Evaluation of Two New Scales Assessing Driving Anger: The Driving Anger Expression Inventory and the Driver’s Angry Thoughts Questionnaire

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This study assessed the validity of the Driving Anger Expression Inventory (DAX) and Driver’s Angry Thoughts Questionnaire (DATQ). Scales within the DAX and DATQ appeared to assess separate, correlated constructs. Aggressive forms of thinking and anger expression correlated positively with each other, trait driving anger, aggressive and risky behavior, some crash-related conditions, general trait anger, and general forms of anger expression. Positive, constructive forms of thinking and anger expression correlated positively with each other, but minimally or negatively with other variables. Specific aggressive forms of thinking and anger expression formed stronger links with each other than other forms of expression, supporting the discriminant validity of the DATQ and DAX. Hierarchical regressions with DATQ and DAX scales entered after other variables showed that they added explained variance above and beyond other measures, supporting the discriminant and incremental validity of these scales. It was concluded that the DAX and DATQ have utility for researchers and clinicians interested in angry drivers.

KEY WORDS: angry drivers; anger expression; anger-related thoughts.

Angry, aggressive drivers have received considerable media attention in the past few years, and public concern about the psychological and health hazard posed by these drivers has led to increased governmental and police attention. It would appear that the public’s concerns are not misplaced. “Road rage,” incidents involving assault or attempted assault (e.g., firing a gun at another driver or attempting to run someone off the road) appeared to increase approximately 7% a year in the United States during the early 1990s (American Automobile Association, 1997). Some public officials have estimated that from one third to two thirds of injury accidents involve aggressive driving such as speeding and rapid lane changing in heavy traffic (Martinez, 1997; Snyder, 1997). Additionally, court- and self-referred aggressive drivers experience higher incidence of intermittent explosive disorder and other psychopathology (Galovski, Blanchard, & Veazey, 2002), some of which gets played out on the road, and drivers who physically assault another driver experience more crashes and traffic tickets (Hemenway & Solnick, 1993).

Highly angry drivers are also at elevated risk (Deffenbacher, Deffenbacher, Lynch, & Richards, 2003; Deffenbacher, Filetti, Richards, Lynch, & Oetting, 2003; Deffenbacher, Huff, Lynch, Oetting, & Salvatore, 2000; Deffenbacher, Lynch, Filetti, Dahlen, & Oetting, 2003). High and low anger drivers drive the same number of times and miles per week, suggesting that they are not exposed to qualitatively different driving environments which might account for differences observed. However, more things on the road provoke high anger driver, they become angry 2.5–3.0 times more often than low anger drivers, and they become more intensely angry when provoked. High anger drivers also tend to express their anger in more dysfunctional ways. They are more verbally and physically aggressive and are more likely to use their vehicle as a means of expressing their anger and are less likely to express anger...
behind the wheel in adaptive and constructive ways. High anger drivers also engage in 3.5–4.0 times more aggression and 1.5–2.0 times more risky behavior while driving and, in some studies, report more close calls, moving violations, and minor accidents than low anger drivers. In studies involving driving simulations (Deffenbacher, Deffenbacher, et al., 2003), high anger drivers, compared to low anger drivers, engaged in excessive speeding (e.g., 40% vs. 10% at 10 mph over the limit and 12% vs. 0% at 20 mph over the limit) in low impedance simulations, and in high impedance simulations reported more anger and verbal and physical aggression, engaged in more erratic driving, experienced shorter times and distances to crashes, and had double the number of crashes. Moreover, studies of British drivers show that driving anger correlates positively with both aggressive and nonaggressive driving offenses (Lajunen & Parker, 2001; Lajunen, Park, & Stradling, 1998; Underwood, Chapman, Wright, & Crundall, 1999). Other studies also show that high anger drivers also tend to be more generally angry, impulsive, and aggressive (Deffenbacher, Deffenbacher, et al., 2003; Deffenbacher, Filetti, et al., 2003; Lajunen & Parker, 2001). In summary, high anger drivers are more easily, frequently, and intensely angered on the road, tend to express that anger in aggressive ways, engage in more aggressive and risky behavior, and experience greater incidence of some crash-related conditions such as moving violations, close calls, and the like.

Recently, angry, aggressive drivers have begun to receive clinical attention (Deffenbacher et al., 2000; Deffenbacher, Filetti, Lynch, Dahlen, & Oetting, 2002; Galovski & Blanchard, 2002). As research and practice move to clinical applications, clinicians and treatment researchers need reliable and valid instruments with which to assess important characteristics of angry drivers. One reasonably well validated measure is the Driving Anger Scale (DAS; Deffenbacher, Oetting, & Lynch, 1994) which provides a measure of anger intensity across a number of driving situations. However, other instruments are needed to screen for and assess issues such as how anger is expressed behind the wheel and the cognitive elements of the angry driver’s experience.

Recently, two new self-report instruments, one assessing ways of expressing anger and the other assessing types of angry cognitions when angered behind the wheel, have been reported. The Driving Anger Expression Inventory (DAX; Deffenbacher, Lynch, Oetting, & Swaim, 2002) provides four, factor analytically derived scales measuring: (a) Verbal Aggressive Expression involving expressing anger through things such as cursing at or calling other drivers name, asking negative rhetorical questions about the person’s driving and character, and the like; (b) Personal Physical Aggressive Expression in which the drivers uses his/her physical being to express anger and intimidate through things such as hostile gestures and getting out of the vehicle to fight with an offending driver; (c) Using the Vehicle to Express Anger involving behaviors such as flashing lights, slowing down or speeding up to frustrate or retaliate upon another driver, or purposefully tailgating another driver; and (d) Adaptive/Constructive Expression involves the driver’s attempts to focus on positive coping and safe driving through things such as cognitive reframing and relaxing and distracting behaviors. The Driver’s Angry Thoughts Questionnaire (DATQ; Deffenbacher, Petrilli, Lynch, Oetting, & Swaim, 2003) provides five, factor analytically derived scales assessing the following cognitive characteristics: (a) Judgmental and Disbelieving Thinking involves thoughts of mild derogation, questioning of other driver’s skills, abilities, and motivations, statements implying others should not be allowed to drive, and rhetorical questions indicating that they cannot believe how others are driving; (b) Pejorative Labeling and Verbally Aggressive Thinking involves highly negative thoughts about the other driver (e.g., name calling) and thinking about how the person would like to engage in verbally aggressive behavior (e.g., telling the person off); (c) Physically Aggressive Thinking involving thoughts of wanting to hurt others and behaviors they would engage in to do so (e.g., beating the hell out of the offending driver); (d) Revenge and Retaliatory Thinking involves thoughts of getting back at others and the behaviors needed to exact revenge (e.g., boxing the other driver in to show him/her); and (e) Coping Self-instruction addresses instructing one’s self to engage in positive coping activities such as relaxing and accepting bad situations.

To be of value as clinical assessment devices, new scales such as the DAX and DATQ must meet at least two basic criteria. First, they must have clinical face validity. That is, they must appear to assess important parameters and processes related to the client and presenting problems. Both scales appear to meet this test. They address the cognitive and expressive dimensions of anger while driving. At least on their face, the DAX and DATQ could extend the clinical interview and other assessment strategies such as self-monitoring to flesh out the cognitive and expressive elements of anger behind the wheel. Second, they must correlate in logical and reasonable ways with other clinically important elements of client experience, such as intensity of anger, aggression, and risky behavior while driving. Initial validity work (see Method section for review) suggests that both scales meet this criterion, but additional work is needed to strengthen confidence in findings. The value of the DAX and DATQ would be...