

SUPPLEMENTAL RESULTS

Outcomes and measures for well-being domains

Among 17 studies to improve social well-being, 10 assessed learner satisfaction (Supplemental Table 4).

Other outcome measures for social well-being included learner agreement (n=7) and perception (n=6).

Four of six mental interventions assessed experiences through open-ended survey questions or semi-structured interviews. The single study that assessed mental health (i.e., anxiety) symptoms used the State-Trait Anxiety Inventory (STAI).¹ Compliance was assessed for the single intervention on physical well-being; specifically, immunization compliance. Twenty-three intellectual and 14 occupational interventions assessed knowledge through standardized assessment tools (e.g., Quality Improvement Knowledge Application Tool - Revised [QIKAT-R]²) with self-assessment tools specific to knowledge delivered (i.e., tapped into subjective well-being associated with knowledge gained). Additional frequent measures to assess intellectual and occupational well-being were agreement (n=12) and satisfaction (n=8).

Summary of statistical findings

Among 17 interventions to improve social well-being, most studies (n=6) with medical students showed statistically significant positive results, while some studies (n=3) with resident physicians showed statistically significant positive results. One study (of six) on mental interventions (all six in resident physicians) showed statistically significant positive results. The single intervention on physical well-being in resident physicians showed statistically significant positive results. Most (n=17/51) intellectual interventions showed statistically significant positive results in medical students (n=17) and resident physicians (n=13). Statistically significant positive results for intellectual well-being were represented comparably across intervention levels in undergraduate medical students (individual, n=6; program, n=6; system, n=5); statistically improved intellectual well-being was primarily (n=11) at the program level for resident physicians. Most of 32 occupational interventions had statistically significant positive results in medical students (n=12, primarily individual) and resident physicians (n=8, primarily program).

REFERENCES

1. Spielberger CD, Gorsuch, R. L., Lushene, R., Vagg, P. R., & Jacobs, G. A. *Manual for the State-Trait Anxiety Inventory*. Palo Alto, CS1983.
2. Singh MK, Ogrinc G, Cox KR, et al. The Quality Improvement Knowledge Application Tool Revised (QIKAT-R). *Acad Med*. 2014;89:1386-91.