Non-Instructional Student Texting in the Classroom: Self-Control and Individual Differences

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Abstract

College students (*N*=221) responded to a series of questions regarding their texting behavior and individual differences. Students who text in class scored lower on measures of self-control, scored higher on friendship closeness and compulsive communication measures, and had lower grade-point-averages than classroom non-texters. Implications for classroom learning are discussed.

Introduction

Previous research has found that texting during class both inhibits the cognitive learning of texters and interferes with the learning environment by serving as a distraction to other students as well as to teachers (Junco & Cotton, 2012; Wei, Wang, & Klausner, 2012; Williams et al., 2011).

The present research is intended to broaden understanding of the factors which motivate or otherwise contribute to in-class texting behavior. Classroom texters were predicted to score lower on trait self-control, lower on self-regulated learning, have lower grade-point-averages, and score higher on friendship closeness and communication compulsivity than non-texters. Correlations between classroom texts and these measures were expected to follow the same pattern.

Method

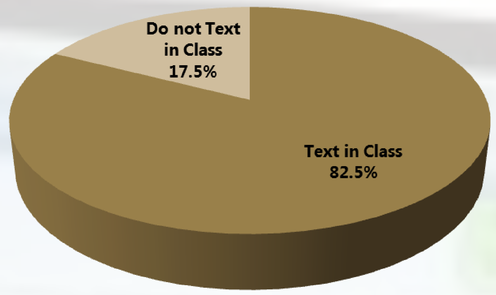
Participants

Two hundred and twenty one college students participated in the current research in exchange for credit towards a research participation requirement in Introductory Psychology or extra credit in upper-level Psychology courses. The average age of participants was 19.62 (*SD*=2.62). Sixty-one percent were women and 70.1% were Caucasian, 20% were African-American, 3.2% were Hispanic, 1.4% American Indian, 1.4% Asian, 1.4% Pacific Islander, and 3.6% indicated other for race. Class rank included 31.7% freshman, 40.7% sophomores, 17.2% juniors, 7.7% seniors, and 1.8% other.

Materials & Procedure

Participants completed 1) the Self-Control Scale (Tangney, Baumeister, & Boone, 2004); 2) the Self-Regulation subscale of the Motivational Strategies for Learning Questionnaire (Pintrich & DeGroot, 1990); 3) the Talkaholic Scale (McCroskey & Richmond, 1993); 4) the Friendship Closeness Inventory (Polimeni, Hardie, & Buzwell, 2002); 5) the Ten-Item Personality Inventory (Rentfrow, Gosling, & Swann, 2003); and 6) questions measuring in-class texting behavior, beliefs regarding whether texting in-class affects learning, general texting habits, and demographic questions.

Results

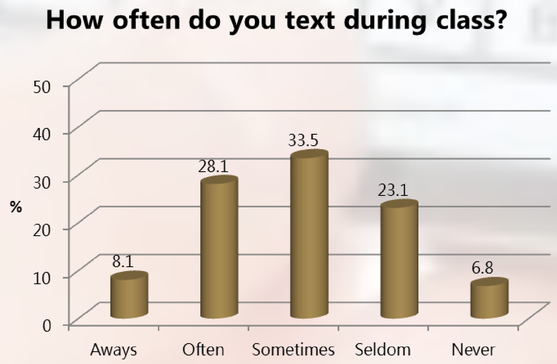


How many text messages do you, on average, READ in class?

7.10 (*SD* =10.33)

How many text messages do you, on average, WRITE in class?

6.64 (*SD* =10.46)



Differences between Classroom Texters and Non-texters by Variable	Classroom Texter	Classroom Non-texter	p
#DAILY_TEXT_SENT	121.98	72.76	0.1
#DAILY_TEXT_REC	140.73	83.58	0.13
OTHERTEXT_INTER_MYLEARN (5pt scale)	2.01	2.74	<.001
MYTEXT_INTER_MYLEARN (5pt scale)	3.03	2.76	0.2
GPA (4pt scale)	3.06	3.28	0.02
FCSE (7pt scale)	2.51	2.29	0.21
FCI_TOTAL (7pt scale)	4.95	4.52	<.01
FCI_EMO (7pt scale)	5.62	5.24	0.05
FCI_BEH (7pt scale)	5.6	4.99	<.001
FCI_COG (7pt scale)	3.43	3.19	0.34
TALKAHOLIC SCALE (Range 10-50)	25.44	22.08	0.02
SCS (5pt scale)	3.09	3.45	<.001
MSL_SR (5pt scale)	3.25	3.39	0.16
OPENNESS (7pt scale)	5.37	5.43	0.76
EXTRAVERSION (7pt scale)	4.74	4.39	0.17
AGREEABLENESS (7pt scale)	4.81	4.95	0.42
EMOTIONAL_STAB (7pt scale)	4.48	5.04	0.02
CONSCIENTIOUSNESS (7pt scale)	5.43	5.64	0.28
AGE	19.39	20.68	<.01
N	180	38	

Sex Differences

Females reported sending and receiving more texts in class than males, but these differences were not statistically significant (*p*=.18 and .16, respectively).

Correlations (r)	#TEXT_READ_CLASS	#TEXT_WRITE_CLASS	CLASS_TEXT_OFTEN	OTHERTEXT_INTER_MYLEARN	MYTEXT_INTER_MYLEARN	#DAILY_TEXT_SENT	#DAILY_TEXT_REC	GPA	FCSE	FCI_TOTAL	FCI_EMO	FCI_BEH	FCI_COG	TALKAHOLIC	SCS	MSL_SR	OPENNESS	EXTRAVERSION	AGREEABLENESS	EMOTIONAL_STAB	CONSCIENTIOUS	AGE
#TEXT_READ_CLASS	1	.969**	.484**	-.165*	.036	.357**	.372**	-.143*	.008	.048	.036	.104	-.039	.133*	-.199**	-.105	-.123	.123	-.164*	-.176**	-.039	-.076
#TEXT_WRITE_CLASS	.969**	1	.492**	-.134*	.035	.325**	.327**	-.130	-.001	.034	.028	.082	-.038	.123	-.203**	-.114	-.152*	.103	-.145*	-.184**	-.073	-.077
CLASS_TEXT_OFTEN	.484**	.492**	1	-.216**	.104	.117	.121	-.165*	.074	.174**	.102	.237**	.023	.264**	-.340**	-.194**	-.083	.156*	-.093	-.234**	-.078	-.125
OTHERTEXT_INTER_MYLEARN	-.165*	-.134*	-.216**	1	.206**	-.185**	-.176**	.040	.123	.055	.010	-.065	.173*	.008	.004	-.022	-.067	.060	-.035	-.022	-.032	.073
MYTEXT_INTER_MYLEARN	.036	.035	.104	.206**	1	-.040	-.052	-.144*	.225**	.098	-.009	.054	.150*	.182**	-.203**	-.084	-.067	.049	-.122	-.060	-.044	-.026
#DAILY_TEXT_SENT	.357**	.325**	.117	-.185**	-.040	1	.964**	-.113	-.061	.082	.039	.151*	-.024	.077	-.063	-.030	.005	.117	-.036	-.080	.193**	-.141*
#DAILY_TEXT_REC	.372**	.327**	.121	-.176**	-.052	.964**	1	-.134*	-.071	.077	.035	.169*	-.049	.058	-.070	-.063	-.012	.110	-.032	-.087	.170*	-.127

**Correlation is significant at the 0.01 level (2-tailed). *Correlation is significant at the 0.05 level (2-tailed). N = 221.

Discussion

Previous research has found that texting during class interferes with the learning environment (Junco & Cotton, 2012; Wei, Wang, & Klausner, 2012; Williams et al., 2011). The present research increases understanding of the factors which motivate or otherwise contribute to in-class texting behavior.

This research clearly shows that despite syllabus statements and other techniques to discourage students from texting during class meetings, the majority of students continue to text in class (82.5%). In addition, students who text in class believe texting does not interfere with their learning and believe they can multitask effectively.

Our research also shows that in-class texting is related to poor self-control, strong friendship closeness, lower gpa, greater communication compulsivity, and less agreeable and less emotionally stable personality traits. Students may actually have under-reported their classroom texting frequencies due to social desirability factors, but this diverse sample admitted to texting across different types of classes and classroom environments. While we did not discover any sex differences, it should be noted that our sample was predominately female.

Techniques to educate students of these outcomes and to increase self-control may help reduce non-instructional texting in the classroom and increase student learning and test performance in the future. Additional experimental studied are needed.

Selected References

Junco, R., & Cotton, S. R. (2012). No A 4 U: The relationship between multitasking and academic performance. *Computers & Education, 59*, 505-514.

Wei, F. F., Wang, Y. K., & Klausner, M. (2012). Rethinking college students' self-regulation and sustained attention: Does text messaging during class influence cognitive learning? *Communication Education, 2012*, 1-20.

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