

“What a wonderful book! It demonstrates how medicine, biology, and evolutionary theory can be brought together to illuminate an important part of the human condition.”

—EDWARD O. WILSON,
Harvard University

Pathological Altruism

Edited by
Barbara Oakley, Ariel Knafo,
Guruprasad Madhavan, and David Sloan Wilson

OXFORD

ADVANCE PRAISE FOR *PATHOLOGICAL ALTRUISM*

“What a wonderful book! This is one of the few books in evolutionary biology I’ve read in the past ten years that taught me something completely new. It demonstrates how medicine, biology, and evolutionary theory can be brought together to illuminate an important part of the human condition.”

—Edward O. Wilson

Pellegrino University Research Professor Emeritus and Honorary Curator
Museum of Comparative Zoology, Harvard University

“Be careful what you wish for’ might be one way of summing up the take-home message of this strikingly original book, highlighting the fact that ‘more is not always better’ when it comes to either being the altruist or the recipient of altruism.”

—Jay Belsky

Professor of Psychology, Birkbeck
University of London

“A hugely valuable and important contribution to a strangely neglected area of both individual psychopathology and our thinking as a society—a book that deserves to be very widely read, and should inform and stimulate discussion not just in psychiatry and psychology, but in our culture at large.”

—Iain McGilchrist

Former Fellow, All Souls College, Oxford
Author of *The Master and His Emissary*

“While other-regarding actions are rightly deemed the moral alternative to selfishness, and while a new biological science of generosity shows that such prosocial actions are in general associated with flourishing and health in the agent, there is always the problem of a good thing going bad. Barbara Oakley and her colleagues have addressed the dark side of altruism, for the altruistic personality can be manipulated by nefarious ideologies and overwhelmed by excessive expectations, can ignore the due care of the self and be unwise in its application. *Pathological Altruism* surveys the dark side of a human capacity that is otherwise one of our saving graces. In this regard, altruism, hope, forgiveness, creativity, purpose, and so many positive human assets can easily be distorted. It is good to have such discussions available.”

—**Stephen G. Post**

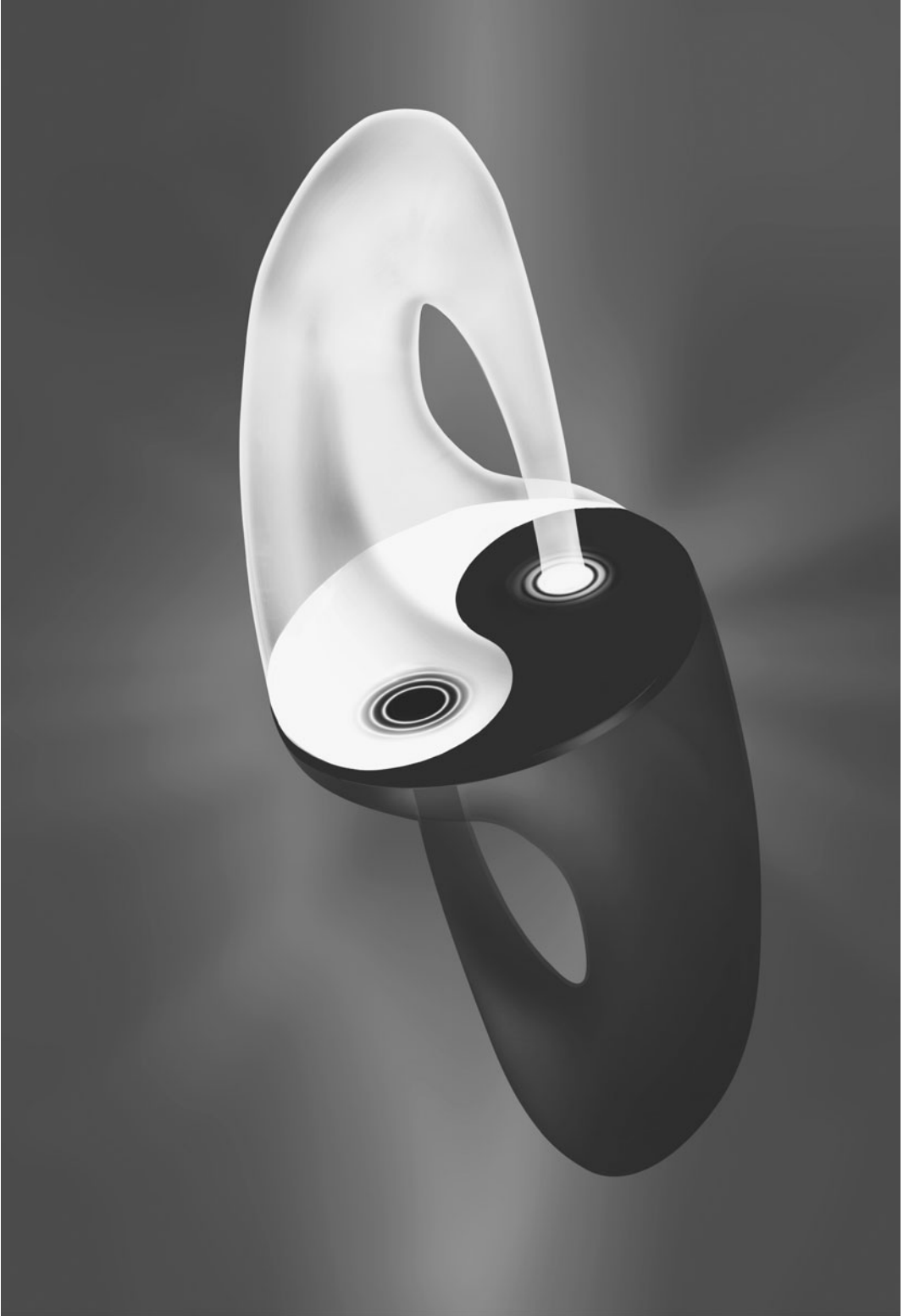
Director, Center for Medical Humanities, Compassionate Care, and Bioethics
Department of Preventive Medicine, Stony Brook University
Editor, *Altruism and Health: Perspectives from Empirical Science*

“Pathological altruism? Sounds like an oxymoron, but this fascinating book quickly convinces you that altruism can go seriously mad and bad. The great breadth and quality of contributors to this book from psychiatry, psychology, and philosophy—and that’s just the ‘P’s’—shed light on the dark side of our evolutionary propensity towards altruism, which can be subverted to a wide range of pathologies such as survivor guilt, drug co-dependency, personality disorders, and eating disorders. When within-group altruism is exploited to between-group hostility, it can lead to suicide martyrdom and genocide.”

—**Robert Plomin**

MRC Research Professor and Deputy Director
Social, Genetic and Developmental Psychiatry Centre
Institute of Psychiatry, King’s College London
Past-President of the Behavior Genetics Association
Author of *Behavioral Genetics* (now in its 5th edition)

PATHOLOGICAL ALTRUISM



A new perspective regarding altruistic actions and their consequences.
Image © Kevin Mendez-Aracena and Barbara Oakley

PATHOLOGICAL ALTRUISM

EDITED BY

Barbara Oakley

Ariel Knafo

Guruprasad Madhavan

David Sloan Wilson

FOREWORD BY

Francisco J. Ayala

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of the authors alone and do not necessarily reflect the views of the organizations they represent.
—*The Editors*

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Printed in the United States of America on acid-free paper

To the late Fred Preston

Whose contributions to this volume are sorely missed

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FAUST: All right—who are you, then?

MEPHISTOPHELES: Part of that force which would do ever evil, and does
ever good.

—Johann Wolfgang von Goethe

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Barbara Oakley, Ariel Knafo, and Michael McGrath

- *Pathological altruism* might be thought of as any behavior or personal tendency in which either the stated aim or the implied motivation is to promote the welfare of another. But, instead of overall beneficial outcomes, the “altruism” instead has irrational (from the point of view of an outside observer) and substantial negative consequences to the other or even to the self.
- Many harmful deeds—from codependency to suicide martyrdom to genocide—are committed with the altruistic intention to help companions or one’s own in-group. Thus, it is worthwhile to study how well-meaning altruism can shade into pathology.
- Studies of pathological altruism provide for a more nuanced and sophisticated understanding of altruism.

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Lynn E. O’ Connor, Jack W. Berry, Thomas B. Lewis, and David J. Stiver

- Empathic reactions to pain or distress in others are instantaneous and begin the path to both normal and pathological altruism. These reactions move quickly to implicit empathy-based guilt, linked to a belief that one should try to relieve the suffering of others.
- Empathic guilt is further linked to evaluations of fairness, equality, and the equitable distributions of resources.
- Survivor guilt (inequity guilt) is a specific form of empathic guilt that tends to become pathogenic when based on a false belief that one’s own success, happiness, or well-being is a source of unhappiness for others, simply by comparison. People with high survivor guilt may falsely believe they are “cheaters.”
- *Pathogenic guilt leads to pathological altruism.* In pathological altruism, the altruistic behavior helps no one and potentially harms the altruist, the recipient of the altruism, or both.
- Empathic concern and empathic guilt are evolved psychological mechanisms sustaining mammalian group cohesion. Altruism may fail to favor fitness at the level of the individual in within-group competition, while increasing fitness at the level of the group in between-group competition.

- Pathogenic guilt and pathological altruism are commonly found in mental disorders, such as depression, posttraumatic stress disorder (PTSD), and obsessive-compulsive disorder (OCD).

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- In the same way that the process of natural evolution selects features of the human species, the cultural environment selects for patterns of behaviors during the lifetime of an individual or a group.
- One particular form of human behavior, language, is of great survival value. But language also amplifies the way we experience both the positive and negative aspects of the world. This can reinforce behaviors that are damaging for individuals and groups.
- Some behaviors that may play a role in pathological altruism are *experiential avoidance*, a *conceptualized self*, *perspective-taking*, and *values-based action*.
- *Acceptance and commitment therapy* and *relational frame theory* lay forth a scientific framework and provide tools to modify such behaviors, which points to their potential utility to reduce pathological altruism.

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Michael McGrath and Barbara Oakley

- Codependency is an inability to tolerate a perceived negative affect in others that leads to a dysfunctional empathic response.
- Codependency likely shares roots with pathological altruism.
- There are evolutionary, genetic, and neurobiological components to the expression and propagation of codependent behaviors.

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David Brin

- The word, “addiction” appears to limit our perception of a wider realm—*general behavioral reinforcement* within the human brain. If neurochemical processes reinforce “good” habits such as love, loyalty, joy in music or skill, then addiction should be studied in a larger context.
- If a mental state causes pleasurable reinforcement, there will be a tendency to return to it. Meditation, adoration, gambling, rage, and indignation might all, at times, be “mental addictions.”
- This more general view of reinforcement suggests potential ways to reduce or eliminate drug addiction, as well as self-induced rage.
- Self-righteousness and indignation may sometimes be as much about chemical need as valid concerns about unfair actions. Among other outcomes, this may cause “pathologically altruistic” behavior.
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- The Five-Factor Model of personality can be used to describe adaptive and maladaptive variants of altruism.
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Rachel Bachner-Melman

- Individuals with eating disorders tend to sacrifice their own needs and interests and devote themselves instead to helping and serving others.
- Selflessness and concern for appropriateness, concepts linked to pathological altruism, have been shown to characterize women with eating disorders.
- Developmental, interpersonal, family, cultural, genetic, personality, and social factors no doubt combine to make pathological altruism a characteristic of people who develop eating disorders.

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- In animal hoarding, animals are used to support the hoarder's own emotional needs with respect to intimacy, self-esteem, control, identity, and fear of abandonment.
- Self- versus other-centeredness in animal hoarding reflects a lack of empathy and often leaves the true needs of animals unmet.
- Precipitating factors for animal hoarding likely include failure to develop functional attachment styles during childhood as a result of caregiver unavailability, neglect, or abuse.
- A hoarder's feeling of being a savior of animals is not the same as actually saving those animals. Although believing they are animals' saviors, rescuer hoarders fail to provide for the animals' basic life requirements.

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- The Williams syndrome style of social engagement occurs alongside high levels of anxiety and social vulnerability in adults.

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- Believing that you are acting in another’s best interest is not synonymous with acting in another’s best interest. It is a belief, not a fact.
- Moral judgments, such as “good intentions,” arise out of basic biological drives, not out of inherent goodness or evilness.
- Justifications of behavior such as “I’m just trying to help,” should be used with great restraint and viewed with great skepticism.

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Madeline Li and Gary Rodin

- Individuals who disavow their own need for support may be vulnerable to distress in the context of medical illness, both as patients themselves and as caregivers to others.
- The term “pathological altruism” has heuristic appeal, but is problematic in the context of life-threatening illness in that:
 - The term “pathology” in this circumstance implies a categorical external judgment of behavior and motivation, based on an arbitrary threshold that does not necessarily account for the social or relational context or the degree of suffering of the other.
 - The concept of altruism implies a dichotomy, often false, between the interests of self and those of the other.
 - Humans are relationally organized, such that acts of caregiving, particularly toward family members or loved ones, are often intrinsically rewarding and therefore not purely altruistic.
- The multiple determinants of altruism in the cancer caregiving context challenge us to develop a new nosology of such behavior and concern, informed by biological, social, and psychodynamic theory.

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- Therapeutic jurisprudence and neuroimaging are valuable tools when considering the treatment of pathological altruism in the law, in cases of organ donations to strangers and cases raising “cultural defenses.”
- Therapeutic jurisprudence gives us a benchmark by which we can assess whether the pathological altruist (if, indeed, the altruist is pathological) has sacrificed her dignity to do the putatively pathologically altruistic act, an assessment process that can also illuminate whether the underlying behavior is irrational, harmful to others, or self-harming.
- Neuroimaging gives us new tools to potentially assess whether the pathological altruist is a rational moral agent in doing such acts.

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- Healthy forms of altruism and pathological altruism are distinguished by the compulsion to be altruistic coupled with a maladaptive outcome.
- Pathological altruism may be found in association with criminal behavior, in which the altruist may be the victim, the victimizer, or both.
- Pathological altruism may be viewed as a manifestation of cognitive distortions resulting from genetic, chemical, environmental, or developmental factors acting alone or in concert.
- Pathologically altruistic behavior can be classified into four major types: *protective*, *defensive*, *masochistic*, and *malignant*, each having both psychotic and nonpsychotic incarnations.

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- Pathological altruism can be briefly summarized as altruism that:
 - is unnecessary or uncalled for
 - has consequences that cause the actor to complain, yet the actor continues doing it anyway
 - is motivated by values or needs within the altruist that are irrational or are symptoms of psychological disturbance
 - is of no real benefit to anyone, and a reasonable person would have foreseen this
- The higher the level of altruistic behavior reported by subjects, the higher their level of criminal victimization.
- Self-reported altruism has been found to be a significant predictor of both property and personal crime victimization.
- The relationship between altruism and victimization has been found to be especially due to *risky altruism*, which in turn is correlated with the basic personality trait of Sensation Seeking.

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- Suicide attacks are a combative tactic arising from a lethal, nonpathological altruism in some warfare contexts.
- Altruism is the only widely agreed upon temperamental attributes of suicide attackers.
- Strong altruistic dispositions are increasingly being found to have underlying biological mediators.
- Understanding the neurocognitive underpinnings of willingness to commit extreme altruistic acts may help us understand suicide attacks.

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- Low self-control, which is a major covariate of criminal behavior, appears early in life and is relatively stable over the life course.
- Levels of self-control may vary across historical periods as people become more sensitive to socially intrusive behavior.
- The perplexing levels of obedience in major genocides do not reflect deficiencies in self-control but suggest the oversocialization of the internal executive function by external social hierarchies.

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- Altruism and emotional contagion have a powerful capacity to mobilize financial and humanitarian aid to impoverished nations.
- Although external economic assistance has been helpful for many countries, a large number of altruistic, non-strategic, foreign aid programs over the past several decades have failed—worsening the very situation they were meant to help. Many other humanitarian programs have also been ineffective at enormous cost.
- Altruistic efforts for social improvements must be guided, not purely by emotion, but with a well thought-out objective strategy and endpoint.
- Neuroscience is allowing us to understand how default emotional approaches to helping others can backfire and cripple otherwise noble intentions.
- Public policies and interventions that have incorporated smart, strategic, and tempered altruism may be effective in alleviating poverty and stimulating economic development.
- There may be value in recruiting a new breed of non-traditional talent that is capable of reframing the way development assistance is carried out.

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Arun Gandhi

- Finding Truth was Gandhi’s ultimate objective.
- Nonviolence is a key means for obtaining Truth.
- Nonviolence can, on occasion, become a pathologically altruistic enterprise, unnecessarily hurting others, and it cannot be dogmatically followed if the greater good of Truth is to be attained.

**CHAPTER 19 A CONTRARIAN PERSPECTIVE ON ALTRUISM:
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David Brin

- Much of what is called “altruistic” behavior in nature can have self-serving, kinship, or game-based roots that we should not ignore simply out of aesthetic Puritanism.
- Unselfish altruism can emerge out of satiability, satiation, empathy, and sympathy, as well as cultural and individual values. Although sometimes implemented in ways that are ill-conceived or pathological, this trait is viewed as a high feature of intelligence.
- Occasionally, altruism *between species* seems to be unleashed by full bellies and sympathy, (sometimes) along with enlightened self-interest in the long-term survival of an entire world.
- Modern Western society disavows the notion that ideas are inherently dangerous or toxic, or that an elite should guide gullible masses toward correct thinking. However, virtually every other culture held the older, prevalent belief in “toxic memes.” As yet, there is no decisive proof supporting one side over the other.
- Western assumptions color the “search for extra-terrestrial intelligence” (SETI), just as previous “first-contact” events were driven by cultural assumptions of past eras. Especially pervasive—and unwarranted—is the belief that all advanced civilizations will automatically be altruistic.

CHAPTER 20 IS PATHOLOGICAL ALTRUISM ALTRUISM? 262

Bernard Berofsky

- Ethical altruism can be defined either as the view that we have obligations to others or that altruism is a virtue. Ethical egoists believe that we have obligations only to ourselves and that altruism is not a virtue.
- Psychological egoists deny that there are altruists. Since altruism is characterized by intention rather than outcome, and there are people who act with the intention to help others at their own expense, psychological egoism seems clearly false.
- Since a conscious intention to help can conceal an unconscious motivation to harm, one can redefine psychological egoism more plausibly as the view that no one is really motivated to sacrifice his or her own interests to help others.
- If the psychological egoist is right and there are no altruists, how can there be pathological altruists?
 - First answer: Pathological types have some common characteristics—compulsiveness, destructiveness, ignorance of motivation.
 - Second answer: More importantly, the pathological altruist's altruistic *intention* is an essential expression of his self-regarding *motivation*. He must intend to help in order to serve his own destructive needs.

CHAPTER 21 ALTRUISM, PATHOLOGY, AND CULTURE 272

John W. Traphagan

- Altruism and pathology are concepts that do not necessarily translate well from one culture to another; this raises questions for how biological and cultural aspects of these concepts influence behavior.
- Certain features of altruistic behavior may be relatively consistent across different cultures, but nuances of meaning vary, necessarily implying that deviation from the “norm” will vary as well.
- Pathological altruism is behavior that deviates from norms of action that shape concepts of altruism in particular cultures, but those acts themselves have no moral value and are not necessarily parallel from one culture to another.

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Joan Y. Chiao, Katherine D. Blizinsky, Vani A. Mathur, and Bobby K. Cheon

- Western and East Asian cultures vary in individualism and collectivism, or cultural values that influence how people think about themselves in relation to others.
- Cultural differences in social behavior are associated with cultural differences in allelic frequency of serotonin transporter-linked polymorphic region *v* (*5-HTTLPR*) variants.
- Culture–gene coevolution between individualism–collectivism and the *5-HTTLPR* may influence brain regions associated with empathy and altruism.

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Jorge M. Pacheco and Francisco C. Santos

- Without additional mechanisms, cooperation is not an evolutionarily viable behavior, as the *tragedy of the commons* often emerges as the final doomsday scenario.

- In a black-and-white world in which individuals' actions are limited to cooperate or to defect, pathological altruists can be seen as obstinate cooperators, who go to all lengths to maintain their behavior.
- Pathological altruists cooperate indiscriminately, being unmoved by the temptations of greed and fear that lead to defection.
- A single pathological altruist can obliterate the evolutionary advantage of defectors, letting others ignore the temptation to cheat and become, themselves, cooperators. Hence, they generate a messianic effect, which spreads through the entire community.
- Pathological altruists catalyze social cohesion, as their presence benefits the entire community even when defection remains as the single rational option and individuals act in their own selfish interest.

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Satoshi Kanazawa

- Psychologically altruistic acts may not necessarily be evolutionarily altruistic.
- Battered women and their violent mates have more sons than others.
- Therefore, battered women's decision to stay with their abusers may be psychologically altruistic, but evolutionarily self-interested, as they gain the genetic benefit of producing violent sons.

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Carolyn Zahn-Waxler and Carol Van Hulle

- Empathy emerges early in life and often motivates caring, prosocial actions toward others. This leads to social competence and healthy emotional development.
- Children's empathy can lead to pathogenic guilt, anxiety, and a sense of personal failure when early family environments require too much of them.
- Parental depression contributes to pathogenic guilt in children which, in turn, creates conditions conducive to risk for developing depression.
- Genetic and environmental factors combine to determine why some children, especially girls, are likely to develop empathy-based pathogenic guilt and depression.

CHAPTER 26 AUTISM, EMPATHIZING-SYSTEMIZING (E-S) THEORY, AND PATHOLOGICAL ALTRUISM 345
Simon Baron-Cohen

- Empathy involves two very different neural processes: affective (feeling an emotion appropriate in response to another person's thoughts and feelings), and cognitive (also called Theory of Mind—that is, being able to imagine someone else's thoughts or feelings).
- The ability to empathize forms one pole of a personality-related dimension—the opposite pole is the ability to systemize. (Put briefly, systemizing is the drive to create and understand systems, for example, the mechanical system of an old-fashioned clock).
- On average, empathizing is stronger in females, whereas systemizing is stronger in males.

- Empathizing-Systemizing theory can be used to quantify people’s drive to empathize and systemize. More importantly, it makes predictions regarding the origins of conditions such as autism, which involves intact or even strong systemizing alongside difficulties in empathy.
- Empathizing-Systemizing theory also predicts that some individuals will have difficulties systemizing, but an intact or even a strong drive to empathize. These “hyper-empathizers” may escape clinical notice.

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Karol M. Pessin

- People are social animals who go to great lengths to belong—a need that may be rooted in biology. This behavior and biology directed toward social belonging may result in heightened altruism toward some and diminished empathy toward others.
- Whether altruism is pathological depends on its context, as empathy may be selective toward particular individuals or one’s own in-group, at the expense of other individuals or groups.
- Oxytocin and vasopressin systems, structurally flexible and capable of rapid changes, appear to be key in understanding social behaviors in rapidly changing human societies.
- A “seduction super-response” may be rooted in biological systems for how receptive one is to social signals, such as vocalizing. Similarly, impaired sensitivity to social signals may lead to “hyper-trust” in failing to detect social threats.
- More broadly, social signals are transmitted through groups; a seduction super-response or undue hyper-trust may be a response to social contagions involving neurosensory or chemosensory means yet to be discovered.

**CHAPTER 28 EMPATHIC DISTRESS FATIGUE RATHER THAN COMPASSION
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Olga Klimecki and Tania Singer

- Compassion fatigue is introduced as a form of pathological altruism since it is altruistically motivated and gives rise to symptoms of burnout.
- Empirical findings are discussed that dissociate different forms of vicarious responses.
- We conclude that the term *compassion fatigue* should be replaced by the term *empathic distress fatigue*.

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Marc D. Hauser

- Pathological altruism emerges as a by-product of a runaway process of selection for in-group favoritism and self-deception.
- In-group favoritism coupled with self-deception or denial of the other, leads to pathological commitment to one group’s ideology, coupled with out-group antagonism that can lead to mass genocides.
- Self-sacrifice and martyrdom represent the ultimate forms of pathological altruism, at least from the perspective of the victims. From the perspective of the pathological altruist’s group (e.g., religion), however, it is divine altruism, revered, and adaptive for the martyr’s faith.

- When pathological altruism runs away, it can lead to mass genocides, as obstinate cooperators disregard the humanity—and human rights—of all who interfere with the ideological cause.

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Joachim I. Krueger

- Personality-based approaches to pathological altruism are either typological or dimensional, with distinct implications for the question of how pathological altruism is propagated.
- In a mixed population of individuals with different social preferences, altruists do poorly. They may not see it that way, however, which makes their behavior pathological.
- In a Volunteer’s Dilemma, altruists suffer when interacting with other altruists.
- When interpersonal dilemmas are nested within intergroup dilemmas, the meaning of altruism is contingent on perspective.
- Evolution has favored parochial morality (altruism), leaving us with the intractable problem of how to satisfy the local group and the general population at the same time.

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David Sloan Wilson

- The concept of a pathological adaptation might seem like a contradiction of terms, but traits that count as adaptive in the evolutionary sense can be harmful to others and even to oneself over the long term.
- When altruism is defined in terms of behavioral consequences, it is inherently vulnerable to exploitation by selfishness and evolves only when altruists manage to confine their interactions with each other. Even when altruism evolves because it is more successful than selfishness, on average, some altruists still encounter selfish individuals and are harmed by their own behavior.
- Social environments are pathological when they are structured to make altruists vulnerable to exploitation. Much can be done to create social environments that favor altruism as a successful behavioral strategy.
- Altruism at one level of a multitiered hierarchy (e.g., within groups) can be used for selfish purposes at higher levels (e.g., between-group conflict). The costs and benefits of altruism are repeated at all levels.
- When altruism is defined in psychological terms, it can be regarded as a proximate mechanism for motivating altruistic behavior. Just as there are many ways to skin a cat, there are many proximate mechanisms for motivating altruistic behavior that can be expected to vary among individuals and cultures.
- The analysis of pathological altruism in this volume should be extended to other traits associated with morality and group-level functional organization.

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Lastly, we would like to thank Jeff Miller of faceoutstudio for his cover design. According to Jeff and Oxford editor Abby Gross, "The onion in the cover page illustrates how something rooted in what we think of as purity—the white, clearish center—could reverberate out or develop into something dark—the brown, crinkly outer layers. Layers within layers are also symbolic of human nature, from emotions to motives to behaviors and beyond that, the impact of behaviors outside of the self." No editors could be happier with such beauty, originality, or insight, all wrapped into one seemingly simple image.

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FOREWORD

MY DICTIONARY (*Merriam Webster Collegiate Dictionary*, 10th edition) defines altruism as “unselfish regard to or devotion to the welfare of others.” The dictionary adds a second definition: “behavior by an animal that is not beneficial to or may be harmful to itself but that benefits others of its species.” This second definition relates to “biological” altruism, which applies to all animals and makes explicit what is implied by “unselfish” in the first definition—namely, that the agent need not benefit and, indeed, may be harmed by the behavior. Biological altruism is assayed in reproductive terms. Human altruism has a broader scope, “the welfare of others,” and it does not necessarily connote action, but simply “regard” or “devotion.”

The target of the regard or the behavior is, in both definitions, the welfare or the benefit of others. If such is the case, it would seem that “pathological altruism” might be a contradiction in terms. It is not so, precisely because *human* altruism, which is the subject of the present book, necessarily denotes only regard or consideration of others, not necessarily action beneficial to them. A person’s actions may harm others who are held in high regard by that person, because of misjudgment, or because the intended beneficiaries are some third party, not the immediate targets of the action. Think of suicide bombers. The terrorists that destroyed the New York Twin Towers surely thought that they were acting for the benefit of Islam.

All these issues and many more are extensively and profoundly explored in *Pathological Altruism*. I offer here the simple points made in the previous paragraph, because I presume many potential readers may react to the book’s title as I did when I was first introduced to this book. I was puzzled. Why “pathological” altruism? Is it not the case that altruism bespeaks benefits to others and virtuous intentions by the altruist? Upon reflection, I imagined that instances of pathological altruism might sometimes occur. I read the manuscript and discovered that pathological altruism is not an aberration that might occasionally be the case, but rather a behavior that overwhelmingly occurs in human social intercourse.

Reading *Pathological Altruism* has been for me an adventure of discovery, taking place at many levels. This book skillfully explores the cognitive and emotional foundations of pathological altruism; the associated psychiatric conditions; its diverse and profound societal consequences; how cultures deal with misplaced altruism and how evolution shaped it; and the development of pathological altruism at the individual level. I am certain that *Pathological Altruism* will be also, for other readers, a stimulating, profitable, and enjoyable enterprise. All chapters are written by experts, conveying their message, even when somewhat esoteric, with clarity and, often, with verve. The concluding chapters are

a suitable colophon for an exciting book, engaging overviews encompassing evolutionary, psychological, philosophical, and cultural perspectives.

Read this book. You will learn much that would be new to you, whatever your expertise or interest. And I would be surprised if you don't enjoy this voyage of discovery.

Francisco J. Ayala
Templeton Prize Laureate
University Professor
Donald Bren Professor of Biological Sciences
University of California, Irvine

CONTRIBUTORS

Francisco J. Ayala

University Professor and Donald
Bren Professor of Biological
Sciences
University of California, Irvine
Irvine, California

Rachel Bachner-Melman

Licensed Clinical Psychologist
Coordinator, Eating Disorders Unit
Adult Psychiatric Ward
Hadassah University Medical
Center
Ein Karem, Jerusalem, Israel

Simon Baron-Cohen

Professor of Developmental
Psychopathology
Director of the Autism Research
Centre
University of Cambridge
Cambridge, United Kingdom

Bernard Berofsky

Professor Emeritus
Department of Philosophy
Columbia University
New York, New York

Jack W. Berry

Assistant Professor
Department of Psychology
Samford University
Birmingham, Alabama; and
Codirector of the Emotion,
Personality, and Altruism
Research Group
Wright Institute
Berkeley, California

Katherine D. Blizinsky

Graduate Student
Interdepartmental Neuroscience
Program
Northwestern University
Evanston, Illinois

Augustine Brannigan

Professor of Sociology and Fellow
Centre for Military and Strategic
Studies
University of Calgary
Calgary, Canada

David Brin

Scientist and Author
Encinitas, California

Vicki Bruce

Professor and Head of the School
of Psychology
Newcastle University
Newcastle upon Tyne, United
Kingdom

Robert A. Burton

Former Associate Chief
Department of Neurosciences
UCSF Medical Center at
Mount Zion
University of California,
San Francisco
San Francisco, California

Bobby K. Cheon

Graduate Student
Department of Psychology
Northwestern University
Evanston, Illinois

Joan Y. Chiao

Assistant Professor
Department of Psychology
Northwestern University
Evanston, Illinois

Arun Gandhi

Founder/President
Gandhi Worldwide Education
Institute
(www.gandhiforchildren.org)
University of Rochester
Rochester, New York

Marc D. Hauser

Professor
Departments of Psychology and
Human Evolutionary Biology; and
Director, Cognitive Evolution
Laboratory
Harvard University
Cambridge, Massachusetts

Steven C. Hayes

Nevada Foundation Professor
Department of Psychology
University of Nevada, Reno
Reno, Nevada

Robert J. Homant

Professor
Department of Criminal Justice
University of Detroit Mercy
Detroit, Michigan

Ali Jawaid

MD/PhD Student
Institute of Neuropathology
University of Zurich
Zurich, Switzerland

Satoshi Kanazawa

Reader in Management
Managerial Economics and
Strategy Group
Department of Management
London School of Economics and
Political Science
London, United Kingdom

Daniel B. Kennedy

Forensic Criminologist
Oakland University
Rochester, Michigan

Olga Klimecki

Doctoral Student
Department of Social
Neuroscience
Max Planck Institute for
Human Cognitive and
Brain Sciences
Leipzig, Germany

Ariel Knafo

Associate Professor
Psychology Department
The Hebrew University of Jerusalem
Jerusalem, Israel

Joachim I. Krueger

Professor
Department of Cognitive, Linguistic,
& Psychological Sciences
Brown University
Providence, Rhode Island

Thomas B. Lewis

Assistant Clinical Professor
of Psychiatry
School of Medicine
University of California,
San Francisco; and
Professor
Fromm Institute
University of San Francisco
San Francisco, California

Madeline Li

Assistant Professor
Department of Psychiatry
University of Toronto; and
Clinician-Scientist
Department of Psychosocial
Oncology and Palliative Care
Division of Behavioural Sciences
and Health Research
Princess Margaret Hospital
Toronto, Canada

Guruprasad Madhavan

Program Officer
Policy and Global Affairs
National Academy of Sciences
Washington, District of Columbia

Vani A. Mathur

Graduate Student
Department of Psychology
Northwestern University
Evanston, Illinois

Michael McGrath

Clinical Associate Professor
Department of Psychiatry
University of Rochester School of
Medicine and Dentistry; and
Medical Director and Chair
Department of Behavioral Health
Unity Health System
Rochester, New York

Jane N. Nathanson

Social Work and Rehabilitation
Consultant
Member,
Hoarding of Animals Research
Consortium
Boston, Massachusetts

Barbara Oakley

Associate Professor of Engineering
School of Engineering & Computer
Science
Oakland University
Rochester, Michigan

Lynn E. O'Connor

Professor
Director of the Emotion, Personality,
and Altruism Research Group
Wright Institute
Berkeley, California

Jorge M. Pacheco

Professor
Department of Mathematics
University of Minho
Campus of Gualtar
Braga, Portugal

Gary J. Patronek

Vice President for Animal Welfare
and New Program Development
Animal Rescue League of Boston
Boston, Massachusetts

Michael L. Perlin

Professor of Law
Director of the Online Mental
Disability Law Program
Director of the International
Mental Disability Law Reform
Project
Justice Action Center
New York Law School
New York, New York

Karol M. Pessin

Biotechnology Intellectual Property
Lawyer
Westlake Village, California

Jennifer Ruth Presnall

Graduate Student
Clinical Psychology Program
University of Kentucky
Lexington, Kentucky

Deborah M. Riby

Lecturer
School of Psychology
Newcastle University
Newcastle upon Tyne, United
Kingdom

Gary Rodin

Professor of Psychiatry
University of Toronto; and
Harold and Shirley Lederman Chair
in Psychosocial Oncology and
Palliative Care
Princess Margaret Hospital
Toronto, Canada

Francisco C. Santos

Associate Researcher
Department of Computer
Science
New University of Lisbon
Lisbon, Portugal

Tania Singer

Director
Department of Social Neuroscience
Max Planck Institute for Human
Cognitive and Brain Sciences
Leipzig, Germany

David J. Stiver

Librarian–Archivist
Graduate Theological Union
Berkeley, California

Adolf Tobeña

Professor of Psychiatry and Chair
Department of Psychiatry and
Forensic Medicine
Autonomous University of Barcelona
Barcelona, Spain

John W. Traphagan

Associate Professor of Religious
Studies and Anthropology
University of Texas at Austin
Austin, Texas

Brent E. Turvey

Forensic Criminologist
Forensic Solutions
Sitka, Alaska
Adjunct Professor of Justice Studies
Oklahoma City University
Oklahoma City, Oklahoma

Carol Van Hulle

Assistant Scientist
Waisman Center
University of Wisconsin–Madison
Madison, Wisconsin

Roger Vilardaga

Doctoral Student
Department of Psychology
University of Nevada, Reno
Reno, Nevada

Thomas A. Widiger

T. Marshall Hahn Professor of
Psychology
University of Kentucky
Lexington, Kentucky

David Sloan Wilson

Distinguished Professor
Departments of Biology and
Anthropology
Binghamton University
State University of New York
Binghamton, New York

Carolyn Zahn-Waxler

Research Scientist
Departments of Psychology and
Psychiatry
Center for Investigating Healthy
Minds, Waisman Center
University of Wisconsin–Madison
Madison, Wisconsin

PART I

**THE PSYCHOLOGY
OF PATHOLOGICAL ALTRUISM**



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PATHOLOGICAL ALTRUISM—AN INTRODUCTION

Barbara Oakley, Ariel Knafo, and Michael McGrath



KEY CONCEPTS

- *Pathological altruism* might be thought of as any behavior or personal tendency in which either the stated aim or the implied motivation is to promote the welfare of another. But, instead of overall beneficial outcomes, the “altruism” instead has irrational (from the point of view of an outside observer) and substantial negative consequences to the other or even to the self.
- Many harmful deeds—from codependency to suicide martyrdom to genocide—are committed with the altruistic intention to help companions or one’s own in-group. Thus, it is worthwhile to study how well-meaning altruism can shade into pathology.
- Studies of pathological altruism provide for a more nuanced and sophisticated understanding of altruism.

THE PAST DECADE has seen an explosion in research and interest in altruism,¹ and for good reason—not only is altruism beneficial, but neuroscience and genetics are now providing fresh and useful insights. For researchers, it is the best of all worlds—modern breakthroughs can allow us to help others by studying the very phenomenon of altruistically helping others.

The benefits of altruism appear so obvious, and a high regard for altruism is so deeply ingrained in modern Western culture, that it seems almost heretical to suggest that altruism may have a dark side. But some of human history’s most horrific episodes have risen from people’s well-meaning altruistic tendencies. Consider Oliver Wendell Holmes, one of America’s most admired Supreme Court justices, whose well-intentioned rhetoric supported eugenic forced sterilization: “It is better for all the world, if instead of waiting to execute degenerate offspring for crime, or to let them starve for their imbecility, society can prevent those who are manifestly unfit from continuing their kind” (*Buck v. Bell*, 1926). Or, master manipulator Adolph Hitler, who confided: “When I appeal . . . for sacrifice, the first spark is struck” (Waite, 1977, p. 396).

Some of human history's most horrific episodes have risen from people's well-meaning altruistic tendencies.

Pathological altruism might be thought of as any behavior or personal tendency in which either the stated aim or the implied motivation is to promote the welfare of another or others. But, instead of overall beneficial outcomes, the “altruism” instead has irrational and substantial negative consequences to

the other or even to the self. Marc Hauser, (Chapter 29), rightly notes that when discussing a pathological altruist, motivation becomes important. A working definition of pathological altruist (besides the obvious “a person who engages in pathological altruism”), might then be: “A person who *sincerely* engages in what he or she intends to be altruistic acts, but who harms the very person or group he or she is trying to help, often in unanticipated fashion; or harms others; or irrationally becomes a victim of his or her own altruistic actions.” Thus, a con artist who solicited funds for orphan children, when his real intention was to spend money on himself, would not be a pathological altruist. But the person who gave to the con man *could* be a pathological altruist.

The many authors showcased in this volume have viewed the central idea of pathological altruism from differing perspectives. Each of their approaches points to one disturbing truth: What we value so much, the altruistic “good” side of human nature, can also have a dark side. Altruism can be the back door to hell.

This book focuses on basic psychological schemata designed to explain pathological altruism from a straightforward psychological perspective. But one of its strengths is its accompanying exploration of the underlying neuropsychological and biological processes that actually account for it. Part I deals with the cognitive and emotional foundations that are most visible as the roots of pathological altruism. At their extreme, these involve those psychiatric conditions that are considered in Part II. The diverse and profound societal implications of pathological altruism are discussed in Part III. In Part IV, we turn to the social and macrobiological basis of pathological altruism—how do cultures deal with it, and how did evolution shape it? Part V explores the development of altruism and pathological altruism at the individual level, taking into account the neural processes involved. And finally, in Part VI, three of the most provocative and sophisticated authors in the field (Marc Hauser, Joachim Krueger, and David Sloan Wilson) undertake overall integrations of the subject matter, which encompass evolutionary, psychological, philosophical, and cultural perspectives (see Chapters 29, 30, and 31).

What we value so much, the altruistic “good” side of human nature, can also have a dark side. Altruism can be the back door to hell.

A major strength of this volume is that the contributing authors bring a combination of eclectic backgrounds and viewpoints to the study of pathological altruism, helping ground the subject in a scientific, social, and cultural matrix. For example, Augustine Brannigan's background as a sociologist helps him form his elegant hypothesis of genocide and pathological altruism based largely on social theory

(Chapter 16). Adolf Tobeña, on the other hand, in Chapter 15, uses his clinical perspective as a psychiatrist, and his firm views on the importance of biological influences, to form a theory of suicide bombings that complements Brannigan's work in an intriguing fashion. Madeline Li and Gary Rodin (Chapter 11) bring their wealth of psychiatric experience from cancer wards, where those who were previously the caretakers become, in turn, the most difficult patients to care for.

Social worker Jane Nathanson and veterinarian Gary Patronek (who also has a background in humane law enforcement) discuss the pathological altruism involved in animal hoarding in Chapter 8. Roger Vilardaga and Steven Hayes (Chapter 3) use their clinical sensitivity and behavioral theory of cognition to explain how our language abilities can become a double-edged sword, allowing us to become genuinely altruistic but also keeping us stuck at times in a state of psychological suffering that can ultimately affect others. And Bernard Berofsky brings to bear his philosophical training to illuminate the logic of the key concepts in Chapter 20. In so doing, he shows how “pathological altruism” is an appropriate label, despite the fact that pathological altruists are not really altruists.

The first known reference to *pathological altruism* in the professional literature is from a 1984 paper by Nancy McWilliams “The Psychology of the Altruist” (McWilliams, 1984). The subject was given a more comprehensive psychoanalytic treatment in a 2001 paper by Beth Seelig and Lisa Rosof: “Normal and Pathological Altruism” (Seelig & Rosof, 2001). Early psychoanalysts had been encouraged to think of all altruism as arising from masochistic impulses. But Seelig and Rosof relied on a psychoanalytic framework to discriminate between forms of altruism ranging from the “protoaltruism” observed in animals and parental nurturing, to the “psychotic altruism” of bizarre caretaking behavior seen in deeply disturbed individuals. In this volume, Brent Turvey (Chapter 13) provides an updated perspective on Seelig and Rosof’s work, grounded in Turvey’s substantial experience as a forensic scientist and criminal profiler.

The lack of systematic research and theory in regard to pathological altruism does not mean that maladaptive variants of altruism (as, for example, excessive self-sacrifice) have completely escaped clinical notice: Thomas Widiger and Jennifer Presnall (Chapter 6) connect the concept to dependent personality disorder in the *Diagnostic and Statistical Manual of Mental Disorders, 4th Edition, Text Revision* (DSM-IV-TR), as well as to the maladaptive form of agreeableness in the Five-Factor Model of personality.²

Pathologies involving altruism, however, have broader implications and profound importance in understanding the human condition from neuroscientific, psychological, psychiatric, and social perspectives. For example, autism involves a well-studied syndrome most often seen in males; it is characterized by strong systemizing skills coupled with little or no empathy. But, as described by Simon Baron Cohen in Chapter 26, there is evidence for a converse of autism more often experienced by females. This hyperempathetic condition would be characterized by superior empathizing skills and poor systemizing ability. Although lack of systemizing abilities would severely restrict career choices for the women involved, conditions of hyperempathy have drawn comparatively little research interest.

Indeed, as Michael McGrath and Barbara Oakley point out in Chapter 4, conditions involving hyperempathy may well underlie the mass appeal of such ill-defined concepts as codependency, so little studied from a scientific perspective. “Codependents” may, in pathologically altruistic fashion, support their paramours’ drug addiction while endlessly forgiving their emotional and physical abuse. Or, they may simply be “nice” people who are easily taken advantage of. As Karol Pessin explains in Chapter 27, variations in alleles related to vasopressin and oxytocin may well lie behind this type of behavior, and in fact, may lead to hyperresponsiveness to social signals of all sorts. In another vein of research explored by Debbie Riby and her colleagues, the overfriendliness of Williams syndrome, which can lead to increased risk of victimization, might also shed light on the genetics underlying some forms of codependent behavior (see Chapter 9).

In fact, pathologies of altruism may be related to a variety of conditions. As Rachel Bachner-Melman explains in Chapter 7, treating the selflessness of eating-disordered patients is an important aspect of recovery that goes beyond a focus on issues of food and weight. Olga Klimecki and Tania Singer (Chapter 28) explain how empathy can inadvertently lead to what is commonly called *compassion fatigue*—their chapter shows how the term would be more aptly termed *empathic distress fatigue*. Lynn O'Connor and her colleagues describe survivor guilt, empathy, altruism, and pathological altruism from the perspective of multilevel selection theory (Chapter 2). Carolyn Zahn-Waxler and Carol Van Hulle describe a pathway whereby empathy-based pathogenic guilt in children of depressed parents may lead to costly altruism and eventually culminate in depression (Chapter 25).

Pathological altruism—in the sense of an unhealthy focus on others to the detriment of one's own needs—may have a very early start, and can be seen in developmental personality processes. (Roth, 2008). This can be quantified using data from toddler-age twins (Knafo, 2006). Children were designated as highly *altruistic* if they were in the top 20% in measured prosocial behavior (Goodman, 1997). Another category related to *self-actualizing* behavior, such as “shows pleasure when s/he succeeds,” “continues trying, even when something is hard,” or “wants to do things by him/herself.” Children were rated as *low* in self-actualizing behaviors if they ranked in the bottom 20% of that category. Twins were thought to potentially show the beginning of a form of pathological altruism if they simultaneously ranked in the top 20% of altruistic behaviors and the bottom 20% of self-actualizing behaviors. Of 2,496 children, 73 (3%) met both criteria. That is, these children were very likely to share, care for other children, and help around the house, but were not at all likely to be characterized by “shows pleasure when s/he succeeds,” “continues trying, even when something is hard,” or “wants to do things by him/herself.”

Some forms of pathological altruism may exact a psychological price even at an early age.

Interestingly, these children were different from other children in their measured temperament. They were less likely to show high degrees of activity, and—unsurprisingly—were slightly more sociable (high motivation for sharing the company of others). Figure 1.1 demonstrates that pathological altruism can

have some benefits for children's adjustment, as it was associated with low degrees of conduct problems (aggression, tantrums). On the other hand, it may exact a psychological price even at this early age, as shown by the high scores in emotional symptoms, including worries, unhappiness, fear, nervousness, and somatization.

Viewing altruism as a potentially negative influence provides a new and surprisingly valuable perspective for a variety of complex problems. For example, altruism by its very nature can position the altruist for various types of victimization, as well as praise. Even if groups of altruists out-compete groups of nonaltruists, how could altruism have spread within a community in the first place? Jorge Pacheco and Francisco Santos's “The Messianic Effect of Pathological Altruism” (Chapter 23) provides an elegant new approach to this crucial, evolutionary conundrum. In some sense, unrequited altruism, even when it has apparently negative aspects from every perspective, can still have positive implications.

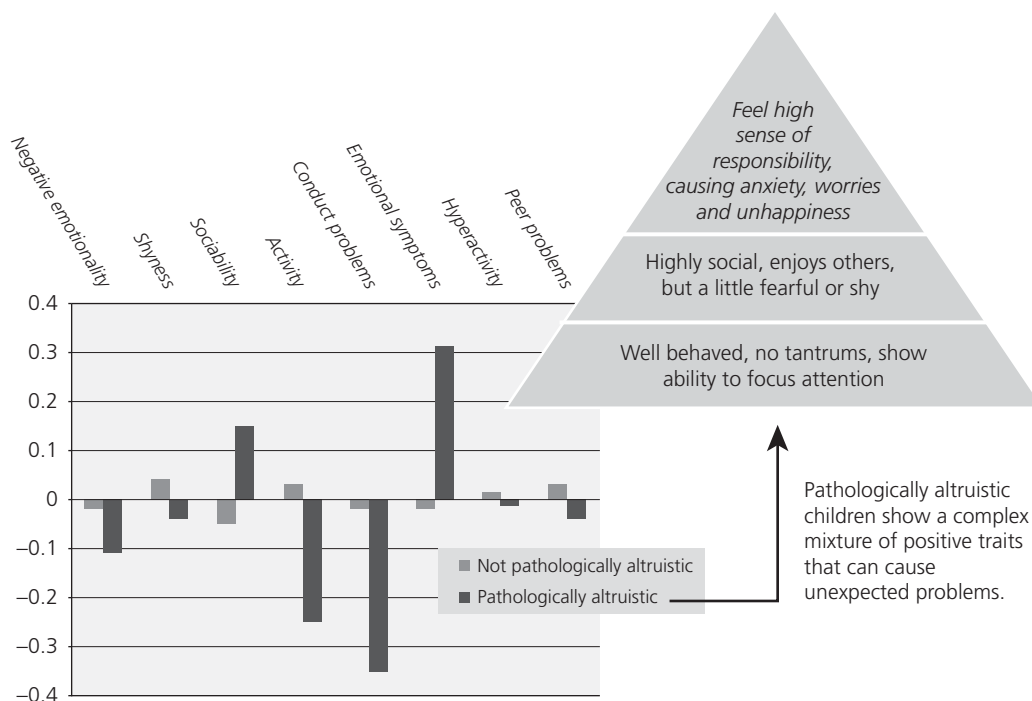


FIGURE 1.1

Mean levels of temperament and behavior problems of 3-year-old twins who display early signs of pathological altruism, as compared with other twins without the syndrome. One twin was selected per pair ($N = 1,248$ pairs). The data presented are based on mother-reported scores standardized separately for girls and boys.

* difference significant ($p < 0.05$ or lower).

One simple way of defining pathological altruism is to say that it involves well-meaning efforts that worsen the very situation they mean to help. This is explored by coeditors Guruprasad Madhavan and Barbara Oakley in their “Too Much of a Good Thing? Foreign Aid and Pathological Altruism” (Chapter 17). Such well-meaning behavior often involves self-righteousness, as explained by neurologist Robert Burton, in his personal story of one doctor’s abuse of power to “help” a mortally ill patient (Chapter 10). The dangers of “altruistic” self-righteousness in political partisanship (Chapter 5) are underscored by physicist and science fiction grand master David Brin, who also explores the dangers of modern Western notions of altruism as panacea in regard to the Search for Extra-Terrestrial Intelligence (SETI) project in Chapter 19.

A more sophisticated, nuanced view of altruism allows us to understand cultural differences in the concept, which in turn offers a better understanding of altruism’s core, as anthropologist John Traphagan explains in “Altruism, Pathology, and Culture” (Chapter 21). Similar sentiments are conveyed from a surprising evolutionary perspective by Satoshi Kanazawa in his “Battered Women, Happy Genes: There Is No Such Thing As Altruism, Pathological or

Viewing altruism as a potentially negative influence provides a new and surprisingly valuable perspective for a variety of complex problems.

Otherwise” (Chapter 24). Joan Chiao and her colleagues knit both cultural and genetic perspectives together as they describe the importance of culture–gene coevolutionary forces in shaping distinct cultural norms of empathy and altruism in Chapter 22.

That different people may view a single act as either beneficial or harmful has legal ramifications, as explored by mental disability law expert Michael Perlin in his discussion of the field of therapeutic jurisprudence (Chapter 12). This cuts to the heart of life-or-death issues, such as whether people should be allowed to sell their own kidneys, or whether a cultural defense for beating one’s wife is, indeed, defensible. And, as Robert Homant and Daniel Kennedy explain in the aptly titled “Does No Good Deed Go Unpunished? The Victimology of Altruism” (Chapter 14) viewing altruism with nuance also allows us to understand phenomena that are often unmentioned or unexplored. Thus, for example, the more altruistic behavior reported by subjects, the higher their level of criminal victimization: Self-reported altruism appears to be a significant predictor of both property and personal crime victimization.

Researchers shy from examining the seamy side of altruism for many reasons. But one of the most important seems to be that exposure of altruism’s gloomy underbelly might discourage people from being altruistic. One could argue that pathological altruism isn’t discussed for altruistic—perhaps pathologically altruistic—reasons. The consequence is that few recognize the phenomenon for what it is. Without an understanding of all aspects of altruism—misguided activities are perpetuated, and horrific acts can result. It is vital to understand how attempts to do good can inadvertently worsen the very situation they were meant to solve, or create other problems, either anticipated or unanticipated. This is set into sharp view in Chapter 15, where Adolf Tobeña notes the single shared characteristic of suicide bombers—their altruism. And Augustine Brannigan points out, in Chapter 16, that genocide is committed by those seeking to *help* their fellow man.

Without an understanding of all aspects of altruism, misguided activities are perpetuated, and horrific acts can result. It is vital to understand how attempts to do good can inadvertently worsen the very situation they were meant to solve, or create other problems, either anticipated or unanticipated.

Pathologies of altruism, it seems, form a great, dark, unexplored frontier. *Pathological Altruism* is the first work to explore this phenomenon from multiple perspectives, rather than relying on a merely (and from some perspectives, outmoded) psychoanalytic approach. The volume synthesizes work from multiple fields, offering many viewpoints on aspects of pathological altruism. Each author brings a unique background to the work. The sum of their contributions will, it is hoped, serve as a scientifically grounded focal point for a new field—pathological altruism—providing a nuanced counterbalance to the study of altruism.

Let us introduce this volume’s contributions by following Goethe’s lead, as Faust asks:

“All right—who are you, then?”

and Mephistopheles answers:

“Part of that force which would do ever evil, and does ever good.”

Acknowledgment

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Notes

1. A succinct parsing of altruism is provided by Jacob Neusner and Bruce Chilton in their *Altruism in World Religions* (p. xi):

A standard dictionary definition describes altruism as “unselfish concern for the welfare of others: opposed to egoism.” The four components of this definition distinguish altruism from other kinds of care for others. “Unselfish” carries with it the notion that the altruist acts for the sake of the other rather than himself or herself. “Concern” suggests that altruism entails a motivation as well as an action. “Welfare” means that the goal is to benefit, rather than harm, the other. And “others” implies that the altruist is capable of seeing the object of concern as someone distinct from himself or herself. (Neusner & Chilton, 2005)

2. The domains of the Five-Factor Model are neuroticism, extraversion (versus introversion), openness to experience, agreeableness (versus antagonism), and conscientiousness.

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EMPATHY-BASED PATHOGENIC GUILT, PATHOLOGICAL ALTRUISM, AND PSYCHOPATHOLOGY

Lynn E. O'Connor, Jack W. Berry, Thomas B. Lewis,
and David J. Stiver



But to help others, it is not sufficient merely to wish to do so (that is to free others from sorrow and bring about their happiness). Indeed, altruistic thoughts can become an obsession and increase our anxiety When such good and positive thoughts are combined with wisdom, we know how to help beings effectively and can actually do so. (p. 26)

—H. H. The Dalai Lama, *For the Benefit of All Beings: A Commentary on the Way of the Bodhisattva* (2009)

KEY CONCEPTS

- Empathic reactions to pain or distress in others are instantaneous and begin the path to both normal and pathological altruism. These reactions move quickly to implicit empathy-based guilt, linked to a belief that one should try to relieve the suffering of others.
- Empathy-based guilt is further linked to evaluations of fairness, equality, and the equitable distribution of resources.
- Survivor guilt (inequity guilt) is a specific form of empathy-based guilt that tends to become pathogenic when based on a false belief that one's own success, happiness, or well-being is a source of unhappiness for others, simply by comparison. People with high survivor guilt may falsely believe they are “cheaters.”
- *Pathogenic guilt leads to pathological altruism.* In pathological altruism, the altruistic behavior helps no one and potentially harms the altruist, the recipient of the altruism, or both.

- Empathic concern and empathic-based guilt are evolved psychological mechanisms sustaining mammalian group cohesion. Altruism may fail to favor fitness at the level of the individual in within-group competition, while increasing fitness at the level of the group in between-group competition.
- Pathogenic guilt and pathological altruism are commonly found in mental disorders, such as depression, posttraumatic stress disorder (PTSD), and obsessive-compulsive disorder (OCD).

IN THIS CHAPTER, we discuss empathy-based guilt, an evolved psychological mechanism that, when misdirected or excessive, can become pathogenic and lead to pathological altruism. Empathy-based guilt often hovers behind pathological acts of altruism, generating the considerable energy spent in sometimes futile and often self- and other-destructive efforts to help. A theme of this chapter is that empathy-based guilt becomes pathogenic when it provokes cognitive errors in understanding causality. When people who feel empathy at witnessing another's misfortunes falsely believe that they caused the other's problems, or falsely believe that they have the means to relieve the person of suffering, they have erred in their analysis of the situation. In the following discussion of guilt and pathological altruism, we are primarily speaking from the perspective of individual fitness pertaining to within-group competition. However, a trait that is detrimental on the level of individual fitness may be adaptive for fitness at the level of the group in between-group competition (i.e., group selection).

As is evidenced throughout this volume, we are seeing a rapid rise of interest in empathy, prosociality, and altruism (Bekoff & Pierce, 2009; Decety & Ickes, 2009; Frith, 2007; Haidt, 2006; Hauser, 2006; Keltner, 2009; Singer, et al, 2006; Tomasello, 2009). For decades, both science and popular culture viewed psychological, social, and economic phenomena from the perspective of an individualistic, competitive worldview (Dawkins, 1976; Williams 1966). Altruism was interpreted as ultimately self-serving, either psychologically or biologically, through the mechanism of inclusive fitness (kin selection), reciprocal altruism, or "costly display." Today, there are numerous reports of empathy and altruism—with authentic focus on "the other"—expressed throughout the human and non-human animal kingdom (de Waal, 2006; de Waal, 2008; Hauser, 2006; Preston & de Waal, 2002). Many now consider altruistic motivation as fundamental and truly other-directed.

As empathy and altruism emerged to take center stage, multilevel selection theory became an obvious solution to the longstanding puzzle over altruism. Furthermore, inspired in part by complexity science illustrating the tendency of agents to "self-organize" with increasing complexity (Barabasi, 2002; Byrne, 2002), the role of cooperation in biology is recognized; cooperation is found at every level of biological organization. Mammals regularly engage in acts of altruism toward conspecifics. At remarkably young ages, human infants and toddlers exhibit empathy, followed by efforts to help (See Eisenberg, 2000 for review; Warneken & Tomasello, 2006; Zahn-Waxler, Radke-Yarrow, & King, 1979; Zahn-Waxler, Radke-Yarrow, Wagner, & Chapman, 1992). In sync with this shifting worldview, a kinder, more adaptive unconscious mind has been uncovered through studies in psychology, social neuroscience, and economic behaviors

(Gintis, Bowles, Boyd, & Fehr, 2006; Hassin, Uleman, & Bargh, 2005; Kihlstrom, 1987).

Accompanying this changing scientific landscape, the theory of group selection has been resurrected and recognized as a viable evolutionary force (Wilson & Sober, 1994; Wilson & Wilson, 2007). Multilevel selection theory (the simultaneous operation of natural selection at the group and the individual levels) provides an explanation for the evolution of empathy-based guilt and altruism, enhancing fitness in between-group competition, but not infrequently causing trouble for the individual in within-group competition. Groups with more altruists do better in competition with groups with fewer altruists. From the point of view of group selection, the evolution of altruism is advantageous for mammals (and other group animals) living together in interdependent social groups. Boehm (2008) notes that, in our species, there has been a preference for generous mates over a period of 45,000 years, in a process of “runaway selection” suggesting that altruistic traits are preferred from multiple levels of selection.

The Positive Role of Empathy-based Guilt

Empathy-based guilt, and survivor guilt broadly defined (inequity guilt), illustrates the contradiction between individual and group fitness. Survivor guilt sometimes refers to the guilt people feel when someone else dies. More broadly, survivor guilt refers to the emotion people may experience when they are surpassing others and believe they are therefore hurting those who are less successful, simply by comparison. In a pilot study carried out by David Sloan Wilson and colleagues, undergraduates who had been assessed on the Interpersonal Guilt Questionnaire (IGQ: O'Connor, Berry, Weiss, Bush, & Sampson, 1997) participated in an economic game. Results demonstrated the positive role of survivor guilt at the level of the group. Individually, students who were high in survivor guilt were also high in other measures indicating psychological difficulties. However, at the level of the group, those who were higher in survivor guilt were significantly more likely to be cooperators (O'Connor, Berry, Lewis, Mulherin, & Crisostomo, 2007; Wilson, personal communication, 2006).

Historically, empathy-based guilt made it possible in our highly social species to live relatively peacefully in large, stable, interdependent groups, despite wide variations in access to food and shelter. Likewise, our altruistic motivation, the way we identify with one another (often outside of awareness) and react to others' pain as if we are feeling it ourselves, is often followed by an impulsive, hardwired, effort to help. This process makes our highly social lifestyle reliable (Singer, 2006). The ability to cooperate, share, and empathize with another's pain contributes to our feeling of belonging, and this in turn helps to regulate our emotions through our ordinary daily interactions (Baumeister & Leary, 1995; Lewis, Amini, & Lannon, 2002; O'Connor, 2001).

Survivor guilt is a common emotion. Antecedents to survivor guilt—discomfort at inequity eliciting begging and sharing—may first be seen in mammals whose infants remain dependent on parents for food and protection, often for years. In humans, children and adolescents are not fully developed and capable of being self-sustaining until around the age of 20. Furthermore, reports of nonhuman animals sharing in nonfamilial relationships are emerging. Bonobos, perhaps our closest relatives, instead of fighting over resources, use sexual encounters to reduce aggression in the group, allowing them to share whatever food becomes available. In experimental conditions, bonobos, given a favorite food, will open

an adjacent cage door housing another bonobo, preferring to share and eat with a conspecific rather than eating the treat alone (Hare & Kwetuenda, 2010). Chimpanzees in the wild share food and demonstrate altruism even to non-related conspecifics. Boesch, Bolé, Eckhardt, and Boesch (2010) report that male and female chimpanzees in the wild will adopt nonrelated orphans and “mother” them through adulthood.

Begging behavior in a species suggests the complementary existence of empathic concern or distress, relieved by sharing. This reaction to begging may be a predecessor to the capacity to feel survivor guilt. Although sharing and cooperation may point to an ultimate biological purpose to altruistic behavior (success in between-group competition), the relief of empathy-based guilt, reflecting an authentic concern for others, may be a proximate purpose of the same behaviors.

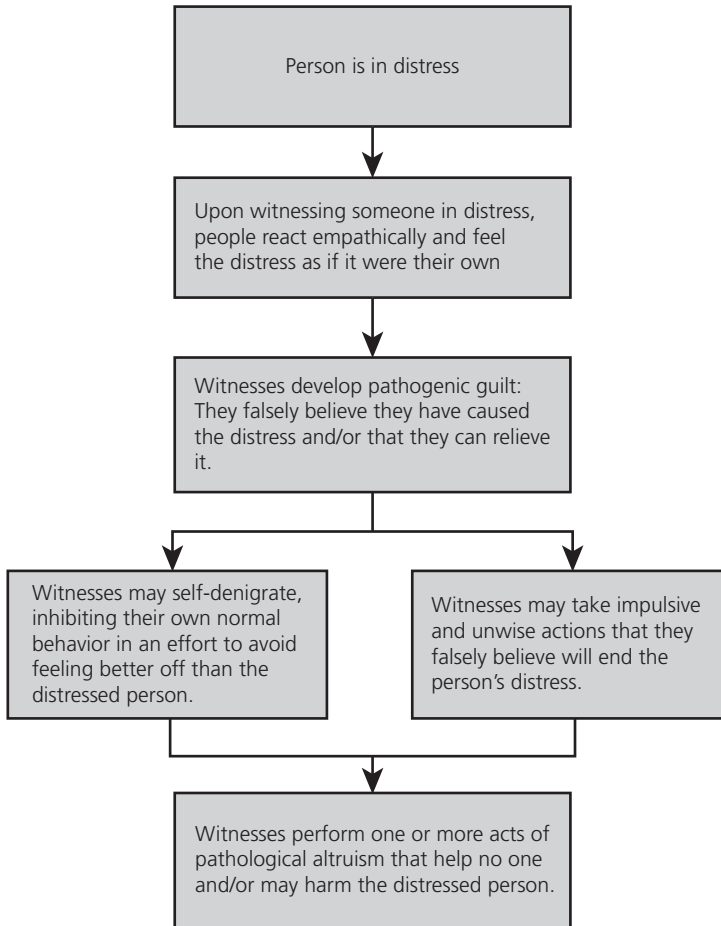
Development of Empathy, Guilt, and Altruism

Between our empathy system and altruistic behavior lies a complex network of emotions and impulses to help someone in trouble. These emotions and motivations are involved in our inclination to take responsibility for the well-being of others. From birth, infants feel distress at the distress of others (Sagi & Hoffman, 1976). When newborns listen to an audio recording of other babies crying, they begin to cry, more so than when they hear a recording of their own crying. By a year of age, if someone is upset or unhappy in their environment, infants make an effort to engage their mother as a helper. By 16 months, toddlers respond to other’s distress by trying to do something to relieve it. Toddlers and young children are already demonstrating individual differences in reactions to other’s suffering. Some toddlers are precocious in their altruistic efforts, and some who have been neglected, abused, or otherwise living in a contentious atmosphere may react to other children’s distress with aggression. When highly empathic toddlers and children are unable to help another child or parent in distress, they may experience the antecedents of empathy-based guilt, or survivor guilt. As children develop into adolescents, empathy-based guilt continues to dominate the complex road from empathy to altruistic behavior. (See Chapter 25, Zahn-Waxler and Carol Van Hulle, pp. 243–259 for a more complete discussion.)

Both genetics and environment—shared and nonshared—may account for individual differences in the path from empathy, to guilt, to action in response to the suffering of another (Knafo, Zahn-Waxler, Van Hulle, Robinson, & Rhee, 2008; Zahn-Waxler, 2000). Francis (2009) found that epigenetics accounts for individual differences in maternal behavior in rats. This has implications for individual differences in empathic responses and altruism, both pathological and authentically helpful. The epigenome is sensitive to environmental influences and may account for how and when genes related to altruism are turned on or off. Individual differences that appear non-genetic may be influenced by the environment through epigenetic processes.

Cognitive evaluations, often unconscious, mediate the relationship between empathy and altruism, by way of explanations that may elicit guilt. These cognitions are related to attributions of causality, whereby a person feels responsible for another’s suffering. Depending on the nature of this unconscious mental

Empathy-based guilt with associated pathogenic beliefs often underlies pathological altruism.

**FIGURE 2.1**

Upon witnessing someone in distress, people tend to react empathically and feel the distress as if it were their own. In some cases, people almost instantly and implicitly feel pathogenic guilt; that is, they erroneously believe they caused the distress, and/or that they have the power to relieve it. Based on this false belief related to causality, they then may engage in pathological acts of altruism, failing to help, or even harming, the person in distress as well as themselves.

processing, empathic perceptions of distress in others can trigger either helpful or pathological forms of altruistic response. In short, empathy-based guilt when associated with pathogenic beliefs, often underlies pathological altruism.

Pathogenic beliefs related to causality produce the implicit experience of guilt. When people falsely believe their own well-being is directly linked to others' misfortunes (the beliefs underlying survivor guilt), attempts to be altruistic are likely to be pathological (Figure 2.1). An act of altruism may harm the altruist and still not be pathological (by our definition), but when harm occurs without any benefit to the object of altruism, we are looking at pathological altruism, which is associated with several types of psychopathology.

Empathy-based guilt, often nonpathogenic, is a necessary ingredient in many social situations; for example, guilt is the driver in forgiveness. If someone causes harm to another, the victim is more able to forgive the perpetrator if the perpetrator feels regretful and guilty, and signals this to the victim (Acker, 2011; Worthington et al., 2005).

Our ability to respond to one another with empathy, to experience guilt when we believe we have harmed another, allows us to overcome many common social conflicts that might, without empathy-based guilt, destroy our relationships and render us isolated. Altruistic behavior has been demonstrated to have numerous benefits for the altruist, including better physical and mental health, and increased fitness. Altruism, then, may be beneficial in both within- and between-group competition.

From a clinical and research perspective, we find that empathy-based guilt may become excessive, unrealistic in scope and perspective, and lead to altruistic behaviors that tend to be pathological. Pathogenic guilt, by definition, is associated with incorrect explanations of causality that result in psychopathology and pathological altruism. Self-blaming narratives are often under the surface of conscious awareness and cover a wide territory. Examples of empathy-based guilt that becomes pathogenic and leads to pathological altruism abound:

- The battered wife falsely believes that she has made her partner become violent and that if she were to leave him, he might commit suicide. In an effort to save his life, she stays in the abusive relationship.
- The man who is happily married and also loves his job errs when he believes that his happiness is making his less fortunate brother feel inadequate by comparison. In an effort to make things more equal, he begins fighting with his wife for no apparent reason.
- The woman with recurring depression and relapses in alcoholism falsely believes that if she kills herself, she will cease being a burden to her family members. As a result she commits suicide.
- The bullied husband errs when he believes his histrionic wife will destroy herself if he doesn't respond to her every demand. Increasingly, he finds himself tiptoeing around, afraid of her outbursts and inhibiting the expression of his own personality to keep her placated.

In each situation, neither empathy nor altruistic motivation is inherently problematic; pathology begins when people believe, erroneously, that they are the source of someone else's problems and/or that they have the ability to relieve the other of his or her difficulties. In each example, the link between empathy and pathological altruism is guilt. The self-destructive actions that follow are all acts of pathological altruism, driven by pathogenic guilt.

Survivor Guilt, Fairness, and Inequity

Recent studies in primates and other mammals suggest that some (perhaps many) species have fairly well-developed capacities for assessing fairness (Brosnan, 2006; Brosnan & de Waal, 2003; de Waal & Berger, 2000; Hauser, Teixidor, Fields, & Flaherty, 1993). Our propensity to assess fairness may be a positive force in one set of circumstances, encouraging our giving nature, while in other conditions it may leave us depressed and self-defeating. Discomfort at inequity is not limited to feelings about close friends, family, or what we consider our "in-group." We feel survivor guilt when we see a homeless older woman, despondent and dirty, on the street in front of the Walgreens, her hand out begging for money. How many of us avert our eyes, avoiding that moment of intimate contact, because we feel guilty about our comparative good fortune?

Survivor guilt is often functioning when we compare ourselves to others and may be the downside of winning in a social comparison. The tendency to respond to misfortune in others with a feeling of guilt was shaped by our species' adaptations to the environment in which we evolved. In the Pleistocene, in our hunter and gatherer origins, we lived in environments where access to food was variable. A variety of ecological reasons—the lack of refrigeration, the sheer size of the prey of a successful hunting party—all contributed to a social system based on equality. Survivor guilt serves to promote equality and sharing; it provides a leveling mechanism required by a culture that, by necessity, must maintain an equitable distribution of resources. Thus, the equitable social system of our early relatives served an ultimate evolutionary purpose.

The development of cooperation and equity in our species is further supported by altruistic punishment (Fehr & Fischbacher, 2003). People are armed with a fine capacity to detect cheaters, or nonaltruistic people. Although there is at present some debate as to whether or not a specific “cheater-detection” module exists in our neurocircuitry (Carlisle & Shafir, 2005), it is remarkable just how early and how well we are able to detect cheaters. Cosmides and Tooby (1992) found that, when they posed a logical problem to a group of subjects and asked them to assess how to solve it, almost all failed to do so. When, however, they changed the problem to reflect one that focused upon detecting cheaters, the subjects were remarkably successful.

Survivor guilt, then, depends on the capacity to make social comparisons and to evaluate the distribution of resources in order to ensure it is equitable. Although the ability to detect cheaters has been described as something we use to judge others, in survivor guilt, cheater detection is turned upon the self. When experiencing survivor guilt, a person believes that he or she is getting more of the “goods” than is deserved, while another member of the group is suffering because of this unfair distribution. Studies of moral self-regulation have revealed that we are in a continuous process of judging our own morality (Sachdeva, Iliev, & Medin, 2009). When the moral system is on overdrive and based on an unrealistic judgment of ourselves as responsible for the suffering of others, we begin to find empathy-based pathogenic guilt, resulting in psychopathology and pathological altruism.

Survivor guilt, when experienced internally but acted upon only after realistic consideration, is not likely to be pathogenic. But when it is followed rapidly by impulsive and ineffective efforts to equalize or level the playing field, the guilt has become pathogenic.

Survivor Guilt in the Clinic

Survivor guilt was first conceptualized as a painful emotion that often emerges when someone survives the death of a loved one. Darwin (1872/1965) described a woman, in the wake of her father's death, walking around wringing her hands, thinking “I should have done more to help him.” Freud (1897/1960) also touched upon survivor guilt in relation to his own brother's death, writing of “the great remorse that follows . . .” Almost 60 years later, Neiderland (1961) described his work with survivors of the prison camps of World War II, noting their intense suffering, insomnia, nightmares, anxiety and depression, and haunting words: “What right do I have to be alive when everyone else in my family is dead?” Two psychoanalysts, Modell (1965; 1971) and Weiss (1986), began to write about survivor guilt, more broadly defined. Their conceptualization included the

emotional suffering of patients who believed that their being successful or satisfied with their lives, their work, or relationships was harming others, especially less successful family members, close friends, and associates. These patients believed their loved ones were suffering simply by comparison with their own successful lives. Burdened with survivor guilt, people tend to inhibit their own healthy goal-seeking behaviors, so as not to be better off than others. In the case of World War II concentration camp survivors, some nearly ceased living, holding themselves in a paralyzed condition, unable to experience joy.

There are situations in which people compete for a reward that only one person can win, and although winning is the goal, it is often marred by survivor guilt. Here, survivor guilt is entirely conscious, based on the realistic situation, and rarely leads to pathological acts of altruism. Furthermore, people with well-developed skills in affect regulation are able to experience survivor guilt without it resulting in a compulsion to level the playing field. They are able to recognize their empathic response to someone else's suffering, but may successfully regulate the intensity and cognitive assessment of the feeling. Some people—perhaps those with an extraverted and even narcissistic personality—claim to never feel survivor guilt. However, it often comes to light that they defend themselves against it by externalizing, blaming others, and getting angry.

The *Diagnostic and Statistical Manual of Mental Disorders, 4th Edition, Text Revision (DSM-IV-TR)* notes that people who are depressed also tend to feel excessively guilty and engage in ruminative self-blaming cognitions. Anecdotal case observations reveal that empathy-based guilt also looms irrationally in anxiety disorders. In obsessive-compulsive disorder (OCD), the fearful situations expected are often found to be something patients fear will happen to a loved one, not to themselves. For example, a woman who washes her hands so much each day that they are red and peeling, when questioned about the reasons for her compulsion, will often say something like: "If I don't wash my hands I might contaminate the food I cook for my husband and daughter; I might be responsible for killing them with some infectious disease." Another form of OCD, regarded as "hyperscrupulosity," is defined by patients' obsession with morality in themselves and others. Catholic priests in the 16th century came to recognize the condition and developed a treatment for parishioners who came to confession daily, or multiple times a day, to confess "sins" that the priests considered to be imaginary crimes. The clergy discovered what is now standard behavioral treatment for OCD—that is, exposure and response prevention. They told their hyperscrupulous parishioners that they were forbidden to look at the Bible, or any form of scriptures. This, of course, filled the afflicted with anxiety, but as with modern-day treatment, their anxiety would peak and often the obsessions then subsided.

A sufferer from an OCD spectrum disorder, hoarding, tells her OCD peer support group that she can't stop picking up papers from the floor of the supermarket. Her reason: She is convinced that if the papers are left on the floor, some old woman with poor coordination might slip on one of them, fall down, and be lethally injured—all because she failed to pick up the pieces of paper.

People suffering from posttraumatic stress disorder (PTSD), so common now in our military personnel returning from tours in Iraq or Afghanistan, are tormented by their memories of a trauma. In many cases, the trauma was seeing their comrade(s) maimed or killed from a sudden bomb blast or unexpected sniper fire. What turns these sad stories into PTSD is, again, erroneous causal attribution. In each case, we hear some reason, an often convoluted and unrealistic explanation,

of how the surviving soldier is at fault in his buddy's death. "If only I had taken my turn being the first in line watch person" or "If only I had been more alert to what was going on around us." In a recent empirical study of 79 American soldiers who served in Afghanistan and/or Iraq, Morgan (2010) found the trauma of witnessing harm to others more significant in PTSD-related obsessions than was the trauma of harm to oneself.

Children who witness the abuse of their mother or siblings while escaping themselves seem to develop a tendency for guilt and faulty reasoning about causality that leads to chronic, pathogenic guilt and self-blame. Witnessing domestic violence may be a more pathogenic experience than being beaten oneself. Children who grow up in dysfunctional families, in which violence is the norm, necessarily begin to confuse causal information, taking on guilt themselves instead of blaming their parents. This is yet another act of pathological altruism.

The Neuroscience of Guilt and Pathological Altruism

The past decade has seen a dramatic leap in understanding the neural substrates underlying healthy altruism. This also suggests possible origins for dysfunction in pathological altruism. A detailed review of this fascinating material is, regrettably, beyond the scope of this chapter. Instead, we present a simplified neurobiological model in which we explore two networks, each comprised of multiple linked areas: the network underlying empathic distress, and the network underlying prosocial emotions such as guilt, compassion, and inequity aversion.

Normal people typically create internal simulations of much of the behavior they witness, including actions, sensations, and emotions of the people around them (Iacoboni & Dapretto, 2006). This ubiquitous "covert modeling" of other's behavior constitutes one of the principal mechanisms of empathy (Decety & Chaminade, 2003). Covert simulation occurs in response to observed facial expressions, postures, body movements, tone of voice, sensations, pain, and even moral attitudes. Through the internal simulation of observed sensations and actions, we are able to experience some portion of what others are themselves feeling and doing.

Empathic modeling gives rise to one of the mechanisms that promotes altruism: because other people's sensations are simulated inside an observer's brain, normal observers experience distress at witnessing the distress of others; they experience pain at witnessing the pain of others. Thus, normal observers are motivated to reduce pain and distress in others to minimize discomfort generated by simulations of that pain in their own brains.

Several brain areas are crucial in representing emotional distress and thus critical to the normal functioning of altruism. The amygdala (Figures 2.2 and 2.3) has been implicated in representing negative emotion in response to experiencing or witnessing aversive stimuli, whereas the anterior temporal pole has been implicated in processing the social meaning of events (Moll, Zahn, de Oliveira-Souza, Krueger, & Grafman, 2005). The insula (Figure 2.4), which can be conceptualized as the sensory cortex of the limbic system, is activated by a wide variety of emotional stimuli, including experiencing or witnessing emotional distress or pain (Jackson, Meltzoff, & Decety, 2005).

Interruption in the function of any of these areas can produce profound disturbances in empathy and altruistic behavior. In frontotemporal dementia (FTD), for instance, the anterior temporal pole undergoes gradual deterioration. Patients with FTD commonly develop an empathic deficit and insensitivity to the pain of

others that is surprising and disturbing to family members (Rankin et al., 2006). In addition, psychopathic individuals have been found to exhibit not only reduced activity (Birbaumer et al., 2005) but also volume loss in the anterior temporal cortex and the insula (de Oliveira-Souza et al., 2008); this may be related to their callousness and inability to “feel” other people’s pain, as well as their indifference to the social dimensions of their actions.

Psychopathy and FTD may represent syndromes of decreased function in one or more areas related to internal models of others’ distress. It is possible that analogous syndromes of hypersensitivity also exist. If the brain areas most important in modeling emotional distress—amygdala, anterior temporal cortex, and insula—are abnormally sensitive in some individuals, they could experience supra-normal levels of empathic distress, and, consequently, would experience a powerful motivation to alleviate or reduce that distress, even in situations in which such behaviors may not be appropriate. It is possible, for instance, that some observers in this supra-normal group experience more distress and pain from the empathic simulation generated in their own brains than does the person suffering the actual injury being witnessed.

The second circuit we will consider is that underlying prosocial moral emotions, including guilt, compassion, and inequity aversion. Moral emotions, which arose late in the evolution of emotion systems, guide and motivate behaviors to facilitate interactions within the large social group that constitutes the environment in which *Homo sapiens* resides (Haidt, 2003). The moral emotions include a prosocial or cohesiveness-promoting group of emotions such as guilt, embarrassment, compassion, and gratitude, which serve to maximize helping behaviors and maintain the social order.

The location of the brain areas involved in producing the prosocial moral emotions has been the subject of recent research. Several areas are consistently implicated across studies.

First, the subgenual cingulate cortex (Figure 2.4) has been observed to be activated under conditions of guilt (Zahn et al., 2009). This is of particular interest, since abnormally increased activity in the subgenual cingulate cortex has been linked to the disease state of major depression (Greicius et al., 2007), in which guilt-ridden ruminations are often a prominent symptom. The subgenual cingulate has also been linked to the presence of charitable donation behavior (Moll et al., 2006). Second, the anterior portions of the medial prefrontal cortex (Figure 2.4) have been implicated in the production of prosocial feelings, such as compassion and the urge to donate to charity at a cost to oneself. Finally, some investigators have reported activation of the mesolimbic reward system (Figure 2.4) during the elicitation of prosocial emotions (Moll et al., 2007), indicating the likelihood that evolution has linked altruistic behaviors to intrinsic reward as a mechanism for promoting the acting and repetition of such behaviors.

The areas most relevant to the production of prosocial emotions—the subgenual cingulate, anterior medial prefrontal cortex, and mesolimbic reward system—suggest mechanisms relevant to the production of pathological altruism.

Major depression, a syndrome that includes overactivation of the subgenual cingulate, is not infrequently accompanied by acts of attempted but pathological altruism, as when severely depressed patients evidence a sincere belief that by committing suicide they could substantially improve the lives of those around them. Increased activity in anteromedial prefrontal cortical areas may produce unusually strong motivations toward compassionate or self-sacrificing altruism. Finally, increased mesolimbic reward activity with respect to prosocial motivations could

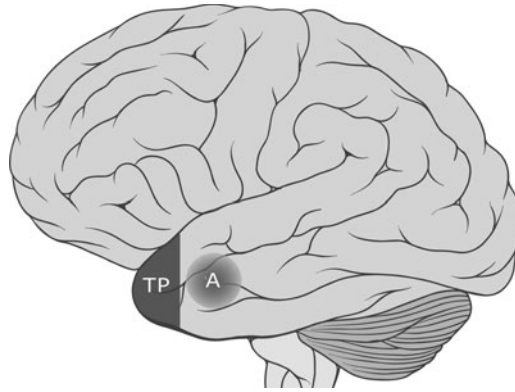


FIGURE 2.2

Lateral view of the human brain, illustrating the anterior temporal pole (TP) and the amygdala (A). The amygdala, located deep within the temporal lobe, represents negative emotions, whereas the temporal pole has been linked to processing the social meaning of behavior. Together, they constitute crucial components of a person’s ability to feel empathic concern, and, if too sensitive, could motivate pathological altruism.

Adapted from an illustration by Patrick J. Lynch, medical illustrator. Creative Commons Attribution 2.5 License 2006.

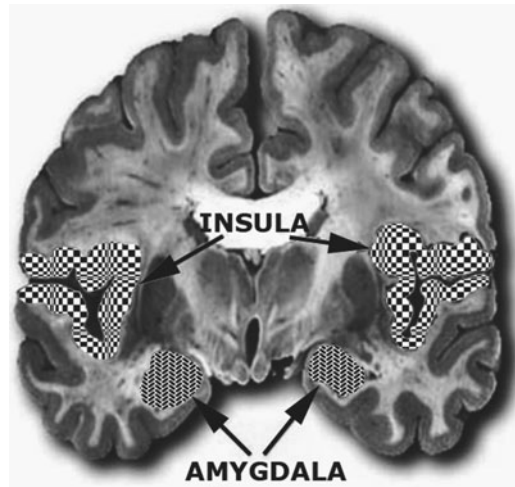


FIGURE 2.3

Coronal section of the human brain, illustrating the bilateral insula (checkerboard pattern) and amygdala (tread pattern). The insular cortex, sometimes called “the sensory cortex of the limbic system,” represents the visceral sensations pertaining to emotional experiences—e.g., chest tightening, butterflies in the stomach, chills up and down the spine. Witnessing pain in others produces intense insular activation, whereas some forms of empathy deficiency (sociopathy) involve restricted insular function and reduced insula volume.

Adapted from Mobbs, D., Lau, H. C., Jones, O. D., & Frith, C. D. (2007). Law, responsibility, and the brain. *PLoS Biol* 5(4): e103. doi:10.1371/journal.pbio.0050103; available through the Creative Commons Attribution License.

**FIGURE 2.4**

Sagittal view of the human brain, illustrating the ventromedial prefrontal cortex (VMPFC), the subgenual cingulate (SG), and the two major components of the mesolimbic reward system, the ventral tegmental area (V) and the nucleus accumbens (N). The VMPFC has been associated with altruistic behaviors, like charitable donations that occur at a cost to oneself. Activity in the SG has been linked to feelings of guilt, and, interestingly, is frequently hyperactive in the state of major depression. The mesolimbic reward system N and V is activated by behaviors that directly advance reproductive fitness (e.g., sex and food) and serves to ensure the repetition of such behaviors. The activation of N and V in altruistic states suggests that these states enjoy a primary reward valence, which in some persons could become overly activated and result in maladaptive altruistic acts.

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make self-sacrificing acts profoundly reinforcing in certain individuals, perhaps providing the enthusiasm with which some missionaries and saints have thrown themselves into situations in which their martyrdom was virtually assured.

Empirical Studies of Empathy, Guilt, Pathological Altruism, and Psychopathology

Moving from anecdotal and clinical examples, we set out to examine empirically the connection between empathy-based guilt, altruism, and psychopathology. We first developed a reliable and valid measure, the Interpersonal Guilt Questionnaire (IGQ-67), designed to quantify survivor guilt and closely related constructs. We consistently found high levels of survivor guilt significantly correlated with depression, anxiety, obsessive thinking and the OCD spectrum disorders along with most of the Axis II personality disorders (O'Connor, Berry, & Weiss, 1999; O'Connor, Berry, Weiss, Schweitzer, & Sevier, 2000; O'Connor, Berry, Weiss, & Gilbert, 2002). In several studies, we have found survivor guilt also present in PTSD (O'Connor et al, 2002; Pole, D'Andrea, O'Connor, & Santarlasci, unpublished manuscript).

Research on attributional style (Seligman, Abramson, Semmel, & von Baeyer, 1979), or how people explain both bad and good events, demonstrates that pessimists—those who blame themselves for bad outcomes and who attribute good outcomes to something outside themselves (like luck for example)—are highly prone to depression when facing adversity. We found that survivor guilt is significantly correlated with a pessimistic explanatory style (Menaker, 1995). Most noteworthy, the association was greater in terms of how people explain