

Is Health Literacy Associated with Concussion Care Seeking Intentions and Behavior in Collegiate Students?

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Context: Individuals who sustain a concussion but do not seek care can experience greater symptom burden and prolonged recovery. Health literacy is defined as the degree to which individuals can access, interpret, and comprehend health information and seek care. Currently, it is unknown how health literacy influences concussion care seeking. The purpose of our study was to determine if health literacy predicts concussion care seeking intentions and behavior. **Methods:** College students were recruited from a convenience sample to complete this cross-sectional survey from one large public institution. Health literacy was measured using the 4-item Brief Health Literacy Screening Tool (BRIEF; rated on a five-point Likert-scale). BRIEF scores are categorized as inadequate (4-12 scores), marginal (13-16 scores), and adequate health literacy (17-20 scores). Indirect (nine items) and direct care seeking intentions (three items) were rated on a 7-point Likert-scale. Both scores were averaged with higher scores indicating more favorable disclosure intentions. Indirect care seeking behavior was evaluated with 10 items and participants were categorized into “care seekers” and “non-care seekers.” Direct care seeking behavior was calculated using a ratio of the number of concussions/bell-ringers/dings disclosed divided by the number of concussions/bell ringers/dings experienced. We also categorized direct care seeking behavior into “care seekers” if 100% of concussions were disclosed, and “non-care seekers” if less than 100% of concussions sought care. The survey was distributed via Qualtrics (Provo, UT). All measures have been previously deemed valid. We calculated four separate univariate regressions to understand the association between the BRIEF categories and care seeking intentions (two linear regressions), and behavior (two logistic regressions). **Results:** Two hundred and fifty-seven students completed the survey in its entirety (completion rate=96.3%, 257/267; age=20.7±2.2 years; male=96/267, 36.0%; female=159/267, 59.6%, non-binary/third gender=1/267, 0.4%, no response=11/267, 4.1%). Most participants had marginal health literacy BRIEF scores (n=121/267, 45.3%; inadequate n=62/267, 23.2%; adequate n=81/267, 30.3%; not calculated due to missingness=3/267, 1.1%). Participants with marginal and adequate BRIEF scores had higher indirect intentions compared to inadequate BRIEF scores by 0.40 and 0.51, respectively ($F_{2,258}=3.72$, $p=0.026$, $R^2=0.028$). BRIEF scores were not associated with direct intentions ($p=0.058$), or behavior (indirect: $p=0.544$, direct: $p=0.900$). **Conclusion:** Greater health literacy was associated with greater concussion care seeking intentions; however, this did not translate to greater care seeking behavior. Health literacy may influence concussion care seeking in a small way given the level of variance explained by the data. Future research may incorporate health literacy in concussion education, but it may play a more significant role in outcomes after concussion care is pursued.