Basics of the Subjective Health Experience approach

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link2trials

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in a person's life cycle'
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Outcomes are measured based on two different points of view: (bio)medical and experience

professional = End user

medical = experience

Outcomes

- Biomedical
- PROMs
- costs

VBHC

$$\text{Patient Value} = \frac{\text{Health Outcomes}}{\text{Cost}}$$

Subjective health experience – fundamentals

SHE-model

Acceptance

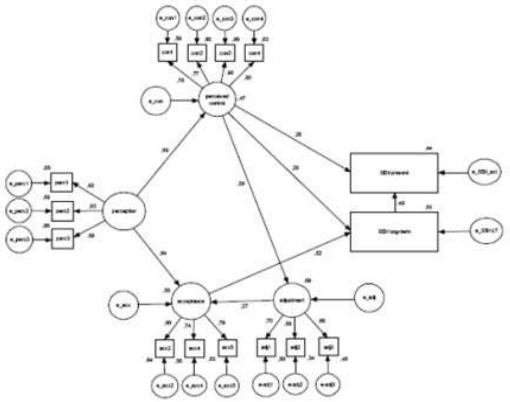
is the feeling by the individual that his health condition and the possible constraints on functioning resulting from it, are acceptable and fitting for him as a person

Perceived control

is the belief of the individual that his health condition, as he perceives it, can be influenced or controlled by himself or by others

Subjective experience of health (SEH)

is an individual's experience of physical and mental functioning while living his life the way he wants to, within the actual constraints and limitations of individual existence



Source: Bloem (2008); Stalpers (2009) Dissertations

Source: Bloem & Stalpers, 2012
http://dx.doi.org/10.2139/ssrn.2102513

subjective health: ladder and segmentation

Fact & figures panels (1) N = 2450

17.4%

31.8%

Quadrant II **Planning and structure** Need for practical help (e.g. digital agenda)	Quadrant I **Information** Need for security (e.g. personalized information)
Quadrant IV **Personal guidance** Need for perspective (e.g. coach)	Quadrant III **Emotive support** Need for peace and comfort (e.g. fellow sufferers)

Acceptance: + / -

Control: - / +

31.9%

18,9%

Bloem &, Stalpers, 2016
https://doi.org/10.1007/s40718-016-0063-5

Source: Bloem, Stalpers, Groenland, van Montfort, van Raaij, de Rooij (2020).
https://doi.org/10.1186/s12913-020-05560-4

diseases (without comorbidity) (2) N = 20.000

		Segment I	Segment II	Segment III	Segment IV	Total
Psychiatric diseases	N	71	22	53	168	314
	%	22.6%	7.0%	16.9%	53.5%	100.0%
Gastrointestinal diseases	N	108	28	47	188	371
	%	29.1%	7.5%	12.7%	50.7%	100.0%
Oncological diseases	N	119	59	12	177	367
	%	32.4%	16.1%	3.3%	48.2%	100.0%
Pain diseases	N	292	113	108	448	961
	%	30.4%	11.8%	11.2%	46.6%	100.0%
Rheumatological diseases	N	436	177	107	549	1,269
	%	34.4%	13.9%	6.4%	45.3%	100.0%
Neurological diseases	N	212	73	49	318	652
	%	32.5%	11.2%	13.4%	42.9%	100.0%

Source: Broekharst, Bloem, Groenland, van Raaij, van Agthoven (2022).
https://doi.org/10.1038/s41598-021-04070-5

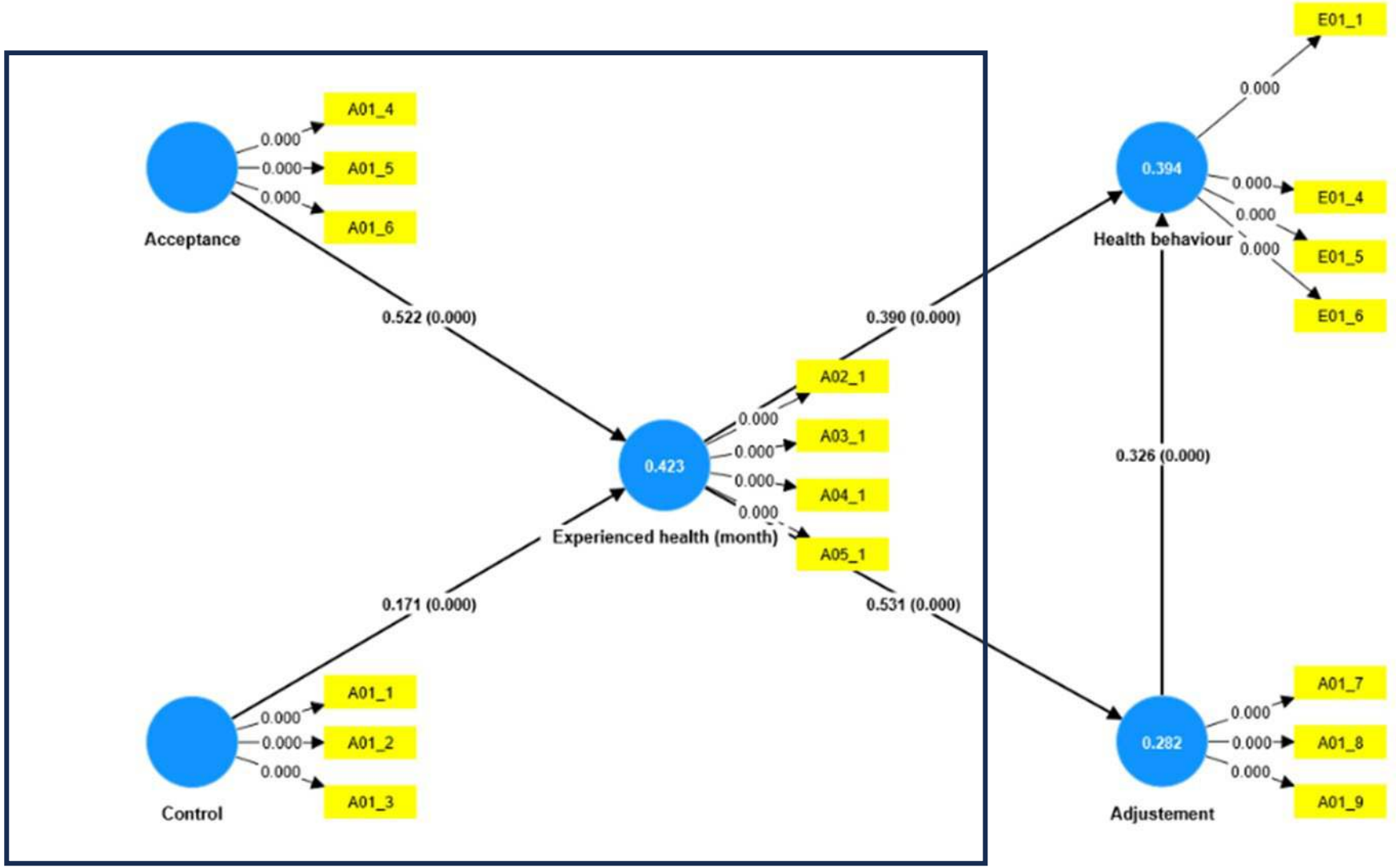
Table 1: Framework of segment characteristics in terms of behavior, queries (dilemmas), and needs.

Behaviour	Common queries	Needs
Segment 1		
Frequently engages with factual information	"Which sources of information can I trust?"	**"I need certainty"** A desire for validation of one's own approach
Keeps informed		
Follows developments related to the condition	"What new developments are relevant to me?"	
Prepares for consultations Copes more easily with setbacks	"What solutions am I unaware of?" "How can I manage fluctuations in intensities of my illness?"	Shared decision-making Perception of attention and active listening when needed
Segment 2		
Seeks stability to better cope with the condition	"How can I gain control?"	**"I need structure"** A need for support to gain control over the situation Arranging matters (themselves) with guidance
Makes efforts to prepare for consultations	"Am I doing the right things?"	Perception of attention and active listening
Consults multiple healthcare providers	"What (lifestyle) adjustments will help me manage my condition?"	Comprehensive overview of disease progression and (treatment and support) possibilities.
Open attitude towards the treatment team	"Am I doing enough?"	

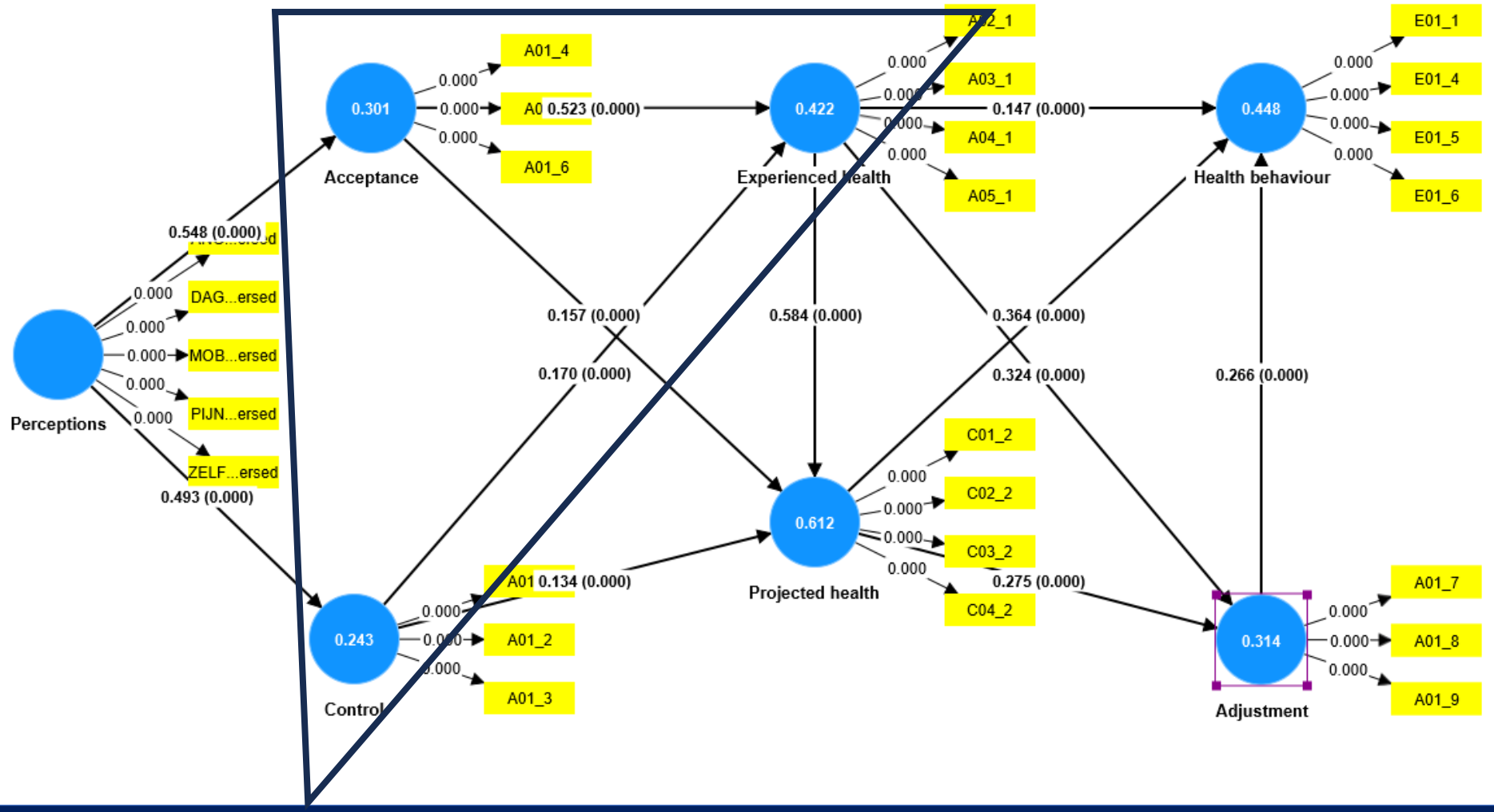
Immunology diseases: Behavior, dilemmas and needs of individuals. Example segment 1 - 2

Source: Tack, Bos, Vodegel, Folkertsma, Broekharst, Liefveld, Bloem (2023). Personalizing supportive healthcare for individuals with immunological disorders A qualitative study in clinical practice. Submitted

SHE model and health behavior



SHE model and health behavior (extended)



Summary
Disease agnostic model – Subjective Health Experience

Fact & Figures *(examples of recent publications)*

Theory & Basics

Bloem & Stalpers, 2012
http://dx.doi.org/10.2139/ssrn.2102513

Broekharst, Bloem, Groenland, et al. (2022).
https://doi.org/10.1038/s41598-021-04070-5

Validity

Broekharst, Thomas, Russel, West, Jansen, Bloem, Römkens (2023)
https://doi.org/10.1016/j.gastha.2023.03.020

van Erp, Thomas, Groenen, Bloem, Russel, Römkens, Wahab. (2023)
doi.org/10.15403/jgld-4855

Segmentation: Needs & support

Bloem, Stalpers, et al (2020)
https://doi.org/10.1186/s12913-020-05560-4

Tack, Bos, Vodegel, Folkertsma, Broekharst, Liefveld, Bloem (2023 – submission)

All relevant platforms (EPR, apps ,Link2Trials and so on)

How to embed a treatment in a person's daily life?

Research topics

Older adults: vitality	Chronic illness and work	Adherence (EFPIA – IMI2)	HTA: Expected and experienced utility
Broekharst, Bloem, Blok, Raatgever, Hanzen, de Vette (2023). https://doi.org/10.3390/ijerph20116052	*Dona, Peters, Senden, Kaal, Bloem, Hoevelaken, Bartstra, Derikx, Jacobs – Middelkoop, Schaafsma, Jeurissen (2023). In preparation*	*IMI Beamer – development of a new adherence model. SHE approach = backbone*	*Broekharst, Bloem, Groenland, van Raaij, Jeurissen and van Agthoven (2023) https://doi.org/10.3389/fpsyg.2023.1139931*

Next Phase

Older adults: frailty, In - out hospital	Valid outcome indicators	Testing model in 6 disease areas (clinical trials)	Translation experienced utility into Qualys

Personalized care (effectivity and efficiency), monitoring, digitalization, real world evidence

Outcomes: positive impact SHE on:

SHE: strong association with

Determinants SHE

#representative sample population; different subgroups: sex, age, income, education, (no) disease (with comorbidity)

Health behavior#

e.g., healthier food intake, more mobility, better rest/ sleep, better health

Projected health#

e.g., health expectations (next 4 weeks, next year)

Disease specific measures

e.g., handle with side effects, symptoms; physical, mental, social functioning because of disease

Acceptance and controle

e.g., dynamic model, changes in time, causal relation SHE, differences in score profile for diseases

Adjustment#

e.g., successful change, using support

Satisfaction

e.g., service and support HCP

General (HR)QoL measures

e.g., anxiety/ depression, mobility, daily activity, mental, physical and social functioning

Segmentation modei Supportive care

4 segments, each segment specifies a need which gives direction to the type of support (6 reliable/ valid questions)

Adherence & retention

e.g., compliance – medicine intake; less drop-outs in (clinical) studies

Next: time, people, work (productivity), and so on

But a unique position

Several platforms

e.g., electronic patient record, Link2trials, and so on

ACRON NAJAARSSYMPOSIUM

Questions - discussion

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