

*The Handbook of*  
**SOLITUDE**

**Psychological Perspectives on Social Isolation,  
Social Withdrawal, and Being Alone**

**Edited by Robert J. Coplan  
and Julie C. Bowker**

**WILEY Blackwell**



# The Handbook of Solitude

For  
**Kenneth H. Rubin**  
scholar, mentor, and friend

and

For  
**Our Families**  
without whom we would always feel alone

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Social Withdrawal, and Being Alone*

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*Editorial Offices*

350 Main Street, Malden, MA 02148–5020, USA

9600 Garsington Road, Oxford, OX4 2DQ, UK

The Atrium, Southern Gate, Chichester, West Sussex, PO19 8SQ, UK

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# List of Contributors

- Lynn E. Alden**, Department of Psychology, University of British Columbia, Vancouver, BC, Canada
- Yair Amichai-Hamburger**, The Research Center for Internet Psychology (CIP), Sammy Ofer School of Communications, The Interdisciplinary Center, Herzliya, Israel
- Steven R. Asher**, Department of Psychology & Neuroscience, Duke University, Durham, NC, USA
- Karen W. Auyeung**, Department of Psychology, University of British Columbia, Vancouver, BC, Canada
- James R. Averill**, Department of Psychology, University of Massachusetts, Amherst, MA, USA
- John D. Barbour**, Department of Religion, St. Olaf College, Northfield, MN, USA
- Neus Barrantes-Vidal**, Department of Clinical Psychology, Universitat Autònoma de Barcelona, Spain; University of North Carolina at Greensboro, Greensboro, NC, USA; Sant Pere Claver – Fundació Sanitària, Barcelona, Spain; Instituto de Salud Carlos III, CIBERSAM, Madrid, Spain.
- Julie C. Bowker**, Department of Psychology, University at Buffalo, The State University of New York, NY, USA
- Matthew H. Bowker**, Department of Interdisciplinary Studies, Medaille College, Buffalo, NY, USA
- William M. Bukowski**, Department of Psychology, Concordia University, Montreal, QC, Canada
- Leo Coleman**, Department of Comparative Studies, Ohio State University, Columbus, OH, USA
- Robert J. Coplan**, Department of Psychology, Carleton University, Ottawa, ON, Canada
- Bella DePaulo**, Department of Psychology, University of California, Santa Barbara, CA, USA

- Jonathan J. Detrixhe**, Department of Psychiatry, Center for Intensive Treatment of Personality Disorders, St. Luke's-Roosevelt Hospital Center, New York, NY, USA
- Nicolas Ducheneaut**, Computer Science Laboratory, Palo Alto Research Center, Palo Alto, CA, USA
- Jack Fong**, Department of Psychology and Sociology, California State Polytechnic University, Pomona, CA, USA
- Evangelia Galanaki**, Department of Special Education and Psychology, National & Kapodistrian University of Athens, Athens, Greece
- Heidi Gazelle**, Melbourne School of Psychological Sciences, University of Melbourne, Victoria, Australia
- Luc Goossens**, Department of School Psychology & Child and Adolescent Development, Catholic University of Leuven, Leuven, Belgium
- Andrew H. Hales**, Department of Psychological Sciences, Purdue University, West Lafayette, IN, USA
- Connie Kasari**, Graduate School of Education and Information Studies, University of California, Los Angeles
- Takahiro A. Kato**, Department of Neuropsychiatry, Graduate School of Medical Sciences, Kyushu University, Fukuoka, Japan
- Kalevi Korpela**, School of Social Sciences and Humanities/Psychology, University of Tampere, Finland
- Thomas R. Kwapil**, Department of Psychology, University of North Carolina at Greensboro, Greensboro, NC, USA
- Kenneth N. Levy**, Department of Psychology, Pennsylvania State University, University Park, PA, USA
- Stephanie Luster**, Department of Family Life, Brigham Young University, Provo, UT, USA
- Andrea Markovic**, Department of Psychology, University at Buffalo, The State University of New York, NY, USA
- Susan Matarese**, Department of Political Science, University of Louisville, Louisville KY USA
- Kevin B. Meehan**, Department of Psychology, Long Island University, Brooklyn Campus, NY, USA
- Mario Mikulincer**, Department of Psychology, Interdisciplinary Center (IDC) Herzliya, Herzliya, Israel
- Vladimir Miskovic**, McMaster Institute for Neuroscience, Discovery, & Study (MiNDS), McMaster University, Hamilton, ON, Canada; Department of Psychology, University of Florida, Gainesville, FL, USA
- Larry J. Nelson**, Department of Family Life, Brigham Young University, Provo, UT, USA
- Drew Nesdale**, School of Applied Psychology and Griffith Health Institute, Griffith University, Queensland, Australia

- Jana Nikitin**, Department of Psychology, University of Zurich, Zurich, Switzerland
- Laura Ooi**, Department of Psychology, Carleton University, Ottawa, ON, Canada
- Elisabetta Palagi**, Centro Interdipartimentale Museo di Storia Naturale e del Territorio, Università di Pisa, Pisa, Italy; Istituto di Scienze e Tecnologie della Cognizione, Unità di Primatologia Cognitiva, CNR, Roma, Italy
- Karl Pillemer**, Department of Human Development & Sociology, Cornell University, Ithaca, NY, USA
- Dongning Ren**, Department of Psychology, Purdue University, West Lafayette, IN, USA
- Kenneth H. Rubin**, Department of Human Development, University of Maryland, College Park, MD, USA
- Paul Salmon**, Department of Psychological and Brain Science, University of Louisville, Louisville, KY, USA
- Louis A. Schmidt**, Department of Psychology, Neuroscience & Behaviour, McMaster University, Hamilton, ON, Canada; Offord Centre for Child Studies, McMaster Children's Hospital, Hamilton, ON, Canada; McMaster Institute for Neuroscience, Discovery, & Study (MiNDS), McMaster University, Hamilton, ON, Canada
- Barry H. Schneider**, School of Psychology, University of Ottawa, Ottawa, ON, Canada
- Simone Schoch**, Department of Psychology, University of Zurich, Zurich, Switzerland
- Phillip R. Shaver**, Department of Psychology, University of California, Davis, CA, USA
- Madelynn Druhen Shell**, Department of Psychology, University of Virginia's College at Wise, Wise, VA, USA
- Paul J. Silvia**, Department of Psychology, University of North Carolina at Greensboro, Greensboro, NC, USA
- Karin Sobocko**, Department of Psychology, Carleton University, Ottawa, ON, Canada
- Henk Staats**, Department of Psychology, Universiteit Leiden, Leiden, The Netherlands
- Lindsey Sterling**, Department of Psychiatry, University of California, Los Angeles
- Kyle W. Stufflebam**, Department of Internal Medicine, University of Michigan, Ann Arbor, MI, USA
- Louise Sundararajan**, Forensic Unit, Rochester Psychogeriatric Center, Rochester, NY, USA
- Christina M. Temes**, Department of Psychology, Pennsylvania State University, University Park, PA, USA
- Alan R. Teo**, Department of Psychiatry, Oregon Health and Science University, Portland, OR, USA
- Marie-Hélène Véronneau**, Department of Psychology, Université du Québec à Montréal, Montréal, QC, Canada
- Molly Stroud Weeks**, Department of Psychology & Neuroscience, Duke University, Durham, NC, USA

**Eric D. Wesselmann**, Department of Psychology, Illinois State University, IL, USA

**Elaine Wethington**, Department of Human Development & Sociology, Cornell University, Ithaca, NY, USA

**Deanna C. Whelan**, Department of Psychology, Carleton University, Ottawa, ON, Canada

**Kipling D. Williams**, Department of Psychology, Purdue University, West Lafayette, IN, USA

**Nicholas Yee**, Computer Science Laboratory, Palo Alto Research Center, Palo Alto, CA, USA

**John M. Zelenski**, Department of Psychology, Carleton University, Ottawa, ON, Canada

**Melanie J. Zimmer-Gembeck**, School of Applied Psychology and Griffith Health Institute, Griffith University, Queensland, Australia

# Foreword

## *On Solitude, Withdrawal, and Social Isolation*

Kenneth H. Rubin

As I sit in my office pondering what it is that I should be writing in the Foreword to this extraordinary compendium, I am *alone*. With the door closed, I am protected against possible interruptions and am reminded of the positive features of solitude – there is no one around, it is quiet, and I can concentrate on the duties at hand. Indeed, several contributors to this volume have written about the pleasant-ries associated with solitude; frankly, I must agree with this perspective, but do so with a number of significant provisos. I will offer a listing of these provisos in the following text. However, before so doing, I would like to suggest a thought experiment or two.

### **A Science Fiction Thought Experiment**

Why must one understand the significance of solitude, withdrawal, and social isolation? Let's begin with a little thought experiment. Imagine, for at least one millisecond, that we have arrived on a planet populated by billions of *people*. Never mind how these people came into existence. Let's just assume that they happen to be on the planet and that we know not how they came to be. Imagine too that there is no interpersonal magnetism ... that these people never come together ... there are no interactions ... there is no crashing together or colliding of these individuals. All we can see are solitary entities walking aimlessly, perhaps occasionally observing each other. In short, we are left with many individuals who produce, collectively, an enormous social void. From an Earthly perspective, we might find the entire enterprise to be rather intriguing or boring or frightening and would likely predict that prospects for the future of this planet are dim.

Given that this is a supposed "thought exercise," please allow me to humor myself and replace the aforementioned noun "people" with "atoms" or their intrinsic properties of electrons, protons, and neutrons. By so doing, one might have to contemplate such topics as magnetism and collision and the products of these actions. This would immediately give rise to thoughts of mass, electricity,

and excitement. Without magnetism (attraction), electricity, and excitement, whatever would we be left with? As I move more forcefully into this exercise, I find myself in increasingly unfamiliar territory – I may study pretense, but I am not a pretender ... at least insofar as suggesting to anyone willing to listen (or read) that I have “real” knowledge about anything pertaining to physics. In fact, I am ever so happy to leave the study of the Higgs boson to that group of scholars engaged in research at CERN’s Large Hadron Collider.

For the time being, I will escape from any contemplation of physics and swiftly return to thinking about a planet on which *people* appear to exist without laws of attraction. If the “people” who inhabit the planet do not collide, we are left with the inevitability of what solitude would eventually predict – a nothingness, an emptiness, a void. If “people” did not collide, did not interact, there would be no “us.” Relationships would not exist; there would be no human groups, no communities, no cultures. There would be no sense of values, norms, rules, laws. Social hierarchies would not exist; there would be no need to think about mind-reading, perspective-taking, interpersonal problem-solving. Liking, loving, accepting, rejecting, excluding, victimizing ... none of these significant constructs would be relevant. Social comparison, self-appraisal, felt security, loneliness, rejection sensitivity ... topics that tend to appear regularly in the Developmental, Social, Personality, Cognitive, and Clinical Psychology literatures would be irrelevant. From my admittedly limited perspective, as a Developmental Scientist (and thankfully not as a Physicist), there would be nothing to write, think, feel, or be about. Thank goodness for those nuclear researchers at CERN. They have taught us that magnetism matters, that interactions matter, that clusters matter (and may collide to produce new entities). These folks are not pondering what happens with people ... they are thinking at the subatomic level. I, on the other hand, have spent the past 40-some years thinking about people, their individual characteristics, their interactions and collisions with one another, the relationships that are formed on the basis of their interactions, and the groups, communities, and cultures within which these individuals and relationships can be found. Indeed, I have collected more than a fair share of data on these topics. In so doing, I am left with the conclusion that solitude, isolation, and social withdrawal can be ruinous. It ain’t science fiction.

## **A Second Thought Experience**

Let’s move to a rather different thought experience. Imagine that the community within which we live teaches its inhabitants, from early childhood, that normative sociocultural expectations involve helping, sharing, and caring with and for each other; teaching each other about that which defines the “good, bad, and ugly”; communicating with each other about norms and what may happen when one conforms to or violates them. Imagine too, that in such a community within which

interaction, cooperation, and relationships matter, there are some individuals who, *for whatever reason*, do not interact with their confreres. One might suppose that the remaining members of the community could ponder why it is that these solitary individuals behave as they do. And several suggestions may be offered for their solitude.

For example, it may be suggested that some of these noninteracting individuals have some biological or perhaps some genetic orientation that leads them to feel uncomfortable in the presence of others. Perhaps members of the community may have read something about a gene that is associated with diminished 5-HTT transcription and reduced serotonin uptake. Some in the community may have read somewhere that without the regulating effects of serotonin, the amygdala and hypothalamic–pituitary–adrenal (HPA) system can become overactive, leading to the physiological profile of a fearful or anxious individual. Fear may be a guiding force for these solitary individuals – fear of what may happen if they approach others in the community; fear of what may happen if they attempt to develop a nonfamilial relationship with another in the community; fear of leaving a negative impression on those who may judge their actions, thoughts, emotions, and behaviors.

Or perhaps, some might believe that it is not fear that guides the behaviors of some of these solitary individuals. Instead, it might be proposed that some of these noninteracting individuals have a biological orientation that leads them to *prefer* a solitary existence. These individuals may feel more positively inclined when in the company of inanimate objects ... things. At this point, our second thought experience leaves us with the identification of two “types” of solitary individuals: (1) those who are motivated by fear, the prospects of social appraisal, and heightened sensitivity to the possibility of rejection; and (2) those who have a distinct preference for solitude.

Regardless of the epidemiological “causes” of solitary behavior, in a society that has strong beliefs in the importance of cooperation, collaboration, and caregiving, it is likely that the majority of individuals who adhere to the cultural ethos would begin to think unpleasant thoughts about the noninteracting minority. They may think of solitary individuals as displaying unacceptable, discomfiting behavior; they may begin to feel negatively about them; they may discuss among themselves the need to exclude these noninteractors or to alter the behavior of these nonconforming individuals. Indeed, from the extant research, it is known that those who display behaviors considered to be inappropriate or abhorrent to the majority may be *isolated* by the group-at-large. And so now we have a third group of solitary individuals – those who have been isolated by the social group.

But how would these hypothetical community responses affect the nonsocial, nonconforming individual? What kinds of interactive/noninteractive cycles would be generated? And what would the solitary individuals think and feel about the larger community responses to them?

## The Point

The preceding verbiage brings me to the singular message that I am attempting to convey. From “all of the above,” I am willing to step out on a limb to suggest, straight-out, that solitude can be punishing, humbling, debilitating, and destructive.

I do admit that it would be foolish to ignore the perspectives of those who have sung the praises of solitude. This would include several authors of chapters in this compendium. It would also include the many beloved and respected authors, poets, painters, philosophers, spiritualists, and scientists who have suggested that their best work or their deepest thoughts derive from those moments when they are able to escape the madding crowd. Here are a few examples:

- 1 “*You do not need to leave your room. Remain sitting at your table and listen. Do not even listen, simply wait, be quiet still and solitary. The world will freely offer itself to you to be unmasked, it has no choice, it will roll in ecstasy at your feet.*” **Franz Kafka**
- 2 “*How much better is silence; the coffee cup, the table. How much better to sit by myself like the solitary sea-bird that opens its wings on the stake. Let me sit here forever with bare things, this coffee cup, this knife, this fork, things in themselves, myself being myself.*” **Virginia Woolf**

I could offer hundreds of quotations about the glories of solitude from rather well-known people. Nevertheless, from my perhaps distorted, limited, and ego-centered perspective, I find it difficult to believe that one can lead a productive and happy life locked in a closet, a cave, a tent, a room. Virginia Woolf committed suicide; Kafka had documented psychological difficulties vis-à-vis his inability to develop and maintain positive and supportive relationships with others. One may prefer solitude ... and many of us require solitude for contemplation, exploration, problem-solving, introspection, and the escape of pressures elicited by the social/academic/employment/political communities. As I noted in the opening paragraph, solitude may be an entirely acceptable pursuit. But this statement comes with several provisos.

*The “ifs”.* If one spends time alone *voluntarily*, and if one can join a social group *when one wants to*, and if one can regulate one’s emotions (e.g., social fears and anger) effectively, and if one can initiate and maintain positive, supportive *relationships* with significant others, then the solitary experience can be productive. But the provisos that I have appended to the solitary experience are rather significant. I am quite certain that what the reader will come away with after having completed the chapters included herein is that solitude has many faces. These faces have varied developmental beginnings, concomitants, and courses. And these faces may be interpreted in different ways in different contexts, communities, and cultures. And perhaps most importantly, the provisos offered previously must be kept in mind regardless of context, community, and culture. Frankly, if

one fails to be mindful of these provisos, one can return to the introductory thought experiment and be assured that the failure of individuals to “collide” with one another will result in unpleasant consequences.

People do need to collide, or better put, interact with others. Of course, these interactions must be viewed by both partners as acceptable, positive, and productive. These interactions must be need-fulfilling. Drawing from the wisdom of others who have written of the significance of such interactions (e.g., John Bowlby and Robert Hinde), one might expect that a product of these interactive experiences is the expectation of the nature of future interactions with *the same* partners. Furthermore, from this perspective, one might expect that each partner is likely to develop a set of expectations about the nature of future interactions with *unknown* others. If the interactions experienced are pleasant and productive, then positive dyadic *relationships* may result. If, however, the interactions experienced are unpleasant or agonistic, the partners may avoid each other. And in some cases, if a particular individual comes to expect that all interactions will eventually prove negative, *withdrawal* from the social community may result.

### **A Final Comment: *Annus horribilis***

During the first six months of 2012, I “lived” in a hospital after having endured a heart transplant and numerous health complications. Although I was surrounded by medical staff and had many regular visitors, I was literally isolated from the “outside world.”

For the first two months of my hospitalization, my mind and body were at the river’s edge. But when the neurons began firing somewhat normally (beginning March 2012), and when I was able to converse with hospital staff and visitors, I nevertheless felt totally alone. It did not help that when visitors (and medical staff) met with me, they were required to wear masks, gloves, and medical gowns of one sort or another.

Eventually, it struck me that I was living at the extreme edge of what I had been studying for most of my professional career. And just as I had found through the use of questionnaires, interviews, rating scales, and observations (with samples of children and adolescents, and their parents, peers, and friends), solitude brought with it intrapersonal feelings of loneliness, sadness, anxiety, helplessness, and hopelessness. I felt disconnected from my personal and professional communities. Despite visitors’ generosity and kindness, I was miserable. Of course, when I was able to read and use my laptop, I could have taken the opportunity to play with ideas and data; my solitude could have been productive. But negative affect (emotion dysregulation) got in the way.

Upon return home, I rehabilitated and received visitors – family, friends, colleagues, students, former golf and hockey “buddies.” I welcomed news about family (I was especially grateful to be reunited with my grandchildren!), friends,

academe, and the world-at-large. I began to catch up on the various projects that my lab was involved in. Within a matter of weeks, I was coauthoring manuscripts and preparing abstracts for submission to various conferences. Although physically weak and incapable of taking lengthy walks or lifting anything heavier than a few pounds, my spirits were greatly improving – I was no longer alone! And finally, by August, when I returned to campus for the first time, I felt reconnected ... and valued!

The bottom line is that my personal solitude, especially given that it was experienced for a lengthy period of time and “enforced” externally and involuntarily, resulted in unpleasant consequences. The good news is that I have come to believe that the data my colleagues and I have collected over the years are actually meaningful beyond the halls of academe! Spending an inordinate time alone; feeling disconnected, rejected, and lonely; being excluded and perhaps victimized by others; being unable to competently converse with and relate to others (which may well result from solitude) can create a life of misery and malcontent; in some cases, this combination of factors may result in attempts at self-harm; in other cases it may result in attempts to harm others. Think for a moment about how often perpetrators of violence (e.g., Columbine, Virginia Tech, Newton High School, and the Boston Marathon bombings) have been described as loners, withdrawn, victimized, isolated, and friendless. Indeed, think about how some of the perpetrators have described themselves.

As I write this last sentence, my mind drifts to the lyricist/songwriting team of Eddie Vedder and Jeff Ament. Their evocative song “Jeremy” is based, in part, on the description of the death of Jeremy Wade Delle, a 15-year-old high school student in Richardson, Texas. Jeremy is portrayed as a quiet, sad adolescent who “spoke in class today” by committing suicide (by gunshot) in the presence of his classmates. The lyrics also suggest that the Jeremy in the song suffered parental abuse and/or neglect. In the music video, Jeremy appears to be rejected, excluded, and isolated by his peers. The words “harmless,” “peers,” and “problem” appear throughout the video. And in interviews about the “meanings” of the lyrics, Vedder has suggested that he was attempting to draw attention to one possible consequence of difficulties that can be produced by familial and peer disruptions. More importantly, he argued that one must gather one’s strength to fight against the seeming inevitability of the negative consequences of isolation, solitude, and rejection. I would suggest that the central message is that family members, peers, school personnel, and community leaders should be aware of the signs that presage intra- and interpersonal desolation.

Of course, not all people described as “solitary” or “isolated” have intra- or interpersonal problems. As noted previously, solitude and social withdrawal are not “necessarily evil.” We all need time alone ... to energize and re-energize, to mull, to produce this-and-that without interruption. But our species is a social species. So much is gained when people interact, collaborate, help, and care for others, develop relationships, and become active members of groups and communities.

However, when combined with dysregulated emotions, social incompetence, and a lack of supportive relationships, solitude, much like many other behavioral constructs studied by psychologists, can induce miserable consequences. The “trick” is to know if, when, and how to intervene within the family, peer group, and community.

In closing, it is with pleasure and pride that two of my former students (and current colleagues and close friends) have done such a wonderful job in putting together this compendium on solitude. After all, I do believe that once upon a time, I may have introduced the constructs of social withdrawal and solitude to Rob Coplan and Julie Bowker! Somehow, I doubt that I instructed or commanded Rob and Julie to study solitude, isolation, and aloneness. If memory serves me correct, they were each interested in things social. All I happened to do was provide them with a personal, historical (perhaps hysterical) note about how and why I became interested in the research I was doing. Of course, I could never claim to have played a role in the thoughts and research of those who have examined solitude from the perspectives of anthropology, biology, computer science, divinity, neuroscience, political science, primatology, psychoanalysis, sociology, and those tracks of psychology that focus primarily on personality, the environment, autism, and adult relationships. Therein lies the beauty of this compendium. Editors Coplan and Bowker have cleverly taken a twisty turn that curves beyond their own comfort zones of Developmental Science. By so doing, they have left me absolutely delighted. Coplan and Bowker have clearly attempted to move the reader into multiple zones of cognitive disequilibrium and to appreciate that if we are to truly understand any given phenomenon, we must look well beyond the silos within which we are typically reinforced to reside. You now hold in your hands a selection of readings that describe a variety of perspectives on solitude. You will read what solitude looks like; why it is that people spend time alone; why it is that solitude can be a necessary experience; how it feels and what one thinks about when one spends a good deal of time avoiding others or being rejected and excluded by one’s social community. There is no compendium quite like the one that you are handling. I applaud the editors’ efforts, and I do hope that the reader does herself/himself justice by closely examining chapters that move well beyond their own self-defined areas of expertise and intrapersonal comfort tunnels.

Part I

Theoretical Perspectives



# All Alone

## *Multiple Perspectives on the Study of Solitude*

Robert J. Coplan<sup>1</sup> and Julie C. Bowker<sup>2</sup>

<sup>1</sup>Department of Psychology, Carleton University, Ottawa, ON, Canada

<sup>2</sup>Department of Psychology, University at Buffalo, The State University of New York, NY, USA

*Seems I'm not alone in being alone. – Gordon Matthew Sumner (1979)*

The experience of solitude is a ubiquitous phenomenon. Historically, solitude has been considered both a boon and a curse, with artists, poets, musicians, and philosophers both lauding and lamenting *being alone*. Over the course of the lifespan, humans experience solitude for many different reasons and subjectively respond to solitude with a wide range of reactions and consequences. Some people may retreat to solitude as a respite from the stresses of life, for quiet contemplation, to foster creative impulses, or to commune with nature. Others may suffer the pain and loneliness of social isolation, withdrawing or being forcefully excluded from social interactions. Indeed, we all have and will experience different types of solitude in our lives.

The complex relationship we have with solitude and its multifaceted nature is reflected in our everyday language and culture. We can be alone in a crowd, alone with nature, or alone with our thoughts. Solitude can be differentially characterized along the full range of a continuum from a form of punishment (e.g., time-outs for children, solitary confinement for prisoners) to a less than ideal context (e.g., no man is an island, one is the loneliest number, misery loves company), all the way to a desirable state (e.g., taking time for oneself, needing your space or alone time). In this *Handbook*, we explore the many different faces of solitude, from perspectives inside and outside of psychology. In this introductory chapter, we consider some emergent *themes* in the historical study of solitude (see Figure 1.1) – and provide an overview of the contents of this volume.

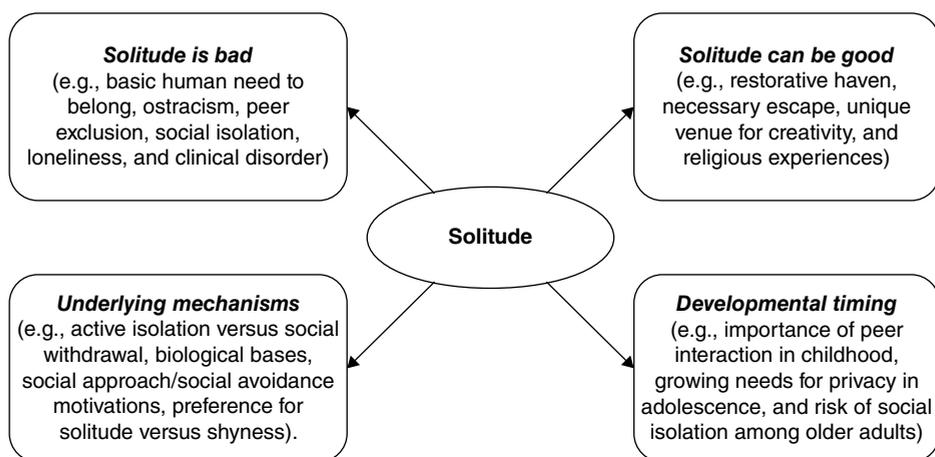


Figure 1.1 Emergent themes in the psychological study of solitude.

## Emergent Themes

The study of solitude cuts across virtually all psychology subdisciplines and has been explored from multiple and diverse theoretical perspectives across the lifespan. Accordingly, it is not surprising that there remains competing hypotheses regarding the nature of solitude and its implications for well-being. Indeed, from our view, these fundamentally opposed differential characterizations of solitude represent the most pervasive theme in the historical study of solitude as a psychological construct. In essence, this ongoing debate about the nature of solitude can be distilled down to an analysis of its *costs versus benefits*.

### Solitude is bad

Social affiliations are relationships that have long been considered to be adaptive to the survival of the human species (Barash, 1977). Indeed, social groups offer several well-documented evolutionary advantages (e.g., protection against predators, cooperative hunting, and food sharing) (Hamilton, 1964; Trivers, 1971). The notion that solitude may have *negative consequences* has a long history and can literally be traced back to biblical times (Genesis 2:18, And the LORD God said “It is not good for the man to be alone”).

Within the field of psychology, Triplett (1898) demonstrated in one of the earliest psychology experiments that children performed a simple task (pulling back a fishing reel) more slowly when alone than when paired with other children performing the same task. Thus, at the turn of the century, it was clear that certain types of performance were hindered by solitude. Developmental psychologists have also long suggested that excessive solitude during childhood can cause psychological pain and suffering (e.g., Freud, 1930), damage critically important

family relationships (e.g., Bowlby, 1973; Harlow, 1958), impede the development of the self-system (Mead, 1934; Sullivan, 1953), and prevent children from learning from their peers (e.g., Cooley, 1902; Piaget, 1926). The profound psychological impairments caused by extreme cases of social isolation in childhood, in cases such as Victor (Lane, 1976) or Genie (Curtiss, 1977), have emphasized that human contact is a basic necessity of development.

Social psychologists have also long considered the need for affiliation to be a basic human need (Horney, 1945; Shipley & Veroff, 1952). Early social psychology studies on small group dynamics, such as the Robbers Cave experiments (Sherif, Harvey, White, Hood, & Sherif, 1961), further highlighted the ways in which intergroup conflict can emerge and how out-group members can become quickly perceived negatively and in a stereotypical fashion and become mistreated. More recently, the need to belong theory (Baumeister & Leary, 1995) has suggested that we all have a fundamental *need to belong* or be accepted and to maintain positive relationships with others and that the failure to fulfill such needs can lead to significant physical and psychological distress. Relatedly, social neuroscientists now suggest that loneliness and social isolation can be bad not only for our psychological functioning and well-being but also for our physical health (Cacioppo & Patrick, 2008; House, Landis, & Umberson, 1988).

Finally, from the perspective of clinical psychology, social isolation has been traditionally viewed as a target criterion for intervention (Lowenstein & Svendsen, 1938). In the first edition of the *Diagnostic statistical manual of mental disorders (DSM-I; American Psychiatric Association [APA], 1952)*, people who failed to relate *effectively* to others could be classified as suffering from either a *psychotic disorder*, such as schizophrenia; a *psychoneurotic disorder*, such as anxiety; or a *personality disorder*, such as an inadequate personality (characterized by “inadaptability, ineptness, poor judgment, lack of physical and emotional stamina, and social incompatibility”; p. 35). In the *DSM-I*, schizoid personality disorder is described as another personality disorder characterized by social difficulties, specifically social avoidance. Interestingly, children with schizoid personalities were described in the manual as quiet, shy, and sensitive; adolescents were described as withdrawn, introverted, unsociable, and as *shut-ins*.

### Solitude can be good

In stark contrast, and from a very different historical tradition, many theorists and researchers have long called attention to the *benefits* of being alone (Montaigne, 1965; Merton, 1958; Zimmerman, 1805). For example, a central question for ancient Greek and Roman philosophers was the role of the group in society and the extent to which the individual should be a part of and separate from the group in order to achieve wisdom, excellence, and happiness. Later, Montaigne acknowledged the difficulties of attaining solitude but argued that individuals should strive for experiences of solitude to escape pressures, dogma, conventional

ways of thinking and being, vices, and the power of the group. For Montaigne, the fullest experiences of solitude could not be guaranteed by physical separation from others; instead, solitude involved a state of natural personal experience that could be accomplished both alone and in the company of others. Related ideas can be found in religious writings and theology (Hay & Morisey, 1978). For example, Thomas Merton, a Trappist monk who spent many years in solitude, passionately argued in several books and essays that solitude offered unique experiences for contemplation and prayer and that solitary retreats are necessary to achieve authentic connections with others.

Ideas about the benefits of solitude can also be found in the writings of Winnicott (1958). For Winnicott, solitude was an experience of aloneness afforded by a *good-enough* facilitating environment and was a necessary precondition during infancy and childhood for later psychological maturity and self-discovery and self-realization. In adulthood, spending time alone and away from others has also long been argued by philosophers, authors, and poets to be necessary for imaginative, creative, and artistic enterprises (e.g., Thoreau, 1854). In these perspectives, solitary experiences provide benefits when the individual *chooses* to be alone. However, personal stories of several accomplished authors, such as Beatrix Potter and Emily Dickinson, suggest that creativity and artistic talents may also develop in response to long periods of painful social isolation and rejection (Middleton, 1935; Storr, 1988).

### Underlying mechanisms of solitude

Although the *costs versus benefits* debate regarding solitude is somewhat all-encompassing, nested within this broader distinction is a theme pertaining to the different mechanisms that may underlie our experiences of solitude. To begin with, it is important to distinguish between instances when solitude is other-imposed versus sought after. Rubin (1982) was one of the first psychologists to describe these different processes as distinguishing between *social isolation*, where the individual is excluded, rejected, or ostracized by their peer group, and *social withdrawal*, where the individual removes themselves from opportunities for social interaction. As we have previously discussed, there are long-studied negative consequences that accompany being socially isolated from one's group of peers. Thus, we turn now to a consideration of varying views regarding *why* individuals might *chose* to withdraw into solitude.

Within the psychological literature, researchers have highlighted several different reasons why individuals may seek out solitude, including a desire for privacy (Pedersen, 1979), the pursuance of religious experiences (Hay & Morisey, 1978), the simple enjoyment of leisure activities (Purcell & Keller, 1989), and seeking solace from or avoiding upsetting situations (Larson, 1990). Biological and neurophysiological processes have also been considered as putative sources of solitary behaviors. For example, the ancient Greeks and Romans argued that biologically based individual differences in character help to determine mood

(such as fear and anxiety) and social behavioral patterns (such as the tendency to be sociable or not), ideas which were precursors to the contemporary study of child temperament (Kagan & Fox, 2006). As well, recent interest in the specific neural systems that may be involved in social behaviors can be traced to the late 1800s with the case of Phineas Gage, who injured his orbitofrontal cortex in a railroad construction accident and afterwards was reported to no longer adhere to social norms or to be able to sustain positive relationships (Macmillan, 2000).

Finally, there is also a notable history of research pertaining to *motivations* for social contact (e.g., Murphy, 1954; Murray, 1938), which has been construed as a primary substrate of human personality (Eysenck, 1947). An important distinction was made between social approach and social avoidance motivations (Lewinsky, 1941; Mehrabian & Ksionzky, 1970). It has since been argued that individual differences in these social motivations further discriminate different reasons why individuals might withdraw from social interactions. For example, a low social approach motivation, or solitropic orientation, is construed as a non-fearful preference for solitude in adults (Burger, 1995; Cheek & Buss, 1981; Leary, Herbst, & McCrary, 2001) and children (Asendorpf, 1990; Coplan, Rubin, Fox, Calkins, & Stewart, 1994). In contrast, the conflict between competing social approach and social avoidance motivations (i.e., approach–avoidance conflict) is thought to lead to shyness and social anxiety (Cheek & Melchior, 1990; Jones, Briggs, & Smith, 1986).

### Developmental timing effects of solitude

Our final theme has to do with *developmental timing* or when (or at what age/developmental period) experiences of solitude occur. The *costs* of solitude are often assumed to be greater during childhood than in adolescence or adulthood – given the now widely held notion that the young developing child requires a significant amount of positive peer interaction for healthy social, emotional, and social-cognitive development and well-being (Rubin, Bukowski, & Parker, 2006). This pervasive belief may explain, in part, why considerably more developmental research on the concomitants of social withdrawal has focused on children as compared to adolescents. In addition, it is during adolescence that increasing needs for and enjoyment of privacy and solitude are thought to emerge (Larson, 1990). For this reason, it has been posited that some of the negative peer consequences often associated with social withdrawal during childhood, such as peer rejection and peer victimization, may diminish during the adolescent developmental period (Bowker, Rubin, & Coplan, 2012).

However, it has also long been argued that solitude at any age can foster loneliness and psychological angst, particularly if it is *other-imposed*. As mentioned previously, social needs are thought to exist in individuals of all ages, with several social and developmental theories suggesting that psychological well-being is determined by whether social needs are satisfied. For example, Sullivan (1953) posited that all individuals have social needs but that with development, the nature

of the social needs change (e.g., with puberty, needs for sexual relations emerge), as well as the *type* of relationship required to fulfill the needs (e.g., relationships with parents might satisfy early needs for tenderness; same-sex chumships or best friendships might satisfy needs for intimacy that emerge in early adolescence). Regardless of the developmental changes, however, Sullivan argued that if social needs were not fulfilled, significant negative self-system and psychological consequences would ensue. Consistent with these latter ideas are research findings that have identified loneliness, at any age, as one of the strongest risk factors for psychological ill-being (Heinrich & Gullone, 2006).

The debate as to *when* in development solitude might carry the greatest costs is yet to be resolved. However, it must also be acknowledged that the very nature of solitary experiences likely changes with age. For example, young children may retreat to their rooms, engage in solitary play in the company of peers, or find themselves forced to the periphery of social groups. Although *other-imposed solitude* might be manifested similarly at older ages (e.g., adolescents being forced to eat alone at lunchtime, adults being left out of after-work gatherings), adolescents and adults have greater control over and increased opportunities for self-selected solitary experiences relative to children. For example, adolescents are sometimes left alone without parental supervision in their homes or able to take themselves to places of their choosing. Adults can also choose to travel alone, can engage in meditative and religious retreats, and can select relatively solitary occupations and ways to spend their free time. In contrast, there may come a time in the life of an older adult where they are significantly impeded in their ability to actively seek out social contacts. It remains to be seen how these potential differences in *agency* pertaining to solitude across the lifespan speak to the relation between solitude and well-being.

## Overview of This Handbook

The chapters in this Handbook provide the reader with the first comprehensive compilation of psychological research related to the construct of solitude. The construct of solitude is examined from multiple psychological perspectives, during different developmental periods across the lifespan and across a broad range of contexts. Moreover, in an effort to further broaden the scope of our explorations, the final set of chapters incorporate disciplinary perspectives from *outside* of psychology.

The first section of this volume includes chapters pertaining to historical, theoretical, and methodological approaches to the study of solitude. Bukowski and Verroneau (Chapter 2) provide a rich historical overview of the conceptualization and measurement of social withdrawal and social isolation in childhood, with a particular focus on the role of peers. From a very different perspective, Mikulincer and Shaver (Chapter 3) describe the contribution of attachment theory to our understanding of loneliness in the face of solitude. These two chapters explicitly

acknowledge the unique and critical role of both *family* and *peers* in how individuals come to experience and respond to solitude. In their chapter, Schmidt and Miskovic (Chapter 4) consider the contributions of *biology*, delineating brain-based neurophysiological factors that appear to underlie the manifestation of shyness in children and adults.

There is no denying the substantive and long-term influence of Freud's psychoanalytic theory in the emergence of psychology as a science. In her chapter, Galanaki (Chapter 5) provides a comprehensive historical analysis of the phenomenon of solitude from a psychoanalytic perspective. Finally, in a notable counterpoint to several of the chapters in this section, Averill and Sundararajan (Chapter 6) espouse the more positive aspects of the experience of solitude while also embedding their consideration of solitude within a broader cultural perspective.

The second section of the book is organized to present the study of solitude in different developmental stages across the lifespan. However, equally represented here is heterogeneous nature of solitude, with various different conceptualizations, types, and psychological processes related to solitude represented. The first four chapters span the years from early childhood to young adulthood. Coplan and Ooi (Chapter 7) characterize different types of solitary play behaviors in early childhood, discussing their differential meanings and implications. Nesdale and Zimmer-Gembeck (Chapter 8) review the substantive and pervasive negative consequences of being rejected by peers (i.e., imposed solitude) in children's development. In his chapter, Goosens (Chapter 9) provides detailed exploration of the notion that some children do not *mind* being by themselves, linking the constructs of preference for solitude in childhood with an affinity for aloneness in adolescence. Bowker, Nelson, Markovic, and Luster (Chapter 10) extend this discussion from adolescence into emerging adulthood, conceptualizing different types of social withdrawal and their differential implications among adolescents and young adults.

The next three chapters explore personal and interpersonal processes in the experience of solitude in adults. Zelenski, Sobocko, and Whelan (Chapter 11) focus specifically on the Big Five personality dimension of introversion and discuss its (potentially complex) association with the experience of solitude and our subjective well-being. In their chapter, Nikitin and Schoch (Chapter 12) provide a rich synthesis of how social approach and social avoidance motivations underlie our interpretation of and reaction to social situations. As well, as a parallel to the earlier chapter on social exclusion in childhood, Wesselmann, Ren, and Hales (Chapter 13) discuss the profound negative implications of social ostracism for our species. In the final chapter in this section, Wethington and Pillemer (Chapter 14) outline the difficulties associated with social isolation among the elderly.

The third section explores how solitude can be differentially expressed and experienced across different contexts. In the first chapter in this section, Gazelle and Druhen Shell (Chapter 15) describe the experiences that anxious-solitary children and adolescents have at school with their peers and teachers, and across

school transitions, and how such experiences impact their behavior and psychosocial adjustment. With a focus on the college years, Asher and Stroud Weeks (Chapter 16) review the history of research on loneliness and belongingness and suggest that the two constructs are related but distinct dimensions of psychological experience. In the next chapter, DePaulo (Chapter 17) presents research debunking the myth that single people are lonely and unhappy and discusses recent changes in attitudes toward singles in the United States.

In their chapter, Amichai-Hamburger and Schneider (Chapter 18) consider solitude in the virtual world, with a focus on when and for whom Internet usage can lead to loneliness. This section concludes with two chapters that describe contexts in which solitary experiences can be restorative. Salmon and Matarese (Chapter 19) argue that solitude can have the greatest benefits when it occurs in the company of supportive others, as exemplified by mindfulness-based stress reduction programs. Finally, Korpela and Staats (Chapter 20) detail the ways in which being alone in nature can offer important opportunities for privacy, relaxation, and restoration.

The fourth section considers solitude from the perspective of clinical psychology. Here the focus is on solitude as it pertains to mental health. For example, Kwapil, Silvia, and Barrantes-Vidal (Chapter 21) examine the construct of social anhedonia (a trait-like disinterest in – and diminished pleasure derived from – social contact) and its link to the schizophrenia spectrum. In their chapter, Alder and Auyeung (Chapter 22) describe the *emotional solitude* that often accompanies social anxiety disorder. Kasari and Sterling (Chapter 23) focus on the social isolation and loneliness that may (or may not) be experienced by children with autism spectrum disorder. Meehan, Levy, Temes, and Detrixhe (Chapter 24) provide an in-depth discussion of how solitude is experienced and expressed by individuals suffering from personality disorders. In the final chapter of this section, Teo, Stufflebam, and Kato (Chapter 25) describe the phenomenon of hikikomori in Japan, a relatively recently studied extreme form of social withdrawal where individuals retreat into solitude in their residence for extended periods of time.

The final section of the book includes chapters pertaining to the study of solitude from disciplines *outside* of psychology. From a *biological* perspective, Palagi (Chapter 26) discusses the importance of solitary play for the individual development of nonhuman animals, citing examples from geladas, a species of Old World monkeys, and bonobos, our closest living nonhuman primate relative. From an *anthropological* perspective, Coleman (Chapter 27) describes historical views of solitude in urban environments and anomie (chaotic and poorly organized social relations often attributed to modernity and globalization) as well as contemporary experiences of solitude and personal isolation. In his chapter written from an existential *sociological* perspective, Fong (Chapter 28) examines how individuals employ solitude to confront social conditions that compel them to make sense of their place in society (such as experiences of imprisonments).

From the perspective of *computer science*, Ducheneaut and Yee (Chapter 29) explore recent theory and research on multiplayer online games, distinguishing