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The Role of Social-Web Specific Epistemic Beliefs in Sourcing Strategies on the Social Web

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Motivation

On the **Social Web** (i.e., blogs, online forums wikis, and social networking sites, etc.), authors can publish almost anything irrespective of their expertise or intentions. Therefore, **sourcing strategies** are vitally important when using the Social Web for learning.

Sourcing strategies:

- evaluating an article's quality: e.g., "Does the article include references?" "Is it balanced or rather one-sided?" "How do other users rate the article?"
- assessing authors' credibility: e.g., "What is the author's expertise?" "What are potential intentions of the author to publish the information?"
- knowing how to find information from credible authors: e.g., "How can I find experts in the field?"

Potential individual characteristics associated with sourcing strategies:
Social Web-specific epistemic beliefs

Prior research has shown that students' **Internet-specific epistemic beliefs**, that is, their personal beliefs about what knowledge and knowing is like on the Internet, **predict**

their **self-regulatory strategies**
(e.g., Chiu, Liung, & Tsai, 2013; Strømsø & Bråten, 2010)

and their **source evaluation behavior**
(Kammerer, Bråten, Gerjets, & Strømso, 2013)
during Web search.

Research question:
Do students' epistemic beliefs about **knowledge and knowing on the Social Web** predict their sourcing strategies with respect to Social Web contents?

Empirical study

Participants were *N* = 124 vocational students from the IT sector (*M* = 20.4 years, 93.5% male).

34% of participants' open responses to the tasks were coded by two independent raters (Cohen's *k* = .77-.94) according to a predefined coding scheme.

Tasks to assess sourcing strategies on the Social Web

Task 1a: A blog article about health risks of laser printers was presented. A hyperlink on the author's name linked to the information that the author is a PR consultant of a well-known printer company. Students had to argue why they would(n't) use this website for a school assignment.	A maximum of 4.5 points could be achieved for arguments such as – "the article did not contain any source references", – "the author was a PR-consultant and thus might be biased", – "one should search for additional sources in order to verify the article's content".
Task 1b: The "about the author" page was directly presented and the author's credibility had to be judged and justified.	It was analyzed whether or not participants argued that the author was a PR-consultant and thus might provide biased information.
Task 2: Another blog article was presented. Four incomplete source references had to be identified (with explanation).	A maximum of 4 points could be achieved for identifying, for instance, missing dates, names, or image sources.
Task 3: Students were asked to imagine that they wanted to find and contact an expert on the topic by using the Social Web. An open question asked them about strategies to do so.	A maximum of 4 points could be achieved for strategies such as – to search for trustworthy articles and find out who is the author – to join social network groups on the topic.

Assessing Social Web-specific epistemic beliefs

Adadaption of the *Internet-Specific Epistemological Questionnaire (ISEQ)* by Bråten, Strømsø, and Samuelstuen (2005):
The 17 items were formulated with respect to course-related knowledge and knowing on the Social Web (instead of the Internet in general). Items were rated on 5-point Likert-type response scales ranging from 1*(totally disagree)* to 5 *(totally agree)*.

Maximum likelihood exploratory factor analysis with oblique rotation revealed 2 factors (eigenvalues 5.10 and 2.40, 44.1% variance explained):

General Social Web Beliefs (13 items, Cronbach's α = .86)
The higher the scores, the more participants believe that the Social Web is a reliable knowledge resource that contains correct and detailed expert information about course-related contents.

Sample item: *"To almost every question related to my course work the Social Web can provide me with a correct answer."*

Justification for Knowing Beliefs (4 items, Cronbach's α = .74)
The higher the scores, the more participants believe that knowledge claims provided on the Social Web need to be checked against other sources, reason, and prior knowledge.

Sample item: *"To find out whether knowledge about my coursework that I find on the Social Web is trustworthy, I try to compare knowledge from multiple sources."*

Results and conclusions

	Task 1a[a]	Task 1b	Task 2[a]	Task 3[a]
General Social Web Beliefs	β = -.04	B = -0.49	β = -.05	**β = .21***
Justification for Knowing Beliefs	**β = .32****	**B = 0.91****	**β = .26****	β = .07
R^2 or *Nagelkerkes* R^2	.10**	.14**	.07*	.05*
Descriptives	*M* = 0.95 *SD* = 0.79	38.7%	*M* = 1.19 *SD* = 0.75	*M* = 0.72 *SD* = 0.60

[a]Note. The dependent variables were square-root transformed because of strong positive skewness.

Social Web-specific items resulted in two meaningful factors that correspond to the factors found in previous studies on Internet-specific EBs (Bråten et al., 2005; Kammerer et al., 2013).

Beliefs that knowledge claims encountered on the Social Web need to be checked against other information sources, reason, and prior knowledge seem to play an important role in sourcing.

Beliefs that the Social Web is a reliable resource that contains correct and detailed expert information about course-related contents positively predicted strategies to find experts by using the Social Web.

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