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Exercise and physical activity: An analysis of answers to an open-ended survey question

Summary

In this paper 708 comments made in response to an open-ended question at the end of a lifestyle survey are analysed in order to explore issues in exercise behaviour. Quantitative and qualitative techniques are used. Five areas are identified as important in shaping people's exercise behaviour: 1) Health-related factors; 2) Factors related to available facilities; 3) Issues of behavioural change; 4) Issues of health information and promotion; and 5) Miscellaneous issues. Each of the five areas of responses is discussed and related to current theory on exercise behaviour. Three substantive conclusions are drawn. Firstly, environmental change might be important to people but not necessarily in a personalized way. Secondly, health problems are an important barrier to exercising. Thirdly, health promotion possibly targets sedentary individuals too much. With regard to the methodology, the open-ended question proves to yield interesting information. However, a single powerful factor cannot be found in the data and the data seems to suffer from a problem of low-explained variance.

Improving levels of physical activity in the population is an important aim of preventive medicine and health promotion[1–3]. Exercise and a good level of leisure time physical activity can improve general health and psychological well-being, and lower morbidity and mortality from chronic diseases, such as those related to the cardiovascular and circulatory system. It can also lower the effect of diseases typically associated with old age, such as arthritis and osteoporosis[4–11]. However, although there has been much effort to improve behaviour, levels of exercising and physical activity have remained stubbornly low and it are estimated that in most countries less then 30% of the population are exercising at levels adequate to maintain fitness and to obtain cardiovascular benefit[3, 12–14]. To allow for effective health promotion in relation to leisure time physical activity and exercise, research will have to address the factors that cause some individuals to exercise while others remain sedentary. Reasons for engaging in leisure time physical activity and exercise include possible health and fitness benefits, improved physical appearance, meeting friends, the team effort and competitive elements, and the fun and enjoyment of engaging in exercise activities[15–22]. Similarly, physical disability, health risks or risk of injury, lack of leisure time, lack of money, lack of available exercise facilities, the weather, and an inappropriate activity for the respondent's age or sex are mentioned as some of the reasons for not engaging in exercise activities[15, 17, 23–25].

In this paper the responses to an open-ended question situated at the end of a general health questionnaire are analysed to gain insight into unprompted opinions on exercise and exercise behaviour. Open-ended questions allow survey respondents to express their opinions with complete freedom. They may use their own terms and add a qualitative component to surveys. In comparison with closed option questions, the results are more people-oriented and language-based, and sometimes richer in "meaning"[26].

The open-ended question discussed was at the end of a questionnaire on health lifestyle and asked if the respondents had any comments to make on issues discussed

in the interview. In this paper these comments are explored in order to learn more about how people organize their exercise and physical activity behaviour and about the barriers to exercising more. Themes will be constructed on the basis of the respondents' comments and these will be used to develop theory in relation to exercise behaviour.

Subjects and methods

The data discussed in this paper was collected by Computer Assisted Telephone Interview (CATI) during 1991 and 1992 in two Scottish cities, Glasgow and Edinburgh. Glasgow is an industrial centre and its development reflects British industrial expansion and decline. Edinburgh is an administrative, financial and tourist centre, and has developed in a slower and more organic way. There is a pronounced difference in mortality, morbidity and lifestyle between the two cities[14, 27, 28].

A random digit dialing procedure was used to contact households. One household member aged between 18 and 60 was selected for the interview using a second random procedure. The interview contained approximately 90 questions on health-related behaviours, covering areas such as smoking, alcohol use, exercise, eating, and sexual behaviour. The response rate fluctuated between 70% and 80%, calculated on a monthly basis according to the procedure suggested by the Council of American Survey Research Organizations[29].

A number of questions from the questionnaire have been used in this paper. First, exercise behaviour was determined by asking the respondent the question: "During the past month, did you take part in any physical activities for exercise?", with two answering categories, "yes" or "no". Those answering "yes" will in the following analysis be classified as "exerciser"; those answering "no" will be classified as "non-exerciser". Next, the "exercisers" were asked: "How many times per week did you exercise for at least 20 minutes", with six answering categories ranging from "every day" to "less than once a "week" and "never". For the analysis the respondents are categorized into the groups "sufficient exerciser", exercising three times or more often per week for twenty minutes or more, and "insufficient exercisers", i.e. those who exercise less often. Exercising three times or more per week for twenty minutes or more is a level of exercise that is often recommended as giving cardiovascular benefits. Occupation is recorded verbatim and coded according to the Office of Occupation Censuses and Surveys *Classification of Occupations and Coding Index*.

During the 9948 interviews (4349, 43.7%, males and 5599 females) collected during 1991–1992, 6023 comments were recorded, 2636 (43.7%) by males and 3387 by females. Records of the comments made by the respondents at the end of the interview contain remarks on many different issues related to the questionnaire, the study and study design. Only one comment was logged for each respondent. Most of the comments were short, but there are examples of elaborate narratives touching on multiple topics. A keyword search program was used to find the comments related to exercise and physical activity behaviour. The search strings "sport" and "exerc" were used in the search procedure. All comments including these strings were selected for analysis; for example, "exerc" yields comments on exercise, exercising and non-exercisers. All the exercise-related comments, a total of 708, were included in the analysis. SPSS and the internet-based calculator SISA (http://home.clara.net/sisa) were used for the quantitative analysis.

The aim of the qualitative analysis was to categorize the comments into a limited number of broad categories and to typify each category by a number of quotes made by respondents. Each comment was placed in one category only, according to the most important topic discussed. First all comments were studied for broad themes. From this initial study it appeared that there were in fact two dimensions in the data, an issue-related dimension and a people-related dimension. The people-related dimension was interesting in that people tend to talk either about themselves or about others; this dimension is particularly striking. The data was then processed a second time in order to classify the comments on issues. Comments that were very similar were given an initial classification. The result was a classification into 57 different categories, ranging from a category with 123 comments made by respondents reporting that there were too few facilities in their area, to a category with only one comment, made by a respondent who reported that she had improved her lifestyle and was exercising more for reasons of disease prevention. The 57 categories were subsequently reduced to five broad categories; 1) Comments which had to do with the availability of facilities (175 comments); 2) Health-related responses (137); 3) Comments on behavioural change, barriers and facilitators (190); 4) Comments related to health information and health promotion (76); and 5) A "Miscellaneous" category (130).

Results

Frequency of comments in relation to socio-demographic characteristics

The first two columns of Table 1 show the percentages of respondents who commented at the end

	Percentage of respondents who comment on an open-ended question		Percentage of comments which are on exercise	
	Males N = 4349	**Females N = 5599**	**Males n = 2636**	**Females n = 3387**
	60.6	**60.5**	**12.5**	**10.9**
Age				
18–21 (636) [a]	55.3	48.5	13.3	16.3
22–29 (2118)	56.6	54.4	13.5	11.6
30–39 (2814)	59.2	59.5	12.3	10.8
40–49 (2276)	60.7	63.4	13	8.7
50–59 (1937)	65.5**,[b]	65.7**	10.9	11.7*
Occupation				
Professional (769)	61.2	62.5	11.9	14.2
Intermediate (2545)	61.2	62.5	13.1	10.6
White Collar (2263)	57	57.4	10.7	10
Blue Collar (1748)	58.1	59.4	11.7	10.4
Semi-skilled (824)	58.8	56.1	15.5	6.7
Un-skilled (322)	57.9	54.7*	14.3	10
Exercising once or more often per week				
No (4336)	57.2	58.7	11.5	10.6
Yes (5612)	61.0*	60.7	13.1	11
Exercising three times or more per week				
No (7055)	58.4	58.5	11.9	9.9
Yes (2893)	61.7*	63.4*	13.6	13.4**

[a] Number of cases between brackets. Numbers might not always add to 100% because of missing cases.
[b] Statistical significance of the Chi^2: * = $p < 0.05$; ** $p < 0.01$.

Table 1. *Responses to an uncued open-ended question by socio-demographic characteristics.*

of the survey, for males and females respectively. The percentages for males (60.6%) and females (60.5%) are similar. Older respondents are significantly more likely to make comments than younger respondents (males, $Chi^2 = 18.8$, df = 4, $p < 0.01$; females, $Chi^2 = 56.7$, df = 4, $p < 0.01$). Respondents from higher occupational groups made comments more often than those from lower occupational groups, but this effect is significant only for females ($Chi^2 = 13.5$, df = 5, $p < 0.05$).

The percentage of comments that were related to exercise is shown in the last two columns of Table 1. Of the 2636 males who gave a comment, 12.5% commented on exercise behaviour as opposed to 10.9% of 3387 females. Among females the difference between the age groups is statistically significant ($Chi^2 = 10.2$, df = 4, $p < 0.05$); females aged 18 to 21 are most and females 40 to 49 are least likely to comment on exercise behaviour.

The last two entries in the table compare respondents who reported exercising with those who reported not exercising. As can be seen, exercisers are more likely than non-exercisers to make comments; this effect is statistically significant among males (61.0% against 57.2%; $Chi^2 = 6.4$, df = 1, $p < 0.05$). In addition, if they make a comment, the exercisers are more likely to comment on exercise than the non-exercisers, but this is not significant.

In the last entry of Table 1, those who exercise three times or more per week (i.e. "sufficient exercisers") are compared with those who do not. Again, comments are made more often by the "sufficient exercisers" (males, 61.7% against 58.4%; $Chi^2 = 4.6$, df = 1 $p < 0.05$; females, 63.4% against 58.7%; $Chi^2 = 10.6$, df = 1, $p < 0.01$), while the "sufficient exercisers" discuss exercise behaviour relatively more often. This last relationship is statistically significant only for females (13.4% against 9.9%; $Chi^2 = 8.2$, df = 1, $p < 0.01$).

Qualitative analysis of comments on exercise

1) Comments (175) about facilities are often stated in general terms and are related to social problems. The comments reflect life in a world without facilities, communities without a focus, monotony, and boredom. This response was partly due to the fact that many respondents elaborated on their answer to the question "What do you think would bring about the greatest improvement to the health of the people in your local area", which was asked in the survey in a separate question. The role of leisure, recreation, or exercise "centres" in their community is seen as important by 123 respondents. For example, a 43-year-old Edinburgh man was of the opinion that: *"... there should be more facilities for children, sporting, clubs, etc., then there would be less problems in other areas"*, while a 51-year-old truck-driver from Glasgow stated that *"... stress related to unemployment should be tackled, that there should be more facilities, sports centres etc. in places like D and E (mentions two deprived neighbourhoods), not just yuppie places, especially for the kids, there is nothing for them in these places"*. Besides complaints about the availability of exercise facilities, 12 respondents mention a lack of childcare arrangements and 19 respondents believe facilities are too expensive, particularly for socially disadvantaged people. This is highlighted by a 30-year-old woman from Glasgow: *"More free facilities [should be] available, especially with a crèche, to encourage poor people to get more exercise, also more information on how to eat cheaply as well as healthily"* and a 27-year-old woman from Edinburgh: *"... I think that exercise facilities other than swimming pools are elitist, they are too expensive for people who are unemployed."* Lastly, although there are respondents who believe that more or cheaper facilities would have a direct effect on their own behaviour, a 29-year-old welder from Glasgow realizes that the provision of facilities is only a first step: *"... there should be more health education for the people of Glasgow, more sport facilities in this area to encourage people to exercise more and [I] myself should attend a centre like that"*.

2) Respondents making a connection between health status and exercising produced a diverse selection of comments (137). In 120 cases

	Comments on exercise				
	1) Facilities	**2) Health**	**3) Change**	**4) Education**	**5) Miscellan.**
Age					
18–29	35	7.1	32	11.2	14.7
30–39	29.7	14.1	22.4	15.6	18.2
40–49	17.9	23.2	30.5	8.6	19.9
50–59	14.5	36.8	25	4.6	19.9
Occupation					
Prof. and Intermediate	25.1	14	25.9	11.9	23
White Collar	26.5	13.6	31.1	12.9	15.9
Blue Collar	27.6	17.2	27.6	6.9	20.7
Semi- and Un-skilled	27.5	14.5	39.1	5.8	13
Sex					
Males	26.1	16.4	25.8	11.9	19.8
Females	24.1	22.4	28.4	8.9	16.2
Exercising once or more often per week					
No	23.3	31.3	27.3	5.1	13.1
Yes	26.6	11.7	26.3	13.9	21.5
Exercising three times or more per week					
No	26.1	23.8	27.2	8.6	14.3
Yes	23.8	11.9	25.8	13.5	25

Table 2. *Comments on exercise behaviour related to various indicators, percentages.*

respondents reported a health problem which restricted the amount or type of exercise they felt they could take, either temporarily, as in the case of a 50-year-old male: *"... I was in the merchant navy and kept very fit until last year when I severely hurt my back, sex is out and I try to take mild exercise like walking"*, or permanently, as in the case of this 54-year-old woman from Glasgow: *"... I suffer from arthritis. That stops me exercising. If I had taken more exercise when younger I might not be suffering today."* A positive effect of health problems on exercise behaviour was observed by 17 respondents, as can be seen in this comment made by a 35-year-old woman from Glasgow: *"... the whole family is on a health kick, eating a better diet and taking more exercise. This came about after I found I had high blood pressure and a high cholesterol level."* The influence of "significant others", particularly medical professionals, is often mentioned. However, the effect of this can be either positive: *"... [I] have an ankle problem and I am doing exercises from the physio, I have been told these affect all of the body"* (Woman, 44, Glasgow) or negative: *"... [I am] just recovering from a heart attack, so questions on exercise are not really relevant as doctors have advised me to take things easy for the time being"*. (Male, 52, Glasgow).

3) All comments (190) of respondents mentioning changing their behaviour, contemplating changing their behaviour, or giving reasons why they have not changed their behaviour were classified in this category. Behavioural change was discussed mostly in terms of the wish to "smoke less", "eat sensibly" and "exercise more', without exploring issues. Changing exercise behaviour was seen by 89 respondents in a context of changing lifestyles more generally. This can be illustrated with this comment of a 24-year-old woman from Glasgow: *"... the only thing that could make me give up smoking would be more exercise and a more disciplined lifestyle. I used to be a gym junkie but exercise much less now"*. In the "lifestyle" context diet and exercise are often mentioned together: *"... I would like to stay healthy now I have achieved it, to let you understand, I am two stone lighter than I was last year, through following a low-fat diet and taking up exercise. Now I keep up exercise to stay that way"* (Woman, 31, Glasgow).

Among respondents who respond in more detail and mention reasons for changing behaviour, 59 mention the improvement of "health", as in this comment of a 49-year-old Glasgow man: *"... keeping myself healthy by exercise and good diet – more people should take an interest in their appearance"*. The concept of health is used not only to refer to a physiological state; often the respondents also discuss "health" in terms of general well-being, social success, social functioning, and way of life. The following comment made by a 48-year-old Edinburgh woman illustrates this: *"... having seen how people live, I am appalled at the lack of exercise, poor diet, stress and smoking at work. It is great to feel fit and healthy, and it is OK to drink wine occasionally, everything in moderation. I am fit and feel like a twenty-year-old. I notice when I don't exercise"*.

Purely preventive considerations – the aim of decreasing the risk of disease or disability – were mentioned as a motive for changing behavior. Illness, physical disability and the problem discussed earlier of facilities being too expensive, difficult to reach or unavailable, lack of time, low motivation, seasonal factors such as holidays and the weather, and being overweight were mentioned as other barriers to improving exercise behavior. This comment from a 42-year-old slater from Glasgow is an example: *"... I was recently given a health check at work. They found my cholesterol level was too high and I'm overweight. I have stopped smoking since Saturday, don't eat fried food, use low-fat spread and once the better weather comes I will start taking more exercise, on my bicycle"*.

4) This category contains comments (76) the respondents made about seeing or hearing information urging them to exercise more, and about the availability and suitability of such information. The opinion that there could be more information about the benefits of exercise was shared by 43 respondents, as in the following comment made by a 27-year-old woman *"... there is not enough information about general exercise, e.g. walking instead of taking the bus. Edinburgh is quite small really"*. The need to use a lifestyle perspective was considered important. Diet and exercise were often linked, as in this remark by a 25-year-old Glasgow man: *"... young people are far more aware of the importance of a low-fat diet and exercise than the older generation, they eat fry-ups for breakfast and then wonder why they have a heart problem"*. Eight respondents were of the opinion that health education should also try to change people's attitudes and behaviour. However, there were no respondents in favour of changing people's behaviours in ways beyond raising awareness and encouragement, as in the following comment by a 45-year-old Glasgow man: *"... exercise helps the mind as well as the body and should be encouraged as much as possible. I help run a boys' football club where I get my exercise."*

Five respondents suggested improvements in health education and information. Health information material was perceived as limiting in its tendency to show females carrying out lighter activities, such as gymnastics and aerob-

ics and males carrying out more strenuous activities, such as jogging and mountain biking. Two respondents were unhappy about health information material showing individuals with such a perfect physical shape that they can hardly be called "normal". A 32-year-old woman from Glasgow: *"Education for health is the most important investment in the future, but the way exercise, fitness etc. is put across in the media is very misleading and causes as many problems as it solves. In particular it has a really bad effect on women as the ads sell a particular look, i.e. designer leotard, perfect teeth, blonde hair, barbie-doll figure. Exercise could be pushed as just an ordinary part of life without the glamorization that tends to go with it at the moment."* Finally, a 53-year-old man from Edinburgh was of the opinion that the world would be better off without people, including his wife, ramming ideas about exercise down his throat.

As well as remarks on information leading to the promotion of exercise, seven respondents perceived a lack of more basic information, such as information as to the opening times and activities taking place in local facilities, where to go to get involved in certain activities, in relation to both adults and children, *"... especially for my age group, 40s, there is a need for some way of finding out and how to tap into this, I don't hear about facilities, for example, my son mentioned that parents could play badminton at school, but then other factors get involved like do I get a baby-sitter that night"* (Man, 43, Glasgow).

5) This category contains all comments (130) which could not be classified in one of the categories discussed above. Here we find 27 respondents who gave comments such as that they are really good exercisers, or that they did not exercise a lot but walked 7 miles each day to their work, which was more or less the same, or that they played bowls each Saturday, not so much for exercise but to meet friends, and various other examples. 14 respondents were of the opinion that they did not need exercise as they already had an active occupation or other strenuous activity, such as this 51-year-old Glasgow woman *"... I look after our disabled son so I get enough exercise of a sort."* Four respondents expressed concerns about the dangers of too much exercising and the need to do it in moderation, such as in the case of this 44-year-old engineer from Edinburgh: *"... you should look after your weight to keep your heart healthy and not over-eat or indulge in anything, exercise in moderation is good for you."*

Quantitative analysis of the comments on exercise

Table 2 shows the comments on exercise cross-tabulated with various characteristics of the respondents. Each row in the table gives the distribution of answers for a particular socio-demographic group for the five categories in which the comments are classified. As can be seen, among those aged 18 to 29 who commented on exercise, more than a third (35%) commented on an issue related to facilities, while issues related to changing exercise behaviour were mentioned by 32%. Health issues were least often mentioned. Comparing the table entries in relation to age, mentioning facilities becomes less frequent with increasing age, whereas mentioning health-related issues increases. The difference between the age groups is statistically significant ($Chi^2 = 79.16$, $df = 12$, $p = 0.001$).

The table shows little difference between the occupational groups and the differences are not statistically significant. The largest difference between males and females is that females comment more often on health-related issues. However, the differences between males and females are not statistically significant. Regarding the last two entries in Table 2, non-exercisers mention health issues almost three times as often as exercisers. The "exercisers" discuss exercise-related information more often and their comments are also more often placed in the miscellaneous category. The difference between the exercisers and the non-exercisers in making comments is statistically significant ($Chi^2 = 51.7$, $df = 4$, $p < 0.001$). In the last entry of Table 2 those who had exercised at least three times for twenty minutes in the week prior to the interview are compared with those who had exercised less often. Again, health-related issues are not often discussed by the physically active group; information-related issues seem to be relatively more important to this group of respondents. The difference between the two groups is statistically significant ($Chi^2 = 25.5$, $df = 4$, $p < 0.001$).

Discussion

The addition of open-ended questions to surveys and open answer categories to survey questions is seen as a way to add a qualitative component to quantitative data. Probably there are in fact many quantitative researchers who work with open-ended questions and open-ended answering categories, but few analyse this information systematically. In this paper, an attempt has been made to analyse data which was collected by adding an open-ended question at the end of a health and lifestyle survey. Survey respondents could use this question to make free and unprompted comments on the survey and the topics discussed in the survey.

In this discussion two issues will be pursued. First, what is the validity of making generalizations on the basis of this data? To which groups

in society do these generalizations apply and what factors should be considered in interpreting the data? Second, what information does this data produce which might lead to a better understanding of exercise behaviour and help to promote its improvement?

Given that the respondents were not prompted to give a response related to exercise behaviour, exercise probably has a high salience among the respondents who made the comments discussed here. From a theoretical perspective this group is rather interesting; these are the contemplators, people among whom a raised awareness of a topic can be found, a group of people with a higher likelihood of behavioural change[30]. Among them attitudes towards exercise are unsettled, their attitudes and behaviours are up for discussion. Complainers might produce different comments, with opinions not widely shared. Complaining might be triggered by social events, for example, there might have been publicity about a famous person having had a heart attack while exercising. However, the sheer diversity of the comments and of the people commenting, makes it less likely that complaining had had a strong influence on the results.

The wealth of different comments in substantive terms makes it difficult to draw conclusions. Barriers and stimulating factors in relation to exercise behaviour are certainly mentioned and explaining these factors might help to improve preventive and health promotion activities. However, the factors identified seem to operate for relatively few people, and might operate differently for different persons in terms of outcome. The data represents the phenomenon of "low-explained variance" which is often observed in community research. In such research even the most powerful factor seldom explains more than 20% of the variance in an outcome variable. Secondly, the data also shows a qualitative equivalent for incomplete association[31]. Thus, personal health problems seem to be strong and relevant inhibitors to exercise among non-exercisers. However, exercisers mention personal health, whether good or bad, far less frequently as a factor which shapes their behaviour; to them it is not so relevant.

Bearing in mind the fact that single explanations are not very powerful, the data does raise some interesting issues. Here three issues will be discussed, related to facilities, health, and health education and information. Firstly, one of the most frequently mentioned factors is that of facilities in the respondent's local community. Some respondents mention that facilities are good, but the great majority emphasizes that access to facilities is limited and problematic. This seems to emphasize the importance of the recent interest in developing healthy environments and the important role of exercise facilities in such environments[32]. However, although respondents mention limited access to facilities as a barrier to them exercising more, many more mention facilities in the context of social problems, for example, as a way of keeping the neighbours' children off the street and making them behave better. If people do not feel that improved environments are relevant to themselves, behavioural change might not be forthcoming. As well as environmental change, attitudinal change continues to be important.

A second interesting factor is related to health issues. Health, as mentioned in the introduction, should be an important reason for exercising more. This is true both for healthy individuals and for most individuals with a health problem. However, in terms of personal behaviour, health-related problems are the most often mentioned single barrier to exercising, a result also found elsewhere[22]. Maybe this is a learned attitude with regard to behaviour in relation to disease. One should not forget that in childhood we learn that in case of illness we should go to bed and rest, and the problem will go away. This old attitude is confirmed in adulthood by advice such as to "take it easy" or "stay at home for a few days". Health and the way people conceptualize it is the topic of much research[33]. Further theoretical development of the relationship between health, disease and activity, also in terms of people's perceptions, would seem to be required.

Thirdly, in relation to health education and information the quantitative analysis produced an interesting result. This is that those who probably already have better access to information, as they are younger and more often in the higher occupational categories, and those who are already positively engaging in exercise behaviour, mention information-related issues more often than other respondents. There seems to be a lack of information which is suitable for their situation, and here it should be considered that much information on health-related issues is aimed at changing the attitudes and behaviours of groups in the population who are perceived as behaving in less "healthy" ways. However, maybe it is more effective to help already active people to maintain and acquire healthy lifetime activity patterns, than to try to change sedentary individuals.

The analysis of the open-ended question in this paper has met the expectation with which the question was included in the questionnaire; it allowed the respondents more freedom in expressing their own opinions and provided a back drop for interpreting the results. Three substantive conclusions were discussed. Firstly, environmental change may be important to people, but not necessarily in a personalized way. Secondly, health problems are an important

barrier to exercising, although from a preventive health perspective the opposite would be preferable by far[34]. Thirdly, health promotion targets sedentary individuals too much, rather than supporting active individuals.

With regard to the methodology, the open-ended question produced a wealth of different responses. However, this wealth is a mixed blessing; the data suffers from problems of "low-explained variance" and "partial association". It would be interesting to develop the approach further by using open-ended prompted questions. To include one or two open-ended questions asking the respondents about facilities, their health or health promotion in relation to exercise behaviour specifically, might add considerable value to a survey with otherwise closed-option questions. Analysing such questions is labour-intensive and expensive; however, modern text analysis and classification programs would reduce the amount of work required.

Zusammenfassung

Bewegung und körperliche Aktivität: Eine Analyse einer offenen Frage in einer Umfragestudie

In diesem Artikel werden 708 Antworten zur letzten offen gestellten Frage einer Lifestyle-Umfrage analysiert, um Kernpunkte im Bewegungsverhalten zu erforschen. Diese Frage sollte mit eigenen Worten beantwortet werden. Quantitative und qualitative Techniken wurden genutzt. Dabei wurden im Wesentlichen fünf Bereiche herausgestellt, die bei der Formung des Bewegungsverhaltens eine wichtige Rolle spielen:

1) gesundheitsbezogene Faktoren
2) verfügbare Möglichkeiten
3) Fragen der Verhaltensänderung
4) Fragen der Öffentlichkeitsarbeit im Gesundheitsbereich
5) Sonstiges

Jeder der fünf Bereiche wurde besprochen und mit den derzeitigen Theorien über Bewegungsverhalten verglichen. Daraus ergaben sich drei wesentliche Schlussfolgerungen:

1) Ein Umfeldwechsel könnte für Menschen wichtig sein, aber nicht unbedingt personenbezogen.
2) Gesundheitsprobleme wirken sich negativ auf das Bewegungsverhalten aus.
3) Die Öffentlichkeitsarbeit zum Thema Gesundheit konzentriert sich möglicherweise zu sehr auf Personen mit einer sitzenden Lebenshaltung.

Hinsichtlich der Methodik ergeben sich aus den Antworten zu dieser offenen Frage interessante Informationen. Ein einzelner starker Faktor kann in den Daten nicht gefunden werden. Ausserdem scheinen die Daten unter unzureichend erklärter Varianz zu leiden.

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Résumé

Exercice et activité physique: une analyse d'une question ouverte d'une enquête

Dans ce document, 708 certains commentaires en réponse à une question ouverte à la fin d'une enquête sur le style de vie sont analysés, en vue d'examiner des aspects du comportement d'exercice. Des techniques quantitatives et qualitatives sont appliquées. Cinq domaines sont définis comme importants pour déterminer le comportement d'exercice des personnes:

1) les facteurs liés à la santé;
2) les facteurs liés aux équipements disponibles;
3) les questions de changement comportemental;
4) les questions d'information et de promotion de la santé;
5) les questions diverses.

Chacun des cinq domaines de réponse est discuté et rattaché à la théorie actuelle sur le comportement d'exercice. Trois conclusions importantes se dégagent. Premièrement, le changement environnemental pourrait être important pour les gens mais sans l'être nécessairement de façon personnalisée. Deuxièmement, les problèmes de santé sont une entrave importante au fait de s'exercer. Troisièmement, la promotion de la santé s'oriente peut-être trop vers les individus sédentaires. Au plan de la méthodologie, la question ouverte apporte des informations intéressantes. Toutefois, il est impossible de dégager un seul facteur frappant des données qui semblent souffrir d'un problème de divergence peu expliqué.

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