

CHAPTER 5

RESULTS AND DISCUSSION

5.1 INTRODUCTION

The results of the empirical study are presented in this chapter. Results from Part I, listening profiles are presented first, followed by the results from Part II, the continuous measurement of self-reported emotional response to music. The relationship between the results of Part I and the results of Part II is also presented, followed by a comparison between the formally trained participants and informally trained participants.

5.2 PART I: LISTENING PROFILES

In this section the results from Part I, listening profiles, are presented. The results of the NEO PI-R and Tomatis listening test should be seen as indications of *tendencies*, and not as claims of significant correlations. Seeing that the demographic questionnaire, the NEO PI-R and Tomatis listening test were only administered in Test Period 1, any correlations or contradictions in the results can be viewed as circumstantial. It is however important that these results be presented, since it informs the results of Part II. The presentation of the results serves to answer the research question. Since the aim of this research project was to determine the effectiveness of the newly designed method, it was firstly important that the research method 1) gather relevant data and 2) reveal patterns in the data. The *nature* of the patterns is not the first concern when judging the method.

5.2.1 Demographic Questionnaire

The tables below show relevant information from the demographic questionnaire. Table 5.1 concerns participants who have experienced illnesses that might have had an influence on their hearing and their listening abilities in general. All of them indicated, however, that they

did not experience any of these illnesses on a regular basis. The only chronic condition that might have an influence on listening abilities was asthma, indicated by Alex.

Table 5.1: Illness

Illness	Ear infection	Severe ear pain	Tympanitis	Chronic
Participants	Alex JP John William	Alex JP John	JP John	Alex (asthma)

Some participants were ill during one of the three Ponto Vista sessions. This is significant, since it had an influence on their listening experiences during that Test Period, as will be shown later. The table below shows which participants were ill, during which Test Period they were ill, as well as the diagnosis. Note that William was ill during the recording session, but not during any of the Test Periods.

Table 5.2: Illness during Ponto Vista sessions

Participant	Which Test Period?	Illness
JP	TP 2	Middle ear infection
Mary-Jane	TP 1	Headache
Steve	TP 2	Fever and ear pain
William	Recording session	Influenza

Table 5.3 shows other relevant information from the demographic questionnaire concerning preferences and dislikes of music styles and/or instruments, the years of training they have had in their instrument(s), how many years they have been playing their instrument(s), which sibling the participant is in relation to his/her other siblings, as well as their parents' marital status. Information on the ages of the participants and instruments they played for this study was provided in Chapter 3.

Table 5.3: Personal information of participants

Participants	Preferences	Dislikes	Training	Playing	Sibling relations	Parents
Alex	Classical music Heavy metal Soul Piano Violin	Trumpet Brass instruments Pop “Boeremusiek”	Piano: 13.5 Violin: 13.5	Piano: 15 Violin: 13.5	Only child (adopted)	Married
James	Baroque Woodwind instruments	Flute Popular music	Bassoon: 5 Saxophone: 5 Clarinet: 4 Voice: 5	Bassoon: 5 Saxophone: 5 Clarinet: 4 Voice: 5	Eldest	Mother died when he was 14
JP	Opera Classical Voice	Recorder Techno Hip-Hop Rap	Flute: 7 Singing: 5	Flute: 7 Singing: 13	Middle child	Married
Mary-Jane	Wide variety of genres from Baroque to contemporary composers Woodwind instruments	Flute Solo violin	Bassoon: 8 Piano: 8 Clarinet: -	Bassoon: 8 Piano: - Clarinet: -	Eldest	Married
Susan	Michael Bubl� Josh Groban Rock Pop Cello Piano Ensemble Orchestra	Organ Trumpets Metal music	Flute: 12 Piano: 5 Organ: 1 Saxophone: 4 months	Flute: 12 Piano: 12 Organ: 1 Saxophone: 4 months	Second child	Married
John	Christian contemporary music Pop, e.g. U2,	Metal Dance Trance Rave	Bass: 0 Piano: 6 months	Bass: 14 Piano: 6 months	Only child	Father died when he was 14

	Sting Jazz, e.g. Yellow Jackets, Diana Krall Bass	Gregorian chant				
Norman	Blues Rock Jazz Acoustic Vocal Guitar Wind instruments Piano	Drums Organ Hard Rock Metal Pop	Guitar: 1	Guitar: 5	Youngest	Married
Peter	Rock Punk Acoustic guitar	Clarinet etc. Opera	Keyboard: 1 Guitar: 0	Keyboard: - Guitar: 11	Youngest	Married
Steve	Cat Stevens The Beatles WOW 2008 Klopjag Golden Oldies Acoustic guitar	Distorted electric guitar R&B Rap Punk Rock Rock Rave House Hard-core Trance	Guitar: 3.5 Bass: 0 Piano: 1.5	Guitar: 6 Bass: 1 Piano: 1.5	Eldest	Married
William	Christian con- temporary Rock Pop Acoustic Piano Violin Guitar	Trumpet Banjo “Boeremusiek” Heavy Metal Opera	Piano: 1 Vocal: 2 Guitar: 0	Piano: 1 Vocal: 2 Guitar: 1 +	Youngest	divorced when he was 3

5.2.2 Tomatis listening test

Table 5.4 summarises the results of the Tomatis listening test. It shows which participants indicated the presence of what is known as ‘the musical ear’, the leading ear, open and closed selectivity, directivity mistakes participants made during the test, as well as the nature of the air and bone conduction curves in terms of contact, crossing or straight lines.

Table 5.4: Tomatis test results

Test	Participants
‘Musical ear’	JP, Alex, Peter
Leading ear: right	All participants
Closed selectivity	Mary-Jane, John
Open selectivity	Alex, James, JP, Susan, Peter, Norman, Steve, William
Directivity mistakes	Alex, James, JP, Mary-Jane, Susan, Peter, John, Norman
Crossing/contact between curves	JP, James, Mary-Jane, Susan, Peter, John, William, Norman
Straight lines in curves	James, John, Norman, Steve

Although there was no report of any physical hearing problems, differences in air and bone conduction curves of specific participants suggest the presence of subjective factors that might influence listening abilities. According to the evaluation report submitted by the psychologist, crossings and/or contact between the air and bone conduction curve suggest the presence of stress and also indicates conflict areas. Mistakes concerning directivity suggest concentration problems. Closed selectivity suggests the presence of fear. Straight lines in either one or both of the curves suggest a struggle to analyse sound which might have a negative influence on sound perception and control. It could also indicate a preference for self-listening as opposed to listening to others (Van Jaarsveld, 1974:233). Note that Alex’s results only indicated a *temporary* problem with concentration. His directivity mistake could be contributed to his struggle with asthma.

5.2.3 NEO PI-R personality test

The results of the NEO PI-R are displayed in Table 5.5 – 5.9. It presents all the domains together with their facet scales as well as the five ratings according to which the participants were scored. The descriptions of each domain, scale and rating were not included here. Please see Addendum B for the descriptions.

Table 5.5: Neuroticism domain results

1. NEUROTICISM					
	Very low	Low	Average	High	Very high
1.1 Anxiety		Alex Steve Norman	JP Mary-Jane Susan William	Peter	James John
1.2 Angry hostility	Mary-Jane	Steve William	Peter John	Alex Susan Norman	JP James
1.3 Depression		Mary-Jane Steve	Peter William Norman	JP Alex Susan	James John
1.4 Self-consciousness	Steve	Alex Norman	Mary-Jane	JP Susan John William	James Peter
1.5 Impulsiveness	Steve	Alex John William	JP Susan Peter Norman	James Mary-Jane	
1.6 Vulnerability	Steve	Alex William	JP Mary-Jane Peter Norman	Susan	James John

Table 5.6: Extraversion domain results

2. EXTRAVERSION					
	Very low	Low	Average	High	Very high
2.1 Warmth	James Mary-Jane Steve	JP Alex Peter	Susan John William Norman		
2.2 Gregariousness	Alex Peter James	Mary-Jane Steve John William	Norman	JP Susan	
2.3 Assertiveness	James	John	Mary-Jane Susan Peter	JP Alex William Norman	Steve
2.4 Activity		Peter Norman	James John William	JP Alex Mary-Jane Susan Steve	
2.5 Excitement-seeking	Steve Peter	James	John	Mary-Jane Susan William Norman	JP Alex
2.6 Positive emotions		JP Alex James Peter	Susan John	Mary-Jane Steve Norman	William

Table 5.7: Openness domain results

3. OPENNESS					
	Very low	Low	Average	High	Very high
3.1 Fantasy	James	John	Susan	Mary-Jane Peter	JP Alex Steve William Norman
3.2 Aesthetics			Susan Peter John	JP Steve William	Alex James Mary-Jane Norman
3.3 Feelings		Susan	James Steve Peter	JP William	Alex Mary-Jane John Norman
3.4 Actions	James	Susan Peter John William	JP	Alex Mary-Jane	Steve Norman
3.5 Ideas		Susan		Norman	JP Alex James Mary-Jane Steve Peter John William
3.6 Values	John William	Susan Norman	JP Steve Peter	Mary-Jane	Alex James

Table 5.8: Agreeableness domain results

4. AGREEABLENESS					
	Very low	Low	Average	High	Very high
4.1 Trust	Alex Mary-Jane John William	JP Susan Steve Norman	Peter	James	
4.2 Straightforwardness	JP Alex	Mary-Jane	Susan Steve William Norman	James Peter John	
4.3 Altruism	Alex James	JP Mary-Jane	Susan Norman	Steve Peter John William	
4.4 Compliance	JP Alex Mary-Jane	Susan Norman	James Steve John	Peter William	
4.5 Modesty	Alex Susan Steve		JP Mary-Jane William Norman	James John	Peter
4.6 Tender-mindedness	JP Alex James Susan		Mary-Jane John	Peter William Norman	Steve

Table 5.9: Conscientiousness domain results

5. CONSCIENTIOUSNESS					
	Very low	Low	Average	High	Very high
5.1 Competence		Susan	Alex James Peter Norman	JP Mary-Jane John William	Steve
5.2 Order		Mary-Jane	JP Alex James Susan William	Norman	Steve Peter John
5.3 Dutifulness		Alex Steve Norman	JP Susan	James Mary-Jane Peter John William	
5.4 Achievement striving	Alex	William Norman	James	Susan Peter John	JP Mary-Jane Steve
5.5 Self-discipline	William	James Susan John Norman	JP	Alex Mary-Jane Steve Peter	
5.6 Deliberation	Mary- Jane Norman		JP Susan Steve Peter William		Alex James John

5.2.4 Combining the results of the NEO PI-R and Tomatis listening test

The results of both the NEO PI-R and Tomatis tests suggest that some participants experience fear or stress. Both tests show that James, JP, Mary-Jane, Susan, John, Peter and William experience stress, and that Mary-Jane and John experience fear. The NEO PI-R has the capability to provide indications of characteristics that are stable over time, but the overlap in results with the Tomatis test is seen as circumstantial, since each of these tests was only conducted once. Also, the results of the Tomatis test might have been influenced by the testing process itself; participants could have experienced stress because of their unfamiliarity with the test procedure.

5.2.5 Ponto Vista Question 1

The results of all three Test Periods for Ponto Vista Question 1 will be presented here, since Question 1 was completed in all the Test Periods.

5.2.5.1 General results: Question 1

The results presented in section 5.2.5.1 report on the way in which participants constructed their categories. This includes the number of emotion words they misunderstood or misarranged (Table 5.10), emotion words that were unknown to them (Table 5.11), words they did not consider to be an emotion (Table 5.12), the remaining number of words that were sorted into useable categories for Ponto Vista Question 2 (Table 5.13), and finally the number of categories that were constructed, excluding Misunderstood, Unknown and Not Emotion-categories (Table 5.14). Emotion words that were misunderstood became evident when the interviews were conducted and the participants were questioned about it. Please note that the results are given for all three test periods, as indicated by TP1, TP2 and TP3 in the first column of the tables below. When the results from the test periods are compared, certain trends become clear. These trends are discussed below after Table 5.14.

Table 5.10 Misunderstood/misarranged emotion words

	Alex	James	JP	Mary-Jane	Susan	John	Norman	Peter	Steve	William
TP 1	0	0	5	0	8	0	4	4	2	2
TP 2	0	0	0	0	4	0	0	0	0	1
TP 3	0	0	3	0	4	0	0	1	2	0
Ranges										
TP 1	0 – 8			Min: Alex, James, Mary-Jane, John Max: Susan						
TP 2	0 – 4			Min: Alex, James, JP, Mary-Jane, John, Norman, Peter, Steve Max: Susan						
TP 3	0 – 4			Min: Alex, James, Mary-Jane, John, Norman, William Max: Susan						

Table 5.11: Unknown emotion words

	Alex	James	JP	Mary-Jane	Susan	John	Norman	Peter	Steve	William
TP 1	0	11	7	2	14	7	8	22	15	14
TP 2	0	16	5	1	12	9	0	34	19	16
TP 3	0	12	2	0	11	11	0	31	18	13
Ranges										
TP 1	0 - 22						Min: Alex Max: Peter			
TP 2	0 - 34						Min: Alex, Norman Max: Peter			
TP 3	0 - 31						Min: Alex, Mary-Jane, Norman Max: Peter			

Table 5.12: Not emotion

	Alex	James	JP	Mary-Jane	Susan	John	Norman	Peter	Steve	William
TP 1	31	6	3	0	9	11	4	3	4	14
TP 2	5	2	1	0	3	11	3	1	0	4
TP 3	0	1	1	0	8	3	0	1	0	2
Ranges										
TP 1	0 - 31						Min: Mary-Jane			

		Max: Alex
TP 2	0 - 11	Min: Mary-Jane, Steve Max: John
TP 3	0 - 8	Min: Alex, Mary-Jane, Norman, Steve Max: Susan

Table 5.13: Remaining emotion words

	Alex	James	JP	Mary-Jane	Susan	John	Norman	Peter	Steve	William
TP 1	104	118	120	133	104	117	119	106	114	105
TP 2	130	117	129	134	116	115	132	100	116	114
TP 3	135	122	129	135	112	121	135	102	115	120
Ranges										
TP 1	104 - 133					Min: Alex, Susan Max: Mary-Jane				
TP 2	100 - 134					Min: Peter Max: Mary-Jane				
TP 3	102 - 135					Min: Peter Max: Alex, Mary-Jane, Norman				

Table 5.14: Number of categories

Categories										
	Alex	James	JP	Mary-Jane	Susan	John	Norman	Peter	Steve	William
TP 1	6	32	16	11	23	18	15	30	31	13
TP 2	5	27	19	23	15	16	14	36	15	6
TP 3	6	16	14	20	10	15	16	26	18	6
Ranges										
TP 1	6 - 32					Min: Alex Max: James				
TP 2	5 - 36					Min: Alex Max: Peter				

TP 3	6 - 26	Min: Alex, William Max: Peter
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The following conclusions can be drawn from the data when comparing the Test Periods to each other.

- Misunderstood emotion words became less; however, Unknown emotion words seem to increase over time.
- Words not considered as emotion became less over time.
- More words were sorted into useable categories for Question 2.
- When comparing the Test Periods, some participants created more categories; others maintained their number of categories, while others created fewer categories.

The changes in the way that the participants responded are relevant for this study and for developing research methods that aim to investigate the emotional content of listening experiences. It is clear from the results that the way that each participant ‘mapped’ the emotional world in terms of categories and meaning of words, did not stay constant. If the emotional content of all listening experiences are compared over time, this shifting nature of a participant’s mapping needs to be taken into account.

Furthermore, it is clear that the different participants did not map in the same way. This means that also when the emotional content of listening experiences of participants are compared, the different maps need to be taken into account. More evidence for the differences between participants are given below by identifying strategies according to which the categories were constructed (section 5.2.5.2), by comparing the categories to Shavers’ categories (section 5.2.5.3).

5.2.5.2 Construction strategies

Strategies the participants used when constructing their categories in Question 1 will be discussed here. Table 5.15 is a summary of those strategies, and each strategy will be discussed separately. The table refers to strategies the participants used aside from sorting words in terms of having the same meaning.

Table 5.15: Strategies

Strategy 1	Creating positive, negative and mixed categories
Strategy 2	Sorting words according to ‘cause and effect’ (one emotion leading to another)
Strategy 3	Sorting words according to emotions related to a situation or person

a) Strategy 1: Creating positive, negative and mixed categories

As mentioned in Chapter 2, the word list used by the participants was based on a study conducted by Shaver and colleagues (Shaver *et al.*, 1987). The results of their study suggested that one meaningful distinction between emotions differentiates positive and negative emotions. It seemed fitting to apply that distinction here as well in order to interpret the data. Table 5.16 shows how many categories a participant constructed using positive emotions, how many were constructed using negative emotions, and how many were constructed using both positive and negative emotions (mixed).

Table 5.16: Constructing positive, negative and mixed categories

Alex					John			
	Positive	Negative	Mixed			Positive	Negative	Mixed
TP 1	2	4	0		TP 1	5	11	2
TP 2	1	2	2		TP 2	4	8	4
TP 3	0	2	4		TP 3	6	7	2
James					Norman			
	Positive	Negative	Mixed			Positive	Negative	Mixed
TP 1	14	16	2		TP 1	4	8	3
TP 2	11	14	2		TP 2	4	7	3
TP 3	7	7	2		TP 3	4	8	4
JP					Peter			
	Positive	Negative	Mixed			Positive	Negative	Mixed
TP 1	6	7	3		TP 1	11	17	2
TP 2	7	8	4		TP 2	12	20	4
TP 3	3	8	3		TP 3	10	14	2

Mary-Jane				Steve			
	Positive	Negative	Mixed		Positive	Negative	Mixed
TP 1	5	4	2	TP 1	10	17	4
TP 2	8	14	1	TP 2	5	6	4
TP 3	5	13	2	TP 3	6	8	4
Susan				William			
	Positive	Negative	Mixed		Positive	Negative	Mixed
TP 1	8	12	3	TP 1	7	5	1
TP 2	6	3	6	TP 2	2	0	4
TP 3	2	2	6	TP 3	2	1	3

The following inferences can be made when comparing the data in terms of each test period.

- Alex, Susan and William show a tendency to create mixed categories.
- JP seems to have a tendency to create almost equal amounts of positive and negative categories.
- William also creates positive categories.
- James, Mary-Jane, Norman, Peter, and Steve have a tendency to create negative categories.

When comparing these observations to the results from the NEO PI-R, it supports William's results, because he scored very high on the Positive Emotions facet scale, and average on the Depression facet scale. The data also supports the results of the NEO PI-R concerning Peter and James, who both scored low on the Positive Emotions facet scale. Peter scored average and James scored very high on the Depression facet scale. Interesting to note is that both Mary-Jane and Steve scored high on the Positive Emotions facet scale, and low on the Depression facet scale, but both of them show a tendency to create negative categories. The correlations are therefore not clear.

That being said, one must bear in mind that 61,4% of the words provided in the list are negative emotions (83 words) while only 38,5% are positive emotions (52 words). The inferences mentioned above should therefore be interpreted in this context.

According to Shaver *et al.* (1987:1061), studies have proven that the distinction between positive and negative emotions is a clear one. It is therefore possible to interpret a decrease in mixed categories as an increase in a participant's insight into the more normative map of the emotional world. This observation is of course open to debate, since it is not clear that there indeed exist something like the normative map of the emotional world (or prototype, in Shaver's terms).

b) Strategy 2: Sorting emotion words according to 'cause and effect'

Sometimes emotion words were sorted together by the participants for other reasons than being related to each other in terms of meaning. One of the strategies participants used to construct categories was to sort words that refer to an emotion that can lead to another emotion. The second emotion is therefore a result of the first emotion. This strategy became evident during the interviews. In the following table, only one example from each Test Period where there was also an interview excerpt that supported it will be provided for each participant. Table 5.17 shows two or more 'cause and effect'-words from a Test Period, as well as the relevant paraphrased interview excerpt.

Table 5.17: Cause and effect strategy

Alex		
	Emotion words	Paraphrased interview
TP 1	Pride and passion	When you are passionate about a certain goal, and you obtain it, then you are obviously proud of it.
TP 2	Horror and exhilaration	Horror builds on something like fear; you can, for instance, feel exhilarated and horrified on a roller coaster.
TP 3	Sentimentality and surprise	Sentimentality is more like the surprise of having a déjà-vu feeling, when something triggers a memory and you get that faraway look and you're suddenly completely lost in your own thoughts. It's kind of a surprise for me in a way, because in a way you don't really expect it to happen.

James		
	Emotion words	Paraphrased interview
TP 1	Frustration and misery	When something frustrates me, it makes me miserable. I hate it when I have a hard time with something. It really makes me miserable.
JP		
	Emotion words	Paraphrased interview
TP 1	Passion and joy	When you are passionate about something, it often causes joy. This is also true the other way around.
TP 2	Jealousy and isolation	Isolation is often a result of jealousy; someone can feel jealous of someone else and then isolate themselves from that person.
Mary-Jane		
	Emotion words	Paraphrased interview
TP 1	Eagerness and pride	I guess when you are proud of something you're doing, you would be eager to do it.
TP 2	Annoyance, rage and scorn	To me, these emotions are based on anger.
Susan		
	Emotion words	Paraphrased interview
TP 1	Isolation and insecurity	Usually when I'm feeling insecure, it makes me sad, and then I just want to be alone. I isolate myself when I feel insecure.
TP 2	Dejection and anger	To me, dejection can in some cases lead to anger, or the other way around.
TP 3	Desire and hope	When you desire a certain thing, you hope it happens or that you will get it.
John		
	Emotion words	Paraphrased interview
TP 1	Fear and hysteria	I view hysteria as an outflow or a consequence of fear; a person might act hysterically because of the fear he is experiencing.
TP 2	Hopelessness with anguish, regret and torment	Hopelessness causes all of these emotions. Hopelessness is a relatively strong emotion in my mind; it is a very bad experience for me to feel hopeless.
Norman		
	Emotion words	Paraphrased interview
TP 1	Optimism with eagerness, enthusiasm, excitement, hope	I see optimism as the root or the cause of the other emotions in this category. I also think the emotions or actions of the emotions in this category can cause positivity in someone.

	and relief	
TP 2	Insecurity with envy, jealousy and pride	Insecurity is the root of these emotions; you act in this way or feel this way because you are insecure.
Peter		
	Emotion words	Paraphrased interview
TP 1	Aggravation and anger	I don't associate aggravation with being irritated; I see it as the step to becoming angry. It is a stronger word than irritation. You first get irritated, then you get aggravated and then you're angry.
TP 2	Aggravation and anger	--
TP 3	Aggravation and anger	[Although Peter did not directly state in Test Period 2 and 3 again why he sorted anger and aggravation together, he did so for all three Test Periods. It would then be safe to assume that the motivation he provided in Test Period 1 is also relevant for Test Period 2 and 3.]
Steve		
	Emotion words	Paraphrased interview
TP 1	Adoration and amusement	I connected these two words in the sense that when you are amused with something it will draw your attention.
TP 2	Anxiety and dread	Dread means that you fear something that might happen. You become anxious that this thing shouldn't happen at all.
TP 3	Resentment and sentimentality	How I connected sentimentality with resentment is in the sense that you're longing for the good old days, but now things have changed, and you resent the change.
William		
	Emotion words	Paraphrased interview
TP 1	Satisfaction with contentment and triumph	When I succeeded at something - I triumph in other words - it causes satisfaction. Because I triumphed I also experience contentment, and as a result, I am satisfied.
TP 2	Suffering and alarm	I viewed suffering and alarm as a situation; they are emotions caused by external factors such as economical suffering.
TP 3	Contentment and excitement	To me contentment has the same emotional intensity as excitement. When you are content, you are happy, and that leads to all sorts of extreme positive emotions.

c) Strategy 3: Sorting emotion words according to emotions related to a situation or person

Emotion words were also sorted together by the participants in terms of their relation to a situation or person. The person they refer to can be the participant himself, or someone else. This strategy also became evident during the interviews. Only one example from each Test Period where there is also an interview extract that supports it, will be provided for each participant here. Table 5.18 shows the words, as well as a paraphrased excerpt from the relevant interview.

Table 5.18: Emotions related to situation or person strategy

Alex	Emotion words	Paraphrased interview
TP 1	Sentimentality and passion	People are mostly sentimental about the things they are passionate about.
TP 2	Desire, arousal, enthrallment, exasperation, frustration, hope, isolation, loneliness, longing, lust, melancholy, nervousness, rejection, resentment, sympathy, uneasiness	The best way to describe this category is to think of the different phases a relationship goes through. At some point or another you will probably go through these emotions in a relationship; I certainly have.
James	Emotion words	Paraphrased interview
TP 1	Frustration and misery	When something frustrates me, it makes me miserable. I hate it when I have a hard time with something. It really makes me miserable.
JP	Emotion words	Paraphrased interview
TP 1	Insults and loneliness	Sometimes when you are insulted, or even when you insult someone else, you can be lonely.
TP 2	Embarrassment and isolation	Isolation is often also a result of embarrassment; someone can feel embarrassed and then isolate themselves.
TP 3	Insult and envy	Sometimes insult is a different form of envy. Sometimes you would insult a person constantly, but secretly you are envious of them.

Mary-Jane	Emotion words	Paraphrased interview
TP 1	Amazement, amusement, astonishment, excitement, surprise	Amusement and excitement are both lighter feelings; you feel light on the inside.
Susan	Emotion words	Paraphrased interview
TP 1	Happiness and surprise	I enjoy receiving something I didn't expect, like a package from my mother, or when someone whom I haven't seen in a while unexpectedly visits me.
TP 2	Caring and worry	Often times when you care about someone, you also get worried about them.
TP 3	Ecstasy and thrill	This refers to the adrenaline-junky-side of my personality. I get a huge thrill and really experience ecstasy when I do extreme something extreme like bungee jumping.
John	Emotion words	Paraphrased interview
TP 1	Anger and aggravation	To me to aggravate something means to, for example, make a situation worse than it already is. A person's actions can aggravate anger.
TP 2	Fear and rejection	I fear rejection of any sort.
Norman	Emotion words	Paraphrased interview
TP 1	Caring and amazement	I was thinking about someone I care for, and how that person just amazes me. That is how I connected the words.
TP 2	Insult and defeat	Defeat and insult go together in the sense that you feel insulted when you've been defeated. A proud person would experience defeat as an insult.
TP 3	Optimism and delight	I viewed delight as having an optimistic attitude. When you are delighted you obtain an optimistic attitude.
Peter	Emotion words	Paraphrased interview
TP 1	Passion and sentimentality	I think it has a lot to do with our office relocation. We talked a lot about sentimentality, because there were a lot of things people wouldn't throw

		away just because they have a sentimental value for it. That is how I connected passion and sentimentality.
Steve	Emotion words	Paraphrased interview
TP 1	Joy and zeal	I viewed zeal as someone expressing joy in such a way that it shines from their being. That is why I grouped it with joy.
TP 2	Dislike and triumph	I connected triumph with dislike in the sense of someone placing himself above someone else. You therefore reject the other person and advance yourself. All the words in this category are feelings that you project towards someone else in the sense of you being better than they are.
William	Emotion words	Paraphrased interview
TP 1	Anger and agitation	When I am agitated it makes me angry; something that constantly disturbs me makes me angry.
TP 2	Joy and sympathy	I see sympathy as an emotion that arouses because of a person; it's not necessarily a bad or negative emotion.
TP 3	Love and remorse	Remorse is when you regret something wrong you did. When you don't regret anything, it means that you never really cared for that person or loved them at all.

Conclusion

The strategies mentioned above are the main ones participants used, aside from sorting together words having the same meaning, or sorting words into categories of words that they think belong together. Other strategies were also used, like sorting words together that described the same physical experience, but this strategy was only used once or twice by one or two participants during a Test Period, and is therefore not mentioned here. It seems in general as if the participants as individuals used the same strategies to sort the words, and used those strategies consistently over all three Test Periods. Their view of the words also changed over time, since less and less words were regarded as being anything else than nouns; misunderstood words became less, as well as words that were not considered to be emotion. More words were sorted into useable categories for Question 2.

5.2.5.3 Comparing participants' categories to Shaver

As was mentioned in Chapter 3, the participants' categories were also compared to the categories from Shaver's study on which Question 1 was based. This is done in order to determine how similar or how different participants' categories are from those of Shaver's. Table 3.4 in Chapter 3 showed the Shaver categories, with an alphabet letter assigned to each category for identification purposes. The number next to the letter indicates the number of words in that category. The table is presented here again (Table 5.19).

Table 5.19: Shaver categories (Table 3.4 in Chapter 3)

Positive emotion words: 52 (38.518%), 11 categories					
Group A (10)	Group B (5)	Group C (1)	Group D (17)	Group E (6)	Group F (2)
Adoration	Arousal	Longing	Amusement	Enthusiasm	Contentment
Affection	Desire		Bliss	Zeal	Pleasure
Love	Lust		Cheerfulness	Zest	
Fondness	Passion		Gaiety	Excitement	
Liking	Infatuation		Glee	Thrill	
Attraction			Jolliness	Exhilaration	
Caring			Joviality		
Tenderness			Joy		
Compassion			Delight		
Sentimentality			Enjoyment		
			Gladness		
			Happiness		
			Jubilation		
			Elation		
			Satisfaction		
			Ecstasy		
			Euphoria		
Group G (2)	Group H (3)	Group I (2)	Group J (1)	Group K (3)	
Pride	Eagerness	Enthralment	Relief	Amazement	
Triumph	Hope	Rapture		Surprise	
	Optimism			Astonishment	

Negative emotion words: 83 (61,481%), 14 categories				
Group L (6)	Group M (2)	Group N (15)	Group O (3)	Group P (2)
Aggravation Irritation Agitation Annoyance Grouchiness Grumpiness	Exasperation Frustration	Anger Rage Outrage Fury Wrath Hostility Ferocity Bitterness Hate Loathing Scorn Spite Vengefulness Dislike Resentment	Disgust Revulsion Contempt	Envy Jealousy
Group Q (1)	Group R (4)	Group S (12)	Group T (3)	Group U (4)
Torment	Agony Suffering Hurt Anguish	Depression Despair Hopelessness Gloom Glumness Sadness Unhappiness Grief Sorrow Woe Misery Melancholy	Dismay Disappointment Displeasure	Guilt Shame Regret Remorse
Group V (12)	Group W (2)	Group X (9)	Group Y (8)	
Alienation Isolation Neglect Loneliness Rejection Homesickness Defeat Dejection Insecurity	Pity Sympathy	Alarm Shock Fear Fright Horror Terror Panic Hysteria Mortification	Anxiety Nervousness Tenseness Uneasiness Apprehension Worry Distress Dread	

Embarrassment				
Humiliation				
Insult				

The table below provides the reader with a representation of the participants' categories constructed over all three Test Periods as compared to Shaver's categories. This representation excludes the words that were regarded by the participants as not being emotion, words that were unknown to the participants, as well as words that were misunderstood or misarranged by them. The first column shows whether the category was constructed from Shaver's positive or negative words, or if the participant used both (mixed). The next column shows the title the participant chose for the category he/she constructed. The third column shows from which Shaver categories the participant used words to construct his/her own unique categories. The number next to the letter here indicates how many words were used from that Shaver category to construct the unique category. If it is underlined, it means that the participant used the entire Shaver category to construct his/her unique category. The last column shows the total of words in the category. Although it is not stated here which specific words the participant used to construct his/her own categories, it will provide the reader with a fair idea of its construction. Comments about categories being divided before being sorted refer only to small Shaver categories. All other categories are divided by the participant, unless specified otherwise. Small Shaver categories refer to the following Shaver categories: C, F, G, H, I, J, K, M, O, P, Q, and W. Comments referring to small categories in general means that the category contains 10 or less words.

Table 5.20: Comparing participants' categories with Shaver categories

Alex

Alex	Test Period 1		Words
N	Anger	R2 + Y2 + T1 + M1 + L4 + <u>P2</u> + <u>O3</u> + N7	22
N	Hurt	X3 + V7 + S11 + T2 + Y4 + U3 + R1 + N1 + <u>Q1</u>	33
P	Passion	H1 + B2 + F1 + <u>I2</u> + <u>G2</u> + A5	13
N	Fear	Y1 + X6	7
P	Joy	D14 + F1 + H1 + <u>J1</u> + <u>K3</u> + E4	24
N	Sympathy	<u>W2</u> + M1 + U1 + Y1	5

Notes	1. Mostly construct a category by combining a few words from 6-8 Shaver categories 2. Mostly incorporated the smaller Shaver categories (G, I, J, K, O, P, Q, W = 8) into bigger categories. Three (M, H, F) were divided before sorting the words into bigger categories. Category C was dismissed altogether. 3. Few, big categories = bigger picture approach		
Alex	Test Period 2		Words
P	Love	$\underline{A10} + D6 + B2 + F1 + I1$	20
Mix	Exhilaration	$D10 + \underline{K3} + \underline{J1} + \underline{G2} + F1 + X2 + H2 + E4$	25
N	Anger	$N12 + \underline{L6} + \underline{O3} + \underline{Q1} + X4 + V2 + R1 + Y1 + T1 + \underline{P2}$	33
N	Distress	$S10 + R3 + Y5 + N2 + V6 + T2 + X3 + U4 + W1$	36
Mix	Desire	$\underline{M2} + \underline{C1} + I1 + H1 + B3 + S1 + V3 + N1 + W1 + Y2$	16
Notes	1. Mostly construct a category by combining a few words from 5-10 Shaver categories 2. Eight smaller Shaver categories (K, J, G, O, Q, M, C, P) incorporated into bigger categories. Four (F, I, H, W) were divided before sorting the words into bigger categories. 3. Bigger Shaver categories (A and L) were sorted as a whole into categories 4. Few, big categories = bigger picture approach		
Alex	Test Period 3		Words
Mix	Anger	$L5 + X1 + N7 + Y2 + O2 + T2 + V1 + G1$	21
Mix	Joy	$A9 + \underline{B5} + D15 + \underline{I2} + H2 + F1 + \underline{J1} + W1 + G1$	37
Mix	Melancholy	$Y4 + V4 + S8 + T1 + P1 + M1 + \underline{C1} + W1 + U2 + N1 + O1$	25
N	Agony	$\underline{R4} + V7 + X5 + M1 + S3 + U2 + L1 + P1$	24
N	Fury	$X3 + \underline{Q1} + Y1 + S1 + N7$	13
Mix	Surprise	$F1 + H1 + Y1 + D2 + A1 + \underline{K3} + \underline{E6}$	15
Notes	1. Mostly construct a category by combining a few words from 5-11 Shaver categories 2. Incorporated the smaller Shaver categories (I, J, C, Q, K) (5) into bigger categories. Seven (O, G, H, F, W, P, M) were divided before sorting the words into bigger categories. 3. Bigger Shaver categories (B, R, E) were sorted as a whole into categories. 4. Few, big categories = bigger picture approach		

James

James	TP1		Words
N	Rage	$N4 + L1$	5
N	Shame	$U3 + V3$	6
N	Anxiety	$Y4 + X3$	7

Mix	Melancholy	V3 + <u>C1</u> + S2 + A1 + R1	8
N	Hate	N3 + O1	4
N	Shock	X3	3
N	Hysteria	X1	1
P	Pleasure	F1 + D1	2
P	Affection	A5 + B1	6
P	Zeal	E3 + <u>H3</u>	6
P	Euphoria	D4 + I1 + E1	6
N	Misery	R2 + V1 + T1 + Y1 + M1 + S4 + <u>Q1</u>	11
P	Joy	D8	8
P	Desire	B4	4
N	Grumpiness	L5	5
N	Spite	N4	4
N	Sorrow	S4	4
N	Displeasure	T1 + S1	2
N	Insecurity	V1 + Y1	2
Mix	Compassion	<u>W2</u> + A1	3
N	Disgust	O1 + N1	2
P	Triumph	F1 + G1	2
N	Bitterness	N2 + R1	3
N	Jealousy	<u>P2</u>	2
P	Excitement	E2	2
P	Liking	A2	2
P	Amusement	D1	1
P	Relief	<u>J1</u>	1
N	Remorse	U1	1
P	Pride	G1	1
P	Jubilation	D2	2
P	Astonishment	K2	2

Notes

1. Mostly construct a category by combining a few words from 1-2 Shaver categories
2. Four of the smaller Shaver categories (C, H, Q, W) were incorporated into bigger categories. Six (O, K, F, I, M, G) were divided into smaller groups and then sorted with bigger categories. Two (P, J) were sorted on their own in accordance with Shaver.
3. Many small categories = detail oriented

James	TP2		Words
N	Anxiety	Y5 + X2	7
P	Desire	B3	3
N	Bitterness	N2	2
P	Love	A5 + B1	6
N	Sorrow	S4 + R3	7
N	Shock	X4	4
P	Enthralment	E2 + I1	3
N	Shame	V5 + <u>U4</u>	9
P	Happiness	D6 + F1 + E1 + G1	9
N	Jealousy	<u>P2</u>	2
P	Infatuation	A3 + B1	4
P	Pleasure	D2 + F1	3
N	Rage	N9	9
Mix	Melancholy	A1 + S1 + <u>C1</u> + V3	6
N	Irritation	<u>L6</u> + M1	7
N	Uneasiness	Y1	1
Mix	Compassion	A1 + <u>W2</u>	3
N	Depression	S5 + V2 + R1	8
P	Optimism	E3 + <u>H3</u>	6
P	Relief	<u>J1</u>	1
P	Euphoria	D6	6
N	Disappointment	T1	1
N	Horror	O1 + X1 + Y1	3
P	Pride	G1	1
P	Surprise	<u>K3</u>	3
N	Dislike	N1 + T1	2
N	Grief	S1	1

Notes

1. Mostly construct a category by combining a few words from 1-2 Shaver categories
2. Three of the smaller Shaver categories (C, H, W) were incorporated into bigger categories. Five (O, F, I, M, G) were divided into smaller groups and then sorted with bigger categories. Three (P, J, K) were sorted on their own in accordance with Shaver. One (Q) was omitted. Two Shaver categories (U, L) were sorted as a whole into other categories.
3. Many small categories = detail oriented

James	TP3		Words
P	Affection	A5 + B1	6
N	Anger	N4 + M1 + <u>L6</u>	11
N	Sorrow	<u>Q1</u> + R3 + S6	10
N	Worry	Y3 + X7	10
N	Anxiety	Y2 + V1 + S1	4
P	Amazement	D1 + K2	3
P	Infatuation	A2 + B4	6
N	Bitterness	<u>P2</u> + V1 + N7	10
P	Euphoria	G1 + E2 + I1 + D7	11
P	Happiness	K1 + <u>J1</u> + G1 + <u>F2</u> + D9	14
Mix	Compassion	<u>W2</u> + A1	3
N	Depression	V9 + S2 + T1 + U3 + R1	16
N	Dislike	Y2 + O1 + N1 + T1 + S1	6
P	Optimism	E4 + H2	6
P	Love	A1 + H1	2
Mix	Melancholy	<u>C1</u> + V1 + S1 + A1	4

Notes

1. Mostly construct a category by combining a few words from 2-3 Shaver categories
2. Six of the smaller Shaver categories (C, W, F, J, P, Q) were incorporated into bigger categories. Six (O, K I, M, G, H) were divided into smaller groups and then sorted with bigger categories. One Shaver categories (L) was sorted as a whole into other categories.
3. Many small categories = detail orientated. A notable decrease in the number of categories constructed during TP3 suggests a change in the way that he mapped his emotional world.

JP

JP		TP 1	Words
P	Joy	D11 + <u>J1</u> + H1 + B1 + F1	15
N	Hostility	L4 + V2 + N5 + <u>Q1</u>	12
P	Love	A8 + B1	9
N	Fury	N5	5
N	Sadness	N1 + R3 + V4 + W1 + U1 + S9	19
N	Hysteria	R1 + O1 + T1 + M1 + Y3 + X3 + N3	13

P	Hope	H1 + E3 + K1 + D4	9
P	Contentment*	<u>G2</u> + K1 + F1 + D1	5
Mix	Sympathy	V1 + A1 + W1	3
N	Loneliness	V4 + P1 + U1	6
Mix	Shock	X1 + K1	2
N	Uneasiness	L2 + S1 + Y1	4
P	Lust	B3 + <u>C1</u>	4
Mix	Fear	X4 + E1 + O1	6
N	Regret	U2 + S1 + P1 + Y1 + T2	7
P	Eagerness	H1	1
Notes	1. Mostly construct a category by combining a few words from 2-4 Shaver categories 2. Seven of the smaller Shaver categories (W, O, H, K, P, F, M) were divided into smaller groups and then sorted into bigger categories. Four of the smaller Shaver categories (J, Q, G, C) were incorporated into bigger categories. One Shaver category (I) was dismissed altogether. 3. Many small categories = detail orientated.		

Contentment*: This category was originally labelled Contempt by the participant, but contempt was categorised under Misunderstood since he confused contentment with contempt. The category was therefore re-labelled to Contentment for discussion purposes.

JP	TP2		Words
P	Joy	D13 + <u>F2</u> + <u>J1</u> + I1 + G1 + H1	19
P	Love	A7 + K2 + D3 + B1	13
N	Irritation	<u>L6</u> + Y1 + M1 + N4 + O1	13
N	Hate	N3 + O1	4
N	Hurt	S4 + Y1 + R3 + V2	10
N	Anxiety	Y5 + X4	9
N	Vengefulness	N3	3
Mix	Isolation	V7 + <u>P2</u> + <u>C1</u> + O1 + N1 + U1	13
N	Regret	U2 + N1	3
Mix	Compassion	<u>W2</u> + A1	3
N	Torment	X2 + <u>Q1</u> + R1 + Y1	5
P	Desire	B4 + E2	6
P	Hope	D1 + E1 + H1 + G1	4

Mix	Outrage	X2 + N1 + E1	4
Mix	Unhappiness	S8 + V1 + T2 + U1 + R1 + A1	14
P	Eagerness	E2 + H1	3
P	Sentimentality	A1	1
N	Homesickness	V1	1
P	Surprise	K1	1

Notes

1. Mostly construct a category by combining a few words from 1-4 Shaver categories
2. Six of the smaller Shaver categories (I, G, H, K, M, O) were divided into smaller groups and then sorted into bigger categories. Six of the smaller Shaver categories (F, J, P, C, W, Q) were incorporated into bigger categories. One other Shaver category (L) was incorporated into a category as a whole.
3. Many small categories = detail oriented

JP	TP3	Words
P	Liking	A5 + D2 + B3
N	Dislike	N4 + L1 + O2
N	Anger	N6 + M1 + R1 + L4 + S3 + X1 + Y1
P	Joy	D15 + <u>F2</u> + <u>J1</u> + <u>G2</u> + A2 + H1 + I1 + E3
N	Despair	L1 + R2 + T1 + Y3 + X3 + U1 + S3 + N2 + <u>Q1</u>
Mix	Surprise	B1 + X1 + <u>K3</u> + <u>W2</u> + E1 + Y1
Mix	Isolation	V4 + <u>C1</u> + A1
P	Optimism	H2 + A1 + B1
N	Depression	T1 + X1 + V6 + U3 + R1 + Y1 + S6
N	Envy	<u>P2</u> + X1 + V1
Mix	Insecurity	V1 + Y1 + A1
N	Wrath	N3 + X1
N	Contempt	O1
N	Dismay	T1

Notes

1. Mostly construct a category by combining a few words from three Shaver categories.
2. Four of the smaller Shaver categories (I, H, M, O) were divided into smaller groups and then sorted into bigger categories. Eight of the smaller Shaver categories (F, J, P, C, W, Q, G, K) were incorporated into bigger categories.
3. Many small categories = detail orientated

Mary-Jane

Mary-Jane TP 1			Words
P	Love	A5 + B4	9
N	Hostility	N14 + <u>L6</u> + <u>P2</u> + V1 + M1 + Y1 + O2	27
N	Hopelessness	V8 + Y5 + S10 + T1 + M1 + X3 + U2 + R1 + <u>Q1</u>	32
P	Ecstasy	<u>I2</u> + D14 + E5 + A1 + H1 + F1 + G1	25
Mix	Tenderness	A4 + <u>W2</u> + F1 + D1	8
N	Misery	X6 + R3 + S1 + Y1 + T1 + V1	13
P	Excitement	<u>K3</u> + D1 + E1	5
P	Hope	<u>J1</u> + B1 + H1	3
Mix	Humiliation	<u>C1</u> + V2 + Y1 + U2	6
P	Eagerness	H1 + G1	2
N	Dislike	O1 + N1 + T1	3
Notes	1. Mostly construct a category by combining a few adj. from 2-4 Shaver categories 2. Eight Shaver categories were incorporated into bigger categories (L, P, Q, I, W, K, J, C). Five smaller Shaver categories were divided before being sorted into categories (M, O, H, F, G) 3. Mostly small categories but also few big categories = detail orientated, and bigger picture approach.		
Mary-Jane		TP2	Words
P	Caring	A8 + B1	9
P	Attraction	B4 + A1	5
N	Annoyance	L4 + N3 + Y1	8
N	Suffering	R2 + <u>Q1</u>	3
N	Fear	Y4 + X8	12
N	Depression	V4 + S8 + Y1	13
P	Surprise	<u>K3</u>	3
P	Delight	D3 + I1 + A1 + F1	6
P	Gaiety	D9	9
N	Outrage	N2	2
N	Defeat	<u>M2</u> + R1 + V1	4
N	Embarrassment	<u>U4</u> + V2 + X1	7
P	Ecstasy	E3 + D2 + I1	6
P	Optimism	<u>H3</u> + <u>G2</u> + E3	8
N	Unhappiness	S4 + T1 + L2 + Y1	8

Mix	Longing	V1 + <u>C1</u>	2
N	Resentment	N7	7
N	Revulsion	<u>O3</u> + Y1 + N2	6
N	Disappointment	V4 + T1 + R1	6
N	Jealousy	<u>P2</u>	2
N	Dislike	N1 + T1	2
P	Contentment	D2 + <u>J1</u> + F1	4
N	Sympathy	<u>W2</u>	2

Notes

1. Mostly construct a category by combining a few words from 1-3 Shaver categories
2. Eight Shaver categories were incorporated into bigger categories (Q, C, M, O, H, J, G, U). Two smaller Shaver categories were divided before being sorted into categories (I, F). Three Shaver categories (K, P, W) were sorted on their own in accordance with Shaver.
3. Mostly small categories = detail approach. Her approach changed from TP1 to TP2.

Mary-Jane		TP3	Words
Mix	Love	A9 + B1 + Y1	11
P	Desire	B4	4
N	Aggravation	L4 + M1 + N4	9
N	Fury	N4	4
N	Dislike	N6 + <u>O3</u> + Y1 + T1	11
N	Grumpiness	L2	2
N	Rejection	V6 + T1 + X1 + U1	9
N	Loneliness	V4 + Y5 + <u>S12</u> + T1 + M1 + R2 + X2	27
N	Regret	U2	2
Mix	Longing	<u>C1</u> + V1	2
N	Fear	X6 + Y1	7
N	Sympathy	<u>W2</u>	2
N	Jealousy	<u>P2</u> + N1	3
N	Agony	R1 + <u>Q1</u>	2
P	Zeal	E5 + <u>I2</u> + D3 + G1	11
P	Optimism	D11 + <u>H3</u> + E1 + A1 + F1 + G1	18
P	Relief	D2 + F1 + <u>J1</u>	4
P	Surprise	D1 + <u>K3</u>	4

N	Defeat	R1 + V1	2
N	Guilt	U1	1
Notes 1. Mostly construct a category by combining a few words from 1-2 Shaver categories 2. Nine Shaver categories were incorporated into bigger categories (O, K, S, C, P, Q, I, H, J). Three smaller Shaver categories were divided before being sorted into categories (M, G, F). One Shaver category (W) was sorted on its own in accordance to Shaver. 3. Mostly small categories = detail approach. Her approach in TP3 resembles her approach in TP2.			

Susan

Susan TP 1			Words
N	Anger	N8 + <u>Q1</u> + M1 + S1 + L1 + P1	13
P	Happiness	D6 + E2 + K1 + G1	10
P	Joy	D4 + I1	5
N	Sadness	S7 + T1 + V1 + X1	10
P	Amazement	A1 + K1	2
N	Loneliness	V4 + R1	5
P	Love	A6 + B3 + F1	10
N	Insecurity	V2	2
N	Humiliation	N1 + U2 + R1 + V2 + O1	7
N	Shock	X8 + R1 + Y2	11
P	Thrill	E1	1
Mix	Caring	A2 + F1 + S1 + W1	5
N	Guilt	U1	1
N	Irritation	L2 + V1 + O1	4
P	Hope	B1 + H1 + <u>J1</u>	3
Mix	Tenseness	Y2 + L1 + H1	4
P	Pride	G1	1
N	Grumpiness	L2 + T1 + Y1	4
Mix	Longing	<u>C1</u> + W1	2
N	Envy	P1	1
N	Agony	R1	1
N	Contempt	O1	1

P	Astonishment	K1	1
Notes	1. Mostly construct a category by combining a few words from 1-4 Shaver categories 2. Three of the smaller Shaver categories were incorporated into bigger categories (Q, J, C). Nine smaller Shaver categories were divided before being sorted into categories (M, P, K, G, I, F, O, W, H) 3. Mostly small categories = detail oriented		
Susan	TP2		Words
N	Sadness	T1 + V2 + S2	5
P	Happiness	D9 + <u>F2</u> + I1 + E1 + H1 + A1 + K1 + G1	17
N	Anger	N10 + <u>Q1</u> + O2 + T1 + M1 + R2 + L2 + P1 + V4 + U2 + S2	28
Mix	Loneliness	S4 + U2 + V4 + <u>C1</u> + X1 + R1	13
Mix	Caring	A3 + Y1 + <u>W2</u>	6
Mix	Love	A3 + E1 + X1 + B2	7
Mix	Anxiety	X7 + R1 + Y2 + V1 + D1 + M1 + L1 + O1 + E2	17
Mix	Adoration	A1 + K1 + B1 + P1	4
N	Annoyance	L2 + S1 + T1	4
P	Optimism	A1 + B1 + H1 + G1	4
P	Eagerness	D1 + H1	2
Mix	Nervousness	Y3 + L1 + I1	5
P	Amazement	K1 + <u>J1</u>	2
P	Sentimentality	A1	1
P	Joviality	D1	1
Notes	1. Mostly construct a category by combining a few words from 2-4 Shaver categories 2. Six of the smaller Shaver categories were incorporated into bigger categories (Q, J, C, F, P, W). Six smaller Shaver categories were divided before being sorted into categories (I, H, K, G, O, M) 3. Mostly small categories = detail orientated, but changing towards a bigger picture approach: she changed her approach in TP2 and created fewer categories.		
Susan	TP3		Words
P	Happiness	D10 + I1 + E2 + H1 + K1 + G1	16
N	Anger	N11 + <u>P2</u> + <u>Q1</u> + L2 + R2 + X1 + O2 + V2 + S4 + U1	28
Mix	Loneliness	V4 + S3 + T1 + <u>C1</u>	9
P	Love	A5 + B1	6
Mix	Uneasiness	Y4 + L1 + <u>J1</u> + R1 + K1 + T1 + H1 + V1 + M1 + D1	13

Mix	Ecstasy	X8 + D2 + N2 + F1 + E2	15
N	Irritation	L2 + M1 + S1 + Y1	5
Mix	Caring	A4 + <u>W2</u> + Y1 + S1 + B1 + R1	10
Mix	Hope	B1 + S 1 + H1	3
Mix	Pride	U3 + V2 + G1 + N1	7
Notes 1. Mostly construct a category by combining a few words from 4-10 Shaver categories 2. Four of the smaller Shaver categories were incorporated into bigger categories (Q, J, P, W). Eight smaller Shaver categories were divided before being sorted into categories (I, H, K, G, O, C, M, F) 3. Bigger picture approach. Her approach in TP 3 is similar to her approach in TP 2.			

John

John TP1			Words
N	Fear	Y7 + V1 + X5	13
P	Optimism	<u>H3</u> + E2	5
N	Anger	N8 + L1 + O1 + V1	11
N	Disappointment	T1 + V2 + U3 + N1 + <u>Q1</u>	8
N	Shock	X3 + O2	5
P	Amazement	<u>K3</u>	3
Mix	Compassion	A2 + W1	3
N	Irritation	L3	3
Mix	Love	A6 + B2 + W1	9
N	Humiliation	V2 + U1	3
P	Satisfaction	D5 + <u>J1</u> + E1 + G1	8
P	Happiness	D9 + F1 + E2 + G1	13
N	Sadness	S10 + R3 + V1 + L1	15
N	Hopelessness	V1 + T1 + M1 + S1	4
N	Hate	N3 + T1 + Y1	5
P	Arousal	B3 + A1	4
N	Loneliness	V3	3
N	Jealousy	<u>P2</u>	2
Notes 1. Mostly construct a category by combining a few words from 1-4 Shaver categories 2. Three of the smaller Shaver categories were incorporated into bigger categories			

	(H, Q, J). Five smaller Shaver categories were divided before being sorted into categories (O, W, G, F, M). Two categories were sorted on its own in accordance with Shaver (K, P). Two Shaver categories (C, I) were dismissed altogether. 3. Mostly small categories = detail orientated		
John	TP2		Words
N	Fear	X7 + L1 + R1 + V5 + U2 + Y6	22
N	Anger	N6 + L1 + O1	8
N	Unhappiness	V5 + T2 + M1 + L1 + R1 + S3	13
P	Happiness	D10	10
P	Affection	A5 + B1	6
N	Hate	N5 + O1	6
Mix	Sympathy	A3 + <u>W2</u>	5
P	Hope	E3 + <u>H3</u> + <u>J1</u>	7
N	Hopelessness	R1 + S1 + U1 + <u>Q1</u>	4
Mix	Desire	B4 + P1	5
Mix	Longing	V1 + <u>C1</u>	2
N	Jealousy	P1	1
Mix	Surprise	<u>K3</u> + X1 + E2	6
N	Displeasure	L2 + O1 + T1	4
N	Misery	S7 + U1 + N1	9
P	Euphoria	D4 + <u>G2</u> + F1	7
Notes:			
1. Mostly construct a category by combining a few words from 2-3 Shaver categories			
2. Seven of the smaller Shaver categories were incorporated into bigger categories (H, Q, J, W, C, K, G). Four smaller Shaver categories were divided before being sorted into categories (O, M, P, F). One Shaver category (I) was dismissed altogether.			
3. Mostly small categories = detail orientated			
John	TP3		Words
P	Happiness	D13 + <u>F2</u> + <u>J1</u>	16
N	Unhappiness	S11 + T3 + <u>Q1</u> + R3 + N2 + V3 + Y2 + M1 + L1 + U2	29
N	Anger	N9 + L2 + O2	13
Mix	Fear	X8 + V1 + E1 + Y6	16
Mix	Love	A4 + <u>W2</u> + B1	7
N	Hate	N1 + O1	2

P	Affection	A6	6
P	Hope	<u>H3</u> + E1	4
P	Desire	B4 + <u>C1</u>	5
P	Pride	<u>G2</u>	2
N	Guilt	V3 + U2	5
N	Jealousy	<u>P2</u>	2
N	Loneliness	V4	4
P	Excitement	<u>K3</u> + D1 + E2	6
N	Dislike	L2 + N2	4

Notes

1. Mostly construct a category by combining a few words from 1-3 Shaver categories
2. Seven of the smaller Shaver categories were incorporated into bigger categories (J, K, F, Q, W, W, H, C). Two smaller Shaver categories were divided before being sorted into categories (M, O). Two categories were sorted on its own in accordance with Shaver (G, P). One Shaver category (I) was dismissed altogether.
3. Mostly small categories = detail oriented

Norman

Norman TP1			Words
P	Caring	A8 + K2	10
N	Rage	N8 + L1 + M1	10
N	Irritation	L5 + X1	6
N	Unhappiness	S8 + N1 + T2 + V1 + R1	13
N	Horror	R2 + <u>Q1</u> + V1 + Y1 + X2	7
P	Exhilaration	B4 + D3 + E2 + X1	10
N	Sorrow	<u>W2</u> + V1 + S2	5
N	Worry	Y7 + V1 + X3	11
N	Shame	V6 + U1	7
P	Joy	D11 + F1 + K1 + G1	14
N	Displeasure	N2 + <u>P2</u> + O2 + T1 + X1	8
P	Optimism	<u>H3</u> + <u>J1</u> + E2	6
Mix	Regret	V1 + G1 + U2 + N2	6
Mix	Tenderness	F1 + V1 + <u>C1</u> + U1 + A1	5
P	Sentimentality	A1	1

Notes	1. Mostly construct a category by combining a few words from 2-5 Shaver categories 2. Six of the smaller Shaver categories were incorporated into bigger categories (Q, J, C, W, P, H). Five smaller Shaver categories were divided before being sorted into categories (K, M, F, G, O). Shaver category I was dismissed altogether. 3. Mostly small categories, but also some big categories = detail orientated and big picture approach.		
Norman	TP2		Words
P	Liking	A8 + I1 + B1	10
P	Ecstasy	B4 + D1 + E1	6
N	Annoyance	<u>L6</u> + <u>M2</u> + Y2	10
P	Pleasure	D15 + <u>F2</u> + I1	18
N	Unhappiness	S10 + <u>W2</u> + T1 + U1 + R1	15
N	Displeasure	N5 + <u>Q3</u> + T2	10
N	Hurt	N8 + <u>Q1</u> + Y3 + X3 + R3	18
N	Shame	V7 + S2 + X1 + U2	12
N	Panic	X4 + Y3 + N1	8
Mix	Longing	A2 + V1 + <u>C1</u>	4
Mix	Amazement	<u>K3</u> + <u>J1</u> + D1 + X1 + E1	7
N	Insult	V2 + N1	3
Mix	Insecurity	<u>P2</u> + V1 + G1	4
P	Hope	E4 + <u>H3</u>	7
Notes 1. Mostly construct a category by combining a few words from three Shaver categories 2. Eleven Shaver categories were incorporated into bigger categories (L, M, F, W, O, Q, C, K, J, P, H). Two smaller Shaver categories were divided before being sorted into categories (I, G). 3. Mostly small categories, but also some big categories = detail orientated and big picture approach.			
Norman	TP3		Words
P	Infatuation	A7 + K2 + I1 + B1	11
N	Annoyance	<u>L6</u> + <u>M2</u> + Y2	10
P	Lust	B4 + D1 + E1	6
Mix	Sympathy	<u>W2</u> + A1	3
P	Happiness	D15 + <u>F2</u> + I1	18
N	Sadness	S9 + T1 + U2 + R1	13
N	Dislike	N3 + <u>Q3</u> + T1	7
N	Hostility	N8 + X2	10

N	Rejection	V8 + S3 + X1 + N2 + U1	15
N	Worry	Y5 + N1 + X4	10
Mix	Sentimentality	A2 + <u>C1</u> + V1	4
P	Optimism	E4 + <u>H3</u> + <u>J1</u> + D1 + G1	10
Mix	Insecurity	<u>P2</u> + V2 + G1	5
N	Agony	R3 + <u>Q1</u> + Y1 + X1	6
N	Disappointment	T1 + V1 + U1 + N1	4
Mix	Thrill	X1 + K1 + E1	3

Notes

1. Mostly construct a category by combining a few words from 3-4 Shaver categories
2. Ten Shaver categories were incorporated into bigger categories (L, M, W, F, O, C, H, J, P, Q). Three smaller Shaver categories were divided before being sorted into categories (K, I, G).
3. Small and big categories = detail and big picture approach. He created a few more categories in TP3.

Peter

Peter TP1			Words
N	Depression	V7 + S3	10
N	Grief	S5 + T1 + R1	7
P	Cheerfulness	D7 + E1 + H1	9
P	Passion	A5 + B1	6
N	Fright	X3 + Y2	5
P	Desire	A2 + B1	3
N	Envy	<u>P2</u> + N1	3
P	Hope	H1	1
N	Agitation	L2 + M1 + N1	4
N	Irritation	L2 + O1 + N1	4
N	Agony	R3	3
N	Hysteria	X3 + Y1	4
N	Alarm	X2 + Y1	3
P	Ecstasy	K2 + D1	3
P	Amusement	D2 + E1	3
Mix	Sympathy	<u>W2</u> + A1	3
N	Bitterness	N1 + T1	2

P	Contentment*	F1	1
N	Unhappiness	T1 + S1	2
P	Gladness	D2 + <u>J1</u>	3
Mix	Homesickness	<u>C1</u> + V1	2
N	Vengefulness	N1	1
N	Hate	N2	2
P	Eagerness	H1 + E1	2
N	Embarrassment	V2 + U1	3
P	Fondness	A2	2
N	Regret	U3	3
N	Nervousness	Y2	2
P	Arousal	B2 + F1	3
N	Anger	N6 + L1	7
Notes	1. Mostly construct a category by combining a few words from two Shaver categories 2. Four of the smaller Shaver categories were incorporated into bigger categories (J, C, W, P). Five smaller Shaver categories were divided before being sorted into categories (K, M, F, H, O). Shaver categories I, G and Q were dismissed altogether. 3. Mostly small categories= detail orientated		

Contentment*: This category was originally labelled Contempt by the participant, but contempt was categorised under Misunderstood since he confused contentment with contempt. The category was therefore re-labelled to Contentment for discussion purposes.

Peter	TP 2		Words
P	Love	A2 + B1	3
P	Joy	D8	8
N	Anger	N5 + L1	6
N	Misery	R1 + N1 + V1 + S1	4
N	Hate	N2	2
N	Jealousy	<u>P2</u> + N1	3
N	Fear	X5	5
Mix	Longing	<u>C1</u> + V1	2
N	Hurt	R2 + S1	3
N	Depression	S2 + V1	3
N	Frustration	<u>Q1</u> + M1	2
N	Irritation	L3	3

P	Fondness	A3	3
N	Defeat	V1 + T1	2
P	Desire	B3	3
P	Amazement	K2	2
P	Amusement	D1	1
Mix	Anxiety	Y1 + H1 + E1	3
Mix	Caring	A3 + <u>W2</u>	5
P	Contentment	F1 + D1 + G1	3
P	Pleasure	D2 + F1	3
N	Disgust	O1 + N1 + T1	3
N	Embarrassment	V2	2
N	Despair	Y2 + S1	3
N	Sadness	S3	3
P	Excitement	E2	2
N	Uneasiness	Y2	2
N	Guilt	U2	2
P	Hope	H2	2
N	Rejection	V2	2
N	Alarm	X2	2
N	Loneliness	V2	2
Mix	Surprise	X1 + K1	2
N	Regret	U2	2
P	Relief	<u>J1</u>	1
P	Triumph	G1	1
Notes 1. Mostly construct a category by combining a few words from 1-2 Shaver categories 2. Four of the smaller Shaver categories were incorporated into bigger categories (P, C, Q, W). Six smaller Shaver categories were divided before being sorted into categories (K, H, F, G, O, M). One was sorted on its own (J) in accordance with Shaver. Shaver category I was dismissed altogether. 3. Mostly small categories= detail orientated. He created more categories in TP2.			
Peter	TP 3		Words
P	Adoration	A3 + B1	4
N	Anger	N5 + L2	7
N	Agitation	L3	3

N	Agony	R2 + <u>Q1</u> + S2 + X1	6
P	Happiness	D6 + F1 + G1	8
N	Alarm	X3	3
N	Hate	N2 + O1	3
N	Humiliation	V5	5
N	Sadness	S3	3
N	Regret	U4 + S1 + N1	6
N	Depression	N4 + T1 + S2	7
P	Lust	B3	3
P	Thrill	D2 + E2	4
N	Envy	<u>P2</u>	2
P	Liking	A3	3
N	Fear	X4 + Y1	5
N	Spite	N3	3
Mix	Longing	<u>C1</u> + V1 + A1	3
P	Amazement	<u>K3</u>	3
Mix	Caring	A3 + <u>W2</u>	5
N	Bitterness	N1 + T1 + M1 + R1	4
P	Relief	D2 + <u>J1</u>	3
P	Satisfaction	D2	2
N	Nervousness	Y3	3
P	Optimism	H2 + E1	3
P	Hope	H1	1

Notes

1. Mostly construct a category by combining a few words from 1- 3 Shaver categories
2. Four of the smaller Shaver categories were incorporated into bigger categories (J, C, W, Q). Five smaller Shaver categories were divided before being sorted into categories (G, M, F, H, O). Shaver category I was dismissed altogether. Categories P and K were sorted on their own in accordance with Shaver.
3. Mostly small categories= detail oriented. He created fewer categories in TP3.

Steve

Steve	TP1	Words	
P	Affection	A6	6
N	Annoyance	L4 + M1	5
N	Neglect	V2	2
Mix	Surprise	<u>K3</u> + X1	4
P	Amusement	A1 + D1	2
N	Distress	Y4	4
N	Fear	X4	4
Mix	Longing	V3 + <u>C1</u> + A1	5
N	Despair	S5 + V1 + T1 + Y2	9
N	Embarrassment	V2	2
N	Displeasure	T1 + V1 + U1 + Y1	4
P	Joy	D7 + E1	8
N	Bitterness	N1 + L1	2
Mix	Rejection	G1 + V1	2
N	Sadness	S3	3
P	Passion	B4	4
N	Grief	S3 + W1	4
P	Exhilaration	E3 + D1	4
N	Hurt	R3	3
N	Dislike	N3 + O1 + X1	5
P	Delight	D2	2
Mix	Compassion	A2 + W1	3
P	Contentment	D3 + F1	4
N	Vengefulness	N6 + <u>Q1</u> + P1	8
P	Optimism	<u>H3</u> + E1	4
N	Anger	N5	5
N	Regret	U2	2
N	Disappointment	T1	1
N	Envy	P1	1
P	Relief	<u>J1</u>	1
P	Triumph	G1	1
Notes	1. Mostly construct a category by combining a few words from 1-2 Shaver categories 2. Four of the smaller Shaver categories were incorporated into bigger categories (K,		

	C, Q, H). Six smaller Shaver categories were divided before being sorted into categories (M, G, W, O, F, P). Shaver category I was dismissed altogether. Category J was sorted on its own in accordance with Shaver.		
	3. Mostly small categories= detail oriented		
Steve	TP2		Words
P	Liking	A6 + D1 + K2 + B2	11
Mix	Melancholy	S7 + <u>C1</u> + V3 + A1	12
P	Gladness	D10 + H1 + F1 + E3	15
N	Alarm	X5	5
P	Delight	B1 + D2 + K1 + E2	6
N	Displeasure	S2 + R1 + T1 + L1	5
Mix	Dislike	N8 + <u>Q1</u> + <u>G2</u> + O1 + M1 + X1 + L3 + V2	19
N	Anxiety	Y4 + X2	6
P	Contentment	D2 + <u>J1</u> + F1	4
N	Anger	N5	5
Mix	Compassion	A3 + <u>W2</u> + U1 + R2	8
N	Resentment	Y3 + V1 + T1 + S2 + U2 + N1	10
Mix	Jealousy	<u>P2</u> + B1	3
P	Hope	H2	2
N	Isolation	V5	5
Notes			
1. Mostly construct a category by combining a few words from 1-4 Shaver categories			
2. Six of the smaller Shaver categories were incorporated into bigger categories (C, J, P, Q, W, G). Five smaller Shaver categories were divided before being sorted into categories (K, O, H, M, F). Shaver category I was dismissed altogether.			
3. Mostly small categories= detail orientated. A remarkable decrease in the amount of categories suggests a profound change in his map of the emotional world.			
Steve	TP3		Words
Mix	Isolation	V6 + <u>C1</u>	7
N	Gloom	S10 + N1 + V1 + T1	13
P	Affection	A6 + B1	7
N	Annoyance	O1 + M1 + L3 + N3	8
N	Anger	N6 + L1	7
P	Amazement	<u>K3</u> + D1	4
N	Distress	Y6 + N1 + T1 + X7	15

P	Joy	D12 + F1	13
Mix	Tenderness	A3 + <u>W2</u>	5
Mix	Desire	<u>P2</u> + B2	4
P	Satisfaction	D2 + <u>J1</u> + F1	4
Mix	Exhilaration	E3 + B1 + X1	5
N	Hurt	R3 + <u>Q1</u>	4
P	Enthusiasm	<u>H3</u> + E1	4
N	Resentment	U2 + T1 + Y1 + N1	5
N	Spite	N2	2
P	Triumph	<u>G2</u>	2
N	Humiliation	V4 + U2	6

Notes

1. Mostly construct a category by combining a few words from 2-4 Shaver categories
2. Seven of the smaller Shaver categories were incorporated into bigger categories (C, P, K, J, Q, W, H). Three smaller Shaver categories were divided before being sorted into categories (O, M, F). Shaver category I was dismissed altogether. Category G was sorted on its own in accordance with Shaver.
3. Mostly small categories= detail oriented. He created more categories than in TP2, but not as many as in TP1.

William

William TP1			Words
N	Unhappiness	S6 + <u>Q1</u> + X1 + R1 + V3 + W1 + Y5	18
P	Adoration	A7 + <u>C1</u> + B3	11
N	Anger	N6 + L2 + O2	10
N	Depression	X7 + R1 + T1 + S4 + W1 + V4 + N4	22
P	Amazement	<u>K3</u> + D1	4
P	Optimism	<u>E6</u> + <u>H3</u>	9
N	Frustration	L2 + M1 + Y1	4
P	Happiness	D12 + A2 + F1	15
P	Satisfaction	F1 + D1 + G1	3
Mix	Pride	<u>P2</u> + B1 + G1 + U1	5
N	Guilt	U2	2
P	Sentimentality	A1	1

P	Relief	<u>J1</u>	1
Notes	1. Mostly construct a category by combining a few words from 1-3 Shaver categories 2. Six of the smaller Shaver categories were incorporated into bigger categories (Q, P, C, K, H, E). Five smaller Shaver categories were divided before being sorted into categories (W, O, M, F, G). Shaver category I was dismissed altogether. Category J was sorted on its own in accordance with Shaver. 3. Mostly small categories, but also some big categories = detail and bigger picture.		
William	TP2		Words
Mix	Joy	D8 + I1 + W1	10
P	Love	<u>A10</u> + <u>C1</u> + B1	12
P	Enjoyment	<u>H3</u> + B3 + <u>F2</u> + <u>J1</u> + D5 + <u>K3</u> + G1 + E5	23
Mix	Sorrow	R1 + U1 + V6 + X1 + G1 + N4 + S6	20
Mix	Hate	N8 + <u>P2</u> + O1 + T2 + X1 + M1 + R1 + L5 + B1 + W1 + V3	26
Mix	Suffering	Y 8 + X6 + S3 + V1 + N1 + U2 + R1 + E1	23
Notes	1. Mostly construct a category by combining a few words from 3-8 Shaver categories 2. Seven Shaver categories were incorporated into bigger categories (A, F, P, C, J, H, K). Five smaller Shaver categories were divided before being sorted into categories (I, W, O, G, M). Shaver category Q was dismissed altogether. 3. Big categories = bigger picture approach. He created fewer categories than in TP1.		
William	TP3		Words
P	Joy	D11 + H1	12
N	Sorrow	S7 + <u>R4</u> + <u>Q1</u> + N1 + T2 + W1	13
Mix	Love	A8 + <u>C1</u> + B3 + F1 + U1 + W1	15
Mix	Hate	N13 + O2 + M1 + V1 + L5 + B1	23
Mix	Anxiety	V10 + <u>P2</u> + X8 + Y6 + T1 + S2 + U3 + G1 + O1	34
P	Excitement	<u>E6</u> + <u>J1</u> + <u>K3</u> + B1 + F1 + H2 + I1 + D3 + A1 + G1	20
Notes	1. Mostly construct a category by combining a few words from 6 Shaver categories 2. Seven Shaver categories were incorporated into bigger categories (R, P, Q, E, C, J, K). Seven smaller Shaver categories were divided before being sorted into categories (H, O, W, M, F, G, I). 3. Big categories = bigger picture approach. There is remarkable consistency in the naming of the categories.		

Conclusion

The following observations can be made regarding the comparison of participants' categories with those of Shaver:

1. The general approach that was used (detail, big picture or both) stayed consistent for James, JP, Peter, John, Steve, Alex, and Norman over all three Test Periods. William, Susan and Mary-Jane changed their approach once. Within the general strategy, one notices smaller changes which are relevant to considerations of the way each participant maps the emotional world, and how they will use this map to determine the emotive content of listening experiences.
2. Alex, James, JP, Mary-Jane, John, Norman, Peter, and Steve each generally combine the same amount of Shaver categories when constructing their categories.
3. Steve, John and Peter tend to sort some Shaver categories on their own.
4. Steve, John and Peter tend to dismiss certain Shaver categories (mostly I).
5. James, Peter, Steve, and William each tend to divide the same amount of small Shaver categories before sorting the words.
6. James, Mary-Jane, Peter, and William each tend to incorporate the same amount of small Shaver categories into bigger categories.

5.2.5.4 Response time and manner

As mentioned before in Chapter 4, Ponto Vista was designed to keep track of a participant's response time and manner. This ability was particularly useful in Question 1, and helped to determine how the words were moved around in the program by each participant. Table 5.21 shows how many words were moved between the Word Pool and a category, words that were moved directly between categories, how many times the participant selected a title for a category, the average time it took for a participant to sort a word, as well as the total time he/she used to complete the question. This is shown for all three Test Periods. The key provided below helps to explain the acronyms in the table.

Key	TP: Test Period	WPC: Words that were moved from the Word Pool to a category
	CWP: Words that were moved from a category back to the Word Pool	
	DC: Words moved directly between categories	ST: Words that were set as a title at some point
	FT: Words that were used as final titles for categories	NC: the participant created a new category himself
	DC: the participant deleted a category himself	AT: the average time it took for a participant to sort a word displayed in seconds
	TT: total time it took the participant to complete the question displayed in minutes, seconds and mili-seconds	

Table 5.21: Response time and manner

Participant	TP	WPC	CWP	DC	ST	FT	NC	DC	AT	TT
Alex	1	137	1	12	10	6	6	0	10.7	29:27.5
	2	135	0	7	10	5	2	1	4.2	10:58.6
	3	140	5	0	21	6	2	0	4.2	12:11.6
	TP	WPC	CWP	DC	ST	FT	NC	DC	AT	TT
James	1	154	19	0	32	32	37	2	12.4	40:38.3
	2	145	10	0	31	27	30	3	7.4	23:49.7
	3	144	9	0	17	16	15	0	6	17:44.4
	TP	WPC	CWP	DC	ST	FT	NC	DC	AT	TT
JP	1	139	4	0	14	16	5	1	12	34:46.125
	2	138	6	5	20	19	29	1	16.2	49:45.5
	3	137	2	4	13	13	21	0	13.6	38:16.0
	TP	WPC	CWP	DC	ST	FT	NC	DC	AT	TT
Mary-Jane	1	141	6	0	10	11	3	0	8.4	23:36.5
	2	149	14	0	23	23	9	0	12.3	42:03.1
	3	149	14	0	24	20	7	0	5.8	20:03.1
	TP	WPC	CWP	DC	ST	FT	NC	DC	AT	TT
Susan	1	141	6	0	28	23	23	0	16.9	50:9.8
	2	137	2	0	16	15	15	0	9.9	26:08.7
	3	140	5	0	13	10	11	1	8.4	22:54.4
	TP	WPC	CWP	DC	ST	FT	NC	DC	AT	TT
John	1	157	22	0	26	18	16	0	19.5	1:08:02.8
	2	166	31	0	28	16	16	4	14.9	59:32.3
	3	145	10	0	18	15	13	1	13.6	40:38.2
	TP	WPC	CWP	DC	ST	FT	NC	DC	AT	TT
Norman	1	149	14	0	15	15		1	13.3	40:05.5
	2	147	12	0	15	14	89	1	18.7	55:35.6
	3	142	7	9	20	16	88	0	19.4	57:54.7

	TP	WPC	CWP	DC	ST	FT	NC	DC	AT	TT
Peter	1	154	19	0	37	30	44	0	10.7	38:05.5
	2	153	18	0	52	36	35	0	11.5	43:39.4
	3	135	0	0	29	26	78	0	12.6	34:47.7
	TP	WPC	CWP	DC	ST	FT	NC	DC	AT	TT
Steve	1	160	25	19	76	31	55	25	14	1:12:15.5
	2	146	11	27	28	15	17	2	10	36:18.3
	3	141	6	22	26	18	19	1	10	33:10.9
	TP	WPC	CWP	DC	ST	FT	NC	DC	AT	TT
William	1	149	14	0	18	13	13	0	7.2	22:28.9
	2	157	22	0	14	6	4	0	7.5	25:11.4
	3	139	4	0	8	6	5	1	7.4	19:32.8

The following observations can be made about the three Test Periods concerning the table above:

- When comparing how many words were moved to and from categories, Alex, JP and Susan made few moves.
- In contrast to this, James, Mary-Jane, John, Norman, Peter, Steve, and William moved numerous words to and from categories.
- When observing total time, it is clear that Alex, Mary-Jane, Susan, James and William spent between 12 and 30 minutes to complete the question, while John, Norman, Steve and Peter spent between 33 minutes and 1 hour, 12 minutes to complete the question. JP spent between 34 and 49 minutes to complete the question. Several participants spent a decreasing amount of time to complete this task over the three test periods. Understanding the reasons for this, will be important for understanding the ways in which they conceptualise emotions.

Moving few words to and from categories as well as spending little time to complete the question could indicate that a participant is decisive, while making numerous moves and using more time could indicate that a participant is indecisive. But candidates who make additional moves can also be seen as deliberative, and as attempting to fit the words to a refined internal map of the emotional world. On the other hand their emotional maps might just be unclear. This needs to be investigated more.

When following the guidelines mentioned above, it then seems as if Alex, JP, and Susan are decisive, while John, Norman, Peter, and Steve seem indecisive. Three participants – Mary-Jane, James and William – made several moves to and from categories, but spent little time on completing the question.

The results of the Deliberation facet scale of the NEO PI-R are clearly supportive of the above mentioned notions with regard to JP, Susan and John. Both JP and Susan had a rating of average on this facet scale, which indicates that they usually do think before they act, but can make decisions quickly when needed. John had a rating of very high, which means that he is very cautious and deliberate; it explains why he made so many moves and why he used a great deal of time to complete the question. The results for the rest of the participants in terms of response time and manner do not clearly support the results for their Deliberation facet scale.

5.2.6 Interviews: relevant information

The following table provides information from the interviews that is relevant to profiling. The participant and corresponding Test Period as well as a description are provided. The table also shows where the description overlaps with the participant's NEO PI-R test results by indicating the facet scale and rating.

Table 5.22: Relevant interview information

Participant	Test Period	Description from interviews	NEO PI-R test results
Mary-Jane	TP 1	She struggles with fear and anxiety when performing.	Anxiety: average
Susan	TP 1	She becomes easily stressed and worried.	Anxiety: average
		She mentioned how her father describes her as a 'pack animal'; she constantly needs to be among people.	Gregariousness: high
Norman	TP 2	He likes travelling, meeting new people, seeing	Actions: very high

		new place, and experiencing new things.	
Susan	TP 1	She was worried for the safety of her sister who was studying at a different university where a female student was murdered at that time.	Altruism: average
William	TP 1	He is of the opinion that when he plays for the church band, he plays correctly all the time, since worship music is not technically challenging enough for him.	Modesty: average
Alex	TP 1	When asked how he feels about his own technical abilities, he replied that, in his opinion, he is very good compared to the other students.	Modesty: very low
Susan	TP 1	She tends to set goals for herself, e.g. making beautiful music for an audience.	Achievement striving: high
Peter	TP 1	He tends to set goals for himself, e.g. having fun when making music with friends.	Achievement striving: high
John	TP 1	He tends to set goals for himself, e.g. becoming a better musician.	Achievement striving: high
JP	TP 1	He tends to set goals for himself, e.g. striving towards a better level of performance.	Achievement striving: very high
Mary-Jane	TP 1	She is working on her performance anxiety and improving her technique.	Achievement striving: very high
Steve	TP 1	His goal was to compete at an international karate competition. He prepared for it and participated.	Achievement striving: very high

Some of the participants answered a specific question showed below in Table 5.23. Their answers corresponded with results from their NEO PI-R tests. The table displays the question, the participant that answered the question, the Test Period during which the question was asked, a description of what was said, as well as the facet scale and rating from the NEO PI-R results that apply here.

Table 5.23: Specific interview question

Question: how do you experience your own performances in terms of your technical abilities?			
Participant	Test Period	Description from interviews	NEO PI-R test results
JP	TP 1	He has been focusing so much on playing right, and not making mistakes, that he stopped enjoying it to play. He is always a little angry at himself, since he has never given a perfect/flawless performance.	Self-consciousness: high
Susan	TP 1	She is worried that she will make mistakes, and not be able to make beautiful music for the audience. Although she plays to the best of her abilities, she will never feel as if she plays good enough; she feels there is always room for improvement.	Self-consciousness: high
John	TP 1	He is usually very nervous when he has to play in front of people who he thinks are better musicians than him, or when his performance is being evaluated in some way. When he feels like this, he is worried about the mistakes he will make, and then he usually makes them. He doesn't like performing solos and usually feels very exposed. He wants to avoid that feeling by practicing more. He doesn't feel capable to play all styles of secular music.	Self-consciousness: high
James	TP 1	When performing, he focuses a lot on what he is technically doing with the music (articulation, phrasing etc.). He is halfway between struggling with everything and getting everything right. His technique is improving.	Self-consciousness: very high
Peter	TP 1	He doesn't like to perform as in entertaining people or to be put on the spot or in the lime light.	Self-consciousness: very high

		He would rather sit in a dark corner of a restaurant and play because he likes it, than to interact with the audience and ‘put on a show’. He is sometimes more critical about his abilities. Although he always tries to play his best, he does make mistakes, but realises that sometimes you cannot allow that to draw attention away from the reason for playing (e.g. worship, where the focus is on God, not people). In his opinion there are always things he can improve on.	
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5.2.7 Listening profiles: an example

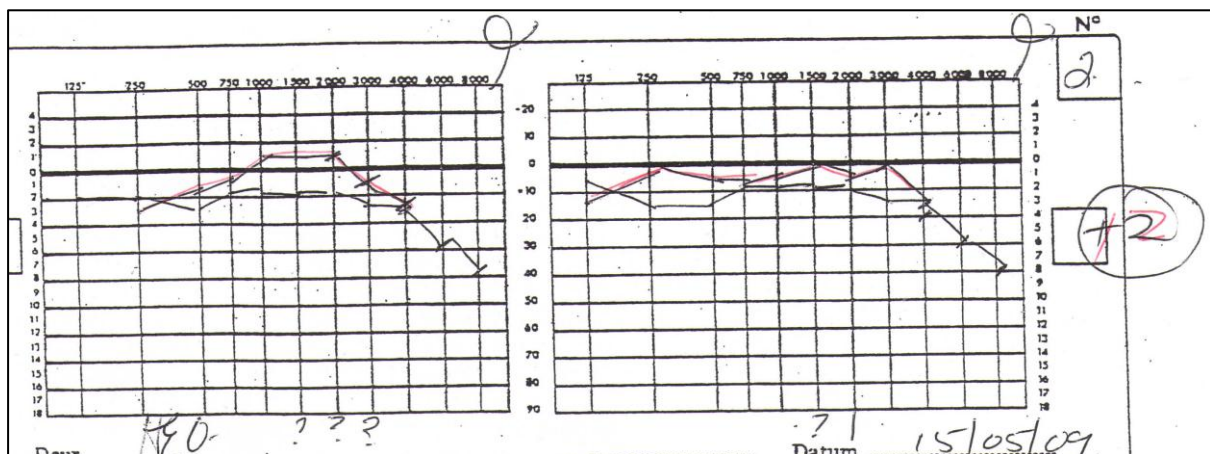
The data of one participant is presented in this section to sketch his listening profile. The purpose is to show the reader what a profile would look like in its entirety. The listening profile of JP, one of the formally trained participants, is presented here. As already mentioned, the evaluation of the Tomatis test and NEO PI-R test were conducted by a psychologist and reports were submitted to the researcher.

Table 5.24: Demographic questionnaire - JP

Demographic questionnaire	JP
Age at the time of testing	21
Gender	Male
Nationality	South African
Cultural background	Western/White
Maternal language	Afrikaans
Course and year	B. Mus 3 rd year
Informal music education in group	No
First formal musical training	Recorder
Age beginning with music education	6
Years busy with musical training	15

Other instruments	Flute, voice
Number of years playing + training	Flute: 7 years playing, 7 years training; Voice: 13 years singing, 5 years training
Parents and instruments	Mother plays piano, received training, Grade 8 Unisa as highest qualification
Music I listen to	Opera and classical singing
Preference for listening to	Singing
Do not listen to	Recorder
Genres I don't like	Hip-hop, techno, rap
Chronic illness/medication	No
Illnesses	Ear infection, Tympanitis, severe ear pain, but none on a regular basis
Siblings	1 brother, 1 sister, middle child
Parents	Both still alive and married
Pieces performed	Reinecke Sonata
	Roussel Joveurs de Flute
Remarks	Recorded on 25 March 2009, 09:45 in Pretorius Studio. Accompanied by Mrs Truida vd Walt.

Figure 5.1: Tomatis listening test - JP



Evaluation report (translated from Afrikaans to English)

Open selectivity and right ear dominance indicate good listening abilities, which is further supported by indications of the ‘musical’ ear in both the left and right ears. A concern though, is the descending curve in bone and air conduction from 2000 Hz.

Table 5.25: NEO PI-R evaluation report – JP

JP NEO PI-R: Validity			
A	JP has answered ‘strongly agree’ to item A, suggesting that he answered the questions honestly and accurately.		
B	Both items B and C were answered ‘yes’, which suggests a valid profile.		
C	JP did not respond ‘agree’ or ‘strongly agree’ to more than 150 items, which suggests a valid profile.		
D	JP responded ‘agree’ or ‘strongly agree’ to more than 50 items, which suggests a valid profile.		
E	JP did not meet any of the five criteria that suggest a random profile; therefore his profile is most likely valid.		
Data table			
Scale	Raw score	T score	Range
Neuroticism	106	61	High
Anxiety	18	54	Average
Angry hostility	23	72	Very high
Depression	17	56	High
Self-consciousness	21	62	High
Impulsiveness	18	53	Average
Vulnerability	9	46	Average
Extraversion	123	56	High
Warmth	20	41	Low
Gregariousness	20	56	High
Assertiveness	20	60	High
Activity	21	57	High
Excitement-seeking	28	75	Very high
Positive emotions	14	36	Low
Openness	116	53	Average
Fantasy	25	68	Very high

Aesthetics	22	57	High
Feelings	26	63	High
Actions	17	52	Average
Ideas	26	66	Very high
Values	20	49	Average
Agreeableness	74	24	Very low
Trust	12	26	Very low
Straightforwardness	11	24	Very low
Altruism	21	40	Low
Compliance	9	24	Very low
Modesty	18	46	Average
Tender-mindedness	16	34	Very low
Conscientiousness	132	54	Average
Competence	27	64	High
Order	20	53	Average
Dutifulness	23	50	Average
Achievement striving	26	66	Very high
Self-discipline	21	48	Average
Deliberation	15	46	Average

NEO PI-R Integrative summary: JP

The validity indices for JP's protocol suggest that the test is valid. He appears to have been honest and straightforward during the assessment.

JP's Neuroticism scores fall within the high range. Therefore, he is likely to be moderately apprehensive and prone to worry. JP may also be frustrated and angered quickly, and it is likely that he will express such feelings. Nonetheless, he may be able to handle stressful situations well most of the time. JP's profile further indicates that he may be prone to feelings of guilt, sadness and loneliness, and that he may be easily dejected. He is likely to have feelings of inferiority and may at times find it hard to delay gratification.

JP's Extraversion score falls within the high range. Hence, although he may enjoy the company of others, he is likely to be more formal and distant. JP's profile further suggests that he is dominant in group situations and that he may lead a busy and fast-paced life-style. Although he may crave excitement and stimulation, he is more likely to be less exuberant.

JP's Openness score falls within the average range. Therefore, he is likely to have an active fantasy life. He may be absorbed in the arts and tend to experience emotions more intensely than most people. Although he may enjoy novel activities, he also has a need for structure. While he has the capacity to re-examine his political, social and religious values, he is also subservient towards authority.

JP's Agreeableness score falls within the very low range, meaning he is likely to be guarded in the way he expresses his true feelings, and is cynical about the intentions of others. He may be self-centred, hard-headed and make decisions based on cold logic. At times he may feel superior towards others and is likely to compete rather than cooperate.

JP's Conscientiousness score falls within the average range. He may feel equipped to deal with the demands in life. He is likely to have direction in life and commit religiously to his career. Although he generally thinks before he acts, he can also make quick decisions if need be.

5.3 PART II: CONTINUOUS MEASUREMENT OF SELF-REPORTED EMOTIONAL RESPONSE TO MUSIC

Presented here are results from Part II, the continuous measurement of self-reported emotional response to music. The results of the prescribed tracks, Raga Kirwani and the three Hindustani samples, are presented first, followed by the results relating to the participants' personal musical tracks.

5.3.1 Prescribed musical tracks

Results of participants' listening experiences to Raga Kirwani and the three Hindustani samples are presented first, since all participants listened to these tracks. The data of JP's listening experiences of the raga and samples are presented as an example in section 5.3.1.1. It shows which words, colours and facial expressions JP selected during his listening experiences over all three Test Periods. The selections are then matched with the score. Note that there doesn't exist any sheet music for the raga or samples; therefore, the researcher made graphic representations of the raga melody and the samples. JP's free descriptions, along with paraphrased interview extracts and the ratings he provided are also presented. The Test Period block that is coloured in red (TP 2) indicates the Test Period during which JP was ill.

5.3.1.1 Example

a) JP, Track 4, Raga Kirwani listening experience results

The first column in the table below shows all the words that JP selected. The number of times he selected that particular word during a Test Period is displayed in the second, fourth, and sixth columns, together with the category from which it was selected during that particular Test Period displayed in the third, fifth and seventh column.

Table 5.26: Word checklist

Emotion word	TP 1	From category	TP 2	From category	TP 3	From category
Amusement	1	Hope	1	Love		
Contempt* (Contentment)	1	Contempt* (Contentment)				
Gladness	1	Joy				
Infatuation	1	Love				
Irritation	2	Hostility	1	Irritation		
Isolation	1	Loneliness				
Jubilation	1	Joy				
Relief			1	Joy		
Surprise			2	Surprise		

Contempt*: In Test Period 1 JP thought contempt is the same as contentment. Therefore contempt in Test Period 1 was replaced with contentment with regard to JP's results. No selections were made in Test Period 3.

JP's choice of emotion words remains remarkably consistent over the three test periods. Some of the words JP selected were from the same or related categories. Since the music stayed the same, one assumes that the experiences of emotive content will be similar in the three test periods. The fact that the research method can show the similarity in the emotive content indicates that the method is indeed measuring emotive content.

Table 5.27 presents JP's selections over all Test Periods from the colours checklist while listening to Raga Kirwani. The colour name, RGB value as well as the number of times the colour was selected, is presented below.

Table 5.27: Colours checklist

Colour	TP 1	TP 2*	TP 3*
Rainbow colours			
Red RGB [255;0;0]	1		
Orange RGB [255;102;0]	2	2	2
Yellow RGB [255;255;0]	2	5	2
Blue RGB [0;0;255]		1	
Indigo RGB [51;51;153]		1	
Violet RGB [128;0;128]	1	4	1
Dark red RGB [128;0;0]		1	
Light Orange RGB [255;153;0]	2	8	1
Gold RGB [255;204;0]		4	1
Bright Green RGB [0;255;0]	2	3	
Lime RGB [153;204;0]	1	1	
Turquoise RGB [0;255;255]	1	1	1
Light blue RGB [51;102;255]	2	3	3
Lavender RGB [204;153;255]		1	1
Pink RGB [255;0;255]	2	4	3
Rose RGB [255;153;204]		1	1
Tan RGB [255;204;153]	1	1	
Brown RGB [153;51;0]		1	

The reader must take note of the following. The * next to a Test Period indicates that the data presented in that particular column is not the original data as generated by Ponto Vista. The program was designed to respond to a participant's commands when the participant uses a double click on the mouse. Sometimes the participants accidentally used a triple click when making selections, which then registered in the program as a double selection. Since the program was designed to provide time stamps of each selection as well, the researcher was able to determine the correct number of selections. When the proximity in timestamps differed with only a few mili-seconds, two selections would then be seen as one selection. Therefore, the data presented with a * is data that was calculated by the researcher after all the 'accidental' selections have been removed.

JP's choice of colours seems less consistent over the three Test Periods than his choice of words. He chooses a large variety of colours, and most colours are not selected in all three test periods.

The table below shows the facial expressions JP selected over all Test Periods during his experience of the raga. The first column displays the actual expression. The second column indicated the emotions that were being expressed; the first one mentioned being in the upper half of the face, and the second emotion mentioned the one being expressed in the lower half of the face. The number of times the expressions were selected is indicated according to Test Period.

Table 5.28: Facial expressions checklist

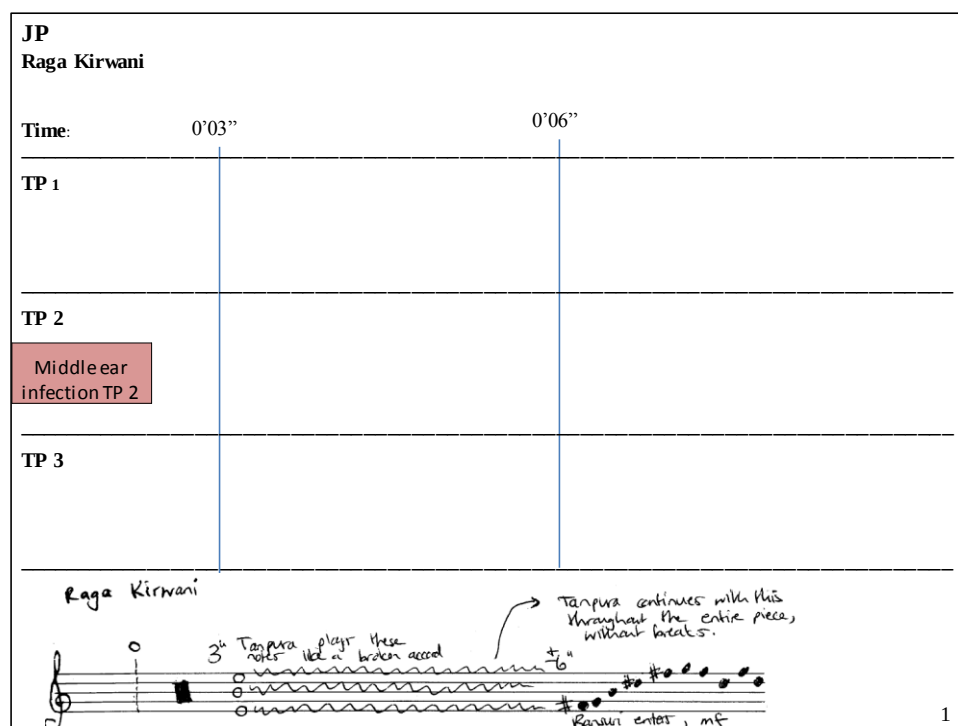
Facial expressions		Emotions	TP 1	TP 2	TP 3
		Joy/Joy	1		
		Neutral/Anger	1		
		Neutral/Neutral	1		

No selections were made during Test Period 2 or Test Period 3. JP's selection of facial expressions in TP 1 overlaps with the words he selected in that Test Period. Since he did not make any selections of facial expressions in TP 2 and TP 3, the data cannot be compared with regard to this correlation.

Figure 5.2 displays all the selections JP made over all three test periods during his experience of the raga together with the graphic representation of the raga melody played on the bansuri. These figures were made using Power Point slides. Only the slides which display JP's

selections during the raga, and not the complete slide show, are presented here. The numbers at the top of the slide (e.g. 0'06'') indicates actual time in minutes and seconds. The Test Period (TP) is displayed on the left. Each selection is presented together with its time stamp (TS) displayed in hours, minutes, seconds and milli-seconds. Emotion words are presented with the category from which they were selected given in brackets. Colours are presented together with their colour name and RGB value. Facial expressions are presented together with the emotions that the upper half (U) and lower half (L) expresses. The tabla entrance is also indicated at 5 minutes 37 seconds.

Figure 5.2: Matching JP's selections with the raga score



Time: 0'10" 0'15"

TP 1 
Light Orange 255;153;0
TS: 00:00:09.656

TP 2

TP 3



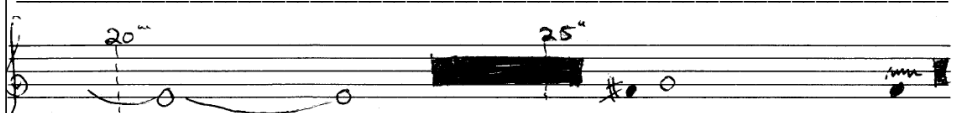
2

Time: 0'20" 0'25"

TP 1

TP 2 
Gold 255;204;0
TS: 00:00:29.187

TP 3



3

Time: 0' 30" 0' 35"

TP 1

TP 2

TP 3

Light Orange 255;153;0
TS1: 00:00:32.468
TS2: 00:00:32.484

Yellow 255;255;0
TS1: 00:00:33.468
TS2: 00:00:33.484

30" 35"

4

Time: 0' 40" 0' 45"

TP 1

TP 2

TP 3

Light Orange
255;153;0
TS: 00:00:41.032

Yellow
255;255;0
TS1: 00:00:44.078
TS2: 00:00:44.094

Orange
255;102;0
TS1: 00:00:45.907
TS2: 00:00:45.922

40" 45"

air sound - throughout

5

Time: 1' 00" 1' 05"

TP 1

TP 2

TP 3

Amusement (Love)
TS: 00:01:08.672



7

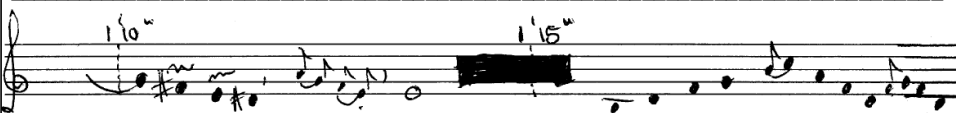
Time: 1' 10" 1' 15"

TP 1

TP 2

TP 3

Light Blue 51;102;255
TS1: 00:01:15.469
TS2: 00:01:15.485



8

Time: 1' 20" 1' 25"

TP 1

TP 2

TP 3

Orange 255;102;0
TS: 00:01:21.157

Yellow 255;255;0
TS: 00:01:25.328

Gold 255;204;0
TS: 00:01:26.719

9

Time: 1' 30" 1' 35"

TP 1

TP 2

TP 3

Orange 255;102;0
TS1: 00:01:39.422
TS2: 00:01:39.437

10

Time: 1' 40" 1' 45"

TP 1

Tan 255;204;153
TS: 00:01:44.406

TP 2

Brown 153;51;0
TS1: 00:01:43.297
TS2: 00:01:43.312
TS3: 00:01:43.328

TP 3

11

Time: 1' 50" 1' 55"

TP 1



U: Neutral, L: Anger
TS: 00:01:54.766

TP 2

Lime 153;204;0
TS1: 00:01:50.062
TS2: 00:01:50.078
TS3: 00:01:50.093

TP 3

12

Time: 2' 00" 2' 05"

TP 1 
Pink 255;0;255
TS: 00:02:00.172

TP 2 
Light Blue 51;102;255
TS1: 00:02:04.062
TS2: 00:02:04.078

TP 3



13

Time: 2' 40" 2' 45"

TP 1
Infatuation (Love)
TS: 00:02:46.234

TP 2

TP 3



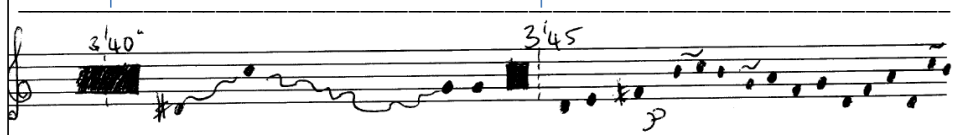
17

Time: 3' 40" 3' 45"

TP 1 Jubilation (Joy)
TS: 00:03:49.734

TP 2 Gold 255;204;0
TS1: 00:03:41.703
TS2: 00:03:41.718

TP 3



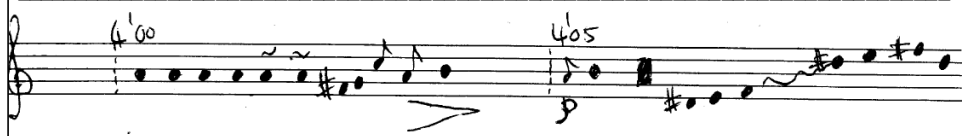
23

Time: 4' 00" 4' 05"

TP 1 Violet 128;0;128
TS: 00:04:03.656

TP 2 U: Joy, L: Joy
TS: 00:04:08.297

TP 3



25

Time: 4' 20" 4' 25"

TP 1

TP 2

TP 3

Light Blue 51;102;255
TS1: 00:04:27.453
TS2: 00:04:27.468

Gold 255;204;0
TS1: 00:04:28.922
TS2: 00:04:28.937
TS3: 00:04:28.953



27

Time: 4' 30" 4' 35"

TP 1

TP 2

TP 3

Yellow 255;255;0
TS1: 00:04:31.218
TS2: 00:04:31.234

Light Orange 255;153;0
TS1: 00:04:32.484
TS2: 00:04:32.500
TS3: 00:04:32.515

Orange 255;102;0
TS1: 00:04:33.750
TS2: 00:04:33.765
TS3: 00:04:33.781



28

Time: 4' 50" 4' 55"

TP 1 Amusement (Hope)
TS: 00:04:51.906

TP 2

TP 3

30

Time: 5' 00" 5' 05"

TP 1 Light Blue 51;102;255
TS: 00:05:02.609

TP 2

TP 3

31

Time: 5' 30" 5' 35" Tabla enters
TS: 00:05:37.006

TP 1

TP 2

TP 3

34

Time: 5' 40" 5' 45"

TP 1

TP 2

TP 3

Pink 255;0;255
TS1: 00:05:42.891
TS2: 00:05:42.907

Pink 255;0;255
TS1: 00:05:45.906
TS2: 00:05:45.922

Rose 255;153;204
TS: 00:05:46.610

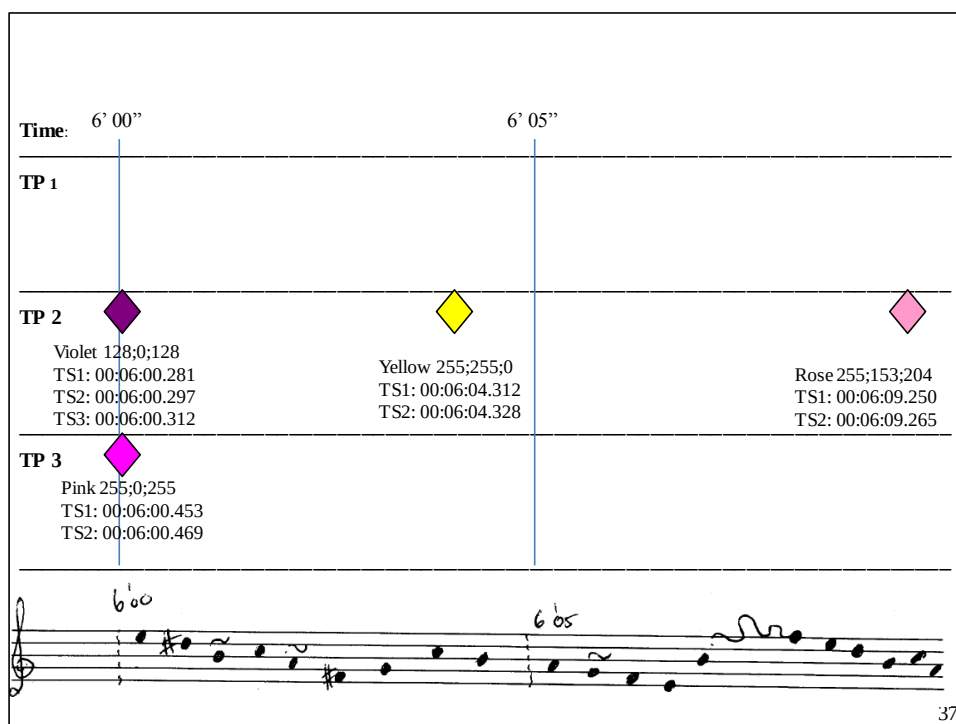
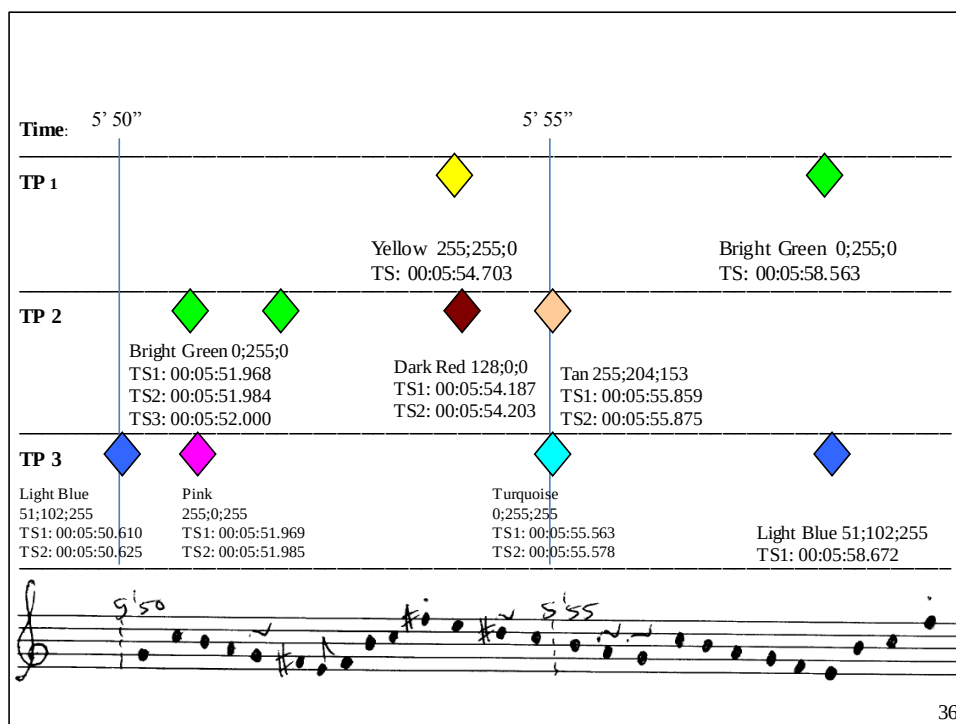
Violet 128;0;128
TS1: 00:05:47.844
TS2: 00:05:47.860

Violet 128;0;128
TS1: 00:05:47.906
TS2: 00:05:47.922
TS3: 00:05:47.937

Indigo 51;51;153
TS1: 00:05:48.937
TS2: 00:05:48.953

Lavender 204;153;255
TS1: 00:05:49.360
TS2: 00:05:49.375

35



Time: 6' 30" 6' 35"

TP 1

TP 2

TP 3

Yellow 255;255;0
TS: 00:06:39.219

40

Time: 6' 40" 6' 45"

TP 1

Bright Green 0;255;0
TS: 00:06:43.297

Light Blue 51;102;255
TS: 00:06:47.500

TP 2

TP 3

only tabla + tanpura

41

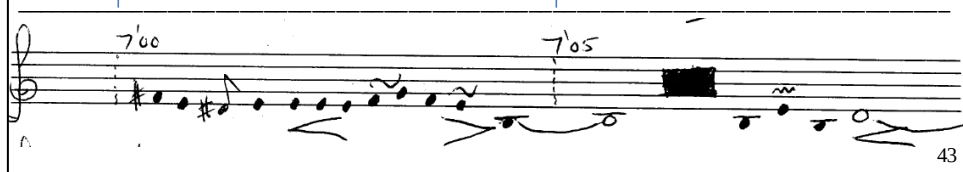
Time: 7' 00" 7' 05"

TP 1

Orange 255;102;0
TS: 00:07:01.516

TP 2

TP 3



43

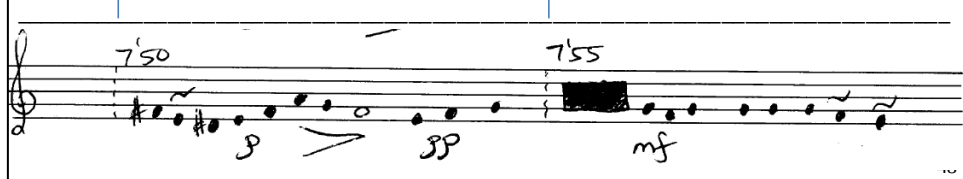
Time: 7' 50" 7' 55"

TP 1

TP 2

Surprise (Surprise)
TS: 00:07:51.656

TP 3



44

Time: 8' 20" 8' 25"

TP 1

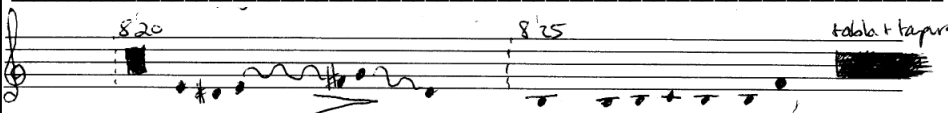
Light Orange 255;153;0 TS: 00:08:20.141

Pink 255;0;255 TS: 00:08:23.641

Turquoise 0;255;255 TS: 00:08:27.094

TP 2

TP 3



51

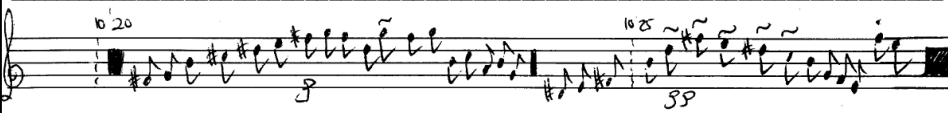
Time: 10' 20" 10' 25"

TP 1

Contempt* (Contempt*) TS: 00:10:24.563

TP 2

TP 3



63

Time: 11' 20" 11' 25"

TP 1

TP 2

TP 3

Orange 255;102;0
TS: 00:11:28.516

69

Time: 12' 00" 12' 05"

TP 1

TP 2

TP 3

Pink 255;0;255 Violet 128;0;128
TS1: 00:12:07.125 TS1: 00:12:07.859
TS2: 00:12:07.140 TS2: 00:12:07.875
TS3: 00:12:07.156 TS3: 00:12:07.890

73

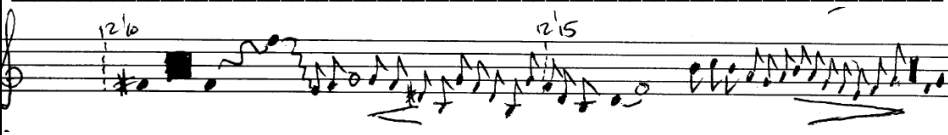
Time: 12' 10" 12' 15"

TP 1

TP 2

Bright Green 0;255;0	Gold 255;204;0	Yellow 255;255;0	Light Orange 255;153;0	Turquoise 0;255;255
TS1: 00:12:10.359	TS1: 00:12:13.562	TS1: 00:12:14.156	TS1: 00:12:15.000	TS1: 00:12:18.359
TS2: 00:12:10.375	TS2: 00:12:13.578	TS2: 00:12:14.172	TS2: 00:12:15.015	TS2: 00:12:18.375

TP 3



74

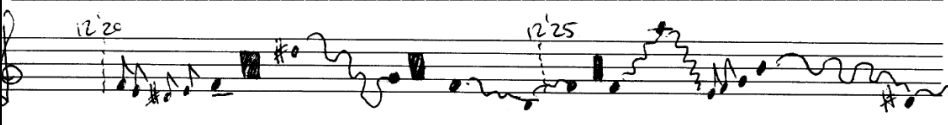
Time: 12' 20" 12' 25"

TP 1

TP 2

Blue 0;0;255
TS1: 00:12:25.047
TS2: 00:12:25.062

TP 3



75

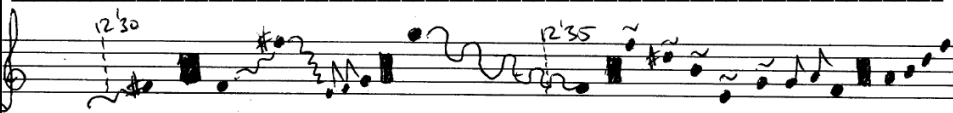
Time: 12' 30" 12' 35"

TP 1

TP 2

Pink 255;0;255	Lavender	Light Blue	Pink 255;0;255	
TS1: 00:12:31.000	204;153;255	51;102;255	TS1: 00:12:35.937	
TS2: 00:12:31.015	TS1: 00:12:32.187	TS1: 00:12:34.125	TS2: 00:12:35.953	
TS3: 00:12:31.031	TS2: 00:12:32.203	TS2: 00:12:34.140	TS3: 00:12:35.968	Violet 128;0;128
				TS1: 00:12:37.609
				TS2: 00:12:37.625

TP 3



76

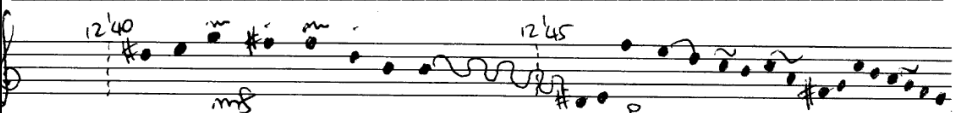
Time: 12' 40" 12' 45"

TP 1

TP 2

Yellow 255;255;0	Surprise (Surprise)
TS1: 00:12:41.187	TS: 00:12:47.984
TS2: 00:12:41.203	
TS3: 00:12:41.218	

TP 3



77

Time: 13' 30" 13' 35"

TP 1 Irritation (Hostility)
TS: 00:13:32.750

Line 153;204;0
TS: 00:13:36.578

TP 2

TP 3

82

Time: 14' 50" 14' 55"

TP 1

U: Neutral, L: Neutral
TS: 00:14:56.922

TP 2

TP 3

90

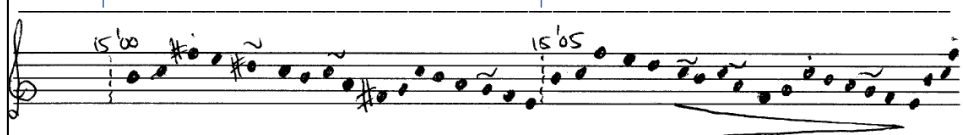
Time: 15' 00" 15' 05"

TP 1

TP 2

TP 3

Red 255;0;0
TS: 00:15:05.953



91

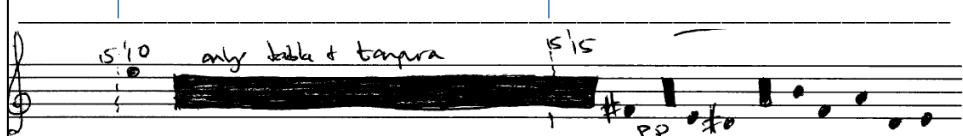
Time: 15' 10" 15' 15"

TP 1

TP 2

TP 3

Irritation (Hostility)
TS: 00:15:16.938



92

Time:	15' 30"	15' 35"
TP 1	Isolation (Loneliness) TS: 00:15:34.250	
TP 2	Irritation (Irritation) TS: 00:15:36.906	
TP 3		

94

Time:	17' 00"	17' 05"	End: 00:17:07.110
TP 1	Gladness (Joy) TS: 00:17:21.516		
TP 2	Relief (Joy) TS: 00:17:14.437		
TP 3			

103

Table 5.29 is a summary of the number of selections JP made during his experience of the raga.

Table 5.29: Summary

JP	Track 4	Raga Kirwani	
Bansuri, tabla and tanpura			
	TP 1	TP 2	TP 3
Elapsed time	00:17:27.109	00:17:27.203	00:17:27.141
Emotion words	8	5	0
Colours	17	42*	16*
Facial expressions	3	0	0
Total	28	47	16

Table 5.30 presents JP's free descriptions. Where necessary, the descriptions were translated from Afrikaans to English.

Table 5.30: Free description

TP 1	It started out interesting and then when the drums came in it was kind of cool. I enjoyed listening to it but then at a later stage I started getting kind of irritated with it because I was getting bored. It is a bit boring listening to this and only listening to it, having nothing else to do.
TP 2	Ek was baie verbaas dat dit my so lank gevat het om geeriteerd te raak met die song. Ek het net baie 'n prentjies en tonele gesien waar hierdie musiek sal inpas. <i>Translation: I was very surprised that it took so long for me to get irritated with this song. I just saw a lot of pictures and scenes where this music would fit.</i>
TP 3	Dit was maar net weer bitterlik lank en aangesien dit die derde keer was, maar redelik vervelig. <i>Translation: Once again it was just very long and seeing as this is the third time, it was really boring.</i>

Table 5.31 presents relevant paraphrased interview extracts from JP's interviews concerning the raga.

Table 5.31: Relevant paraphrased interview extracts

TP 1	In the beginning it was interesting and mysterious, and when the tabla entered it was really cool, but at some point it just became too much. I become irritated since I can do nothing except listen to this music that just keeps on going, and it really becomes boring after a while. I cannot really connect any specific emotions with this raga; sometimes I use pictures. In my mind I saw a lot of soft, pastel colours, like during a sunset in the desert. I even imagined watching the sunset from a castle in an Arabic setting, with the wind blowing softly, and the strange colours that appear because of the sand in the atmosphere. This picture creates a feeling of contentment. There is also an exotic, mysterious element to the music which fascinates me a little. The beginning of the music, before the tabla enters, is more peaceful, but after the tabla enters it becomes a bit more explorative and exciting, like being in a strange place with strange people, trying to figure out what is going on.
TP 2	I think I didn't become so easily irritated with the music this time, because I imagined a story line and pictures where this music would fit into. That preoccupied me and so prevented me from becoming irritated so quickly. I pictured the Walt Disney movie Aladdin, and imagined myself standing at the palace at night, gazing at the desert. When the tabla enters, I imagine myself sitting on a cushion, watching the belly dancers while eating exotic foods. In my mind the picture is very rich in a variety of colours. I chose to select mostly colours, because it is easier for me to express myself that way than it is with the words or facial expressions. Listening to this Raga the first time was very exploratory. I was already more familiar with the music during the second test, so I knew what to expect. The first time the tabla enters, it is a huge surprise, since the tabla changed the character of the music completely. But this time I knew what was coming, so I was more prepared. In a way I think I enjoyed the second test more, since I was using pictures and story lines to amuse myself.
TP 3	I imagined the same story as I did in test two. I don't think my experience of this music deepened in any way, since I was already familiar with it. In my opinion the music doesn't contain enough interesting elements to capture and surprise you every time you hear it; it is not complex enough. There are no thematic developments, no 'hidden' parts, no more surprises left. You can only hear the same things again. Unless of course I'm missing it all together; in which case the music would then be too

	complex. It is either too simple or too complex. But in my experience, I've heard what there is to hear, there is nothing else left. It isn't an inexhaustible piece of music, which you would spend hours of listening and studying. Once you have figured it out, that is the end of it. I think I don't like this kind of music because it is boring. The music doesn't really go anywhere. If the music had a purpose, let's say it was used for a film, then it wouldn't bother me, because there would be something else that captures your attention. The drums are interesting, but it is torture to listen to a bland piece of music for 17 minutes. It is just too long, and too uninteresting for me to just sit there and listen to it. I think this kind of music would be more suitable as background music.
--	--

Table 5.32 presents the ratings JP provided of psychophysical parameters as well as the appropriateness of words to the raga.

Table 5.32: Rating scales

Question 4a-e	TP 1	TP 2	TP 3
Scale			
Pitch level	3	3	3
Dynamic level	3	3	3
Tempo	3	2	2
Rhythmic complexity	5	2	2
Melodic complexity	5	4	2
Question 4f	TP 1	TP 2	TP 3
Emotion word			
Love	3	3	2
Joy	4	5	3
Surprise	6	6	6
Anger	5	4	5
Sadness	1	2	4
Fear	2	1	1

b) JP Track 5, 6 and 7 Hindustani samples listening experience results

The results of JP's experiences of the samples (Track 5, 6 and 7) are presented here in the same way as described above, unless specified otherwise. Remember that each of the samples allowed only one response format.

Table 5.33: Track 5 Word checklist

Emotion word	TP 1	From category	TP 2	From category	TP 3	From category
Annoyance					1	Dislike
Dislike			1	Hate	1	Dislike

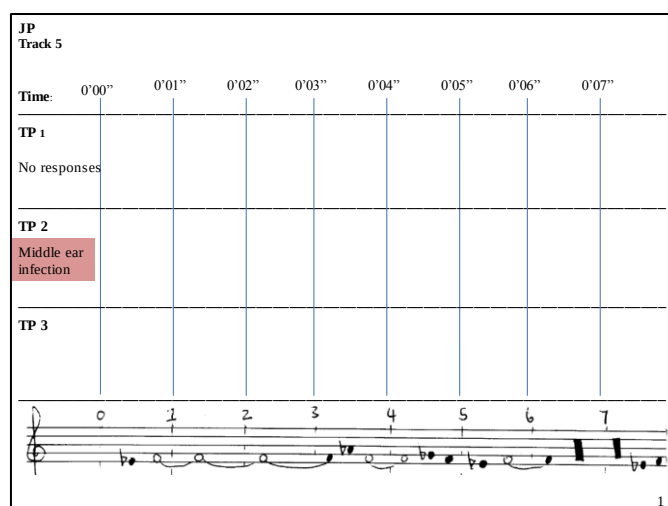
Table 5.34: Track 6 Colours checklist

Colour	TP 1	TP 2*	TP 3*
Red RGB [255;0;0]		3	
Orange RGB [255;102;0]	1		
Green RGB [0;128;0]			1
Dark red RGB [128;0;0]			1
Light Orange RGB [255;153;0]	1		
Gold RGB [255;204;0]	2		
Teal RGB [0;128;128]			1
Grey (25%) RGB [192;192;192]			1
Grey (50%) RGB [128;128;128]			1
Black RGB [0; 0; 0]			1

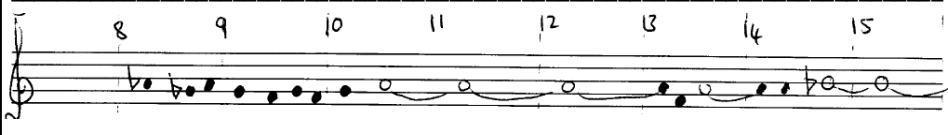
Table 5.35: Track 7 Facial expressions checklist

Facial expressions	Emotions	TP 1	TP 2	TP 3
	Fear/Disgust			1*
	Joy/Disgust			1
	Joy/Neutral	1		
	Neutral/Anger	1		
	Neutral/Disgust		1	
	Sadness/Surprise		1*	

Graphic representations of the samples were made as well, and are displayed here in their entirety.

Figure 5.3: Matching JP's selections with the score -Track 5, 6 and 7

Time:	0'08"	0'09"	0'10"	0'11"	0'12"	0'13"	0'14"	0'15"
TP 1								
TP 2								
TP 3				Annoyance (Dislike) TS: 00:00:11.657		Dislike (Dislike) TS: 00:00:13.313		



Handwritten musical notation on a staff, corresponding to the time markers 8 through 15. The notation includes various note values and rests.

2

Time:	0'16"	0'17"	0'18"	0'19"	0'20"	0'21"	0'22"	0'23"
TP 1								
TP 2						Dislike (Hate) TS: 00:00:21.969		
TP 3								



Handwritten musical notation on a staff, corresponding to the time markers 16 through 23. The notation includes various note values and rests.

3

Time: 0'24" 0'25" 0'26"

TP 1

TP 2

TP 3

4

JP
Track 6

Time: 0'00" 0'01" 0'02" 0'03" 0'04" 0'05" 0'06" 0'07"

TP 1

TP 2

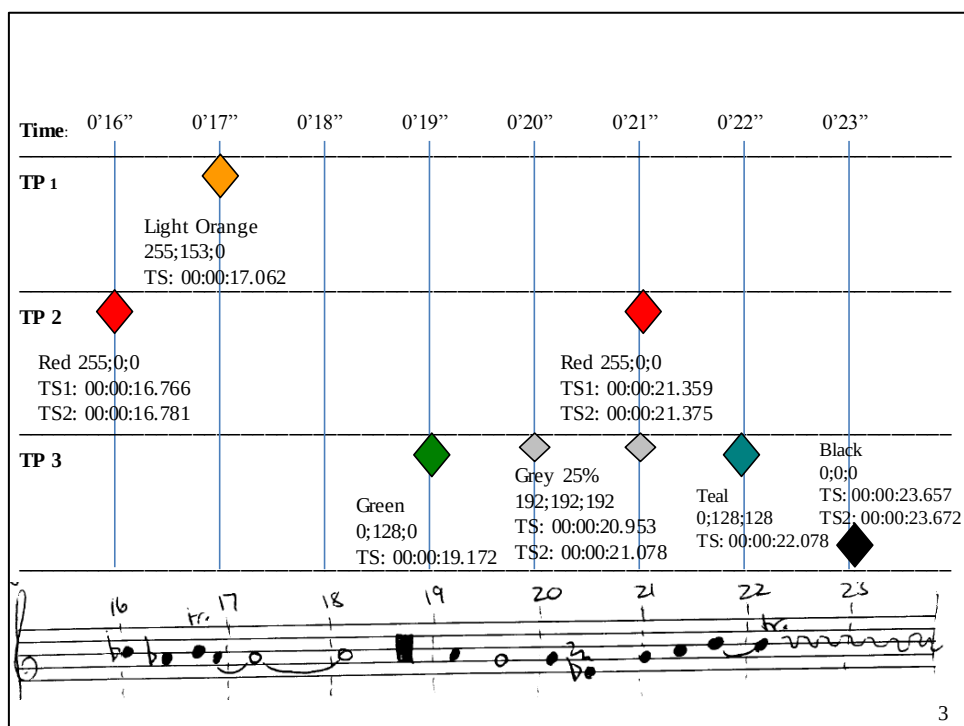
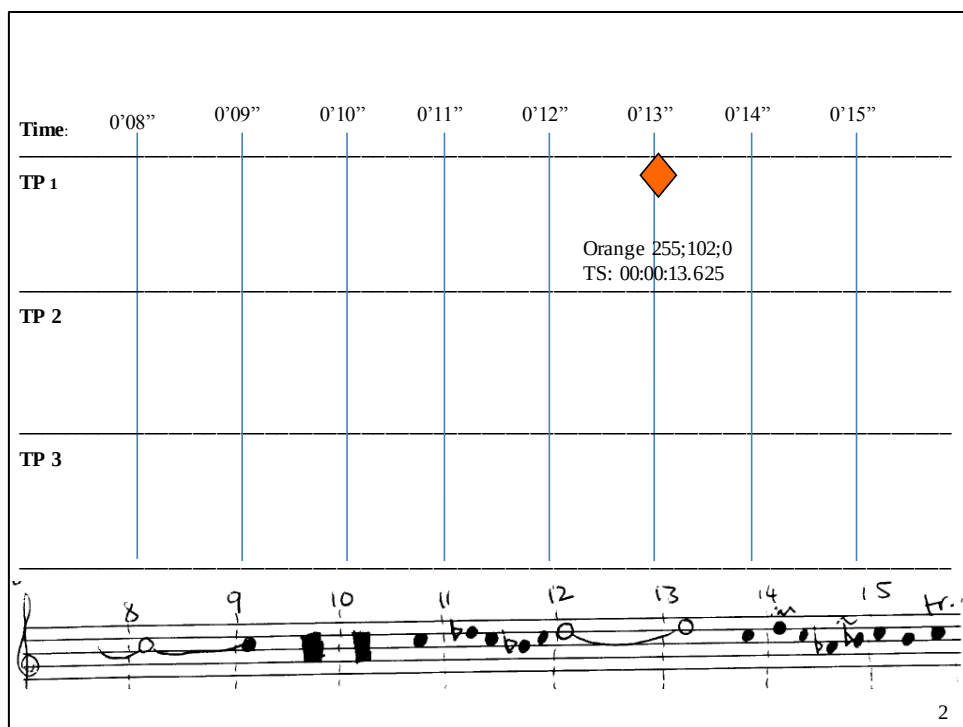
TP 3

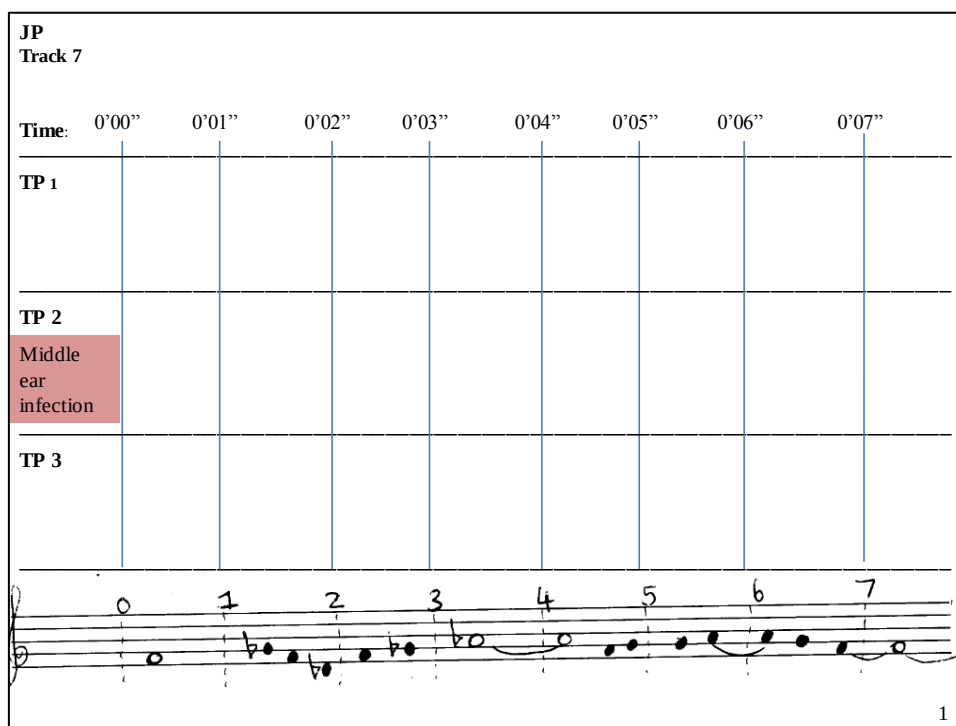
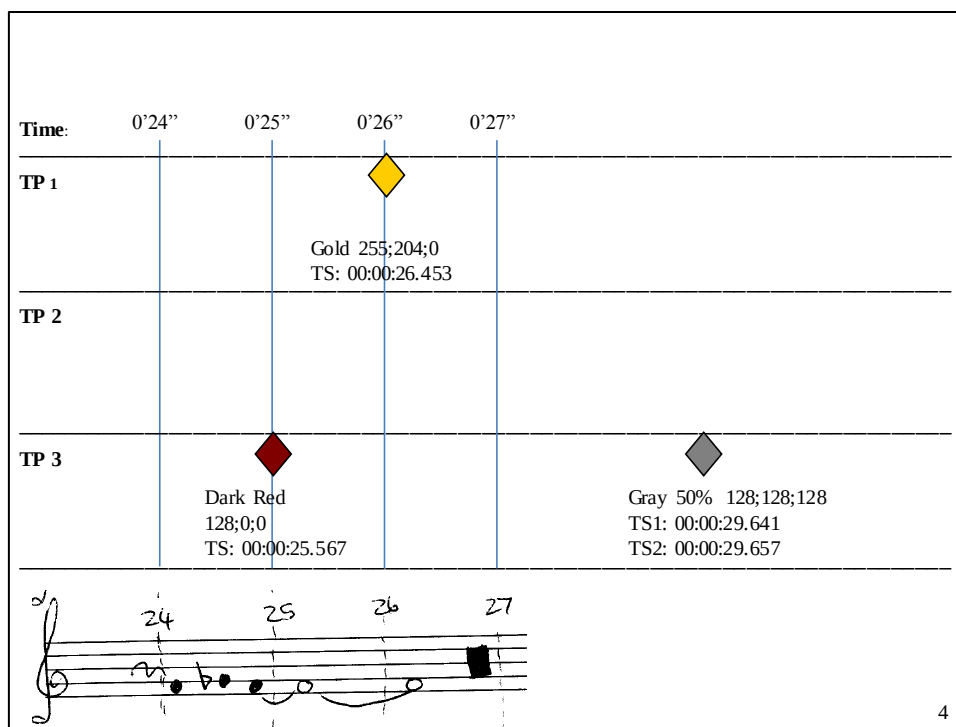
Middle ear infection

Gold 255;204;0
TS: 00:00:06.062

Red 255;0;0
TS1: 00:00:05.641
TS2: 00:00:05.656

1





Time: 0'08" 0'09" 0'10" 0'11" 0'12" 0'13" 0'14" 0'15"

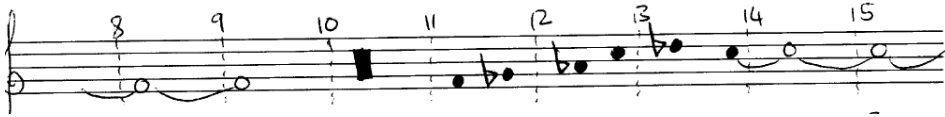
TP 1



U: Neutral, L: Anger
TS: 00:00:09.937

TP 2

TP 3



2

Time: 0'16" 0'17" 0'18" 0'19" 0'20" 0'21" 0'22" 0'23"

TP 1



U: Joy, L: Neutral
TS: 00:00:22.906

TP 2



U: Sadness, L: Surprise
TS: 00:00:17.578
TS2: 00:00:17.594

TP 3



3

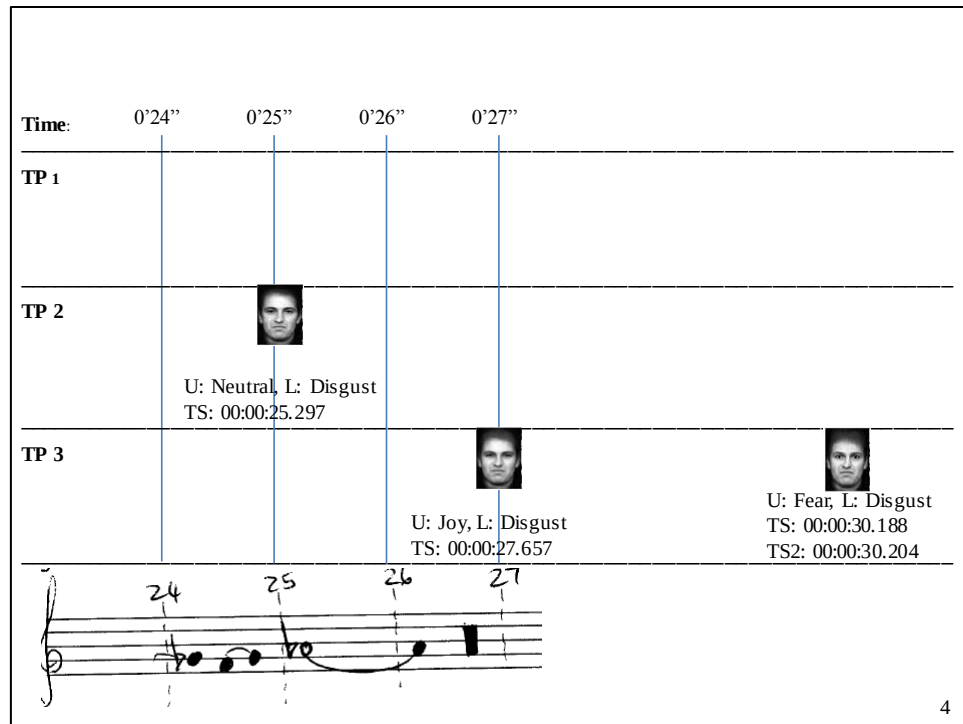


Table 5.36: Summary

Track 5			
	TP1	TP2	TP3
Elapsed time	00:00:41.141	00:00:41.140	00:00:41.141
Emotion words	0	1	2
Colours	0	0	0
Facial expressions	0	0	0
Total	0	1	2

Track 6			
	TP1	TP2	TP3
Elapsed time	00:00:42.141	00:00:42.141	00:00:42.203
Emotion words	0	0	0
Colours	4	3*	6*
Facial expressions	0	0	0
Total	4	3*	6*

Track 7			
	TP1	TP2	TP3
Elapsed time	00:00:41.109	00:00:41.156	00:00:41.141
Emotion words	0	0	0
Colours	0	0	0
Facial expressions	2	2*	2*
Total	2	2*	2*

Table 5.37: Free descriptions

Track 5	
TP 1	I did not really feel much. I was kind of short. I just did not really feel like listening to that kind of music after then last one.
TP 2	Het nie daarvan gehou nie. <i>Translation: did not like it.</i>
TP 3	Gelukkig kort. Hou nie baie daarvan nie. <i>Translation: Short, luckily. Don't like it very much.</i>
Track 6	
TP 1	Omdat ek die keer van kleur kon kies het ek regtig gedink aan so woestyn sons ondergang. So regte movie scene. <i>Translation: This time I could choose colours, so I thought about a sunset in the desert. Like a movie scene.</i>
TP 2	Nie daarvan gehou nie, maak my ore seer al sit ek sagter. <i>Translation: Didn't like it much. It hurts my ears, even when I turn down the volume.</i>
TP 3	Ook gelukkig kort. <i>Translation: Luckily short as well.</i>
Track 7	
TP 1	Net bietjie moeg vir die soort musiek maar anders het ek nie regtig iets gevoel net bly dis klaar. <i>Translation: Just a little tired of this kind of music; didn't really feel something. Just glad it's over.</i>
TP 2	Hou nie daarvan nie. <i>Translation: Don't like it.</i>
TP 3	Net bly dis nou kla. <i>Translation: Just glad it's over now.</i>

Table 5.38: Relevant paraphrased interview extracts

Track 5, 6 and 7	
TP 1	I didn't select any words, since the sample was so short. Besides - I'm more of a colour and picture person. The words just seemed either too weak or too strong at the time. I rather would have used the colours. I was also still irritated by the previous track, the Raga, and I think that prevented me from focusing on the sample. I just couldn't think of words that would fit with the sample. I tried to find suitable words, but the sample was too short, and I couldn't find any words that fit. I experienced the samples being very similar to each other and the Raga. I think this is because I was tired of the music and anything that sounded remotely like the Raga would be similar in experience to me.
TP 2	I think the fact that I had middle ear infection during TP2 did have an influence on my

	experience of the music, especially the Hindustani samples. Although I turned down the volume almost all the way, it was still physically painful to listen to the samples because of the penetrating, sharp, high pitched bansuri tone colour.
TP 3	no comment

Table 5.39: Rating scales

	Track 5			Track 6			Track 7		
Question 4a-e	TP 1	TP 2	TP 3	TP 1	TP 2	TP 3	TP 1	TP 2	TP 3
Scale									
Pitch level	3	3	3	3	4	4	3	3	3
Dynamic level	4	4	4	4	4	4	4	3	3
Tempo	3	1	2	3	1	2	3	1	2
Rhythmic complexity	1	1	1	1	1	2	1	1	2
Melodic complexity	1	1	2	1	1	2	1	1	2
Question 4f	TP 1	TP 2	TP 3	TP 1	TP 2	TP 3	TP 1	TP 2	TP 3
Emotion word									
Love	3	2	2	3	2	1	3	2	1
Joy	4	3	3	6	3	3	6	4	2
Surprise	5	4	4	4	4	4	4	3	3
Anger	6	6	6	5	6	6	5	6	6
Sadness	2	5	5	2	5	5	2	5	5
Fear	1	1	1	1	1	2	1	1	4

5.3.1.2 Raga Kirwani (Track 4) and Hindustani samples (track 5-7) results: group

Results concerning listening experiences regarding Raga Kirwani and the three samples are presented here in terms of the participants as a group, as well as in terms of all three Test Periods.

a) Experience of predetermined emotion: sadness

Raga Kirwani and the three samples were selected according to the predetermined emotion, sadness. The predetermined emotion was not revealed to the participants. They were also instructed to only indicate the emotions they were experiencing themselves in terms of each musical track, and not emotions they thought the researcher wanted them to experience.

Therefore, their indications of emotional experiences to all musical tracks are seen as reliable. It is also possible, though, that the participants just related the musical content to the emotions they indicated without really experiencing those emotions. For the purposes of this report the researcher worked from the premise that the emotions the participants indicated are the emotions they experienced.

Participants that mainly experienced sadness in the raga are Alex and Peter. James and William did experience sadness, but also joy and a variety of other positive emotions. Participants that experienced sadness in the three samples are Alex, James, Peter, and William.

b) Question 2: use of responses formats

Table 5.40 presents the response formats a participant used most in Question 2 of the raga and samples. In the case where a participant used two formats almost equally, his/her name will appear next to both. Note that Norman used all three formats frequently during his experiences of the raga. Alex, James, Steve, and William used all three formats to indicate emotional experiences in the samples.

Table 5.40: Response formats participants used most

	Raga	Samples
Word checklist	James Mary-Jane Susan Norman Steve William	Alex James Steve William
Colours checklist	Alex James JP Mary-Jane Susan John Norman	Alex James JP Mary-Jane Susan John Norman

	Peter	Peter Steve William
Facial expressions checklist	Alex John Norman Peter	Alex James Susan John Norman Steve William

b.1) Word checklist: participant's personal categories

Results for participants' word selection during listening experiences of the raga and the samples are presented here according to each participant's own personal categories. The first, fourth and seventh columns displays the word category of the relevant Test Period. The second, fifth and eighth columns display the number of words that were selected from the relevant category during experience of the raga (R). The third, sixth and ninth columns show the number of words selected from that category during Track 5 (the first sample).

Table 5.41: Alex word checklist

Alex								
TP 1 Categories	R	T5	TP 2 Categories	R	T5	TP 3 Categories	R	T5
Anger	4	1	Distress	5	4	Agony	3	1
Hurt	2	2				Melancholy		2
Passion	1							
Sympathy	1							

Table 5.42: James word checklist

James								
TP 1 Categories	R	T5	TP 2 categories	R	T5	TP 3 categories	R	T5
Bitterness	1	1	Anxiety	2		Worry	2	
Anxiety	3		Melancholy	1		Anxiety	1	
Melancholy	1		Love	2		Affection	1	
Pleasure	4		Enthralment	1		Love	1	
Affection	3		Pleasure	2		Amazement	1	

Zeal	1		Euphoria	1		Euphoria	9	
Misery	4		Desire	1		Sorrow	4	3
Joy	3		Irritation	2		Infatuation	2	
Desire	4	1	Sorrow	3	2	Happiness	3	
Sorrow	4	2	Uneasiness	2		Optimism	5	
Triumph	1		Infatuation	1		Compassion		2
Jealousy	1		Happiness	2				
Excitement	8		Optimism	3				
Liking	1		Disappointment		1			
			Depression		2			
			Compassion		1			
			Bitterness		1			

Table 5.43: JP word checklist

JP								
TP 1 categories	R	T5	TP 2 categories	R	T5	TP 3 categories	R	T5
Joy	2		Joy	1		Dislike		2
Hostility	2		Irritation	1				
Love	1		Love	1				
Hope	1		Surprise	2	1			
Contempt* (Contentment)	1		Hate					
Loneliness	1							

Table 5.44: Mary-Jane word checklist

Mary-Jane								
TP 1 categories	R	T5	TP 2 categories	R	T5	TP 3 categories	R	T5
Hopelessness	1		Caring	1	1	Zeal	2	
Ecstasy	33		Ecstasy	13		Relief	1	
Tenderness	6	2	Optimism	7	1	Optimism	2	
Excitement	8		Longing	2		Loneliness		1
Eagerness	1		Contentment	3		Longing		2
			Delight	12				
			Gaiety	2				

Table 5.45: Susan word checklist

Susan								
TP 1 categories	R	T5	TP 2 categories	R	T5	TP 3 categories	R	T5
Love	1		Annoyance	1		Anger	1	
Insecurity	1		Nervousness	1		Happiness	1	
Shock	1							
Irritation	2							
Agony		1						
Anger		1						
Tenseness	1							

Table 5.46: John word checklist

John								
TP 1 categories	R	T5	TP 2 categories	R	T5	TP 3 categories	R	T5
Fear	6	2	Surprise	1		Dislike	3	
Anger	1		Displeasure	2	2	Anger	1	
Disappointment	1		Fear		1	Fear		1
Irritation		1				Loneliness		2
Hopelessness	1							
Arousal	1							
Loneliness	1							

Table 5.47: Norman word checklist

Norman								
TP 1 categories	R	T5	TP 2 categories	R	T5	TP 3 categories	R	T5
Caring	5	1	Liking	1	1	Sentimentality	1	
Exhilaration	1		Longing	1		Happiness	1	1
Joy	6	1	Pleasure	2		Sympathy	1	
Optimism	3		Amazement		1	Optimism	1	
Tenderness	3	1				Infatuation	2	1
Sentimentality	1							

Table 5.48: Peter word checklist

Peter								
TP 1 categories	R	T5	TP 2 categories	R	T5	TP 3 categories	R	T5
Grief	2		Hurt	2		Bitterness	1	
Agitation	3		Joy	3		Sadness	2	
Desire	1		Contentment	4		Longing	1	2
Agony	2		Longing	1	1	Hope	2	
Contempt	2		Love	1		Optimism	1	
Homesickness	1		Defeat	1		Regret	2	
Depression		2	Sadness		2	Relief	3	
			Amazement	1				
			Anxiety	1				

Table 5.49: Steve word checklist

Steve								
TP 1 categories	R	T5	TP 2 categories	R	T5	TP 3 categories	R	T5
Longing	3		Contentment	1		Joy	6	
Affection	1		Melancholy	1		Affection	1	
Surprise	2	1	Hope	1		Satisfaction	3	
Despair	1		Liking	1		Tenderness	1	
Joy	1		Displeasure	2		Exhilaration	3	
Fear	1		Alarm	2	1	Amazement	3	
Rejection	1		Isolation	1		Isolation	2	2
Grief	1		Resentment	1	1	Enthusiasm	1	
Dislike	1		Anxiety	2				
Contentment	1		Dislike	9				
Vengefulness	2							
Optimism	1							
Anger	1							

Table 5.50: William word checklist

William								
TP categories	R	T5	TP 2 categories	R	T5	TP3 categories	R	T5
Relief	1		Hate	5		Excitement	27	
Adoration	2		Joy	2		Joy	5	
Anger	1		Suffering	5	2	Anxiety	9	3
Depression	10	2	Sorrow	1	1	Sorrow	1	1

Amazement	5		Enjoyment	25				
Optimism	14							
Frustration	9							
Happiness	4							
Satisfaction	9							
Pride	2							
Guilt	3							
Sentimentality	1							

b.2) Colours checklist

Results of participants' colour selections during their experiences of the raga and samples are presented in Table 5.51. Colours were grouped together according to hue in the first column. The hue is mentioned first, together with the shades that fit into that category. The second column represents the participants that selected the particular colour during the raga, while the third column presents participants' selections during the second sample, Track 6. The table shows a selection made during any of the three Test Periods, and not the selections made individually during each Test Period.

Table 5.51: Colour selections

Colours	Raga	Track 6
Reds Red, Dark red	Alex James JP Mary-Jane John Norman Peter Steve William	Alex JP John
Pinks Pink, Rose	James JP Mary-Jane John Peter Steve	Mary-Jane

Oranges Orange, Light Orange	Alex James JP Mary-Jane John Norman Peter Steve	Alex James JP John Norman Peter
Yellows Yellow, Gold	James JP Mary-Jane John Norman Peter Steve William	James JP Mary-Jane Susan Norman Peter Steve
Greens Green, Teal, Sea Green, Bright Green, Lime	Alex James JP Mary-Jane Susan John Norman Peter Steve William	Alex James JP Susan Norman Peter Steve William
Blues Blue, Indigo, Turquoise, Light Blue, Aqua	James JP Mary-Jane Susan John Norman Peter Steve William	James Mary-Jane Norman Peter Steve William

Purples Violet, Lavender	James JP Mary-Jane John Steve	James Mary-Jane John William
Greys 25 %, 40 %, 50 %	Alex James Susan John Peter Steve William	JP Susan John Peter Steve William
Browns Brown, Tan	Alex James JP John Steve	Alex Susan John Norman Peter William
White	Alex Norman Peter Steve	Norman
Black	Alex Susan Steve William	Alex JP John

b.3) Facial expressions checklist

Results concerning participants' selections of facial expressions during their experiences of the raga and third sample (Track 7) are presented here. The results for all three Test Periods are combined in this presentation. The emotion mentioned first, was displayed by the upper half of the face, while the emotion mentioned second was displayed by the lower half of the face.

Table 5.52: Facial expressions selections

Facial expressions	Raga	Track 7		Facial expressions	Raga	Track 7
Fear/Fear	John	John		Joy/Joy	James JP Mary-Jane Norman Peter Steve William	Mary-Jane Norman
Fear/Anger	Peter William	Susan John Norman		Joy/Neutral	James John Norman Peter William	James JP Mary-Jane Norman Peter Steve
Fear/Disgust		JP Susan		Joy/Sadness	Alex John	William
Fear/Joy	William	Norman		Joy/Surprise	Peter Steve	
Fear/Neutral	Steve			Neutral/Fear	John Norman Peter William	James
Fear/Sadness	William	Susan John William		Neutral/Anger	Alex James JP John Peter Steve	James JP Peter William
Fear/Surprise	Peter Steve			Neutral/Disgust	Alex Peter	JP
Anger/Fear	John Peter			Neutral/Joy	Mary-Jane Norman Peter Steve William	Mary-Jane Norman
Anger/Anger	Alex John Peter	John		Neutral/Neutral	James JP John	James Peter William

					Norman Peter Steve William	
Anger/Disgust	Alex Steve	Susan		Neutral/Sadness	Alex Peter	Alex
Anger/Joy	Alex Mary-Jane John William			Neutral/Surprise	William	
Anger/Neutral	Alex James John Peter	Peter		Sadness/Fear	James Susan John Peter William	James John
Anger/Sadness				Sadness/Anger	James Susan John Peter William	James John
Anger/Surprise	William			Sadness/Disgust	Alex Susan Peter Steve	Alex Susan
Disgust/Fear	James John Peter Steve William	Steve		Sadness/Joy	Mary-Jane John Norman Peter William	William
Disgust/Anger	Alex Susan John Peter William	Alex Norman Peter Steve		Sadness/Neutral	Alex James John Peter	James John Peter William
Disgust/Disgust	James	Alex		Sadness/Sadness	Peter William	Alex James John William
Disgust/Joy	James Norman			Sadness/Surprise	John Steve	JP John

	William					
Disgust/Neutral	Alex James Norman Peter Steve	Norman Peter		Surprise/Fear	John Steve	
Disgust/Sadness	Alex Peter	Alex William		Surprise/Anger	John Norman	
Disgust/ Surprise	Peter Steve			Surprise/Disgust		
Joy/Fear	Norman William	Norman		Surprise/Joy	Norman William	Steve
Joy/Anger	Alex Norman Peter	Alex		Surprise/Neutral	John Norman William	
Joy/Disgust	Alex Peter Steve	Alex JP		Surprise/Sadness	Susan John William	
				Surprise/ Surprise	Norman William	Norman

c) Question 3: free descriptions

The free descriptions participants provided during their experiences of the raga and samples were examined according to topics. The first column in Table 5.53 presents the topic, while the second column shows which participant wrote about it in his free descriptions of the raga over all three Test Periods. The third column shows which participant wrote about it in his free descriptions of the samples.

Boredom refers to either the raga being too long, the raga having no variation of some kind, or just the experience of boredom in general. ‘Short enough’ indicates that, if the sample was longer, the participant might have experienced it differently. Others complained that the samples were too short, and because of that they could not form an opinion. Some participants experienced irritation and frustration during the raga and/or samples. Some participants indicated that they experienced the predetermined emotion, while others either

described other emotions, or a variety of emotions. Some participants used stories or pictures to describe their emotional experiences. Structural elements and melody were also mentioned, as well as a like or dislike of the musical track and instruments.

Table 5.53: Topical descriptions of free descriptions

Topic	Raga	Samples
Boredom	Alex JP Susan Norman Steve William	Alex
Short enough		Alex JP Norman
Too short		JP
Irritation / frustration	Alex JP Susan John Steve John William	Alex John Peter
Predetermined emotion: sadness		Alex James Peter William
Other emotions		Mary-Jane John Norman
Variety of emotions	James JP Mary-Jane Susan Peter Steve William	Peter Steve William

Didn't like it		JP Susan John
Using pictures or stories	JP Norman Steve William	JP Susan John Norman Peter Steve
No melody / No structure	Susan John	Susan John
Like it	Norman	Norman
Likes tabla	Norman	
Likes bansuri		Norman
Did not like bansuri		Mary-Jane Susan

d) Question 4: rating scales

Table 5.54 presents the results of the rating scales for the raga (R) and samples (S). Since the samples were all supposed to display the same predetermined emotion (sadness) their ratings were added together to determine an average. The raga's rating scales were also averaged. If the rating is a 1 or 2, it is regarded as a low rating; 3 is considered to be a mid-rating, and 4 or 5 is considered a high rating.

Table 5.54: rating scales

Scale	Low rating		Mid rating		High rating	
	R	S	R	S	R	S
Pitch level	Steve	Steve	JP Susan John Norman	Alex JP Susan John Norman Peter William	Alex James Mary-Jane Peter William	James Mary-Jane
Dynamic level		Peter	Alex JP Mary-Jane Susan Norman Peter Steve	Alex Mary-Jane Jane Susan Steve William	James John William	James JP John Norman
Tempo	JP Steve	JP Peter Steve	James Susan John Norman Peter William	Alex James Mary-Jane Jane Susan John Norman William	Alex Mary-Jane	
Rhythmic complexity	JP	JP Susan Peter		Mary-Jane Norman Steve	Alex James Mary-Jane Susan John Norman Peter Steve William	Alex James John William
Melodic complexity		JP Susan Peter	JP	Mary-Jane Steve	Alex James Mary-Jane Susan John	Alex James John Norman William

					Norman Peter Steve William	
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Table 5.55 presents the results of the appropriateness scale for the raga (R) and samples (S) over all three Test Periods. Averages were calculated for each word. The samples' ratings were added together to determine an average. If a rating is 1 or 2, it is considered low; if a rating is 3 or 4, it is considered to be a mid-rating. If the rating is a 5 or 6, it is considered a high rating.

Table 5.55: Appropriateness scale

	Low rating		Mid-rating		High rating	
Emotion word	R	S	R	S	R	S
Love	John Peter William	JP John	Alex JP Norman Steve	Alex James Susan Norman Peter Steve William	James Mary-Jane Susan	Mary-Jane
Joy	Susan John	Alex John William	Alex JP Peter Steve William	James JP Susan Peter Steve	James Mary-Jane Norman	Mary-Jane Norman
Surprise	Alex		James Mary-Jane John Peter Steve	Alex James JP Mary-Jane Susan John Peter	JP Susan Norman William	Norman

				Steve William		
Anger	Alex James Norman William	Alex Mary-Jane Norman Peter William	Mary-Jane Susan Peter Steve	James Susan Steve	JP John	JP John
Sadness	JP	Norman	Mary-Jane Susan John Norman Steve	JP Mary-Jane Susan John Steve	Alex James Peter William	Alex James Peter William
Fear	James JP Mary-Jane Susan Norman	JP Mary-Jane Susan Norman	John Peter Steve William	James Peter Steve	Alex	Alex John William

e) Interviews

The relevant interview extracts concerning participants' experiences of the raga and samples were also examined according to topics. Table 5.56 presents those topics, together with the participants that spoke about it during their discussions on the raga or the samples.

Table 5.56: interview topics

Topic	Raga	Samples
Boredom (too long)	Alex JP Norman Steve William	
Irritation	JP Susan John	JP Susan John

	Peter Steve William	Steve
No variation	Alex Susan	Alex
Repetitive structure	Alex JP Norman	Alex
Structural elements	James Mary-Jane Susan John Norman William	James Susan John Steve
Fits as background music	Alex JP Norman William	Alex Steve
Performance technique	Alex Susan William	John
Related emotions: sadness	Alex Peter William	Alex James Peter William
Raga and samples sound/feel the same		Alex James JP Mary-Jane Susan John Norman Peter Steve William
Variety of emotions	James	Steve

	JP Mary-Jane Susan Norman Peter Steve William	William
Likes tabla	James JP Mary-Jane Norman	
Likes bansuri	John William	Mary-Jane Norman
Did not like drone	Susan John Peter	
Did not like bansuri		JP Susan
Provides pictures or stories	JP John Norman Peter Steve William	Susan John Norman Steve

5.3.2 Personal musical tracks

Results of participants' listening experiences to their personal musical tracks are presented in this section. The data of JP's listening experiences of one of his personal tracks are presented as an example in section 5.3.2.1. It shows which words, colours and facial expressions JP selected during his listening experiences over all three Test Periods. The selections are then matched with the score. JP's free descriptions, along with paraphrased interview extracts and the ratings he provided are also presented. The Test Period block that is shaded (TP 2) indicates the Test Period during which JP was ill. The results are presented here in the same manner as they were presented for JP's raga and samples.

5.3.2.1 An example: JP – Track 2, Sonata, 3rd movement (Reinecke)

Table 5.57: Word checklist

Emotion word	TP 1	From category	TP 2	From category	TP 3	From category
Annoyance					1	Dislike
Depression					1	Depression
Disgust	1	Hysteria	1	Hate		
Dislike					1	Dislike
Excitement	2	Hope				
Joy	1	Joy				
Outrage			1	Outrage		
Rage			1	Irritation		
Regret			1	Regret		
Sadness			1	Unhappiness		
Shame			1	Isolation		
Total	4		6		3	

There is clearly very little consistency in his responses. This suggests that the emotive content of JP's listening experiences to the same music changes profoundly over the three test periods. However, there does seem to be a tendency towards negative emotions towards the third test period. This is confirmed by the interviews (see below).

Table 5.58: Colours checklist

Colour	TP 1	TP 2 *	TP 3 *
Rainbow colours			
Red RGB [255;0;0]	1	3	1
Orange RGB [255;102;0]			1
Yellow RGB [255;255;0]	1	1	
Green RGB [0;128;0]			1
Bright Green RGB [0;255;0]	1		
Grey (40%) RGB [150;150;150]			1
Grey (50%) RGB [128;128;128]			1
Total	3	4	5

There is also little consistency in JP's choice of colours, supporting the previous remark that his experiences of the emotive content changed over the three test periods. He chose fewer colours than for the ragas, which suggest a less varied experience of emotive content.

Table 5.59: Facial expressions checklist

Facial expression	Emotions	TP 1	TP 2	TP 3
	Anger/Disgust		1*	1*
	Disgust/Anger	1		
	Disgust/Joy	1		
	Neutral/Disgust		1*	
Total		2	2*	1*

Since JP chose very few faces it is hard to compare the three test periods. However, faces expressing disgust are chosen every time and in every test period. This supports his choice of words, as represented above.

Figure 5.4: Matching JP's selections with the score – Reinecke Sonata

JP
Sonata, 3rd movement-Reinecke

Time: 0'05" 0'10" 0'15"

TP 1

TP 2
Middle ear infection

TP 3

Andante tranquillo. $\text{♩} = 84$.

1

Time: 0'35" 0'40" 0'45" 0'50"

TP 1
Excitement (Hope)
TS: 00:00:49.234

TP 2
Disgust (Hate)
TS: 00:00:41.062

Red 255;0;0
TS1: 00:00:44.406
TS2: 00:00:44.421

TP 3
Outrage (Outrage)
TS: 00:00:49.921

3

Time:	1'10"	1'15"	1'20"
TP 1	 U: Disgust, L: Anger TS: 00:01:11.25	 Red 255;0;0 TS: 00:01:16.328	
TP 2		 Red 255;0;0 TS: 00:01:17.859	
TP 3			



5

Time:	1'25"	1'30"	1'35"	1'40"
TP 1				
TP 2		Sadness (Unhappiness) TS: 00:01:31.000		
TP 3				



6

Time:	1'45"	1'50"	1'55"	2'00"
TP 1	Disgust (Hysteria) TS: 00:01:45.453			
TP 2	Shame (Isolation) TS: 00:01:46.562		Rage (Irritation) TS: 00:01:56.109	
TP 3			Orange 255;102;0 TS1: 00:01:57.657 TS2: 00:01:57.672	Dislike (Dislike) TS: 00:02:01.313



7

Time:	2'05"	2'10"	2'15"
TP 1			
TP 2	Red 255;0;0 TS1: 00:02:03.500 TS2: 00:02:03.515	U: Neutral, L: Disgust TS1: 00:02:09.203 TS2: 00:02:09.218 TS3: 00:02:09.234	U: Anger, L: Disgust TS1: 00:02:14.125 TS2: 00:02:14.140
TP 3	Annoyance (Dislike) TS: 00:02:09.688		Red 255;0;0 TS1: 00:02:15.641 TS2: 00:02:15.657



8

Time: 2'25" 2'30"

TP 1 Excitement (Hope)
TS: 00:02:28.453

TP 2

TP 3

10

Time: 2'35"

TP 1 
Yellow 255; 255;0
TS: 00:02:32.484

TP 2

TP 3

11

Time:	2'40"
TP 1	 U: Disgust, L: Joy TS: 00:02:44.281
TP 2	
TP 3	Depression (Depression) TS: 00:02:41.860



12

Time:	2'45"	2'50"	2'55"	3'00"
TP 1		Joy (Joy) TS: 00:02:54.109		
TP 2	 Yellow 255;255;0 TS1: 00:02:46.593 TS2: 00:02:46.609 TS3: 00:02:46.625			
TP 3				



13

Time:	3'05"	3'10"	3'15"
TP 1			
	Bright Green 0;255;0 TS: 00:03:09.687		
TP 2	Regret (Regret) TS: 00:03:04.046		
TP 3			
	Green 0;128;0 TS1: 00:03:17.641 TS2: 00:03:17.657		



14

Time:	3'20"	3'25"	3'30"	3'35"	3'40"	End 3'44"236
TP 1						
TP 2						
TP 3						
	Gray 40% 150;150;150 TS: 00:03:21.985	U: Anger, L: Disgust TS1: 00:03:29.422 TS2: 00:03:29.438	Gray 50% 128;128;128 TS1: 00:03:31.688 TS2: 00:03:31.704			



15

Table 5.60: Summary

Track 2 – Sonata, 3rd movement - Reinecke			
Flute, accompanied by piano			
	TP 1	TP 2*	TP 3*
Elapsed time	00:04:03.156	00:04:03.125	00:04:03.141
Emotion words	4	6	3
Colours	3	4	5
Facial expressions	2	2	1
Total	9	12	9

Based on the results presented, there appears to be coherence between the results obtained from the three response formats in the context of a particular Test Period. Even though the results vary between Test Periods, this can be attributed to changes in the participant's experiences. The coherence in the results suggests that the method developed for this study is effective in uncovering patterns in a particular Test Period, and also in showing changes in patterns over consecutive Test Periods.

Table 5.61: Free descriptions

TP 1	A little surprised to hear how my sound [i]s from the other side. A little disappointed in myself especially for some of the unmusical playing that I did. But glad and again surprised for some of the nice moments and some of the places that I know I make mistakes in that came out ok.
TP 2	Disgusted that I played so badly.
TP 3	So bly dat ek hoef nie weer daarna te luister nie! <i>Translation: So glad that I don't have to listen to that again!</i>

Table 5.62: Relevant paraphrased interview extracts

TP 1	I remember I first reacted to the strange tone colour of the flute. It sounded like I was playing on a plastic flute! I remember that I was working on some Baroque pieces just before the recording session. I try to create a different sound when playing Baroque music. I think the sudden change to Romantic music caught me off guard. I tried to add some vibrato, but it sounded superficial and flat and not at all beautiful or round. I think the slower parts of the Reinecke make me want to reflect over the events of the day.
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	It is like sitting down, drinking coffee, thinking about what has happened, or like that feeling when you've just finished watching a captivating movie and now you're wondering about it. I think I would mostly have a reflective emotion about the Reinecke, although, the faster middle part seems random to me. I don't know how to react to that.
TP 2	I experienced my performance of the Reinecke worse this time. The first time I expected it to be bad, but then I was surprised by the way I played, especially in the fast part. But this time it was all bad, and it really sounded like I was playing a plastic flute. It also sounded off pitch, which really made it horrible to listen to. Maybe I was harder on myself this time, but I really experienced it worse. Maybe I just heard more mistakes and now I'm being hard on myself.
TP 3	My sound is ugly, it sounds like a plastic flute! There are also a lot of mistakes and my performance wasn't musical at all. In my opinion I actually played very badly. I don't like listening to it. I find it very hard to separate my experience of the music from my experience of my performance. I always try to look at myself critically, and then it becomes difficult to distinguish between the two. In order to experience the music, I would rather listen to a different recording of the same work.

The free descriptions support the data gathered during the continuous measurement.

Table 5.63: Rating scales

Question 4a-e	TP 1	TP 2	TP 3
Scale			
Pitch level	2	3	3
Dynamic level	2	2	2
Tempo	2	2	2
Rhythmic complexity	2	2	3
Melodic complexity	1	2	3
Question 4f	TP 1	TP 2	TP 3
Emotion word			
Love	4	1	1
Joy	5	2	2
Surprise	6	3	3
Anger	3	6	5
Sadness	2	5	6
Fear	1	4	4

5.3.2.2 Personal musical track results: group

Results concerning listening experiences regarding the participants' personal tracks are presented here in terms of the participants as a group, as well as in terms of all three test periods. The personal tracks that each participant listened to are mentioned here again in Table 5.64.

Table 5.64 (Table 3.3 in Chapter 3): Participants' personal musical tracks

Participant	Track nr.	Musical piece	Composer	Length
Alex	2	Sonata in b minor, nr 33.	D. Scarlatti	3:17
	3	Devotion, Liebeslied	R. Schumann	4:13
James	2	Romance, opus 62	E. Elgar	6:33
	3	Sonata in B-flat major, Rondo	W.A. Mozart	3:31
JP	2	Sonata, Andante tranquillo and Molto vivace	C. Reinecke	4:03
	3	Joueurs de Flute, Mr. de la Pejaudie, op.27, nr. 4	A. Roussel	1:56
Mary-Jane	2	Sonata in C major for bassoon	Devienne	4:36
	3	Sonata in e minor for bassoon	G.P. Telemann	3:32
Susan	2	La flute de pan, op.45, first movement	J. Mouquet	4:49
	3	Concerto nr.1 in G maj, second movement	W.A. Mozart	9:01
John	2	Atlantis	Koos Kombuis	3:38
	3	Psalm	Peter	4:42
Norman	2	Nothing without You	Bebo Norman	4:00
	3	Plastic Jesus medley	Jack Johnson	4:47
Peter	2	Jimmy	Own composition	4:49
	3	A world you can't imagine	Own composition	3:35
Steve	2	Romanza (d'Amour) – Spanish guitar solo	Anonymous/ Traditional	4:25

	3	Wild World	Cat Stevens	4:02
William	2	Love song	Own composition	3:05
	3	Majesty	Own composition	4:06

a) Question 2: use of formats

The table below indicates which formats a participant used most while listening to Track 2 and 3. If a participant used two formats more frequently than the third format, it is indicated in the table. If a participant used all formats frequently, it is also indicated in the table.

Table 5.65: Use of formats

	Track 2	Track 3
Word checklist	Alex James JP Susan John Norman Peter Steve William	Alex James Susan John Norman Steve William
Colours checklist	Alex JP Mary-Jane Susan John Norman Peter	Alex JP Mary-Jane John Norman
Facial expressions checklist	Alex Susan Norman Peter William	Alex Norman Peter Steve William

a.1) Word checklist

The results of the word checklist for Track 2 (T2) and Track 3 (T3) are presented here according to each participant's own word categories. Each table indicates in the first, fourth and a seventh column from which categories a word was selected. The second, fifth and eighth column shows how many words were selected from that particular category during Track 2. The third, sixth and ninth columns show how many words from that particular category were selected during Track 3.

Table 5.66: Alex word checklist

Alex								
TP 1 categories	T2	T3	TP 2 categories	T2	T3	TP 3 categories	T2	T3
Hurt	1		Love		3	Melancholy	2	
Passion	2	7	Desire	3		Surprise		2
Joy	2	3				Joy		4

Table 5.67: James word checklist

James								
TP 1 categories	T2	T3	TP 2 categories	T2	T3	TP 3 categories	T2	T3
Anxiety		2	Anxiety	1		Anxiety		1
Melancholy	6		Melancholy	5		Melancholy	3	
Compassion	1		Love	3		Love	2	
Excitement		3	Pleasure		1	Compassion	2	
Joy	2	2	Euphoria		2	Worry	1	2
Pleasure	2		Uneasiness		2	Sorrow	5	
Misery	1		Surprise	1		Affection	2	1
Zeal		1	Sorrow	3		Infatuation	2	
Euphoria	2	3	Infatuation	1	2	Euphoria	1	4
			Relief	3		Depression	4	
			Happiness	1	5	Happiness	1	3
			Optimism		3	Optimism	2	3

Table 5.68: JP word checklist

JP								
TP 1 categories	T2	T3	TP 2 categories	T2	T3	TP 3 categories	T2	T3
Joy	1	1	Isolation	1		Depression	2	
Hysteria	1		Irritation	1		Dislike	1	1
Hope	2		Hate	1				
Hostility		1	Outrage	1				
Regret		1	Unhappiness	1	1			
			Joy		1			
			Regret	1	1			

Table 5.69: Mary-Jane word checklist

Mary-Jane								
TP 1 categories	T2	T3	TP 2 categories	T2	T3	TP 3 categories	T2	T3
Dislike	7		Caring	1	2	Love	1	2
Ecstasy	1	1	Delight	1		Optimism		1
Tenderness	3	1	Annoyance	2				
Excitement		1	Disappointment		1			
Humiliation		1	Gaiety	6				
Dislike		7						
Hopelessness		2						

Table 5.70: Susan word checklist

Susan								
TP 1 categories	T2	T3	TP 2 categories	T2	T3	TP categories	T2	T3
Amazement	1		Love	1		Love	1	1
Happiness	1	3	Happiness	1	2	Happiness	1	
Hope	1		Optimism	1	1	Caring		2
Pride	1		Sentimentality	1				
Anger		1						
Joy		1						
Love		2						
Caring		1						

Table 5.71: John word checklist

John								
TP 1 categories	T2	T3	TP 2 categories	T2	T3	TP 3 categories	T2	T3
Love	2	3	Euphoria	1		Hope	1	1
Optimism	2	2	Affection	2		Affection	2	
Satisfaction	1		Fear		2	Desire		1
Happiness	2		Longing		1			
Fear		1	Hope		3			
Compassion		1						
Hopelessness		1						
Loneliness		1						
Amazement		1						

Table 5.72: Norman word checklist

Norman								
TP 1 categories	T2	T3	TP 2 categories	T2	T3	TP 3 categories	T2	T3
Caring	1	2	Amazement	2		Optimism	1	
Joy	2	5	Pleasure	2	2	Infatuation	2	1
Optimism	2	1	Liking	2	1	Happiness		1
Sentimentality	1	2	Longing		2			
Shame		1						
Tenderness		1						

Table 5.73: Peter word checklist

Peter								
TP 1 categories	T2	T3	TP 2 categories	T2	T3	TP 3 categories	T2	T3
Depression	1		Amazement	4		Adoration	1	
Ecstasy	1		Sadness	1		Satisfaction	1	
Cheerfulness	2		Frustration	1	1	Sadness	2	
Bitterness	1		Pleasure	1		Optimism	1	
Contempt	1		Hurt	2		Happiness		1
Passion		1	Excitement	1		Thrill		1
Hope		2	Contentment	1	3	Caring		2
Amusement		1	Joy		1			
Sympathy		1						
Eagerness		1						

Table 5.74: Steve word checklist

Steve								
TP 1 categories	T2	T3	TP 2 categories	T2	T3	TP 3 categories	T2	T3
Joy	1		Contentment	2		Affection		1
Contentment	1		Dislike	1	2	Resentment		1
Anger	1		Isolation	1		Tenderness		2
Longing	3		Melancholy	1				
Affection		1	Resentment	1	2			
Grief		1	Liking		1			
Compassion		1	Compassion		1			
Optimism		1						
Hurt		1						

Table 5.75: William word checklist

William								
TP 1 categories	T2	T3	TP 2 categories	T2	T3	TP 3 categories	T2	T3
Relief	1		Joy	3	4	Joy	4	4
Adoration	1	1	Love	2		Love	2	2
Optimism	3	5	Enjoyment	6	13	Anxiety	1	1
Frustration	1					Excitement	5	5
Satisfaction	1	8						
Sentimentality		1						
Pride	1							
Happiness		5						
Amazement		2						
Guilt	1							

a.2) Colours checklist

The tables below show each participant's colour selections during their experiences of Track 2 (T2) and Track 3 (T3). Results are presented according to the participant as an individual and in terms of all three Test Periods, meaning that if a participant selected a colour during any of the Test Periods, it is indicated here. Colours were also sorted here according to hue, with the different shades mentioned under each hue in the first column.

Table 5.77: Colours checklist

	John	John	Norman	Norman	Peter	Peter	Steve	Steve	William	William
Colours	T2	T3	T2	T3	T2	T3	T2	T3	T2	T3
Reds Red, Dark Red					y	y			y	y
Pinks Pink, Rose	y	y		y				y		
Oranges Orange, Light Orange		y			y					y
Yellows Yellow, Gold	y	y	y		y	y	y		y	
Greens Green, Teal, Sea Green, Bright Green, Lime	y	y	y	y		y			y	y
Blues Blue, Indigo, Turquoise, Light Blue, Aqua	y	y	y	y	y	y			y	y
Purples Violet, Lavender		y		y	y					
Browns Brown, Tan	y			y	y		y			y
Greys 25%, 40 %, 50 %		y			y	y	y	y		y
White		y	y	y						
Black					y			y		

a.3) Facial expressions checklist

The table below presents each participant's selection of a facial expression during their experiences of Track 2 and Track 3. The presentation was made in terms of the results all three Test Periods combined. The emotion mentioned first, was displayed by the upper half of the face. The emotion mentioned second was displayed by the lower half of the face.

Table 5.78: Facial expressions checklist

	Alex	Alex	James	James	JP	JP	Mary-Jane	Mary-Jane	Susan	Susan
Facial expressions	T2	T3	T2	T3	T2	T3	T2	T3	T2	T3
Fear/Fear										
Fear/Anger	Y									
Fear/Disgust									Y	Y
Fear/Joy										
Fear/Neutral										
Fear/Sadness										
Fear/Surprise										
Anger/Fear										
Anger/Anger										
Anger/Disgust					Y					
Anger/Joy						Y				
Anger/Neutral										
Anger/Sadness										
Anger/Surprise										
Disgust/Fear										
Disgust/Anger					Y	Y		Y	Y	Y
Disgust/Disgust							Y	Y		
Disgust/Joy		Y			Y		Y		Y	Y
Disgust/Neutral										
Disgust/Sadness										
Disgust/Surprise										
Joy/Fear	Y	Y								

Table 5.79: Facial expressions checklist

[illegible]

	John	John	Norman	Norman	Peter	Peter	Steve	Steve	William	William
Facial expressions	T2	T3	T2	T3	T2	T3	T2	T3	T2	T3
Neutral/Joy	Y	Y	Y	Y		Y			Y	Y
Neutral/Neutral										
Neutral/Sadness					Y					
Neutral/Surprise										
Sadness/Fear								Y		
Sadness/Anger										
Sadness/Disgust								Y	Y	
Sadness/Joy		Y							Y	Y
Sadness/Neutral					Y			Y		
Sadness/Sadness					Y					
Sadness/Surprise								Y		
Surprise/Fear					Y	Y				
Surprise/Anger										
Surprise/Disgust									Y	
Surprise/Joy					Y	Y				Y
Surprise/Neutral							Y			Y
Surprise/Sadness										
Surprise/Surprise										

b) Question 3: free descriptions

The free descriptions participants provided during their experiences of Track 2 and Track 3 over all three Test Periods were examined for topics. The topics which participants wrote about in any of their free descriptions concerning Track 2 and Track 3 are mentioned in the first column, with the name of the participant that mentioned it in the second column.

Table 5.80: Free descriptions

Topic	Participants
Experience of emotions	Alex James JP Mary-Jane Susan John Norman Peter Steve William
Performance (how they experienced their own performance)	JP Mary-Jane Susan Norman Peter Steve William
Sound quality (good, bad or ugly)	Alex James JP Mary-Jane Norman William
Structural elements (harmony, melody, tempo, articulation, instrumentation)	Alex Mary-Jane Norman
Likes the piece	Alex Susan Norman Peter William
Expectations (having low expectations)	James JP William
Use pictures or stories to describe their experience	Peter Steve

c) Question 4: rating scales

The results of the ratings for each track were averaged over all three Test Periods to determine a general rating for each track. The general rating is then displayed in the tables below according to each individual participant's track. If the general rating was a 1 or a 2, it is described as low (L). A general rating of 3 is described as a mid-rating (M). A general rating of 4 or 5 is described as high (H).

Table 5.81: Rating scales results

	Alex	Alex	James	James	JP	JP	Mary-Jane	Mary-Jane	Susan	Susan
Scale	T2	T3	T2	T3	T2	T3	T2	T3	T2	T3
Pitch level	M	M	L	M	M	M	M	H	H	H
Dynamic level	L	M	M	H	L	M	M	M	M	M
Tempo	L	M	L	H	L	M	M	M	H	L
Rhythmic complexity	M	H	H	H	L	M	L	L	M	L
Melodic complexity	H	M	H	H	L	M	L	H	M	M

Table 5.82: Rating scales results

	John	John	Norman	Norman	Peter	Peter	Steve	Steve	William	William
Scale	T2	T3	T2	T3	T2	T3	T2	T3	T2	T3
Pitch level	M	H	M	M	M	M	H	L	H	H
Dynamic level	M	H	M	M	M	L	L	L	M	M
Tempo	M	M	L	M	M	M	L	L	M	M
Rhythmic complexity	M	L	M	L	M	L	L	L	H	H
Melodic complexity	M	M	M	L	M	L	M	L	H	H

The tables below display the results for each individual participant's appropriateness rating according to their personal musical tracks. Averages of the three Test Periods were also calculated here. If an average is a 1 or 2, it is described as low (L). An average of 3 or 4 is described as a mid-rating (M) and an average of 5 or 6 is described as high (H).

Table 5.83: Appropriateness rating results

	Alex	Alex	James	James	JP	JP	Mary-Jane	Mary-Jane	Susan	Susan
Word	T2	T3	T2	T3	T2	T3	T2	T3	T2	T3
Love	H	H	H	M	L	L	M	H	M	M
Joy	L	H	M	H	L	M	H	H	H	H
Surprise	M	M	L	H	M	H	M	M	H	H
Anger	L	L	L	L	M	M	M	L	L	L
Sadness	H	M	H	L	H	H	L	M	M	M
Fear	M	L	M	M	M	L	L	L	L	L

Table 5.84: Appropriateness rating results

	John	John	Norman	Norman	Peter	Peter	Steve	Steve	William	William
Word	T2	T3	T2	T3	T2	T3	T2	T3	T2	T3
Love	H	H	H	H	H	H	H	H	H	H
Joy	H	M	H	H	M	M	M	L	M	H
Surprise	M	M	M	M	L	M	L	M	H	M
Anger	L	L	L	L	M	L	L	L	L	L
Sadness	M	M	M	M	H	H	H	H	M	M
Fear	L	M	L	L	M	L	L	M	L	L

d) Interviews

The interview extracts regarding participants' personal musical tracks were also examined according to topic over all three Test Periods. The topic is mentioned in the first column of the table below, while the participant that spoke about it in any of the Test Periods about any of his/her personal tracks is indicated in the second column.

Table 5.85: Interview topics

Topic	Participants
Critical of own performance	Alex, James, JP, Mary-Jane, Susan, John, Norman, Peter, Steve, William
Able to let go of mistakes	Alex, John, Norman, Peter, Steve, William
Discussed improvements on performance	Alex, James, Mary-Jane, Susan, Norman
Ideas about the piece have changed	Alex, James, William
Experience was worse than previous experience	James, JP, Mary-Jane
Expectations	James, JP, Susan, Steve, William
Emotional experiences of the piece	James, JP, Mary-Jane, Susan, John, Norman, Peter, Steve, William
Provides pictures or stories to describe their experiences	JP, Norman, Peter, Steve

5.4 PART I AND PART II: TENDENCIES

This section shows how the results of Part I and the results of Part II coincide with each other. The demographic questionnaire, Tomatis test and NEO PI-R from Part I is used as the guide for this section, with a representation of results or details from Part II that coincide with that particular part of Part I. Although these connections are mentioned here in isolation, one must bear in mind that it must be placed within the context of all the other information provided by the participant. The overlaps are however mentioned in isolation here to prove the notion that there are relationships between the results of Part I and Part II.

5.4.1 Tendencies according to Part I (Demographic Questionnaire) and Part II

5.4.1.1 Preferences

The only information from the Demographic questionnaire that was relevant to Part II of the methodology was participants' preferences and dislikes concerning musical styles and/or instruments. This in particular played a role during their experiences of the raga and samples.

The relationship of preference of musical style or instrument to the raga and samples became evident in free descriptions and relevant interview extracts. A summary is provided here, with only results of one participant's experiences of the raga and samples where it played a noticeable role displayed in Table 5.86.

Participants that indicated a preference for classical music are Alex, James, JP, Mary-Jane and Susan. Alex, JP and Susan commented on a dislike of the raga in terms of genre and style, as well as a lack of complex or interesting structure in the music. Mary-Jane, on the other hand, liked the raga due to her interest in Indian music. Although John did not indicate a preference for classical music, he also commented on his experience of the raga in terms of a lack of interesting structure and melody.

Mary-Jane and James indicated a dislike of flute in the demographic questionnaire, and also seemed to dislike it in the samples. For example, Mary-Jane credited her irritation during her experience of the samples to the bansuri. She mentioned that it irritated her because it was a high-pitched instrument playing by itself. Although Susan did not indicate a preference or dislike relevant to the raga and samples, she did mention that she became irritated with the timbre of the bansuri. John, on the other hand, expressed a liking of the airy timbre of the bansuri.

Some participants expressed a dislike of the drone in the raga, which irritated or annoyed them. They were Susan, Peter, and John. Peter in particular indicated in his demographic questionnaire that he doesn't like wind instruments.

Some participants expressed a liking for the tabla in the raga. They were James, JP, and Norman. John, on the other hand, mentioned that the part where the tabla plays in the raga felt trance-like to him; he mentioned Trance as a style of music that he doesn't like.

Norman mentioned that he likes wind instruments, ethnic music and other unusual instruments. This contributed to his experience of the raga and samples.

Table 5.86 Example

Alex			
Preference/dislike	Test Period and track	Free description	Paraphrased interview
Prefers classical music, specifically late romantic, modern and twentieth century music	TP 1, Track 4	I was intensely bored out of my mind. I have yet to learn how to appreciate this type of music.	At this point in my life, this kind of music all sounds the same to me. You're not going to get anything more than boredom.
	TP 2 Track 4	Glad that's over...I just wasted 17 minutes of my life...	It has a cyclical form that just keeps on repeating. Although there are subtle differences, the main picture still stays the same. So I knew right from the start that it was going to bore me intensely.... I don't understand this music at all, but I could understand the form. Lacking the necessary referential information, listening to this piece is like looking at something out of context. You don't really understand it; it's just there but it doesn't make sense. Applying classical training to this kind of music is pointless, since Hindustani music and Classical music are worlds apart...
	TP 3 Track 4	It's finally over! Not ugly but just not what I wanted to	The cause of the dislike and irritation was just the simple repetitiveness. My main interest in

		hear...	music lies in late romantic to modern to twentieth century music; all the new stuff, which is relatively in all aspects - whether it is rhythmic or harmonic or melodic or whatever - it is all complex and it is always very rich... For me - and I'm sure for many Western listeners - this music needs something more for us to keep our attention, because of what we are so use to in the Western idiom of composing and performing.
	TP 1, Track 7	All these Hindustani tracks sound emotionally the same to me. It allows me to appreciate the emotional variety in some western music and some other eastern music a lot more than I used to.	
	TP 2, Track 6	This genre of music is getting quite aggravating...	

5.4.1.2 Illness

As mentioned before, three participants experienced illness during one of the Test Periods. When comparing the results from the listening experiences where they were ill to other listening experiences where they were healthy, there are noticeable differences. The participants who were ill at some point in the empirical study are indicated in Table 5.87. Only the differences between experiences of one participant, Steve, are described here.

Table 5.87: Illness during a Test Period

Participant	Which Test Period?	Illness
JP	TP 2	Middle ear infection
Mary-Jane	TP 1	Headache
Steve	TP 2	Fever and ear pain

Steve had fever and ear pain during Test Period 2. When comparing his experiences of Test Period 1 and 3 to each other, they are very similar, while Test Period 2's experiences are significantly different. During his Test Period 2 interview Steve mentioned that he thought his perception of everything was influenced by his illness. He also seemed to be more bothered with the mistakes he made in Track 2 in Test Period 2 than in Test Period 1. He mentioned that he was irritated due to his illness, and that he did not experience so much emotion either. He was feeling sick and said he wanted to disengage from the music. He was pondering his previous experiences in Test Period 2, and didn't like the way the music had made him feel then.

In Test Period 2 Steve selected more words from the negative categories for Track 3 than in Test Period 1 or 3. The only colour he selected in Test Period 2 was Black. This could possibly be contributed to his changed perception of how the song writer feels about the girl in the song. At first Steve sensed that he cared about the girl; in the second Test Period he simply does not care at all, and then he changed his mind again and cared about her in Test Period 3. He also mentioned in Test Period 2 that it felt like he could only hear with his right ear, reported that his nose was blocked and that he had some swelling underneath one of his ears. He seemed more detached from the music in Test Period 2.

Concerning the raga and samples, Steve mentioned that he was definitely irritated with and detached from the raga and samples during Test Period 2. He was annoyed because it felt unending, with many repetitions.

5.4.2 Tendencies according to Part I (Tomatis listening test) and Part II

5.4.2.1 Directivity

As has been mentioned before, mistakes concerning directivity suggest concentration problems. Participants that displayed concentration problems during the Tomatis test also showed a tendency during their listening experiences in Part II to experience irritation or frustration, boredom, as well as distraction by background noises or letting their minds wander. This tendency was displayed during listening experiences of JP, Alex, Susan, Peter, John and Norman to the raga and bansuri samples. Data was taken from Test Period 1, Question 3 together with the relevant interview extracts.

Example: John experienced irritation, frustration and tension. To him, there was no structure, melody, form or emerging patterns in the raga or samples. He was mostly pre-occupied with the background noises, especially during his experience the samples.

5.4.2.2 Selectivity

Closed selectivity suggests the presence of fear. An example of the relationship between closed selectivity and results from Part II can be found in John's experiences of the raga and samples in Test Period 1. From his free description and relevant interview extract it seems as if John experienced fear during his listening experience. For instance, he said that it felt to him like he was in a strange country where no one cares about him; he felt unwelcome; he also had a picture of hostile people in his mind, one of them being the bansuri player, with whom he thought he would not get along.

5.4.2.3 Thresholds

Stress and conflict areas are indicated by crossings and/or contact between the air and bone conduction curve, as has been mentioned before. Participants that displayed stress during the Tomatis test also indicated a dislike for the instruments that played during the raga and samples in Test Period 1. Participants that best demonstrated this tendency are Mary-Jane, Susan and Peter.

Example: Mary-Jane indicated that she experienced irritation due to the high pitch of the bansuri. This corresponds with her dislike of solo flute, which she indicated in the demographic questionnaire.

As is well known by now, straight lines in either one or both of the curves in the Tomatis test suggest a struggle to analyse sound. An example of this can be found in John's listening experiences of the samples in Test Period 1. In his interview he said that he was under the impression that it was exactly the same sample that was just played three times. He could not differentiate between them.

5.4.3 Tendencies according to Part I (NEO PI-R) and Part II

Overlaps between the NEO PI-R results and Part II are presented here according to domains and facet scales.

Table 5.88: Neuroticism domain

Tendency: experiences of anxiety and related states are found in the experiences of the raga and samples	
Facet scale	Anxiety
Participants	James, John
Example	In his listening experiences of the raga and samples John indicated that he was apprehensive, fearful and nervous. He also mentioned that the music didn't make him feel welcome. He also felt like a captive at times, wanting to escape.
Tendency: Experience of anger, irritation, frustration, and annoyance during the raga and samples	
Facet scale	Angry hostility
Participants	Alex, Susan, Norman, JP, James
Example	In TP1 free description Susan wrote that she became annoyed with the sound of the instruments. In TP 3 interview she mentioned that

	the drone playing in the background of the raga irritated her. In her free descriptions of the samples she repeatedly stated that she doesn't like the samples or the sound of the instrument.
Tendency: Recognition of pre-determined emotion of raga and samples (sadness) on some scale or level	
Facet scale	Depression
Participants	JP, Alex, Susan, James, John
Example	As has been mentioned before, Alex indicated that he experiences sadness and depression in the raga and samples.

Table 5.89: Extraversion domain

Tendency: select mostly colours during listening experiences	
Facet scale	Excitement-seeking
Participants	Mary-Jane, Susan, William, Norman, JP, Alex
Example	Norman mostly selected bright colours like orange, yellow, bright green, red and turquoise during his listening experiences.
Tendency: experience positive emotions in a track which pre-determined emotion is sadness	
Facet scale	Positive emotions
Participants	Mary-Jane, Steve, Norman, William
Example	As has been mentioned before, Norman in general liked the raga and samples because it is unusual, different and interesting.

Table 5.90: Openness domain

Tendency: describes experiences of the raga and samples in terms of pictures	
Facet scale	Fantasy
Participants	Mary-Jane, Peter, JP, Alex, Steve, William, Norman
Example	Steve provided pictures and stories in his free descriptions of the raga and samples, for example

	(TP 3, Track 7 free description) Dit het my laat dink aan 'n plek waar klein kindertjies musiek oefen. 'n Man stap daar verby en dink dit is goed dat die kindertjies oefen maar is redelik neutraal en onbetrokke teenoor wat daar aangaan. <i>Translation:</i> <i>It makes me think of a place where small children are practicing music. A man walks past them and thinks to himself that it is good that they are rehearsing. He is however detached from what is going on there.</i>
Tendency: experiences different emotions within a single musical track (Tracks 2-4)	
Facet scale	Feelings
Participants	JP, William, Alex, Mary-Jane, John, Norman
Example	In Track 2, William indicated that he experienced disappointment with his vocals, but he liked listening to himself and the song. The song made him feel content. In his experiences of Track 3 he mentioned that he was ignoring his mistakes, and experienced optimism and contentment. In his experiences of the raga he mentioned the following emotions: frustration, jealousy, contentment, hopelessness, hope, celebration, defeat, horror, and triumph.

Table 5.91: Agreeableness domain

Tendency: to show concern for other people	
Facet scale	Altruism
Participants	Steve, Peter, John, William
Example	He experienced oppression during the raga (Test Period 3) and said during the interview that it reminded him of how unfair and inhumane women are treated in some cultures. This made

	him fearful.
Tendency: demonstrates sympathy towards others	
Facet scale	Tender-mindedness
Participants	Peter, William, Norman, Steve
Example	Norman: Track 3, Interview 1 When discussing the meaning of the words of Plastic Jesus, he said that he sees all the wrong things in the world and wants to make a difference.

Table 5.92: Conscientiousness domain

Tendency: no misunderstood or misarranged words	
Facet scale	Deliberation
Participants	Alex, James, John
Example	Alex never sorted any words under the unknown category, and never indicated during any of the interviews that he had misunderstood or misarranged a word.

5.5 COMPARISON BETWEEN FORMALLY TRAINED AND INFORMALLY TRAINED PARTICIPANTS

In this section the two groups of participants, formally trained and informally trained musicians, are compared to each other. This comparison is not to show that they are different, but to show that they can be compared on some level. The comparison will be done in terms of a discussion and not necessarily a display of results. This is done in order to support the central theoretical argument stated in Chapter 1.

5.5.1 Part I: Listening profiles

In terms of the Demographic questionnaire, it seems as if the five formally trained participants are more prone to illnesses that might influence their hearing and listening

ability. However, there is one participant from each group that have experienced all the illnesses that the participants are probed about in the questionnaire.

Although there is predominantly a preference for classical music in the formally trained group, they also have preferences for other musical styles, which overlap with the preferences of the informally trained participants. The two groups also share some dislikes of instruments (e.g. the organ) as well as a dislike of certain musical styles (e.g. 'boeremusiek').

In terms of family relationships, it seems as if both groups consist mostly of participants who have intact families. There is one participant in each group that have suffered the loss of a parent at an early age. In terms of sibling relations, there is one participant in each group that is an only child. The formally trained participants are mostly the eldest child or an older child in relation to siblings, while the informally trained participants are mostly the youngest child in their family.

In terms of the Tomatis test results, the presence of the 'musical ear' was more noticeable among the formally trained participants. Both groups consist of participants with the right ear as leading ear. One participant from each group indicated closed selectivity, while the remainder of each group indicated open selectivity. Concerning directivity mistakes, it seems as if the formally trained participants were more prone to making such mistakes, while only half of the informally trained group made such mistakes. Crossing or contact between the curves was present in the results of both the formally and informally trained group. Straight lines in the curves were more present in the results of the informally trained participants.

A comparison between the two groups concerning their NEO PI-R results is presented here in Table 5.93. The table shows which group dominated the low or high rating of each facet scale. If a group is mentioned at both ratings, it means that they were divided in their ratings. If the results of both groups displayed an equal number of participants, it is indicated in the table as 'equal'.

Table 5.93: Comparison of the group's NEO PI-R results

Facet scale	Low rating	High rating
Anxiety	Informal	Informal
Angry hostility	Informal	Formal
Depression	Equal	Formal
Self-consciousness	Informal	Equal
Impulsiveness	Informal	Formal
Vulnerability	Informal	Formal
Warmth	Formal	No results
Gregariousness	Equal	Formal
Assertiveness	Equal	Informal
Activity	Informal	Formal
Excitement-seeking	Informal	Equal
Positive emotions	Formal	Informal
Fantasy	Equal	Equal
Aesthetics	No results	Equal
Feelings	Formal	Equal
Actions	Informal	Equal
Ideas	Formal	Equal
Values	Informal	Formal
Trust	Equal	Formal
Straightforwardness	Formal	Informal
Altruism	Formal	Informal
Compliance	Formal	Informal
Modesty	Formal	Informal
Tender-mindedness	Formal	Informal
Competence	Formal	Equal
Order	Formal	Informal
Dutifulness	Informal	Informal
Achievement striving	Informal	Equal
Self-discipline	Informal	Equal
Deliberation	Equal	Formal

Concerning the results for Ponto Vista, Question 1, it seemed in Test Period 1 as if informally trained participants misunderstood or misarranged more words than the formally trained group. However, in Test Period 2 and 3 they appear to be on equal ground in this matter. In terms of the number of words that were unknown to the participants, the number for the informally trained group is higher. The formally trained group had a stronger tendency to indicate words that were not emotions in their opinion. The formally trained group also showed a tendency to sort a higher number of remaining words into useable categories than the informally trained group.

In terms of the number of categories participants created in Test Period 1, both groups have participants that create a high number of categories as well as an equal number of participants that created categories between ten and twenty. In terms of Test Period 2 and 3, both groups have one participant that created less than ten categories, while the formally trained participants tended to create the most categories on general.

In terms of positive, negative and mixed categories, both groups seemed to have an equal number of participants that create mixed or negative categories. Strategies (e.g. cause and effect) used to sort words were equally used by both groups. Both the formally and informally trained groups seem to follow the same approach (e.g. detail approach) in general when constructing categories. Participants from both groups displayed a tendency to combine the same number of Shaver categories, as well as incorporate smaller Shaver categories into bigger categories. The informally trained group mostly dominated in terms of sorting Shaver categories on their own, dismissing smaller Shaver categories and also dividing Shaver categories before words were sorted.

In terms of response time and manner, the formally trained group mostly made few moves to and from word categories, while participants from the informally trained group tended to make numerous moves. The formally trained group tended to spend little time completing Question 1 (between twelve and thirty minutes) while the informally trained group tended to take more time (between 33 min and 1 hour).

5.5.2 Part II: Continuous measurement of self-reported emotional response to music

A comparison between the ways the formally and informally trained participants experienced the musical tracks are discussed here first in terms of prescribed musical tracks and then in terms of personal musical tracks.

Concerning the predetermined emotion of the raga and samples, only two participants from each group were able to identify the emotion. That ability was more clearly displayed in their experiences of the samples. The word checklist was used frequently in the raga by both the formal and informally trained groups, while the formal group displayed a preference for the colours checklist, and the informal group displayed a preference for the facial expressions checklist. Since all participants were forced to use only one checklist for each sample, the preferences of the groups were not so clearly displayed.

Both groups showed a preference for the following colour hues in their experience of the raga: reds, pinks, oranges, greens, blues, purples, greys, browns and black. The informal group indicated a stronger preference for yellows and white.

Both groups also showed a preference for the following hues in their experiences of the samples: reds, pinks, oranges, yellows, green, purples and black. The informal group showed a stronger preference for blues, greys, browns and white.

Both groups tended to select the neutral facial expression in their experiences of the raga and samples. The informally trained group tended to select facial expressions of joy, fear and surprise during their experiences of the raga, while the formally trained group tended to select facial expressions of sadness. During their experiences of the samples, the formally trained group tended to select facial expressions displaying disgust, while the informally trained group tended to select facial expressions displaying anger.

Both the formally trained and informally trained groups described boredom, irritation, frustration, a variety of emotions, the similarity of the raga and samples, and structural elements in their free descriptions and interviews concerning the raga and samples. The informally trained group used pictures and stories to describe their experiences, and also tended to discuss the predetermined emotion of the samples more than the formally trained participants.

Concerning the rating scale results of the raga, the informally trained group tended to provide low ratings to pitch level and tempo, while the formally trained group tended to provide high ratings to tempo. The groups are equal with regard to the rest of the ratings in terms of the raga.

Rating scale results concerning the samples indicated that the informally trained group rated the pitch level, dynamic level and tempo as low, while the formally trained group rated pitch level as high, and rhythmic and melodic complexity as low. The groups are equal with regard to the rest of the rating scales concerning the samples.

In terms of a word's appropriateness to describe the raga, the informally trained group rated love as not being appropriate, while the formal group rated it as being appropriate. Both groups showed an equal tendency to rate joy and anger as being both not appropriate and appropriate. The formal group rated surprise and sadness as being not appropriate more than the informal group.

In terms of a word's appropriateness to describe the samples, the formally trained group displayed a clearer tendency to rate love as appropriate, and fear as being not appropriate. The informally trained group displayed a clearer tendency to rate surprise as being appropriate, while they rated sadness as being not appropriate to describe the samples.

In terms of participants' personal musical tracks, the groups cannot be compared since each participant listened to different tracks. Therefore comments are restricted to the use of formats, preference for colour hues and facial expressions as well as topics of discussion in their free descriptions and interviews.

Both the formally and informally trained groups used the word and colours checklists frequently, while the informally trained group tended to use the facial expressions checklist more in their experiences of their personal musical tracks. In terms of colour preferences both groups seem to prefer reds, pinks, oranges, yellow, greens, blues, purples, greys and black. The informally trained group indicated a clearer preference for browns and white.

Concerning facial expressions, the two groups showed equal preference for all emotions, except for the informally trained group which seemed to select more facial expressions displaying fear than the formally trained group.

Both groups discussed their emotional experiences of their personal musical tracks, and also commented on their performances. The formally trained group showed a clearer tendency to notice mistakes than the informally trained group. The informally trained group displayed a tendency to describe their experiences in terms of stories or pictures. They also displayed the ability to release themselves of the mistakes they made in their performances and just enjoy the music in their personal tracks, while the formally trained group tended to focus more on their mistakes over time, and also described their experiences of their personal tracks as becoming progressively worse.

5.5.3 Part I and Part II: Tendencies

The display of angry hostility, depression, and excitement-seeking in a listening experience were tendencies that occurred more among the formally trained participants.

The display of positive emotions, altruism, and tender-mindedness, as well as an inability to analyse sound were tendencies that occurred more among the informally trained participants.

The presence of musical style preferences, concentration problems, anxiety, fantasy, and feelings in listening experiences were equally displayed by the formally and informally trained groups.

5.5.4 Conclusion

It can be concluded from the information in this section that the formally and informally trained participants can be compared to each other when comparisons are made on a general level. There are, however, differences between them as a group but also as individuals when comparisons are made on a detailed level. These observations should therefore not be interpreted as a comparison between all formally trained and all informally trained musicians in general. The participants are not presented as representative of the two respective groups.

In the next chapter conclusions regarding the data presented in this chapter are drawn, mainly in terms of the research questions.