Appendix

Table 1: Overview of all 43 model papers included in the analysis and their research domain

Paper reference	Domain
Abrica-Jacinto, N.L., Kurmyshev, E., Juárez, H.A., (2017). Effects of the interaction between ideological affinity and psychological reaction of agents on the opinion dynamics in a relative agreement model. JASSS (Journal of Artificial Societies and Social Simulation), 20, 3. DOI:10.18564/jasss.3377.	opinion dynamics
Akhmad, M., Chang, S., Deguchi, H., (2018). Agent-based Model of Negative Outgroup Stereotype in Intergroup Conflict Setting. Join 10th International Conference on Soft Computing and Intelligent Systems (SOS) and 19th International Symposium on Advanced Intelligent Systems (ISIS), 1289-1294. DOI:10.1109/SCIS-ISIS.2018.00202.	conflict research
Alizadeh, M., Cioffi-Revilla, C., Crooks, A., (2015). The effect of ingroup favoritism on the collective behavior of individuals' opinions. Advances in Complex Systems, 18, 43862. DOI:10.1142/S0219525915500022.	opinion dynamics
Alizadeh, M., Coman, A., Lewis, M., Cioffi-Revilla, C., (2014). Intergroup Conflict Escalation Leads to More Extremism. JASSS (Journal of Artificial Societies and Social Simulation), 4. DOI:10.18564/jasss.2559.	opinion dynamics
Bakillah, M., Domínguez, J.A., Zipf, A., Liang, S.H.L., Mostafavi, M.A., (2013). Multi-agent evacuation simulation data model with social considerations for disaster management context. Lecture Notes in Geoinformation and Cartography, 199609, 3-16. DOI:10.1007/978-3-642-33218-0_1.	crowds
Bravo, G., Yantseva, V., (2020). Cooperation and Conflict in Segregated Populations. Social Science Computer Review, 38, 4, 405-421. DOI:10.1177/0894439318821687.	conflict research
Chae, S.W., Seo, Y.W., Lee, K.C., (2015). Task difficulty and team diversity on team creativity: Multi-agent simulation approach. Computers in Human Behavior, 42, 83-92. DOI:10.1016/j.chb.2014.03.032.	organisations
Choi, B., Lee, S., (2018). An Empirically Based Agent-Based Model of the Sociocognitive Process of Construction Workers' Safety Behavior. Journal of Construction Engineering and Management, 144, 2. DOI:10.1061/(ASCE)CO.1943-7862.0001421.	organisations
Cioroianu, I., (2020). An agent-based model of cooperation with cross-cutting identity dimensions. Journal of Computational Social Science, 4, 1, 49-75. DOI:10.1007/s42001-020-00065-w.	social dilemma
Dimas, J., Prada, R., (2014). Dynamic identity model for agents. Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 8235 LNAI, 37-52. DOI:10.1007/978-3-642-54783-6_3.	virtual believable agents
Ekmekci, O., Casey, A., (2011). Computer simulation exploring organisational identification for contingent workers. Team Performance Management, 17, 43987, 279-298. DOI:10.1108/13527591111159018.	organisations

Flache, A., (2018). ABOUT RENEGADES and OUTGROUP HATERS: MODELING the LINK between SOCIAL INFLUENCE and INTERGROUP ATTITUDES. Advances in Complex Systems, 21, 44018. DOI:10.1142/S0219525918500170.	opinion dynamics
Frank, K.A., Xu, R., Penuel, W.R., (2018). Implementation of Evidence-Based Practice in Human Service Organizations: Implications from Agent-Based Models. Journal of Policy Analysis and Management, 37, 4, 867-895. DOI:10.1002/pam.22081.	organisations
Frantz, C.K., Purvis, M.K., Savarimuthu, B.T.R., Nowostawski, M., (2015). Modelling dynamic normative understanding in agent societies. Scalable Computing, 16, 4, 355-380. DOI:10.12694/scpe.v16i4.1128.	norms
Hesan, R., Ghorbani, A., Dignum, V., (2014). Modeling the inuence of multiple social groups on agents behavior. CEUR Workshop Proceedings, 1283, 238-249.	group membership
Higino, J., Mascarenhas, S., & Prada, R., (2016). Towards Characters With A Dynamic Model of Social Identity. In Proceedings of 1st International Joint Conference of DiGRA and FDG.	virtual believable agents
Hofstede, GJ., Dignum, F., Prada, R., Student, J., Vanhee, L., (2015). Gender Differences: The Role of Nature, Nurture, Social Identity and Self-organization. Multi-Agent Based Simulation XV, 72-87. DOI:10.1007/978-3-319-14627-0_6.	gender research
Jani, A., (2020). An extension of Schelling's segregation model: Modeling the impact of individuals' intolerance in the presence of resource scarcity. Communications in Nonlinear Science and Numerical Simulation, 85, 105202. DOI:10.1016/j.cnsns.2020.105202.	group membership
Jung, J., Bramson, A., Crano, W.D., (2018). An agent-based model of indirect minority influence on social change and diversity. Social Influence, 13, 1, 18-38. DOI:10.1080/15534510.2017.1415961.	minority influence
Kim, JW., Hanneman, RA., (2011). A Computational Model of Worker Protest. JASSS (Journal of Artificial Societies and Social Simulation), 3.	conflict research
Lim, D., Zo, H., Lee, D., (2011). The value of anonymity on the internet. Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 6629 LNCS, 452-464. DOI:10.1007/978-3-642-20633-7_33.	opinion dynamics
Mason,C., van der Putten, P., van Duijn, M., (2020). How Identity and Uncertainty Affect Online Social Influence. An Agent-Based Approach. Lecture Notes in Computer Science book series, LNCS 12259, 174-190. DOI:10.1007/978-3-030-61841-4_12 .	opinion dynamics
Medeiros, L., van der Wal, C.N., (2017). An agent-based model predicting group emotion and misbehaviours in stranded passengers. Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 10423 LNAI, 28-40. DOI:10.1007/978-3-319-65340-2_3.	crowds
Metz, T., (2011). A multilevel model of party identification. 10th Dutch-Flemish Politicologenetmaal, Session.	opinion dynamics
Miodownik, D., Cartrite, B., (2010). Does political decentralisation exacerbate or ameliorate ethnopolitical mobilisation? a test of contesting propositions. Political Research Quarterly, 63, 4, 731-746. DOI:10.1177/1065912909338462.	conflict research
Morano, R.S., de Moraes, E.A., Jacomossi, R.R., (2018). Can small groups avoid the tragedy of the commons?. AI and Society, 33, 1, 71-80. DOI:10.1007/s00146-017-0720-9.	social dilemma

Mosler,H-J., Brucks, W., (2008). Resource-Use Simulations Using Agents with Psychology-Relevant Internal Models. 5th conference of the European social simulation association (ESSA 2008).	social dilemma
Moulin, B., Larochelle, B., (2010). Crowdmags, Multi-agent Geo-Simulation of the interactions of a crowd and control forces. In Modelling, Simulation and Identification, chapter 11, , 213-238.	crowds
Pickett, C.L., Smaldino, P.E., Sherman, J.W., Schank, J., (2011). Agent-based modeling as a tool for studying social identity processes: The case of optimal distinctiveness theory. Social Cognition Social Identity and Intergroup Relations, 127-143. DOI:10.4324/9780203816790.	group membership
Pires, B., Crooks, A.T., (2017). Modeling the emergence of riots: A geosimulation approach. Computers, Environment and Urban Systems, 61, 66-80. DOI:10.1016/j.compenvurbsys.2016.09.003.	conflict research
Qiao, J., Huang, H.-Q., Li, G.-Y., Fan, Y., (2014). Bridging the gap between different social networks. Physica A: Statistical Mechanics and its Applications, 410, 535-549. DOI:10.1016/j.physa.2014.05.067.	social networks
Salzarulo, L., (2006). A Continuous Opinion Dynamics Model Based on the Principle of Meta-Contrast. JASSS (Journal of Artificial Societies and Social Simulation), 9, 1.	opinion dynamics
Seeme, F., Green, D., Kopp, C., (2019). Pluralistic ignorance: A trade-off between group-conformity and cognitive dissonance. Proceedings, Part II, 26th International Conference on Neural Information Processing, ICONIP 2019 Sydney, NSW, Australia. , 695-706.	opinion dynamics
Shults, FL., Gore, R., Wildman, WJ., Lynch, CJ., Lane, JE., Toft, MD., (2018). A Generative Model of the Mutual Escalation of Anxiety Between Religious Groups. JASSS (Journal of Artificial Societies and Social Simulation), 4. DOI:10.18564/jasss.3840.	conflict research
Situngkir, H., (2004). On massive conflict: Macro-micro link. Working Paper (WPD2004) in Bandung Fe Institute.	conflict research
Skarin, B., (2014). Social Identity Simulation System (SISTEM). In APTIMA Human-Centred Engineering Report No.DRDC-RDDC-2014-C139).	conflict research
Smaldino, P., Pickett, C., Sherman, J., Schank, J., (2012). An agent-based model of social identity dynamics. JASSS (Journal of Artificial Societies and Social Simulation), 4. DOI:10.18564/jasss.2030.	group membership
Smaldino, P.E., Janssen, M.A., Hillis, V., Bednar, J., (2017). Adoption as a social marker: Innovation diffusion with outgroup aversion. Journal of Mathematical Sociology, 41, 1, 26-45. DOI:10.1080/0022250X.2016.1250083.	opinion dynamics
Stephen, A., (2019). Steering Gently: Crowd Management with a Non-Confrontational Philosophy. The Design Journal.	crowds
Upal, MA., Gibbon, S., (2015). Agent-based system for simulating the dynamics of social identity beliefs.. SpringSim (ANSS).	group membership
van der Wal, C.N., Couwenberg, M., Bosse, T., (2017). Getting frustrated: Modelling emotional contagion in stranded passengers. Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 10350 LNCS, 611-619. DOI:10.1007/978-3-319-60042-0_67.	crowds

Van Rooy, D., (2012). A connectionist ABM of social categorisation processes. Advances in Complex Systems, 15, 6. DOI:10.1142/S0219525912500774.	opinion dynamics
Wellman, N., Applegate, J.M., Harlow, J., Johnston, E.W., (2020). Beyond the Pyramid: Alternative Formal Hierarchical Structures and Team Performance. Academy of Management Journal, 63, 4, 997-1027. DOI:10.5465/AMJ.2017.1475.	organisations

Table 2: Overview of models and the categories they incorporated, provided as extra pdf file.

	Research domain	Agent represents	Modelled behaviour	Personal identity?	Social identity?	Multiple social identities?	Salience?	Comparative fit?	Normative fit?	Consequences of a social identity?	Self-Categorization to a new social identity or evolvement of social identities?	Social identity motives?	Prototypical aspects associated with social identity?	Strength of social identification?
Abrica-Jacinto, Kurmyshev and Juárez 2017	opinion dynamics	Individual	opinion formation and affinity	private opinion	tag	NA	implicit, affinity	relative agreement (not defined as comparative fit)	NA	NA	NA	NA	NA	NA
Akhmad, Chang, and Deguchi 2018	conflict research	individual	changing beliefs/stereotypes by cooperation or non-cooperation	NA	tag	NA	NA	NA	NA	NA	NA	NA	stereotype belief function	NA
Alizadeh et al. 2014	opinion dynamics	individual	opinion	NA	NA	NA	NA	NA	NA	NA	NA	NA	opinion	NA
Alizadeh, Cioffi-Revilla, and Crooks 2015	opinion dynamics	individual	opinion	NA	tag	yes	NA	NA	NA	influence of in-group/out-group	NA	NA	opinion	NA
Bakillah et al. 2013	crowds	individual and actors with collective responsibility	evacuating, sending messages (authority agents)	NA	tag	yes	NA	NA	NA	focus on collective action	emergence of new identity groups	NA	NA	primary and secondary ties.
Bravo and Yantseva 2020	conflict research	individual	giving help reproduce “harming” (reducing reproduction probability)	NA	tag	NA	NA	NA	NA	tags influence decision (no salience needed)	NA	NA	NA	NA
Chae, Seo and Lee 2015	organizations	individual	knowledge exchange, strategy (exploitation/exploration), problem solving	implicit, knowledge base	implicit, tag	NA	NA	NA	NA	intergroup bias for outgroup	NA	NA	NA	NA
Choi and Lee 2018	organizations	individual	adherence to norm	NA	unclear, degree of identification, tag	NA	NA	NA	NA	adherence to safe behaviors	NA	NA	behaviour, unclear	NA
Cioroianu 2020	social dilemma	individual	playing PD (cooperate or defect)	NA	tag	yes	probabilistic	NA	NA	defines strategy	NA	NA	NA	NA

Dimas and Prada 2014	virtual believable agents	individual	cooperation in the example	set of characteristics	set of characteristics	yes	formula: salience = fit x accessibility	meta contrast ratio	yes, unclear	shift towards the values, goals of the prototypical characteristics of that specific social group	based on context-specific salient characteristics the agent employs comparative fit and can fill in characterists of a group with the characteristics of the most prototypical group member	NA	characteristics: explicit [e.g. skin, clothes] or implicit [social values, norms, interest, goal]	indirect, emotional valence leads to accessibility
Ekmekci and Casey 2011	organizations	individual	randomly interact with each other (this allows the agents to compare their attributes to the other agents' attributes), construct an organizational identity	unclear, set of characteristics	unclear, identification	NA	NA	comparison of own attributes with organization	NA	NA	during the simulation identification with the organization is emerging	NA	NA	frequency of interaction and information
Flache 2018	opinion dynamics	individual	influencing	NA	tag	NA	NA	NA	NA	NA	NA	NA	NA	NA
Frank and Penuel 2018	organizations	individual	tie formation, opinion	NA	tag	NA	NA	NA	NA	stronger adherence to norms of intraorganizational network	NA	NA	NA	parameter
Frantz et al. 2015	misc	individual	trade	set of characteristics	set of characteristics, tag	yes	NA	NA	generalization from individual observations, stereotype and how to behave with them	NA	NA	NA	similarity in features	NA
Hesan, Ghorbani and Dignum 2014	group membership	individual	opinion	NA	tag	yes	NA	NA	NA	conformity: pressure to social influence	NA	NA	behaviour triggered by social influence, implicit.	implicit as pressure to social influence
Higino, Mascarenhas, and Prada 2016	virtual believable agents	non playable character (virtual agent)	diverse behaviours, in the example case donating money	NA	set of characteristics	yes	formula: salience = fit x accessibility	NA	average of adequacy and affordance of a character to the context	filtering and choice of behaviour (depending on behavioural options)	NA	goal and adequacy affordance	values, resources, goals	commitment (value)

Hofstede et al. 2015	misc	individual	finding playmates, status conferral, power exchange (fighting), leaving a group	set of characteristics	tag	NA	NA	NA	NA	NA	NA	gaining status	norm	NA
Jani 2020	group membership	individual	movement (spatial relocation)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Jung, Bramson and Crano 2018	misc	individual	attitude change due to ingroup influence	NA	tag	NA	NA	NA	NA	NA	NA	NA	NA	NA
Kim and Hanneman 2011	conflict research	individual	choice to participate in collective action	NA	tag	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lim, Zo and Lee 2011	opinion dynamics	individual	opinion	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mason,van der Putten and van Duijn 2020	opinion dynamics	individual	opinion	NA	set of characteristics	yes	NA	NA	NA	influence of in-group/out-group	NA	NA	NA	NA
Medeiros and van der Wal 2017	crowds	individual	misbehaviour, secondary actions (sit, go to the toilet, walk, go to a restaurant)	NA	implicit, set of characteristics	yes	NA	NA	NA	NA	NA	NA	behaviour, implicit	NA
Metz 2011	opinion dynamics	individual	party identification	private opinion, set of characteristics	set of characteristics + party identity (2 levels)	yes	implicit, meta-contrast	meta contrast ratio	NA (maybe implicit through signalling/norms, not specified)	party identification and signalling of decision	implicit: meta-contrast and change of traits	NA	norm, abstract	NA
Miodownik and Cartrite 2010	conflict research	individuals, political entrepreneurs, state bureaucracy	change identity activation and identity subscription	NA	tag	yes	local and global information	NA	implicit, categorization of others by their salient identity influences own identity salience	behaviour (participation in movement)	agents can substitute an identity with a preferable one not in their repertoire	NA	NA	weight for each identity

Morano, de Moraes and Jacomossi 2018	social dilemma	individual	obey or not rules on resource extraction	equation	tag	NA	NA	NA	NA	decision about how to extract resources	NA	NA	NA	NA
Mosler and, Brucks 2008	social dilemma	individual	resource use	NA	NA	NA	depends on resource scarcity	NA	NA	self-restraint increases under collective identity conditions	NA	NA	NA	NA
Moulin and Larochelle 2010	crowds	individual, spatio-temporal group	leader: stereo-typical be-haviour, agents: join group, Control: actions, Crowd: collective actions	set of characteristics, unclear	set of characteristics	yes	NA	NA	(implicit) compare the collective actions of a group to their personal norms	shift from individual to collective goals	can join a group they weren't part of before	NA	norm	implicit, adhesion/belonging/support to the group
Pickett et al. 2011	group membership	individual	group change (join/leave group)	NA	NA	NA	NA	NA	NA	NA	the change to a new group is by definition a novel group for the agent	desire for inclusion and distinctiveness, implicit	NA	NA
Pires and Crooks 2017	conflict research	individual and household	collective action (rioting), households select a home	set of characteristics, implicit	tag	yes	conflicts in role-based identities lead to SI saliency	NA	NA	collective actions	yes, rioter, depending on energy & self-esteem	self-esteem	behaviour	strength of network ties, unclear
Qiao et al. 2014	misc	node (in the network)	not really choices/behaviours, just connecting	NA	tag	yes	NA	NA	NA	NA	NA	NA	NA	NA
Salzarulo 2006	opinion dynamics	individual	opinion change	NA	unclear, opinion	yes	NA	metacontrast principle	implicit: difference from the prototypical opinion of the ingroup	in-group influence	yes it can happen that you change your opinion and thereby 'change' group	NA	opinion	NA
Seeme, Green and Kopp 2019	opinion dynamics	individual	opinion & group belonging/tie formation	private opinion	tag	NA	NA	NA	NA	conform to group opinion	yes, the agent switches to a new SI if this gives a higher reward, which is if it is closer to its own opinion	group reward for conforming, weak	norm, group opinion	NA
Shults et al. 2018	conflict research	individual	religious violence	NA	set of characteristics	NA	NA	NA	NA	predisposition to intergroup violence	NA	NA	beliefs, behaviour	NA
Situngkir 2004	conflict research	individual	influencing other agents' mobility (*mobilisation*) index	NA	tag	NA	NA	membership degree	NA	social influence of ingroup	NA	NA	behaviour	membership degree, dynamic

Skarin 2014	conflict research	individual	individual and collective actions	unclear, self-esteem, set of characteristics	tag	yes	implicit, self-esteem, identification	NA	NA	collective actions	NA	self-esteem	NA	affiliation (dynamic)
Smaldino et al. 2012	group membership	individual	group/identity change (join/leave group)	NA	tag	NA	NA	NA	NA	NA	the change to a new group is by definition a novel group for the agent	desire for inclusion and distinctiveness, implicit	NA	NA
Smaldino et al. 2017	opinion dynamics	individual	adoption or rejection of new products	NA	tag	NA	NA	NA	NA	social influence	NA	NA	behaviour (adoption of an innovation)	NA
Stephen 2019	crowds	individual	movement to attraction point	implicit, personal preference structure	influencing	yes	NA	NA	NA	walking direction, collective emotion	NA	NA	NA	NA
Upal and Gibbon 2015	group membership	individual	strategy (e.g. group derogation) to increase self-esteem	self-esteem, implicit	tag	yes	NA	NA	NA	NA	NA	self-esteem	NA	weight affiliation
van der Wal, Couwenberg, and Bosse 2017	crowds	individual	do nothing, ask question, yelling, intimidation	NA	tag	yes	NA	implicit, similarity in traits	NA	NA	NA	NA	behaviour	NA
Van Rooy 2012	opinion dynamics	individual brain	opinion	set of characteristics	set of characteristics	yes	priming	NA	NA	activation levels change ("grown" out of the recurrent network rules)	yes, learned (recurrent network)	NA	traits for ingroup stereotypes	implicit, strength of the internal connections, dynamic
Wellman et al. 2020	organizations	individual	decide (option A, B, scope/links, social identity)	NA	identification	NA	NA	NA	NA	NA	NA	NA	NA	based on member optimum and team decision, dynamic