

Anger and Related Emotions

1. Self Esteem and Anger
2. Stress and Anger Management
3. Anger and Health
4. Depression and Anger
5. Anger and Self Harming Behavior

Theorists and clinicians are not always clear in distinguishing anger from hostility and aggression, sometimes using the terms interchangeably. Given the confusion that prevails in much of the literature, Thomas (1993c) maintains the importance of establishing such distinctions. Thomas defines *anger* as "a strong feeling of distress or displeasure in response to a specific provocation of some kind", as distinct from *hostility*, which "implies a more pervasive and enduring antagonistic mental attitude". Person (1993) agrees, citing hostile behaviour as anger either previously unexpressed or anger that had been expressed and had failed to effect a desired change. *Aggression* is distinct from anger in being defined as "any behavior directed toward another person (or a person's property) with the intent to do harm, even if the aggressor was unsuccessful" (White & Kowalski, 1994, p. 487). Thomas (1993c) contends theorists error in placing anger and aggression on a continuum, implying that if anger remains unchecked it will escalate to aggressive acts. This assumption ignores the fact that "aggressive behavior can exist in the absence of anger and vice versa" (p.13; Lewis, 1993; Person, 1993). The definition Campbell (1993) puts forth recognizes the continuum that Thomas rejects. Campbell traces a chronology of women's aggression that begins with anger, initially accompanied by restraint and self control, moves through a mounting frustration if the provocation continues, and erupts in aggression when the frustration becomes intolerable. She thus views women's aggression as emerging from "their inability to check the disruptive and frightening force of their own anger" (p. 1). Thomas, whose study was conducted concurrently with Campbell's work, maintains research evidence does not substantiate this view.

In relating the experiences of shame and guilt to anger and self-reported aggression, Tangney, Wagner, Fletcher, and Gramzow (1992), reporting two studies of college undergraduates, note that psychologists have often failed to make a distinction between these two powerful emotions. While they both involve negative affect, the focus of the affect differs. Guilt emerges with an act or failure to act. Personal behaviour is thus evaluated somewhat externally, apart from the self. Shame is described as much more devastating, with the object of concern being the entire self. "The 'bad thing' is experienced as a reflection of a 'bad self'" (p. 670), with a resultant shrinking sense of worthlessness, of feeling small and powerless. In a search of the literature, Tangney et al. contend there is a consistent understanding that guilt leads to empathy, and motivates individuals to desire to confess, apologize, make amends, or repair, whereas shame activates a wish to hide, shrink, or disappear. The authors suggest that an initial sense of shame fosters a subsequent anger, a humiliated fury, as an attempt to provide temporary relief from the debilitating experience of shame. As shame typically involves a real or imagined disapproving other (p. 673), this fury is easily directed toward others. This study does not delineate the sex ratio of subjects and thus does not draw comparisons of male and female samples.

A significant link is cited in the clinical literature between adults shamed as children and anger and judgment toward the qualities in others they feel ashamed of in themselves (Middleton-Moz (1990). This reflects the shift from shame to rage noted above and confirmed by Nathanson (1992) who suggests "the most prominent stimulus to anger is humiliation" (p. 105).

Valentis and Devane (1994), in their analysis of the roots of female *rage*, make no clear distinction between this emotion and anger. The root cause of female rage is identified as "anguish turned to shame" (p. 17), and is described as a basic instinct along with fear, aggression, and sexual desire. The authors maintain rage is "carried deep within the human genetic program" (p. 19), and emerges as a defense against a perceived or real threat to the self, that may be experienced as the terrifying threat of annihilation. Rage is experienced by women as a total mind and body experience that blocks out all other emotions, and may trigger unconscious memories of key humiliating incidents.

Parrott and Smith (1993), in two experiments, empirically investigated the distinctions between envy and jealousy. Though long regarded as distinct emotions, they contend the two have recently been confused in the literature. *Envy* traditionally involves comparing poorly with others and emerges when another has what one lacks. It is associated with feelings of inferiority, longing, resentment, and ill will sometimes accompanied by guilt. *Jealousy* necessarily occurs in the context of relationships, involving three persons. Involved is the fear of losing an important relationship to a rival. Emotions associated are fear of loss, anxiety, suspiciousness, and anger about betrayal.

1. Self Esteem and Anger

Self-esteem and anger in the literature are inextricably linked. One theorist claims "our emotions, to put the matter bluntly, are nothing other than our attempts to establish and defend our self-esteem" (Solomon, quoted in Saylor & Denham, 1993, p. 98). In a search of the literature, Saylor and Denham observe a majority of theorists suggest that persons with low self-esteem tend to become angry more easily than persons with high self-esteem. Two differing views emerge in explanation. Thomas (1991) suggests that when self-esteem is low women may interpret events in a manner that produces anger. Saylor and Denham reference a 1989 study by C.A. Hockett suggesting "*anger* caus[es] low self-esteem rather than low self-esteem being a predisposition to anger" (p. 99). Saylor and Denham further note a complicating factor in assessing the anger self-esteem linkage in women, an assessment shared by Bernardez-Bonesatti (1978). Many women have been taught that anger is an unacceptable emotion. Its expression therefore produces a diminished sense of self-esteem. The possibility of a vicious cycle is apparent, low self-esteem predisposing women to become angry which leads in turn to lower self-esteem.

This cycle becomes apparent in a discussion of self-esteem and anger within the context of women's social development. Crawford, et al. (1992), in examining the relative differences in social power between men and women, suggest that men, expressing anger from a position of power as a means of attempting to ensure it, and directing their anger toward inferiors, become empowered in the process. Women's anger however, arising out of a sense of powerlessness "takes on an out-of-control, passionate, ineffective character" (p. 183). Their anger expressed is likely to provoke angry reactions in the more powerful at having their power challenged. Similarly Belenky, Clinchy, Goldberger and Tarule (1986), in examining women's ways of knowing that "have been neglected and denigrated by the dominant intellectual ethos of our time" (preface), address the relative powerlessness women have experienced, manifesting itself in the extreme "in denial of self and in dependence on external authority for direction" (p. 24). The expression of anger among persons without power who are "assessed against a standard that holds that women should be seen but not heard" (p. 45), and who risk fear of unfavourable social consequences brought about as a result, is likely to lead to the cycle noted above.

The debate regarding the ventilationist perspective noted above, appears in the literature on anger and self-esteem. The view that venting one's anger leads to increased self-esteem (Hockett, 1989, cited in Saylor & Denham) is consistently challenged (Tavris, 1982; Lerner, 1985; Saylor & Denham, 1993). Lerner, in conversation with Kirmer (1990), maintains therapists "place too much emphasis on just expressing feelings per se, as if emoting is curative" (p. 12). As she earlier maintained, venting alone does not solve the underlying problems and in fact can lead to lower self-esteem (Lerner, 1985). Studies conducted by Brown (cited in Tavris, 1989) and Saylor and Denham (1993) substantiate this claim. Lerner (1985) advocates that to develop a stronger sense of self, it is essential that women translate their anger into clear, nonblaming statements that establish boundaries.

Saylor and Denham (1993) confirm in their study that discussing anger in a nonblaming way is positively associated with self-esteem. They further find that higher self-esteem is related to less tendency to become angry, to dwell over anger producing events, and most significantly, to convert anger into physical symptoms. Interestingly, lower self-esteem was related both to venting anger and to keeping it in, although the relationship was stronger for venting. Findings were congruent in nonclinical, medical, and psychiatric groups in the sample.

2. Stress and Anger Mangement



The study conducted by Thomas and Donnellan (1993) is among the first to assess the relationship between high levels of life stress and increased anger in women. While prior studies affirm the relationship, it is noted these have predominately been conducted on college students or on men and may not be generalized to women. No previous studies have extensively addressed the relationship between specific modes of anger expression and stress. The study confirms that higher stress is associated with higher anger levels, and this anger is more likely to find expression in physical symptoms or vented outwardly in blaming statements than suppressed or discussed in constructive ways.

The study notes some association, though not significant, between social support and the experience of anger. There is indication that anger increases with "feeling unloved, smaller network size, interpersonal relationships of shorter length, and less frequent contact with one's network" (p. 121). Older women were more likely to suppress their anger, while younger women were more prone to vent outwardly. The busiest women, those carrying a three role combination of wife, mother, and worker were least prone to anger. Those most prone to be angry were never-married women, followed by homemakers. Married workers without children and divorced workers with children were tied in their propensity to be angry. Although the results in the study were consistent, because they were working with cross sectional data within a nonexperimental design, the authors were reluctant to conclude that stress causes anger or that higher anger creates more stress.

One of the major recommendations of this study is for further exploration of vicarious stress the women identified. When asked about their greatest stress, women responded most often by indicating the stresses of other people in their social network; "the burdens of others were taken on as the women's *own*" (p. 128). Cognitive restructuring was recommended to health care providers to assist women to view stressors as "challenges to be mastered" (p. 128).

Women's aggression (as distinguished from anger) in the home related to domestic stresses such as budgeting, primary responsibility for child care, and social isolation of the nuclear family, is examined in one American survey that found women's aggression remains low until very high levels of stress are reached (Straus, cited in Campbell, 1993). The role of the home in diminishing women's usual self control is a further factor contributing to women's aggression (Campbell, 1993). Women who work outside the home and who experience the normal stress of the workplace compounded by patronizing comments and sexual harassment, fearing possible dismissal, are rarely able to openly express their frustration. Socialized to exert internal control over their anger in public places, their frustration erupts in the less inhibited environment at home (Campbell, 1993). The exacerbated level of stress women experience in nonsupportive homes and battering relationships is further addressed below.

Lerner (1985) documents predictable styles of managing anger when anxiety and stress is high. Anger may often be turned into tears, hurt, self-doubt, silent submission, or nonproductive blaming. Women may become distancing, under, or overfunctioning. Crawford et al. (1992) specifically address anger accompanied by crying, suggesting it is representative of the "impotence and powerlessness" (p. 174) felt when a woman is victimized by injustice. Tears accompany anger when there is a power differential between a woman and the object of her anger, when "action is denied us [because] the forces which frustrate us are too powerful" (p.174). Often misinterpreted as a sign of sorrow, crying is "a signal of the righteousness of [women's] anger along with the strength of the hurt" (p. 176). In suggesting that anger is the expression of women's frustration and powerlessness, Crawford et al. maintain that "[a] person with power does not need to be angry" (p. 182), suggesting that women's anger will be significantly lessened when it is acknowledged and recognized as legitimate.

3. Anger and Health



While present research is conclusive that anger increases with higher stress, further research is required regarding anger and women's health (Thomas & Atakan, 1993). Negative affect has been associated with the development of a wide range of diseases (Bleiker, van der Ploeg, Mook, & Kleijn, 1993), though many of the studies have not included women (Modrcin-McCarthy, & Tollett, 1993). For example, though extensively researched in men, few studies have focused on cardiovascular disease among women (Emerson & Harrison, 1990; Information Morning, 1995), with recent research disproving the prevailing belief that this is a primarily male disease (Baker, Dearborn, Hastings, & Hamberger, 1984; Information Morning, CBC Radio, Halifax, January 26, 1995). Women who do not acknowledge anger, or who are prone to high levels of anger, in addition to cardiovascular illness (Emerson & Harrison, 1990), are vulnerable to headaches (Epstein & Kaplan, 1983; Munhall, 1992), stomachaches (Epstein & Kaplan, 1983), asthma, arthritis (Friedman Booth-Kewley, cited in Modrcin-McCarthy & Tollett, 1993), elevated blood pressure (Modrcin-McCarthy & Tollett, 1993), insomnia, ulcers, back pain and obesity (Munhall, 1992). Rates of diagnosed breast cancer are found to be higher both in women who have openly expressed their anger only once or twice in their lives and in those who display frequent temper outbursts as compared to women who display less extreme expressions of their anger (Greer & Morris, cited in Thomas, 1993a). The transformation of anger into "socially accepted pathology" (Munhall, 1992, p. 488) that is treated while the anger remains unrecognized is noted above.

In addition to denial or suppression of anger, the expression of anger outwardly is associated with psychosomatic symptoms. The inappropriate expression of anger in behaviours such as obscenity, rudeness, or condescension, in addition to increasing hostility, is identified as a risk factor for coronary heart disease (Musante, MacDougall, Dembroski, & Costa, cited in Modrcin-McCarthy & Tollett, 1993).

The question of how anger actually relates to health is explored in research regarding anger and health habits among women (Johnson-Saylor, cited in Modrcin-McCarthy & Tollett, 1993; Modrcin-McCarthy & Tollett, 1993). Both studies found an association between poor health habits and anger expression. Johnson-Saylor found healthy behaviours to decrease as hostility increased. Modrcin-McCarthy & Tollett discovered that women who held anger in or expressed it somatically through body pain also practised poor health habits (p. 166). The authors cite a 1992 study by Pope, Wiebe, and Smith, that suggested "hostile persons directed their hostility onto themselves as well as others, thereby contributing to lack of self-care" (p. 166). Modrcin-McCarthy and Tollett further postulate that individuals believe they have little control over their ability to influence their health and/or their expression of anger. They are indeed, as the title of their article suggests, unhealthy, unfit, and too angry to care. In addition to physical exercise, promoting the expression of anger through discussion is suggested as the most valuable recommendation for the improvement of health among women (Modrcin-McCarthy & Tollett, 1993).

One further study of some interest relating to anger and health issues among women, (Siblerud, Motl, & Kienholz, 1994) suggests the mercury in silver dental fillings, by affecting the neurotransmitters in the brain, may be an etiological factor in increased anger, depression and anxiety. Women with dental amalgams, having notably more mercury vapour in the oral cavity than those without, had significantly higher scores in their propensity to express anger without provocation, and their frequency of anger expression.

4. Depression and Anger



The long standing belief begun with Freud (Dropleman & Wilt, 1993), that depression is anger turned inward, is strongly questioned in much of the literature (Tavris, 1982; Tavris, 1989; Thomas, 1991; Dropleman & Wilt, 1993). The related assumption that releasing anger produces clinical improvement is similarly discredited (Tavris, 1982; Lerner, 1985; Gershon, Cromer, & Klerman, cited in Thomas, 1990; Lerner, in Kirmer, 1990; Thomas & Atakan 1990; Thomas, 1990; Thomas, 1991; Nathanson, 1992; Moreno, Fuhriman, & Selby, 1993). It is documented in fact, that women who inappropriately express their anger are more likely to be depressed (Thomas & Atakan, 1990), or their depression deepens as a result (Tavris, 1989; Dropleman & Wilt, 1993). In a study involving male and female subjects, Moreno, et al. (1993) note that "anger may mask underlying depression" (p. 521), and in suggesting that hostility in depressed persons may be a predictor of suicide, cautions clinicians to pay strict attention to anger and hostility when assessing for suicide risk among clients.

While Greenspan (1993) holds the conventional belief that depression is anger turned inward, maintaining "traditional experts in chronic depression do recognize that the major dynamic here is anger which has been displaced...and directed at the self" (p. 190), she notes that such displacement is "an inevitable aspect of female identity in patriarchal society" (p. 190). Women's increased tendency to depression (Notman, 1989; Bleiker, et al., 1993; Campbell, 1993) is noted in part as a consequence of female development that "prescribe(s) passivity" and allows for "relatively fewer pathways for...active mastery" (Notman, 1989, p. 230) of aggression.

From a developmental perspective, Jack (1991) maintains "psychologists who are listening to women from a developmental perspective, a clinical orientation, or a psychoanalytic viewpoint all agree women's orientation to relationships is the central component of female identity and emotional activity" (p 3) Jack argues if such relatedness [See also Belenky, et al.(1986) and Gilligan (1982) for research on women from a developmental perspective.] is primary for women, "it becomes clear why a person will go to any lengths, including altering the self, to establish and maintain intimate ties". (p. 11) The link between the altering of self in relationship and the expression of anger is best expressed by Harriet Goldor Lerner in her 1987 article entitled *Female depression: Self-sacrifice and self-betrayal in relationships*. In it she writes, "Feelings of depression, low self-esteem, self-betrayal, and even self-hatred are inevitable when women fight but continue to submit to unfair circumstances, when they complain but participate in relationships that betray their own beliefs, values, and personal goals, or when they find themselves fulfilling society's stereotype of the bitchy, nagging, bitter, or destructive woman" (cited in Jack, 1991, p. 230).

There is suggestion that the ability to discuss anger rationally decreases the likelihood of depression (Dropleman & Wilt, 1993), but the correlation was so small in this study the authors are reluctant to infer a causal relationship. In a 1989 study conducted by Riley, Triber, and Woods, women suffering from Post Traumatic Stress Disorder (PTSD) and women who are depressed were found to be less likely to discuss their anger than women who had not experienced such trauma (cited in Dropleman & Wilt, 1993). Dropleman and Wilt confirm in their study "the more depressed women were, the more they were likely to report physical symptoms when angry" (p. 221), as well as the previously held conclusion that dwelling on angry thoughts amplifies depression. They conclude their analysis on a positive note by advising that though the anger-depression linkage among women is "often overlooked and inadequately treated" (p. 232), women can use the experience to move beyond blockages in their functioning and further their growth.

5. Anger and Self Harming Behavior



Anger is implicated in various forms of self harming behaviour among women. The powerlessness women feel finds expression in self mutilation (Bass & Davis, 1988; Courtois, 1988; Favazza & Conterio, 1989; Herman, 1992; Greenspan, 1993), unhealthy eating behaviour (Woodman, 1980; Pendleton, Moll, Tisdale, & Marler, 1990; Smith, Hillard, Walsh, Kubacki, & Morgan, 1991; Arnow, Kenardy, & Agras, 1992; Russell & Shirk, 1993), substance abuse (Gustafson, 1991; Potter-Efron & Potter-Efron, 1991; Grover & Thomas, 1993; Seabrook, 1993), and suicidal gestures (Grumet, 1988; Grossman, 1992; Greenspan, 1993).

a) Self Mutilation

Self mutilation, often inaccurately interpreted as a suicidal gesture (Herman, 1992), is a specific response to anxiety that offers temporary relief from emotional pain (Favazza & Conterio, 1989). Associated with earlier childhood abuse (Courtois, 1988; Favazza & Conterio, 1989; Herman, 1992), self-injury is associated with an "impotent rage" (Courtois, 1988, p. 303) that becomes directed at the self rather than the abuser. It becomes for some "a way to anesthetize the part of their body that is being abused by distracting themselves with another type of pain" (Courtois, 1988, p. 303). For others it becomes an internalization of the abuser's hostility as the survivor continues to abuse herself (Bass & Davis, 1988). A third motivation to self-injury is to provide a feeling of calm that rapidly decreases tension surrounding memories of abuse (Courtois, 1988; Favazza & Conterio, 1989; Herman, 1992). Herman documents the accounts of survivors who report injuring themselves to prove they exist (p. 109), and thus paradoxically regards self-injury as a form of self-protection rather than a suicide attempt.

Favazza & Conterio (1989) report a large number of women who self-mutilate also have an "eating disorder" (p. 283) and are alcoholics. The authors further found that no form of therapy was particularly helpful to subjects in their study.

b) Eating Behaviour

In a review of the literature, Russell and Shirk, (1993) found that although several studies have examined the link between overeating and emotions, few have examined anger in particular or concentrated specifically on women (p. 177). Their intensive study of 535 subjects found eating to be a response to almost every emotion, with "injustice, resentment, discrimination and rejection" (p. 181) common factors that triggered eating. Food was identified as the "drug of choice" (p. 184) for many women in the sample. Their study concludes that anger as a contributing factor in obesity in women is a subject warranting further research so appropriate treatment can be designed.

Although the current literature search found no other studies that specifically address the relationship between women's anger and eating behaviour, anger was mentioned among other factors affecting eating and non eating. In their study of binge eating in 20 female subjects, Arnow et al. (1992) discovered negative emotions to be present both before and after bingeing. Any relief from feelings of anger, anxiety, or sadness that bingeing offered was extremely temporary. In her study of eating patterns and personality traits among twenty obese women, Woodman (1980) observed eating in repressed anger to be present in all twenty subjects. Woodman, in a Jungian approach, theorises that obesity and anorexia nervosa reflect "the progressive loss of the feminine in our culture" (p. 23) that has caused women to reject their own bodies. Rage was rarely expressed among the obese women studied. All twenty women reported feeling "caged" (p. 34), propelled by "compulsive drives waiting to burst out" (p. 32). Experiencing herself as a social outcast from a very early age, the obese woman harbours fears of rejection along with a "compensating anger and desire for power" (p. 32).

Elynn Kaschak (1992) places her discussion about women's eating patterns within the context of her analysis of women's position in a male dominated society and considers the "so-called eating disorders - anorexia, bulimia, and bulimarexia...to be the extreme end point of normal feminine development" (p.190). This view is substantiated by Brown and Jasper (1993), and a decade earlier by Tavris (1982), who suggests "most dieters would do better to become angry not with their parents, but at a society that has made an enemy of their bodies" (p. 101). In a discussion of the theory that sex-role conflict contributes to the prevalence of eating disorders among contemporary women, Pendleton et al. (1990) suggest that the conflict regarding "how aggressive/independent vs. how passive/dependent a woman ought to be" (p. 816) is not specific to bulimic women but appears in women who seek psychiatric treatment for a large range of disorders. Their examination fails to delineate factors leading to the development of bulimia separate from other forms of psychiatric presentation.

In addition to the agreement that excessive eating is viewed among women as a means of control and regaining power (Woodman, 1980; Bass & Davis, 1988; Root, Fallon & Friedrich, cited in Smith et al., 1991), it is cited as a socially acceptable way to appease anger (Matsakis, cited in Russell & Shirk, 1992). Valentis and Devane (1994) suggest eating and noneating become the adolescent's way of expressing rage at parental neglect. "Eating is the one thing Mom can't make her do" (p. 82). Purging among bulimics, from a psychoanalytic perspective, is interpreted as a self punishing act (Schwartz, cited in Smith et al., 1991). Smith et al. cite the 1983 study of Mintz who suggests "vomiting has long been considered a symbolic expression of rage" (p. 285). Although differences were not significant in their study, Smith et al. conclude that purgers were somewhat more likely to be depressed, angry, and self-absorbed, with a somewhat higher self-destructive potential than nonpurgers. The "physiological and tranquilizing" component of purging is reported by Valentis and Devane (1994) who suggest "purging is a protection against the self and its rage" (p. 84). The authors quote therapist Pam Killen's explanation that endorphins are released in vomiting that "soothe[s] that rage and act[s] as palliatives for murderous feelings" (p. 84).

The relationship between food abuse and prior physical or sexual assault is reported in the literature. Russell and Shirk (1993), refer to two studies (Root, 1989; Tice, 1991) suggesting this correlation. Root reported from 30% - 75% of women who had failed treatment for food and substance abuse had been previously assaulted while Tice reported a figure of 50%. Among other emotions, anger was cited as a problem exhibited among Root's subjects. Difficulty remaining in treatment was related to the surfacing of feelings that had been masked by the addictive behaviour. Tice reported intense anger and low self esteem among the obese and bulimic women studied, with the anger directed toward themselves, their abuser, and projected toward other men. Women identified eating as a way to deny the abuse or suppress feelings including anger, and some relied on their weight as a protection against further sexual advances. Clinical literature confirms the link between sexual and physical assault and abuse of food (Bass & Davis, 1988; Courtois, 1988; Luepnitz, 1988; Herman, 1992; McGillicuddy & Maze, 1993).

c) Substance Use

Prior to the past two decades which have seen a dramatic increase in research on substance abuse by women, research, predominantly conducted on male subjects either ignored women or viewed them as anomalies when results were inconsistent with that of men (Seabrook, 1993). Research on women's anger and substance abuse has received very little attention.

Seabrook determined in her study, which she deems exploratory given the scarcity of research in this area, "women who use alcohol express their anger in ways that are similar to the general population of women" (p. 207). Although this study does not confirm any suggestion that women who use alcohol are angrier than other women, it does maintain a subgroup demonstrating unhealthy anger management may be at risk for future alcohol abuse. High risk drinkers showed a higher propensity to become angry, displayed more angry symptoms in their bodies such as headaches and shakiness, and tended to dwell on angry thoughts. These women were found to be less likely to engage in a discussion about their angry feelings in a healthy or productive way. High risk drinkers were found to have fewer social supports, a finding that contradicts results of Grover and Thomas (1993), who found no significant difference between the social supports of substance users and nonusers.

Women with anger symptoms (e.g., having a headache when angry) were found to drink more alcohol (Grover & Thomas, 1993) and use prescription drugs (Seabrook, 1993), suggesting cause for concern regarding the use of medication that masks underlying distress and the possibility of overdose and interactions of medication with alcohol. The suppression of anger chemically is considered both to be socially acceptable and fairly common in our society. No relationship was found between stress and use of alcohol, or between depression and drinking in the Seabrook study. A relationship was found however, between smoking and alcohol use, and a tendency for alcohol users to also use over the counter drugs. In a study testing aggression in women, use of alcohol in moderate dosage was not found to increase aggression when more than one response alternative was available (Gustafson, 1991).