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Depression in Adolescent Peer Networks

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Research Question: Student's with higher depressive symptoms are less likely to like peers and more likely to dislike peers.

BACKGROUND

Depression in adolescents has been linked to poor life outcomes, including suicidal ideation, peer victimization, and peer rejection among others. Previous studies have focused on how depressed peers are seen by other peers (friendship networks). Less is known about how adolescent depression impacts their social networks and possible perceptions of social interactions. The current study investigated the association between depression and antipathy towards peers in the context of rejection status as determined by peer reciprocity of friendship.

METHODS

The data comes from 457 Italian first year secondary school students (M age = 11.9, SD = 0.7, 54% male) and 58 of their teachers (Mage = 45.7, SD = 9.4, 92.8% female) in 23 classrooms across nine schools (Marucci, Oldenburg, & Barrera, 2018). The average size of classrooms were 22 students (ranging from 17 to 25 students). The schools that participated in the study were located across the urban area of Turin and were spread evenly over the different neighborhoods in the city. About 54% of the students were of Italian origin, 9% had one parent of foreign origin, and 36% had both parents of foreign origin. The data were collected in 2015–2016 and were part of a combined effort between a local project ('provaci ancora Sam') and the European project 2young2fail at decreasing school dropout in secondary schools.

TABLES

	est	se	nGroups	p	sigma	Q	Qp
constant liking rate (period 1)	19.622	2.059	12	0.000	4.099	18.788	0.065
constant liking rate (period 2)	12.202	0.826	12	0.000	1.641	21.838	0.026
liking: outdegree (density)	-1.142	0.073	12	0.000	0.214	43.730	0.000
liking: reciprocity	-0.200	0.063	12	0.002	0.153	21.789	0.026
liking: transitive triplets	0.117	0.009	12	0.000	0.029	68.424	0.000
liking: indegree-popularity (centrd)	-0.030	0.013	12	0.022	0.040	54.514	0.000
liking: same sex	0.360	0.037	12	0.000	0.052	11.367	0.413
liking: same nat	-0.175	0.052	12	0.001	0.124	22.077	0.024
liking: edu similarity	0.087	0.095	12	0.364	0.240	23.611	0.014
liking: depr alter	-0.026	0.036	12	0.482	0.091	24.962	0.009
liking: depr ego	-0.062	0.021	12	0.004	0.000	5.097	0.926
liking: depr similarity	0.212	0.103	12	0.040	0.231	19.137	0.059
constant dislik rate (period 1)	7.012	0.926	12	0.000	2.421	37.382	0.000
constant dislik rate (period 2)	6.724	0.747	12	0.000	2.075	46.732	0.000
dislik: outdegree (density)	-1.282	0.078	12	0.000	0.220	43.955	0.000
dislik: reciprocity	0.321	0.066	12	0.000	0.061	10.752	0.464
dislik: indegree-popularity (centrd)	0.125	0.010	12	0.000	0.022	19.381	0.055
dislik: same sex	-0.258	0.111	12	0.021	0.329	53.821	0.000
dislik: same nat	0.134	0.065	12	0.039	0.144	23.081	0.017
dislik: edu similarity	-0.229	0.146	12	0.116	0.377	25.993	0.007
dislik: depr alter	-0.042	0.033	12	0.196	0.001	11.543	0.399
dislik: depr ego	0.287	0.102	12	0.005	0.309	63.779	0.000
dislik: depr similarity	-0.016	0.143	12	0.909	0.299	16.813	0.114

Effect of depression on liking ties
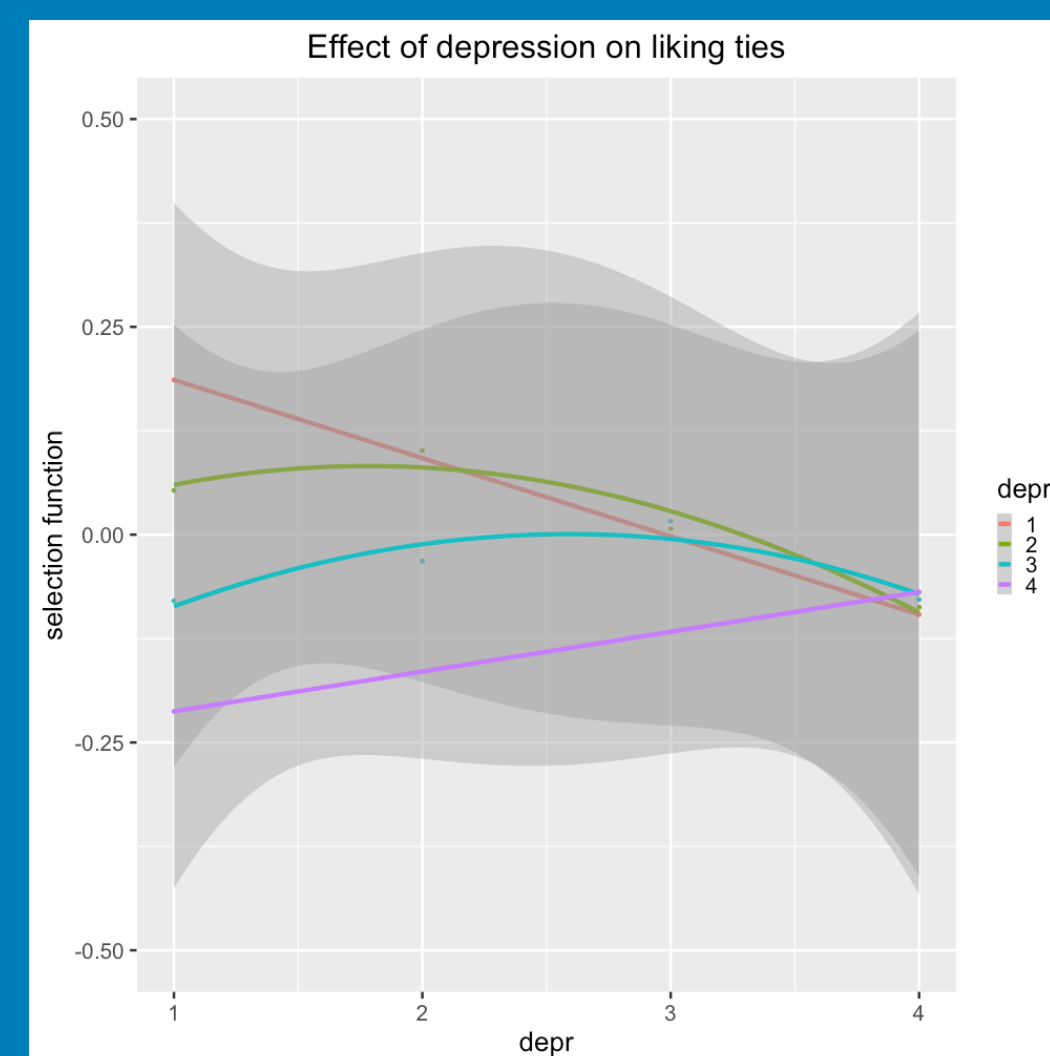
METHODS

We analyzed three waves of data, with a six-months period between assessments. Analytical strategy: The model determines likely trajectories between observations using information from the first wave as a starting point. The estimates of the model are obtained through an iterative simulation following a Markov Chain approach, expressing the strength of the effects included in the model. The unstandardized estimates resemble regression coefficients in logistic regression, indicating the strength of each effect in creating or maintaining a tie. Model parameters were tested using t-ratios, referring to the parameter estimate divided by its standard error. Specifically, we used the stochastic actor-oriented models for analyzing the effects of depressive symptoms on liking and disliking networks while controlling for network structural effects (density, reciprocity and transitivity) and relevant covariates (gender, nationality and highest parents' education level).

First Result: Students liked peers with similar levels of depressive symptoms. Second Result: Students with higher levels of depression were less likely to like other classmates. Third Result: depressed students were more likely to dislike other classmates. Fourth Result: depressed peers were not more likely to be rejected compared to non-depressed peers.

DISCUSSION

Of particular note are the ego effects found in which peers are receiving more peer nominations than they send, suggesting a discrepancy in possible friendship or rejection status. These peers may view themselves as being more rejected or prone to rejection than the nominations would suggest. It may be the case that they view themselves as rejected and respond by disliking more peers and liking fewer peers (future applications for dataset analysis and research). Overall, depressed peers were not rejected in terms of both liking and disliking receiving nominations. Conversely, depressed students seem to reject more peers than non-depressed classmates, by means of being less likely to like other peers and more likely to dislike other classmates. These findings could suggest that depressed peers misperceived their on social interactions by underestimating or focus on negative aspects of them.

REFERENCES

1. (Marucci, Oldenburg, & Barrera, 2018)

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