

Managing walking rage: self-assessment and self-change techniques

Abstract

The activity of walking involves physical space, social space that maps out norms of walking, and mental space that involves changes of mood and self-control in reaction to other pedestrians. Walkers who impede the flow of progress of others have passive-aggressive sidewalk rage, while those who are impeded by them have active-sidewalk rage and walk around with intolerance and disapproval. A 20-item self-assessment inventory was constructed from the self-observations made by 30 volunteers who recorded their thoughts and feelings while walking in crowded places and using the think aloud approach. A walking personality makeover technique is described consisting of observing one's thoughts and emotions while walking and attempting to reassess the focus from the frustration of being impeded to the rationality of greater tolerance and civility.

Keywords: sidewalk rage, pedestrian rage, walking, self-monitoring, self-assessment, self-change

Volume 2 Issue 1 - 2015

Leon James

Department of Psychology, University of Hawaii, USA

Correspondence: Leon James, Department of Psychology, University of Hawaii, 2430 Campus Road Honolulu, HI 96822, USA, Email leon@hawaii.edu

Received: November 01, 2014 | **Published:** January 14, 2015

Introduction

Gait or walking style is a stable human skill that depends on many factors such as physical build, height, posture, stride length, velocity, and involvement of arms swinging.¹ Hangland & Cimbalo² examined some gait parameters of mall walking, including cadence, speed, and stride length for men and women aged 15 to 55 plus. In general women of all ages walk faster than men in large suburban malls, though contextual factors influence how fast people walk. Senior pedestrians (aged 55 and over) walk significantly slower, take less number of steps per minute, and have a shorter stride. Helbing & Molnar present a social force model for pedestrian dynamics in terms of motivation for certain types of movement in pedestrian flows such as acceleration and distance kept from those ahead and from borders of buildings. Walmsley & Lewis³ observed more than 1,300 pedestrians in various places in Australia and England and found that pedestrians actually move faster in big cities compared to smaller towns, although other factors interact with pace such as degree of congestions, time of day, weather, and age and sex of pedestrians.

More recently a number of studies attempted to study pedestrian behavior using computer simulation within specified pedestrian space.⁴ Two sources of "mental stress" factors were labeled "P-stress" (pedestrian-stress) and "D-stress" (destination stress). Degree of stress is dependent on density since the more people occupy a place the more impediments are encountered, the more one has to adjust one's speed and direction, and the more passing behavior occurs. However, studies have not yet focused on pedestrian interactions involving specifically anger and rage against other walkers as examined and then present study.

Conceptually the activity of walking is more than getting from one place to another. It involves moving through three different kinds of space: physical, social, and mental. A pedestrian moves through physical space that functions also as social space and involves a series of thoughts and intentions which take place in mental space. Social space functions by mapping out normative paths for pedestrians to follow, selecting some types of physical movement as allowable, and others as not allowable by social norms. When walkers suddenly stop and intently look at their tiny mobile device, they are

violating normative paths by behaving in such a way as to compel nearby pedestrians in both directions to negotiate their way around the physical block.

Conditions for Hostile Pedestrian Interactions

Sidewalk rage occurs in two directions. One consists of the pedestrians who are raging against walkers who impede their forward progression. This shows itself as active-aggressive rage and is confrontational by showing disapproval and by retaliating. The other is passive-aggressive pedestrian rage and consists of acting unaware or uncaring about impeding others. There is thus a community crisis in public walking spaces consisting of rage against rage.

It is hypothesized that walking around with intolerance and disapproval may contribute to emotional hostility and weakening of moral conscience in public interactions. In other words, the more negative is the mental space of a walker, the more stressful the walk and consequently, the unhealthier. Although specific research is still lacking it is predicted that the habit of rageful walking is a major mental health hazard, and consequently, a hazard on physical health. Today more people are expressing a variety of rageful behavior both in public, like road rage,⁵ surf-rage,⁶ and air rage,⁷ and in private, like computer rage⁸ and workplace rage.^{9,10}

Walking rage or sidewalk rage, also called pedestrian rage or pavement rage, may be defined as the experience of rageful emotions against other pedestrians and road users. There are two types of pedestrian rage: active and passive. People who act unaware of how they are interfering with the progress of other pedestrians are categorized as having passive-aggressive sidewalk rage. People who are verbally rude or tailgate pedestrians to make them go faster are categorized as having active-aggressive sidewalk rage. Self-observation can confirm many details of such oppositional walking:

- i. Stopping suddenly and unexpectedly, requiring those immediately behind to initiate risky and stressful collision avoidance procedures.
- ii. Walking shoulder to shoulder with companions, forcing those behind to slow down and wait, or else, to ask for permission to pass ("Excuse me!")

- iii. Sitting on the pavement against a wall with legs extended, forcing walkers to step over or go around them.
- iv. Walking on the left side of the pavement, passageway, or mall, forcing others to walk around.
- v. Standing in one spot and seeing a person carrying bags coming towards them but not moving out of the way, giving the impression they couldn't care less about other people's comfort or right of way.
- vi. Walking around a corner too close to the building and invariably almost bumping into others.
- vii. Walking much slower than others while talking on a cell phone, reading, or dawdling and gawking without showing awareness of the ongoing traffic movement dynamic.
- viii. Standing too close to the person ahead in a cashier shopping line as if to pressure the person in front to hurry up.
- ix. After the show in a theater standing in the aisle putting on the coat and ignoring others who want to pass.
- x. Passing another pedestrian, going in front and slowing down (often called "cutting me off").
- xi. Walking too close behind another pedestrian (sometimes called "tailgating me")
- xii. Smoking outside a building close to the entrance.
- xiii. Using a cell phone in an elevator, waiting room, or waiting line, indicating no concern for the need to be quiet.

When walking in a crowded area while being in a hurry people may experience intense hostile emotions of frustration and anger each time there is an impediment or human block to their forward progress. This negative emotion is a natural response that humans share with animals that attack when they are frustrated by fear or impediment. In behavioral biology this is known as the frustration-aggression hypothesis.¹¹ You can see this also with toddlers and older children who hit or push each other when frustrated over having to give up a toy or losing a turn in a game.¹² When frustration in a community goes up over a shared issue, violent acts tend to erupt.¹³ The frustration-aggression response tends to lower the civilized level of a community. On the other hand, as people strive towards higher levels of civilization and humanity they develop for themselves rational principles of pedestrianism that convince them of the critical necessity of maintaining civility in our interactions with others in public places. Civility is the antidote to the age of rage and is "the glue that holds the nation together" (George Washington, see below). Sidewalk rage, in both the active and passive-aggressive forms, is an uncivilized brute-force approach to walking on streets and malls. Pedestrian rage proceeds from a lack of emotional intelligence and realistic thinking.^{5,14} Rage is an emotional state that imposes impaired thinking.¹⁵ False assumptions and misjudgments turn into rageful behavior that is unhealthy to the individual and dangerous to the community. The intense negative emotion of rage overcomes the habit of civility that people normally show in public places. Rage weakens the bonds of restraint that people impose on themselves and lowers the threshold for explosive behavior. The current DSM manual includes road rage in the category of "intermittent explosive behavior" (IED).^{16,17} For example, tailgating a pedestrian by following too close behind is an active rageful response sourced in the desire to retaliate by punishing the slower pedestrian whose walking behavior

is seen as inconsiderate and rude. Sidewalk rage that is going on in the mental space of a pedestrian shows itself outwardly in social space as explosive behavior that is communicated in several ways:

- a. Following behind closer than is normal or typical
- b. Making comments under the breath that sound challenging or critical
- c. Saying something out loud that is negative or sarcastic
- d. Saying "Excuse me" with a forced smile but disapproving tone
- e. Yelling and threatening
- f. Stepping on their feet or barging through with physical contact

The walker who insists on walking slower than the rest of the pedestrian traffic is also emotionally gripped by passive-aggressive justifications that tend to reassert self-interest over public good and order. Pedestrians who insist on maintaining a slower walk than is normative for that area find ways of justifying it, as for instance thinking: "You can't make me go faster. I have just as much right as you do to walk here as I please, etc." The aggressiveness in this attitude is from a lack of caring, sympathy, or compassion for the other walkers. Also it is irrational since if the majority adopted it, walking in public would become impossible. Walking, bicycling, and driving are collaborative activities whose success depends on participants obeying norms, rules, regulations, and laws.

The habit of sidewalk rage is therefore a weakening of the community bonds that hold citizens together.

Negative thoughts decrease the enjoyment of walking in public places and increase its noxious by-products--stress, higher blood pressure, frustration, pessimism, less effective mental productivity that influences health, workplace, and family life. For many people living, working, and shopping in crowded places has become an emotional irritant that daily contaminates their mood.¹⁸ Research on driving in traffic indicates that the longer the commute, the higher the blood pressure and the greater the incidence of absenteeism.¹⁹ Men and women alike, of all ages, ethnic, and income groups, experience frustration on crowded freeways and at red lights. While this is an understandable reaction to congestion, few realize that frustration in traffic is a learned habit, and therefore it can be unlearned.⁵ An issue of the New Yorker magazine (July 12, 1999) shows a cartoon by Michael Crawford captioned "Sidewalk Rage" that pictures a spacious sidewalk divided by double lines into four lanes, each marked with a sign: Speed Walkers (leftmost lane), Walkers Who Veer, Walkers who Reverse Direction, and Walkers Who Inexplicably Stop (rightmost lane).

When confronted with an obstructionist walker the other pedestrians make a choice about the symbolic value they attach to the event. If they attach the event to their self-esteem, they may go down the road of rage, feeling insulted, wronged, disrespected, demeaned, and thwarted from their legitimate goal. The emotional brain takes over and leads them to emotionally challenged behaviors like yelling, gesturing, and retaliating. But there is another choice available in that emotional moment. People can reflect that they are giving up control of the situation when responding with their own rage. In these situations it is always uncertain as to how the other individual might react, whether politely or with rage. The "prime directive" in traffic, whether vehicular or pedestrian, is to retain control of the situation to avoid tragedy.⁵ By following this prime directive people have the opportunity to remain cool headed and to respond with emotional

intelligence by showing calm and civility in the face of perceived provocation.

The problem isn't absence of self-esteem - but an utter lack of self-restraint. Two-and-a-half centuries ago George Washington subscribed to a more cost-effective and time-tested program for reining in one's inner dragons. He carried a hand-copied list of self-improvement rules wherever he went. The original manuscript is kept at the Library of Congress and a copy may be seen on the Web.²⁰ Civility is the simplest and most emotionally intelligent solution available, more effective than law enforcement surveillance. Civility is a true American virtue. For instance, Washington's Rule 1, can be translated for the pedestrian traffic world as follows: "Every action done to another walker ought to be done with some sign of respect." This alone could solve the rage epidemic that has been invading the minds of drivers, bicyclists, and pedestrians. Washington's Rule 22 had a moral implication for character development: "Shew not yourself glad at the misfortune of another though he were your enemy." This is the basis of walking with civility, which promotes a positive spirited orientation emphasizing compassion, tolerance, and emotional intelligence or rationality.

Further advice from our founding father for aggressive drivers, as recast by Malkin:²¹ "Don't show any sign of anger in your interactions with other motorists, but show instead signs of "sweetness and mildness" (Rule 45). "Don't use insulting language against another driver or pedestrian, neither curse nor revile your passengers" (Rule 49). "Labor to keep alive in your breast that little spark of celestial fire called your driving conscience" (Rule 110).

Method and sample

Pedestrian aggressiveness is expressed through a variety of negative interactions, all of which relate to each other. Pedestrians can examine the list of aggressive behaviors here identified to see which ones occur regularly in their own experience as walkers.

Two types of pedestrian aggressiveness may be involved:

1. Active-aggressive sidewalk rage involving pedestrians who verbally or by appearance express strong disapproval of some other pedestrians and how they are behaving in a crowded public walkway; and
2. Passive-aggressive sidewalk rage involving pedestrians who act like they are oblivious or unconcerned with the legitimate rights and needs of other pedestrians nearby. Every person can observe these two types of pedestrian aggressiveness behaviors occurring regularly in crowded malls, airports, theaters, school exits, office buildings entrances, etc. It is necessary for a society to train its citizens in appropriate crowd behavior. School children need to have programs to acquire good pedestrian behavior in schoolyards, streets, shopping malls, and inside stores. College campuses can have designated volunteers with an armband to encourage appropriate pedestrian behaviors. This can be also be done at airports and all crowded places. Without such societal involvement it is unrealistic to expect people to change an ongoing cultural habit. Furthermore, like road rage, sidewalk rage is likely to increase or get worse with each new generation⁵. The self-assessment items were constructed from information based on the self-reports of 30 male and female volunteers aged 21-34 who carried a small voice recorder and spoke their thoughts and feelings loud enough for recording. All volunteers agreed to do this on three separate outings they took around shopping malls, airport, and busy street. The volunteers were asked to

focus specifically on their thoughts, emotions, and perceptions. Later they listened to the tapes and brought notes to share in a discussion group. At the end of the meeting the notes were handed in anonymously. These were then collated and edited into 20 items while attempting to select from the three types of behaviors visible in rage: affective, cognitive, and sensorimotor.²²

In view of prior research on pedestrians showing the important effects of age, sex, density, and purpose, additional future research is necessary using a systematic method of sampling both subjects and conditions of walking. These preliminary data may be considered suggestive regarding the specific focus on pedestrian hostility, competition, style, and tolerance. The current findings identify some specific affective and cognitive factors that individuals can use to assess their own hostility and intolerance when walking in crowded areas. This kind of self-assessment also helps pedestrians to plan and execute self-change attempts for modifying both emotions and interactions in challenged walking situations.

Self-Assessment of Walking Aggressiveness

The following is a self-administered inventory that informally assesses the intensity of a person's self-perception of aggressiveness as a pedestrian. It has 20 scale items referencing the walker's mental and social behavior in the affective domain of intentions and emotions, as well as the walker's cognitive behavior (i.e., thoughts), and sensorimotor actions. The items reference details about people's style of walking in public places, especially when crowded with other people, vehicles, shops, and places of attraction. The checklist can be used to provide an informal self-assessment of the strength of one's tendency to experience walking rage. For each question, people are to circle Yes if the statement applies to them reasonably well, or No if it doesn't.

1. Swear to myself a lot more in crowded places than I do elsewhere
Yes/No
2. I normally have critical thoughts about other pedestrians.
Yes/No
3. When a shopper in a cashier line tries to steal ahead, I get furious in my mind.
Yes/No
4. I sometimes enjoy the fantasy of doing violence to some pedestrians (e.g., imagining blowing them up or sweeping them aside).
Yes/No
5. When pedestrians are being inconsiderate and inconvenience other walkers, I get furious with them, even aggressive sometimes.
Yes/No
6. It's good to get my anger out because we all have aggressive feelings that are triggered under stressful situations.
Yes/No
7. When I'm very upset about something, it's often a relief to walk aggressively through a group of people to give my feelings an outlet.
Yes/No

8. I feel that it's important to remind certain obnoxious walkers to behave appropriately in crowded places instead of just letting them walk in whatever way they want.

Yes/No

9. Pedestrians should not have the right to walk slowly in crosswalks when cars are waiting.

Yes/No

10. Pushy walkers really annoy me so I bad-mouth them when I can which makes me feel better.

Yes/No

11. I tailgate when someone walks too slowly for conditions.

Yes/No

12. I try to get to my destination in the shortest time possible, or else it doesn't feel right.

Yes/No

13. If I stopped walking aggressively others would take advantage of my passivity.

Yes/No

14. I feel envious emotions when another pedestrian makes the green light on time and I'm stuck on red.

Yes/No

15. I feel energized by the sense of power and competition I experience while walking aggressively through a crowded area.

Yes/No

16. I can't stand hallways and walkways that are always crowded.

Yes/No

17. Once in a while I get so frustrated with other pedestrians that I begin to walk recklessly, taking chances in bumping into them.

Yes/No

18. I hate pedestrians who just dawdle instead of walking somewhere.

Yes/No

19. Sometimes I feel that I'm holding up walkers behind me so I start pressuring the pedestrians in front of me (called "tailgating").

Yes/No

20. I would feel embarrassed and frustrated to "get stuck" behind a crowd of slow moving pedestrians.

Yes/No

Scoring the answers: Give yourself 1 rage point for every Yes answer. How many do you have?

Interpreting your score

Scores will range from 0 to 20 Yes answers. Although no research is available on score distributions it is expected that few pedestrians would ever get 0 because negative pedestrian emotions are widespread, habitual and cultural. We all have some tendency toward it sometimes. In theory the higher the score the more likely it is that the person will experience sidewalk rage. Informal observation

of a small sample of 30 people indicate typical scores to range from 5 to 20 with an average of 12. A score greater than 10 would indicate a strong tendency for pedestrian rage, enough to compromise one's ability to remain calm and fair in certain routine but challenging walking situations. The self-checklist can assess four critical elements that create habitual pavement rage:

- I. Your anger theory (questions 1 to 7)
- II. Your pedestrian philosophy (questions 8 to 11)
- III. Your habit of compulsive rushing or feeling competitive (questions 12 to 17)
- IV. Your over-sensitivity to social pressure by pedestrians (18 to 20)

Walking Personality Makeovers

Negative pedestrian behaviors can be modified by those who (a) realize this negativity in themselves, (b) are shocked by it, and (c) make a drastic decision to stop being an aggressive pedestrian and start acting like a supportive pedestrian. Pedestrians may benefit by connecting with each other on social networking facilities and mutually encouraging each other to become supportive walkers. This involves acting the opposite of what one feels and thinks while venting or obsessively complaining about it. It's normal to experience walker's rage under certain conditions as when people come up against other pedestrians at airports who are walking on the left of the hallway and disrupting the flow of those who are moving along at a quick pace in the opposite direction. See if you can recognize your own experiences in the following sequence of events at an airport or mall:

Step A: The Set Up: As you walk on the right at a quick pace pulling your suitcase wheels behind you (or carrying packages), you notice two pedestrians coming towards you on your side, carrying things and walking on their left. You realize as you come nearer that they are just not going to move out of your way.

Step B: Taking the Bait: You suddenly feel the heat of the extra blood rushing to your face and you become conscious of negative thoughts tumbling through your mind. You hear yourself mutter quietly under your breath and derogatory words are formed silently on your lips. Or in addition: you allow yourself more overt expressions such as "giving the stink eye" as you move by, saying something unflattering out loud, deliberately bumping into, and perhaps for some people, some violently inventive behaviors.

Step C: Losing by Venting and Stressing: At this point you have the opportunity of continuing the process in the form of mental venting or in the form of mental reassessment. Mental venting is a long process marked by the inability to stop thinking and talking about a negative and annoying event or person. It is an obsession high in affective cost. Self-observation confirms that we are assailed by a lot of negative feelings during mental venting (zzz). There is a high toll on the physical health as well. Mental venting destroys the social glue that holds community together. The person in the grips of mental venting gives up rationality and civility.

Step D: Winning by Being Nice: Cognitive reassessment puts a stop to mental venting. Mental re-evaluation is the quick process of changing one's negative and aggressive performance style to positive and supportive. In mental venting we quickly multiply the reasons and justifications for hating and punishing the offending pedestrians. In mental reassessment we can multiply the reasons and justifications for forgiving the offending pedestrians. We compel ourselves to make a show of public friendliness or civility by slowing down, by smiling,

by accepting apologies, by greeting, by walking around without showing displeasure, etc.

To summarize the self-change steps:

- a) You notice inconsiderate walkers ahead.
- b) You're filled with negative thoughts and words.
- c) You continue with mental venting and walking rage; or else.
- d) You do mental reassessment towards tolerance and civility.

The difference between (step C) and (step D) is like that between unhealthy vs. healthy, or between irrational vs. rational, or between destructive of community vs. community building. Pedestrians are capable of switching from mental venting and revenge (step C) to mental tolerance and civility (step D) when their love for community and rationality exceeds their love for revenge and getting even with the offending walkers. Insulting and deprecating thoughts about someone may be motivated by feelings of revenge and the satisfaction of punishing people who are offensive or inconsiderate in their walking style. It helps to reflect about the fact that being a supportive walker strengthens social bonds in the community generally. Everybody benefits when a person switches from being an aggressive walker to a supportive walker.

Any individual motivated by powerful self-change agents such as ethics, morality, spirituality, and patriotism may undertake this self-change effort. Sidewalk rage, both active and passive varieties, is unethical, immoral, spiritually detrimental, and unpatriotic. These can be justified by the following considerations:

a. Unethical:

because we are occupying or blocking the rightful space of other walkers, preventing them from using it as provided by order and norms

b. Immoral:

because we are aggressively keeping someone from their freedom to go somewhere as we block the passage way that does not belong to us

c. Spiritually detrimental:

because we are reinforcing in ourselves selfish and disrespectful attitudes and behaviors towards others in daily life

d. Unpatriotic:

Because aggressiveness in all forms in public places is disjunctive of community life and disrupts mutual reliance and interdependence.

There are two self-change techniques that can promote a successful pedestrian personality makeover. The first strategy is the activity of monitoring or observing one's thoughts and emotions while walking in crowded areas. The second technique involves the activity of arguing with oneself to promote the adoption of principles of fairness and human rights for all walkers. This two-pronged activity therefore consists of self-monitoring and self-modifying one's mental behavior while walking. It is predicted that if this self-change activity is done regularly it can transform a habitual sidewalk rager to a peaceful and supportive pedestrian. The benefits of achieving this are significant. It is expected that people will feel better about themselves when walking in a crowd of people who display good will and respect for each other. This strengthens the feeling of belongingness to the community because everyone's behavior promotes the public good and the protection of the individual citizen.

To switch from an aggressive to a supportive walking style requires giving up and inhibiting the expression of aggressive intentions and their satisfactions, both direct and indirect. For instance, there is a strong tendency to want to communicate disapproval in the tone and in the facial expression when saying "Excuse me!" to an inconsiderate and passive-aggressive pedestrian who is taking up the entire available narrow path by dawdling in the middle. The satisfaction that is felt when expressing disapproval for such passive-aggressive behavior needs to be given up for the satisfaction felt when being a supportive pedestrian. Making this mental step from aggressive to supportive pedestrian interactions may be difficult for most people and may require additional techniques and many trials for eventual success.

Intermediate steps for emotional preparation may be helpful such as surrounding oneself in a mental context of good will to other road users that avoids giving in to condemnation, criticism, or ridicule. Instead, one needs to be inventive by finding a positive thought about the passive-aggressive pedestrian rager who is blocking the way, as for example, "Perhaps the person is distracted right now by some problem and does not normally walk this way. The fact is that I myself sometimes do this when I'm distracted", etc. Putting on this positive and community spirited attitude allows the frustrated pedestrian some time to keep on showing a patient front to the passive-aggressive walker until at some point passing and getting through becomes feasible without giving offense.

There is the belief that it is wrong to reward bad public behavior by being nice to the offenders. Some people might feel that it is our community duty to protect others by letting passive-aggressive sidewalk ragers know that they are out of line and should not make it hard for others to pass. Some even feel that their inconsiderate attitude deserves to be punished. And a few might even perform this by threatening or perpetrating violence. But taking on this pedestrian vigilante role is just producing more of sidewalk rage. An indication that it is rage is that people fantasize various punishments the offending walkers deserve. This kind of mental venting is stressful and robs us from the pleasure and peace of walking anywhere. Repeated self-monitoring of one's walking style in crowded places such as a mall, supermarket, hallway, waiting room, theater isle, waiting line, etc., can increase awareness of one's own bad walking habits.

Conclusion

People who suffer from walking rage may need professional counseling to apply the techniques discussed, as well as other techniques that may be available to the therapist. Managing one's walking rage can be of critical importance because the individual's self-control for avoiding risky behaviors is impaired while experiencing rage. Rage in all its forms lowers the level of civilized conduct that normally inhibits the expression of hostile and violent acts in public. The items identified here may serve as a useful start for pedestrians who wish to remake their walking personality. Further research is needed to expand the inventory of aggressive behaviors while walking and to see the distribution or frequency of such behaviors as they actually occur in daily life.

Acknowledgments

None.

Conflicts of interest

Author declares there are no conflicts of interest.

Funding

None.

References

1. Makihara Y, Mannami H, Yagi Y. Gait analysis of gender and age using a large-scale multi-view gait database. Proceedings of the 10th Asian conference on Computer vision, Springer Berlin Heidelberg, Germany. 2011. p.440–451.
2. Hangland A, Cimbalo RS. Human ethology: age and sex differences in mall walking. *Percept Mot Skills*. 1997;85(3):845–846.
3. Walmsley DJ, Lewis GJ. The pace of pedestrian flows in cities. *Environment and Behavior*. 1989;21(2):123–150.
4. Osaragi T. Modeling of pedestrian behavior and its applications to spatial evaluation. Proceedings of the Third International Joint Conference on Autonomous Agents and Multiagent Systems-Volume 2, USA. 2004. p.836–843.
5. James L, Nahl D. Road Rage and Aggressive Driving. *Prometheus Books*, USA. 2000. p. 275.
6. Young N. Surf Rage: A Surfer's Guide to Turning Negatives Into Positives. *Nymboida Press*, USA. 2000.
7. James L. Air Rage: Gamification techniques for managing passenger behavior. *American International Journal of Contemporary Research*. 2014;4(10):1–11.
8. Laboratory for Automation Psychology. Computer Rage: Reported Acts of Rage Against Computers. *Laboratory for Automation Psychology and Decision Processes*, University of Maryland. 2005.
9. Denenberg RV, Braverman M. The violence-prone workplace: A new approach to dealing with hostile, threatening, and uncivil behavior. Cornell University Press, New York, USA. 2001. p. 288.
10. Kanter RM. Workplace Rage. *Harvard Business Review*. 2010.
11. Berkowitz L. Frustration-aggression hypothesis: examination and reformulation. *Psychol Bull*. 1989;106(1):59–73.
12. Dodge KA, Coie JD. Social-information-processing factors in reactive and proactive aggression in children's peer groups. *J Pers Soc Psychol*. 1987;53(6):1146–1158.
13. Bandura A. Social learning theory of aggression. *J Commun*. 1978;28(3):12–29.
14. Goleman D. Emotional Intelligence. Bantam Books, USA. 1995.
15. Safran JD, Greenberg LS. Emotion, psychotherapy and change. Guilford Press, USA. 1961.
16. American Psychiatric Association. Diagnostic and statistical manual of mental disorders (5th edn), American Psychiatric Publishing, USA. 2013.
17. Coccaro EF. Intermittent explosive disorder as a disorder of impulsive aggression for DSM-5. *Am J Psychiatry*. 2012;169(6):577–588.
18. Ellis A. Feeling Better, Getting Better, Staying Better: Profound Self-help Therapy for your Emotions. Impact Publishers. 2001.
19. Novaco R, Gonzalez OI. Commuting and Well-being. In: Yair Amichai-Hamburger (Ed.), *Technology and Well-Being*. Cambridge University Press, USA. 2011.
20. Foundations Magazine. George Washington's Rules of Civility and Decent Behavior. 2014.
21. Malkin M. A Founding Father's Rules Might Cure Raging Drivers. The Seattle Times, Washington, USA. 1997.
22. James L, Nahl D. Dealing with Stress and Pressure in the Vehicle: Taxonomy of Driving Behavior: Affective, Cognitive, Sensorimotor. University of Alberta Press, Canada. 2002.