# PICK-A-MOOD USER MANUAL

PICTORAL SELF-REPORT SCALE FOR MEASURING AND EXPRESSING MOOD STATES

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Pictorial self-report scale for measuring and expressing mood states www.diopd.org

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## **INTRODUCTION**

Pick-A-Mood is a validated cartoon-based pictorial instrument for reporting and expressing moods. It measures eight distinct mood states in a quick and intuitive way, and can be used both for qualitative and quantitative research. Pick-A-Mood consists of three cartoon characters: a male, female and a robot character (Figure 1). Each character includes nine expressions that represent eight distinct mood states (and one neutral character). The sets are interchangeable; choice of character can be based on respondent demographics or on other pragmatic considerations. This manual provides background information, a step-by-step user guide, answers to frequently asked questions, and some examples of Pick-A-Mood applications.

PICK-A-MOOD

Pick-A-Mood consists of three characters, each expressing eight different mood states (and a neutral expression), representing four basic mood categories: Excited-Lively and Cheerful-Happy (for *energized-pleasant*), Tense-Nervous and Irritated-Annoyed (for energized-unpleasant), Calm-Serene and Relaxed-Carefree (for calm-pleasant), and Bored-Weary and Gloomy-Sad (for calm-unpleasant), see Figure 2. The use of cartoon characters enables people to visually express or report their mood in an intuitive and easy-to-use way. Pick-A-Mood requires little time and effort of the respondents, making it suitable for design research applications, in which people often have little time or motivation to report their moods.

## **HUMAN MOODS**

Even though the words mood and emotion are often used interchangeably, they represent different phenomena. Emotions are acute, and exist only for a relatively short period of time, usually seconds, minutes or hours at most. Contrary, moods are always present, even though it may not always be in our awareness. Mood states tend to have a relatively long-term nature: One can be sad or cheerful for several hours or even for several days. This implies that our mood is the affective background colour to what we do, and emotions are momentary 'perturbations' that are superimposed on this affective background (see Figure 3 for some examples). Another important difference is that emotions are targeted, while moods are global.



Figure 1. The three Pick-A-Mood characters, expressing an 'Excited-Lively' mood



Figure 2. Eight mood states expressed with Pick-A-Mood characters

Whereas emotions are always directed at someone or something (one is afraid of something, proud of something, and in love with something), moods are not directed at a particular object but rather 'at the world as a whole.' Emotions usually have an explicit cause (e.g. some event). Moods often have combined causes and can be produced in a cumulative fashion over time (e.g. "It is raining, I didn't sleep well, and someone has finished the coffee").



## **MEASURING MOOD**

Several mood questionnaires are available that obtain a reliable understanding of a respondent's mood state. Questionnaires are easy to administer and analyse, and can be used to measure subtle and nuanced mood patterns. However, they also come with some limitations. They can be demanding for the respondent and take long to complete, which can distort the original feelings. Moreover, some mood words are difficult to translate and sensitive to different interpretations across cultures. Some of these limitations are overcome by methods that rely on visuals instead of adjectives. Visual scales are promising because they are quick, easy, and (when properly validated) reliable. Several visual scales are available that measure distinct emotions or basic dimensions of affect (like pleasure and arousal). Pick-A-Mood is similar to these existing visual scales, but unique in the sense that it was developed to specifically measure human moods.

## PREPARING THE MEASUREMENT PROCEDURE

The set of expressions can be printed on paper or presented on-screen, and respondents can simply point out one or more expressions that best represent(s) their mood. The tool has been kept as simple as possible to allow for versatility in usage. Pick-A-Mood can be used both as a tool for measurement (i.e. to enable researchers to measure the moods of their respondents) and as a tool for communication (i.e. to enable people to communicate their mood in social interactions). Here are some tips in preparing your procedure:

Step 1: Obtain the characters from <a href="http://diopd.org/pick-a-mood/">http://diopd.org/</a> pick-a-mood/

Step 2: Decide which of the characters (male, female, or robot) you will use in your study.

**Step 3:** Formulate your question(s) and/or rating scale(s). We did not provide predefined questions

and/or rating scales because we want to enable you to create a rating procedure that fits your research goals. The procedure will depend on your research question, type of inquiry (qualitative or quantitative), sampling protocol and the overall research setup. For example, you can add tag boxes and ask respondents to tag one (or more) expressions that best describe their mood. In an interview setting you do not need to add tag boxes because you can ask respondents to simply point out expressions. Another approach is to use Likert scales, asking respondents to rate each expression. In addition, you can decide to add an open question to ask the respondent to describe in their own words how they feel. Figure 5 shows some examples of how Pick-A-Mood has been used.

**Step 4:** Prepare the measurement interface; either in print or on screen. A general recommendation is to give your respondents an overview of all expressions because that will help them to see the nuanced differences between the expressions. The arrangement of the characters may varied depending on the screen space: whether in circle or in a grid layout.



Figure 3. Human moods; examples by Lauren Raaijmakers

## FREQUENTLY ASKED QUESTIONS

The FAQ below can help you in determining how you want to use the characters.

# **1.** Should I use the cartoons with or without words?

We advise to not use words to ensure quick and intuitive usage. The cartoons have been developed and validated to be used without words. Verbal labels can be used when reporting results.

## **2.** For which target groups can I use the cartoons?

Pick-A-Mood was tested with a general population. In the validation study, 191 people participated, including 31 different nationalities, with people from various countries in Europe, Asia, Australia, South-America, Canada, and the Middle-East. Age ranged between 13 and 76 (mean = 34,9; SD = 13,0), and 47% were female. Pick-A-Mood was not tested with children younger than 13 years old, nor with target groups who have difficulties with recognizing emotional expressions (e.g. due to medical reasons). For application with these participants, it is advised to test the applicability of the characters with a pilot study. Note that a version of Pick-A-Mood with senior characters (male and female) is available. Contact us if you want to use this version.

# **3.** When using the cartoons without text, how do I make sure participants have given them the intended meaning?

The validation study showed that the expressions as presented by the visuals are interpreted in line with the intended meanings. Consequently, the visuals can be used without verbal labels. Note that all representations of affective states are 'fuzzy categories'. This means that there is some overlap between mood states and that interpretations of the expressions are slightly different between people. However, this does not only apply to the characters (and any other type of affective expression), but also to verbal labels or adjectives. Depending on your research aims (to add nuance to your research insights), you can 4 consider asking respondents to provide labels for the expressions that they selected, either retrospectively or (if that does not interfere with the study flow) immediately after the selection.

# **4.** Should I include the neutral expression in my study?

No, not necessarily; it depends on your research aim. If you want to enable your respondents to report a neutral mood state, you should include it. Note that when you do so, it is important to use a graphical layout of the visuals that communicates that this is a neutral expression (e.g. if you use a circular layout, such as in Figure 4, you can place neutral in the middle). The reason is that people tend to interpret feeling states in neutral faces, which was confirmed in our validation study. The misinterpretation can be avoided with a clear interface design.

# **5.** Which of the three characters (female, male, or robot) should I use for my study?

The three characters are identical in terms of their expression, and we did not find a character-effect in our validation study. They can therefore be used interchangeably and data that is generated with different versions can be aggregated. We advise to select the character that you expect your respondent to be able to best relate to. The robot version was developed for studies with children, and to have an alternative available for studies that require a gender-neutral character. **6.** What is the protocol that I should use with participants to make sure they will report their mood and not their momentary emotions? (e.g. What question to ask? How often to ask that question? When to ask the question?)

There is no single answer to this question because it depends on the context and aim of the measurement. Nonetheless, it can be useful to be aware that unlike emotion, mood is not a response to a particular stimulus. When measuring emotions, we can ask: "how do you feel about X ?" or "how does X makes you feel?" For mood measurement, the question should be phrased more general. For example, "In what mood are you today?" Alternatives are "How do you feel (today, this week, month, etc.)?" Since mood does not change that often, it should be asked no more than twice around the event of interest. Our experience tells us that moods are best not reported shortly before or immediately after an emotional event (e.g. product usage, lecture, social interaction, etcetera), because people will tend to report their feeling about that (anticipated) event instead of their mood.

#### **7.** Can I ask participants to select multiple moods?

Yes. In our research we have found that asking participants to pick one mood is often sufficient. However we have also experienced that it sometimes can be useful to allow respondents to pick more than one mood. For example, in a study that measured mood of people who are in the process of recovering from surgery, respondents expressed the need to communicate dualities in their mood. Or when people are asked how they have felt the last couple of days, they may also want to have the ability to pick more than one visual if their mood has changed in that period. We advise to base the decision on the level of granularity required for the given research question.



Figure 4. Pick-A-Mood circular representation, robot character

## **8.** Can I use a shorter version by using less expressions (e.g., one per quadrant)?

The eight expressions represent the basic variety of human moods. If you use not all of them, respondents may not be able to find a visual that expresses their mood state. In other words, if you use less than eight you will lose granularity. However, if you are only interested in a subset of the eight moods, you can consider using a subset of expressions.

# **9.** What kind of layout should I use for the expressions?

We have used the tool mostly with a circular layout, as in Figure 4, or in the form of a card-set (with each expression printed on a separate card), but you can use any layout that fits your study. We have not investigated effects of configuration on measured moods but we do not expect to find such effects, and the tool was developed with the idea to be malleable. See also FAQ-4 for recommendations about including the neutral expression.

#### **10** Can I use Pick-A-Mood to measure emotional responses?

You can. Even though Pick-A-Mood was developed to specifically measure mood, it has been successfully used to measure emotion in several studies. The characters represent four categories of affect that apply to emotion as well as to moods. When using the characters for measuring emotion, you need to adjust the question that is asked to the respondent: mood - "How do you feel?"; emotion - "How do you feel about this event/product/situation/etcetera?" Note that you have to decide if the set of expressions is sufficient to measure all emotions that you are interewsted in. The characters represent the variety of human mood states, but they do not represent the full pallet of human emotions. For example, if you are interested in emotions such as confusion, desire or fasciation, you may better use another scale. See Desmet et al. (2016)

for an overview of methods. In short, Pick-A-Mood is suitable for measuring emotions if a general understanding of emotions is sufficient for your research aims (i.e. the four basic affective states).

#### **11**. Is Pick-A-Mood freely available?

Yes. Pick-A-Mood is available under the 'Creative Commons community license,' free-of-charge for non- commercial use. Anyone can use and share Pick-A-Mood as long as these licence terms are followed (see the link on the Pick-A-Mood web-page for the details): Attribution - You give appropriate credit (including the above mentioned reference publication), provide a link to the license, and indicate if changes were made. *Non-Commercial* — You may not use the material for commercial purposes. No- Derivatives -If you transform, or build upon the material, you may not distribute the modified material. For details you can check the Pick-A-Mood website.

#### **EXAMPLES**



Figure 5. Examples of Pick-A-Mood Interfaces

#### **12.** How do I refer to Pick-A-Mood?

When reporting a study with Pick-A-Mood, please refer to: Desmet, P. M. A., Vastenburg, M. H., & Romero, N. (2016). Mood Measurement in Design Research; Current methods and the introduction of a pictorial self-report scale. *Journal of Design Research*, 14(3), 241-279.

# **13.** Can we consult you when we have questions about how to use Pick-A-Mood?

You are free to contact us if your question is not answered by this manual. In addition, we do appreciate all feedback, questions, suggestions, or comments that can help us to further develop the tool or this manual.



[B] Used older versions of the characters

[C] Interface of the "Better Mood Tracker" app by Alexander Stone.

[E] EMS tool, an Experience Sampling Method research tool developed Priscilla Pui Sai Ho, Denny Petrus Johannes by Hurkmans, Chushu Zhang and Weiyi Ning (supervised by Dr. ir. Juan Jiménez Garcia), as part of the Interaction Design (MDes), School of Design, The Hong Kong Polytechnic University.

### **COLOPHON**

Pick-A-Mood was developed by the Delft Institute of Positive Design (TU Delft). As design researchers at the DIOPD, we seek to advance our understanding of the ways products and services can be designed to foster human happiness. We develop tools that designers and organisations can use to tap into the vast potential of lasting wellbeing.

Pick-A-Mood is available at: <u>http://diopd.org/pick-a-mood/</u>

On our website, you will find more tools, a rich library of open-access research and specific usage guidelines to design for positive emotional granularity. See <u>www.diopd.org</u>.

#### Acknowledgements

Pick-A-Mood was developed by Pieter Desmet, Martijn Vastenburg and Natalia Romero. Manual design by Joo Young Park. Photos by Lauren Lauren Raaijmakers. Pick-A-Mood character design and drawings by Peter Wassink.

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#### References

In communications, please refer to this manual as follows: Desmet, P.M.A., Vastenburg, M.H., & Romero, N. (2019). Pick-A-Mood user manual: Pictorial self-report scale for measuring mood states. Delft, NL: Delft University of Technology (ISBN: 978-94-6384-061-3).

Pick-A-Mood development and validation is reported in the following publication: Desmet, P.M.A., Vastenburg, M.H., & Romero, N. (2016). Mood measurement with Pick-A-Mood: Review of current methods and design of a pictorial self-report scale. Journal of Design Research, 14 (3), 241–279.

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