A Survey of Pathologists and Learners of Pathology on Pathology Information Consumption

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Libre Pathology

librepathology.org

Background

Observational data suggests seekers of pathology information (PI) have focused questions and value the ease of finding info, based on web statistics; however, PI consumption is still incompletely characterized and infrequently stratified by practicing pathologist and learner.

Where information is sought and what is important may give insight into how PI may be delivered in the future.
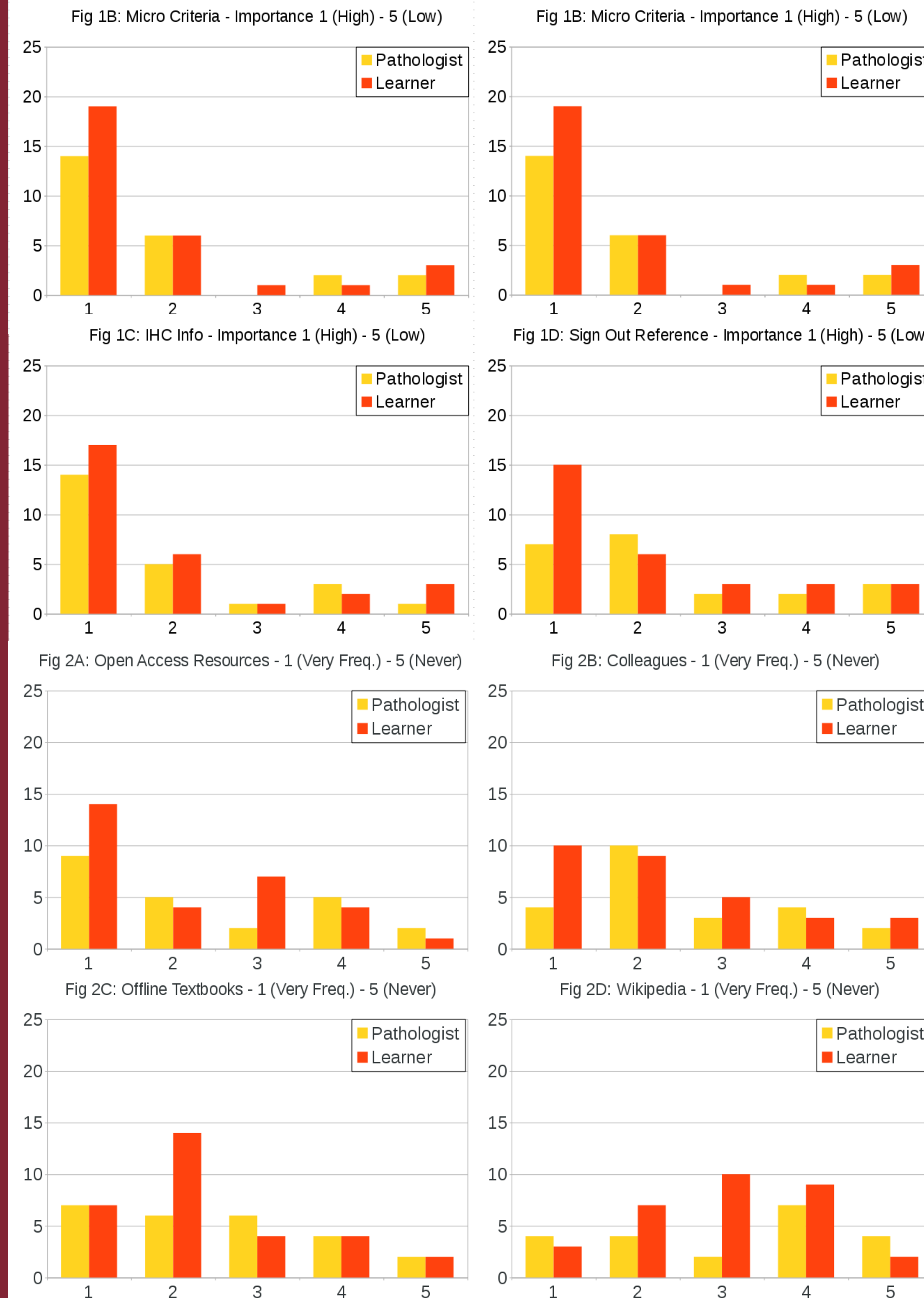
Design / Methods

An online survey was done using limesurvey (limesurvey.org). Participants were recruited from an open access pathology website (Libre Pathology), via Twitter, email and word of mouth.

Results

A total of 59 participants completed the survey (25 pathologists, 33 learners (3 fellows, 30 residents), 1 other health professional) and were from various regions (North America 39, Asia 9, Europe 5, Africa 5, Other 1).

Among learners (L) and pathologists (P) elements rated very important (VI) were images (70% L/60% P), followed by microscopic criteria (58% L/56% P) and IHC info (52% L/56% P) – Fig 1A-1C.

Fig 1B: Micro Criteria - Importance 1 (High) - 5 (Low)

Fig 1B: Micro Criteria - Importance 1 (High) - 5 (Low)

Fig 1C: IHC Info - Importance 1 (High) - 5 (Low)

Fig 1D: Sign Out Reference - Importance 1 (High) - 5 (Low)

Fig 2A: Open Access Resources - 1 (Very Freq.) - 5 (Never)

Fig 2B: Colleagues - 1 (Very Freq.) - 5 (Never)

Fig 2C: Offline Textbooks - 1 (Very Freq.) - 5 (Never)

Fig 2D: Wikipedia - 1 (Very Freq.) - 5 (Never)

Learners and pathologists differed on the VI ratings for spot diagnosis quizzes (39% L/28% P), sign out examples (45% L/28% P), image annotations (27% L/48% P) and references (12% L/28% P) – Fig 1D.

Both groups very frequently (VF) sough info via search engines (30% L, 32% P) and open access websites not involved in the survey (42% L/36% P) – Fig 2A.

Learners preferred login web sites (24% vs 12% VF) and colleagues (30% vs 16%), while pathologists preferred the primary literature (36% vs 6%) & review articles (24% vs 6%) - Fig 2B.

Offline textbooks (28% vs 21%) and Wikipedia (16% vs 9%) were more VF used by pathologists; however, learners less frequently 'never' used Wikipedia (16% vs 6%) - Fig 2C-2D.

Conclusions

The interest in images suggests that picture-matching is important and images showing variation likely desired. The interest in sign out examples among learners may indicate an increased desire for standardization.

The differing importance placed on references and the medical literature may reflect a change in where individuals get information (media versus social media) and the ease of finding information/verification with other sources. PI seekers use a variety of sources.

Offline resources remain important; however, learner-pathologist differences suggest that PI is increasingly being sought online and open access resources may be preferred.