
ANGER AND AGGRESSION: CONCEPTUAL BACKGROUND AND HISTORICAL PERSPECTIVE

OVERVIEW

An efficacious approach to anger treatment must be grounded in a coherent view of anger and how this normal emotion can become 'disordered'. Anger is a captivating, unsettling, and oddly satisfying emotion. Activated in our surround, it commands attention and alertness for potential danger. Triggered within us, it provides empowerment yet can otherwise be cause for apprehension or shame. Anger is embedded in our hard-wiring for survival and perseverance. In response to oppressive circumstances, its expression is often tension-relieving. Recurrent anger, however, adversely affects emotional and physical health and is disruptive of social relationships that sustain personal well-being. Overridingly salient, perhaps, is anger's linguistic, symbolic, and empirical connection to aggression, which impels societies to seek remedies for its control.

Anger is indeed a perplexing emotion, and there is a multi-level ambivalence about its control. It is part of the human fabric and the diversity of personality, often garnering delight as well as disapproval. As a subjective experience, it curiously has self-serving qualities that can carry a gratifying aura, particularly in the service of retaliation. Thus, we do appreciate its functionality, but nevertheless recognize its commonly troublesome products. Precisely because it is associated with subjective distress, detrimental effects on personal relationships, health impairments, and the manifold harmful consequences of aggressive behaviour, interest in anger control prevails as a human welfare and societal concern.

Providing clinical interventions for persons having recurrent anger problems is a challenging enterprise. This turbulent emotion, ubiquitous in everyday life, is a feature of a wide range of disorders encountered by mental health and social service professionals in diverse settings. It is commonly observed in various personality, psychosomatic, and conduct disorders, in schizophrenia, in bipolar mood disorders, in organic cognitive disorders, in impulse control dysfunctions, and in a variety of conditions resulting from trauma. The central characteristic of anger in the broad context of clinical problems is that it is 'dysregulated' – its activation, expression, and ongoing experience occur without appropriate

controls. Alternatively stated, in such clinical conditions, there is a substantial incongruence between anger engagement and the requirements for optimal functioning, both in the short term and in the long term.

For persons with developmental disabilities, their life circumstances and psychosocial experiences, from childhood onward, are conducive to the activation of anger. Moreover, the environmental settings in which many reside are intrinsically constraining and limited in satisfaction. Recurrent thwarting of physical, emotional, and interpersonal needs can easily activate anger; cognitive functioning deficits readily impair effective coping with frustrating or aversive events; and impoverished support systems curtail problem-solving options. For decades, however, a prime treatment target for persons with developmental disabilities has been their 'challenging behaviour', which focuses away from internal emotional distress. As was so aptly stated by Blunden and Allen, 'very few intervention plans actually teach people with learning difficulties socially acceptable ways of expressing anger or frustration, and challenging behaviour may be the one way in which people in such circumstances can exert control over the way in which they live' (1987, p. 39).

Because anger is a common precursor of aggressive behaviour, it can be unsettling for mental health professionals to engage as a treatment focus, regardless of its salience as a clinical need. Because seriously angry people tend to be treatment-avoidant, engaging them in the therapeutic enterprise is often hard-going. Efforts to achieve clinical change are challenged by the adaptive functions of anger as a normal emotion and by its ties to symbolic structures having high personal, familial, and social group relevance. Anger routines have identity attachment qualities and are not easily relinquished. The oppositional nature of many high-anger clients results from anger being entrenched in personal identity, derivative of traumatic life history, associated with personality or mental disorder, and unmitigated by soothing social influences. Intellectual functioning deficits clearly add to the challenges of anger regulation from the standpoint of both clients and those who seek to help them therapeutically.

In this book, we address the assessment of anger and the provision of anger treatment for persons with developmental disabilities. Our approach is cognitive-behavioural in orientation, and while it is grounded in an extensive clinical research project with hospitalized forensic patients, the proffered content and overview are more broadly based. Our attention to anger is mindful of the entanglements of the clinical problem in this client population – namely, the conjunction of developmental disability, impoverished family background, early conduct difficulties, substance use, serious offence history, institutionalization, re-offending, amalgamative emotional distress, and recurrent challenging behaviour for mental health care staff. Innovations and evidence in the existing literature point to achievements in the assessment and treatment of persons having such multi-layered difficulties in regulating anger and aggressive behaviour, and this bodes well for extensions to clients with less severe anger problems and less resource impairment.

THE SOCIETAL CALL FOR ANGER CONTROL

Proscriptions for anger control have been plentiful since classical philosophers sought rational control over the emotions, which were then understood as passions that seized the personality, disturbed judgement, and imperilled behaviour. Pre-dating the Greek and Roman Stoics were Buddhist teachings about the path to enlightenment, seeking to train

the mind to gain inner strength. Anger control has been a vexing issue addressed in disparate ways by Buddhists, Stoic philosophers, Psalmists, Scholastics, philosophers of the European Enlightenment, Jonathan Swift, American colonists, Victorians, Existentialists, early North American psychology, Dr Spock, Dale Carnegie, sensitivity trainers, Zen masters, and psychodynamic and cognitive-behavioural therapists, to name an assortment of promulgators.

Interest in anger control gained prominence in recent decades both in the general culture of Western societies and in broad clinical psychology literature. In many countries, the call for 'anger management' is commonly encountered in news/entertainment media, as well as in directives from social gatekeepers seeking to rectify someone's troublesome behaviour. In the popular press, road rage metastasized into air rage, cinema rage, golf rage, rink rage, surf rage, trolley rage, and royal rage. Anger management became a frequent prescription given by judicial officers, school administrators, mental health system directors, and prison and probation authorities. Its diffusion is exemplified by the many self-help tradebooks written by clinical practitioners, the subtitles of which reflect the quest for wellness through anger control (e.g., Carter, 2003; Colbert, 2003; Cullen & Freeman-Longo, 1995; Davies, 2000; Harbin, 2000; McKay, Rogers, & McKay, 1989). Advances in academic research and in evidence-based psychological treatment provided the springboard for the societal consciousness-raising, which has now included a Hollywood production on the topic. Perhaps it is too cynical to state that anger problems are commonly trivialized, but it seems fair to conclude that, unless serious violence is involved, anger therapy is viewed with less gravitas than therapy for depression.

The designated recipients of real-life anger interventions have been highly diverse in problem condition, e.g., domestic violence perpetrators, traffic offenders, children with conduct problems, quarrelsome neighbours, explosive felons, and persons with various psychiatric disorders being offered anger management as supplementary care. Anger treatment gains for clients having a wide range of clinical disorders have been reported in case studies and multiple baseline studies, which will be presented later. In contrast, a great many recipients of anger treatment in controlled studies have been college student volunteers, which unfortunately results in such studies with quasi-clinical clients receiving disproportionate attention in meta-analyses. As six meta-analyses have now been published (Beck & Fernandez, 1998; Del Vecchio & O'Leary, 2004; DiGuiseppe & Tafrate, 2003; Edmondson & Conger, 1996; Sukhodolsky, Kassinove, & Gorman, 2004; Tafrate, 1995), there oddly may be more meta-analyses of anger treatment than the number of high quality clinical trials justify.

The call for 'anger management' has perhaps been far too prevalent, and those ready to be proficiently responsive far too few. Nevertheless, mental health professionals in many service delivery domains have now become familiar with client anger problems and have explored diverse approaches to improving their clinical care capacity in this regard. Dissemination of programmes has occurred in schools, clinics, hospitals, and prisons, especially of cognitive-behaviour therapy (CBT) interventions, implemented with varying degrees of systematization. As reviewed by Taylor (2002a), anger treatment also took hold in the field of intellectual disabilities, including CBT, as well as other modalities. Because the general procedures of CBT are relatively accessible, attempts to apply this mode of treatment to anger can easily miss important elements of this therapeutic approach, from the clinical problem formulation, to the complexities of cognitive restructuring, and to the details of stress inoculation work with provocation hierarchies. To facilitate improvements in service

provision, this book presents a full anger assessment and treatment protocol, buttressed by clinical material and procedural tools to enable effective implementation for persons with developmental disabilities.

As an important backdrop, the historical context of psychological interventions for anger will be broadly overviewed to cultivate a differentiated understanding of the anger construct. Being versed in the conceptual complexities will foster adeptness in assessment of anger problems and provide a firmer grasp of core elements of CBT anger treatment. Implementation of the anger treatment ultimately requires proficient flexibility and nuances in protocol application. One must 'breathe life' into a treatment manual (Kendall, Chu, Gifford, Hayes, & Nauta, 1998). An enriched understanding of anger and aggression provides a grounding for the identification of anger problem dimensions, points of leverage, and treatment avenues.

AN ENCAPSULATED HISTORY

Early psychology

Since the writings of Charles Darwin, William James, and Walter B. Cannon, anger has been viewed in terms of the engagement of the organism's survival systems in response to threat and the interplay of cognitive, physiological, and behavioural components. It is an elementary Darwinian notion that the adaptive value of a characteristic is entailed by its fitness for the environment (Darwin, 1859); if the environment changes, that characteristic may lose its adaptive value, and the organism must adjust. Thus, the activation of anger may usefully serve to engage aggression in combat and to overcome fear, but, in non-combat environments (and even in combat ones), anger is often maladaptive. Many theories of emotion have enlarged upon the Darwinian view of emotions as reactions to basic survival problems created by the environment and upon Cannon's (1915) idea that internal changes prepare the body for fight or flight behaviour. These core ideas are exemplified in Plutchik (1980), as well as in Lazarus (1968). From Cannon to Lang (1995), emotion has commonly been viewed as an action disposition. As well, emotional expression is understood to have communicative value, which Darwin (1872) recognized and which has received extensive research attention from Ekman (2003), Izard (1977), and others.

Anger was prominently addressed by Darwin (1872), both throughout that volume and in a chapter detailing its vicissitudes (i.e., defiance, indignation, rage, and hatred). However, anger had long been the subject of scholarship in philosophical writings, from the classicists, such as Aristotle and Seneca, through Augustine, Aquinas, Hobbes, Spinoza, Nietzsche, and Sartre – to do some leapfrogging over time. To summarize the work of philosophers on anger would be a daunting task, and on the classicists there is a masterful book by Harris (2001) and a splendid edited volume by Braund and Most (2003). Regarding intellectual ancestry highly pertinent to what is presented in this book, it should be noted that a conception of anger as a product of threat perceptions, as having confirmatory bias characteristics, as being primed by aversive precursors, and as having social distancing effects can be found in the writings of Lucius Seneca (44/1817), who was Nero's tutor and is perhaps the first anger scholar.

In the field of psychology, G. Stanley Hall's (1899) important monograph sought to move us beyond the predominantly philosophical analyses that prevailed at that time. To

this end, he distributed a questionnaire in a national mailing that produced 2,184 returns. His questionnaire asked for descriptions of sensations, symptoms, overt acts, mental correlators, cognitive constructions, and palliatives associated with anger reactions. He distilled the responses into various content categories: causes, physical manifestations, 'vents', reactions, control, and treatment. Despite Hall's rich account, no programmatic work followed. In the ensuing decades, there was a peppering of diary studies of anger experiences (cf. Novaco, 1986), some introspection experimentation (e.g., Richardson, 1918), and some prescient clinical writings in the nascent field of psychosomatic medicine (e.g., Alexander, 1939; Miller, 1939; Saul, 1939) that called attention to the relationship of anger to blood pressure. No paradigm for research came to the fore, nor was there a prevailing conceptual framework – anger had no conceptual salience for Freud and his followers. Hall (1915) asserted that every Freudian mechanism applies to anger as well as to sexuality, yet anger remained neglected.

As there is no better metaphor for anger than hot fluid in a container, it is surprising that interest in anger and blood pressure slipped into abeyance until a burst of laboratory research occurred in the 1950s (e.g., Ax, 1953; Funkenstein, King, & Drolette, 1954; Oken, 1960; Schacter, 1957). There was dormancy again until the important field research of Harburg and his colleagues (Harburg et al., 1973; Harburg, Blakelock, & Roeper, 1979) on anger and essential hypertension, which importantly highlighted person–environment interactive variables and provided impetus for the study of anger as a public health issue. These clusters of research on anger and cardiovascular processes and disease are noteworthy – while developments in several areas of psychology have fuelled our contemporary interest, it was especially research in health psychology that served to spur attention to anger that had merely flickered since Hall's (1899) effort to advance psychological work on this subject.

Nascent aggression research

Research on aggression in personality and social psychology was substantial following the famous *Frustration and Aggression* monograph (Dollard, Doob, Miller, Mowrer, & Sears, 1939). Oddly, this body of research, for the most part, ignored anger; indeed, the word 'anger' is virtually absent in Dollard et al. (1939), appearing rarely and only incidentally, as in a footnote that refers to a diary study monograph by Goodenough (1931). In accounting for the activation of aggression, Dollard et al. relied on the term 'instigation', a hypothetical internal motivational state, rather than give attention to anger. The empirical agenda of experimental psychology in observable events resulted in a preference for the study of aggressive behaviour over the emotion of anger, which was seemingly more elusive and unsuitable for the positivistic programme.

Frustration was understood by Dollard et al. as a measurable goal-blocking – its intensity was seen to vary with the importance of the goals ('strength of the goal response'), the degree of interference with the goal response, and the number of response sequences frustrated. Its empirical locus was outside the person. The inherent ambiguity of the term, which certainly connotes an internal state, and the over-generalality of its application ultimately weighed against its utility in accounting for aggression. As Buss stated, 'It is difficult to imagine a behaviour sequence in which some drive is not suffering interference, especially when security and comfort are included as drives' (1966, p. 153). Pertinent to later cognitive appraisal formulations of the dynamics of anger and aggression, research by Pastore (1952)

and Cohen (1955) had shown that the experience of frustration did not uniformly provoke aggression but that the 'arbitrariness' of frustrations was an important mediating factor.

The landmark book by Buss (1961) did indeed given attention to anger (e.g., a chapter on anger physiology), but being strongly inclined toward positivism (Buss defined aggression as 'a response that delivers noxious stimuli to another organism', *ibid.* p. 1), he did not designate anger as an antecedent to aggression. In was Berkowitz (1962), in his important book, who argued for giving greater focus to anger as the emotional response mediator of frustration-aggression relationships. He used 'anger' in lieu of 'instigation to aggression' and asserted that it would be profitable now to consider this emotional state as the mediating condition. For example, one of his distinguished students, Geen (1968) later showed that when frustration is personalized or is exacerbated by insult, the resulting anger and aggression are proportionately greater. Oddly, although Berkowitz (1962) argued for the value of anger as a central mediating variable, he gave relatively little attention to it in the remainder of the book after his discussion of frustration-aggression propositions. In subsequent decades, Berkowitz also changed his view of the role of anger as a determinant of aggression, instead asserting that 'negative affect' was the central mediator (Berkowitz, 1990, 1993).

In the experimental laboratory research that evolved from the frustration-aggression hypothesis (see also, Feshbach, 1964, 1971), as well as the development of social learning theory (Bandura, 1973), the pre-ordained focal topic was aggression, and anger remained a secondary subject. Feshbach's approach to aggression also reflected the positivistic bias that excluded anger as a primary research topic. He asserted that 'aggressive drive', an intervening variable specified in Hullian terms (a mediating response-drive stimulus), motivated aggressive behaviour. He distinguished anger from aggressive drive, which was said to be facilitated by anger. Thus, the motivation for aggression was ascribed to a hypothetical condition having no organismic or phenomenological referents, which thereby diverted attention away from internal states. Similarly, Bandura's (1973) social learning theory analysis relegated anger to a secondary position of importance. He adopted a general arousal model in accounting for the disposition for aggression, asserting that any source of emotional arousal would increase its probability, and while he certainly incorporated anger in his pioneering book, it had no featured status. In this genre of research, attention given to anger in experimental psychology occurred predominately with regard to it being a laboratory precondition manipulated to instigate aggression. In the aggression theories of Berkowitz, Feshbach, and Bandura, respectfully, anger arousal is assigned response-energizing, response-motivating, and response-activating functions. Anger was viewed in each of their theories as an emotional response that facilitates aggression, rather than as a necessary condition, which remains the standard position among aggression scholars.

We will return to mainstream aggression research after first discussing psychoanalytic writings and some important concepts that it has bequeathed pertinent to our understanding of anger and its regulation.

Psychoanalytical theory

The heuristic source of the frustration-aggression hypothesis was psychoanalytic theory, but anger was a sparse topic in psychoanalytic writings (cf. Novaco, 1986). Freud, in his many works, never provided a coherent view of anger. Menninger (1938), one of Freud's primary

exponents, presented many clinical and journalistic stories of persons who 'boil over with rage' and later asserted that the human child 'usually begins his life in anger' (Menninger, 1942); but he did not give explicit attention to anger and rarely used the word in his books. Similarly, the treatise on aggression by Hartmann, Kris, and Loewenstein (1949) virtually omits the word 'anger' – it appears in one incidental comment in describing hypothetical behaviour of a child. Their concern was with the integration of libido and aggression, and their conjectures were consonant with the frustration–aggression hypothesis. Anna Freud's (1949) article on aggression in that same volume (originally a paper presented at the Royal Society of Medicine in 1947) had emotional development in its title, but the word 'anger' does not appear anywhere in the text. She too was preoccupied with the fusion of the libidinal and aggressive instincts. For example, in describing pathological aggressiveness of young children who had distressed family backgrounds, who had been exposed to war, or who had been in institutions or camps, she states: 'Closer observation shows that the pathological factor in the cases is not to be found in the aggressive tendencies themselves, but in the lack of fusion between them and libidinal (erotic) urges' (ibid., p. 41). For her, the pathology was located in the blocking of emotional libidinal development due to impaired object relations. It is as if anger was a triviality.

Among the psychoanalytic writers who thought that Freud overemphasized libidinal frustration in the etiology of the neuroses was Horney (1939) who conjectured that hostile impulses toward parents may be aroused in the child in many ways, including lack of respect, injustice, unreasonable demands, unreliability, coercion, and manipulation. It is not surprising, then, that in the camp of psychoanalysis, it was one of her disciples, Rubin (1969), who gave anger top billing. Rubin's book was written in colloquial style. He advocated an outlook on anger that recognized its normality. However, he was preoccupied with the blocking, freezing, twisting, subverting, or otherwise 'perverting' of anger and hence leaned a bit far in the ventilationist direction. His overstating of the adaptive value of anger expression is readily seen in the 103 questions he puts forward at the book's end to prod the reader towards a healthier outlook on anger.

The first psychoanalytic authors to grant anger some priority were Redl and Wineman (1951, 1952), whose theoretical framework for their work with children posited an impulse system and control system hydraulic model, within which disorders of anger were understood in terms of breakdowns in the control system. Despite the cogency of their work, anger remained an undiscovered topic in psychoanalytic writings. Crocker's (1955) lengthy case study of a highly aggressive 13-year-old boy, with 'severe temper tantrums', which was published in the flagship journal, *The Psychoanalytic Study of the Child*, was approached in formulation and in treatment in terms of ego mastery of libidinal development – indeed, to an astounding degree. Saul's *The Hostile Mind*, (1956), in effect picks up where Freud (1930) had left off in *Civilization and Its Discontents*, viewing 'hostility' as the motivating force for human destructiveness – essentially, by-passing anger. There are many examples of the inattention to anger by psychoanalytic scholars in the decades after Freud. In Rochlin's (1973) scholarly book that examines aggression as viewed by psychoanalytic theory, the vantage point is narcissism – anger is not indexed and is sparsely mentioned. Bowlby's (1969, 1973) treatment of the subject is sparse. In his first volume on attachment, he briefly touches on anger in commenting about the reification of 'feeling' terms in discussing appraisal processes; in his second volume, it occupies a very small proportion of the text, despite its inclusion in the book's subtitle. Bowlby saw anger as functional when it served to fortify attachment bonds and dysfunctional when it weakened them.

As noted above, Rubin's (1969) book was an exception, being fully devoted to anger, and this is also the case for Madow (1972). However, as he himself says, 'no attempt is made in this book to distinguish between "aggression," "hostility," "rage," "resentment," and "anger"' (ibid., p. x). Madow's chapter on the *causes* of anger rests on frustrations of the pleasure principle and the societal demands for its surrender, and his analysis of societal violence turns on frustrations associated with deprivation and competition. The more recent book, *Rage*, by the psychoanalyst, Eigen (2002), describing case studies of psychoanalytic therapy, is near-tabloid in presentation and offers no conceptual framework.

Psychoanalytic theory gave scant attention to anger, but it was the inspiration for the frustration-aggression hypothesis, which in turn was the springboard for a wealth of research on human aggressive behaviour. Even psychoanalytic concepts, such as catharsis and repressed anger/hostility, which have been mired in empirical controversy far too complicated to address here, have influenced our understanding of anger and aggression, if only in being foci of debate and empirical investigation.

THE EMERGENCE OF ANGER IN PSYCHOLOGICAL RESEARCH

The post-FA field

In the decades after the frustration-aggression monograph, anger was for the most part an incidental topic in studies of human aggression. Berkowitz (1962) had flagged up the value of anger for this genre of research, but he gave it little coverage. Even Geen, one of Berkowitz's top intellectual offspring, who found significance for anger in the study on types of frustration noted earlier (Geen, 1968), soon thereafter was pursuing a general arousal model in accounting for aggressive behaviour (Geen & O'Neal, 1969), minimizing the relevance of anger. In the well-regarded book on aggression by Johnson (1972), anger is not in the subject index, and he gives it sparse treatment in two paragraphs of the book. In his chapter on the 'Control of Aggression', the word 'anger' is not to be found. It was in this historical context that Novaco (1975, 1976) argued for the importance of anger and anger control as subject matter, as it was paradoxically much discussed colloquially but rarely studied scientifically.

Several prominent aggression researchers (namely, Hokanson, 1961a, 1961b; Konecni, 1975a, 1975b; Zillmann, 1971; Zillmann & Bryant, 1974) did give anger a highlighted focus. It has centrality in Konecni's model of aggressive behaviour and in Hokanson's research on the physiology of catharsis. With the exception of their work, and that of Zillmann on arousal states, anger's status in aggression research through the 1970s was that of a nearly inconsequential phenomenon. There is a somewhat parallel situation in contemporary research on violence risk factors for psychiatric patients, as anger is just beginning to be identified as an important dynamic variable, as will be discussed in Chapter 6 concerning anger assessment.

Zillmann has contributed importantly to our understanding of the anger-aggression relationship (see especially Zillmann, 1979, 1988), and his key discovery was that of 'excitation transfer' effects (Zillmann, 1971). This idea and phenomenon are that arousal ('excitation') residues from a prior activating event can combine with arousal activated by some present event, thus transferring the undissipated arousal to that present event. This transfer then enhances or intensifies the experience of anger and the potentiation of aggressive behaviour,

when cognitively guided by cues of anger/aggression. Transfer effects are not conjectured to occur when the residual arousal is attributed to non-provocation sources. In a series of studies (see also Zillmann, Katcher, & Milavsky, 1972) involving physiological and behavioural measures, but no explicit anger measure (observation of anger came in debriefing interviews), he and his colleagues found that arousal residues from prior, non-provocation sources (physical exercise or erotic films) intensified subsequent aggression in the context of anger provocation. To put it simply, and to paraphrase Zillmann and Bryant (1974), someone who is already aroused 'blows their top' more readily than someone who is not already aroused.

Zillmann's excitation transfer concept is important because it provides a theoretical and empirical base for understanding how exposure to stressors, both acute and ambient, can predispose the person to respond angrily when faced with a minor provocation. For persons with developmental disabilities, the sequential experience or accumulation of aversive events can easily occur. When problems, conflicts, or disappointments remain unresolved due to resource limitations, the arousal residue can amplify anger in response to a subsequent thwarting. This concept highlights the need for arousal reduction techniques as part of a therapeutic programme.

Studies of anger in the fields of emotion and stress

A major boost to the study of anger occurred through the ascendancy of emotion in the agenda of psychological research, and the scholarship of Averill (1982, 1983) was particularly important. Great pioneers in the field of psychology, William James (1890) and Walter B. Cannon (1915), had given attention to anger in their efforts to understand psychophysiology and emotion as an action impulse, but its relevance was subsidiary to concern with general principles. With the advent of behaviourism, from Watson to Skinner, anger was generally off the radar, being a within-the-skin subjective phenomenon. The behaviouristic emphasis that characterized the work that flowed from the frustration-aggression hypothesis, as discussed above, bypassed anger as emotion.

Following the seminal work by Hall (1899), about which the reader might now have even greater appreciation, there were a number of self-report diary studies done with college students, including that of Gates (1926) with women in New York (Barnard College), Stratton (1926, 1927) with males and females in California (Berkeley), Meltzer (1933) with males and females in Oregon, and Anastasi, Cohen, and Spatz (1948) with Barnard College women. A much more intensive investigation, which concerned young children, was reported in a very fine monograph by Goodenough (1931). These studies were conducted to ascertain normative patterns of anger, but the research samples were limited in generalizability (cf. Novaco, 1986, for a review of this body of research). Averill's (1983) work would correct that shortcoming.

Two other notable exceptions to the anger research dearth decades, and which incorporated sample variation, were the little known studies by Landis, Ferrall, and Page (1936) and by McKellar (1948, 1949). Landis et al. were inspired by Stratton's (1926) research, (rudimentary as it was) relating anger to disease, and they conducted a questionnaire study (anger and fear) with both college students and hospitalized psychiatric patients in New York. Relevant to points that will be addressed in our chapter on the assessment of anger, the college students reported higher anger than did the psychiatric patients, and female patients reported

more anger than did male patients. Landis et al. also found that anger significantly correlated with the number of physical diseases among the psychiatric patients, but not among the students. McKellar (1948) conducted both an introspective study (as did Richardson, 1918), with himself as subject over 47 days, and questionnaire studies with adult education students in the London area. This was followed by a multi-stage interviewing study with male soldiers and female college students (McKellar, 1949). He was insightful about the complexities of anger and its activating conditions, and he asserted that 'behaviourist and operationist type' methods were insufficient for the study of anger and aggression, 'in view of the frequency of the non-expression of experienced anger' (1948, p. 155).

To be sure, there was substantial psychological scholarship on emotion (e.g., Cannon, 1931; Gray, 1935; Hebb, 1946; Leeper, 1948; Wechsler, 1925; Zangwill, 1948), but that work addressed the subject generically, as theorists struggled to define and demarcate emotion, emotional experiences, and emotion-driven behaviour. Anger would be mentioned, but not given a concerted focus. Later emotion theorists, especially Izard (1977), certainly featured anger, but his research, and that of other prominent theorists (e.g., Ekman, Friesen, & Ancoli, 1980; Plutchik, 1980) primarily concerned facial expressions. Tomkins (1963) virtually ignored anger; also, the term appears in only a few lines in the book by Mandler (1975) on the psychology of emotion and stress.

The field of human stress offered another potential avenue for anger research, particularly given the bridge provided by Lazarus (1966, 1967), most centrality with regard to the concepts of threat, appraisal, and coping, which interfaced with the study of emotion. Arnold (1960) had already proffered the appraisal concept in the emotion field, as pertaining to what she called the 'estimative system' involved with the experience of emotional states and the impulse to action. However, in the stress field, the affective state that received most attention was anxiety, and rarely anger. Even in the book by Lazarus and Folkman (1984), anger is a sparse topic. It is astounding that in the field of posttraumatic stress disorder (PTSD), anger has been given little priority (see Novaco & Chemtob, 1998) despite its phenomenological salience in PTSD and its demonstrable empirical relevance, particularly for combat-related PTSD (Novaco & Chemtob, 2002). Nevertheless, in the 1970s, stress emerged as a rubric under which a wide variety of adaptation-related phenomena were investigated.

Psychological approaches to stress, as compared to those in the medical field, gave considerable emphasis to cognitive mediational processes and had a person-environment interactive focus. The research and theorizing done by Lazarus and his students, most notably Averill (1973), as well as by others, such as Glass and Singer (1972), strongly drove the cognitive mediation theme that became a core focus of research on anger and on the development of cognitive-behavioural interventions for anger problems (Novaco, 1975). As well, cognitive-behavioural pioneers, particular Meichenbaum (1977), laid the groundwork for the refinement of anger treatment and the formulation of the stress inoculation approach (Meichenbaum & Novaco, 1978). It was in this sea of influences that Novaco (1979) put forward a perspective on the cognitive regulation of anger and stress, and first implemented the stress inoculation approach for anger problems (Novaco, 1977a, 1977b).

The significance of Averill's (1982, 1983) work in advancing anger research and theory is unmistakable. He conducted multiple community and college sample studies that mapped normative data on various components of anger episodes, including background conditions, targets, objectives, intensity, duration, perceptions, continuing reactions, and also responses to the anger of others. Beyond his exceptional studies of the 'everyday experience of anger', he set forth a theory of anger that differs markedly from other thinking

in the field. As a social constructivist, he views anger as a socially constituted syndrome – a transitory social role governed by social rules. His constructivist viewpoint emphasizes the idea that the meaning and function of emotions are primarily determined by the social systems in which they occur and of which they are an integral part. Emotions are interpreted as passions, rather than actions, i.e., as something that happens to one, rather than something that one does. He articulated this analysis with relevant biological and psychological systems, and his scholarly book covered historical, philosophical, legal, and scientific literature.

However, Averill's view of anger does not inform us about anger from the standpoint of maladjustment or psychopathology. That is, the elements of his perspective do not provide for understanding of anger as *psychological disturbance*. Nor is there direction for remedies for anger-related disorders. Only a few pages in his book are concerned with problematic anger. His intention was instead to emphasize the positive or functional aspects of anger within social systems, being quite inclined to see anger as a form of problem solving.

In the past decade or so there have been a number of autobiographical recall and questionnaire studies, which will be discussed in Chapter 6 on anger assessment.

Anger in health psychology

Emotion garnered broad attention in psychological research and theory in the 1980s (e.g., Frijda, 1986, 1988; Lazarus, 1982; Ortony, Clore, & Collins, 1988; Russell, 1991; Zajonc, 1984), and, in parallel, enthusiasm for the study of anger grew strongly, especially in conjunction with cardiovascular diseases. Research on anger and cardiovascular disease was bountiful, as reflected in the publication of a number of academic books (Chesney & Rosenman, 1985; Friedman, 1992; Johnson, 1990; Johnson, Gentry, & Julius, 1992; Siegman & Smith, 1994), as well as ones for lay readers (e.g. Williams & Williams, 1993). Among the seminal works were the book by Friedman and Rosenman (1974) and the study by Barefoot, Dahlstrom, and Williams (1982) that linked coronary heart disease incidence and mortality among physicians to their hostility scale scores obtained during medical school admissions testing.

In this genre of research, the differentiation between anger and hostility was often muddled, including in a major review by Miller, Smith, Turner, Guijarro, and Hallet (1996). Nevertheless, anger was featured prominently in research programmes pertaining to hypertension and coronary artery disease (see, Diamond, 1982; Dembroski, MacDougall, Williams, Hancy, & Blumenthal, 1985; Siegman, 1994). Current research has differentiated the anger and hostility constructs, and in their review of psychosocial risk factors, Strike and Steptoe (2004) state that anger shows a more consistent relationship to coronary artery disease. This is confirmed by the mortality data for men in a large sample prospective study by Eaker, Sullivan, Kelly-Hayes, D'Agostino, and Benjamin (2004) and by the fascinating study by Rosenberg et al. (2001) concerning facial expressions related to ischemia.

It is curious that enthusiasm for the study of anger was so enhanced by its identification with medical disorders. After all, people have been dying as a result of anger and hostility for a rather long time. Mostly, they died from externally caused tissue damage inflicted by anger-induced uncivilized behaviour, as opposed to anger-induced internal disease processes. There had always been numerous interpersonal and societal problems that result from this emotion and the violence that it subtends. While the general populace and community

gatekeepers knew well about the lethality of unregulated anger, academic researchers did not seem to get intrigued until it was established that desirable clientele, such as corporate executives, had anger problems. Once amenable to assessment and treatment in medico-laboratory settings, anger's popularity as a research topic grew exponentially. Setting any cynicism aside, it was all to the good that anger received such focus, not the least because heart disease was identified as the 'number one killer', with close to a million deaths per year in the United States (cf. Kannel et al. 1986). It also presents a vulnerability for other physical illness (Suinn, 2001).

It had long been known that anger is accompanied by heightened cardiovascular arousal, which acts as the mechanism that translates personality and behaviour into cardiovascular disease processes (Siegman and Smith, 1994). Dr John Hunter, a famous eighteenth-century British surgeon, is often quoted as having once remarked, 'My life is in the hands of any rascal that chooses to annoy me . . . ' and, he died suddenly while attending a hospital board meeting (Jenkins, 1978). Indeed, the famous Professor William Osler, in his *Lumleian Lectures on angina pectoris* stated that 'Many instances of slight anginal attacks are brought on by anger, worry, or sudden shock; and while in individual cases they may be serious, yet the cause is rather easier to avoid . . . though John Hunter neither thought so, nor found it so' (1910, p. 974). This intuition and expert medical opinion long preceded the landmark research by Barefoot et al. (1982) on the association of hostility assessed in medical school with physician mortality 25 years later, but with that study the physician death toll became scientific news.

The link between anger proneness and coronary heart disease (CHD) is empirically robust (e.g., Kneip et al., 1993; Krantz, Contrada, Hill, & Friedler, 1988; Williams, Nieto, Sanford, & Tyroler, 2001). In the study of 12,986 men and women by Williams et al. (2000), the multivariate adjusted risk ratio for CHD was 2.2 for high versus low anger. High anger in early adulthood was found by Chang, Ford, Meoni, Wang, and Klag (2002), in a follow-up study of 1,055 men since medical school, to have a relative risk ratio of 3.5 for CHD and 6.4 for a myocardial infarction. However, a large sample prospective study by Eaker et al. (2004) found trait anger to be predictive of atrial fibrillation and mortality in men but not in women.

With regard to hypertension, Johnson et al. (1992) stated that the preponderance of evidence indicates that the suppression of anger is characteristic of hypertensive patients. Although the meta-analysis by Suls, Wan, and Costa (1995) on resting blood pressure found the effect to be small and variable, the meta-analysis on ambulatory blood pressure by Schum, Jorgensen, Verhaeghen, Sauro, and Thibodeau (2003) concluded that not expressing anger was related to elevated diastolic pressure. In a study of over 4,300 men and women in Japan, Ohira et al. (2002) reported that Japanese men who do not express their anger have an increased risk of high blood pressure. Thus, the hypothesis proffered by Alexander (1939) seems to have held up.

Overall, ample scientific evidence was amassed that pointed to a robust association between anger and the deterioration of cardiovascular health. The evidence has accumulated in both epidemiological and laboratory-based research. The epidemiological studies have linked anger to heart disease and mortality, and the laboratory work has shown that anger-prone individuals react to conflict with greater increases in blood pressure and are more at risk for cardiovascular dysfunction. This body of research about such important health problems has most certainly spurred interest in anger assessment and treatment.

Contemporary clinical research: anger and violence risk

As broad-based interest mounted to find remedies for violent behaviour, attention began to be given to violence risk factors, particularly in research with psychiatric patients and forensic populations. Progressively, anger has emerged in clinical assessment and violence risk research, including with offenders having developmental disabilities (Novaco & Taylor, 2004; Taylor, 2002a). Recurrent anger and aggressive behaviour are among the most refractory problems faced by mental health treatment staff who work with criminal offenders, either in secure institutional settings or in out-patient facilities. Yet, despite anger's seemingly transparent relevance, it was a sparse subject in the book by Wykes (1994) on violence and health care professionals. In the volume on the 'neurobiology and clinical views of aggression and impulsivity' by Maes and Coccaro (1998), the word 'anger' is virtually absent. This is similarly the case for Volavka's (2002) masterful book on the neurobiology of violence, despite its extensive concern with the clinical context. While patient assaultiveness received considerable attention in institutional settings (e.g. Lion & Reid, 1983; Rice, Harris, Varney, & Quinsey, 1989), comparatively little research on assessment and intervention was devoted to anger. This lapse will be addressed further in Chapter 6 on anger assessment with regard to staff-rating scales.

In the early stages of research on the clinical prediction of violent behaviour, anger was neglected, as it was in the various research domains we have discussed. The landmark monograph by Monahan (1981) did take note of the relevance of anger, but it had not yet been included in prediction variable schemes. In Monahan's (1992) evidence review, anger studies did not appear. However, with the advent of the MacArthur Violence Risk Study (Monahan & Steadman, 1994) and the results obtained from that stellar project involving over 1,100 discharged psychiatric patients in three US metropolitan areas (Monahan et al., 2001), the empirical grounds for anger as a risk factor for psychiatric patient violence were established. This is not to say that the relevance of anger has been fully embraced, e.g., in the book by Hodgins and Muller-Isberner (2000) on violence, crime, and mental disorder, it is completely ignored. Nevertheless, there are substantial conceptual and empirical grounds for advocating the importance of anger as a risk factor for clinical populations (Novaco, 1994), and advances in anger assessment have facilitated research on anger with persons at risk for violent behaviour in various community and institutional settings, both clinical and correctional.

In the mental health field, violence is a prevalent and costly problem. Anger has been found to predict physical aggression by psychiatric patients in the community prior to hospital admission (Craig, 1982; McNeil, Eisner, & Binder, 2003), in the hospital (Novaco, 1994; Novaco & Renwick, 1998; Wang and Diamond, 1999) and subsequently in the community after discharge (Monahan et al., 2001). For persons with developmental disabilities, Novaco and Taylor (2004) found anger, as self-rated by the patients themselves, to be predictive of hospital assaultiveness, controlling for age, length of stay, IQ, violent offence, and personality variables.

Within a hospital, anger and aggression incur a great cost. High levels of direct care staff injuries have been reported in studies done in secure hospitals in the USA (Bensley et al., 1997; Carmel & Hunter, 1989), in the UK (National Audit Office, 2003), and in Australia (Cheung, Schweitzer, Tuckwell, & Crowley, 1996). Assaultive behaviour by hospital patients seriously impairs the treatment milieu, results in restrictions and diminished chances

for discharge, constitutes very significant risk for harm among staff, and has considerable financial cost for the institution in workers' compensation claims and employee turnover. Reciprocally, staff expectations of being assaulted by patients may potentiate a disposition toward anger as a defence against perceived threat.

It must never be forgotten, however, that the non-isomorphism between anger and aggression leaves much to be explained with regard to violence prediction and much to be protected with regard to the human right to self-determination. Regarding the latter, one should consider the autobiography of Clifford Beers (1908), for whom anger was central to his recovery from a debilitating disorder while in a psychiatric hospital. Our approach to anger is aimed at fostering self-regulation and gives diligent attention to the psycho-social context of the person and the care-giving system.

Because anger is a common precursor of aggressive behaviour, it can be unsettling for mental health professionals in any setting to engage as a treatment focus, regardless of its problem salience. In that regard, it is the aim of this book to provide a resource for clinical practice and research concerning anger problems, especially for clients with intellectual disabilities who indeed have anger and aggression as a clinical need. That clinical need and problem salience, as well as the contextual conditions that engender and sustain it among persons with developmental disabilities, are detailed in Chapter 2.

SUMMARY

Anger is a commonly encountered clinical problem among persons served by mental health professionals in community and institutional settings. Its assessment and treatment are a challenging clinical enterprise. Anger is a feature of a wide variety of clinical disorders, and it has high relevance for persons with developmental disabilities, whose lives are often replete with frustration, unfairness, discouragement, and unsupportiveness.

Societal interest in anger control is abundant, but the assessment and treatment of anger problems should proceed with proficient understanding of anger and aggressive behaviour. The historical background of theory and research on anger has been presented, so as to foster an enriched view of this complex emotion. Being grounded in how anger has emerged as a psychological research topic across many sub-fields will facilitate comprehension of the theoretical view that is offered in the next chapter as a guiding conceptual perspective.