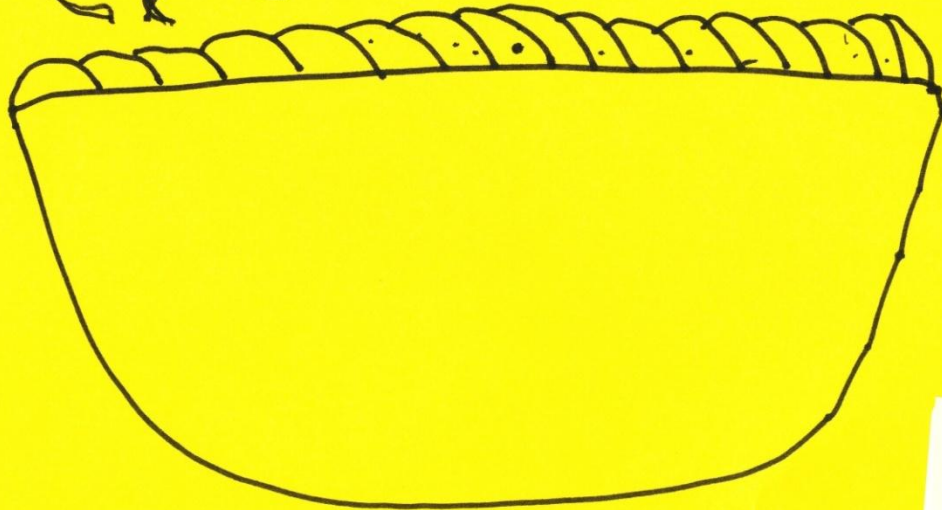


Children's perspectives on health and well-being

- **Things that keep people well and healthy**
 - Eating well
- **Food is either '*good for you*' – fruit, vegetables, milk, water**
- **Or '*bad for you*' – sweets, crisps, biscuits, chocolate, fizzy drinks**
- **In the main survey (Williams et al., 2009):**
 - 35% had eaten chips in the past day
 - 55% crisps or other savoury snacks
 - 74% biscuits, doughnuts, cakes, or chocolate
 - 53% non-diet soft drink



WATER



Porridge

doing
Sports

Go to
Bed early

Keep Warm



Children's perspectives on health and well-being 2

- **Things that keep people well and healthy**
 - Exercise
- **Explicit link between exercise and health**
- **Contrasted with being '*lazy*' and '*watching too much TV*'**
- **In the main survey (Williams et al., 2009):**
 - 29% of boys, 21% of girls 60 minutes' exercise every day (child report)
 - 63% of boys, 47% of girls 20 minutes' hard exercise more than 9 of 14 days (parent report)
 - 65% watch TV for 1 to 3 hours per day; 9% for more than 3 hours



Attitudes to overweight and obesity

- **Children's Body Image Scale (CBIS; Truby & Paxton, 2002)**
 - Conceptualised as scale of own body image
 - Boy and girl versions
 - Based on BMI percentiles
 - IOTF Overweight: 19.5 for boys and girls
 - IOTF Obese: 23.4 for boys, 23.5 for girls
 - No underweight
- **CAF raised some issues**
 - CBIS employed as scale of healthy body image
- **All children asked about both genders**
 - No gender differences in ratings

Figure 1. The Children's Body Image Scale (© 2001 Helen Truby).

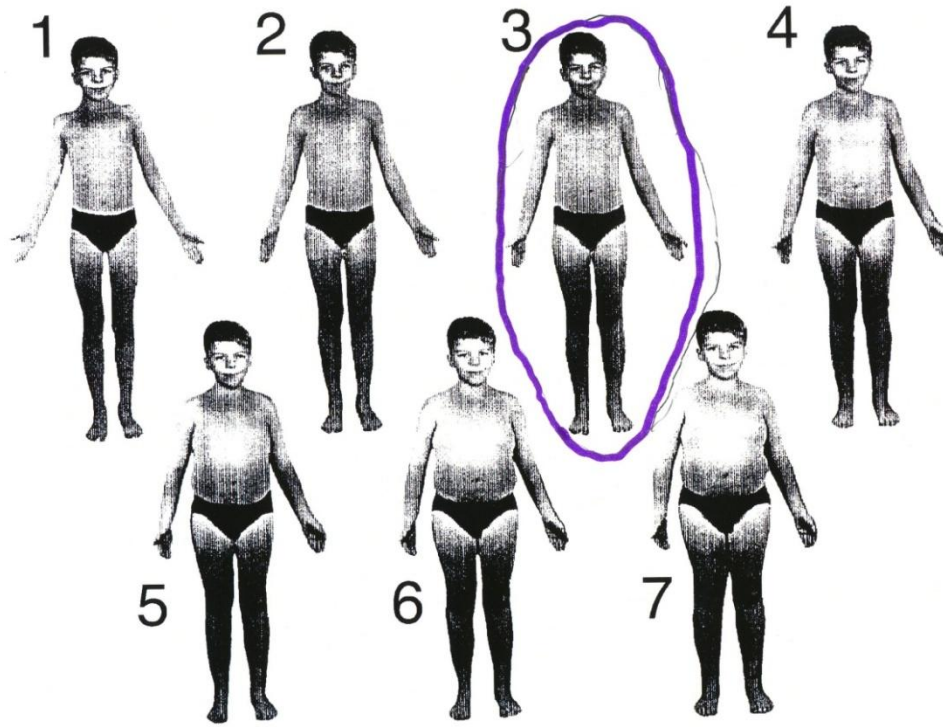
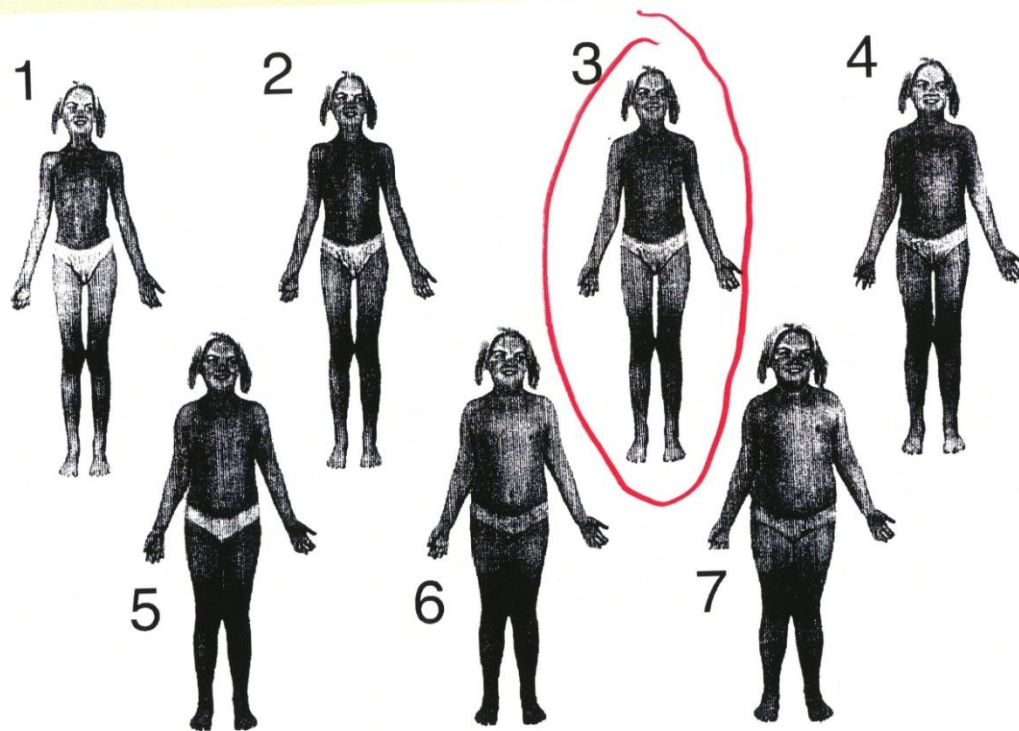
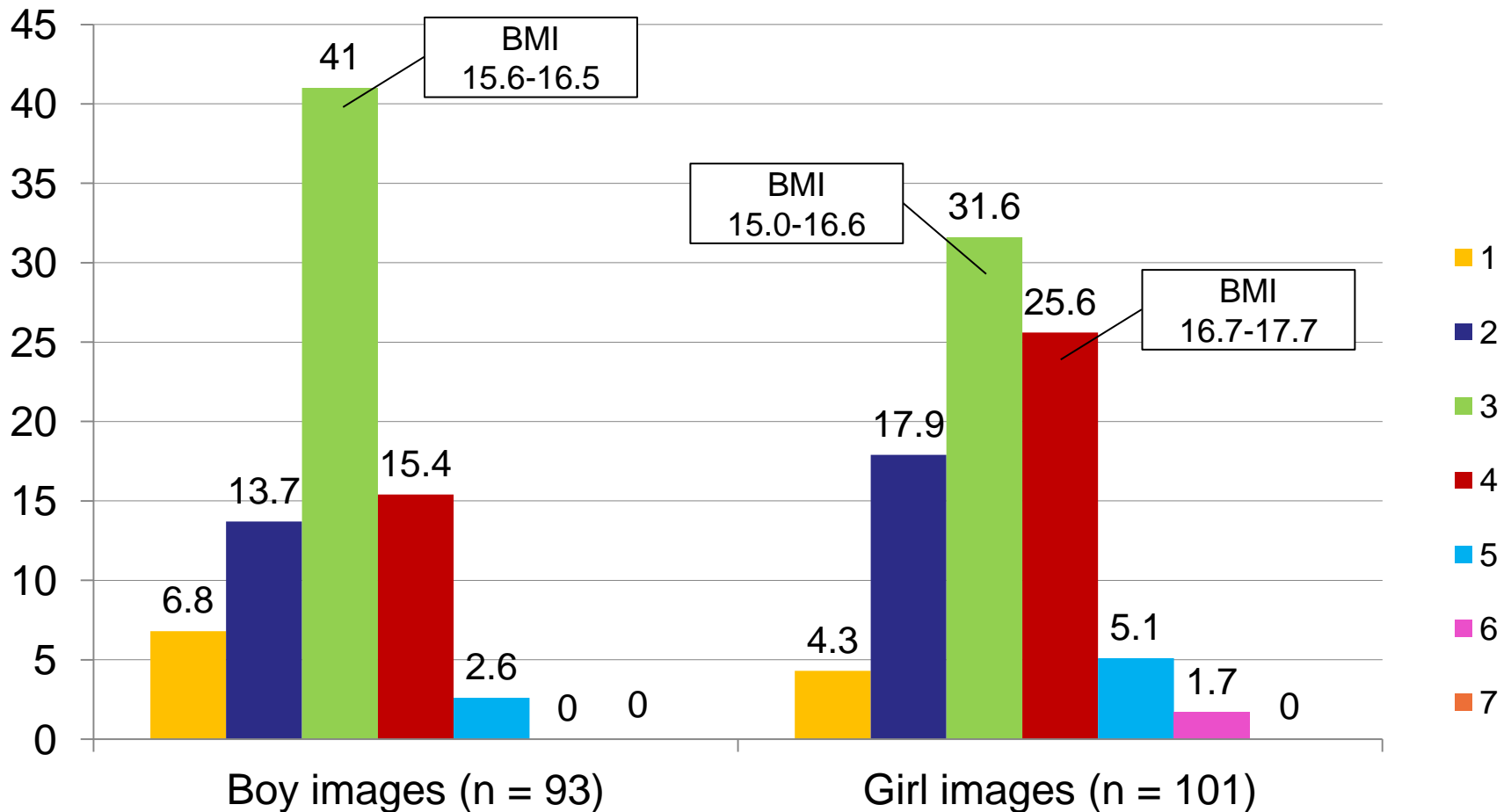


Figure 1 (continued). The Children's Body Image Scale (© 2001 Helen Ruby).



CBIS Results

Children's ratings of healthy boy and girl images (CBIS)





CBIS Results 2

- **Highly consistent rationale for selection as healthiest body size:**

“Not too fat and not too thin.”

- **Cognitive dissonance**
- **Gender variation – girls’ interviews**
 - Image is only important *“if you’re a superstar”* or for the minority going to parties
 - Things they would change were glasses, freckles, and hair length
 - In general, looks are *“not very important”*
- **Protective factors**

“My mum says that it is what is inside counts.” (Girl)



Influences on behaviour – Facilities

- **School facilities**

I: *“And who chose to take part in all the activities? Was it you or your parents?”*

C: *“Well, like I asked to do some of them, like the tennis and the swimming and the hockey are in school, so I asked to do them.”* (Girl; Highest tercile)

- Point of contact for organisations

“The youth club, this person gave me sheets one day to start it, in my school they gave me it” (Girl; Lowest tercile)

- **Places to play**

- Most common request in the Letter to the Minister for Children

“I’d give more places for children to play in because some of the places like big parks are closed off to children, and they’re really big areas that would be perfect for playing soccer or a playground or just for doing things like that, and people don’t like children on it playing.” (Girl)



Influences on behaviour – Family

- **By instruction**

“My mam put me in {Taekwondo} to make me healthy.” (Boy)

- **By example**

“Dad goes to the gym and sometimes he plays squash and sometimes he takes me and I mess around on the treadmill.” (Girl)

I: “Who decided that you should go to play hurling or Gaelic?”

*C: “Well, Dad sometimes comes to see us and our uncle is a trainer.”
(Boy)*

- **Reinforcement of social inequality**



Case study

- **Lowest income tercile, urban area of south-east**
- **Single mother, unemployed**
- **Indicators of poverty**

- **Family owns laptop, Nintendo DS, mp3 player**
- **Cost-free activities**
 - Library
 - River

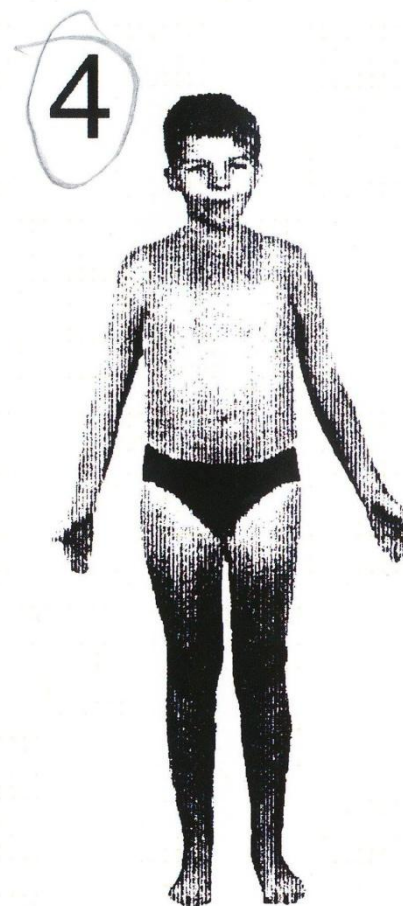
- **Indications of poor dietary quality**
 - Jam sandwiches
 - Favourite food is chicken pizza
 - Coke

- **Above average on CBIS (4, 4)**
- **Kick-boxing**
- **Used to be bullied; reason not specified**
- **Mother smokes**

Overweight

I: So do you think your tummy is too big?

C: No, but I think I have to do a bit more exercise because I am getting too fat. I need to be very fast to catch up with the dog.





Social gradient

I: And when you hear the word obese, what do you think that means?

C: Super-fat.

I: Really?

C: I think you would too if you saw the film *Supersize Me*.

I: What is it about?

C: A man tries to live off just @@fast food## and stuff like that.

I: And what do you think of that?

C: It was good but at the end he almost died.

I: Do you ever eat @@fast food##?

C: Yes, only when we are really low on money.



Income and diet

I: And is there anything that stresses you out at the moment as a parent?

M: Just making ends meet, it gets hairy sometimes. The back of the cupboard, the back of the freezer to put together some sort of stew, but usually it is just you get to Wednesday and you think, "Okay, I have made it through the week," and you start from Thursday and you buy loads of food straight away so you are covered. Just making sure you stretch everything and the worry is over.

I: And does that have an impact on @@Sean##?

M: I worry a bit. @@Sean## doesn't really worry about it because there is always bread and milk.

Income and diet

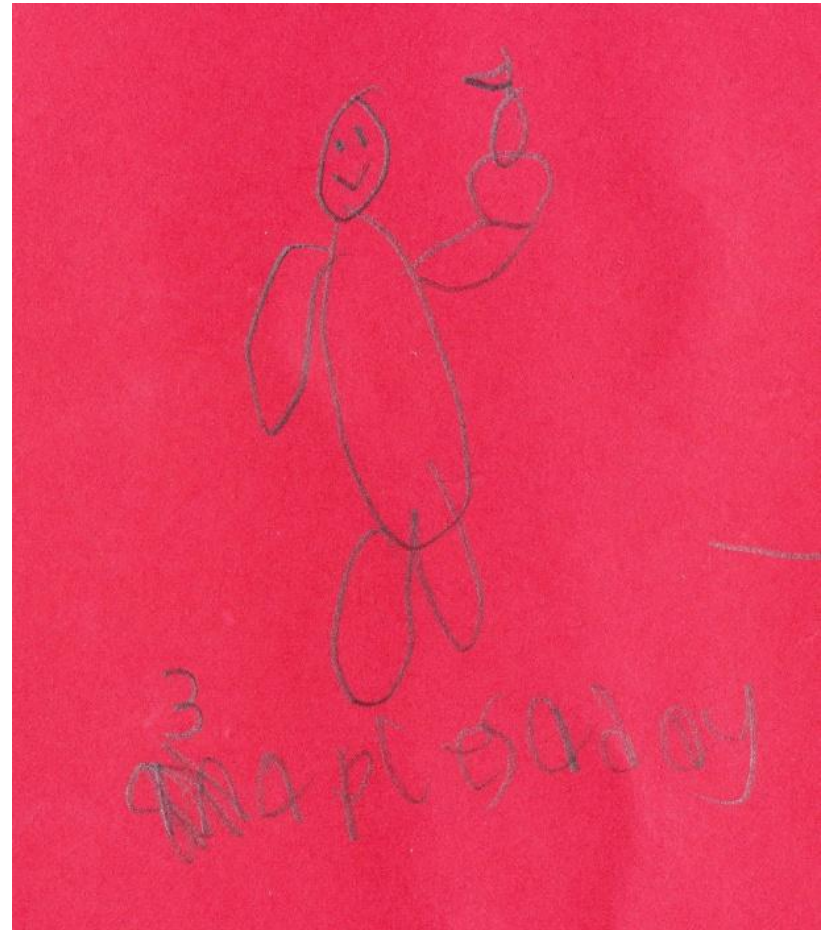
I: Okay, so can you tell me a bit about what you have drawn there and written?

C: Three apples a day keeps me healthy.

I: And do you eat three apples a day?

C: When we *have* apples.

{Looks at mother.}





Smoking

I: And what do you think of smoking and cigarettes?

C: Smoking is bad for you and I'm never going to start doing it. {...}
She always told me to never start smoking with a fag in her hand.

I: And what do you think about that?

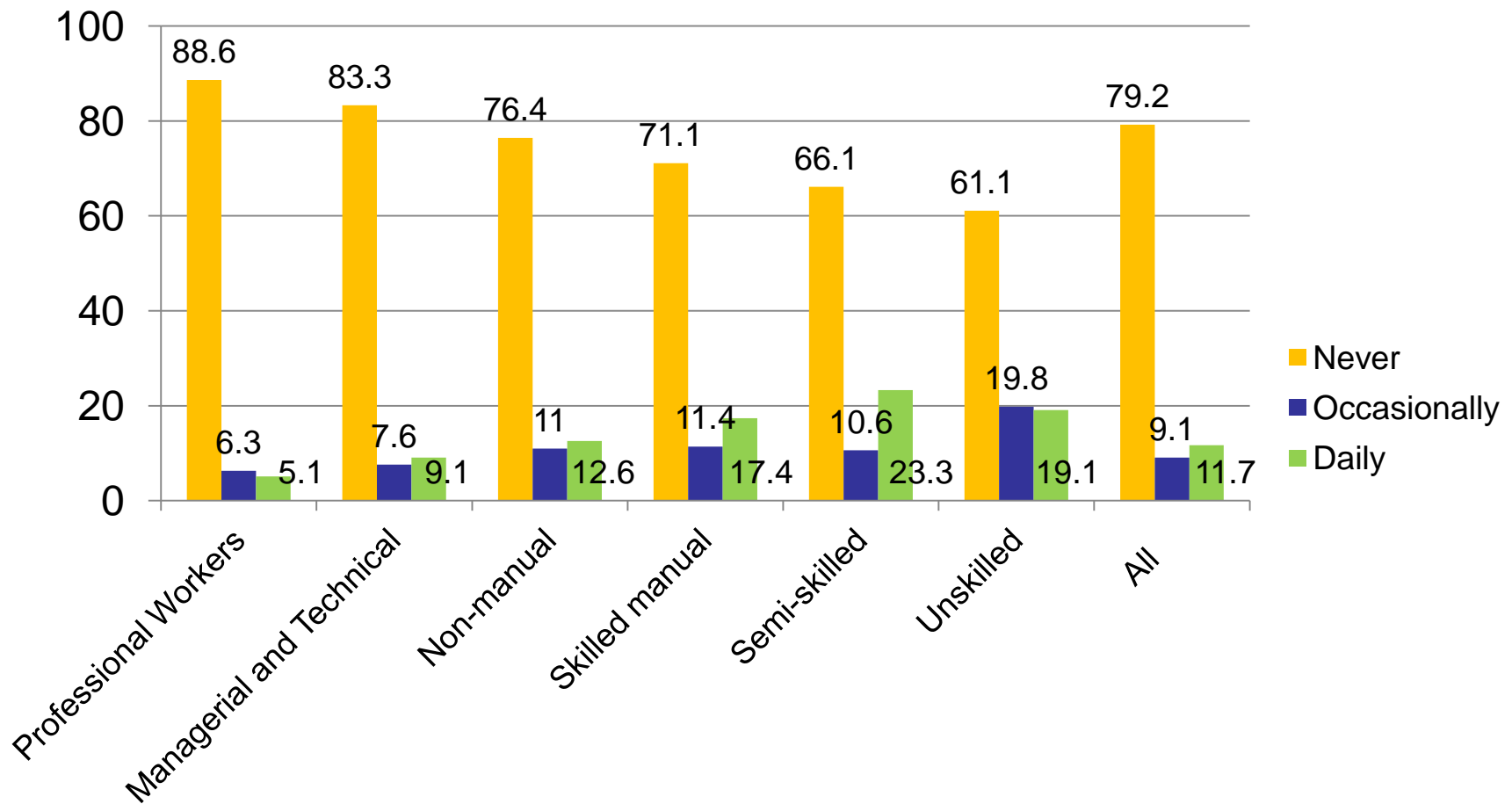
C: That it is weird. She is actually telling me not to smoke with a
cigarette in her hand!

I: And would you like your mum to stop smoking?

C: Yeah. That's why I get a chest infection. {Looks at mother.}

Smoking during pregnancy

Rates of smoking during pregnancy by social class





Conclusions

- **Children and parents know what it takes to be healthy**
 - Say all the right things; do lots of wrong things
- **High abstract awareness**
 - Little evidence of self-awareness, self-criticism
- **High motivation to be healthy**
 - Children lack autonomy, control over diet, exercise
- **Social gradient manifest in unhealthy lifestyle**
 - Pressure on relationships
 - High levels of stress



Mixed methods

- ***Growing Up in Ireland* is a mixed methods study**
- **Triangulation**
- **Explanatory analysis**
- **Narrative**
- **Hypothesis generation**
- **Protocols in development to link Irish Social Sciences Data Archive and Irish Qualitative Data Archive datasets**
 - <http://www.ucd.ie/issda/data/growingupinireland/>
 - <http://www.iqda.ie/content/growing-ireland>



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Thank you!

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