The weight loss blogosphere: an online survey of weight loss bloggers

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Abstract

Blogging is a form of online journaling that has been increasingly used to document an attempt in weight loss. Despite the prevalence of weight loss bloggers, few studies have examined this population. We examined characteristics of weight loss bloggers and their blogs, including blogging habits, reasons for blogging, like and dislikes of blogging, and associations between blogging activity and weight loss. Participants (N=194, 92.3 % female, mean age=35) were recruited from Twitter and Facebook to complete an online survey. Participants reported an average weight loss of 42.3 pounds since starting to blog about their weight loss attempt. Blogging duration significantly predicted greater weight loss during blogging (β=−3.65, t(185)=−2.97, p=.003). Findings suggest that bloggers are generally successful with their weight loss attempt. Future research should explore what determines weight loss success/failure in bloggers and whether individuals desiring to lose weight would benefit from blogging.

Keywords

Blogging, Weblog, Obesity, Weight loss, Social media, Weight loss blogs, Bloggers

INTRODUCTION

Obesity is one of the most significant health problems facing the USA [1]. More than two thirds of adults are overweight or obese [2], putting them at higher risk for heart disease, diabetes, stroke, and many cancers [3–5]. The US Preventive Services Task Force (USPSTF) recommends that physicians "screen all adult patients for obesity and offer intensive counseling and behavioral interventions to promote sustained weight loss for obese adults" [6]. Despite these recommendations and the increasing prevalence of obesity, the rate of obese patients receiving any type of weight loss counseling from their physicians has decreased significantly, even for those patients with obesity and weight-related comorbidities such as diabetes and hypertension [7]. As a result, patients are increasingly turning to the Internet for weight loss information [8].

Eighty percent of US adults who use the Internet report looking online for health-related information

[8]. In 2013, "diet" was the number six terms among the top health issues searched on Google [9]. Among adult Internet users, 60 % have tracked their weight, diet, exercise routines, or other health indicators online [10]. In addition to seeking health information, individuals are increasingly using online social networks to seek out personal interaction around topics of health and weight loss. For example, among Internet users, 34 % have read and 25 % have watched an online video of someone else's commentary or experience with a health-related issue [10]. This personal interaction over the online social networks to seek support, information, and encouragement regarding a health condition has been coined "peer-to-peer health care" [11]. The Pew Research Center report indicates 13 % of US adults have searched online to find others who have similar health concerns [11]. Furthermore, among

social network users, 23 % have followed a friend's personal health experience online [10].

One form of "peer-to-peer health care" is blogging, which is one of the fastest growing Internet technologies. Blogging first appeared as an online journal in 1997 [12–15]. Weblogs, or blogs for short, are websites that contain discrete entries or posts. In comparison to static websites, blogs are updated regularly, the content is organized in reverse chronological order, and many enable comments and allow subscriptions. Bloggers typically divulge daily events of their lives, personal musings, discuss their thoughts, express emotions, and articulate ideas similarly to keeping a diary but with the added ability to publicize their writing [16]. Individuals are currently using blogs to document their experiences in health, including weight loss. A Google search of "weight loss blog" returns about 134,000,000 results. Despite the rapid growth in weight loss blogs, no studies have examined the characteristics of people who blog about their weight loss.

A qualitative study of eight weight loss blogs found that the blogs focused on conventional weight loss approaches, exercise, life stressors, life activities, weight loss barriers, diet progress, personal opinions, and emotions [17]. Another study surveyed 50 morbidly obese bloggers concluded that morbidly obese bloggers receive social support in four ways: empathy, accountability, venting, and validation [18]. These studies shed light on the topics discussed and types of support received by weight loss bloggers. However, these studies do not focus on the characteristics and motives of weight loss bloggers. The purpose of the present study is to describe the characteristics, amount of weight lost, blogging duration, and blog readership (e.g., monthly page views and blog subscribers) of weight loss bloggers. Additionally, this study seeks to describe blogging habits (e.g., frequency of posting, number of blog posts, and hours spent maintaining blog), reasons for starting a blog, and what weight loss bloggers like most and least blogging about their weight loss attempt.

METHODS

This was a cross-sectional, observational study of adult weight loss bloggers, who were defined as individuals currently authoring a blog about their attempts to lose weight or maintain weight loss. Investigators recruited weight loss bloggers through the social networking sites Twitter and Facebook. Recruitment tweets were distributed by two investigators (MME:@300lbsandrunnin and SLP:@DrSherryPagoto) 28 times over a 2-month recruitment period in 2013 on Twitter. Combined, the two investigators had approximately 11,000 Twitter followers at the time of the study. Tweets were sent out both automatically and manually at different times of day to account for users residing in different time zones and for users accessing Twitter at different times. To increase the reach of the tweets received, many were scheduled via a social marketing tool called HootSuite, which automatically sends tweets at times when the most followers are online. The recruitment tweet stated, "Do you blog about your weight loss journey? We want to hear from you! Participate in a research survey" and included a link to the online survey. Additionally, investigators incorporated snowball sampling by including the phrase "PLZRT" (meaning "please retweet") to encourage followers to pass along the recruitment tweet to their own follower network. Additionally, hashtags of blogger networks (#FitFluential), Twitter chats (#FitBlog, #RunChat), and conferences (#140You and #FitBloggin) were used to capture the attention of weight loss bloggers following these hashtags. Additionally, the recruitment advertisement was posted twice in two private Facebook weight loss blogger groups, each of which had approximately 550–600 members throughout the 2-month recruitment period.

Interested individuals clicked on the link bringing them to an online survey administered via a secure web form [19]. Individuals were eligible if they selected "yes" to "I have maintained a blog for at least 30 days or more." Respondents meeting the eligibility criteria were directed to a page presenting the study fact sheet. Selecting "yes" to "I am at least 18 years of age and I wish to participate in the survey" indicated informed consent, and consenting participants were directed to the survey. The survey was composed of 49 questions and was designed to take approximately 10 min to complete. This survey was based on previous research on blogs [20]. Data were collected and managed using Research Electronic Data Capture (REDCap) hosted by the University of Massachusetts Medical School [19]. Participants who completed the survey were entered in a raffle for a $100 gift card. Two participants were randomly selected to win the $100 gift card. All procedures were approved by both the University of Massachusetts Medical School's Institutional Review Board (IRB) and the University of Connecticut's IRB.

Measures

Participants were asked to report their gender, race, age, marital status, income, height, self-reported current and pre-blogging weight, highest level of education, and if they possessed a health-related degree or certification. Each respondent's BMI was calculated using self-reported height and weight [21].

Participants also reported information about their blog, including the date on which they started the blog, if this was their first blog, the total number of posts on their blog, their blog's monthly page views, and the number of subscribers. Additionally, participants described how many hours they spent maintaining their blog per week, the number of posts they published per month, if they contributed posts to other blogs, and whether they made money from blogging. Bloggers were also asked if they had a Twitter account or a Facebook page. Additionally, participants self-reported the amount of weight they had lost since

Table 1 | Characteristics of weight loss bloggers (*N*=194)

Variable	Percent
Gender	
Female	92.3 %
Race	
White	91.2 %
Black	6.7 %
Asian	3.1 %
Native American	1.0 %
Other	0.5 %
Age	
18–24 years old	3.6 %
25–34 years old	50.6 %
35–44 years old	36.6 %
45–54 years old	9.3 %
Education	
High school degree/G.E.D./equivalent	2.6 %
Some college (e.g., Trade school, Some College, and Associates)	31.4 %
Bachelor's degree (e.g., Bachelor's degree and Some graduate school)	40.7 %
Graduate degree (e.g., Masters and Doctorate)	25.3 %
Income	
$0–$25,000	16.5 %
$25,000–$35,000	11.3 %
$35,000–$45,000	16.5 %
$45,000–$50,000	6.2 %
$50,000–$60,000	11.9 %
$60,000–$75,000	11.9 %
Over $75,000	25.8 %
Marital status	
Married	58.2 %
Single	20.6 %
Partnered	13.9 %
Separated/divorced	7.2 %
Weight status at study enrollment	
Normal weight	18.1 %
Overweight	24.4 %
Obese Class 1	17.1 %
Obese Class 2	16.6 %
Obese Class 3	23.8 %
Additional weight to lose (reported by respondent)	
0–10 lbs.	10.0 %
10–20 lbs.	11.9 %
20–50 lbs.	28.8 %
50–100 lbs.	31.3 %
100–150 lbs.	15.6 %
+150 lbs.	2.5 %

starting their blogs. Furthermore, participants answered seven Likert scale questions about their reasons for starting a blog (1=not a reason at all, 2=minor reasons, 3=major reasons), and this was modeled after previous research on blogs [20]. Lastly, in open-ended questions, participants were asked to describe what they "liked most" and "liked least" about blogging about their weight loss attempts.

Data analysis
Descriptive statistics were used for all variables. Linear regression models estimated the crude associations between self-reported weight loss since the start of blogging and factors as blogging duration, the number of posts published per month, the total number of posts on the blog, the blog's monthly page views, and the number of subscribers. Quantitative analyses were performed using SPSS (Version 21.0, IBM, Chicago, IL).

Thematic analyses were used to characterize the open-ended questions regarding what participants liked most and least about blogging about their weight loss attempts. Two coders (MME and ASC) independently reviewed all responses to identify major themes represented in each of the two domains (i.e., most and

Table 2 | Blog characteristics and habits (N=194)

Variable	Percent
Blogging duration	
≤1 year	20.4 %
1–2 years	30.6 %
2–3 years	17.2 %
3–4 years	12.9 %
≥4 years	18.8 %
Blog subscribers	
≤100 subscribers	66.5 %
100–500 subscribers	24.7 %
500–1000 subscribers	3.6 %
≥1000 subscribers	3.6 %
Monthly page views	
≤500 page views	42.3 %
500–1000 pages views	17.5 %
1000–5000 page views	22.7 %
5000–10,000 page views	8.2 %
10,000–50,000 page views	5.7 %
≥50,000 pages views	3.6 %

least liked things about blogging their weight loss attempts). Both coders have intensive training in qualitative coding. A broad set of themes emerged for each question. Themes for each set of questions were then discussed among coders and refined using a consensus process following discussion. The two coders then independently coded the responses according to themes. Finally, coders met to compare their coded responses; discrepancies were discussed among the coders to achieve theme consensus. Inter-rater reliability is reported in percent agreement.

RESULTS

Sample characteristics

Of the 270 respondents who initiated the survey, we excluded those who did not complete the survey in its entirety (n=71) and those who reported blogging less than 30 days (n=6), resulting in an analytic sample of 194 adult weight loss bloggers.

The majority (92.3 %) of participants was female and 91 % was Caucasian. The average age was 35 years old (SD=7.2). More than half of respondents (66 %) had a bachelor's degree or higher, and 9.3 % had a health-related degree or certification (Table 1). Mean current BMI was 33.6 kg/m^2 (SD=9.1); 18.1 % of participants were normal weight, 24.4 % were overweight, 17.1 % were class 1 obese, 16.6 % were class 2 obese, and 23.8 % were class 3 obese at the time of the survey. Most bloggers (85.6 %) reported having a Twitter account, and 49.0 % reported having a Facebook page for their blog.

Blog characteristics and habits

More than half (58.8 %) reported that this was their first blog. Participants reported blogging for an average of 2.6 years (SD=2.3). On average, participants spent 6.4 h (SD=6.9) a week maintaining their blog. Bloggers published an average of 11 posts a month (SD=8.6) and had a total of 322 posts on their blog (SD=531.1). Participants had an average of 522 blog subscribers (SD=4782.8; median=40; range=0–66,000). Additionally, participants averaged 6283 page views a month (SD=18955.3; median=791; range= 0–150,000). Few bloggers (12 %) reported making money from their blog with only one blogger reporting that her sole income came from blogging (Table 2).

The major reasons cited for blogging were as follows. It helped the bloggers stay focused on their weight loss goals (74.7 %) and provided them with support (64.9 %) and accountability (58.8 %) (Fig. 1). Additionally, more than two-thirds of the respondents (82.5 %) reported that they were actively trying to lose weight. On average, participants reported wanting to lose an additional 61.8 lbs. (28.0 kg) (SD=44.8; median=50.0 lbs. (22.7 kg); IQR=25.0–98.2; range=3–233 lbs. (1.4–105.7 kg) (Table 1).
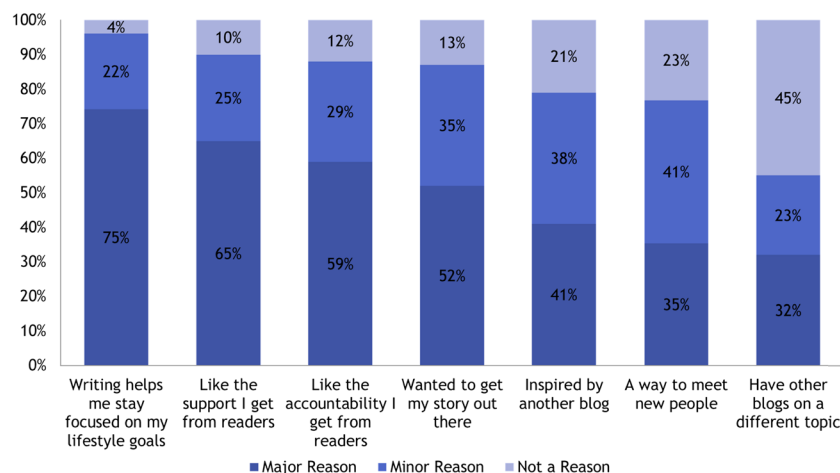

Fig. 1 | Responding to weight loss bloggers' reasons for blogging

Associations between blogging activity and weight loss

Based on self-reported current and pre-blogging weight, participants had lost an average of 42.3 lbs. (19.2 kg) (SD=39.5; median=34.5; range=215 lbs. (97.5 kg) lost to 30 lbs. (13.6 kg) gained) since they began blogging. This self-reported weight loss represents, on average, 14.6 % of their pre-blogging weight (median=13.3). Blogging duration was associated with the amount of weight loss reported since the start of blogging (β=−3.65, t(185)=−2.97, p=.003, beta= −.213, 95 % CI=−6.086-1.223). However, none of the following factors were associated with the amount of weight loss reported by participants: the number of blog posts published per month (β=.196, t(192)=.592, p=.554), the total number of posts on the blog (β=.000, t(192)=−.050, p=.960), the monthly page views (β=.000, t(192)=−1.434, p=.153), and the number of subscribers (β=.000, t(189)=.783, p=.434).

Likes and dislikes of blogging

Raters demonstrated 84.7 and 90.5 % agreement when identifying themes about what bloggers liked most and least about weight loss blogging, respectively. All participants (100 %) reported what they liked most about blogging. The 280 responses for likes were categorized into nine themes (Table 3). The most common themes were the following: (1) sense of community (reported by 18.9 %); (2) sharing experiences (15 %); (3) catharsis (sharing feelings/emotions); 13.6 %); and (4) accountability (12.9 %). Additionally, 91 % of participants reported what they least liked about blogging. A total of 190 responses were distilled into 15 themes (Table 3). The most common themes were the following: (1) time/labor intensive (reported by 24.7 %); (2) pressure to post regularly/becoming a chore (10.5 %); and (3) negative comments/feedback (9.4 %).

DISCUSSION

With the explosion of internet tools to easily create blogs, blogging has gained tremendous popularity [20]. For the participants in this study, blogging represented a significant time commitment. Maintaining a weight loss blog can be viewed as a part-time job as bloggers in this study spend the equivalent of one workday blogging each week, which is a significant commitment of time and energy. Non-financial incentives likely motivate bloggers to continue since less than 15 % reported receiving income from their blog. Blogging might provide psychological benefits since it is similar to journaling or narrative therapy, where the individual records personal thoughts, daily experiences, reflections, feelings, opinions, hopes, and fears [22]. Current research suggests that writing encourages factors, such as awareness, catharsis, distancing, self-talk, ventilation, and organization of thoughts [23–25]. Such writing has been associated with improved physical health (health center visits, self-reported symptoms, and upper respiratory illness), psychological well-being (positive effect, happiness, adjustment, and general temperament), physiological functioning (blood pressure, heart rate, and triglycerides), and general functioning (reemployment, grade point average, and absenteeism) [26]. In the present study, the creation of a sense of community was the most commonly liked aspect of blogging reported by weight loss bloggers. This finding is consistent with the research literature that supports the notion that online interactivity can provide a source for support and strengthen feelings of belonging [27]. This may be a possible reason people are drawn to blogging in addition to the social reinforcement and accountability they receive from their readers. Weight loss treatment studies have shown that social support is associated with greater weight loss [28], thus blogging may be one approach to building a social support network around a weight loss attempt. Further research is needed to determine if blogging can be used as an adjunctive weight loss strategy and to examine mechanisms that could induce weight loss via blogging.

The time commitment to blogging could have deleterious effects on health since blogging, unless conducted using a standing desk, is a sedentary activity. However, weight loss bloggers in this study reported a fair degree of weight loss success, and the number of years since they started blogging was the only factor associated with weight loss. This finding is consistent with the research literature that supports the notion that the longer a person is adherent to a weight loss program, the more likely they are to lose weight. This brings up the question of what other mechanisms blogging contributes to weight loss. Further research is needed to examine the pathways behind weight loss and weight loss maintenance that bloggers experience in spite of that blogging in itself is a sedentary activity.

There were several limitations in our study. The first relates to our recruitment strategy. Participants were recruited using Twitter and Facebook through specific users, which likely did not result in a representative sample of all weight loss bloggers in the USA. Unfortunately, no systematic way exists to expose recruitment messages to all weight loss bloggers. Those most active on Twitter and Facebook and those interested in the accounts of our investigators who distributed the study advertisements (i.e., an obesity researcher and a weight loss blogger) would have been most likely to see the advertisements. Furthermore, participants in this study were disproportionately female. This is reflective of social media users and those typical attending weight management programs [29]. Results represent bloggers who participated in this survey and may likely be skewed toward those who are highly active in social media, which our previous research has shown to be associated with significant weight loss [30]. In addition, the use of self-reported weight data could present bias in the reported results. Furthermore, the authors did not

Table 3 | Most and least liked aspects of blogging about weight loss attempts

Theme	Frequency	Illustrative responses
What respondents liked most about blogging (280 comments; from 194 participants)		
Sense of community	18.9 % (53)	"Connecting with others who are on the same journey of weight loss and health improvement."
Sharing experiences	15.0 % (42)	"Sharing my experiences with others and learning from others."
Cathartic	13.6 % (38)	"Getting my thoughts/problems/anxieties/hopes/dreams out there and getting feedback."
Accountability	12.9 % (36)	"It helps me stay focused and organized. I can write down exactly what I want to do or achieve and have that to go back to. It's so much more effective than post it notes on the fridge, for me."
Helping/inspiring others	12.9 % (36)	"I enjoy being able to inspire others."
Support	10.7 % (30)	"I like the support I get from other bloggers."
Tracking/journaling progress	10.4 % (29)	"Being able to track my own progress, and looking back at my history to see what I did when I was most successful and least successful."
Feedback	5.0 % (14)	"Getting feedback from others."
Skills development	0.7 % (2)	"I'm honing my writing skills, finding my voice, and working on my brand."
What respondents liked least about blogging (190 comments; from 177 participants)		
Time/labor intensive	24.7 % (47)	"The time it takes to do it. Sometimes I feel like I just don't have the time."
Pressure to post regularly/becoming a chore	10.5 % (20)	"How pressured you can feel to provide content to your readers."
Negative comments/ feedback	9.4 % (18)	"The negative anonymous comments that I've seen other bloggers receive."
Relevancy/coming up with new ideas, subjects to write about	8.4 % (16)	"I absolutely suck about coming up with themes! I wish I was a bit more creative, but for the life of me, I can never comes up with themes to liven' it up. I'm afraid that sometimes I come across as dull and boring!"
Technology	7.9 % (15)	"I least enjoy the amount of technical knowledge it requires with regards to HTML codes and such, but I'm learning to navigate my way through that and build my website."
Nothing	7.9 % (15)	"Nothing really. I do it because I enjoy it. If I didn't then I would stop."
Spam	6.8 % (13)	"Spammers and the business people who want me to promote their item for free with nothing in return for my time or effort."
Lack of responses, comments, feedback	4.7 % (9)	"Not getting much feedback or hearing from readers."
Social comparison	4.7 % (9)	"It's sometimes easy to get caught up in the comparison game, thinking I'm not doing enough with brands, my weight loss, etc. It's so important to stay focused and not lose my voice in the pressure of wanting to appeal to the most people."
Building readership, audience , traffic	4.2 % (8)	"Trying to build an audience."
Privacy	3.6 % (7)	"the possibility that someone from my private life might happen upon it...I am very private, which is why I want to ensure confidentiality of my information provided is preserved here as well."
Admitting to failures	2.1 % (4)	"The only time I don't enjoy blogging is when I have to admit to a weight gain. It's embarrassing, but part of the process."
Money	2.1 % (4)	"Not making money from it at this point in time."
Internet drama, cliques	1.6 % (3)	"The 'high school' drama that happens sometimes."
Writer skills	1.1 % (2)	"Writing is hard for me, I get wordy and have a hard time doing emotions versus facts."

assess the average number of comments bloggers received per post. This would have required bloggers to gather data on their comment frequency, and we anticipate that an item assessing this would have a low response rate. Finally, it cannot be determined if blogging contributed to the large weight losses observed in this sample or if our recruitment strategy resulted in an elite group of individuals who are highly successful at losing weight. People who start a blog and quit after a short time because they gained weight back or failed to lose it in the first place may not be represented in this sample, which likely skews our sample toward people who are successful at both blogging and weight loss. Additionally, those who start a blog may be more prone to discuss their weight loss successes, also skewing results positively. Furthermore, the causality or temporality of associations cannot be evaluated from this study. However, despite these limitations, this study adds to the scant literature on the characteristics of weight loss bloggers and describes motivations for blogging and the most and least liked aspects of this activity.

Conclusion

The weight loss bloggers in this study are mostly white, highly educated women who invest several hours a week into blogging and report losing a great deal of weight. Weight loss bloggers in this study enjoyed feeling a sense of community, sharing their experiences with others, participating in cathartic writing, enhancing their sense of accountability, and having access to the information and inspiration that blogging can provide. Future research should explore what determines weight loss success and/or failure in weight loss bloggers. Additionally, research should explore whether people who desire to lose weight would benefit from blogging or from reading others' weight loss blogs.

Compliance with ethical standards

Conflict of interest and adherence to ethical principles statement—Martinus Evans receives advertisement income from his weight loss blog, www.300poundsandrunning.com. All other authors have no conflicts of interest to declare. All procedures, including the informed consent process, were conducted in accordance with the ethical standards of the responsible committee on human experimentation (institutional and national) and with the Helsinki Declaration of 1975, as revised in 2000.

References

1. World Health Organization. Obesity: preventing and managing the global epidemic. World Health Organization; 2000.
2. Ogden CL, Carroll MD, Kit BK, et al. Prevalence of childhood and adult obesity in the United States, 2011–2012. *JAMA*. 2014; 311(8): 806-814.
3. Kopelman P. Health risks associated with overweight and obesity. *Obes Rev*. 2007; 8: 13-17.
4. Wilson PW, D'Agostino RB, Sullivan L, et al. Overweight and obesity as determinants of cardiovascular risk: the Framingham experience. *Arch Intern Med*. 2002; 162(16): 1867-1872.
5. Field AE, Coakley EH, Must A, et al. Impact of overweight on the risk of developing common chronic diseases during a 10-year period. *Arch Intern Med*. 2001; 161(13): 1581-1586.
6. U.S. Preventive Services Task Force. Screening for obesity in adults: recommendations and rationale. *Ann Intern Med*. 2003; 139(11): 930-932.
7. Kraschnewski JL, Sciamanna CN, Stuckey HL, et al. A silent response to the obesity epidemic: decline in US physician weight counseling. *Med Care*. 2013; 51(2): 186-192.
8. Zickuhr K. Generations 2010. Pew Internet & American Life Project. 2010;16(11).
9. Google Trends [Internet]. [cited 2/16/2014]. Available from: http://www.google.com/trends/topcharts#cid=nature_and_science&geo=US&date=2013.
10. The Social Life of Health Information, 2011 [Internet]. Washington, D.C.: Pew Research Center; 2011 [updated May 12, 2011; cited March 15, 2014]. Available from: http://www.pewinternet.org/2011/05/12/the-social-life-of-health-information-2011/.
11. Peer-to-peer Healthcare. [Internet]. Washington, D.C.: Pew Research Center; 2011 [updated February 28,2011; cited April 7, 2013]. Available from: http://www.pewinternet.org/2011/02/28/peer-to-peer-health-care-2/.
12. Amichai-Hamburger Y, Lamdan N, Madiel R, et al. Personality characteristics of Wikipedia members. *Cyberpsychol Behav*. 2008; 11(6): 679-681.
13. Kaye BK. It's a Blog, Blog, Blog World: Users and Uses of Weblogs. Atlantic Journal of Communication. 2005 06/01; 2013/04;13(2):73–95.
14. Kline D, Burstein D. Blog!: how the newest media revolution is changing politics, business, and culture. 2005.
15. Scoble R, Israel S. Naked conversations: how blogs are changing the way businesses talk with customers. Wiley; 2006.
16. Nardi BA, Schiano DJ, Gumbrecht M, et al. Why we blog. *Commun ACM*. 2004; 47(12): 41-46.
17. Rausch PA. Cyberdieting: blogs as adjuncts to women's weight loss efforts.[dissertation]. University of Florida; 2006.
18. Sanford AA. 'I can air my feelings instead of eating them': blogging as social support for the morbidly obese. *Commun Stud*. 2010; 61(5): 567-584.
19. Harris PA, Taylor R, Thielke R, et al. Research electronic data capture (REDCap)—a metadata-driven methodology and workflow process for providing translational research informatics support. *J Biomed Inform*. 2009; 42(2): 377-381.
20. Bloggers. Pew Internet & American Life Project [Internet].; 2006 []. Available from: http://www.pewinternet.org/Reports/2006/Bloggers.aspx.
21. Garrow JS, Webster J. Quetelet's index (W/H2) as a measure of fatness. *Int J Obes*. 1985; 9(2): 147-153.
22. Pennebaker JW, Seagal JD. Forming a story: the health benefits of narrative. *J Clin Psychol*. 1999; 55(10): 1243-1254.
23. Wright J, Chung MC. Mastery or mystery? Therapeutic writing: a review of the literature. *Br J Guid Couns*. 2001; 29(3): 277-291.
24. Pennebaker J. Writing to heal: a guided journal for recovering from trauma and emotional upheaval 2004.
25. Kerner EA, Fitzpatrick MR. Integrating writing into psychotherapy practice: a matrix of change processes and structural dimensions. *Psychother Theory Res Pract Train*. 2007; 44(3): 333.
26. Smyth JM. Written emotional expression: effect sizes, outcome types, and moderating variables. *J Consult Clin Psychol*. 1998; 66(1): 174.
27. Ko H, Kuo F. Can blogging enhance subjective well-being through self-disclosure? *CyberPsychol Behav*. 2009; 12(1): 75-79.
28. Kiernan M, Moore SD, Schoffman DE, et al. Social support for healthy behaviors: scale psychometrics and prediction of weight loss among women in a behavioral program. Obesity (19307381). 2012 04;20(4):756–64.
29. Duggan M, Smith A. Social media update 2013. Pew Internet and American Life Project. 2013.
30. Pagoto S, Schneider KL, Evans M, et al. Tweeting it off: characteristics of adults who tweet about a weight loss attempt. J Am Med Inform Assoc. 2014.