

This article was downloaded by: [Iryna Pentina]

On: 23 January 2014, At: 06:36

Publisher: Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



## Journal of Marketing Communications

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/rjmc20>

### A cross-national study of Twitter users' motivations and continuance intentions

Iryna Pentina<sup>a</sup>, Oksana Basmanova<sup>b</sup> & Lixuan Zhang<sup>c</sup>

<sup>a</sup> Department of Marketing,, University of Toledo, Toledo, OH, USA

<sup>b</sup> Business Administration Department, People's Ukrainian Academy, Kharkov, Ukraine

<sup>c</sup> Augusta State University, Augusta, GA, USA

Published online: 20 Jan 2014.

To cite this article: Iryna Pentina, Oksana Basmanova & Lixuan Zhang , Journal of Marketing Communications (2014): A cross-national study of Twitter users' motivations and continuance intentions, Journal of Marketing Communications, DOI: [10.1080/13527266.2013.841273](https://doi.org/10.1080/13527266.2013.841273)

To link to this article: <http://dx.doi.org/10.1080/13527266.2013.841273>

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms & Conditions of access and use can be found at <http://www.tandfonline.com/page/terms-and-conditions>

## A cross-national study of Twitter users' motivations and continuance intentions

Iryna Pentina<sup>a1</sup>, Oksana Basmanova<sup>b2</sup> and Lixuan Zhang<sup>c\*</sup>

<sup>a</sup>Department of Marketing, University of Toledo, Toledo, OH, USA; <sup>b</sup>Business Administration Department, People's Ukrainian Academy, Kharkov, Ukraine; <sup>c</sup>Augusta State University, Augusta, GA, USA

Given the explosive popularity and growth of microblogging worldwide and its potential use in the areas of public policy, civic activism, as well as marketing and advertising, the questions of why and how individuals use these services warrant a comprehensive research. While some studies addressing motivations to join and continue using Twitter have been published, no research to date has investigated these issues in the context of developing economies. This exploratory study seeks to build an understanding of Twitter usage and continuance motivations in Ukraine, and compares them to those of the US users. The findings of the study suggest that participants in both countries use Twitter for professional development, entertainment, status maintenance, and social interaction and exchange. The Ukrainian participants, however, emphasize Twitter use for identity negotiation and self-expression, as well as for news updates and sharing. The study also examines how different motivations of joining Twitter affect current Twitter usage and continuance intentions, and provides implications for public policy and advertising.

**Keywords:** Twitter usage; cross-national study; social media; uses and gratifications

### Introduction

Microblogging is a form of social media that allows users to broadcast short messages via multiple platforms to friends and followers, ensuring frequent and immediate updates on their activities, opinions, and status (Barnes et al. 2010). The most popular microblogging platform, Twitter (currently reporting over 500 million registered users), has enjoyed unprecedented adoption diffusion around the world (Pan, 2012). As a form of social media, Twitter intrigues marketers with possibilities to connect brands with consumers at a deeper, personal level and on a wider scale. By tapping into real-time worldwide information on this network, businesses have unprecedented opportunities to collect accurate data about their customers, understand their needs and issues, show their own 'human' side, and engage in a friendly dialogue that can strengthen loyalty and create new relationships (Economist 2010). While numerous businesses have jumped on the Twitter bandwagon (Sarner, Collins, and Fletcher 2011) by establishing brand accounts and experimenting with various promotional, PR, customer service, and research tools, the development of precise marketing strategies is contingent upon clear understanding of why people join and continue participating on Twitter. Born in 2006 as a side project and spun off in a different company in 2007, Twitter was an unusual entrant on the social media scene. Although similar to other Web 2.0 phenomena in terms of growth, the

---

\*Corresponding author. Current address. Department of Economics, John B. Goddard School of Business & Economics, Weber State University, Ogden, UT 84408, USA. Email: [lixuan.zhang@mail.weber.edu](mailto:lixuan.zhang@mail.weber.edu)

microblogging site holds a distinct status by allowing members to follow anyone without being followed back and limiting all posts to 140 characters. The fact that only 15% of adult social media participants in the USA use Twitter compared to the 73% who have a Facebook profile (Pew Research Center 2012a) suggests that Twitter may fulfill a unique function that differs from those of other online and social media. Finding out whether its members have unique needs that motivate them to join and continue using Twitter, and whether these needs are similar for Twitter users in different cultural and political environments may provide important insights for marketers in the process of developing global marketing strategies and allocating resources for marketing on Twitter and other microblogging platforms. Despite the strategic importance of these issues, very few studies to date have addressed the motives and their role in explaining Twitter usage patterns and continuance intentions (Chen 2011; Java et al. 2007; Johnson and Yang 2009).

Another virtually unaddressed topic in the research on adoption and use of microblogging, as well as other online social media, is the impact of contextual cultural and/or political environment on individual media choices and usage patterns. Only a few studies have considered the roles of cultural variables, such as high/low context (Kim, Sohn, and Choi 2011), and collectivism, power distance, and masculinity (Lewis and George 2008), in affecting the reasons for participating in and disclosing information in online social networks. While their results suggest that culture plays a role in determining the importance of various motivations in joining social networks, their contexts were limited to developed countries (e.g. South Korea and the USA) and did not consider microblogging motivations. To our knowledge, no studies to date have considered the role of culture in microblogging adoption and use in developing countries, where adoption of social media and their mobile applications is rapidly increasing (Pew Research Center 2012b).

To address this gap, the current study compares Twitter users in the USA (a mature microblogging tradition within a democracy) with those in Ukraine (reflecting a relatively recent Twitter audience in transitional political and institutional circumstances). In particular, we identify major motivations to use Twitter in Ukraine and the USA and compare potential impact of different motivations on usage patterns and Twitter continuance intentions in both countries. The remainder of the paper presents prior research on the topic, identifies the gaps addressed by the current study, describes its methods, reports the results of the investigation, and discusses its findings. Managerial implications are derived from the findings, and directions for future research in the area are proposed.

### **Prior research**

The extant literature on Twitter motivations and functions is very sparse and somewhat inconsistent. Its worldwide usage patterns were analyzed in two studies that used the information records from the site and arrived at different conclusions. Java et al. (2007) analyzed the topological and geographical properties of Twitter's social networks and identified four dominant types of its uses: updates on daily routines, conversations focused on certain topics, sharing information and links, and reporting news. Kwak et al. (2010), on the other hand, identified only one dominant activity, news broadcasting, in their study examining Twitter's follower-following topology. The authors found that Twitter's follower distribution deviates from the power law function describing other social networks. According to them, in Twitter, a few prominent users each had over one million followers. This distribution did not fit power law distribution, which postulates that the number of followers should vary as a power of the tweeter's rank. Twitter was also

characterized by low proportion of reciprocal relationships (22.1%) compared to other social networking sites (68% on Flickr and 84% on Yahoo 360). Finally, the lack of relationship between the number of followers and popularity of one's tweets measured by retweets suggested a deviation from the characteristics of other human and computer-mediated social networks. On the basis of this, and the fact that the majority of trending topics included news, the authors suggested that Twitter may be better characterized as a news medium as opposed to a social network (Kwak et al. 2010).

Two other studies surveyed US Twitter users to elicit their motivations for joining Twitter. Johnson and Yang (2009) utilized the Uses and Gratifications (U&G) paradigm to examine how various motives for using Twitter affect usage behaviors. They reported that users motivated by the need to receive and share information and news learn interesting things, give and receive advice, participate in discussions, and meet new people spent more hours per week on the site than those who used Twitter to have fun, relax, be entertained, and pass the time. Additionally, only the motivations to give and receive advice and to share information with others predicted higher frequency of posted messages. The study by Chen (2011) found that the need to connect with others is positively related to the frequency of tweets, time spent on the site, total number of tweets, and length of membership. Both studies appear to concur that Twitter is used by its participants in the USA primarily to satisfy the need for information (both headline news and personal life updates) and connectedness (mainly with those who share common interests). Finally, Twitter continuance behavior was investigated by Barnes and Böringer (2011). They found that perceived usefulness of the microblogging service, satisfaction with the tool, and the habit of using it were the major determinants of Twitter continuance intentions in the USA and Europe. Their findings highlighted the previously identified role of Twitter as a social site that, in addition to providing benefits such as news information and personal updates, serves as a routine and habitual platform for socializing and connecting. Although the above-mentioned studies provide an initial understanding of the uses and functions of Twitter, the extant literature lacks a comprehensive account of Twitter participants' motivations to join the platform and the role of these motivations in determining the users' current behaviors and future intentions toward Twitter. Moreover, research on cultural differences in using this globally adopted platform appears to be nonexistent.

As a 'shared perception of social environments?' (Triandis 1972), culture affects individual behaviors in relation to other people and institutions, as well as their patterns of interaction and media choices for communicating with others (Gudykunst et al. 1996). The variations in cultural communication styles are generally explained in the extant literature by Hall's (1976) differentiation between low- and high-context communications. Low-context communication, where individuals use explicit messages to convey the meaning, is predominant in individualistic societies, focusing on self as a unique entity. High-context communication, predominant in cultures emphasizing collectivism and a focus on self as embedded in group membership (Triandis 1972), uses indirect and implicit messages, with meaning embedded in the sociocultural context. While no studies to date have compared microblogging motivations and usage patterns in different cultures, research in other social networks suggests possible influence of value orientations on participants' motives and usage patterns, which underscores the possibility of unique findings in the Ukrainian context. For example, a comparative study (Kim, Sohn, and Choi 2011) reported that the main motives to join an online social network (such as Facebook) for Korean students were 'seeking social support' and 'seeking information'. On the contrary, in the USA, 'entertainment' and 'convenience' were identified as major reasons for joining online social networks. The authors suggested that in low-context cultures

(like the USA), users join social networks for superficial impression management and casual relationships, while in high-context cultures (like Korea), the motives are based on the need to form long-term relationships and define one's group identity. Another study (Chau et al. 2002) compared Internet users in the USA and Hong Kong and found that the Internet was mainly viewed as a means for social interaction in the more collectivistic Hong Kong, and as an information portal in the USA, supporting the role of cultural differences in media attitudes and choices.

Contemporary Ukrainian culture has been influenced by both the traditional communal values of the seventeenth–nineteenth centuries, quasi-collectivistic features of the oppressive Soviet regime, and the growing individualistic tendencies borrowed from western pluralism (Badan 2011). As a result, it can be presently characterized as 'tribal' where loyalty and interdependence are concentrated at the family (or small in-group) level and competition and hedonism are practiced in the society in general (Leaptrott 2003). Since communication media patterns and motives are shaped by cultural contexts (Kim, Sohn, and Choi 2011), we anticipate that Ukrainian Twitter users are driven by a somewhat different set of motivations than those in the developed western countries characterized more commonly by individualistic culture and low-context communication style. The present research endeavors to inductively arrive at major motivations to use Twitter in Ukraine, and to compare them to those in the USA. We also compare potential impact of different motivations on usage patterns and Twitter continuance intentions in both countries.

## Methods

### *Context*

The study compared the motives and their effects on usage patterns of Twitter users in Ukraine and the USA. These countries were selected because of differences in economic and technological development, contrasts in the Internet and social media penetration, as well as potential differences in dominant communication styles determined by their cultural contexts. Boasting a high level of education and literacy and classified as an emerging market by the World Trade Organization, the United Nations, and the World Bank, Ukraine is representative of other former Soviet countries in economic transition. With the GDP per capita estimated at \$3615 and the human development index (HDI) of 0.729, Ukraine is undergoing a prolonged, complex transition to a free-market, consumption-based economic model. While numerous business and marketing practices effective in western economies are being implemented by businesses in Ukraine, the low Internet penetration (less than 25% of the population) prevents a mass scale use of Internet marketing (Kostenko 2011). However, the emerging middle class exhibits great interest and involvement with the Internet as both informational and commercial communication channel. On the other hand, the USA is economically developed with GDP per capita at \$48,112 and an HDI index of 0.937. With an Internet penetration rate higher than 78%, 67% of US online adults use social networking sites (Pew Research Center 2013). The two countries also exhibit sharp contrasts in cultural values. Ukraine is characterized as a collectivistic culture with high-context communication style, and USA as an individualistic culture with predominantly low-context communication style.

The few existing research studies of Ukrainian marketing and marketing in former Soviet countries focus on the specifics of advertising perceptions (Wells 1994), stages, and managerial approaches to adopting marketing in Eastern Europe (Akimova 1997; Marinov et al. 1993), as well as the effect of marketing adoption on firm performance (e.g. Akimova 2000; Brooksbank 1991). However, no extant research investigates motivations for online

communications and, particularly, microblogging in Ukraine. In addition, no studies have examined the difference in motivations and usage behavior of Twitter users between Ukraine and the USA.

### **Procedure**

For this study, 12 in-depth interviews (20–50 minutes each) with Twitter users in Ukraine and 15 interviews with Twitter users in the USA were conducted with the goal of eliciting information about the respondents' uses of and behaviors on Twitter, reasons for joining, its importance in their lives, what they enjoy in the process of using it, and whether (and why) they intend to continue using it. In Ukraine, the interviewees were recruited by one author's graduate business students who identified regular Twitter users among their family friends and business colleagues. In the USA, the interviewees were selected from an author's personal acquaintances and professional colleagues who used Twitter on a regular basis. In both countries, every attempt was made to interview a diverse and representative set of the Twitter community.

The interview transcripts were analyzed to generate a comprehensive list of 32 motivations for Ukrainian and 17 for American respondents. Subsequently, these lists were sent to one Twitter user in each country (with more than 3000 followers each) for feedback. Seven Ukrainian users provided comments that led to the deletion of one item due to its ambiguity and overlap with other items, for the total of 31 motivational items. The comments by three US users did not lead to any modifications in the list of 17 motivations for American Twitter users. Online surveys in English and in Ukrainian were designed that asked respondents to rate (using a seven-point Likert scale) the respective Twitter use motives: 'I use Twitter to \_\_\_\_\_'. The scale was anchored at 1 (strongly disagree) and 7 (strongly agree). The surveys also asked for the respondents' demographics, time spent on Twitter each day, frequency of tweet updates, the time they first registered on Twitter, the number of followers, and intentions to continue using and to recommend Twitter to friends. All questions were translated and back-translated from Ukrainian to English by each bilingual author to avoid language-related errors in the analysis.

In Ukraine, the online survey was distributed to the members of the Ukrainian Twitter community by a member, who was selected due to his active participation in the community and large number of followers. Of the 130 responses collected, five were incomplete, and so 125 were retained for the analysis. In the USA, a social media consultant was chosen to distribute the survey to her followers since she had over 1500 followers and had a lot of interaction with her followers. Her request resulted in 80 responses, of which 77 were complete. Given the exploratory nature of the study, the sample size was considered adequate. While this sampling method has low cost and provides easy access to targeted population, it yields a convenience sample with the respondents being more likely to have stronger social ties and be similar in age, education, and social values to the two requestors. Additionally, the samples could also be biased by volunteerism, with more cooperative subjects being more likely to participate (Erickson 1979). Therefore, the results of this study should be generalized with caution.

## **Results**

### ***Factor analysis of Twitter users' motives***

The US sample ( $n = 77$ ) contained 61% female respondents, with an average age of 40.5 years, and with 86% respondents having at least a bachelor's degree. These demographics

reflect the profile of US Twitter members with an average age of over 35 years, 53% of whom are female, and with a household income of over \$60,000 (Cheng and Evans 2009). The Ukrainian sample ( $n = 125$ ) contained 55% males, with an average age of 28 years, and with 89% of respondents having a bachelor's or higher degrees. While typical Ukrainian Twitter user demographics are not available, the sample characteristics are representative of the Ukrainian Internet user who is characterized by a younger age and higher socioeconomic status that provides access to wireless and mobile communications (Kostenko 2011). Table 1 shows the respondents' demographic information along with their Twitter activity data. The US respondents logged in to Twitter a median of 14 times a week (min = 0, max = 1001), had a median of 500 followers (min = 0, max = 20,000), and have been members of Twitter for a median of 2 years (min = 0, max = 5). Ukrainians logged into the network a median of five times a week (min = 0, max = 960), had a median of 30 followers (min = 0, max = 15,000), and have been on Twitter a median of 1 year (min = 0, max = 5).

An exploratory factor analysis with Varimax rotation was performed on the two sets of motivations data (Costello and Osborne 2005). After deleting one item in the US data and two items in the Ukrainian data due to low loadings or cross-loadings, four factors were identified for the US data (explaining 76.5% of variance) and six for the Ukrainian data (explaining 74.1% of variance). Tables 2 and 3 present the items retained for each factor along with their eigenvalues, percentage of variance explained, Cronbach's alpha scores (all above 0.76), and scale means. The scale items for each factor were averaged to create composite factor scores for further analysis.

The 'Identity Negotiation and Self-Expression' factor, unique for the Ukrainian sample, reflects Twitter use to record the events of one's life for oneself and to broadcast immediate thoughts, feelings, and emotions to others. It appears to represent a desire to negotiate identity through sharing mental processes and real-time happenings, to get

Table 1. Respondents' information (in %).

	Country	
	USA	Ukraine
Gender		
Male	39.5	54.4
Female	60.5	45.6
Marital Status		
Single	27.9	61.6
Single, have children	34.9	7.2
Married	8.1	14.4
Married, have children	3.5	15.2
Other	25.6	1.6
Employment status		
Unemployed	14	18.4
Employed part-time	8.1	15.2
Employed full-time	77.9	66.4
Education		
Some high school	1.2	2.4
High school graduate	11.6	8.8
Completed bachelor's degree	58.1	18.4
Completed graduate degree	16.3	55.2
Completed advanced degree	12.8	15.2

Table 2. Twitter motivations factor loadings: Ukrainian data.

	Identity negotiation and self-expression	Status maintenance	Professional development	Social interaction and exchange	Entertainment	News and content sharing
To broadcast my immediate emotions	0.841					
To record the events of my life	0.834					
To record my life	0.809					
To share my thoughts and feelings	0.779					
To share my news and updates	0.747					
To share/retweet interesting thoughts of others	0.663					
To feel important		0.806				
To impress others		0.797				
To get peer support from others		0.755				
To belong to a community		0.710				
To solve problems and make decisions		0.638				
I feel peer pressure to participate		0.626				
To follow changes in my industry			0.860			
To advertise my business			0.834			
To follow changes in different companies			0.810			
To recruit employees for my company			0.713			
To develop myself professionally			0.561			
To get information recommended by my friends				0.775		
To get news about celebrities				0.745		
To meet interesting people and make new friends				0.702		
To stay in touch with friends and/or colleagues				0.635		
To interact with others				0.627		
To pass the time when bored					0.795	
To relax					0.767	

(Continued)



Table 2 – continued

	Identity negotiation and self-expression	Status maintenance	Professional development	Social interaction and exchange	Entertainment	News and content sharing
To entertain myself					0.764	
To play					0.731	
To share/retweet jokes					0.527	0.659
To get information and provide others with information						0.648
To get news about what is going on in my social network						0.605
To get real-time news about world events						0.561
To share/retweet interesting content		15.1%	11.9%	11.7%	10.6%	8.8%
% of variance explained	16%	4.1	2.5	2.0	1.75	1.5
Eigenvalue	0.929	0.872	0.86	0.872	0.838	0.86
Reliability	4.34 (1.78)	3.48 (1.56)	4.61 (1.68)	4.68 (1.7)	3.53 (1.55)	5.54 (1.47)
Scale mean (SD)						

Table 3. Twitter motivations factor loadings: US data.

	Entertainment	Social interaction and exchange	Information sharing and professional development	Status maintenance
To play	0.852			
To entertain myself	0.834			
To pass the time when bored	0.825			
To relax	0.808			
To stay in touch with friends and/or colleagues		0.808		
To get news about what is going on in my social network		0.790		
To interact with others		0.664		
To meet interesting people and make new friends		0.614		
To develop myself professionally			0.803	
To get information and provide others with information			0.783	
To generate ideas			0.660	
To get peer support from others			0.596	
To solve problems and make decisions			0.555	
To impress others				0.856
To feel important				0.780
I feel peer pressure to participate				0.732
% of variance explained	21.8%	21.2%	20%	13.5%
Eigenvalue	7.7	2.0	1.75	1.1
Reliability	0.922	0.862	0/867	0.769
Scale Mean (SD)	4.21 (1.81)	5.46 (1.41)	5.25 (1.38)	2.88 (1.44)

approval and legitimacy confirmation from similar others, and to reflect the development of common meanings and values. The absence of this motivation for Twitter use in the US sample may be attributed to the availability and wide adoption of numerous social networking sites (such as Facebook) where this need is better met due to their broader functionality and significantly wider adoption. While both Facebook and various Russian-language networking sites are used in Ukraine, their adoption is relatively low and comparable to that of Twitter (at about 500,000 users each; Rudenko 2012), which may indicate that the need for self-expression and identity negotiation can be equally satisfied by both types of online communities. One potential explanation for this may be an emphasis on high-context cultural tradition, where brief messages can adequately transmit complex ideas and concisely describe events, to which the homogenous Ukrainian Twitter demographics can easily relate. A tentative support for this explanation comes from the study of Chinese microblogging (Weibo) motivations that also identified self-expression as a driver of joining Weibo and affecting the frequency of updates and time spent on the site (Zhang and Pentina 2012). Given the specifics of the Chinese language, and the high-context nature of the Chinese culture, short updates appeared to be sufficient for fulfilling the need to express and preserve one's thoughts, feelings, and opinions. However, this explanation for the Ukrainian microblogging should be tested in future research.

The 'Status Maintenance' factor was identified in both samples and reflects the need for elevating one's social status through belonging to an aspirational social group and receiving support from it, both in terms of access to networking connections and problem solving, and for impressing others. This motivation has been identified in numerous media usage studies employing the U&G approach (Blumler and Katz 1974; Tan 1985) and is attributable to various online media. The 'weak tie' type of Twitter participation and membership, where reciprocity of friendship and connections is not required, may be particularly conducive to satisfying the status maintenance motivation. The fact that users can participate in transmitting important news and celebrity information may facilitate fulfilling the motivation to elevate one's visibility via 'process gratification', rather than through creating and broadcasting own content (Chen 2011).

The 'Professional Development' factor was identified in the Ukrainian sample to indicate Twitter use for advertising and recruiting, in addition to following changes and trends in the respondents' respective industries. US sample, while also reflecting the need for professional development by using Twitter, contained this motivation within a broader set of items combining it with information use and sharing, and problem solving. Therefore, in the US sample, this broader factor was labeled as 'Information Sharing and Professional Development'. It is interesting that the item for information sharing in the Ukrainian data fell within a separate motivational factor, 'News and Content Sharing' which also contained the need to get information about real-time news and events and to share (retweet) interesting content. These differences may be explained by the greater separation between the strictly practical Twitter utilization for business and promotional purposes, and its use as a more comprehensive source of information for news, political, and other issues of interest in Ukraine. It is also possible that different segments of Twitter participants use it for different purposes: those who focus on Twitter as strictly a promotional tool may not be using it as a political and general information source. The lack of a separate factor for news and content sharing in the USA probably reflects Twitter's lower importance as a news medium, under the conditions of proliferation of news media choices. The existence of a separate motivation of news and content sharing further underscores the importance of Twitter for disseminating timely information in societies that rely on it for objective reports of events and commentary.

‘Social Interaction and Exchange’ motivation was common to both samples and reflected the need to keep in touch with friends, interact with others, and meet new and interesting people. The motivation is fundamental for any social media and was previously found to positively affect intentions to join social networks (Raacke and Bonds-Raacke 2008), as well as the frequency of Twitter use (Chen 2011). Finally, the ‘Entertainment’ motivation was also common to both samples, and manifested in the need to relax, pass the time, play, and (for the Ukrainian sample) share jokes. In earlier research, entertainment motivation was found to positively affect the number of friends in social networks, as well as the attitude toward social networking sites (Kim, Sohn, and Choi 2011).

### *Twitter motives and user demographics*

Previous research shows that women and men perceive and use technology-mediated communication channels differently (Gefen and Straub 1997). For example, female bloggers discuss their personal life more frequently and write in a more personal style. Male bloggers, on the other hand, write more about technology, money, and politics than females (Schler et al. 2006). On Facebook, women are more likely than men to view and share photos, keep in touch with friends, and post status updates (Joinson 2008). A PEW study shows that females are more likely to use social media to connect with families than males (Pew Research Center 2011). We conducted a MANOVA test that showed a significant difference between males and females on the scores across the six Ukrainian motivation scales ( $F = 3.55$ ,  $p = 0.004$ ). Further analysis of between-subjects effects showed that scores were significantly different for three factors – identity negotiation, entertainment, and professional development – and marginally significant for social interaction (Table 4). Ukrainian women are more likely to use Twitter for expressing their emotions and recording life events ( $M_{\text{female}} = 4.8$ ,  $SD = 1.86$ ) than men ( $M_{\text{male}} = 3.88$ ,  $SD = 1.69$ ), as well as for entertainment ( $M_{\text{female}} = 5.02$ ,  $SD = 1.56$ ;  $M_{\text{male}} = 4.33$ ,  $SD = 1.78$ ) and (marginally) for social interaction ( $M_{\text{female}} = 4.12$ ,  $SD = 1.43$ ;  $M_{\text{male}} = 2.94$ ,  $SD = 1.47$ ). Ukrainian men are more likely to pursue professional

Table 4. MANOVA results: demographics and Twitter motivations.

Source	Dependent variable	Type III sum of squares	df	Mean square	F	Sig.
Ukraine						
Gender	Social interaction and exchange	8.856	1	8.856	3.153	0.080
	Status maintenance	0.166	1	0.166	0.067	0.796
	Identity negotiation	15.469	1	15.469	5.211	0.025
	Entertainment	25.689	1	25.689	12.270	0.001
	Professional development	15.806	1	15.806	5.987	0.017
	News updates and content sharing	2.744	1	2.744	1.279	0.262
USA						
Gender	Social interaction	0.084	1	0.084	0.041	0.840
	Status maintenance	0.032	1	0.032	0.015	0.903
	Entertainment	0.794	1	0.794	0.240	0.626
	Information sharing and professional development	0.016	1	0.016	0.008	0.929

development ( $M_{\text{male}} = 4.15$ ,  $SD = 1.73$ ) on the platform than women ( $M_{\text{female}} = 3.88$ ,  $SD = 1.69$ ). Other motivations (status maintenance and information and news updates) appear to be equally important for both Ukrainian males and females. The analysis of the US sample did not reveal any differences in Twitter motivations between men and women ( $F = 0.18$ ,  $p > 0.1$ ; Table 4). These results may indicate increased similarity between men and women in using Twitter as it becomes more widely adopted in the USA, and warrant further research into potential cultural or value-based antecedents of gender differences in microblogging (and other social media) use.

In the context of social media, age has been shown to affect users' preferred activities and usage patterns. For example, younger people are more likely to connect with friends and view and share pictures on Facebook than older users. Additionally, younger participants spend more time on Facebook and have more friends than older participants (Joinson 2008), while middle-aged and older adults are more likely to use social media as a tool to connect with people with common interests (Pew Research Center 2011). Our results show that in both samples, the entertainment motivation to use Twitter was stronger for younger participants ( $\beta_{\text{AgeUkraine}} = -0.246$ ;  $p = 0.034$ ;  $\beta_{\text{AgeUS}} = -0.355$ ;  $p = 0.009$ ). Also, younger Americans used Twitter to maintain their status more than older US Twitter users ( $\beta_{\text{AgeUS}} = -0.355$ ;  $p = 0.007$ ), while older Ukrainians had stronger motivation for professional use of Twitter ( $\beta_{\text{AgeUkraine}} = 0.35$ ;  $p = 0.002$ ) than those of younger age.

### *Twitter usage patterns and continuance intentions*

A series of multiple regressions were run using motivation factor scores to see whether different motives of joining Twitter influence the length of membership, frequency of visits to the site, time spent on the platform during each visit, number of followers, as well as the intentions to use Twitter in the future and recommend it to others (Tables 5 and 6). Age and gender were used as control variables. Mainly men ( $\beta_{\text{GenderUkraine}} = -0.201$ ;  $p = 0.09$ ) and those motivated by status maintenance ( $\beta_{\text{StatusMotiveUkraine}} = 0.312$ ;  $p = 0.025$ ) and professional development ( $\beta_{\text{ProfMotiveUkraine}} = 0.264$ ;  $p = 0.052$ ) were characterized by longer Twitter use in the Ukrainian sample. In the US sample, only the participants' age ( $\beta_{\text{AgeUS}} = 0.342$ ;  $p = 0.021$ ) correlated with their number of years on Twitter. This result may mean that early adopters of Twitter in Ukraine are innovators wishing to make their higher socioeconomic status visible via the platform. Additionally, those attracted to the platform by the possibility to promote their businesses and identify career opportunities may be the first on the Twitter bandwagon. Since the majority of the sample (75%) joined Twitter less than 2 years ago, it can be suggested that by the time Twitter was introduced in Ukraine, it already had well-developed advertising and targeting capabilities and, therefore, immediately attracted those who wanted to try out a new marketing communications medium.

In the US sample, the frequency of Twitter visits per week (logarithmically transformed due to high skewness of the variable) was higher for those motivated by the information sharing and professional development motive ( $\beta_{\text{InfoMotiveUS}} = 0.397$ ;  $p = 0.036$ ), and lower for males ( $\beta_{\text{GenderUS}} = -0.255$ ;  $p = 0.051$ ). The time spent on the site during each visit, however, did not differ based on age, gender, or Twitter motives. In the Ukrainian sample, neither frequency of visits to the microblogging site nor the time spent on the platform during each visit was affected by users' motivations or demographics. A possible explanation of no significant influence of Twitter motives on its usage frequency and time in Ukraine may be explained by its relatively novel position

Table 5. Regression results of relationships between Twitter motives, behaviors and continuance intentions: Ukrainian sample.

Dependent variables/Independent variables	Years of Twitter membership	In, Number of visits per week	Number of minutes spent	In, Number of Followers	In, Number of brands followed	Intention to continue using Twitter	Intention to recommend Twitter
Social interaction and exchange	0.030	0.290	0.164	0.119	0.442**	0.068	0.221
Status maintenance	0.312**	-0.028	-0.021	0.068	-0.164	-0.071	0.078
Identity negotiation	-0.083	-0.160	0.067	0.030	-0.278	0.161	0.031
Entertainment	0.155	-0.118	-0.130	0.451***	-0.059	0.006	-0.012
Professional development	0.264*	0.010	0.096	0.201	0.114	0.135	0.123
News updates and content sharing	-0.002	0.069	0.142	-0.014	0.176	0.451***	0.291**
Age	0.060	-0.100	0.056	0.347***	0.128	0.150	0.069
Gender	-0.201*	-0.132	-0.107	-0.172	-0.160	0.256**	0.150
F	4.058**	0.9	1.21	4.639***	2.298**	8.523***	5.246***
Adj. R <sup>2</sup>	0.251	-0.011	0.023	0.327	0.154	0.452	0.318

\*\*\*p < 0.01; \*\*p < 0.05; \*p < 0.1. In: natural logarithm.

Table 6. Regression results of relationships between Twitter motives, behaviors and continuance intentions: US sample.

Dependent variables/Independent variables	Years of Twitter membership	In, Number of visits per week	Number of minutes spent	In, Number of followers	In, Number of brands followed	Intention to continue using Twitter	Intention to recommend Twitter
Social interaction	0.243	-0.158	0.179	0.245	0.020	0.271*	0.339**
Status maintenance	-0.037	-0.057	0.039	-0.290*	-0.042	0.105	0.034
Entertainment	-0.090	0.236	-0.018	0.120	-0.167	0.110	-0.046
Information sharing and professional development	0.042	0.397**	0.036	0.361**	0.394**	0.432**	0.510***
Age	0.342**	-0.027	-0.108	0.239*	0.019	0.292**	0.169
Gender	0.215	-0.255*	-0.071	0.033	-0.060	-0.121	-0.113
F	1.772	2.231*	0.613	3.950***	1.205	10.898***	11.708***
Adj. R <sup>2</sup>	0.079	0.124	-0.044	0.254	0.026	0.519	0.539

\*\*\* $p < 0.01$ ; \*\* $p < 0.05$ ; \* $p < 0.1$ . In: natural logarithm.

among other communication media, whereby regardless of the motivation to join, members use it on a trial basis. The relatively low usage rate across the Ukrainian sample (the median of 5 visits per week, each at the median of 15 minutes long, compared to the median of 14 visits at 60 minutes each in the USA) may further support this explanation.

While the number of followers (logarithmically transformed) of American Twitter users was positively affected by the Information sharing and professional development motive ( $\beta_{\text{InfoMotiveUS}} = 0.361$ ;  $p = 0.029$ ) and negatively by the status maintenance motive ( $\beta_{\text{StatusMotiveUS}} = -0.29$ ;  $p = 0.05$ ) and (marginally) increased for older users ( $\beta_{\text{AgeUS}} = 0.239$ ;  $p = 0.08$ ), only the entertainment motive ( $\beta_{\text{EntertMotiveUkraine}} = 0.451$ ;  $p = 0.001$ ) and age ( $\beta_{\text{AgeUkraine}} = 0.347$ ;  $p = 0.008$ ) affected this outcome for the Ukrainian users. These findings suggest that asking for and giving professional advice facilitates the process of Twitter-mediated communication and attracts more followers who want to stay 'in the loop' on the latest developments, making relevant content creation an important driver of popularity in the USA. This exchange of professional information, involving reciprocal give-and-take in an open forum, however, appears not to be as highly valued among Ukrainian Twitter users. Instead, those who retweet jokes and entertain their followers seem to enjoy greater popularity, possibly reflecting the importance of folklore and indirect and implicit communications, characterizing Ukraine as a high-context culture.

Natural log of the number of brands followed by Twitter participants on the platform was positively influenced by the social interaction and exchange motive ( $\beta_{\text{SocialMotiveUkraine}} = 0.442$ ;  $p = 0.01$ ) in the Ukrainian sample, and by the information sharing and professional development motive ( $\beta_{\text{InfoMotiveUS}} = 0.394$ ;  $p = 0.034$ ) in the US sample. These differences further underscore the role of Twitter as a source of professional information and problem solving in the USA. In Ukraine, however, Twitter users interact with brands they follow on the platform socially, which may present a better advertising and viral environment. After all, a majority of Twitter promotional strategies emphasize social relationship building and maintenance, as well as follower engagement with brands to ensure exponential spread of information throughout the network.

In the Ukrainian sample, females ( $\beta_{\text{GenderUkraine}} = 0.256$ ;  $p = 0.013$ ) and those attracted to Twitter by the need for news and content sharing ( $\beta_{\text{NewsMotiveUkraine}} = 0.451$ ;  $p = 0.001$ ) were more likely to continue using Twitter in the future, and only those motivated by the news and content sharing ( $\beta_{\text{NewsMotiveUkraine}} = 0.291$ ;  $p = 0.042$ ) were more likely to recommend Twitter to their friends. In the US sample, the intention to continue using Twitter was positively affected by age ( $\beta_{\text{AgeUS}} = 0.292$ ;  $p = 0.007$ ) and information sharing and professional development motive ( $\beta_{\text{InfoMotiveUS}} = 0.432$ ;  $p = 0.002$ ), as well as (marginally) by the social interaction and exchange motive ( $\beta_{\text{SocialMotiveUS}} = 0.271$ ;  $p = 0.073$ ). Both the information sharing and professional development ( $\beta_{\text{InfoMotiveUS}} = 0.51$ ;  $p < 0.001$ ) and the social interaction and exchange ( $\beta_{\text{SocialMotiveUS}} = 0.339$ ;  $p = 0.023$ ) motives positively affected the intention to recommend Twitter usage to friends by the American participants.

Table 7 summarizes the main difference between Twitter users in the USA and in Ukraine regarding the relationships between Twitter motives, usage behaviors, and continuance intentions.

## Discussion and conclusion

This pioneering study is among the first to compare cross-cultural motivations of Twitter use in the USA (a developed economy with low-context communication culture and



Table 7. Summary of differences between Twitter users' motivations and usage behaviors in Ukraine and the USA.

Motivations to participate in Twitter	Twitter behaviors	Standardized ( $\beta$ )	
		Ukraine	USA
Social interaction and exchange (Ukraine)	Number of brands followed	0.442**	0.020
Social interaction (USA)	Intention to continue using Twitter	0.068	0.271*
	Intention to recommend Twitter	0.221	0.339**
Status maintenance (Ukraine and USA)	Years of Twitter membership	0.312**	-0.037
	Number of followers	0.068	-0.290*
Entertainment (Ukraine and USA)	Number of followers	0.451***	0.120
Professional development (Ukraine)	Years of Twitter membership	0.264*	0.042
Information sharing and professional development (USA)	Number of visits per week	0.010	0.397**
	Number of followers	0.201	0.361**
	Number of brands followed	0.114	0.394**
	Intention to continue using Twitter	0.135	0.432**
	Intention to recommend Twitter	0.123	0.510***

\*\*\* $p < 0.01$ ; \*\* $p < 0.05$ ; \* $p < 0.1$ .

individualistic values) and Ukraine (a developing country with mainly high-context communications and tribal family-centered values). Qualitative interviews with Twitter users were conducted in each country, and served as the basis for inductively identified motivational scale items. As a result, separate lists of motivational items were developed and offered in the form of an online survey to Twitter users in both countries. The data were subsequently factor-analyzed and revealed different needs satisfied by the microblogging service in each country. Thus, news and content sharing is the most highly valued Twitter motivation in Ukraine (Table 2), probably reflecting its role in delivering real-time world event updates not curated by the government-controlled media. In the USA, social interaction and exchange was the most valued function of Twitter (Table 3), illustrating its originally intended function of instant sharing of personal updates with close social networks. This testifies to the expanded role Twitter may play in developing countries where access to objective and 'direct-from-source' information is at times restricted.

Another notable difference in Twitter motivations is the existence of a separate professional development motive in the Ukrainian sample, whereby Twitter is used as a tool for advertising and recruiting, as well as a source for industry trends. In the USA, professional development via Twitter is combined with its informational use as a channel for discussions, problem solving and decision-making. It can be supposed that open professional forums, where media and marketing professionals share advice with both colleagues and competitors, are not a distinguishing feature of the societies transitioning from tribal (with loyalty limited to close in-groups) to individualistic cultures. This issue can be further investigated in the context of professional virtual groups and communities

in different cultures. The motivation of identity negotiation and self-expression, which, as opposed to short, trivial updates on one's current status, reflects the need to record one's life events and share thoughts and emotions, was unique to the Ukrainian respondents. This finding may indicate that Ukrainians use Twitter as a blog (or a social networking platform), notwithstanding the limited length of its messages. Potentially, this use can be explained by the high-context character of Ukrainian communications, where other, indirect, and implicit signs (such as one's name, age, geographic location, etc.) complement the content of a post and make it understandable. The study also identified demographic differences between the two samples. While in the USA, only younger age was a significant predictor of using Twitter for status maintenance and entertainment, in Ukraine gender also affected the choice of Twitter motivations. Women were more likely to use the platform for self-expression, social exchange, and entertainment, while men chose Twitter more often for professional development. This finding presents an impetus for further research into online media and communications access and usage differences for men and women in developing countries.

Other interesting findings of this study include differential sources of members' popularity on Twitter, measured by the number of followers. In Ukraine, those motivated by the need to play, entertain, and share jokes (as well as older members) enjoy greater numbers of followers. However, in the USA, those who join Twitter to share professional information, solve problems, and make decisions (as well as older users) get larger following. While it seems that relevant content creation and sharing drive popularity in both countries, different types of content seem to be important. Future research should determine a possible role of culture in understanding the type of content most valued by different cultures online. It is possible that in the conditions of lower informational openness, sharing allegorical content that reflects the reality indirectly (in the form of jokes) may present higher value and increase popularity for Ukrainian Twitter users.

The number of brands one follows on Twitter also seems to be driven by different Twitter motivations in different countries. In Ukraine, more brands are followed by those pursuing social interaction and exchange needs, while in the USA, the motivation of information sharing and professional development drives brand following. Since a major goal of businesses advertising on Twitter is to engage their followers and build long-lasting interactive relationships, Ukrainian users appear as an ideal target market. By following brands and retweeting their posts, Ukrainian participants facilitate viral campaigns and help promote products and brand messages. In the USA, following brands seems to pursue a more pragmatic goal, probably due to longer history with, mistrust in, and dislike of advertising Twitter participants are less inclined to follow brands for interacting with them. Finally, the intentions to continue using Twitter are also determined by different Twitter motivations for the two samples. Those Ukrainians who are motivated to use Twitter for news updates and content sharing are more likely to both continue using the platform in the future and recommend it to others. In the USA, those who joined the service for social interaction, as well as for information sharing and professional development, are more likely to both continue using it in the future and recommend it to others. This finding further underscores the importance of Twitter in the developing countries as an alternative source of news and information.

While the limited size of our convenience sample warrants caution in generalizing the obtained results, this study can provide interesting implications for marketers. Although the use of Twitter in Ukraine is in its initial stages, clearly unique motivations of news updates and sharing, professional advertising and recruiting, and self-expression may provide useful segmentation bases for marketers, in addition to the important gender

differences identified in Twitter motivations. The fact that Ukrainians who join Twitter for social interaction and exchange follow more brands suggests that word-of-mouth and viral messaging can be a good tactic as compared to advertising and building brands in Ukrainian Twitter. While the entertainment motivation does not play a major role in affecting American Twitter use or intentions, providing entertaining jokes may help gain more followers and increase a business' popularity on Ukrainian Twitter. Our findings emphasize the need for global marketers wishing to pursue social media promotional strategies to carefully research and understand the needs each online channel fulfills in different cultures. This knowledge may help in market segmentation and targeting strategies, as well as in making proper resource allocation decisions. They also underscore the importance of comparative cross-cultural marketing research in developing comprehensive theories in contemporary global markets.

## Notes

1. Email: [iryna.pentina@utoledo.edu](mailto:iryna.pentina@utoledo.edu)
2. Email: [Oksana.Basmanova@teaminternational.com](mailto:Oksana.Basmanova@teaminternational.com)

## Notes on contributors

**Iryna Pentina** is Associate Professor and Chair of the Department of Marketing and International Business at the University of Toledo. Her research focuses on digital consumer behavior and digital marketing communications.

**Oksana Basmanova** is Assistant Professor (Docent) of the Business Administration Department at the People's Ukrainian Academy (Kharkov, Ukraine) and Marketing Manager at TEAM International Services, Inc. Her research focuses on Internet marketing, consumer behavior and firm-level competitiveness.

**Lixuan Zhang** is an adjunct professor in John B. Goddard School of Business & Economics at Weber State University. Her research interest is online consumer behavior and social media.

## References

- Akimova, I. 1997. "Marketing Approaches and Organization for Marketing in Ukraine." *Journal for East European Management Studies* 2 (3): 237–258.
- Akimova, I. 2000. "Development of Market Orientation and Competitiveness of Ukrainian Firms." *European Journal of Marketing* 34 (9–10): 28–45.
- Badan, A. A. 2011. "American–Ukrainian Communication: Interface Description." PhD diss., Kharkiv Polytechnic Institute.
- Barnes, S. J., and M. Böringer. 2011. "Modeling Use Continuance Behavior in Microblogging Services: The Case of Twitter." *Journal of Computer Information Systems* 51 (4): 1–10.
- Barnes, S. J., M. Böringer, C. Kurze, and J. Stietze. 2010. "Towards an Understanding of Social Software: The Case of Arinia." Paper presented at Hawaii International Conference on System Sciences, Kauai, HI, January 5–8.
- Blumler, J., and E. Katz. 1974. *The Uses of Mass Communication*. Thousand Oaks, CA: Sage.
- Brooksbank, R. 1991. "Successful Marketing Practices." *European Journal of Marketing* 25 (5): 20–29.
- Chau, P. Y. K., M. Cole, A. P. Massey, M. Montoya-Weiss, and R. M. O'Keefe. 2002. "Cultural Differences in the Online Behavior of Consumers." *Communications of the ACM* 45 (10): 138–143.
- Chen, G. M. 2011. "Tweet This: A Uses and Gratifications Perspective on How Active Twitter Use Gratifies a Need to Connect with Others." *Computers in Human Behavior* 27: 755–762.
- Cheng, A., and M. Evans. 2009. "Inside Twitter: An In-Depth Look Inside the Twitter World." Accessed July 17, 2012. <http://sysomos.com/insidetwitter>

- Costello, A. B., and J. W. Osborne. 2005. "Best Practice in Exploratory Factor Analysis: Four Recommendations for Getting the Most from Your Analysis." *Practical Assessment, Research and Evaluation*, 10. <http://pareonline.net/getvn.asp?v=10&nd=7>
- The Economist. 2010. "A World of Connections: A Special Report on Social Networking." January 30, 3–20.
- Erickson, S. H. 1979. "Some Problems of Inferences from Chain Data." *Sociological Methodology* 10: 276–302.
- Gefen, D., and D. Straub. 1997. "Gender Differences in the Perception and Use of Emails: An Extension to the Technology Acceptance Model." *MIS Quarterly* 21: 389–400.
- Gudykunst, W. B., Y. Matsumoto, S. Ting-Toomey, T. Nishida, K. Kim, and S. Heyman. 1996. "The Influence of Cultural Individualism-Collectivism, Self Construals, and Individual Values on Communication Styles Across Cultures." *Human Communication Research* 22 (4): 510–543.
- Hall, E. T. 1976. *Beyond Culture*. New York: Doubleday.
- Java, A., X. Song, T. Finin, and B. Tseng. 2007. "Why We Twitter: Understanding Microblogging Usage and Communities." Paper presented at SNA-KDD Workshop, San Jose, CA, August 12–17.
- Johnson, P. R., and S.-U. Yang. 2009. "Uses and Gratifications of Twitter: An Examination of User Motives and Satisfaction of Twitter Use." Paper presented at Annual Association for Education in Journalism and Mass Communication Conference, Boston, MA, August 5.
- Joinson, A. N. 2008. "'Looking At', 'Looking Up' or 'Keeping in Touch With' People? Motives and Use of Facebook." Paper presented at CHI, Florence, Italy, April 5–10.
- Kim, Y., D. Sohn, and S. M. Choi. 2011. "Cultural Differences in Motivations for Using Social Network Sites: A Comparative Study of American and Korean College Students." *Computers in Human Behavior* 21 (1): 365–372.
- Kostenko, N. V. 2011. "Information-Culture Styles in Russia and Ukraine." *Sociological Research* 50 (4): 57–86.
- Kwak, H., C. Lee, H. Park, and S. Moon. 2010. "What is Twitter, a Social Network or a News Media?" Paper presented at 19th International World Wide Web WWW Conference, Raleigh, NC, April 26–30.
- Leapfrog, N. 2003. *Rules of the Game: Global Business Protocol*. Cincinnati, OH: International Thompson.
- Lewis, C. C., and J. F. George. 2008. "Cross-Cultural Deception in Social Networking Sites and Face-to-Face Communication." *Computers in Human Behavior* 24: 2945–2964.
- Marinov, M., T. Cox, G. Avlonitis, and T. Kouremenos. 1993. "Marketing Approaches in Bulgaria." *European Journal of Marketing* 7 (11–12): 35–47.
- Pan, J. 2012, February 22. "Will You be Twitter's 500 Millionth User?" *Mashable*. Accessed July 18, 2012. <http://mashable.com/2012/02/22/twitters-500-million-user/>
- Pew Research Center. 2011, November 15. "Why Americans Use Social Media." Accessed February 3, 2012. <http://www.pewinternet.org/Reports/2011/Why-Americans-Use-Social-Media/Main-report.aspx>
- Pew Research Center. 2012a. "Twitter Use 2012." Accessed July 19, 2012. <http://pewinternet.org/Reports/2012/Twitter-Use-2012.aspx>
- Pew Research Center. 2012b, December 12. "Social Networking Popular Across Globe." Accessed April 19, 2013. <http://www.pewglobal.org/files/2012/12/Pew-Global-Attitudes-Project-Technology-Report-FINAL-December-12-2012.pdf>
- Pew Research Center. 2013, February 14. "Pew Internet: Social Networking." Accessed April 22, 2013. <http://pewinternet.org/Commentary/2012/March/Pew-Internet-Social-Networking-full-detail.aspx>
- Raacke, J., and J. Bonds-Raacke. 2008. "MySpace and Facebook: Applying the Uses and Gratifications Theory to Exploring Friend-Networking Sites." *Cyberpsychology and Behavior* 11 (2): 169–174.
- Rudenko, O. 2012, April 5. "Ukraine is Not a Tweeting Nation Yet, But Give it Time." *Kyiv Post*. Accessed July 20, 2012. <http://www.kyivpost.com/content/lifestyle/ukraine-is-not-a-tweeting-nation-yet-but-give-it-t.html#.UAhMcqZeSY>
- Sarner, A., K. Collins, and C. Fletcher. 2011. "Predicts 2012: Marketers Must Adapt, Differentiate and Innovate in Social CRM, SaaS and IMM." *Gartner, Inc.*, November 10.

- Schler, J., M. Koppel, S. Argamon, and J. Pennebaker. 2006. "Effects of Age and Gender on Blogging." Paper presented at AAAI Spring Symposium on Computational Approaches for Analyzing Weblogs, Stanford, CA, March 27–29.
- Tan, A. S. 1985. *Mass Communication: Theories and Research*. New York: Macmillan.
- Triandis, H. C. 1972. *The Analysis of Subjective Culture*. New York: Wiley.
- Wells, L. G. 1994. "Western Concepts, Russian Perspectives: Meaning of Advertising in the Former Soviet Union." *Journal of Advertising* 23 (1): 83–95.
- Zhang, L., and I. Pentina. 2012. "Motivations and Usage Patterns of Weibo." *Cyberpsychology, Behavior and Social Networking* 15 (6): 312–317.