## Contents

## Preface viii

	_		
1	т.,	, , .	1
	Intro	uction	•

- 1.1 The escalation of road-traffic casualties 1
- 1.2 Dangers of road traffic as experienced by the road user 15
- 1.3 How is it possible that road traffic is allowed to kill and injure so many people? 19
- 1.4 The purpose and design of the present book 39
- 2. Critical determinants of road-user behavior 41
- 2.1 Extra motives of the road user 41
- 2.2 Subjective risk of an accident of the road user 68
- 2.3 Some persistent problems of the field in the light of the behavioral dynamism proposed 79

Driver education 80

The young driver 91

Road-user enlightenment and 'attitude training' by means of mass publicity campaigns 99

3. Perceptual-motor skills vs motivation in traffic behavior and accident causation 113

Perception of road signs 115

Changeover from the left-hand to the right-hand traffic in Sweden 139

Driver performance in prolonged driving 143

Skilled performance and accidents 149

Spare capacity of drivers 151

4. Expectancy and the related aspects of the estimation and judgment of the road-user 155

On the measurement of expectancy 181

Contents

- 5. A model of the driver's decision making and behavior 186
- 5.1 Introducing the model 186
- 5.2 Testing the model 203
  Simulating critical features in driver behavior 203
  A study of safety margins in driving 215
- 6. On the prevention of traffic accidents 219
- 6.1 The threshold of the road user's subjective risk as the determinant of the effectiveness of traffic-safety countermeasures 219
- 6.2 The determination of the total amount of investments, efforts, and sacrifices to promote traffic safety 227
- 7. Concluding discussion: safety margins 237

References 244

Author index 259

Subject index 264