

Research Progress on the Generation and Development of Guilt

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Abstract

Guilt is a self-conscious emotions, which occurs when an individual knows that he has done something wrong or hurts someone else, and tends to apologize to the victim or take some steps to make up for his mistake. Guilt plays an important role in prosocial behavior and ethics. Combining with the research at home and abroad, this paper summarizes the neural mechanism, cognitive mechanism and developmental characteristics of guilt. The future research can be carried out from three aspects: 1) To explore the development characteristics and influencing factors of children's guilt; 2) To improve the experimental paradigm of guilt research and make causal inference on the influencing factors of guilt through experimental research; 3) Further study on the external and internal reactions of guilt emotions by comprehensive observation, physiological feedback technology, eye tracker, etc., and to establish an identification system for guilt emotions, so as to provide a new basis and method for the study of guilt.

Keywords

Guilt, Neural Mechanisms, Cognitive Mechanism, The Development Process

内疚情绪产生与发展的研究进展

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摘要

内疚是指当个体知道自己做错了事情或伤害了别人时, 会感到局促不安, 同时倾向于向受害者道歉或采取某些措施来弥补自己犯下的错误时所产生的的一种自我意识情绪。内疚在亲社会行为和道德规范中具有重要的作用。本文结合国内外的研究, 对内疚情绪产生的神经机制、认知机制以及发展特征进行了总结。未来可以从三个方面来展开研究: 1) 探究幼儿内疚情绪的发展特点和影响因素; 2) 完善内疚情绪研究的实验范式, 通过实验研究对内疚情绪的影响因素做出因果推断; 3) 综合观察法、生理反馈技术、眼动仪等进一步研究内疚情绪发生时的外在和内在反应, 建立内疚情绪的识别系统, 为内疚情绪的研究提供新的依据和方法。

关键词

内疚, 神经机制, 认知机制, 发展过程

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1. 引言

随着对自我意识发展研究的不断增加和深入, 自我意识情绪也受到了越来越多的研究和关注。自我意识情绪(self-conscious emotion)也被称为社会情绪或道德情绪(Tangney & Stuewig, 2007), 它是人们在社会交往中根据一定的价值标准评价自我或被他人评价时产生的情绪, 也是个体根据道德自我认同标准, 比较不同情境下的行为或行为倾向时产生的道德情绪(俞国良, 赵军燕, 2009), 如, 内疚、羞愧、同情、自豪、感激等。内疚(guilt)是指当个体知道自己做错了事情或伤害了别人时, 会感到局促不安, 同时倾向于向受害者道歉或采取某些措施来弥补自己犯下的错误时所产生的的一种自我意识情绪。内疚情绪能促进个体亲社会行为水平的提高(Ding et al., 2016; Ohtsubo & Yagi, 2015; Ortiz Baron et al., 2018; Skatova et al., 2017; Smits & Boeck, 2003; Sznycer, 2019; Vaish, 2018; 汤明, 李伟强, 刘福会, 袁博, 2019)。在违规行为中, 表达内疚可以增加违规者补偿行为的积极性(Aurélien Graton, François Ric, 2017; Jennifer Jordan et al., 2015)。内疚对个体的行为起到了制约作用, 内疚会促使个体对自己的不当行为进行反省, 并感到自责懊悔, 最终对自己将来的行为产生积极影响(张琨等, 2014)。内疚作为道德情绪的一种, 对于个体形成良好的道德观念具有重要作用, 而且有研究指出内疚与犯罪行为、危险行为呈显著负相关(Spruit, Schalkwijk, Vugt, & Stams, 2016)。

本文主要针对内疚情绪的发生、发展进行梳理、总结, 包括内疚情绪的产生(内疚情绪的神经机制、认知机制)以及不同阶段的发展特点, 这对于内疚情绪进行系统、深入的研究具有重要作用。

2. 内疚的产生

2.1. 内疚的神经机制

内疚的神经机制非常复杂。Shin et al. (2000)首次运用神经科学技术对自我意识情绪进行了考察, 他通过让被试回忆内疚的情绪体验, 阅读与自己相关的情绪经历, 使用正电子发射型计算机断层显像(PET)研究了内疚发生时的脑部神经活动, 研究发现相比于中性条件, 内疚情绪状态下边缘系统前部脑血流量

活动增加。Takahashi 等人(2004)发现, 内疚和尴尬会在涉及心理理论过程的神经区域内产生激活, 包括内侧前额皮层和左后颞上沟。内疚感还与内侧前额皮层(Takahashi et al., 2004)的高度激活有关, 这一区域与监控心理状态和做出道德判断有关(Adolphs, 2001; Greene & Haidt, 2002; Greene, Sommerville, Nystrom, Darley, & Cohen, 2001; Nakagawaa et al., 2015)。Zhu, Feng, Zhang, Mai, & Liu (2018)等发现, 内疚激活了缘上回、颞顶叶交界处、眶额叶皮层、腹外侧前额叶皮层和背外侧前额叶皮层等区域。有研究者采用社会决策范式, 使用功能磁共振成像(fMRI)研究了内疚的神经基础和随后的补偿行为, 发现前额叶皮层和背内侧前额叶皮层的激活与内疚呈正相关(Ty, Mitchell, & Finger, 2017)。Li, Yu, Zhou, Kalenscher, & Zhou (2020)将 fMRI 与集体互动游戏相结合考察了群体内疚是如何在大脑中产生的, 研究发现群体内疚激活了前中扣带皮层的神经反应模式, 与个人内疚感是类似的, 这拓宽了我们对群体成员是如何融入社会情绪的神经认知过程的理解。

2.2. 内疚的认知机制

情绪与认知的关系是心理学领域中一直探讨的一个话题。认知是产生情绪、情感的前提和基础。人们通过感知觉、记忆、思维等认识过程, 有了对事物各种属性的认识, 才能有主客体之间需求关系的反映, 从而产生情绪与情感, 没有对事物的认识就不能产生情绪和情感。自我意识情绪, 包括羞愧、内疚、嫉妒等, 同样需要复杂的认知过程的发展(Caprara, Giunta, Pastorelli, & Eisenberg, 2013; Caprara, Vecchione, Barbaranelli, & Alessandri, 2013; Tangney, Wagner, & Gramzow, 1992)。现有的发展研究表明, 内疚是一种复杂的情绪, 在许多心理能力得到发展后才出现(Deem & Ramsey, 2016), 诸如因果关系归因、心理理论等心理能力(Leary, 2007; Lewis, 2010)。

2.2.1. 归因

归因是社会认知的重要部分, 它指的是人们对他人或自己行为原因的推论过程。具体的说, 就是观察者对他人或自己的行为过程所进行的因果解释和推论。根据归因理论, 当与个人身份目标相关的事件(例如, 一个人想成为什么样的人)被归因于个人内部原因时, 自我意识情绪就会产生(Lewis, 1971; Tangney, 1990; Tracy & Robins, 2004)。附加的属性决定了在特定的情况下激发出特定的情绪。当人们把与自己的身份目标不一致的事件(例如, 如果一个人想成为一个好学生, 但是考试不及格)归因于特定的、不稳定的或自我可控的方面(例如, 学习不够努力)时, 内疚感就会产生; 如果把原因归结于整体的、稳定的或自我不可控的因素(例如, 不聪明)则会引发羞耻(Tangney, 1990; Tracy & Robins, 2004)。与此同时, 与身份目标一致的结果(例如, 通过考试)会引发成就导向的自豪或骄傲, 这取决于这些结果是归因于自我的稳定/不稳定还是整体/稳定的方面(Tracy & Robins, 2004, 2014)。这些情绪的属性, 不论是它们的归因导向, 还是它们的情感和行为属性, 都非常敏感地依赖于个体如何正确地解释和评价自己的成功和失败(Szycer, 2019)。

2.2.2. 心理理论

心理理论(theory-of-mind, TOM)是指理解自己和他人的心理状态并据此推测他人的行为(Premack & Woodruff, 1978)。心理理论中涉及的心理状态通常包括信念、愿望、意图、情绪等多重成分, 其中情绪理解主要包括对情绪和引起情绪情境的识别; 对情绪和愿望、信念、意图关系的理解; 对冲突情绪的理解等。Ratcliffe 认为, 要理解自我意识情绪, 儿童就必须形成关于其他人如何看待他们行为的信念, 例如, 个人感到内疚, 因为他认为其他人认为他的行为是错误的。关于内疚神经机制的研究中, 发现内疚会激活与心理理论相关的区域, 如缘上回和颞顶叶交界处(Zhu et al., 2018)、背部内侧前额叶皮层(Amodio, & Frith 2006; Fletcher et al., 1995; Gallagher et al., 2000; Goel et al., 1995)。Muris et al. (2014)发现随着儿童从

关注他人的反应转向自我意识、自我表征、和心理理论能力的发展, 羞耻感和内疚感等自我意识情绪似乎会随着年龄的增长而增加。Misailidi (2018)探讨了 8~10 岁儿童心理理论与内疚理解的关系, 发现高水平的内疚感与高水平的心理理论测试成绩有关, 表明心理理论与内疚的发展确实存在相关关系, 但是对于那些善于推断他人心理状态的孩子是否比那些能力一般或较差的孩子更容易感到内疚这一因果关系目前还不清楚。

2.2.3. 同理心

同理心(Empathy), 也可称为“设身处地理解”、“感情移入”、“共感”、“共情”, 泛指心理换位、将心比心, 也就是设身处地对他人的情绪和情感的认知性的觉知、把握与理解(车文博, 2001)。主要体现在情绪自控、换位思考、倾听能力以及表达尊重等方面。Ferguson, Stegge & Damhuis (1991)认为, 内疚的出现取决于儿童基于认知的能力, 如同理心。霍夫曼(Hoffman, 1982)提出, 个体通常会对处于难过状态的其他个体进行一种移情倾向的判断, 之后或许会意识到, 很可能是由于自身的不良行为造成了他人这种难过的情绪状态, 因此个体会产生自我道德准则的内省, 即无意识地开始体验内疚情绪, 为了使自己减少这种由于良心的反省带来的内疚感, 个体在之后的行为中开始尝试约束自己以防做出另外的伤害行为。即使在以后出现某些伤害行为, 也会想方设法请求原谅, 做出补偿行为, 以期减少对其他个体的伤害, 并且降低自己的内疚感。也就是说, 内疚是对客体是否体验到难过等情绪的共情性反应, 以及主体是否对导致负性情绪体验原因指向自我的认知这两者的统一体。研究发现, 同理心与内疚感倾向和亲社会行为密切相关(Roberts, Strayer, & Denham, 2014)。一项关于情绪和亲社会行为的研究表明, 有同理心的儿童在内疚上的得分更高(Larsen & Buss, 2009)。Gambin & Sharp (2018)发现认知同理心与情境内疚感有着密切的联系。

3. 内疚的发展过程

内疚情绪在婴幼儿时期开始萌芽。Kochanska 等(2002)人发现 22~33 个月到 34~46 个月的幼儿在出现错误行为的实验情境中(如把娃娃弄坏了)会表现出内疚情绪反应, 如在犯错后体验到的不安的程度、倾向道歉的程度以及对他人错误的敏感度都会有所增加; 其中母亲提到在犯错后会出现的后果并且会主动认错弥补过失的幼儿与其他同伴相比, 在以后犯错的次数要少。许仲红使用过失情境范式观察 2~4 岁儿童在损坏对主试有重要意义的玩具后的 5 种典型反应(目光回避、身体紧张、总体的苦恼反应、消极情绪和积极情绪), 认为 2~4 岁幼儿的内疚无显著的年龄差异(孟妍菁, 2018; 许仲红, 2007)。Mascolo & Fischer (1995)提出, 大约到了 3 岁左右, 儿童开始在他人评价的基础上形成自己的行为准则, 如果自己的外在行为与内在准则不适合时, 则产生消极自我意识情绪, 如内疚和羞耻。内疚水平随着年龄的增长而升高, 3~4 岁是幼儿内疚缓慢发展时期, 4~5 岁是幼儿内疚发展的关键时期(董傲然, 2014)。6~8 岁时, 儿童对内疚的感受更深刻, 表现出一定的修复行为, 责任型内疚开始发展; 到了 9~12 岁, 儿童的道德认知结构逐渐完善, 道德水平提高, 当他们意识到自己违背了德规范, 内疚感就会产生。Ferguson, Stegge, & Damhuis (1991)发现儿童只有在能够对自己的行为负责并根据规范标准评价自己和他人的行为之后, 才开始表现出认识到适当情况下感到内疚的能力, 这种情况不早于 7 岁, 也不晚于 10 岁。

青春期是自我意识和自我意识情绪发展的高峰时期(Rankin, Lane, Gibbons, & Gerrard, 2004; Somerville et al., 2013)。基于责任的同伴关系间的内疚是初中生内疚的主要类型, 初中生的内疚情绪体验在年级上不存在差异, 在性别、他人评价、情境类型以及情境类型与他人评价的交互作用上存在显著差异(丁芳, 周璁, 胡雨, 2014)。11 年级学生与 5 年级、8 年级学生相比, 家庭情境的内疚减少, 同伴内疚增加, 8 年级学生因违背规则产生的内疚体验达到高峰(Wiebe et al., 1994)。从青春期到老年内疚感都在持续地增长, 在 70 岁左右达到一个稳定的阶段, 平均而言, 女性报告经历了更多的内疚(Orth, Robins, & Soto, 2010)。

4. 未来研究方向

第一, 前人的研究大多都集中于关注成年人的内疚情绪, 也有部分研究者在探究青少年的内疚情绪(Meesters et al., 2014, 2017; Gambin & Sharp, 2018)。Wang et al. (2018)采用自述问卷调查了雅安地震三年半后庐山县 706 名青少年幸存者, 研究发现幸存者内疚感对创伤后应激障碍(PTSD)和创伤后成长(PTG)均有积极影响。但是目前关于婴幼儿内疚情绪的相关研究并不多。有研究者采用过失情境范式考察了内疚对儿童认知功能的影响, 发现内疚组 3~4.5 岁儿童的抑制控制得分低于中性组; 然而, 两组的灵活性得分没有显著差异(Lapan & Boseovski, 2017)。根据埃里克森的人格八阶段理论, 3~6 岁的幼儿主要发展任务是获得主动感克服内疚感, 研究 3~6 岁幼儿内疚情绪的发展对培养个体道德感和主动感, 建立良好人际关系等发挥着自我调节的作用, 因此未来可以进一步对幼儿内疚情绪的发展特点和影响因素进行研究。

第二, 前人研究表明内疚的神经机制是非常复杂的, 内疚的产生过程、内疚体验本身以及内疚的自我调节等可能都涉及到不同的神经机制, 这需要更多相关研究去验证。另外, 关于内疚情绪的影响因素的研究多是基于相关法或者是通过神经机制的研究来推测的, 还需要进一步丰富内疚情绪研究的实验范式, 通过实验法对影响内疚情绪的认知因素和社会因素等做出因果推断。

第三, 研究表明, 基本情绪具有明显的、普遍性的表情识别系统, 而对于自我意识情绪的外在表现不仅仅表现在面部活动, 还包括身体姿势、手臂的活动、头部的运动等, 综合这些非言语的行为信息, 情绪表达才得以识别。以往研究发现了一些内疚情绪产生时的普遍的表现, 如, 脸红、流泪、低头、紧张、目光回避、担心等(Darwin, 1965; Zahn-Waxler, 1992; Yu et al., 2017; 文静, 2018; 于瑛琦, 2013)。但是到目前为止内疚情绪的研究还没有发现一个可靠的、稳定的、能够被识别的情绪表达系统, 未来的研究可以综合观察法、生理反馈技术、眼动仪等进一步研究内疚情绪发生时的外在反应和内在反应, 建立内疚情绪的识别系统, 为内疚情绪的研究提供新的依据和方法。

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