Growing Closer on Facebook: Changes in Tie Strength Through Social Network Site Use

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SUPPLEMENTARY ONLINE MATERIAL

The following tables are similar to Table 2 in the main paper and include tests for interaction effects with (S1) family status, (S2) frequent contact status, and (S3) new relationship status. See http://tinyurl.com/burkechi2014 for the full paper.

	Reported tie strength		
	Value	SE	p-value
(Intercept)	4.49	0.01	0.00***
Controls			
Reported tie strength last month	0.76	0.00	0.00***
Ego age (decades)	0.05	0.01	0.00***
Age difference (decades)	0.00	0.01	0.77
Ego is male†	0.03	0.01	0.01**
Same gender†	0.03	0.01	0.00**
Ego's friend count‡	0.00	0.03	0.97
Alter's friend count‡	-0.03	0.01	0.00***
Number of mutual friends	0.01	0.03	0.64
Is family†	0.32	0.01	0.00***
In a relationship together†	-0.15	0.03	0.00***
Same work†	-0.09	0.03	0.01**
Same school†	0.00	0.01	0.92
Same city†	-0.06	0.03	0.02*
General communication			
In-person contact	0.08	0.00	0.00***
Phone contact	0.11	0.01	0.00***
Online contact (not incl. Facebook)	0.11	0.00	0.00***
Facebook communication			
Directed communication (both directions)	0.05	0.01	0.00***
Passive consumption by ego	0.03	0.00	0.00***
Broadcasting (by ego)	-0.02	0.01	0.05
Broadcasting (by alter)	-0.02	0.01	0.00***
Interactions w/ family status			
Is family x directed communication	-0.05	0.01	0.00***
Is family x passive consumption	-0.03	0.01	0.00***

*** p < 0.001 ** p < 0.01 * p < 0.05

N=40,521 Egos=3,643 Alters=26,103
† Binary variable
‡ Continuous variable logged (base 2) and standardized
All continuous variables are centered at their means.

Table S1. Interactions between family status and types of Facebook use on changes in tie strength. Family members are less affected by FB communication than non-family members.

	Reported tie strength		
	Value	SE	p-value
(Intercept)	4.43	0.01	0.00***
Controls			
Reported tie strength last month	0.85	0.00	0.00***
Ego age (decades)	0.03	0.01	0.00***
Age difference (decades)	-0.01	0.01	0.24
Ego is male†	0.05	0.01	0.00**
Same gender†	0.04	0.01	0.00**
Ego's friend count‡	0.01	0.03	0.64
Alter's friend count‡	-0.05	0.01	0.00***
Number of mutual friends	0.01	0.03	0.68
Is family†	0.29	0.01	0.00***
Same work†	0.02	0.03	0.56
Same school†	-0.02	0.01	0.15
Same city†	-0.01	0.03	0.85
Is frequent contact†	0.30	0.02	0.00***
General communication			
In-person contact	0.08	0.00	0.00***
Phone contact	0.11	0.01	0.00***
Online contact (not incl. Facebook)	0.11	0.00	0.00***
Facebook communication			
Directed communication (both directions)	0.06	0.01	0.00***
Passive consumption by ego	0.04	0.00	0.00***
Broadcasting (by ego)	-0.03	0.01	0.00***
Broadcasting (by alter)	-0.03	0.01	0.00***
Interactions w/ frequent contact status			
Is freq contact x directed communication	-0.05	0.01	0.00***
Is freq contact x passive consumption	-0.01	0.01	0.29

*** p < 0.001 ** p < 0.01 * p < 0.05

N=40,521 Egos=3,643 Alters=26,103
† Binary variable
‡ Continuous variable logged (base 2) and standardized
All continuous variables are centered at their means.

Table S2. Interactions between frequent contact status (including ties who are in a romantic relationship, live together, or report talking a few times per week or more via the phone, email, or in person) and types of Facebook use on changes in tie strength. Frequent contacts are less affected by FB communication than infrequent contacts are.

	Reported tie strength		
	Value	SE	p-value
(Intercept)	4.51	0.01	0.00***
Controls			
Reported tie strength last month	0.76	0.00	0.00***
Ego age (decades)	0.05	0.01	0.00***
Age difference (decades)	0.00	0.01	0.73
Ego is male†	0.04	0.01	0.01**
Same gender†	0.02	0.01	0.01**
Ego's friend count‡	0.00	0.03	0.94
Alter's friend count‡	-0.03	0.01	0.00***
Number of mutual friends	0.01	0.03	0.66
Is family†	0.27	0.01	0.00***
In a relationship together†	-0.14	0.03	0.00***
Same work†	-0.09	0.03	0.01**
Same school†	0.00	0.01	0.77
Same city†	-0.06	0.03	0.02*
General communication			
In-person contact	0.10	0.01	0.00***
Phone contact	0.11	0.00	0.00***
Online contact (not incl. Facebook)	-0.16	0.04	0.00***
Facebook communication			
Directed communication (both directions)	0.02	0.00	0.00***
Passive consumption by ego	-0.02	0.01	0.00***
Broadcasting (by ego)	0.02	0.00	0.00***
Broadcasting (by alter)	-0.02	0.01	0.05
Interactions w/ new relationship status			
Is new x directed communication	0.02	0.03	0.61
Is new x passive consumption	0.04	0.04	0.31

*** $p < 0.001$ ** $p < 0.01$ * $p < 0.05$

N=40,521 Egos=3,643 Alters=26,103

† Binary variable

‡ Continuous variable logged (base 2) and standardized

All continuous variables are centered at their means.

Table S3. Interactions between new relationship status (ties marked as "someone I just met" or ties friended on Facebook in the last two months) and types of Facebook use on changes in tie strength. Facebook communication does not appear to affect new ties differently from longstanding ties.