The aim of the Ph.D. study presented in this thesis was to facilitate improved road safety through increased understanding of methods used to measure driving behaviour, and through increased knowledge about driving behaviour in sub-groups of drivers. More specifically, the usefulness of the Driver Behaviour Questionnaire (DBQ) within a Danish context was explored, sub-groups of drivers differing in their potential danger in traffic were identified, and the relationship between implicit attitudes towards safe and risky driving and self-reported driving behaviour was explored. The methods applied were a questionnaire survey on a random sample of 4,849 drivers, and an implicit attitude test on 55 drivers. The findings are reported in four articles that all are included in this thesis. The main contributions of the thesis are the following:

1. It is shown that Danish drivers' perform aberrant behaviours with underlying mechanisms of lack of focus, emotional stress, recklessness and confusion, and hence it is highly important to further explore means to making drivers become more focused or attentive when driving, and to deal with emotional responses in traffic like impatience and frustration (Article 1).
2. It is shown that the DBQ is a valid measure across sub-groups of drivers (Article 1).
3. A Mini-DBQ is developed, which can be applied when a shorter DBQ instrument is needed (Article 2).
4. It is demonstrated that the DBQ and the DSI together can be used to identify sub-groups of drivers that differ in their potential danger in traffic, and can give a more nuanced picture of drivers' self-assessment of driving behaviour (Article 3).
5. It is suggested that different interventions should be applied in different sub-groups of drivers, and that these drivers are aware of their shortcomings in driving skills, indicating that the problem lies in the drivers' attitudes towards safety (Article 3).
6. It is indicated that rather than viewing safety and risk as two ends of a continuum, safety and risk should be understood as two separate constructs, with different underlying motives. Therefore it is suggested that interventions should focus both on increasing safety and on decreasing risk, as measures to increase attitudes towards safety might not decrease attitudes towards risk (Article 4).
7. It is shown an attitude-behaviour inconsistency within males who report high frequency of violations/errors, with the implication that even though drivers' attitudes towards safety are positive or attitudes towards risk are negative, safe behaviour will not necessarily follow (Article 4).