

# 疼痛共情对利他行为的影响

孟广腾<sup>1,2</sup> 杨仲<sup>1,2</sup> 付迪<sup>1,2</sup> 李琦<sup>1,2</sup> 刘勋<sup>1,2</sup> (通讯作者)

1 中国科学院心理研究所行为科学重点实验室, 北京, 100101

2 中国科学院大学心理学系, 北京, 100049, 通讯作者 E-mail: [liux@psych.ac.cn](mailto:liux@psych.ac.cn)

**摘要** 共情使个体理解和分享他人的情绪体验, 在亲社会决策和行为都起着重要作用。个体与他人的群际关系和心理距离会直接影响共情, 进而影响个体对他人情感的理解并产生适当的情绪和行为反应。对他人疼痛的共情是社会生活中重要的情绪反应, 疼痛共情能够促使个体理解他人的痛苦并产生适当的情绪和行为反应, 对观察对象进行救助。本研究旨在探讨疼痛共情对利他行为的影响, 研究招募 26 对异性恋情侣被试 (平均年龄  $22.31 \pm 0.37$  岁), 采用真实电刺激诱发疼痛, 通过操纵个体与共情对象的关系 (情侣或陌生人) 和疼痛刺激的强度来诱发不同程度的共情, 个体被动承担全部疼痛刺激后, 可以选择为共情对象主动分担一定比例 (0, 20%, 50% 或 80%) 的疼痛刺激, 记录相应分担比例的接受率和主观疼痛评估。结果发现, 在疼痛分担的接受率上, 被试更倾向于为情侣分担疼痛, 男性比女性更倾向于主动分担疼痛, 疼痛分担的比例越低越容易被接受, 三者交互作用显著。在评估他人的疼痛程度时, 主动分担会降低对他人的疼痛评估, 对情侣的疼痛评估高于陌生人。在评估自己的疼痛程度时, 主动分担也会降低对自己的疼痛评估; 女性被试为情侣分担疼痛时会提高对自己疼痛程度的评估, 而男性被试为不同对象分担疼痛时没有差异。本研究表明, 人们对群际关系较近的个体表现出更强的共情和更多的利他行为; 在主动帮助他人分担疼痛后会降低对自我疼痛的感知, 该效应还受到群际关系和性别的调节。

**关键词** 疼痛共情, 利他行为, 疼痛敏感性, 群际关系, 情侣

## The influence of pain empathy on altruistic behavior

Guang-Teng Meng<sup>1,2</sup> Zhong Yang<sup>1,2</sup> Di Fu<sup>1,2</sup> Qi Li<sup>1,2</sup> Xun Liu<sup>1,2</sup>

<sup>1</sup> CAS Key Laboratory of Behavioral Science, Institute of Psychology, Beijing, China

<sup>2</sup> Department of Psychology, University of Chinese Academy of Sciences, Beijing, China

**Abstract:** Empathy enables individuals to understand and share others' emotional experiences, and plays an important role in prosocial decision-making and behavior. The degree of empathy can be influenced by the interpersonal relationship or psychological distance between people and the others, which can account for the emotional and behavioral response by understanding and sharing the others' experiences. Pain empathy is an important emotional response in social life. Pain empathy can promote individuals to understand others' pain and produce appropriate emotional and behavioral responses to help the observed objects. The purpose of this study was to investigate the influence of pain empathy on altruistic behavior. This study recruited 26 heterosexual couples ( $M_{age} = 22.31 \pm 0.37$  years) and pain were induced with real electrical stimuli. Different degrees of empathy were induced by manipulating the relationship between participants and their partners (couples or strangers) and the intensity of pain stimuli. Participants passively take on pain stimulus, and then they can choose to take the place of their partners by taking a certain proportion of pain stimuli (0, 20%, 50% or 80%) or not. The acceptance rate, as well as other-pain evaluation (OPE) and self-pain evaluation (SPE) of pain stimuli were recorded. The results showed that participants were more inclined to take pain for their couples than for strangers, and males were

more inclined to take pain for others than females, and low proportion of pain is easier to take for others. Besides, the interaction among the three factors was significant. Initiatively taking pain for others reduces both other-pain evaluation and self-pain evaluation, and the OPE for couples is higher than the strangers. As for SPE, males showed no significant difference whoever they took pain for, however, the SPE of females increased when taking pain for their partners. This study shows that individuals with close intergroup relationships exhibit stronger pain empathy and more altruistic behavior, in addition, initiatively helping reduces their pain sensitivity, which is also regulated by intergroup relationship and gender.

**Keywords:** pain empathy, altruistic behavior, pain sensitivity, intergroup relationship, couple