Needs assessments were first introduced in the late 1970s. The objectives of these assessments were to ensure that needs were assessed for every case and to create greater consistency in service planning. Early needs instruments made no claims that needs assessed caused criminal behavior.

If a factor was significantly correlated to subsequent criminal behavior and assisted in accurately classifying individuals to different levels of risk, it was included on the agency’s risk instrument. In general, few factors defined as “needs” met this test. Factors with the highest relationships to recidivism most often included substance abuse, employment issues, peers/associates, and school/behavioral issues.

The term “criminogenic needs,” meaning needs seen as causing criminal behavior, emerged in the 1980s. Typical lists of criminogenic needs generally encompass four to eight needs categories or domains (known colloquially as the “Big Four,” “Big Six,” or “Big Eight”), including parenting/family relationships, education/employment, substance abuse, leisure/recreation, peer relationships, emotional stability/mental health, criminal orientation and thinking, and residential stability.

There are serious problems with identifying needs as criminogenic and with the way that various risk models define and measure needs thought to be criminogenic. There were also flaws in the logic that developers used to stress the importance of the role that criminogenic needs play in risk assessment.

**Problem 1: Some needs assessed in various risk instruments have little or no relationship to recidivism.**

Although nearly all current risk assessment models are described as actuarial, many in truth are not. In actuarial science, scale content (and item weights) is determined by data analysis with the objective of including only those factors that, in combination, best separate cases into different levels of risk. Scale construction is based on actual cases with observed outcomes (Gottfredson & Snyder, 2005).

However, for many generation-3 and -4 risk assessment models, their content was determined by individuals who developed the model, often guided by prior research and/or crime theory. Most of these
models were then tested for validity, but such analysis was rarely used to revise these instruments.

As a result, several instruments currently in use contain many more factors than true actuarial scales and some of these items have little relationship to outcomes (Flores, Travis, & Latessa, 2004; Baird et al., 2013). Including these factors in a risk score can dramatically change the proportion of cases categorized as high, moderate, and low risk and substantially decrease the degree of discrimination attained between recidivism rates for cases at each level.

No one demonstrated this effect more conclusively than James Austin when he and his colleagues compared results using eight factors from the LSI-R with results from the entire 54-item scale. Much better discrimination was obtained when classifications were based on the eight best scale factors, and the proportion of cases placed at each risk level changed dramatically (Austin, Coleman, Peyton, & Johnson, 2003). More recent research on models used in the juvenile justice system produced similar findings (Baird et al., 2012).

Problem 2: A general statistical relationship between a need and recidivism does not mean that need is “criminogenic” for an individual offender. Still, several models link these needs directly to case planning for individual offenders. Such inference conflates the appropriate use of individual and group data.

Most would agree that any one of the Big Eight factors could contribute to criminal behavior in individual cases. However, the existence of a need does not mean it is always related to, let alone that it causes, criminal behavior. Correlation does not equal causation, yet some developers have made this leap in logic. Hoge and Andrews stated that “risk factors are those identified as causally linked with criminal activity” (1996, p.6). This is not true. Risk factors, whether identified through statistical analysis or reliance on previous studies, are those factors that correlate with recidivism.

There is nothing in these models that identifies which needs are criminogenic for a specific offender. For example, association with a particular peer group could lead one youth into delinquent behavior, while for another youth, association with particular peers may simply be an artifact of his or her delinquent behavior. Both would score the same on this risk factor, yet putting effort and resources into changing the peer group of the latter youth would, in all probability, have little effect on his or her delinquent behavior. Yet some risk assessment models label this “peer relationships” need as criminogenic, implying a claim of causality that far exceeds what can legitimately be concluded from the assessment conducted.

The practice of labeling a need as criminogenic without an in-depth clinical assessment to establish causality appears to be an effort to merge risk assessment—which uses group data to inform certain fundamental case decisions—with case planning, which must be based on each person’s individual circumstances. Labeling a need as criminogenic when it has little or nothing to do with criminal behavior could lead to ineffective, even harmful, interventions and unnecessary expense.
Conversely, there is also a problem when researchers label needs other than the Big Eight, Big Six, or Big Four as “non-criminogenic” (see, for example, Vincent, Guy, & Grisso, 2012). The lack of relationship between a need and recidivism in the general correctional population does not mean the need is unrelated to (or even the underlying cause of) the criminal behavior of an individual.

A need like “lack of self-esteem” is a prime example. It is one of several factors often identified as non-criminogenic (Taxman, Shepardson, Delano, Mitchell, & Byrne, 2006; Vincent et al., 2012). While seldom a cause of delinquent behavior, self-esteem issues can and do occasionally lead to serious violence. Some acts of horrific violence committed by young people who felt bullied or simply dismissed by peers and authority figures have been linked to self-esteem issues.

In essence, using statistical information (group data) to define what is to be considered in case planning, treatment, and services for an individual represents a misapplication of data. The presumption that relationships gleaned from group data can be readily applied to individual offenders (particularly when these relationships are modest to begin with) far exceeds any legitimate interpretation of the research.

Problem 3: There are flaws in the logic used to assert that criminogenic needs represent the most powerful predictors of recidivism.

Andrews, Bonta, and others have stressed the importance of criminogenic needs, basing their views at least in part on the belief that changes in these needs over time are predictive of changes in delinquent or criminal behavior. Consider the following statement regarding the predictive capacity of the LSI instruments when put in the context of actual practice:

“Dynamic predictive validity is demonstrated when changes in total scores predict changes in the probability of criminal behavior” (Andrews, Bonta, & Wormith, 2008).

This reasoning is both misleading and illogical. All LSI instruments include a substantial number of criminal history items. Scores on these items can, of course, increase if a person is rearrested during the supervision period. Hence, the total LSI score at reassessment will, in most instances, increase when new criminal behavior is observed. In these cases, the change in the LSI score did not predict criminal behavior; the change occurred because new criminal behavior was detected. In one study of the YLS/CMI, the delinquency history score increased at reassessment for more than 60% of cases in the sample (Raymour, Kynch, Roberts, & Merrington, 2000). Thus, the increase in total risk scores correlated well with recidivism in large part because recidivism led directly to the increase in the risk scores. Calling this evidence of “dynamic predictive validity” is a misrepresentation.
Similar issues can occur in other domains. Substance abuse, especially for minors, is often, in itself, an offense. Youth who continue to use drugs (or alcohol) are thus committing new offenses, so any change in risk scores for these individuals may well be the result of a crime, not predictive of a crime. The probation officer may know of continued substance abuse because the youth was re-arrested.

Finally, the very idea that assessments conducted well into the supervision period can be “predictive” defies logic. The behaviors and attitudes assessed six, 12, or 18 months into a probation term are clearly enmeshed with outcome measures. Naturally, youth who continue to abuse drugs, consort with peers who commit delinquent acts, etc., are more likely to recidivate than those who do not. But these behaviors are co-occurring, not predictive. Those who do well on supervision are more likely to succeed; those who do poorly, recidivate.

These developers thus have employed circular logic to promote their models. This is not an exercise in prediction. There is a reason that bets (predictions) cannot be placed after a horse race begins. If bets could be placed at the seventh furlong, when a good portion of the race has been completed, predictive accuracy would undoubtedly improve. Predictions, by definition, are made before an event occurs, not well into the event.

Still, reassessment plays a critically important role in corrections. At intake, risk is based on group probabilities because there is no experience with the individual, at least in the current timeframe. If properly designed, re-assessment instruments can shift emphasis from group probabilities to the actual behavior of each individual. Appropriate revisions to supervision requirements, treatment plans, and services provided can be made based on each person’s response to supervision. Reassessment and consequent changes to case plans and supervision requirements are crucial to an individual’s success as well as community safety.

In summary, including needs that have little relationship to outcomes on a risk assessment likely has significant implications on the instrument’s power. Risk instruments should contain only those factors that, in combination, produce the greatest degree of discrimination between recidivism rates for individuals at different risk levels.

Further, assuming that needs that are statistically related to recidivism are criminogenic for a specific individual far exceeds any legitimate interpretation of statistical inference. Needs should be assessed separately for case planning and service-delivery purposes. Combining the two in a single scale conflates the roles of group and individual data.
References


