

Optimism and immunity: Situations, dispositions, and mechanisms

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Both dispositional optimism and situational optimism relate to immunity, but in different ways and for different reasons. In first-year law students, situational optimism about success in law school associated with indices of better cellular immunity both in vitro and in vivo. When this relationship was examined in a longitudinal, multi-wave design, changes in optimism correlated with changes in immunity. Furthermore, the relationship between optimism and immunity was mediated by positive but not negative affect. In contrast, dispositional optimism alone did not predict cellular immunity. However, there was an interaction between dispositional optimism and whether or not the student had relocated to attend law school. For relocaters, more optimism associated with higher cellular immunity. For residents, more optimism associated with lower cellular immunity. This effect was not mediated by affect. Instead, it is likely that the negative relationship between optimism and immunity in residents was related to energy and goal demands. Ecological models of immunity predict that immunity will be compromised in the context of important, alternative uses of that energy such as goal pursuit, and this mechanism may be acting in dispositional optimists. This complex relationship between dispositional optimism and immunity may account for dispositional optimism's inconsistent relationship with health outcomes.