# Motivace činnosti a nečinnosti

## Domácí úkoly – 1. část

A . Pro další práci jsem hledala článek týkající se propojení stravování a jeho vlivu na psychiku člověka. Myslím, že téma správného stravování zajímá mnoho lidí, obzvlášť v této době, kdy jsou nám dostupné prakticky všechny potraviny. Dostupnost rychlého jídla nám zjednodušuje život. Původní nápad bylo hledat články týkající se pouze obezity a hubnutí, což není úplně nový trend, avšak mnoho článků neřeší problém psychologicky. Prohlédla jsem si několik článků týkající se závislosti na jídle, binge-eating. Používala jsem především portál EBSCO (jelikož dokáže vyhledat velké množství informací týkající se daného tématu, jejichž dostupnost netřeba řešit). Nahlédla jsem také do Google Scholar. Vyhledávala jsem především slova týkající se jídla a několik psychologických termínů (od obecného „psychology“, po konkrétnější pojmy, jako je např. „self-confidence“ atd.). Pokud bylo výsledků mnoho, omezila jsem je pomocí filtrů a booleovských operátorů. Nakonec jsem zvolila konkrétnější téma závislosti na jídle (jímž může trpět mnoho lidí) a obecně stravování ve stresu ve spojení s obezitou. Nakonec jsem zvolila článek **Reasons for eating ‘unhealthy’ snacks in overweight and obese males and females[[1]](#footnote-1)**, jelikož právě pochopení důvodů obézních může vést k pochopení fenoménu a případně rozvíjet další metody léčby. Článek nejspíš není nijak klíčový, ale přináší několik definic kláčových pojmů.

B. Cleobury, L., & Tapper, K. (2014). Reasons for eating 'unhealthy' snacks in overweight and obese males and females. *Journal Of Human Nutrition And Dietetics: The Official Journal Of The British Dietetic Association*, 27(4), 333-341. doi:10.1111/jhn.12169

Introduction

Snack consumption has increased significantly in recent years (Zizza et al., 2001). Given that snack foods tend to be high in fat and sugar, this has implications for weight gain and obesity (Bes-Rastrollo et al., 2010). Cutting back on snacks may therefore help with weight loss. However, if we are to encourage reduced snacking as a weight loss

strategy, it is important to understand overweight and obese individuals’ reasons for snacking. Superficially, it

might appear that the most likely reason for snacking is hunger. However, research indicates that eating is not

always preceded by hunger. For example, Tuomisto et al. (1998) employed a diary methodology to examine reasons for eating among 114 male and female obese participants. The diary contained 26 different reasons for starting eating and participants were asked to mark the primary reason for each eating episode over a 24-h period. The results showed that hunger was selected in just 21% of cases. By contrast, time of day, or habitual patterns was the most common reason, as cited in 46% of episodes. That eating often occurs for reasons of habit is also supported by other studies conducted with both female undergraduate students (Adriaanse et al., 2011) and a community sample (Verhoeven et al., 2012). Other frequently cited reasons for eating in the literature include external eating (eating in response to food

cues) and emotional eating (eating in response to stress and other negative emotions). In a study conducted by Tuomisto et al. (1998), external eating accounted for approximately 10% of eating episodes. Emotion-related reasons were cited as the primary reason for eating in just over 2% of episodes. However, other research suggests that emotional eating may be more common than this. For example, both laboratory and diary studies have shown that stress and other negative moods can increase the desire to eat (Hill et al., 1991; Macht & Simons, 2000; Kubiak et al., 2008) and the amount eaten (Greeno & Wing, 1994; Zellner et al., 2006; O’Conner et al., 2008),

as well as the preference for less healthy foods (Greeno & Wing, 1994; Oliver & Wardle, 1999; Oliver et al., 2000; Zellner et al., 2006; O’Conner et al., 2008). There is also evidence to suggest that females and individuals who are obese are more prone to eating unhealthy snacks in response to stress (Zellner et al., 2007; O’Conner et al.,

2008). Additionally, questionnaire measures of emotional eating tend to correlate with body mass index (BMI) and weight gain (Blair et al., 1990; Delahanty et al., 2002; Hays et al., 2002; Koenders & van Strien, 2011). However, recent research suggests that such self-report measures may reflect an individual’s concerns over their eating rather than be an accurate reflection of emotional eating per se (Evers et al., 2009; Adriaanse et al., 2011; Jansen et al., 2011). Thus, although individuals do appear to eat in response to stress and other negative emotions, the extent to which they do so relative to other reasons in unclear. Finally, there is evidence to suggest that individuals also eat for social reasons such as wanting to be polite, or simply wanting to be sociable. Tuomisto et al.

(1998) noted such reasons were cited as the primary reason for eating in approximately 4% of cases. Any research examining reasons for eating also needs to consider sex differences because there is evidence to suggest that males and females may eat for different reasons.

In particular, males report more environmental reasons, as well as bodily sensations and hunger, and females report more thoughts, cognitions and social reasons for initiating eating (Tuomisto et al., 1998), as well as higher levels of emotional eating (Conner et al., 1999; Larsen et al., 2006; but see also Adriaanse et al., 2011; Evers et al., 2009; Jansen et al., 2011). In terms of weight loss intervention, it is important to establish the relative frequency of these different reasons for eating, amongst both males and females because they will have different implications for strategies that are employed. For example, strategies that may be effective for altering nonhabitual behaviours are unlikely to work if applied to habits and vice versa (van’t Riet et al., 2011). To devise effective interventions, we need to ensure that the strategies employed are appropriate to overweight and obese individuals’ reasons for eating. However, we also need to ensure we are targeting eating behaviours that are relevant to weight loss. For example, the study conducted by Tuomisto et al. (1998) did not distinguish between ‘healthy’ versus ‘unhealthy’ foods. The reasons for eating foods such as fruit may be quite different from the reasons for eating foods such as chocolate and, clearly, from a weight loss perspective, it would be more important to try to reduce the consumption of the latter. Tuomisto et al. (1998) also failed to distinguish between meals and snacks. Again, this is important because, arguably, reasons such as habit may be more likely to apply to mealtimes than to between-meal snacks and, although a reduction in snacking might be an appropriate weight loss strategy, it is less likely that one would want to promote meal skipping. The study population is also relevant. Many studies examining predictors of unhealthy snacking have included participants of normal weight (Adriaanse et al., 2011; Verhoeven et al., 2012). However, reasons for eating amongst those of normal weight may be quite different from reasons amongst those who are overweight and, again, from an intervention perspective, the latter will be most important. The present study aimed to address these gaps in the literature by examining the relative frequency of different perceived reasons for eating main meals, ‘healthy’ snacks and ‘unhealthy’ snacks amongst overweight and obese males and females. It also explored potential sex differences. Thus, in contrast to previous studies, the data obtained in the present study should be more directly applicable to weight loss intervention.

Discussion

In line with previous research (Ovaskainen et al., 2006),

the results of the present study showed that the majority

of snacks (79%) were high in either fat or sugar. This

confirms the importance of targeting snacking behaviours

in weight loss intervention.

The most common perceived reason for eating

unhealthy snacks, cited in over half of all instances, was

‘because the food looked or smelt so tempting’. This

value is considerably higher than the 10% reported by

Tuomisto et al. (1998). However, as noted previously, the

data analysed by Tuomisto et al. (1998) correspond to

primary reasons provided by participants (i.e. one reason

per eating episode) whereas, in the present study, participants

were asked to record all reasons (i.e. multiple

reasons per eating episode). The high proportion of episodes

for which external eating was reported as a reason

in the present study points to the potential utility of

intervention strategies that target cravings (Andrade

et al., 2012), enhance self-control (Muraven, 2010;

Stadler et al., 2009; Johnson et al., 2012) or promote

stimulus control (Sun et al., 2007; but see also van’t Riet

et al., 2011).

The next single most commonly cited reason for eating

unhealthy snacks was hunger, which was reported as a

reason in 49% of cases. Again, this is considerably higher

than the 21% reported by Tuomisto et al. (1998) and so

it is important to note that, although our data indicate

that hunger was a reason for unhealthy snack intake in

almost half of all episodes, it was not necessarily the primary

reason. Nevertheless, from an intervention perspective,

these results suggest that weight loss programmes

that help limit hunger (Jakubowicz et al., 2012a,b;

Touyarou et al., 2012) may be successful at reducing

consumption of unhealthy snacks.

Tuomisto et al. (1998) found that the most frequently

given reasons for eating (being cited in 46% of episodes)

related to time of day (it being a mealtime, or ‘because of

a regular lifestyle’, p. 215). In the present study, according

to participants, only 18% of unhealthy snacks were eaten

because the individual usually ate at that time. This is in

contrast to the fact that time of day was a reason in 75%

of main meal episodes. These data show that, unlike main

meals, unhealthy snacks are less likely to be part of the

individual’s regular eating routine. Because repetition in

stable contexts (Verplanken & Orbell, 2003; Wood &

Neal, 2007) is a characteristic of habitual behaviour, we

might conclude that, although main meals are eaten out

of habit, unhealthy snacks are not. However, frequent

repetition does not always mean a behaviour is habitual

(Verplanken, 2006). An important characteristic of habits

is that they are carried out automatically, with little cognitive

awareness. We explored automaticity with the item

‘I don’t recall deciding to eat – I just found myself eating’.

This statement was true for only 1% of main meals

episodes, suggesting that, despite their regularity, it is

possible that they were not carried out automatically.

Indeed, this value was higher for episodes of unhealthy

snacking, with this being given as a reason in 9% of episodes.

These results provide some support for research

showing habit to be a predictor of unhealthy snacking

(Adriaanse et al., 2011; Verhoeven et al., 2012). However,

it should be noted that these studies relied on a measure

of habit that included items that assessed repetition as

well as automaticity, and the relative contribution of each

is unclear. Equally, the single item employed in the present

study to assess automaticity is unlikely to perfectly

capture what is arguably a very complex construct. As

such, the extent to which eating is truly habitual is

unclear. Although many eating episodes may be repeated

in stable contexts, it is possible that the decision to initiate

eating is rarely automatic. Given its implications for

intervention (van’t Riet et al., 2011), it is important that

future research address this issue.

Compared to Tuomisto et al. (1998), we found more

evidence for eating in response to negative emotions:

10–19% for unhealthy snacks in our study compared to

2% according to Tuomisto et al. (1998). These differences

are probably partly a result of the different items used to

assess emotional eating [‘I wanted to relax’ and ‘I had

problems’ in Tuomisto et al. (1998) (p. 215) versus items

relating to feeling fed up, bored and stressed in the present

study]. They are probably also a result of the fact that

Tuomisto et al. (1998) did not distinguish between different

types of eating episodes. Because the present study

indicated that 67% of all eating episodes were main

meals, it is likely that the majority of episodes in the

study conducted by Tuomisto et al. (1998) also related to

main meals. Our data indicate that emotional eating was

less likely for main meals (3–6%) compared to unhealthy

snacks (10–19%) and support other studies showing that

negative moods can increase the desire to eat (Hill et al.,

1991; Macht & Simons, 2000; Kubiak et al., 2008), as well

as the preference for unhealthy foods (Greeno & Wing,

1994; Oliver & Wardle, 1999; Oliver et al., 2000; Zellner

et al., 2006; O’Conner et al., 2008). Given the reasonably

high levels of emotional eating for unhealthy snacks (26%

overall), interventions that address these reasons (Tapper

et al., 2009) may be helpful for weight management.

According to our results, in a significant proportion of

episodes of unhealthy snack consumption (19%), participants

reported eating to keep others company, and in

smaller proportion (5%) because they felt obliged to eat.

Again, these data are higher than the 4% reported by

Tuomisto et al. (1998), probably as a result of the fact that

participants in the present study were able to cite multiple

causes rather than just one. Our data highlight the fact

that eating is often a social act. In this respect, weight

management interventions that provide individuals with

strategies to employ in social situations may be helpful.

Finally, in a proportion of episodes of unhealthy snack

consumption (8%), participants cited not wanting food

to go to waste as a reason. In a larger proportion (19%),

participants reported eating because they could not stop

thinking about food. This latter value suggests that preoccupation

with food was an important factor for our participants

and is consistent with previous research showing

associations between dieting status and food preoccupation

(Tapper & Pothos, 2010). Interventions that attempt

to break links between food-related thoughts and behaviours

may therefore be helpful (Tapper et al., 2009;

Jenkins & Tapper, 2013).

As well as providing data on reasons for eating

unhealthy snacks, the present study also examined reasons

for eating healthy snacks (Table 2). Although fewer

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Reasons for eating unhealthy snacks L. Cleobury and K. Tapper

healthy compared to unhealthy snacks were consumed

(75 compared to 283), interestingly, the reasons for eating

were very similar. This raises the possibility that, when it

comes to eating behaviours, the type of eating episode

may be a more important correlate of perceived reasons

for eating than type of food consumed.

The results of the present study showed that, compared

to males, females were more likely to report eating

unhealthy snacks because they were feeling stressed. This

is in line with data from the DEBQ questionnaire showing

higher levels of emotional eating amongst females

compared to males (Table 1), as well as with the results

of previous studies (Pine, 1985; van Strien et al., 1986;

Wardle, 1987; Grunberg & Straub, 1992; Conner et al.,

1999; Oliver & Wardle, 1999; Larsen et al., 2006; Burton

et al., 2007; O’Conner et al., 2008). Females were also

more likely to report eating unhealthy snacks because

they were feeling fed up or bored, although these differences

failed to reach statistical significance. Women were

significantly more likely to report eating for social reasons

compared to men. However, it should be noted that in

only one of the 13 reasons provided did males give higher

ratings than females (‘… because I usually eat at this

time’), suggesting that, overall, females may have more

insight into their reasons for eating, or are simply more

likely to report a wider range of reasons for eating. This

is consistent with the fact that females scored significantly

higher than males on all eating-related questionnaire

measures (Table 1). Given evidence to indicate that selfreport

of emotional eating may be a reflection of concerns

over eating behaviour (Evers et al., 2009; Adriaanse

et al., 2011; Jansen et al., 2011), it is possible that these

sex differences represent differences in attitudes towards

eating rather than real differences in causal factors.

It is important to acknowledge the limitations of the

present study. Given that the data were all based on selfreport,

they may not always reflect the true reasons if

participants lacked insight into these. For example,

Tuomisto et al. (1998) have argued that, where a number

of cues other than hunger have preceded meals and mealtimes,

these may become associated with hunger, leading

people to assume that the reason they are eating after

exposure to these cues is actually a result of hunger. Similarly,

given that, in the present study females tended to

report higher levels for all reasons for eating compared to

males (Table 1), it is likely that there are sex differences

in the ways in which males and females report their reasons

for eating. Nevertheless, these limitations need to be

balanced by the high level of ecological validity. Indeed, it

would be difficult to examine the relative frequencies of

different reasons for eating without the use of self-report

data.

With regard to those meals that were not recorded in the

diary, it is unclear whether participants skipped these meals

or simply forgot to record them. If participants forgot to

record eating episodes, it is possible that they differed in

some way from those they did record. In particular, they

may have been eating episodes that were more habitual. As

such, the results of the present study may underestimate

the degree to which individuals eat for reasons of habit.

Future research would benefit from a detailed questioning

of participants on the return of the diaries.

Conclusions

To conclude, understanding the perceived reasons for

unhealthy snacking in overweight/obese individuals is

essential for the development of weight loss and weight

maintenance interventions. Because individuals may not

necessarily have a clear insight into the reasons for their

behaviours, self-report data will always need to be treated

with caution. Equally, however, data collected in the laboratory

will be unable to inform us about the relative frequency

of different types of behaviours in the real world.

In the present study, we used a diary methodology to

enable participants to report on their reasons for eating

as close as possible in time to the actual eating occasion

in attempt to enhance the accuracy of the data and provide

some initial evidence on the relative frequencies of

different types of eating. Our results highlight the importance

of hunger and temptation (external eating) as the

most common causal factors in unhealthy snack consumption

for both men and women, indicating the

potential utility of intervention strategies that target cravings

(Andrade et al., 2012), enhance self-control (Stadler

et al., 2009; Muraven, 2010) or promote stimulus control

(Sun et al., 2007).

C.

1. Tuomisto, T., Tuomisto, M., Lappalainen, R., & Hetherington, M. (1998). Reasons for initiation and cessation of eating in obese men and women and the affective consequences of eating in everyday situations. Appetite, 30(2), 211-222. doi:10.1006/appe.1997.0142

Jeden z nejcitovanějších zdrojů ve studii. V jednom z prvních výskytů této citace autor tvrdí, že v Tuomistově studii se externí jezení objevilo v 10 %, kdežto emocionální se objevuje pouze ve dvou procentech. Ve skutečnosti se článek těmito faktory zaobírá jen minimálně a emocionální důvody nebyly ve studii zahrnuty. Pouze se objevila zmínka, že během jídla se u obéznějších respondentů objevily příjemné emoce.

2. Zizza, C., Siega-Riz, A. M., & Popkin, B. M. (2001). Lead Article: Significant Increase in Young Adults' Snacking between 1977–1978 and 1994–1996 Represents a Cause for Concern!. Preventive Medicine, 32303-310. doi:10.1006/pmed.2000.0817

Autor pouze cituje informaci, že množství snědených „mezijídel“ stoupá. Jelikož celá studie o tom pojednává, zachycuje tato věta hlavní myšlenku celého článku. Ovšem změny ve stravování jsou daleko zajímavější, tudíž je toto vyjádření silně redukcionistické.

3. Tapper, K., & Pothos, E. M. (2010). Development and validation of a Food Preoccupation Questionnaire. Eating Behaviors, 1145-53. doi:10.1016/j.eatbeh.2009.09.003

Autor propojuje svoje zjištění se zjištěním v citované studii, tedy že zaujatost jídlem je důležitým faktorem. Citovaná studie má asociovat stav stravování a zaujatost jídlem. Článek však tuto informaci opět nerozvádí dál. Citovaná studia rozvádí dva výzkumy týkající se vnímaní vlastního stravování. Těmito stavy jsou pravděpodobně myšleny negativní i pozitivní aspekty vztahu k jídlu (binge-eating, přejídání, craving atd.)

4. Ovaskainen, M., Reinivuo, H., Tapanainen, H., Hannila, M., Korhonen, T., & Pakkala, H. (2006). Snacks as an element of energy intake and food consumption. European Journal Of Clinical Nutrition, 60(4), 494-501. doi:10.1038/sj.ejcn.1602343

Autor z této studie cituje, že většina snacků obsahuje vysoké množství cukrů a tuků (79 %). Nosnou myšlenkou citovaného článku však není množství vysokokalorických svačin mezi všemi, ale příjem, která získáváme ze svačin v porovnání s hlavními jídly. Ve studii se ani neobjevuje, jaké množství svačin je skutečně nezdravé (z tabulky uvedené v citované studii by se dalo říct, že takřka všechno). Jelikož se toto tvrzení oběvuje v diskusi, pravděpodobně tak porovnává své výsledky s jinou studií.

5. Riet, J. v., Sijtsema, S. J., Dagevos, H., & De Bruijn, G. (2011). Research review: The importance of habits in eating behaviour. An overview and recommendations for future research. Appetite, 57(Feeding infants and young children: guidelines, research and practice), 585-596. doi:10.1016/j.appet.2011.07.010

Autor cituje, že „strategie, které jsou efektivní při nahrazování chování, které nesouvisí se zvyky, nemusejí fungovat, když se aplikují na zvyklosti.“ Věta v podobném znění se nachází v původním článků, netýká se však úplně strategií, ale spíše predikce výsledků při pokusu o změnu nějakého chování. Zvykové chování se od nezvykového liší tím, že k jeho nápravě je třeba více informací.

1. http://ezproxy.muni.cz/login?url=http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,cookie,uid&db=mdc&AN=24134077&lang=cs&site=eds-live&scope=site [↑](#footnote-ref-1)