

## Bridging the Digital Divide: Examining the Use and Access to E-Health Based Technologies by Millennials and Older Adults

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## **Background**

#### What is the digital divide?

The digital divide is a complex phenomenon in which a metaphorical gap is present in between two groups of individuals who utilize ICT's (information communication technologies).

This gap provides cause for concern, especially with a society that is so technologically advanced in todays' day. Currently, little is known about how older adults and millennials access and use e-health based technologies. Hence, a

## **Results**

#### Age

11 articles indicated age as being a large factor to the contribution of the digital divide. Millennials grew up with technology, whereas older adults were not as familiar and only used technology when required.



systemic review was undertaken to address this noted gap in the literature.

#### **Research Methods**

A systemic review of the literature was undertaken employing the following three databases:

## (i) PubMed, (ii) ERIC, and (iii) CINAHL.

They were examined using the search term "**digital divide and generations**" to identify any potential articles that were present.



5 articles identify that older adults are concerned by the collection and usage of Internet applications, whereas millennials tend to skip reading the terms and conditions of an app to reach the benefits of the app.

### **Digital Literacy**

**Privacy Concerns** 

The ability to use ICT's for research, knowledge retention, social and mechanical application. Digital literacy was found to be a contributing factor in 6 of the articles examined. Some barriers include: a fear of technology, feeling too old, etc.

#### Access to the Internet

Geographical location of an individual has largely to do with if they are able to gain access to information communication technologies and the Internet. "*Dead zones*" often mean that a location lacks the infrastructure for Internet usage.

#### Lack of Canadian Research

There is a lack of research that was completed in Canada. The majority of research

Adapted from Bartfay and Bartfay (2018).

## **Findings**

The sample size was N=572, with 541 duplicate or non-relevant articles, which left 31 relevant articles to review. The Initial search included the search term "**digital divide**" with a combination of words such as "older adults, 65+, elderly, and seniors" AND " millennials, young adults, college students, university students"

PubMed	ERIC	CINAHL
<ul> <li>Jan 2009 to Aug 2018</li> <li>n=505</li> </ul>	<ul> <li>Jan 2009 to Aug 2018</li> <li>n=53</li> </ul>	<ul> <li>Jan 2009 to Aug 2018</li> <li>n=14</li> </ul>
-ଟ୍ରୁ Digital Divide	Q Older adults	Hillenials Young adults College students
Initial Search S	✓ 65+ Elderly Older adults	<ul> <li>Young adults</li> <li>College students</li> <li>University</li> <li>students</li> </ul>

Exclusion Criteria: letters to the editor, theory-focused articles, non-English articles

Inclusion Criteria: Published quantitative peer-reviewed articles published between the years January 2000 and May 2018; English only; focus on the target population for the review compromised of those aged 65+ and millennials only surrounding the digital divide and different generations was from other countries such as Spain, USA, Poland and the Netherlands, with the USA being the greatest contributed to research.

## **Conclusions**

 Digital divide is still a large problem in society, and now that we have examined various factors (such as age, education, IT literacy and sociodemographic factors) leading to the gap being present, we can now examine the impact of the digital divide on health information received, used, distributed and collected by different generations.



• There is a dearth of literature in this area especially because it is a newer area of research. The consequences and benefits of technology being integrated into



To extract required data from the studies, a data abstraction tool was created to obtain the following information:

(i) author

(ii) year of publication

(iii) sample size

(iv) country of origin

(v) design/methods

(vi) major findings/outcomes obtained.

#### daily living is just being investigated.

- Majority of the literature for this topic was produced in the United States.
- A major public health challenge in the next decade will be to bridge the digital divide.

### **Further Information**

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