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### **REGULATIONS ON USE**

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#### Background

The field manuals were originally intended as working documents for internal use only. They were supplemented by verbal instructions and additional guidelines in many cases. If you have questions about using the materials, or comments on the viability in various field situations, feel free to get in touch with the authors.

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# EMOTION CONCEPTS Disa Sauter

Project	Categories across language and cognition
Task	There are three core tasks and three additional add-on tasks:
	(i) naming emotions from scenarios
	(ii) production of affective vocalisations from scenarios
	(iii) naming emotional states from affective vocalisations
	and optionally
	(iv) free generation of emotion words
	(v) the recognition of emotional vocalisations
Goal of task	To investigate emotional categories across linguistic and cultural
	boundaries.
Prerequisite	To conduct this task you need emotional vocalisation stimuli on your
	field computer and to have translated the scenarios at the end of this entry into your local language.

#### Background

Emotions undoubtedly play a central role in all human lives, but what are they? People have some shared knowledge about emotions: high agreement has been found in judgments of posed or natural photographs of common emotional expressions, what emotional state generally follows a particular set of abstract antecedent events etc. (Shaver, Schwartz, Kirson, & O'Connor, 1987). Nevertheless, in recent decades, theorists have argued fiercely over what emotions are and how they should be studied. There are disagreements on almost every aspect of emotions: what emotions are and do, whether they are adaptive or not, and how they relate to body, brain and culture. For example, the social constructionist school of thought argues that an emotion is merely a transitory social role, interpreted as a passion rather than an action (Averill, 1997). In contrast, some theorists hold that emotions are biologically driven functions helping us to deal with our environment (Ekman, 1992). Others suggest that emotions are the result of a series of cognitive appraisals of pertinent information (Lazarus, 1991; Scherer, 1997). No doubt some of these disagreements are the result of emotions being considered at many different levels of analysis: Some have likened the disputes between emotion theorists to the fable of several blind men encountering different parts of an elephant and disagreeing on what the animal is truly like. Nevertheless, the debate is ongoing.

Much psychological research into emotions has focused on emotional signals, such as facial expressions. This follows the framework set out by Silvan Tomkins, who, following Darwin's earlier ideas, proposed a two-factor theory of emotion: The biological factor formed the basis of a small set of universal emotions, while the culture-specific factor determined the social rules for displaying and inhibiting emotional expressions (Tomkins, 1962). Much subsequent work has attempted to map out the biological contributions to this system (Ekman, 1992), but more recently models have been

proposed that take into account both consistencies and variations across cultures. For example, the dialect account proposes that emotional expressions are universal, but each cultural group has some culture-specific variation on the original expressions. These specific adjustments are acquired by social learning. With increasing cultural distance the participant would have less exposure to the variations employed by the poser and thus be less good at recognising them (Elfenbein & Ambady, 2002).

A different approach is to investigate how and what people think about emotions, by studying the language people use to talk about emotions (Wierzbicka, 1999). By investigating the words that people use to describe different affective states we can derive a structure of the semantic domain of language. This structure can be computed on the basis of how often people tend to use the same term or expression to describe different affective states; the more often people use the same term for two states, the more similar they think they are. From these data we can produce a spatial map of the relationships between different emotions in each language, and look at similarities and differences of those maps across languages. Previous work has used direct translations of terms but this is problematic as "The degree of correspondence between emotion systems cannot be assessed if one presumes to know the corresponding terms from the outset" (Boster, 2005). Furthermore, previous studies have tended to use explicit similarity judgments ("how similar is anger to relief?"). However, this is problematic, as many domains, including emotion (Russell, 1991) can be mapped onto a conceptual space varying in terms of arousal and valence. This means that judgments can be made in terms of these properties without any consideration for the richer meaning of the concepts. Instead, we will examine the underlying space that is reflected in the labels elicited by affective stimuli, and compare these rich, and possibly multi-dimensional structures across languages. This approach also allows us to look at what emotion categories are labelled more and less consistently across consultants within and across languages.

#### **Relation to previous field manual entry**

In the 2007 field manual, tasks on emotions were included, including naming emotions from facial expressions and from scenarios (Levinson, Senft, & Majid, 2007). The current set of tasks is building on that work. The naming of emotions from facial expressions is supplemented with data from auditory affective stimuli, which allows for a wider range of emotions, particularly for positive states. Formulating the task is challenging, both in terms of selecting a set of emotions, and in formulating scenarios. There is a common bias in emotion research towards negative emotions, which was reflected in the 2007 entry, and several researchers also reported that the scenarios were not clear in conveying the intended emotions. This new set of materials has been more systematically selected and the scenarios were constructed taking into account psychological, as well as ethnographic data. As in the previous field manual, the target words are taken from English terms. It is a question of the project to find out whether these concepts are shared across cultures, and it is thus not pre-supposed that they are.

#### **Research question**

What is the underlying structure of emotion vocabularies in different languages – how similar or different are they? What emotions form well-defined semantic categories?

# Task

There are three core tasks in this section, and the running of each of these is outlined in more detail later in this entry. Different individuals can perform the different tasks. If the same person does several tasks, they should do them in the following order: task 4 (free generation of emotion words), task 1 and 2 (production of affective vocalisations and naming of scenarios), task 3 (naming emotional states from affective vocalisations), and then task 5 (the recognition of emotional vocalisations).

### Consultants

Aim to test 10-12 participants for each task.

### Stimuli

(tasks i,ii, iv) The full list of scenarios eliciting emotions is at the end of this field manual entry.

(task iii) You require a set of emotional vocalisations.

(task v) If you would like to run the recognition of emotional vocalisations task, you will have the task and stimuli on your field computer.

### Procedure

Remember to video and audio-tape your session.

### (i) Naming emotions from scenarios

Below is a set of scenarios, which need to be translated into the local language. Both the definitions and scenarios were taken, as far as possible, from the psychological literature. However, lists of emotion terms tend to consist of several hundred words, and so here is included only an abridged set of relatively frequent terms, balanced for the number of negative and positive items. Some of these terms were included in the 2007 field manual entry; however, many of the stories have been changed, definitions included, and in order to permit an formal analysis the data needs to come from the same informants for all of the stories, so please run the complete set of scenarios (see the end of this entry) with each participant (testing can be divided into several sessions). Although the scenarios were constructed with cross-cultural comparison in mind, you may need to consider whether each scenario makes sense for your cultural context in eliciting the target emotion (note that these are based on English terms). If the first scenario doesn't make sense, use the second one (where available). If neither of them work, try telling the participant the definition. Failing that, make up a story that fits as closely as possible to the definition, but that is appropriate for your culture. Make sure to note down the story you use, and use the same one for all participants.

After telling the participant the scenario, ask them to re-tell the story to you, to make sure that they have understood it. Then try to get a single word or phrase that captures the relevant emotion, using prompts such as "how is the person feeling?", "what is the emotion of that person?" (or equivalent). We are interested in the most concise emotion term attributed to each scenario. If the response you get is long, ask if there is a single term that would describe the state. It is crucial that the answer is about how the person is feeling, nothing else. Following this, ask whether what the person is really feeling would

be different to the socially accepted emotional state of the person in that situation (for example, a person might be envious but not show it as the socially accepted feeling would be happiness for the person that has the envied possession). Make sure to note both what the informant thinks the person would really be feeling, and what the person "should be feeling" according to social norms. Also ask what the person would be likely to do in that situation, given how they feel (e.g., cry, run away, tell their friends the good news). What would their face and body look like? Run through all of the scenarios in order.

#### (ii) Production of affective vocalisations from scenarios.

Here it is especially important that the audio- and video-recording apparatus are positioned as well as possible. It is important to try this out before starting the task. Using the emotion scenarios from (i), ask consultants to produce a non-verbal vocalisation to go with the emotional state. Ask them what kind of sound they would make if they were feeling in that way: "If that happened to you, what kind of sound would you make? Can you make that sound?". Emotions are often expressed concurrently with speech in the form of affective prosody, but this expression is restricted by the segmental and suprasegmental structure of the speech signal. For this study, it's important that the vocalisations are non-verbal, to enable us to compare the sounds from different groups. This means that the vocalisations should not contain any lexical items.

### (iii) Naming emotions from vocalizations.

Now present your consultant with the emotional sounds. Ask your consultant how they think the person who made the sound feels. The consultant can listen to the sound several times if they want. If your consultant does not provide an emotion term use additional prompting until they do. We are interested in the most concise emotion term attributed to each vocalisation. Again, if you get only long descriptions ask, "Is there a word for that feeling?"

#### **Optional tasks**

# (iv) free generation of emotion labels

Given the considerable disagreements on what emotions are, some researchers are interested in which emotions are considered particularly good examples of what an emotion is – that is, what affective states are the most prominent examples of the concept of emotions (Shaver, Schwartz, Kirson, & O'Connor, 1987). One way to investigate this is to ask people to list any emotions that come to mind during a few minutes, and to examine what emotions are reported most commonly. From these and other kinds of data, a number of emotions have been proposed to be "prototypes" of what emotions are, but this is mainly based on data from English-speaking consultants. A simple elicitation such as "tell me all emotions you can think of" in a range of languages would allow for a cross-linguistic comparison of the most common or salient emotion terms, as well as addressing some additional questions, such as the prominence of positive as compared to negative affective states. For this task, all that is required is to ask participants to list all the emotions they can think of in a limited time span of 2 minutes. You need to write down all the terms they used (best to video record this and transcribe later). If there is no overall term for "emotions" in your local language, use the nearest available term or an

explanation, but make sure to make note of the exact words you said, and that this is the same for all consultants.

#### (v) the recognition of emotional vocalisations

Humans use a range of signals to communicate emotions, including vocalisations, facial expressions, and postural cues. Auditory signals allow for affective communication when the recipient cannot see the sender, for example, across a distance or at night. In addition, young infants are sensitive to vocal cues from the very beginning of life, when their visual system is still relatively immature. Yet, little research has investigated vocal cues of emotions. To complement an ongoing project on the universality of emotional vocalisations, any researcher who would like to is invited to collect data on the recognition of emotional vocalisations. For this task, you need to have the emotional vocalisations task installed on your field computer, and two computer mice. You will also need to record a translation of the stories into the local language before going to the field, also to be put on the computer. You will also need a set of headphones, to be worn by the consultant throughout the testing. This is to make sure that the researcher doesn't hear the sounds, so that they don't know which answer is "correct". The consultant will hear a recorded version of an emotion story, describing an event eliciting an affective reaction (such as the scenarios at the end of this entry). The consultant is then asked what emotion they think the person in the story is feeling. If they are not sure, or have misunderstood the story, they can hear the story again, and ask questions. After confirming that the consultant has understood the intended emotion of the story, play them two vocalisation sounds (each produced by clicking on each of the mice). One of the stimuli is from the same category as the story, and the other one is a distractor. The consultant is then asked which of the two human vocalisations matches the emotion in the story.

#### Workflow: Details of running the studies

Here are some more details on running the studies. Please make sure you do them in following order:

#### (iv) WordList (optional)

Make sure that you have a timing device available: you likely have a stopwatch function on your computer, but a watch is also fine. Ideally audio-record responses.

Explain to the consultant that you would like them to tell you all emotions you can think of. You can give them the example of listing different fruits, or another category. If there is no overall term for "emotions" in your local language, use the nearest available term or an explanation, but make sure to make note of the exact words you said, and that this is the same for all consultants.

Once they have understood the task, record all the emotion terms they produce during 2 minutes. All the terms they used as well as in the order in which they were said is important.

### (i) NameScenarios

Tell the informant all of the scenarios in turn, and following each one do the following:

- Ask your informant to re-tell the story to you, and make sure that they have understood it.
- Ask your informant how the person is feeling and note down the response.
- If the response you get is long, ask if there is a single term that would describe the state.
- Ask whether the state that the person is really feeling would be different to the socially accepted emotional state of the person in that situation. Note down the response.
- Ask what the person would be likely to do in that situation, given how they feel. Note down the response.

Ask what their face and body would look like? Note down the response.

### (iii) SoundProduction

Use the emotion scenarios again. Tell the informant all of the scenarios in turn, and following each one do the following:

Ask the consultants what kind of sound they would make if they were feeling in the way that that the person in the story does: "If that happened to you, what kind of sound would you make? Can you make that sound?".

The vocalisations should not contain any lexical items.

# (ii) NameSounds

Play the consultant the emotional sounds and following each one do the following: Ask your consultant how they think the person who made the sound feels. If they are not sure, play the sound again. If the response you get is long, ask if there is a single term that would describe the state. Note down their response.

# Analysis

For these tasks, we plan to do quantitative analyses using hierarchical cluster analysis and multi-dimensional scaling. In addition, these data will allow for qualitative analyses of emotion terminology and concepts in each language.

#### Outcome

Together with the data on emotions in the 2007 field manual, these data should result in individual publications in a special issue of a peer-reviewed journal. In addition, a joint publication synthesising the results will follow. The contributions of researchers who collect data for any of the optional tasks will be acknowledged appropriately in any resulting publications.

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### Workflow

Before field trip:

You should have translated, and discussed

the prompting questions for the tasks:

- "How is the person feeling?"
- "If that happened to you, what kind of sound would you make? Can you make that sound?"
- "Tell me all emotions you can think of."

the scenarios

the meta-term "emotion"

Check that the emotional vocalizations are on your field computer.

#### In the field:

Test 10-12 informants on tasks 1-3, and optionally also 4 and 5. If the same person does several tasks, they should do them in the following order: task 4 (free generation of emotion words), task 1 and 2 (production of affective vocalizations and naming of scenarios), task 3 (naming emotional states from affective vocalizations), and then task 5 (the recognition of emotional vocalizations), as shown below.

Informant	WordList	NameScenarios	SoundProduction	NameSounds	(ForcedChoice)
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

# Scenarios

Amusement	Definition	Finding something funny.
Amusement	Example 1	A child is tickling you.
	Example 1 Example 2	A friend tells you a very funny story.
Angor	Definition	Being offended by someone and intending to
Anger	Definition	defend oneself.
	Example 1	Somebody is very rude and disrespectful to you on
	Example 1	purpose, insulting you.
Awe	Definition	Feeling that one is in the presence of something
Twe	Definition	greater than oneself, and intensely appreciating it.
	Example 1	You see an exceptionally beautiful sunrise/sunset.
	Example 2	You see an exceptionally beautiful flower.
Compassion	Definition	Being moved by someone else's suffering
-	Ŭ	
	Example 1	You see someone who is in a lot of pain and you
		feel like you want to help them.
Contempt	Definition	Contempt is an interpersonal emotion that involves
		a feeling of no respect for another person.
	Example 1	You hear an acquaintance bragging about
		accomplishing something for which they were not
~	<b>D</b>	responsible.
Contentment	Definition	You are deeply satisfied with your current
		condition.
	Example 1	You relax at home with your family having
	Example 1	successfully finished the day's work.
Curiosity/interest	Definition	Wanting to explore novel objects and information.
Curiosity/interest	Example 1	You encounter a novel – but not dangerous –
	Example 1	looking object. You don't know what it is, and you
		want to find out.
Desire	Definition	Being sexually attracted to someone.
Desire	Example 1	You are physically close to a person that you want
	Litempre 1	to sleep with.
Disgust	Definition	Coming in contact with something physically
E .	,	noxious and/or contaminating.
	Example 1	You have just eaten rotten food.
Embarrassment	Definition	Embarrassment is conceptualised in psychological
		literature as a less intense form of shame. It is
		always in a social situation, emphasising the
		person feeling exposed.
	Example 1	Other people see that you have made a social gaffe,
		such as being naked in public.
	Example 2	You have used an inappropriate form of address to
		someone senior to you.

Envy	Definition	Envy has been defined as a negative feeling of social comparison.
	Example 1	Somebody else is very good at something that you would like to be good at.
	Example 2	Somebody else owns an object that you would like to have.
Fear	Definition	You are faced with physical danger.
	Example 1	You are alone and suddenly confronted with a dangerous animal, and you have no weapon with which to defend yourself.
Норе	Definition	Hope has been defined as a positive goal-directed thinking, believing in good things happening in the future, especially following bad events in the past.
	Example 1	You think that, after many years of bad yields, you will get a good yield of your food-crop this year.
	Example 2	For hunter-gatherers: For many years you have not had much luck hunting, but you think this year it will be better.
	Example 3	Many people in your village have been ill, but now it looks like they might recover
Gratitude	Definition	Feeling appreciative of something received.
	Example 1	A stranger gives you a lot of tasty food and asks for nothing in return.
	Example 2	Somebody helps you with your work and asks nothing in return.
Guilt	Definition	Psychologists define guilt as a response to having performed a morally bad action, but it doesn't affect the core identity of the wrong-doer (in contrast to shame).
	Example 1	You know that you have intentionally done something bad, such as hurting another person who has done nothing wrong.
	Example 2	You know that you have intentionally done something bad, such as stealing from a poor person.
Jealousy	Definition	Jealousy is primarily a feeling of romantic rivalry, and resenting someone because they have the affection of someone that you care about.
	Example 1	Your partner has sex with someone else.
	Example 2	Somebody you love loves somebody else more than you.
Joy/Happiness	Definition	Enjoyment of an event or experience.
	Example 1	You are at a wedding in your village with everyone having a good time.
Love /Affection	Definition	Having strong positive feelings towards someone, and wanting to be close to them.

	Example 1	You enjoy being close to someone that you care
		for, like your children.
	Example 2	You enjoy being close to someone that you care
	1	for, like a close relative
Pride	Definition	Having done something that increases people's
		opinions of yourself.
	Example 1	You show that you are very good at something
		(e.g., singing), which many others would like to be
	-	good at too but they find it difficult.
Relief	Definition	Some unpleasant experience ceases.
	Example 1	Someone has just found their child after it was lost.
	Example 2	You reach your goal after a very long and tiring walk and can finally sit down.
Sadness	Definition	Experiencing the irrevocable loss of a loved one.
	Example 1	You find out that a close member of your family
		has died.
Sensory Pleasure	Definition	You are enjoying the taste or scent of something.
	Example 1	You eat an unusually tasty food.
Shame	Definition	According to psychological theories, shame is
		feeling like a bad person, and usually involves a
		pre-occupation with others' opinions, although it
		can occur both in public or private situations.
	Example 1	You fail to provide food for your family because
		you made some bad judgments.
Surprise	Definition	Something highly unexpected occurs.
	Example 1	You suddenly see a bright light in the sky in the middle of the night.
	Example 2	You return to your home and suddenly you see a
		large rock in your home that wasn't there when
		you left.
Triumph	Definition	Triumph is the response to an important victory.
	Example 1	Your win a game against someone else. If that
		doesn't work: You win a fight.
Worry	Definition	Facing an uncertain, existential threat.
	Example 1	You have heard that there will be a big
		storm/tornado/draught coming that will damage
		your village.
	Example 2	There is a dangerous disease spreading in your
		village.