accountability, of subgroup leaders in resource dilemmas, 291–308
action effects, and spatial concentration in environmental dilemmas, 166–8, 175
action strategy, and behavioral variability of agents in dynamic environment, 185, 188–90
Adsit, D. J., 290
agents, and behavioral variability in dynamic environments, 184–6
aggression: as interpersonal orientation, 9, 12–14; and outcome transformations, 6; and personality traits, 102
Ahmad, N., 11–12
air pollution, and environmental dilemmas, 158–9, 177
Allison, S. T., 84, 316, 362, 376
altruism: and social-value orientation, 73–4, 77; uncertainty and explanations of, 332–41
Andreoni, J., 337–8
anger, and studies of aggression, 12–13
appointment, of subgroup leaders, 288
aspiration level, and risk preference, 59
Assurance Game (AG), 273–4, 282
attachment, as motivator of generosity, 10–11, 12
Au, W. T., 75, 318, 363
authoritarianism, and measurement of social-value orientation, 74
Axelrod, R., 148–9, 209–10, 233–4, 236n13, 240, 332, 334
Bar-Hillel, M., 365
Batson, C. D., 10, 11–12
Bazerman, M. H., 335, 337
behavior: and assimilation as interpersonal orientation, 14–15; and evolutionary theory, 211, 339–41; and self-interest, 4–6; and simulation of environmental dilemmas, 158, 162–3; and success of strategies, 209; and uncertainty, 315–27, 393–4; utility and theory of, 31; variability of in social-dilemma research, 182–3.
See also behaviorism; cooperation; negotiation
behaviorism, and evolutionary theories of behavior, 339–40
Bendor, J., 219
Ben-Yossef, M., 231–2
Berejikian, J., 27, 30, 31–2, 51
Billig, M., 270
Binmore, K., 148
biological factors, and studies of aggression, 12
Boone, R. T., 346

© in this web service Cambridge University Press
www.cambridge.org
Bornstein, G., 231–2, 235–6, 239, 241, 293, 345
Bower, G. H., 340
Brandt, J. R., 11–12
Brewer, M. B., 128, 271, 301
Bruderman, M., 318n3
Budescu, D. V., 61, 75, 318, 344, 362–3, 365, 378, 392, 394
Campbell, D. T., 227, 242, 244
Carnevale, P., 291
Categorization: and in-group favoritism, 270, 284; and prisoner’s dilemma, 271–4
Cellular automata (CA), and environmental dilemmas, 157, 158–63
Challenging encouragement device, and matrix-society simulation, 116–18, 119–20, 121–3
Chammah, A., 350n4
Characteristic Space Theory (CST), and social-value orientation, 80–2
Chen, X. P., 75, 318
Chicken game, and study of intergroup conflict, 248–68
Children, and development of social-value orientation, 87–8
Chin, J., 333–4
Clusters, and cooperation in simulation of environmental dilemmas, 168–71, 175–6
Cognition, and social-value orientation in negotiations, 84
Collective interest and collectivism: and accountability of subgroup leaders, 292–3; and intergroup conflicts, 227–8, 232; and levels of tolerance in dynamic environments, 200–201, 203; and self-interest, 3–4; and social orientations, 121–3
Commitment: and egotistic incentives for altruism, 337–8; and generosity in relationships, 10, 12
Common-pool-resource dilemma, and social-value orientation, 82–3
Communication: and intergroup prisoner’s dilemma game, 236–9, 240–41; and social uncertainty, 316, 317
Competition: and decision-making in intergroup prisoner’s dilemma game, 239–40, 242; and integrative model of outcome transformations, 6, 7; as interpersonal orientation, 9; and social-value orientation, 77–8
Conditionality, and action strategies in dynamic environment, 188–90, 201–205
Conflict, and asymmetric access to information, 370. See also intergroup conflicts
Conjoint measurement, of social-value orientation, 80
Contribution rates, and communication in intergroup prisoner’s dilemma game, 236, 237–9, 241–2
Cooperation: and access to information in resource uncertainty, 361–72; and aggression, 13; and computer simulation of environmental dilemmas, 164–5, 168–71, 174, 175–6, 177–8; effects of environmental and endowment uncertainty on dependence and, 343–59; and egalitarianism, 14–16; and egotistic incentives for altruism, 335–6, 337–9, 341; and game-theoretical analysis of risk preferences, 25–56, 61–8; and generosity, 11; and group cohesion, 239; and individual-difference research, 58–61; and integrative model of outcome transformations, 6, 7; and intergroup prisoner’s dilemma game, 233–4, 239–40; and interplay between environmental and social uncertainty, 376–95; and leadership in deteriorating-resource dilemmas, 306; and social-exchange heuristic in
Index

intergroup conflicts, 269–84; and strategic analysis of dynamic environments, 200, 203, 205; and team-game research, 244; and trust game, 131, 133–6, 142–4, 149, 150, 153 coordination, and two-stage game of Chicken, 253–4 Crettenden, A., 288, 291, 307 culture and cross-cultural issues, in social-value orientation, 88, 90 Darley, J. M., 382 Darwin, C., 339 Dawes, R. M., 13, 227, 315, 340 De Bruin, E. N. M., 86 decision-making: and computer simulation of environmental dilemmas, 175; and intergroup prisoner’s dilemma game, 239–40; modeling of intergroup conflicts and individual, 248; and social-dilemma research on cooperation, 68; and trust or trustworthiness, 127, 130–2 decomposed games (DG), and measurement of social-value orientation, 72–4, 82, 90 de Cremer, D., 307 de Dreu, C. K. W., 67 democracy, and study of intergroup conflict, 248–59 Deutsch, R. M., 100 development, of social-value orientation, 87–9 de Vries, S., 344, 364 dictatorship, and study of intergroup conflict, 249–59 Diekmann, K. A., 292 distance-dependent payoffs, in environmental dilemma situations, 158–62 Doi, T., 80–1, 101–2, 103, 105 dual-concern model, 6 Dubro, A. E., 78 dynamical aspects, of social dilemmas: and computer simulation of trust and trustworthiness in groups, 127–53; and environmental dilemmas, 155–78; and strategic analysis of freedom of movement, 180–205; and tit-for-tat strategies, 209–23 ecological validity, and empirical research on social-value orientation, 84–5 economics: and framing, 67; and laboratory experiments on effects of institutions, 248; and utility function for losses, 31 effective matrix, 5 egalitarianism: and cooperation, 14–16; and outcome transformations, 7–8; as rule of interdependent behavior, 9. See also equality; fairness egotistic payoffs, and explanations of altruism, 333–7 empathy, and generosity as interpersonal orientation, 10, 12 environmental dilemmas: centralized and decentralized solutions to, 155–6; computer simulation of intervention strategies for, 157–78; definition of, 155. See also resource dilemmas environmental uncertainty. See uncertainty equal division rule, and social uncertainty, 384, 391 equality: and accountability of subgroup leaders, 291–2; aggression as violation of, 13–14; and social-value orientation, 77. See also egalitarianism; fairness
evolution, and behavioral models, 211, 339–41
expectations: and computer simulation of environmental dilemmas, 165–6; and goal/expectation theory of cooperation, 273–4, 280, 282
expected value, and risk preferences, 59
fairness, and cooperation in asymmetric social dilemmas, 394. See also egalitarianism; equality
Fehr, E., 335
Fennema, H., 31, 38
Fischer, I., 212
fishing industry, and resource dilemmas, 315, 320, 322
Foddy, M., 288–9, 291, 300, 307
framing, and connection between risk preference and cooperation, 66–7
free-riding: and dependence hypothesis, 347; and public goods problem, 228, 239, 241, 315; and two-person games, 249, 346
Frohlich, N., 61
fuel subsidies, and environmental dilemmas, 164
Gächter, S., 335
Gaertner, L., 284
game theory, and analysis of individual differences in risk preferences, 24–54. See also Chicken game; intergroup prisoner’s dilemma game; prisoner’s dilemma; team games; trump game; trust game; two-person games
Gärtinger, T., 16, 67, 319, 321, 344, 379, 383–4
generosity, as interpersonal orientation, 9, 10–12
genetically modified foods, and uncertainty, 369–70
Gibbs, B. J., 318n3
Gifford, R., 321, 363
Gilbert, R. K., 228n3
Girootto, V., 317
give-some game, 346, 349–50, 357
goal/expectation theory, of cooperation, 273–4
Goren, H., 232, 235–6, 239
Gould, R. V., 227, 243
Griesinger, D. W., 8, 9, 74, 80–1, 88, 100
Groenenoorn, A., 327, 390–1, 395
groups: definition of, 269; and environmental uncertainty in resource dilemmas, 322–3; identification and solidarity of, 232; and social-value orientation, 77; trust game and homogeneous, 132, 148; and uncertainty in public-goods dilemmas, 325–6. See also intergroup conflicts; intergroup prisoner’s dilemma game; subgroups
Grzelak, J. L., 79
Gustafsson, M., 321, 344, 365–6, 371, 379, 381, 383–4
Hanna, B. A., 128
Hardin, R., 228n2, 243
health hazards, and asymmetric access to information, 369
Hegselmann, R., 175–6
Henager, R. F., 59
Hine, D. V., 321, 363
Hobbes, Thomas, 3, 4, 155
Hogarth, R. M., 318n3
Hogg, M. A., 289, 300, 307
Iedema, J., 80, 88
identity: and group solidarity, 232; and study of in-group cooperation, 276–7, 278–80. See also social identity theory
image scores, and altruism, 334
Imai, S., 80–1, 101–2, 103, 105
individual differences, and social dilemmas: and game-theoretical analysis of risk preferences, 24–54; and interpersonal orientations, 3–19; and risk preference as
Index

predictor of cooperation, 58–68; and simulation study of cooperation in collective society, 99–123; and social-value orientation, 71–91, 189–90
individualism: and integrative model of outcome transformations, 6, 7; as interpersonal orientation, 9; and matrix-society simulation of social orientations, 121–3; and motivation for social-value orientation, 77
information and information processing: availability versus unavailability of in social-dilemma situations, 376; and behavioral variability of agents, 185; choice behavior and uncertain, 393–4; and environmental uncertainty in public-goods dilemmas, 386; resource uncertainty and asymmetrical access to, 361–72; social uncertainty and asymmetric distribution of environmental, 390–2; trust game and social, 144–7, 152. See also knowledge initialization, and simulation parameters of probabilistic reactive strategies, 214–15, 220
Insko, C. A., 294
institutions: Chicken game and study of political, 249; economic experiments on effects of, 248
integrative model, of outcome transformations, 6–16
interactions: intergroup prisoner’s dilemma and repeated, 232–40; and social influences on tit-for-tat strategies, 213–14
interdependence: and behavioral variability of agents, 186–7; self-interest and theory of, 5; social-value orientation and theory of, 71; and strategic analysis in dynamic environments, 203. See also dependence
intergroup conflicts, in social dilemmas: and accountability of subgroup leaders in resource dilemmas, 287–308; cooperation and problem of public goods in, 227–44; cooperation and social exchange heuristic in, 269–84; Chicken game and study of, 248–59. See also conflict
intergroup prisoner’s dilemma (IPD) game, 228–44, 294–300
intergroup public good (IPG) game, 240–1
intergroup resource allocation, and social-value orientation, 83
interpersonal dispositions and interpersonal orientations, and individual differences, 3–19
intervention strategies, in computer simulation of environmental dilemmas, 163–71
“invisible hand” paradigm, and conflicts between self-interest and collective interest, 3–4, 155–6
Isaac, R. M., 52–3, 337
Iwinski, T. B., 79
James, D., 52–3
Jansen, R. W. T. L., 86
Jin, N., 271
Jorgerson, D. O., 316
Kagan, S., 77–8
Kahneman, D., 35–6, 223
Karp, D., 271
Kelley, H. H., 13, 71, 74, 79, 85, 191
Kimmel, M. J., 85, 273
Kinchla, R. A., 382
Knight, F. H., 345n1
Knight, G. P., 77–8
knowledge: in-group cooperation and commonality of, 274; and resource uncertainty, 366. See also information and information processing
Koehler, J. J., 318n3
Kollock, P., 219–20
Komorita, S. S., 64
Kramer, R. M., 128, 301
Kriss, M., 382
Kuhlman, D. M., 66, 86

Index

404

Milliman, R. A., 53
minimal group experiments, and study of in-group cooperation, 270–4, 276, 281–3
morality, and social-value orientation, 86
Morgenstern, O., 30
Morris, M. W., 317
Moskowitz, J. M., 87
motivation: and collective interests of groups, 232; and egotistic incentives for altruism, 335–6; and estimation of resource size, 321; and intergroup conflict-intragroup cooperation hypothesis, 230–2; and mixed-motive contexts in accountability research, 291–2; and Social Orientation Choice Card, 77
movement strategy, and behavioral variability of agents, 185–6
Murnighan, J. K., 53
negotiation: and connection between risk preferences and cooperation, 67–8; and social-value orientation, 83–4
noise pollution, and environmental dilemmas, 158–9
norms, social: and interpersonal orientations, 17–18; self-interest as, 4–5; and social uncertainty, 319
Nowak, M. A., 332
outcome transformations: and interpersonal orientations, 5–6; and self-interest, 6–8
Papciak, A. S., 316
Parks, C. D., 59, 82
perception: and behavioral variability of agents, 185; and study of risk preference and cooperation, 65–6
performance, and levels of tolerance in strategic analysis of dynamic environments, 193–7, 202
personality: and determinants of cooperation, 68; and interpersonal
orientations, 17; and risk preferences, 53, 69; and social orientation, 101–2
physical space, and behavioral variability in dynamic situations, 184, 204
political science, and game theory, 254, 258–9
politician in accountability theory (PAT), 292
pollution, and model of dynamics in environmental dilemmas, 177. See also air pollution; noise pollution; resource dilemmas
Poppe, M., 80, 88
positional protocol, and social uncertainty, 318
predation, and consequences of behavior, 340–1
prisoner’s dilemma (PD): and concepts of cooperative choice, 60; degree of freedom versus forced-play paradigm in, 180–1; and environmental dilemmas, 158; and game-theoretical analysis of cooperation and risk preferences, 25, 27–56; and modeling of cooperation, 210, 356–9; and modified trust game, 129–30; and social-exchange heuristic in ingroup cooperation, 271–4; and tit-for-tat strategy, 63, 130, 149, 152, 182–3, 233–4. See also intergroup prisoner’s dilemma (IPD) game probabilistic reactive strategies (PRS), and tit-for-tat strategies, 210–11, 213–15
probability weighting, and measurement of utility in prisoner’s dilemma, 34–9
problem attention, and computer simulation of environmental dilemmas, 171–5
pro-social orientation and prosociality: and action strategies in dynamic environments, 188–90, 201–5; and forced-play environments, 181; and individual differences in social-value orientation, 89–90; and levels of tolerance in strategic analysis, 197–201; as rule of interdependent behavior, 9. See also social orientation prospect theory, and risk preference versus cooperation in resource dilemmas, 67
provision threshold, and environmental uncertainty, 323–4
prudence, and concept of tolerance, 191
Pruitt, D. G., 72, 85, 273
psychology: and assumption of self-interest, 4; and framing, 67
psychometrics, and decomposed games as measure of social-value orientation, 74
public goods: and Chicken game, 249; definition of, 315; and environmental uncertainty, 377; social-value orientation and games involving, 83; and study of cooperation and intergroup conflict, 227–44
public transportation (PT), and social-value orientation, 84–5
Rabbie, J. M., 271, 283, 350
Radzicki, J., 79
Kapoort, A., 61, 81, 211, 321, 344, 350n4, 362–3, 364, 378, 379, 381, 383, 392, 394
rationality, and social-value orientation, 86–7
Ratner, R. K., 4
Raub, W., 26, 32, 40–1, 44–7, 50–3
reciprocity: and computer simulation of environmental dilemmas, 175–6; and cooperation in social dilemmas, 131, 189; and learning in intergroup prisoner’s dilemma game, 234–6; and strategies in trust game, 131; tit-for-tat strategy compared to, 182–3
regression and cluster analyses (RCA), and social-value orientation, 78–9, 82
relationships: and interpersonal orientations, 10, 17; and social-value orientation, 85
repeated interaction, and intergroup prisoner’s dilemma games, 232–40
resource dilemmas: and accountability of subgroup leaders, 287–308; cooperation and access to information in situations of uncertainty, 361–72; and empirical research on social-value orientation, 82–3; and tragedy of the commons hypothesis, 343–4.

See also environmental dilemmas

rewards, and game-theoretical analysis of risk preferences, 44–5
Rijken, V. M., 86
ring measure (RM), of social-value orientation, 74–7, 82, 90
risk preferences: and aversion versus risk-seeking in individual behavior, 24–5; and game-theoretical analysis of cooperation, 25–56, 61–8; individual-difference research and study of cooperation, 59–61; and utility measurement, 34–9
rivalry, and motivations for social-value orientation, 77
Roch, S. G., 74, 82–3, 321, 363, 365
Roth, A. E., 53
Rusbult, C. E., 10

Sallows, G. O., 340
Samuelson, C. D., 74, 82–3, 316, 321, 362–3, 365, 376
Savage, L. J., 317
Sawyer, J. E., 80, 316
Scamahorn, S. D., 59
Schelling, T. C., 318–19, 390
Schoonenrade, P. A., 11–12
Schopler, J., 284
Schulz, U., 80
Science (journal), 332
selection strategy, and behavioral variability of agents in dynamic environments, 185, 188, 190–2, 197
self-categorization theory (SCT), and study of subgroup leadership, 288, 306–8
self-interest: conflicts between collective interest and, 3–4; as determinant of behavior, 4–5; and integrative model of interpersonal orientations, 6–8; limitations of theories emphasizing pursuit of, 19; and psychological theory, 4
Selten, R., 219
sequential protocol, and social uncertainty, 318
Shafir, E., 317
Shaklee, H., 13
Sherif, M., 242
Sigmund, K., 332
signaling, and two-stage game of Chicken, 253–4
Sim, D. L. H., 317
situational influences, on social-value orientation, 87–9
Smith, Adam, 3–4, 155–6
Smither, J. W., 290
Sniezek, J. A., 316
Snijders, C., 26, 32, 40–1, 44–5, 46–7, 50–3
social arrangement, and matrix-society simulation, 115–16, 18–19, 121–3
social behavior scale (SBS), 77
social category, and in-group cooperation, 274–5, 283
social choice rules, and democracy versus dictatorship in Chicken game, 252, 257–8
social comparison theory, and environmental uncertainty, 382
social dilemmas. See dynamical aspects; individual differences; intergroup conflicts; uncertainty
social-exchange heuristic, and study of cooperation and intergroup conflicts, 269–84
social identity theory: and in-group favoritism, 270; and minimal groups, 281–2; and study of accountability in subgroup
Index

leadership, 288, 291–2, 306–8; and team game research, 244. See also identity
social influence, and tit-for-tat strategies, 213–14
social orientation: definitions and models of, 99–101; and matrix games, 102–23; as personality trait, 101–2. See also pro-social orientation and prosociality; social-value orientation
social planning, and environmental dilemmas, 177–8
social responsibility, and social norms, 18
social uncertainty. See uncertainty
social-value orientation: definition of, 71; detection and expectation of other’s, 85–6; developmental and situational influences on, 87–9; empirical research on, 82–5, 89–91; measurements of, 72–82; and goal-prescribes-rationality principle, 86–7; individual differences in studies of, 189–90; and might versus morality hypothesis, 86. See also social orientation
Social Orientation Choice Card (SOCC), 77–8
sociology, and definition of group, 269
solidarity, intergroup mechanisms of, 228, 232
spatial concentration, of action effects in environmental dilemmas, 166–8
stability, of social-value orientation, 88–9
Stahelski, A. J., 13, 74, 85
subgroups, and accountability of leaders in resource dilemmas, 287–308
Suhre, C. J. M., 86
Suleiman, R., 61, 212, 216n6, 321, 344–5, 362–3, 378, 392, 394
Takigawa, T., 322n7
Tajfel, H., 269–70
Taylor, M., 29
team games: and study of intergroup relations, 242–4; and study of leader accountability, 293–308
testosterone, and aggression, 12
test-retest reliability: and game-theoretical analysis of risk preferences, 43–4, 52; and ring measure of social-value orientation, 76–7
Tetlock, P. E., 290–1
Thibaut, J. W., 71, 79, 191
Thomas, S. H., 337
Thompson, L., 335, 337
Thorngate, W. B., 14
time: and behavioral variability of agents in dynamic situations, 187, 203–204; pressure of and connection between risk preference and cooperation, 66–7
tit-for-tat (TFT) strategies: emergence of in dynamical situations, 209–23; and prisoner’s dilemma, 63, 130, 149, 152, 182–3, 233–4
tolerance, and selection strategies in dynamic environments, 190–205
Trabasso, T., 340
trade-off method, for measurement of risk preferences, 26, 37–9, 42–3, 47, 50, 52
tragedy of the commons, and resource dilemmas, 343–4
transformation of situations, and interpersonal orientations, 5–6
trigger strategy, and repeated prisoner’s dilemmas, 28
triple-dominance game, and decomposed games, 73
trump game, 347–59
trust game (TG), 128–32
trust and trustworthiness: dynamics of in simulated populations, 128–53; examples of decisions involving, 127; and individual differences in cooperation, 59; social-value orientation and opinions on public transportation, 85; and Yamagushi scale, 74
Tversky, A., 35–6, 223, 317

Two-person games: and dependence hypothesis, 346, 357–8; and study of intergroup conflicts, 248. See also Chicken game

Uncertainty, in social dilemmas:
- cooperation and access to information in resource, 361–72;
- cooperation and interplay between environmental and social, 376–95;
- effects of on behavior, 315–27;
- effects of on dependence and cooperation, 343–59; and explanations of altruism, 332–41; and public-good dilemmas, 323–6; resource dilemmas and environmental, 319–23; social versus environmental forms of, 316–19, 326–7

Utility: and conditional cooperation, 29–30, 31; and conjoint measurement in studies of social-value orientation, 79–82; and outcome transformation, 6–7; and risk preferences, 26, 34–9, 41, 51, 52–3

Value, and uncertainty in public-goods dilemmas, 324–5

van Assen, M. A. L. M., 31, 39, 51, 53–4
Van Avermaet, E., 71, 80
van Dijk, E., 322n7, 325, 327, 363, 365, 386–9
van Lange, P. A. M., 85–6, 90
Van Run, G. J., 74, 82
van Vogt, M., 85, 307
von Neumann, J., 30

Wakker, P. P., 37, 39
Walder, A. G., 27, 30–2
Walker, J. M., 337

War, and team games, 293. See also military

Ward, H., 253
Weber, E. U., 53, 62
Wedekind, C., 332–3
Weg, E., 344, 362–3, 378
Weiss, T., 345
White, L., 228
Wilke, H., 324–5, 327, 344, 363, 365, 380, 382–3, 386, 390–1
Wilke, M., 363
Wimberley, D. C., 66
Winter, E., 232

Wit, A. P., 324, 327, 344, 363, 380, 382–3, 390–1
Wyer, R. S., 79

Yamagishi, T., 271–3, 274–5, 283