

Below are five of reports you can analyse. (Thanks Liz Sneddon for collating this resource)

["GRADUATING IS GOOD FOR YOUR HEALTH"](#)

[Ginger reduces the symptoms of motion sickness](#)

[Scots Slimming down a wee bit](#)

[" HEAVY DRINKING DURING PREGNANCY LEADS TO HYPERACTIVE KIDS"](#)

[Travel App makes Campers Happy](#)

Extract from Newspaper article

“GRADUATING IS GOOD FOR YOUR HEALTH”

College graduates feel better emotionally and physically than their high-school drop-out counterparts, a study of over 400,000 US adults reveals. Participants were asked a series of questions including level of education and on how many of the past 30 days they felt physically and emotionally healthy.



Discuss the problems with getting people to recall how they have felt physically and emotionally in the previous month.

Ginger reduces the symptoms of motion sickness

Whether on a bumpy plane ride, the ferry to the South Island or a fishing trip, motion sickness can make travelling a misery. What is worse, many medications have severe side effects, such as sleepiness and drowsiness. A Danish study has now found a natural cure for motion sickness: ginger.

In a study on 80 cadets of the Danish navy, ginger showed a positive effect on the main symptoms of motion sickness. The participants, all of them inexperienced sailors, were randomly allocated into two groups. One group was given 1 g of powdered ginger and the other a placebo. After four hours on the same ship at high sea, the cadets were asked about any symptoms of motion sickness.

It was found that ginger reduced the tendency to cold sweat and vomiting much better than the placebo. There were also fewer symptoms of nausea and vertigo, but this was not found to be statistically significant.

Explain whether the study is an observational study or an experiment. Give an implication for this type of study for the relationship investigated for the claim made.

Here is an article from The Scotswatch, May 3 2012 – reproduced from Level 3 Statistics Learning Workbook.

Scots Slimming down a wee bit

Scots slimming down a wee bit

In the past year the percentage of Scottish people of normal weight has increased slightly but overweight people still command a solid majority, according to the Centre of Dietetics in Bigtown.

At the end of March 2012, 37.9 per cent of Scots were within the normal weight range, compared with 36.8 per cent a year ago, the Spratt-Good Health Index survey found.

Overweight and unhealthily obese Scots accounted for more than 60 per cent of the population, it said.

The study said that it is very encouraging to note that obesity rates are declining in Scotland even though most Scots are still considered obese or overweight.

Figures from March 2011 indicated that overweight people made up 34.7 per cent of the Scottish population, and obese people 26.7 per cent. The 2012 survey found 33.8 per cent of Scots to be overweight and 26.5 per cent obese.

The Centre of Dietetics offered some possible reasons for the change, although they stated the reasons were not clear cut. Amongst these were: the depressed economy meaning Scots tended to eat at home rather than eating higher calorie content take-away foods; their advertising campaign educating the population about health risks associated with obesity; and the increased availability of fresh

fruit and vegetables with import restrictions having been lifted.

The decline in obesity rates could mean a decrease in healthcare costs, the study said. The spokeswoman for the Ministry of Health estimated medical costs associated with obesity were £1.73 billion (\$NZ3.39 billion) in 2009.

The study used self-reported data of height and weight to determine a score of body mass index and was based on telephone interviews with a random sample of 1,583 people aged 18 and older. The margin of error was $\pm 2.5\%$.

- 1) Is the study an experiment or observational study? Explain how you know.
- 2) Who paid for the study? What is their purpose?
- 3) What is the sample size in the study? Discuss.
- 4) What sampling method was used? Discuss the advantages and disadvantages.
- 5) What survey method was used? Discuss the advantages and disadvantages.
- 6) What non-sampling errors would be present in this study? Discuss.
- 7) Write a final evaluation of this study.

“ HEAVY DRINKING DURING PREGNANCY LEADS TO HYPERACTIVE KIDS”

A recent study of 11,500 UK children by the Department of Epidemiology and Public Health, showed that the children of mothers who drank heavily during pregnancy were more likely to suffer from hyperactivity and behavioural or emotional problems.



Extract from Journal Article

This study examines the relationship between light drinking during pregnancy and

the risk of emotional or cognitive problems at age 5 years. 11513 UK children were selected from the UK Millennium Cohort study. Participants were grouped according to the mothers' reported alcohol consumption during pregnancy. Children of these mothers were tested at age 5 years. Children born to mothers who drank 1 – 2 drinks per week or per occasion during pregnancy were not at increased risk of behavioural or cognitive difficulties compared with mothers who had not drunk during pregnancy. However, children born to mothers in the heavy/binge drinking category were more likely to have hyperactivity, behavioural or emotional problems compared to those born to mothers who did not drink during pregnancy.

1) Is the study an experiment or observational study? Explain how you know.

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5) What survey method was used? Discuss the advantages and disadvantages.

6) What non-sampling errors would be present in this study? Discuss.

7) Write a final evaluation of this study.

Travel App makes Campers Happy

If you think that bringing a radio on a camping trip is too much technology, think again. A new breed of campers is using smartphone apps to make most of their holidays. And it seems campers using this technology are happier than those who don't.

"We use it all the time", a keen traveller from Auckland said. "I can see where my friends have been and whether they liked a place. And because we sort of have the same taste I usually like the place, too. It's like a personal recommendation."

In the study commissioned by New Zealand app maker TrApps, 73.2% of campers using travel apps while on holiday report that they are overall happy or very happy with their holiday, compared to only 61.7% of campers not using travel apps.

The study was conducted by an independent research company in January 2013 with 500 participants, aged 18 – 29, in New Zealand.

Additional information:

TrApps is a maker of social networking travel apps for smart devices. The survey was conducted with campers aged 18 – 29. In 2013, about 30% of campers in the age group used travel apps while on a camping holiday.

Evaluate the report.

