

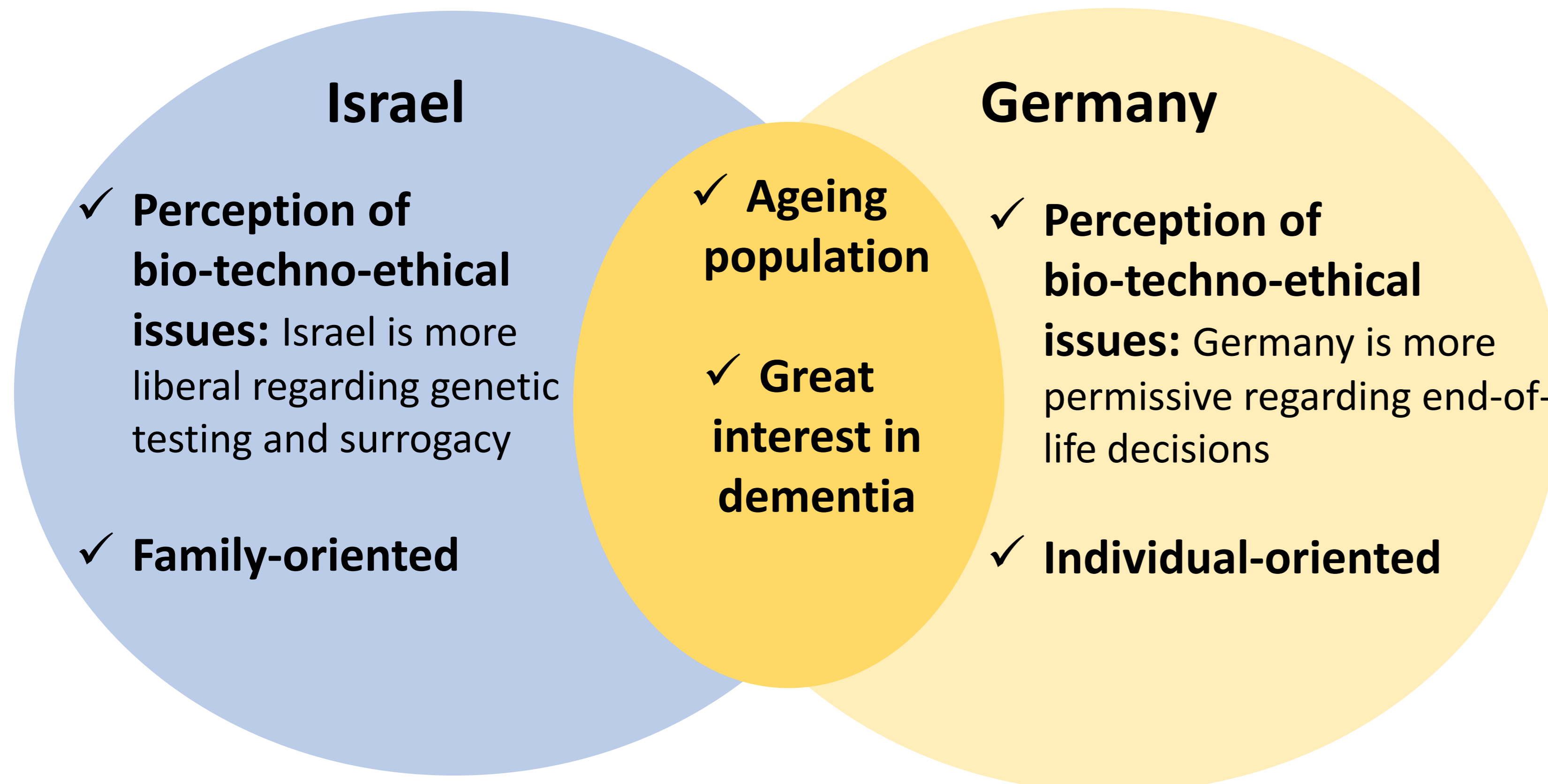
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## 1. Background

- ❖ Intelligent assistive technology (IAT) is considered an innovative way to reduce the challenges associated with dementia care<sup>1</sup>.
- ❖ The research and implementation of IAT raises several social (e.g., stigma and economic cost) and ethical issues (e.g., invading privacy vs. maintaining safety)<sup>2</sup>.
- ❖ Conducting cross-cultural comparative studies is crucial, as culture shapes individuals' preferences and fosters their thinking and behavior patterns.<sup>3</sup>

### Comparison between Israel and Germany<sup>4</sup>



## 2. Aims

- ❖ To explore and compare the attitudes of Israeli and German experts regarding IAT in dementia care.

## 3. Methods

- ❖ **Semi-structured interviews.**
- ❖ **Participants:** 35 experts (15 Israelis and 20 Germans) in key roles in health and community services for people with dementia as well as in the fields of dementia/cognitive decline and IAT (e.g., computer science, electrical/biomedical engineering, ethics, nursing, and gerontology).

### Participants' sociodemographic characteristics by country (n=35)

	Israeli experts (n=15)	German experts (n=20)
Mean age (S.D)	55.53 (11.39)	49.0 (8.87)
<b>Gender (%)</b>		
Male	27	45
Female	73	50
Other	0	5
<b>Expert type (%)</b>		
Technology experts	60	45
Experts in key roles in health and community services	40	50
Professional association experts	0	10

- ❖ Data were analyzed using thematic analysis.

## 4. Findings- three main themes:

### Theme 1. The social and technical preconditions that impact IAT development and implementation

#### Sub-theme 1.1 Accelerators

##### 1.1.1 Changes in family structure:

"Many relatives are forced to find new ways to care for their parents due to the fact that they live and work far away from their hometown." (German expert, works in a non-profit organization)

##### 1.1.2 Societal digitization:

"[...]thanks to the entry of all the social media apps like WhatsApp, Facebook[...] we are so accustomed to working with this technology that if there were an app designed for treatment, caregivers would feel it was accessible and would work with it." (Israeli expert, biomedical engineer)

#### Subtheme 1.2. Inhibitors

##### 1.1.2 Economic considerations:

"It is crucial to know who's going to bear the costs for these expensive systems." (German expert, researcher in the fields of nursing and technology)

##### 1.2.3 Cognitive capacity of the person with dementia:

"As for 'wearable technologies,' they do not work for people with dementia. Because they forget to wear them, or they get into the shower with them." (Israeli expert, biomedical engineer)

##### 1.2.4 Ageism and stigma- (primarily among Israeli experts):

"Who sees old people at all? [...] People are willing to invest a lot of money into technologies of all kinds, but invest less in the elderly and people with dementia. (Israeli expert, works in a non-profit organization)

### Theme 2. The benefits of adopting IAT in dementia care

#### 2.1 Empowering people with dementia-

enables "ageing in place" by improving the ability of people to live independently, autonomously and safely:

"In the initial stage of dementia, technology has a major role in helping the person manage their life with [the disease] as independently as possible." (Israeli expert, gerontologist)

"There is definitely the possibility that people with dementia will be able to stay longer in their own homes and not yet have to go to a nursing home." (German expert, works in a non-profit organization)

#### 2.2 Empowering family and professional caregivers of people with dementia-

reduces the caregiver burden and worries:

**Family caregivers:** "The psychological burden is eased when you can simply sit at your desk at work and take a look at the system." (German expert, representative of public care insurance)

**Professional caregivers:** "If every patient had a GPS monitoring bracelet it would give the nurses at the institutions a feeling that they have some kind of back-up, some control over the patient's mobility." (Israeli expert, researcher in the field of ethics)

### Theme 3: The risks of adopting IAT in dementia care

#### 3.3 Invading the privacy of the person with dementia- privacy was most highly prioritized by German experts, while Israeli experts prioritized safety over privacy:

"Well, there is the risk that you could be monitored in situations that you don't want to be monitored in. You probably can't protect your private sphere." (German expert, researcher in the fields of nursing and technology)

"When I weigh these things against one another – that is, safety vs. autonomy and privacy – then in these cases, safety is more important to me than autonomy. Because being safe is in and of itself a worthy goal" (Israeli expert, works in a non-profit organization).

#### 3.2 Lack of human contact:

"There is a very fundamental risk regarding relationships between people: When there is a technical device involved, you no longer communicate directly." (German expert, representative of a free welfare company)

#### 3.3 Lack of technology reliability:

"Technology is getting better and better, but at the same time we need to keep in mind that this technology is a supportive tool only and cannot be relied upon entirely, at least not at this stage." (Israeli expert, gerontologist)

## 5. Conclusion

- ❖ The study indicated quite similar perceptions among the German and Israeli experts, with some differences in mainly in regard to inhibitors (stigma and ageism) and risks (prioritizing privacy).
- ❖ Our findings provide important insights for the international debate about IAT in dementia care as well as considerable knowledge about the cross-cultural values, concerns, and preferences that shape IAT development and design.
- ❖ These insights are particularly relevant to policymakers, service providers, and technology developers.

#### References:

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