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Author Correction: Variability in Language used on Social Media Prior to Hospital Visits

Sharath Chandra Guntuku¹, H. Andrew Schwartz, Adarsh Kashyap, Jessica S. Gaulton, Daniel C. Stokes¹, David A. Asch, Lyle H. Ungar & Raina M. Merchant

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The Article contains errors.

In the Results section under the subheading “Identifying differentially expressed language features prior to a hospital visit”

“Dictionary-based: Prior to ED visits, patients less more likely to post about leisure ($d = -0.225$), associated words such as ‘family’, ‘fun’, ‘play’, ‘nap’, internet slang (netspeak) ($d = -0.374$) words such as ‘:’, ‘fb’, ‘ya’, ‘ur’, and informal language ($d = -0.345$) with words such as ‘u’, ‘lol’, ‘smh’, ‘da’. Patients also use personal pronouns less ($d = -0.345$) prior to ED visits compared to random time windows.”

should read:

“Dictionary-based: Prior to ED visits, patients were less likely to post about leisure ($d = -0.225$) with words such as ‘fun’, ‘play’, ‘nap’, internet slang (netspeak) ($d = -0.374$) such as ‘u’, ‘da’, ‘smh’, and informal language ($d = -0.345$) with words such as ‘lol’, ‘:’, ‘b’”

In Table 2 under “Categories that decrease in usage before emergency visit”, the row “1st person singular” is a duplication of row “informal speech”.

In Table 2 under “Change in linguistic topics”, the row “even, still, tho, though, yet, blah” is a duplication of the row “kids, child, their, children, mother, father”.

The correct Table 2 appears below as Table 1

In Table 3 under “Categories that decrease in usage before inpatient visit”, the row “1st person singular (‘lol’, ‘:’, ‘b’)” is a duplication of the row “Informal Speech (‘lol’, ‘:’, ‘b’)”.

In Table 3 under “Change in Linguistic Topics”, the row “even, still, tho, yet, blah, mad” is a duplication of the row “kids, child, their, children, mother, father”.

In Table 3 under “Topics that decrease in usage before inpatient visit”, the row “better, feeling, little, hope, bit, type” is a duplication of the row “lol, ha, ctfu, lmao, funny, haha” and the row “no, what, matter, how, always, end” is a duplication of the row “:, show, crew, awesome, fashion, guys”.

The correct Table 3 appears below as Table 2

These corrections do not affect the conclusions of the Article.

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Feature	Cohen's d	p value (corrected)	Mean diff-of-diff	95% CI
Emergency				
<i>Change in Linguistic Style/Mental Well-being</i>				
<i>Categories that increase in usage before emergency visit</i>				
Anxious	0.241	<0.001	0.070	[0.1, 0.38]
Depressed	0.238	<0.001	0.066	[0.1, 0.37]
Arousal (how exciting the post is)	0.191	0.011	0.051	[0.06, 0.33]
Valence (positive affect)	0.168	0.017	0.079	[0.03, 0.3]
#posts b/w 9 am–12 pm	0.160	0.020	0.016	[0.02, 0.3]
#posts b/w 12–3 pm	0.144	0.047	0.013	[0.01, 0.28]
<i>Categories that decrease in usage before emergency visit</i>				
Netspeak ('u', 'da', 'smh')	−0.374	<0.001	−0.01	[−0.51, −0.24]
Informal Speech ('lol', ':)', 'b')	−0.345	<0.001	−0.012	[−0.48, −0.21]
Leisure ('fun', 'play', 'nap')	−0.225	0.001	−0.002	[−0.36, −0.09]
<i>Change in Linguistic Topics</i>				
<i>Topics that increase in usage before emergency visit</i>				
Hospital, pain, surgery, blood, doctor, nurse	0.230	0.001	0.001	[0.09, 0.37]
Kids, child, their, children, mother, father	0.165	0.021	<0.001	[0.03, 0.3]
Thankful, very, amazing, most, blessed, wonderful	0.142	0.013	<0.001	[0.01, 0.28]
<i>Topics that decrease in usage before emergency visit</i>				
luv, nite, sum, 2 day, kidz, doin	−0.315	<0.001	−0.001	[−0.45, −0.18]
< 3, tht, lovin, bt, missin, ima	−0.308	<0.001	<0.001	[−0.44, −0.17]
nite, fb, bed, gn, sleep, night	−0.295	<0.001	−0.001	[−0.43, −0.15]
jus, bored, crib, house, chilin, hmu	−0.287	<0.001	−0.001	[−0.42, −0.14]
lol, ctfu, funny, too, yo, lmao	−0.262	<0.001	−0.001	[−0.4, −0.13]

Table 1. Statistical insights on differential language expression prior to an emergency visit*. *Positive Cohen's d indicates an increase in the given style, while a negative score indicates decrease. Effect sizes of individual linguistic features (diff-of-diff b/w true and null events) for emergency visits. Significance was measured using paired, two-tailed t-test with Benjamini–Hochberg p-correction.

Feature	Cohen's d	p value (corrected)	Mean diff-of-diff	95% CI
Inpatient visits				
<i>Change in Linguistic Style/ Mental Well-being</i>				
Categories that increase in usage before inpatient visit				
Depressed	0.306	0.001	0.089	[0.09, 0.52]
Anxious	0.286	0.001	0.084	[0.07, 0.50]
Family ('baby', 'ma', 'son', 'family')	0.306	0.001	0.003	[0.09, 0.52]
Health ('tired', 'pain', 'sick', 'ill')	0.255	0.032	0.001	[0.04, 0.48]
Categories that decrease in usage before inpatient visit				
Informal Speech ('lol', ':)', 'b')	-0.392	<0.001	-0.014	[-0.61, -0.17]
Hear ('say', 'hear', 'listen', 'heard')	-0.365	0.003	-0.001	[-0.58, -0.15]
Affiliation ('we', 'our', 'friends')	-0.361	0.001	-0.003	[-0.58, -0.14]
Extraverted	-0.357	<0.001	-0.080	[-0.57, -0.14]
Drives ('up', 'get', 'love', 'good')	-0.354	<0.001	-0.006	[-0.57, -0.14]
Netspeak ('u', 'lol', 'da', 'smh')	-0.35	<0.001	-0.01	[-0.57, -0.13]
Nonfluencies ('ugg', 'well', 'oh', 'er')	-0.335	0.001	-0.001	[-0.55, -0.12]
Leisure ('fun', 'play', 'nap')	-0.321	0.006	-0.002	[-0.54, -0.1]
Reward ('get', 'take', 'best', 'win')	-0.314	0.001	-0.002	[-0.53, -0.1]
Affective processes (':)', 'ugh', 'happy')	-0.242	0.023	-0.004	[-0.46, -0.03]
Positive emotion ('love', 'good', 'better')	-0.228	0.013	-0.004	[-0.44, -0.01]
Swear words ('a**', 'f**k', 'hell', 'wtf')	-0.209	0.023	-0.002	[-0.43, 0.00]
<i>Change in Linguistic Topics</i>				
Topics that increase in usage before inpatient visit				
Check, yes, doctors, office, waiting, appointment	0.504	<0.001	0.001	[0.29, 0.72]
Hospital, pain, surgery, blood, meds, nurse	0.380	<0.001	0.001	[0.16, 0.6]
Baby, mommy, girl, son, boy, daughter	0.377	<0.001	0.001	[0.16, 0.59]
Days, more, two, weeks, until, couple	0.301	0.014	0.001	[0.08, 0.52]
Kids, child, their, children, mother, father	0.275	0.006	0.001	[0.06, 0.49]
Hurt, head, bad, body, stomach, :(, ugh	0.267	0.026	0.001	[0.05, 0.48]
Topics that decrease in usage before inpatient visit				
Calling, phone, answer, hear, ooo, talking	-0.488	<0.001	-0.001	[-0.71, -0.27]
Lol, ha, ctfu, lmao, funny, haha	-0.429	<0.001	-0.001	[-0.65, -0.21]
Cool, funny, tho, used, remember, seem	-0.395	<0.001	<0.001	[-0.61, -0.18]
:), show, crew, awesome, fashion, guys	-0.381	<0.001	<0.001	[-0.6, -0.16]
Wat, tht, juss, imma, luv, sum	-0.366	<0.001	<0.001	[-0.59, -0.16]

Table 2. Statistical insights on differential language expression prior to an inpatient visit*. *Effect sizes of individual linguistic features (diff-of-diff b/w true and null events) for inpatient visits. Significance was measured using paired, two-tailed t-test with Benjamini–Hochberg p-correction.



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