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Asosiasi Psikologi Industri dan Organisasi
BANTEN

HIMPSI BANTEN

ASOSIASI
PSIKOLOGI INDUSTRI & ORGANISASI
PERWAKILAN BANTEN

memberikan penghargaan kepada

Lerbin R. Aritonang R.

atas partisipasinya sebagai narasumber di Webinar Bulanan APIO Perwakilan Banten
"Perlakuan terhadap Perubahan Perilaku Konsumen dalam Pandemi"

yang diselenggarakan pada tanggal
19 Februari 2021

Mohamad Abdilah Nuradhi, M.Psi., Psikolog
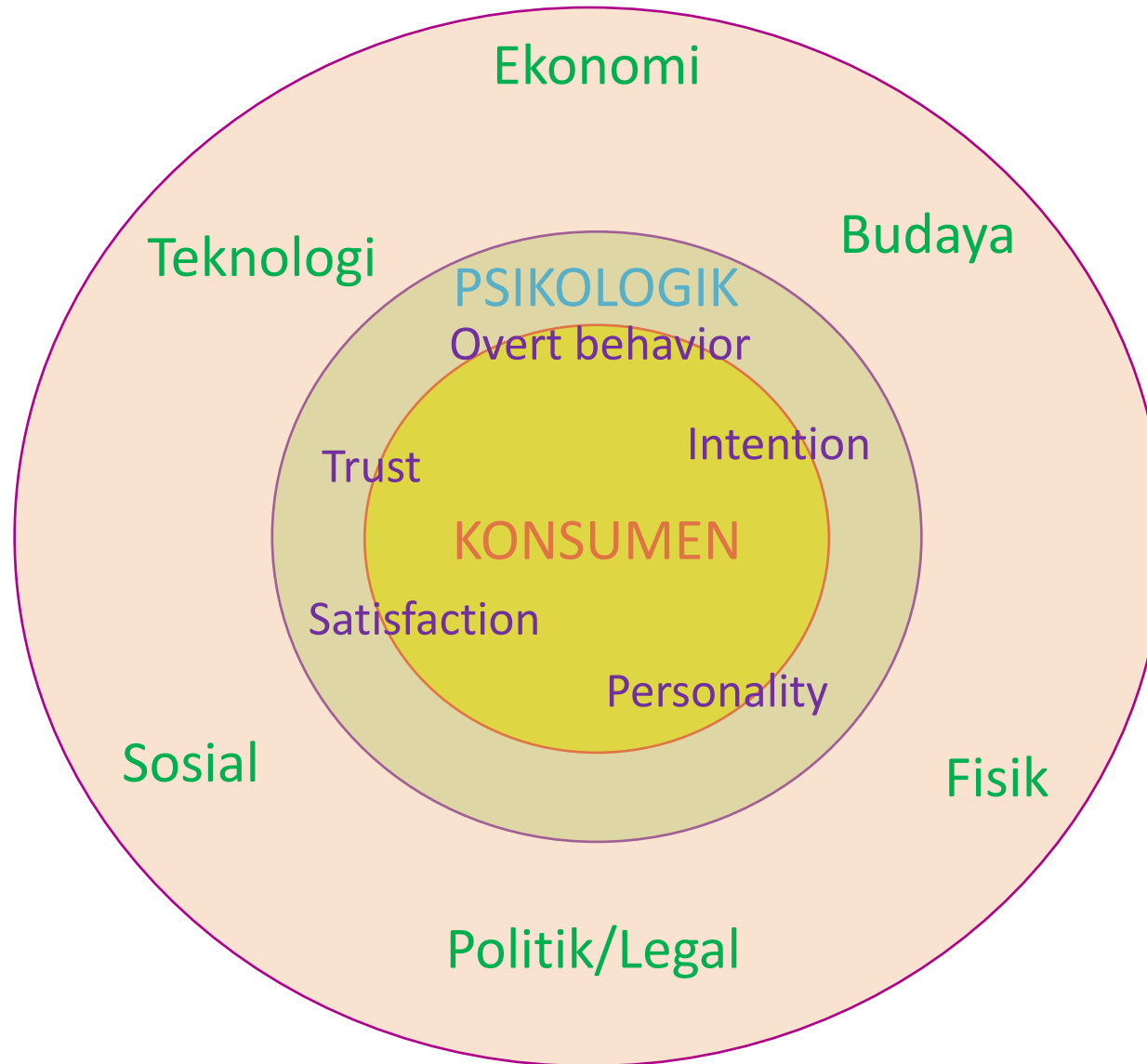Ketua APIO Perwakilan Banten

COVID-19 DAN PERILAKU KONSUMEN: APLIKASI *PSYCHOPHYSICS*

Lerbin R. Aritonang R.
APIO DAN HIMPSI BANTEN
Jumat, 19 Februari 2021

MODEL PERILAKU KONSUMEN DAN LINGKUNGANNYA

COVID-19, PANDEMI DAN PERTUMBUHAN EKONOMI

RIWAYAT COVID-19 dan Prediksi

- Covid-19 diyakini berawal dari Cina.

- Kasus pertama di Indonesia: 2 Maret 2020.

- Prediksi Covid-19 melandai:

  # Pandemi (WHO, 11 Maret 2020): terjadi di banyak negara

  # Prediksi para ahli: tidak ada yang meyakinkan

  # Walkot Bogor: puncaknya pada Desember 2021 (detik.com,)

  # perkiraan mulai melandai akhir 2021 hingga 2020

  => **dampaknya masih lama** . . . .

Pertumbuhan Ekonomi dan Resesi

- Resesi ekonomi Indonesia: pertumbuhan ekonomi negatif 2 kuartal berurutan

  - K1 2020: -2,97%

  - K2 2020: -5,32%

  - K3 2020: -3,49%

  - K4 2020: -0,42%

  => *year-on-year*: -2,19% (kumulatif 2020 vs. 2019)

- **Pendapatan** masyarakat turun
- **Tabungan** dan **konsumsi** turun

PERMINTAAN DAN PENAWARAN PRODUK

Permintaan atas produk turun

- Pengurangan tenaga kerja
- daya beli
- alternatif konsumsi

Penawaran produk turun

- Biaya produksi dan harga naik
- kuantitas turun
- *Placement* makin terbatas
- Kualitas turun

Permintaan dan penawaran tidak sinkron

    # penyesesuaian, adaptasi
    # peluang: inovasi dan penggunaan *psychophysics*.

PERILAKU KONSUMEN: COVID-19

Fucui (2020): Italy, Germany, Turkey, Russia, South Korea, Switzerland, South Africa and China

No.	Italy, Germany, Turkey, Russia, South Korea, Switzerland, South Africa and China	A%	B%
1	Cosmetics & personal care	+6	-32
2	Digital entertainment	+1	-28
3	Agro food & beverage	0	-11
4	Fashion & accessories	+2	+13
5	Pharmaceutical/health	+9	-23
6	Media & books	+4	-27
7	Education & online courses	+8	-20
8	Tools, gardening & do-it-yourself	+9	-35
9	Tourism/travel	0	-75
10	Electronic goods	+10	-48
11	Home furniture & household products	+7	-53
A. Online shopping undertaken by the individuals during the COVID-19 pandemic			
B. Online average monthly spending during the COVID-19 pandemic			

Ali (2020) Penjualan produk elektronik di Iraq

In-store	- 14%
Online shopping	+ 700%

Butu et al. (2020): Consumer Buying Behavior of Fresh Vegetables Directly from Local Producers **Romania**

	< March 2020	> March 2020	▲	Intention	▲
No	226	103	123	1	102
Yes	31	154	-123	49	105

Indonesia

Lembaga Demografi UI (2020) **Indonesia**: Pengeluaran rutin per bulan selama Covid-19: online

1	Beli makanan/pesan makanan	97%
2	Jasa pengiriman	76%
3	Transportasi	75%
4	Belanja kebutuhan sehari-hari	74%
5	Donasi	54%
6	Langanan content/paid streaming	50%
7	Pembelian obat	46%

Siti, Cucu, Lina, Iskandar (2020): **Indonesia**

Penggunaan aplikasi belanja online melonjak hingga 300 persen.

Juliana, Rudy, Djakasaputra dan Bernarto (2020): **Indonesia**

- word of mouth has a significant effect on online purchase decisions
- observational learning has a significant effect on online purchase decisions

MODIFIKASI PENAWARAN PRODUK

- *Placement*: *online*
- Produk, antara lain dengan riset konsumen dengan *psychophysics*

PSYCHOPHYSICS

The study of the relationship between physical objects and people's perceptions of that physical object.

- **Sensory receptors**: eye, ears, nose, tongue. skin
- **Objects**: sensory receptors => brain: meaning (perception)
- **Intensity**: attributes of sensory objects vary

Figures/Theory of Psychophysics

1. Ernst Heinrich Weber (1795-1878)

2. Gustav Theodor Fechner (1801-1887)

3. Stanley Smith Stevens (1906-1973)

4. Signal Detection Theory (SDT):
    * Peterson, Birdsall, & Fox (1954)
    * Swets, Tanner, and Birdsall (1961)
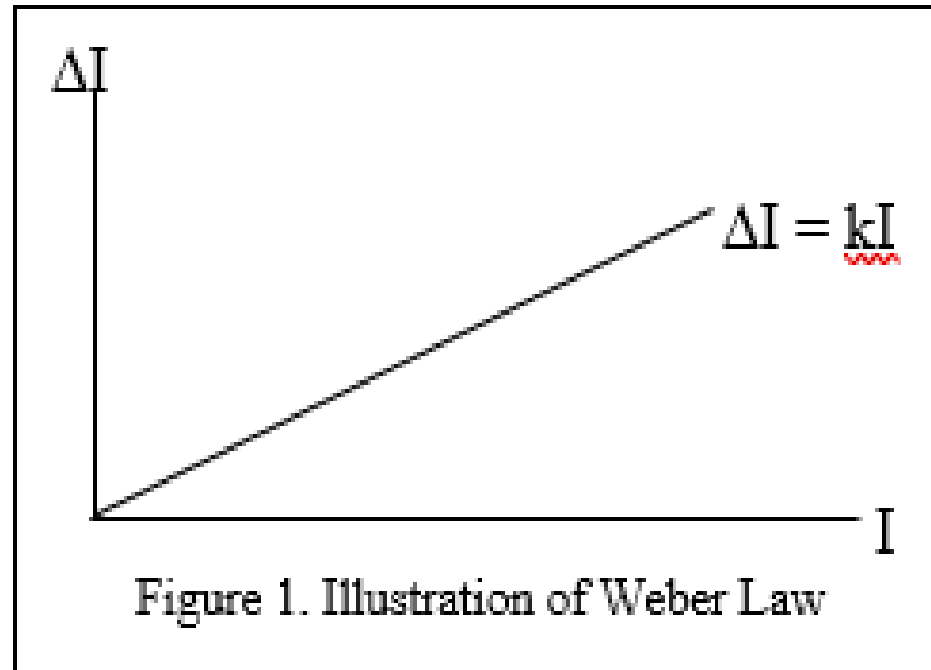
1. Weber's Law

$$k = \frac{JND}{I}$$

- **k**: a constant (constant) fraction,
- **I**: the initial intensity of the physical object
- **JND** (just noticeable difference): a minimal change in the initial intensity of a physical object so that the subject begins to realize that the intensity of the physical object has changed

Illustration of Weber's Law

I0	ΔI1	ΔI2	ΔI3	ΔI4	ΔI5	ΔI5	JND	$k = \dfrac{JND}{I0}$
10 kg	1 kg	**2 kg**					**2 kg**	2 / 10 = 0.2 = 20%
15 kg	1 kg	2 kg	**3 kg**				**3 kg**	3 / 15 = 0.2 = 20%
30 kg	1 kg	2 kg	3 kg	4 kg	5 kg	**6 kg**	**6 kg**	6 / 30 = 0.2 = 20%

Figure 1. Illustration of Weber Law

2. Weber-Fechner's Law

Fechner's research:

- Objects of various senses

- Development of methods for measuring the intensity of that object.

- Notes regarding the weaknesses of the validity or legality of Weber's Law

Findings:

1. The same subject: JNDs are not reliable/consistent => **k is not constant**.

2. The quantities of **k for all sensory objects** are **not same**.

3. **Assumption**: JND is psychologically equivalent so that the resulting JNDs
   may be used as a guide to determine the psychological intensity of the stimulus.

S = k log(I)

- S: the intensity of sense experience or perception of I
- k: the Weber fraction (JND / I)
- I: the intensity of the sensory physical object.

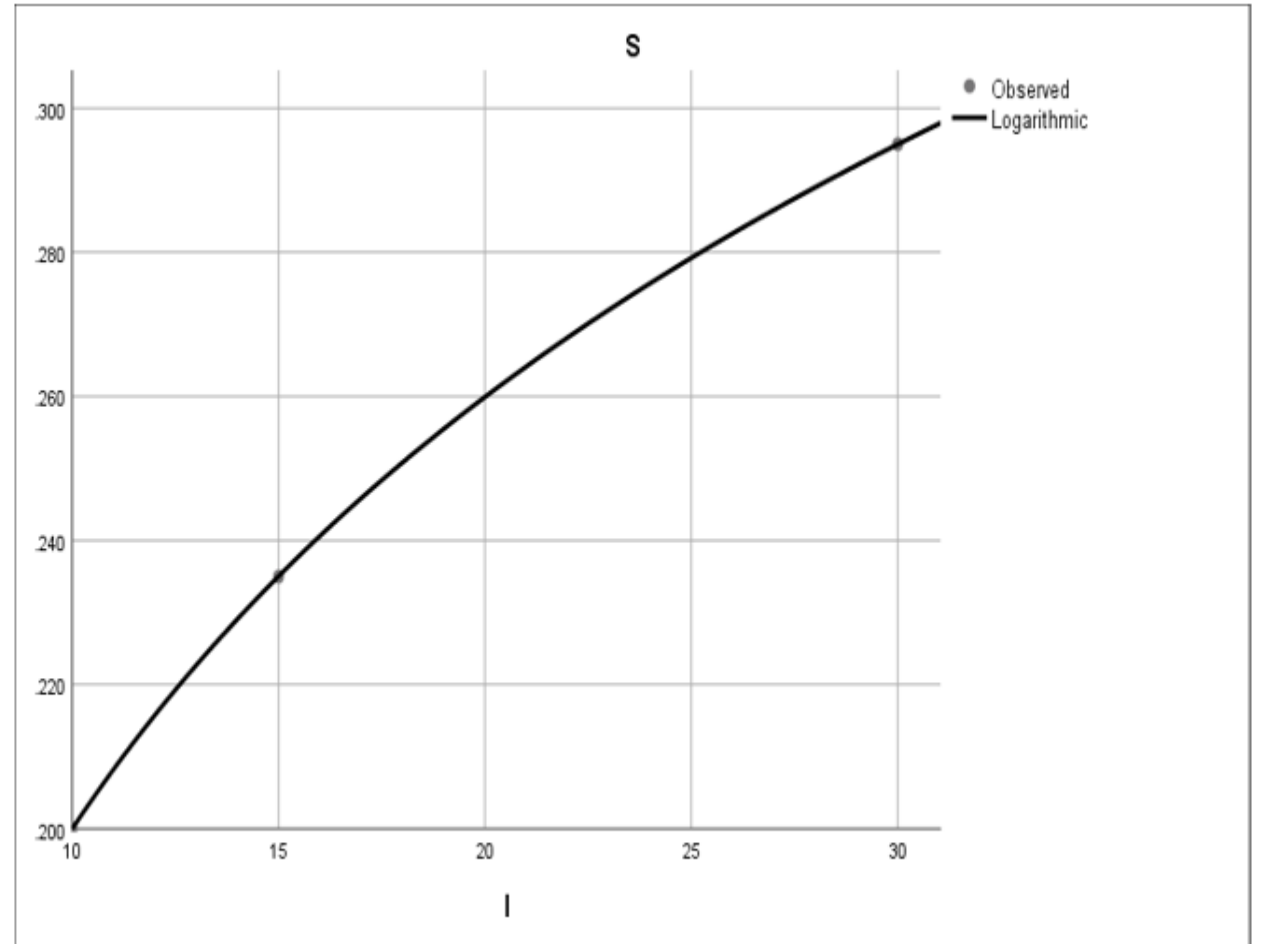| I	Log(I)	S
10 kg	1,00	0,2 x 1,000 = 0,200
15 kg	1,176	0,2 x 1,176 = 0,235
30 kg	1,477	0,2 x 1,477 = 0,295

Illustration of Weber-Fechner Law

3. Stevens' Law

$$S = c I^b,$$
$$\log(S) = \log(c) + b \log(I)$$

- **S**: intensity of sense experience or perception of I,
- **c**: a constant and can be any number, depending on each sensory modality,
- **I**: intensity of the sensory physical object, and
- **b**: power or exponent that determines the form of the function or quantity S.

The relationships between psychological intensity (perceived above) and the physical intensity of many different types of objects based on **empirical** observations rather than assumptions.

4. Signal Detection Theory (SDT)

If stimuli is difficult to detect, cognitive factors are critical (critical) in decisions made by an observer.

PENUTUP

- Selalu ada peluang
- Teori: perlu, termasuk perkembangannya
- Kerjasama penelitian: generalisasi (validitas eksternal) hasil

IDE "ASOSIASI PENELITI KONSUMEN INDONESIA"

Rekan-rekan peneliti konsumen, silakan menyampaikan gagasan dll. yang terkait dengan itu ke:

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Wadah kerjasama dan berbagi pengetahuan, informasi, keterampilan dll.

TERIMA KASIH!