Journal of Orthodontics, Vol. 33, 2006, 258–269

SCIENTIFIC SECTION

Patients' expectations of orthodontic treatment: part 1 – development of a questionnaire

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Objective: The development of a questionnaire to measure patients' and their parents' expectations before orthodontic treatment, and to test the reliability and validity of this measure.

Design: A two-stage methodology, with open-ended interviews to identify themes and concepts followed by development and testing of the questionnaire.

Setting: GKT Orthodontic Department, King's College Dental Hospital.

Subjects: The sample consisted of 140 participants, 70 patients aged 12–14 years, who had been referred to the orthodontic department for treatment. One parent of each patient was also recruited.

Materials and methods: The study was in two phases. In the first phase 30 participants (15 new patients and their 15 parents) participated in open-ended interviews, which were analysed qualitatively. Information from these interviews was used to construct a questionnaire. During the second phase, the questionnaire was piloted on 10 participants, five new consecutive patients and their parents. The questionnaire was then distributed to 174 subjects (87 new patients and their 87 parents). Seventy-eight subjects (39 new patients and their 39 parents) completed the questionnaire before their orthodontic consultation. Another 96 subjects (48 new patients and their 48 parents) were invited to complete the questionnaire prior to and at their orthodontic consultation. Test-retest analysis was conducted on 22 participants (11 patients and their 11 parents), who completed the questionnaire previous to and at their orthodontic consultation, and contributed to the psychometric validation of this questionnaire.

Main outcome measures: A questionnaire was devized using the key themes and concepts identified in the open-ended interviews. As a result, 10 questions, some with sub-questions were constructed using a visual analogue scale as the response format.

Results: The questionnaire developed had good face validity. Internal consistency of the questionnaire using Cronbach's alpha, produced an overall inter-item reliability > 0.7 along with item-total correlations > 0.3 in over 50% of questions. Test-retest reliability was statistically significant using Spearman's correlation.

Conclusion: This study provides a valid and reliable measure of orthodontic expectations in participants aged 12–14 years and their parents.

Key words: Patients' expectations, orthodontics, questionnaire, measure

Received 16th June 2005; accepted 20th July 2006

Introduction

Quality of life is an increasingly important component of the evaluation of treatment outcomes and has been defined as the discrepancy between our expectation and our experience.[1] There is little research regarding orthodontics in relation to health-related quality of life, and clinicians are expected to be accountable for the effectiveness of treatment and efficient use of resources.[2]

Carr *et al.*[3] proposed a model of the quality of life, which highlights the above definition. This model showed three problems when measuring health-related quality of life. Firstly, people have different expectations. Secondly, people are at different stages in their illness. Thirdly, people's expectations change with time. When treating these people we need to adapt their expectations, change their negative experiences into positive experiences and promote health. The authors

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DOI 10.1179/146531205225021753

felt a new measure was required to evaluate the role of expectations and experiences in the evaluation of the quality of life.

There are few studies which examine patients' expectations of orthodontic treatment, especially in the UK. Most studies have focused on the factors that motivate patients to undergo orthodontic treatment.[4] Arnett and Worley[5] presented the Treatment Motivation Survey to measure patients' motivation and define their expectations. However, these authors reported its use on one case report. Other authors state that patients' motivation and expectations should be considered separately.[6]

The majority of studies regarding patients' expectations about orthodontic treatment have directed their questions to the parents of the children involved.[4] This assumes that children have similar expectations of orthodontic treatment to their parents.

Other studies have mainly focused on the benefits and not the experiences of orthodontic treatment. One study carried out in South Wales asked parents and children about their expectations of orthodontic treatment. Few questions were asked about the type of orthodontic appliance, discomfort or duration of time expected for orthodontic treatment.[7]

Many studies investigating patients' expectations of orthodontic treatment do not include a validity and reliability testing of their measure. These factors are important to produce rigour and reduce bias.[8]

A valid and reliable measure of orthodontic expectations for patients presenting with unrealistic expectations, is helpful in effective orthodontic treatment planning, consent and quality of treatment provided.

This article describes the methods used in developing a questionnaire to measure patients' and their parents' expectations of orthodontic treatment prior to their initial orthodontic consultation, including reliability and validity testing of this measure.

Material and methods

Ethical approval was granted by King's College Hospital Research Ethics Committee (LREC 02–153) and King's College Research and Development Committee. Patients and their parents were invited to participate, and asked separately to sign a consent form. The sample size was based on convenience sampling and the reports from related studies.

The study was in two phases (Figure 1). The first phase consisted of 15 new patients and their parents participating separately in open-ended interviews. Information from these interviews was used to construct the questionnaire. The second phase consisted of piloting the questionnaire on five new patients and their five parents, prior to distribution to 87 patients and their 87 parents. Reliability testing of the questionnaire was then carried out.

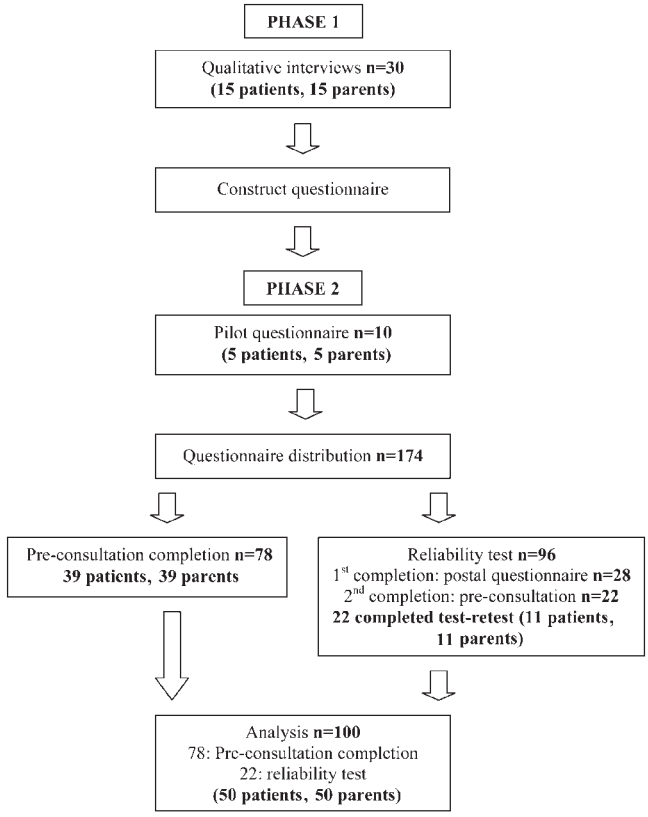

Figure 1 Summary of method

Inclusion criteria for both phases were:

- new patients and their parents presenting to the orthodontic consultant clinic;
- patients aged between 12–14 years;
- patients with no previous history of orthodontic treatment;
- consent obtained from both the child and the parent.

Phase 1

Semi-structured qualitative interviews were carried out on 15 new consecutive patients who had been referred to the department for an orthodontic consultation, during December 2002. Fifteen of their parents were also recruited.

The qualitative interviews were designed and carried out following guidelines for qualitative research by Mays and Pope.[9] Interviews were carried out by the first author in a non-clinical setting, and the interviewer was

introduced as a dental researcher. Child participants were interviewed separately from their parents. These interviews were designed to ask both the child and their parent about their expectations of orthodontic treatment regarding benefits and experience. The interviews were carried out informally with no time pressures. All responses were recorded by the interviewer in note form, especially salient responses regarding orthodontic expectations. Each interview took approximately 20 minutes to complete.

Questionnaire construction

A questionnaire was devized from the key themes and concepts identified in the interviews (Appendix 1). By interview number 15, similar responses to the questions were identified. These data underwent content analysis where key themes and concepts were identified in the transcripts and categorized by the author. The data were analysed by the second author to check the coding and subjective biases in analyses.

Ten questions were identified. A Visual Analogue Scale (VAS) marked at 10 mm intervals was used as the 'Likert' response format for all questions except two. This consisted of a line 10 cm long, with regular 1 cm intervals along the line. It was labelled at one end with extremely likely, and at the other end extremely unlikely. The respondent was asked to place a mark on the line nearest the point where their response best answered the question. Scores on individual visual analogue scales were calculated by measuring the distance to the participants mark in mm from the left hand side of the VAS. A centre point was marked on question 7. This was because it asked the participant about people's expected reaction to them wearing orthodontic braces. The middle point represented no reaction.

In addition, the Likert scale indicates the ordering of people's responses, but not precisely how close these responses are. A VAS allows the respondent to record more precisely the intensity of the domain being measured instead of just a yes/no response. The use of yes/no formats, Likert scales and VAS have been used in combination in the same questionnaire, with no evidence that one scaling method produces a superior result when compared to the others.[8] The use of different response scales guards against a stereotyped response set.[8] Questions were asked about expectations of their initial visit, the type of treatment expected, problems associated with orthodontic treatment, duration and frequency of attendance and the expected benefits of treatment.

Phase 2

Pilot questionnaire

The questionnaire was tested on five new consecutive patients and five parent participants. As a result, some of the questions were re-worded with a question added regarding the parental status of the parents, i.e. mother/father/guardian. The amendments were judged to be sufficiently minor as to not require pilot testing. The typical time taken for completion of the consent and questionnaire was approximately 5–10 minutes.

Questionnaire distribution

The questionnaire was distributed to 174 subjects (87 new patients and their 87 parents). In order to test the reliability of the questionnaire, 48 patients and 48 parents from the sample of 174 subjects, were mailed the questionnaire along with the consent sheet, information sheet and a stamped address envelope, prior to their new patient appointment. Both children and parents were asked to complete the questionnaire, and return it to the orthodontic department before their consultant clinic appointment. The same children and parents were asked to complete another questionnaire, before they were seen by the orthodontic consultant. This was to reduce operator bias. Patients completed their questionnaires separately from their accompanying parent. Eleven children and their 11 parents completed 22 postal questionnaires, and then completed the questionnaires again on the day of their appointment.

Another 39 children and their 39 parents completed 78 questionnaires on the day of their pre-treatment consultation. An information sheet was given to both patient and parent before consent was obtained.

Results

A total of 140 subjects participated in this study during the period of December 2002 to April 2003. The findings from the questionnaire were analysed using SPSS Version 10.0 (SPSS Corporation, Chicago, USA).

Phase 1

Fifteen subjects and 15 of their parents participated in semi-structured interviews, comprising of eight males and seven females accompanied by 12 mothers and three fathers. Content analysis of their responses produced seven broad themes: expectations of their initial visit, type of treatment, problems associated with orthodontic treatment, reaction of people to orthodontic treatment,

Table 1 Summary of identified themes and responses (n = 30).

Themes	Number of children	Number of parents
1. Expectations of initial visit		
Check up & diagnosis	6	9
Discussion	2	1
Get braces	4	1
Radiographs	2	2
Impressions		2
Don't know	2	2
Check oral hygiene	2	
2. Expected types of orthodontic treatment		
Don't know	3	4
Oral hygiene	1	1
Extraction		3
Braces: general	10	7
Braces: train tracks	4	1
Headgear		1
Gold chain to tooth		1
Orthognathic surgery	1	1
Removable brace		1
3. Expected experiences of orthodontic treatment		
None	11	10
Don't know	1	2
Embarrassment	1	1
Pain/discomfort		1
Reduced activity: eating	2	1
Reduced activity: speech	1	
Problems cleaning teeth		1
4. Expected reaction of other people		
Don't know		1
None	7	3
Positive	5	4
Negative	3	7
5. Expected duration of orthodontic treatment		
Don't know	4	4
3–4 years	2	1
2 years	3	5
1–2 years		2
1 year	2	2
6 months	1	1
2 months	1	
6 weeks	1	
4–6 weeks	1	
6. Expected frequency of orthodontic appointments		
Don't know	2	1
6 months		1
4–6 months	1	1
3 months	1	5
2 months	1	2
4–6 weeks	2	
4 weeks	4	2
1 week	2	
Twice/week	1	
Other	1	3

Table 1 (Continued).

Themes	Number of children	Number of parents
7. Benefits of orthodontic treatment		
Don't know	1	
Straight teeth	15	10
Better speech	2	3
Improved mastication	1	
Improved smile	3	1
Psychological (confidence)	1	2
Social prospects (partner, friends, career)	2	1
Improved oral hygiene	1	2

duration and frequency of attendance, and the benefits of treatment. The themes and sub-themes identified are listed in Table 1. The frequency of occurrence for each theme and sub-theme is identified in Table 1. Whilst not required for qualitative research of this nature, this information is included in order to provide some information on how common themes are mentioned.

Children were asked, 'Do you think treatment will affect what you eat or drink?' Examples of some of the responses are:

- 'Chewing gum will get stuck in my brace.'
- 'Chocolates—get stuck in brace.'
- 'Can't chew gum or drink fizzy drinks—make brace go yellow. Food and drink get stuck under parts you can't see and rot the teeth'.
- 'Won't affect what I eat or drink, just need to be careful that I don't get things stuck in brace by cleaning teeth.'

Parents were also asked, 'Do you think treatment will affect what your child eats or drinks?' Examples of parents' responses are:

- 'No problems with eating or drinking if my child brushes his teeth.'
- 'Treatment shouldn't affect what he eats or drinks if he cleans after each meal – no food in brace.'
- 'Uncomfortable to eat or drink until she gets used to the brace. No – she has a healthy diet and cleans her teeth.'
- 'Yes—no chewing gum, no sweets, chocolates or sticky things.'
- 'They say not to drink fizzy drinks, decrease sugar because it sticks to the brace and rots the teeth.'

Children and parents were asked about other people's expected reaction to them or their child wearing an orthodontic brace.

Examples of some of the children's responses:

- 'People won't mind as most people in my class have them (referring to braces).'
- 'No … loads of my mates wear them.'
- 'People will react in a silly way … say I'm a geek. I'll ignore them, they don't understand why I need treatment.'
- 'Don't know. I think they'll be shocked. I don't think they will look good on me.'

Examples of some of the parents' responses:

- 'It's the in-thing to have a brace. It's cool, everyone has them!'
- 'Some friends will laugh—he'll take it in his stride. Lots of children have them—more fashionable. Seen on TV that you can have your own braces—spice girl braces.'
- 'She'll have fun at school showing off her new brace.'
- 'People will notice and take the mick. He will be called names like tractor mouth and train mouth.

Phase 2

Characteristics of the sample. In total 100 subjects completed the questionnaire. Test-retest analysis was conducted on 22 participants (11 patients and their 11 parents), who completed the questionnaire previous to and at their orthodontic consultation. They consisted of patient participants aged between 12–14 years and their parents (mean age 41 years).

Reliability testing of the questionnaire: test-retest of the questionnaire. The questionnaire was mailed to 48 child and parent participants 3 weeks prior to their pre-treatment consultation. Only 14 children and parents returned their questionnaires by post before their appointment. In addition, only 11 out of the 14 children and their parents attended their pre-treatment orthodontic consultation. Therefore, only 22 questionnaires were completed for the second time prior to their orthodontic consultation and included in the test-retest.

Responses from the postal questionnaire (Table 2, time 1) were compared to the questionnaire completed prior to participants pre-treatment orthodontic consultation (Table 2, time 2). The scores produced were correlated using Spearman's correlation coefficient (Table 2). The responses recorded on these two occasions were statistically significant using Spearman's Rank Correlation Coefficient, except for question 1d, with no statistically significant difference in mean scores suggesting that scores are reliable over time.

Test-retest reliability of questions 8 and 9 were analysed using weighted Kappa because of their ordinal nature. A weighted Kappa (Kw) was used to measure the level of agreement between time 1 and time 2 and to account for 'near misses' in agreement.[8] Weights were assigned according to the method described by Altman.[10]

Question 8 has a weighted Kappa of 0.86. Therefore, a very good level of agreement was produced. However, these data should be treated with caution, as there are a number of cells with very small numbers. Question 9 produced a weighted Kappa of 0.91. This indicates that a very good level of agreement between the two responses has been achieved.

Internal consistency. Cronbach's alpha[8] was used to test the internal consistency for the 78 participants who

Table 2 Analysis of test and re-test of questionnaire (n = 22).

Item	Mean time 1	Mean time 2	Spearman's rho
1A	36.7 (se 8.15)	27.5 (se 5.38)	0.54**
1B	66.2 (se 7.36)	75.8 (se 3.89)	0.60**
1C	72.7 (se 5.87)	77.14 (se 4.81)	0.50*
1D	55.0 (se 6.45)	55.5 (se 4.67)	0.42 NS
1E	40.5 (se 5.42)	55.5 (se 6.0)	0.46*
1F	59.2 (se 6.40)	65.16 (se 6.16)	0.72**
2A	56.40 (se 7.99)	64.7 (se 5.8)	0.80**
2B	44.1 (se 7.62)	51.5 (se 4.45)	0.51*
2C	45.92 (se 6.44)	43.24 (se 6.97)	0.74**
2D	16.57 (se 4.03)	20.05 (se 3.74)	0.66**
2E	25.5 (se 7.32)	13.3 (se 2.95)	0.57**
3	29.9 (se 4.41)	43.0 (se 4.73)	0.62**
4	40.66 (se 7.19)	48.23 (se 4.67)	0.52**
5	48.68 (se 5.7)	39.95 (se 4.7)	0.58*
6	51.16 (se 7.08)	50.95 (se 4.9)	0.42**
7	49.95 (se 4.46)	48.41 (se 3.98)	0.65**
10A	79.32 (se 5.42)	74.68 (se 3.37)	0.65**
10B	62.05 (se 7.07)	62.9 (se 5.84)	0.75**
10C	40.61 (se 5.49)	41.7 (se 5.49)	0.49*
10D	35.5 (se 5.79)	40.68 (se 5.43)	0.55**
10E	45.9 (se 6.97)	50.64 (se 5.73)	0.81**
10F	31.5 (se 6.75)	41.41(se 5.44)	0.68**
10G	50.32 (se 6.75)	62.9 (se 4.93)	0.87**

*Correlation is significant at the 0.05 level (two-tailed).
**Correlation is significant at the 0.01 level (two-tailed).
NS = not significant.
Numbers in item column = questions asked (see Appendix 1).

completed the questionnaire on the day of their orthodontic consultation. The overall inter-item value was 0.76 and the corrected item-total correlation of > 0.3 was achieved in over 50% of items (questions), producing a good level of internal consistency[8] (see Table 3).

Discussion

Previous studies have measured subjects' expectations of orthodontic treatment only after their initial consultation or during treatment which introduces bias into the results.[7,11] This study measures patients' expectations of orthodontic treatment before consultation or treatment with an orthodontist.

A measure should be psychometrically validated which involves assessing for reliability and validity.[8] Reliability is defined as an assessment of the reproducibility and consistency of an instrument.[12] Previous studies measuring patients' expectations of orthodontic treatment have not mentioned or included tests for reliability or/and validity tests.

A test-retest study of the questionnaire was carried out to confirm its reproducibility, using statistical analyses which have been recommended in the recent literature for testing the reproducibility of questionnaire responses on two separate occasions.[8,12]

Table 3 Reliability analysis (Cronbach's alpha) $n = 22$.

Question	Corrected item-total correlation	Alpha if item deleted
1a	0.33†	0.75
1b	0.91	0.76
1c	0.22	0.75
1d	0.18	0.75
1e	0.38†	0.74
1f	0.20	0.75
2a	0.31†	0.74
2b	0.54†	0.73
2c	0.35†	0.74
2d	0.37†	0.75
2e	0.20	0.75
3	0.02	0.76
4	0.25	0.75
5	0.07	0.76
6	0.29	0.75
7	0.26	0.75
10a	0.41†	0.74
10b	0.49†	0.73
10c	0.35†	0.74
10d	0.40†	0.74
10e	0.38†	0.74
10f	0.26	0.75
10g	0.43†	0.74

†= > 0.3 corrected item-total correlation.
Questions asked (see Appendix 1).

Internal consistency was tested using Cronbach's alpha in regards to the overall inter-item and item-total correlations. Bennett *et al.*[4] used Cronbach's alpha to assess the reliability of their questionnaire. However, these authors measured parents' expectations of orthodontic treatment, but not children's expectations.

Validity is an assessment of whether an instrument measures what it aims to measure.[8,12] Phase 1 of this study used open-ended questions in semi-structured qualitative interviews from which a closed form questionnaire was produced. Face validity was judged by subjective assessment and relevance of the questionnaire to the participants. The use of open-ended questions during a qualitative interview increases validity.[12] Another study used qualitative telephone interviews to design a questionnaire. However, this measured parents' and orthodontists' expectations of orthodontic treatment and stated that the validity of their measure maybe questioned.[4]

Weaknesses of the study

The robustness of the results should be viewed with caution because of the small test-retest sample size. As a result the patient and parent data were analysed together. This limits the reliability test, because it may have been different if the patient and parent groups were analysed separately.

The statistical analysis used to confirm the reliability of the questionnaire can be questioned even though it is supported by recent literature[11] as the use of Spearman's Rank is not universally accepted.[13]

Postal questionnaires used in the reliability test do not control who completes the questionnaire, and problems with literacy and language are more difficult to identify. This may be reflected in a reduced response rate, as shown in this study. However, the advantages of postal questionnaires include access to large sample groups at a relatively low cost and completing the questionnaire before the orthodontic consultation and treatment reduces the subjects' response bias.[12]

Reliability and validity of a study are threatened by biases and errors.[8] In this study, bias could have resulted from mood bias (people in low spirits may under-estimate their health status), non-response bias (patient not completing all the questions, or returning their postal questionnaires), random measurement error (the respondent guesses the answer or gives an unpredictable response), recall (memory) bias (participants remembering responses from postal

questionnaire), response style bias (participants responding to questions in the same manner regardless of the question) and selection bias (only children 12–14 years old were investigated).

Strengths of the study

This study provides a questionnaire which measures patients' and parents' expectations before orthodontic treatment. The questionnaire is both valid and reliable and based on a UK population.

The study has provided information on patients' and parents' expected frequency of orthodontic visits and duration of orthodontic treatment. At present, the literature has not reported child or parent expectations in regard to duration and frequency of orthodontic appointments in the UK.[4]

The questionnaire has recorded information about patients' and parents' high and low expectations of orthodontic treatment and their initial expectations of their first orthodontic visit.

Application of the questionnaire

The questionnaire could be used to assess unrealistic expectations and ascertain if pre-treatment counselling is required before embarking on orthodontic treatment. It could also be used as an aid for consent and treatment planning. All these factors help to improve the quality of orthodontic treatment provided to the patient, because it helps to bridge the gap between their expectations of health and their experience of it.[1] It has been suggested that orthodontists should ask their patients how they feel about their dental appearance and their expectations regarding orthodontic treatment.[14]

Conclusions

This study provides a psychometrically validated measure of orthodontic expectations in 12–14-year-old patients and their parents in the UK. This questionnaire provides the following:

- A reliable measure of patients' and parents' expectations of orthodontic treatment.
- A validated measure of patients' and parents' expectations of orthodontic treatment.
- It measures orthodontic expectations of 12–14-year-olds and their parents before their initial orthodontic consultation in regard to the initial appointment, type of treatment, expected experiences during treatment, duration of treatment, frequency of visits, and benefits of orthodontic treatment.

Contributors

Mark Sayers was responsible for the recruitment of the participants, data collection, content analysis, designing the questionnaire and drafting the article. Tim Newton was responsible for study design, content analysis, statistical data analysis, critical revision, expert advice and final approval of the article. Professor Fraser McDonald helped in critical appraisal and advice. In addition Liz O'Higgins, Shruti Patel and Mr Powell allowed access to recruitment of patients referred to their consultant clinics. Tim Newton is the guarantor.

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Appendix 1

King's College Hospital NHS
NHS Trust

QUESTIONNAIRE TO MEASURE PATIENTS' EXPECTATIONS OF ORTHODONTIC TREATMENT

This questionnaire is to help you tell the orthodontists about your expectations regarding your forthcoming treatment. Read each question, and answer each question by placing a mark on the line nearest your expectation.

For example:

All information obtained is strictly confidential.

If you have already received orthodontic treatment, and are not aged between 12-14 years; you do not need to complete the questionnaire. Please return it to the researcher or the orthodontic receptionist.

Name:

Surname:

Date of birth:
Gender (please delete): Male:Female

Address:

Post code:

Ethnic origin:

1. **At your initial appointment do you expect to:**

a. **Have a brace fitted?**

Extremely Unlikely ——————————— Extremely Likely

b. **Have a check-up and diagnosis?**

Extremely Unlikely ——————————— Extremely Likely

c. **Have a discussion about treatment?**

Extremely Unlikely ——————————— Extremely Likely

d. **Have X-rays?**

Extremely Unlikely ——————————— Extremely Likely

e. **Have impressions?**

Extremely Unlikely ——————————— Extremely Likely

f. **Have oral hygiene checked?**

Extremely Unlikely ——————————— Extremely Likely

2. **What type of orthodontic treatment do you expect?**

a. **Braces, don't know what type?**

Extremely Unlikely ——————————— Extremely Likely

b. **Train track braces?**

Extremely Unlikely ——————————— Extremely Likely

c. **Teeth extracted?**

Extremely Unlikely — Extremely Likely

d. **Head brace?**

Extremely Unlikely — Extremely Likely

e. **Jaw surgery?**

Extremely Unlikely — Extremely Likely

3. **Do you think orthodontic treatment will give you any problems?**

Extremely Unlikely — Extremely Likely

4. **Do you think wearing a brace will be painful?**

Extremely Unlikely — Extremely Likely

5. **Do you think orthodontic treatment will produce problems with eating?**

Extremely Unlikely — Extremely Likely

6. **Do you expect orthodontic treatment to restrict what you can eat or drink?**

Extremely Unlikely — Extremely Likely

7. **How do you think people will react to you wearing a brace?**

Negative Reaction — positive reaction

NO REACTION

8. **How long do you expect orthodontic treatment to take?** (Please tick the appropriate box)

4 years	
3.5 years	
3 years	
2.5 years	
2 years	
1.5 years	
1 year	
6 months	
3 months	
1 month	
Don't know	

9. **How often do you think you will need to attend for check up?**(please tick the appropriate box)

Every 8 months	
Every 6 months	
Every 3 months	
Every 2 months	
Every 6 weeks	
Every 4 weeks	
Every 2 weeks	
Once a week	
Twice a week	
Don't know	

10. **Do you expect orthodontic treatment to:**

a. **Straighten your teeth?**

Extremely Unlikely ——————————— Extremely Likely

b. **Produce a better smile?**

Extremely Unlikely ——————————— Extremely Likely

c. **Make it easier to eat?**

Extremely Unlikely ——————————— Extremely Likely

d. **Make it easier to speak?**

Extremely Unlikely ——————————— Extremely Likely

e. **Make it easier to keep my teeth clean?**

Extremely Unlikely — Extremely Likely

f. **Improve my chances of a good career?**

Extremely Unlikely — Extremely Likely

g. **Give you confidence socially?**

Extremely Unlikely — Extremely Likely

Thank you for completing the questionnaire.