

Table 1: Performance of ATT estimators under model misspecifications across mediator types.

		TMLEs									One-step estimators								
		<i>Univariate Binary</i>			<i>Univariate Continuous</i>			<i>Univariate Binary</i>			<i>Univariate Continuous</i>			<i>Univariate Continuous</i>			<i>Univariate Continuous</i>		
		$\psi_1(\hat{Q}^*)$			$\psi_{2a}(\hat{Q}^*)$			$\psi_{2b}(\hat{Q}^*)$			$\psi_1^+(\hat{Q})$			$\psi_{2a}^+(\hat{Q})$			$\psi_{2b}^+(\hat{Q})$		
		Linear	SL	CF	Linear	SL	CF	Linear	SL	CF	Linear	SL	CF	Linear	SL	CF	Linear	SL	CF
n=500	Bias	-0.011	0.002	-0.006	-0.076	-0.011	-0.019	-0.077	-0.02	-0.028	-0.012	-0.001	-0.004	-0.076	-0.003	-0.006	-0.077	-0.019	-0.03
	SD	0.055	0.063	0.062	0.1	0.143	0.145	0.1	0.11	0.125	0.056	0.06	0.067	0.1	0.113	0.113	0.1	0.11	0.128
	MSE	0.003	0.004	0.004	0.016	0.02	0.021	0.016	0.013	0.016	0.003	0.004	0.005	0.016	0.013	0.013	0.016	0.013	0.017
	Coverage	89.2%	88.3%	90.3%	88.1%	95.7%	95.2%	88%	92.5%	93.3%	90%	87.9%	89.3%	88.2%	98.1%	98.8%	88.1%	92.8%	93%
	CI width	0.209	0.204	0.218	0.437	0.526	0.547	0.437	0.416	0.478	0.219	0.197	0.212	0.438	0.526	0.548	0.439	0.418	0.481
n=1000	Bias	-0.011	0.001	-0.004	-0.077	-0.004	-0.007	-0.078	-0.014	-0.017	-0.012	-0.001	-0.003	-0.077	-0.002	-0.001	-0.078	-0.013	-0.017
	SD	0.038	0.042	0.042	0.073	0.086	0.088	0.073	0.08	0.085	0.039	0.042	0.042	0.073	0.082	0.082	0.073	0.08	0.085
	MSE	0.002	0.002	0.002	0.011	0.007	0.008	0.011	0.007	0.007	0.002	0.002	0.002	0.011	0.007	0.007	0.011	0.007	0.008
	Coverage	89%	89.7%	89.6%	80.3%	96.4%	97%	80.3%	92.4%	92%	88.8%	89.2%	89.1%	80.4%	96.8%	98.1%	80.4%	92.8%	91.7%
	CI width	0.145	0.147	0.151	0.308	0.366	0.374	0.308	0.293	0.316	0.152	0.144	0.148	0.309	0.366	0.375	0.309	0.294	0.317
n=2000	Bias	-0.012	0.002	-0.001	-0.078	-0.004	-0.005	-0.078	-0.007	-0.01	-0.012	0.001	0	-0.078	-0.004	-0.004	-0.078	-0.007	-0.01
	SD	0.026	0.028	0.029	0.051	0.059	0.06	0.051	0.055	0.058	0.027	0.028	0.029	0.051	0.056	0.056	0.051	0.055	0.058
	MSE	0.001	0.001	0.001	0.009	0.003	0.004	0.009	0.003	0.003	0.001	0.001	0.001	0.009	0.003	0.003	0.009	0.003	0.003
	Coverage	88.8%	93.5%	93.3%	67.8%	97.5%	97.2%	67.7%	93.7%	93.5%	90%	93.1%	93.5%	67.8%	97.7%	98.2%	67.7%	93.9%	93.6%
	CI width	0.101	0.107	0.109	0.216	0.257	0.261	0.216	0.207	0.218	0.107	0.105	0.107	0.216	0.257	0.261	0.217	0.208	0.218