

## **IWP MULTI-AFFECT INDICATOR**

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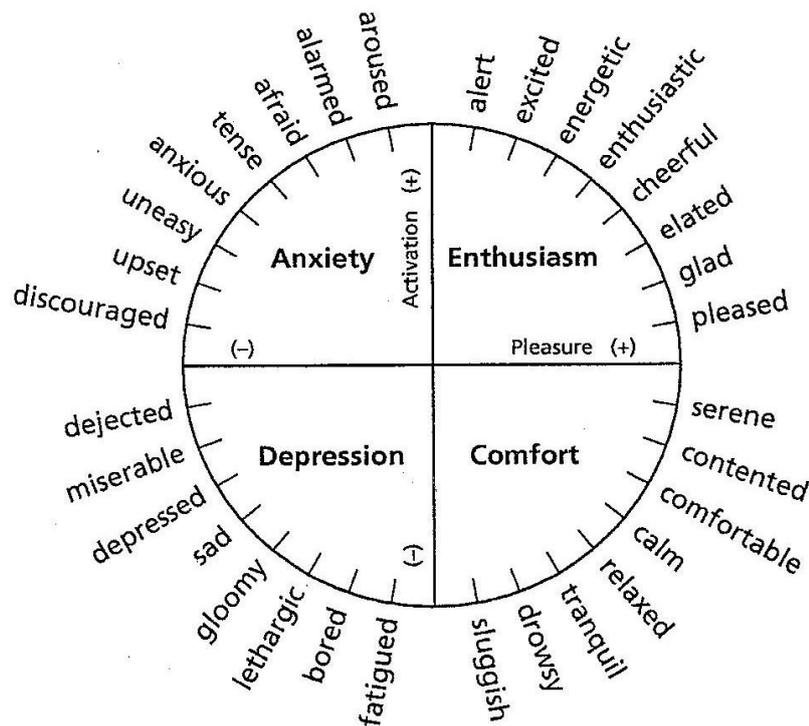
(Previous version 2010, in conjunction with Sharon Parker, University of Western Australia)

Behavioural research in organizations deals with two broad kinds of outcome – behaviour and wellbeing. There are many ways of “being well”, and accordingly wellbeing can be studied through indicators of very different kinds. For instance, we might be interested in *physical* wellbeing or *social* wellbeing as well as purely psychological themes. Psychological wellbeing itself (sometimes described as “subjective wellbeing”) has been investigated in two ways, either through cognitive-affective clusters of satisfaction, engagement, burnout and so on, or through feelings that are positive or negative (e.g., Warr, 2013). These feelings are sometimes referred to as “affective wellbeing”, and will be considered here.

Affects – at work and in life more generally – can helpfully be viewed in terms of the circumplex shown on the next page, specifying different kinds of feeling not only in terms of the conventional negative-to-positive continuum (from unpleasant to pleasant, bad to good, etc.) but also through low-to-high mental arousal or activation (e.g., Remington, Fabrigar, & Visser, 2000; Russell, 1980, 2003). The activation dimension – vertical in the figure – concerns how much a person is energized, his or her “state of readiness for action or energy expenditure” (Russell, 2003, p.156). Particular feelings in terms of those two axes are illustrated around the outside of the diagram, and summary labels for each quadrant are indicated as Anxiety (activated negative), Enthusiasm (activated positive), Comfort (low-activation positive) and Depression (low-activation negative)<sup>1</sup>.

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<sup>1</sup> Note that negative labels in the diagram refer to kinds of feeling and not to substantive clinical syndromes.



Despite strong theory and evidence for the power of the circumplex model, studies of job affect have often been imprecise about the location of studied feelings in terms of these quadrants. For example, research into positive affect might be expected to cover all feelings on the right-hand side of the figure, involving both low and high activation. However, that has rarely been the case, in part because many studies have used the Positive and Negative Affect Schedule (PANAS) created by Watson, Clark, and Tellegen (1988). Although the two PANAS scales were originally referred to as “positive affect” (PA) and “negative affect” (NA), it is widely recognized that they tap only certain kinds of those affects – high-arousal feelings in the two upper segments of the diagram (e.g., Warr, 2007). The scales can be appropriate in that limited respect, but not as a complete measure of positive and negative affect.

Affects in the four quadrants tend to be intercorrelated, but they are different in tone and can have different causes and consequences. By recording feelings in each quadrant, we can look separately at:

- Activated negative affect: top-left quadrant (summarised as Anxiety or HANA<sup>2</sup>)
- Activated positive affect: top-right quadrant (summarised as Enthusiasm or HAPA)
- Low activation negative affect: bottom-left quadrant (summarised as Depression or LANA)
- Low-activation positive affect: bottom-right quadrant (summarised as Comfort or LAPA)

In some projects it can be of interest to examine certain quadrant-combinations, chosen as theoretically appropriate for the study in question. For example, we might be interested

<sup>2</sup> Abbreviations for “high-activation negative affect” and so on.

in all negative affect (the two left-hand quadrants) or all positive affect (the two right-hand quadrants). Of particular importance are the diagonal axes – from Anxiety to Comfort and from Depression to Enthusiasm<sup>3</sup>. These play a prominent role in theories of approach and avoidance, fall within the comprehensive model of Tellegen, Watson, and Clark (1999), and have been separately linked to different neurophysiological systems (e.g., Carver, 2001; Carver & Scheier, 1990, 1998).

Systematically different associations with other variables have also been found. For instance, proactive behaviours and job engagement are significantly associated with activated positive affect (top-right in the diagram) rather than with the other three quadrants (e.g., Madrid, Patterson, Birdi, Leiva, & Kausel, 2014; Warr, Bindl, Parker, & Inceoglu, 2014). Demands from a job are more strongly negatively related to the diagonal axis from Anxiety and Comfort than to the other diagonal, from Depression to Enthusiasm (Warr, 2007).

A 12-item measure of the four kinds of affect in job settings published by Warr (1990) has been widely used. However, in order better to ensure internal reliability, factorial separation and wide-ranging applicability, a new 16-item instrument has been created. This, the IWP Multi-affect Indicator, is shown on page 6; it is freely available for research use and for student projects<sup>4</sup>.

### **Advantages of the Multi-Affect Indicator**

The Affect Indicator can be completed in a few seconds and is reported to have high acceptability and content validity. Other positive features include:

- being job-specific, focusing on feelings at work rather than in-general, and thus likely to be more predictive of a work-related outcome than are context-free measures.
- also being usable in other specified domains (e.g., a family) and in respect of life in general, simply by adjusting the first sentence of the instructions.
- a strong theoretical grounding in the much-researched circumplex model of affect.
- it covers all four quadrants, whereas similar measures often provide partial coverage.
- it excludes specific emotions with content beyond merely valence and activation (guilt, disgust, shame, etc.), that are included in some other scales.
- its response anchors identify amounts of time in a brief recent period, minimizing recall errors.
- its response anchors permit examination of the relative frequency of different affects – an aspect of ambivalence, which itself deserves greater research attention.
- it develops Warr's (1990) widely-used measure of this kind, to better represent the four quadrants and to enhance reliability through a larger number of items.

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<sup>3</sup> One set of scores (most usually for negative affect) has to be reversed to ensure coherence.

<sup>4</sup> The measure may be cited, for instance, as: Warr, P. B., Bindl, U., Parker, S. K., & Inceoglu, I. (2014). Four-quadrant investigation of job-related affects and behaviours, *European Journal of Work and Organizational Psychology*, 23, 342-363.

## **Scoring**

Item responses are scored from 1 to 7, and negative items (2, 4, 6, 8, 10, 12, 14, 16) are reverse-scored so that higher scores always represent higher well-being. Mean values are used for each type of affect, as follows:

### **Single-quadrant scores**

- Activated negative affect: top-left quadrant (Anxiety or HANA): items 2, 6, 10, 14, all reverse-scored
- Activated positive affect: top-right quadrant (Enthusiasm or HAPA): 1, 5, 9, 13
- Low activation negative affect: bottom-left quadrant (Depression or LANA): 4, 8, 12, 16, all reverse-scored
- Low-activation positive affect: bottom-right quadrant (Comfort or LAPA): 3, 7, 11, 15

### **Double-quadrant scores recommended at the top of page 3**

- The Anxiety-Comfort (HANA to LAPA) dimension: top-left (reverse-scored) and bottom-right quadrants: 2, 3, 6, 7, 10, 11, 14, 15
- The Depression-Enthusiasm (LANA to HAPA) dimension: bottom-left (reverse-scored) and top-right quadrants: 1, 4, 5, 8, 9, 12, 13, 16

### **Other double-quadrant scores**

- All negative affect: the two left-hand quadrants (HANA and LANA): 2, 4, 6, 8, 10, 12, 14, 16, all reverse-scored
- All positive affect: the two right-hand quadrants (HAPA and LAPA): 1, 3, 5, 7, 9, 11, 13, 15

Since the different types of affect are intercorrelated through the consistent presence of hedonic evaluation, it is often desirable to examine multivariate patterns, for instance controlling for other quadrants in multiple regression analyses. Thus one might ask: does activated positive affect (HAPA, in the top-right quadrant) predict a particular work behaviour over and above affects in the other three quadrants?

## **Other Domains and Time Periods**

The focus in the present report is explicitly on feelings that are job-related. However, the items can alternatively be applied to other domains (e.g., one's family), or used for measurement that is context-free (asking about life as a whole); they can also be applied to more specific aspects of a job (a team, one's manager, etc.). As indicated above, the first sentence of instructions can easily be modified.

Similarly, the target time period can be altered for particular purposes, modifying instructions accordingly. For example, one might ask in a diary study about "right now" and provide response options in terms of intensity of feeling (e.g., from "not at all" to a lot") rather than the frequency continuum offered in the version illustrated here.

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## Feelings at Work

For the past week, please indicate below approximately how often you have felt the following while you were working in your job. Everyone has a lot of overlapping feelings, so you'll have a total for all the items that is much greater than 100% of the time.

		<b>Approximate amount of your time when at work in the past week</b>						
	I have felt:	<b>Never</b>	<b>A little of the time</b>	<b>Some of the time</b>	<b>About half the time</b>	<b>Much of the time</b>	<b>A lot of the time</b>	<b>Always</b>
		0% of the time	1% to roughly 20%	Roughly 21% to 40%	Roughly 41% to 60%	Roughly 61% to 80%	Roughly 81% to 99%	100% of the time
1	Enthusiastic							
2	Nervous							
3	Calm							
4	Depressed							
5	Joyful							
6	Anxious							
7	Relaxed							
8	Dejected							
9	Inspired							
10	Tense							
11	Laid-back							
12	Despondent							
13	Excited							
14	Worried							
15	At ease							
16	Hopeless							