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NETWORKED HEALTH

AN ANALYSIS OF HEALTH NONPROFITS' USE OF FACEBOOK IN TURKEY

MASTER'S THESIS

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Dedicated to the memory of my dad…

PREFACE

#ThankYou

This thesis is a product not only of a graduate program in communications but of decades of curiosity about the role of social networks the way we live and communicate about the things that matter most to us. It surely takes a *network* to complete such journey. And I feel extremely fortunate to be linked with amazing people who have contributed – consciously or not – in making this adventure more meaningful and more endurable for me.

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ACRONYMS

ALS : Amyotrophic Lateral Sclerosis

CDC : Centers for Disease Control and Prevention

FAQ : Frequently Asked Questions

GSÜ : Galatasaray Üniversitesi (Galatasaray University)

IoT : Internet of Things

KAYD : Kansersiz Yaşam Derneği (The Association of Life Without Cancer)

LÖSEV : Lösemili Çocuklar Vakfı (The Foundation of Children with Leucemia)

NGO : Nongovernmental Organization

SNS : Social networking sites

TOFD : Türkiye Omurilik Felçlileri Derneği (The Association of Spinal Cord Paralytics)

USA : United States of America

WHO : World Health Organization

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ABSTRACT

Organizations worldwide are realizing the potential to sustain relationship with their key stakeholders using social networking sites. The social networking sites like Facebook may help organizations; (i) to further their relationship with volunteers and donors to better mobilize them, (ii) to recruit others in the wider community, (iii) to boost their management functions, (iv) to educate the greater community about their cause, and to inform regarding programs and services, (v) to streamline the conversation between stakeholders, (vi) to retrieve data to assess the impact of outreach endeavors, (vii) to enhance accountability and trust, (viii) to enhance their fundraising efforts (Waters et al., 2009; Rybalko and Seltzer, 2010; Saxton and Waters, 2014; Lovejoy and Saxton, 2012; Saxton and Guo, 2011). As the capability of reaching the audience and seemingly limitless information, nonprofit organizations may have great potential in providing health-related service, with the increasing outreach and establishing relations with key stakeholders through social media.

Similar to organizations, individuals are turning increasingly to these platforms to share knowledge and support to enhance health outcomes. Using the Internet for medical knowledge offers prime advantages for acknowledging alternative therapies as well. For instance, medical providers are using Web 2.0 portal to disseminate health information and educate patients (Nordqvist et al., 2009), researchers are conducting web-based intervention to change health behaviors (Stoddard et al., 2005; Simon-Arndt, Hurtado, and Patriarca-Troyk, 2006; Whitten, Buis, and Love, 2007), and patients are pursuing online support groups (Tanis, 2008; Ancker et al., 2009). Diaz et al. (2002: 183) found that patients were seeking information on a wide variety of topics, including treatment side effects, second opinions, complementary or alternative medicines, and specific diagnoses. Also, Mittman and Caine (1999: 18) suggests that information can equip consumers to lead healthier lifestyles, detect potential medical problems early, work more collaboratively with (their provider) to treat illness, and learn of effective treatments that a local provider may not have access to. The Internet and the unprecedented growth of online, health-oriented peer-to-peer networking, however, have forced a rapidly approaching parity of knowledge between the public and the medical profession. Given the high volume of usage, Facebook is the most popular social networking site said to be reshaping our health behaviors.

Whereas traditional health communication efforts have tended to be interpersonal (e.g., face-to-face counseling) or mediated by traditional media (e.g., print, radio, television), technologies such as the Internet and mobile devices are opening up new doors for innovative health communication efforts.

The modern health care system irrevocably changed by the increasing demand toward more sophisticated care. The dramatic increase of non-communicable causes, especially heart disease, diabetes, and cancer has triggered the need to provide more comprehensive health service. The economic and social burden of these risks has ushered many developed countries to prioritize their public health goals with a more deliberate outlook. Thus, the strategic turn to curate public health messages, as part of a comprehensive communication strategy, by health organizations through communication mediums has marked a new style of health communication. Also, as being aware of massive care expenditure, many developed countries have begun to reframe current health care system, aligning their public health policies with neoliberal restructuring that requires acknowledging a much more market-oriented and profit-driven health care. By doing this, the state has become no longer the only service

provider, but it turned out as a player – a significant one, in a complex picture of health industry, including private hospitals, health insurance companies, medical firms and pharmaceutical companies. Developing countries are facing these difficulties head on, as they have more exposed to dire effects of globalization such as inequitable trade, irresponsible marketing, arbitrary urbanization and environmental degradation. Remarkably, power asymmetry in global world order has made such deeply rooted disparities even worse for a rapidly aging, underdeveloped populations with a limited key infrastructure and inadequate funding for medical research.

Turkey, as a developing country, is also facing those challenges in its current frame of health care system. According to the Chronic Diseases and Risk Factors Survey Report, a cross sectional study carried out by the Health Ministry (Public Health Agency of Turkey, 2013), the prevalence of diseases which are highly associated with life style choices of Turkish population is increasing with age. Therefore, strategic communication for effective health communication has been increasingly important to sustain health behavior change and disease prevention.

Despite widespread adoption, very little research has been conducted on SNS use by health nonprofits in Turkey. A study conducted by Öztürk and Öymen (2013) on the use of Facebook and Twitter by nonprofits working on cardiovascular health in Turkey belongs to the one of the first attempts within the field.

Grounded in Kent and Taylor's (1998) dialogic communication theory, this study has aimed to better understand how health nonprofit organizations in Turkey are using Facebook from the perspective of dialogical communication theory. The dialogic communication theory tests whether a nonprofit organization is utilizing social networking platforms in a way that produces dialogue and two-way communication. Previously, many studies have used this theory to study, Fortune 500 companies, companies as well as candidates on social networking sites. Based on the literature on nonprofits, online relationship building and dialogical communication theory, this study has investigated the likelihood of organizations to incorporate relationship building principles of dialogic communication theories.

For this purpose, two independent studies have been developed and conducted in association with research objectives. The combination of quantitative and qualitative methods has been used in order to understand the phenomenon from its various angles. This combination is significant one, because such research on dynamic nature of user-generated content necessitates to employ both message-level and organization-level analyses.

Therefore, the current study has used multi-method research design to examine whether health nonprofit organizations use Facebook dialogically. This study has analyzed nonprofits' Facebook profiles (n=3), posts (n=140) and comments (n=3,569) during a one-month sampling period. The content analysis was conducted to systematically identify the data. In addition to this, semi-structured interviews were conducted to consider how communication practitioners use Facebook as a communication and relationship-building tool.

The results suggest that though Facebook has immense opportunities to foster relationships with the key stakeholders, nonprofits are missing this significant chance to build a strategic relationship with users by failing to enjoy two-way communication that Facebook offer. The data has showed that health nonprofits that operates in Turkey

mostly avoid to stimulate dialogic engagement with the publics. They rarely utilize the principles of dialogic interaction, whereby avoiding to communicate directly. The results have indicated that nonprofits use Facebook as an online brochure. Mostly, to their usage, Facebook is a broadcasting medium to inform public about their organizational issues such as events, donations etc. It has been also found that nonprofits are neither respond nor follow up the comments they received.

This dissertation consists of four subsequent chapters. The introduction mainly discusses the general topics. The first chapter represents a narrative review of the literature on health, health communication, and discuss the effect of new technologies on health such as eHealth or digital health. The second chapter outlines overall rationale, research design and elucidates the methodology used. It also touches upon strengths, limitations, as well as ethical considerations arise which are specific to the research design. The third chapter provides a general discussion of findings. The forth chapter develops discussion on alternative ways of SNS usage, and provides a projection and recommendations of nonprofits' communication practitioners that can enable themselves to enjoy with full advantages of these sites.

Given the new model of patient-centered health care, the Internet and social networking sites have the potential to bridge the gaps prevalent in care services. Future research must focus on circumvent obstacles to effective use, and identifying relevant factors that increase their effectiveness among diverse audience. The establishment of long-term, trust-based, mutually beneficial relationships with publics is a conducive to further fuel not only health communication pipelines, but also overall health care processes, increasingly online.

Nonprofits should embrace fully with the myriad of communicative opportunities on Facebook to stimulate dialogic engagement. The users should be invited to join the profile by directly participating interactive content such as quizzes, games, threaded discussions etc. Posing questions and responding to the feedbacks should be on the priority list of nonprofit. The results indicate that nonprofits may neglect to respond them. This is neither practical nor ethical choice since the information vacuum left behind may be easily filled by some whose agendas are often not based on scientifically reliable knowledge.

From a policy perspective, Turkey, as a developing country, should welcome the opportunities that digital health offer and develop requisite technical design to incorporate with big data. This requires a nested cooperation between the state institutions, academia and venture capital business environment. Some policy advices include but not limited to enhancing health literacy through digital systems in order to change health behaviors, encouraging healthcare providers to internalize digital services and gadgets. Additionally, it is expected that health insurance firms should re-arrange their risk assessments whereby incorporating mHealth opportunities into their portfolio. This enable them to increase the pooling and directly impact the health of people.

Key words: Facebook, dialogic communication, social networking sites, nonprofits and strategic communication

RÉSUMÉ

Les organisations dans le monde entier se rendent compte de la possibilité de maintenir leur rapport avec leurs parties prenantes principales en utilisant des sites de réseautage social. Les sites de réseaux sociaux comme Facebook peuvent aider les organisations; (I) pour favoriser leur relations avec les bénévoles et les donateurs afin de les mobiliser mieux, (ii) recruter d'autres personnes dans la communauté, (iii) renforcer leurs fonctions d'administration, (iv) éduquer la communauté élargie de leur cause et Informer sur les programmes et les services (v) pour rationaliser le dialogue entre les parties prenantes (vi) pour récupérer les données pour évaluer l'impact des efforts socials (vii) pour renforcer la responsabilisation et la confiance (viii) pour améliorer leurs efforts de collecte de fonds (Waters et al., 2009 , Rybalko et Seltzer, 2010; Saxton et Waters, 2014; Lovejoy et Saxton, 2012; Saxton and Guo, 2011). Pourvu de la capacité d'atteindre un large public et des informations apparemment illimitées par le biais des médias sociaux, les organisations à but non lucratif peuvent avoir un grand potentiel pour fournir des services liés à la santé, avec une augmentation dans les activités de rayonnement et l'établissement de relations avec les principaux intervenants.

Semblable aux organisations, les individus se tournent de plus en plus vers ceux-ci pour partager le savoir et le soutien concernant l'amélioration de la santé. L'utilisation d'Internet pour la connaissance médicale offre des avantages privilégiés pour reconnaître d'autres thérapies alternatives. Par exemple, les fournisseurs médicaux utilisent le portail Web 2.0 pour diffuser des informations sur la santé et éduquer les patients (Nordqvist et al., 2009), les chercheurs mènent une intervention sur le Web pour modifier les comportements de santé (Stoddard et al., 2005; Simon-Arndt, Hurtado , Et Patriarca-Troyk, 2006, Whitten, Buis et Love, 2007), et les patients poursuivent des groupes de soutien en ligne (Tanis, 2008; Ancker et al., 2009). Diaz et al. (2002: 183) a révélé que les patients recherchaient des informations sur une grande variété de sujets, y compris les effets secondaires du traitement, les deuxièmes avis, les médicaments complémentaires ou alternatifs et les diagnostics spécifiques. De plus, Mittman et Caine (1999: 18) proposent que l'information peut permettre aux consommateurs de mener des modes de vie plus sains, de détecter les problèmes médicaux potentiels au début, de travailler plus en collaboration avec leur prestataire médical pour traiter la maladie et d'apprendre des traitements efficaces qu'un fournisseur local peut ne pas avoir l'accès. L'Internet et la croissance sans précédent des réseaux point à point axée sur la santé en ligne ont toutefois forcé une approche de la connaissance rapide entre le public et le métier médical. Étant donné le volume élevé d'utilisation, Facebook est le site de réseautage social le plus populaire, dit être en train de remodeler nos comportements de santé.

Le système de santé moderne a irrévocablement changé par la demande croissante vers des soins plus sophistiqués. L'augmentation spectaculaire des causes non transmissibles, en particulier les maladies cardiaques, le diabète et le cancer, a entraîné la nécessité de fournir un service de santé plus complet. Le charge économique et social de ces risques a conduit de nombreux pays développés à donner leur priorité à leurs objectifs de santé publique avec des perspectives plus délibérées. Ainsi, le tournant stratégique à la conservation des messages de santé publique, dans le cadre d'une stratégie de communication globale, par les organismes de santé par le biais de moyens de communication a marqué un nouveau style de communication sur la santé. De plus, en ce qui concerne les dépenses de soins massifs, de nombreux pays

développés ont commencé à reformuler le système actuel de soins de santé, aligner leurs politiques de santé publique sur la restructuration néolibérale, ce qui nécessite de reconnaître des soins de santé beaucoup plus orientés vers le marché et axés sur les bénéfices. En ce sens, l'État n'est plus le seul fournisseur de services, mais il s'est avéré être un acteur - un acteur important, dans une image complexe de l'industrie de la santé, y compris les hôpitaux privés, les compagnies d'assurance maladie, les cabinets médicaux et les entreprises pharmaceutiques. Les pays en développement font face à ces difficultés, car ils sont plus exposés aux effets désastreux de la mondialisation, tels que le commerce équitable, le marketing irresponsable, l'urbanisation arbitraire et la dégradation de l'environnement. Notamment, l'asymétrie du pouvoir dans l'ordre mondial a rendu les disparités profondément enracinées encore pires pour une population à vieillissement rapide et sous-développée avec une infrastructure limitée et un financement insuffisant pour la recherche médicale.

La Turquie, en tant que pays en développement, est également confrontée à ces défis dans son système actuel de soins de santé. Selon le rapport sur les maladies chroniques et les facteurs de risque, une étude transversale menée par le Ministère de la Santé (Agence de la Santé Publique de Turquie, 2013), la prévalence de maladies fortement associées aux choix de vie de la population turque augmente avec l'âge. Par conséquent, la communication stratégique pour une communication efficace sur la santé a été de plus en plus importante pour soutenir le changement de comportement en matière de santé et la prévention des maladies.

Malgré une adoption généralisée, très peu de recherches ont été réalisées sur l'utilisation de services de réseaux sociaux par des organismes sans but lucratif en Turquie. Une étude menée par Öztürk et Öymen (2013) sur l'utilisation de Facebook et Twitter par des organisations à but non lucratif travaillant sur la santé cardiovasculaire en Turquie appartient à l'une des premières tentatives dans le domaine.

La théorie de la communication dialogique analyse si une organisation à but non lucratif utilise des platesformes de réseaux sociaux de manière à produire un dialogue et une communication bidirectionnelle. Etant donné le volume élevé d'utilisation, on peut dire que le Facebook est le site de réseautage social le plus populaire à exercer une influence sur nos comportements en ce qui concerne la santé. Auparavant, de nombreuses études ont utilisé cette théorie pour étudier les sociétés Fortune 500 ainsi que les candidats sur les sites de réseaux sociaux. Sur la base de la littérature sur les organismes à but non lucratif, le renforcement des relations en ligne et la théorie de la communication dialogique, cette étude examine la probabilité que les organisations incorporent les principes de construction relationnelle des théories de la communication dialogique.

À cette fin, deux études indépendantes ont été développées et menées en association avec des objectifs de recherche. La combinaison de méthodes quantitatives et qualitatives a été utilisée pour comprendre le phénomène sous ses différents angles. Cette combinaison est importante, car une telle recherche sur la nature dynamique du contenu généré par l'utilisateur nécessite d'utiliser à la fois des analyses au niveau des messages et des niveaux d'organisation.

Par conséquent, l'étude actuelle a utilisé la conception de la recherche multi-méthodes pour examiner si les organisations à but non lucratif de la santé utilisent Facebook de manière dialogique.

Fondé sur la théorie de communication dialogique de Kent et Taylor (1998), ce travail-ci part d'un modèle de recherche formé de plus d'une méthode dans le but d'examiner si oui ou non les organisations de santé non lucratives utilisent le Facebook d'une façon dialogique. Notre travail a analysé les profils (n=3), les messages (n=140) et les commentaires (n=3,569) des non lucratifs sur Facebook en se limitant à une période d'échantillonnage d'un mois. L'analyse du contenu a été réalisée afin de systématiquement identifier les données. En outre, des entretiens semi-structurés ont été menés afin que soit examiné comment les professionnels de la communication utilisent le Facebook comme un outil de communication et d'établissement des relations.

Cette dissertation se compose de quatre chapitres. L'introduction traite principalement des sujets généraux. Le premier chapitre représente un examen narratif de la littérature sur la santé, la communication sur la santé et débute l'effet des nouvelles technologies sur la santé telles que la cybersanté ou la santé numérique. Le deuxième chapitre décrit la logique générale, la conception de la recherche et élucide la méthodologie utilisée. Il touche également les forces, les limites, ainsi que des considérations éthiques qui se posent spécifiques à la conception de la recherche. Le troisième chapitre fournit une discussion générale sur les résultats. Le quatrième chapitre développe la discussion sur les modes alternatifs d'utilisation des services de réseaux sociaux et fournit une projection et des suggestions des praticiens de la communication sans but lucratif qui peuvent se permettre de profiter pleinement de ces sites.

Les résultats donnent à penser qu'en ne jouissant pas de la communication bidirectionnelle que le Facebook offre les non lucratifs ratent cette occasion significative d'établir une relation stratégique avec les utilisateurs, malgré des possibilités gigantesques que le Facebook offre pour favoriser des relations avec les parties prenantes.

Etant donné le nouveau modèle de soins de santé axés sur le patient, l'Internet et les sites de réseautage social ont le potentiel de servir de pont pour combler les lacunes répandues dans les services de soins. La recherche future doit s'occuper de contourner les obstacles pour un usage efficace et d'identifier les facteurs pertinents qui augmentent leur efficacité parmi des publics divers. L'établissement des relations mutuellement bénéfiques de long terme et de confiance avec des publics est propice à alimenter d'avantage non seulement les pipelines de la communication santé, mais aussi les processus des soins de santé en générale, qui ont lieu de plus en plus souvent en ligne.

Les organisations à but non lucratif devraient embrasser pleinement la myriade d'opportunités de communication sur Facebook pour stimuler l'engagement dialogique. Les utilisateurs devraient être invités à se joindre au profil en participant directement à des contenus interactifs tels que des quiz, des jeux, des fils de discussions, etc. Poser des questions et répondre aux commentaires devrait la priorité des organismes à but non lucratif. Les résultats indiquent que les organismes sans but lucratif peuvent négliger de les répondre. Il ne s'agit ni d'un choix pratique ni éthique puisque le vide d'information laissé peut être facilement complété par ceux qui dont les agendas ne sont souvent pas basés sur des connaissances scientifiquement fiables.

D'un point de vue politique, la Turquie, en tant que pays en développement, devrait accueillir les opportunités offertes par la santé numérique et développer la conception technique nécessaire pour intégrer de grandes données. Cela nécessite une coopération

imbriquée entre les institutions de l'État, l'université et le milieu des entreprises de capital de risque. Certains conseils sur les politiques incluent, mais sans s'y limiter, l'amélioration de la compétence en matière de la santé par le biais de systèmes numériques afin de modifier les comportements de santé, en encourageant les professionnels de la santé à internaliser les services et les gadgets numériques. De plus, on s'attend que les entreprises d'assurance maladie réorganisent leurs évaluations des risques en intégrant les opportunités de santé dans leur portefeuille. Cela pourrait leur permet d'augmenter la mise en commun et d'influer directement la santé des personnes.

Mots clés: Facebook, la communication dialogique, des sites de réseaux sociaux, les organismes sans but lucratif et la communication stratégique

ÖZET

Dünyanın neredeyse her yerinde, kuruluşlar, temel paydaşlarıyla kurabilecekleri diyalog-temelli ilişkilerde çevrimiçi sosyal ağ sitelerinin onlara sunduğu imkân ve fırsatların farkına varıyorlar. Facebook vb. sosyal ağ siteleri, kuruluşların; (i) gönüllü ve bağışçı kitlelerini daha iyi mobilize etmelerine, (ii) diğerlerine duyurmalarına, (iii) yönetimsel edimlerini arttırmaya, (iv) daha büyük toplulukları kendi konuları hakkında eğitmekle beraber hizmet ve programları hakkında bilgilendirmeye, (v) paydaşlarıyla istişare edebilmelerine, (vi) etkilerini ölçebilmek için veriye ulaşabilmeye, (vii) güven ve hesap verilebilirliği arttırmaya, (viii) yardım toplama faaliyetlerini güçlendirmelerine destek olabilir (Waters et al., 2009; Rybalko and Seltzer, 2010; Saxton and Waters, 2014; Lovejoy and Saxton, 2012; Saxton and Guo, 2011). İzleyiciye ve enformasyona ulaşma kapasitesi genişledikçe, sağlık alanında çalışan sivil toplum kuruluşlarının sosyal medya aracılığıyla büyüyen ölçüde kendi paydaşlarıyla etkileşime girmek ve sağlık hizmeti ulaştırabilmek açısından önemli bir potansiyeli olmuştur.

Tıpkı kuruluşlar gibi, bireyler de artan bir oranda sağlık amaçlı bilgi ve desteği arttırmak için sosyal ağ sitelerine başvuruyorlar. İnterneti kullanmak tıbbi bilgi ve alternatif tedaviler açısından da önemli ayrıcalıklar sunuyor. Örnekse, sağlık hizmeti verenler, sağlık bilgisini yayma ve hastalarını eğitmek için Web 2.0 özelliklerinden büyük ölçüde faydalanmakta (Nordqvist et al., 2009), araştırmacılar sağlık davranışlarının değişimi için web-tabanlı çalışmalar düzenlemekte (Stoddard et al., 2005; Simon-Arndt, Hurtado, and Patriarca-Troyk, 2006; Whitten, Buis, and Love, 2007), hastalar çevrimiçi destek gruplarını takip etmektedirler (Tanis, 2008; Ancker et al., 2009). Diaz ve arkadaşları (2002:183) hastaların tedavi yan etkileri, ikinci görüş, tamamlayıcı ya da alternatif tedaviler yahut belirli teşhisler gibi pek çok konuda çevrimiçi destek aradıklarını ortaya koymuştur. Bununla birlikte, Mittman ve Caine de (1999:18) çevrimiçi bilginin kişileri daha sağlıklı yaşam stillerine yöneltmekte, olası tıbbi problemlerin öncesinde müdahale edilebilmesinin sağlanmasına, iyileşme sürecinde hekim ve diğer sağlık personelleriyle daha işbirlikçi bir iletişim modeli izlenmesinde faydalı olduğunu belirtmiştir. Bununla birlikte, bu yöntemler kişiyi, kendisini izleyen mahallî hekimin bilemeyebileceği etkili tedavi yöntemleri hakkında bilgilendirilmesi gibi konularda da desteklediğini belirtmiştir. Ancak, internet ile birlikte benzersiz bir ölçüde büyüyen çevrimiçi, sağlık-tabanlı uçtan uça ağ oluşturma gitgide yakınsayan hekim-toplum arasındaki bilgi paritesini de zorlamaktadır. Popülaritesi göz önüne alındığında, en sık kullanılan sosyal ağ olan Facebook'un sağlık davranışlarını en çok etkileyen ağ olduğu da söylenebilir.

Geleneksel sağlık iletişimi yöntemleri genellikle kişiler-arası (örn., yüz yüze danışmanlık) nitelik göstermekte ya da geleneksel medya aracılığıyla yapılmaktayken, internet ve mobil aygıtların aracılığında yapılacak etkin sağlık iletişimi modelleri yeni kapılar açmaktadır.

Modern sağlık sistemi, daha karmaşık sağlık hizmetine olan talep arttıkça geri dönülemez bir hal almıştır. Özellikle kalp rahatsızlıkları, diyabet ve kanser gibi hastalıkların yüksek ölçüde artışı bu nevi çok kapsamlı hizmete duyulan ihtiyacı arttırmıştır. Bu risklerin ekonomik ve sosyal yükü, pek çok gelişmekte olan ülkenin kamu sağlığı planlamalarını daha etkin bir şekilde ele almasını gerektirmiştir. Bu noktada, sivil toplum kuruluşlarının, kapsamlı bir iletişim stratejisinin parçası olarak kamu sağlığı için stratejik mesaj planlaması sağlık iletişimi alanında yeni bir alan oluşturmaktadır. Bununla birlikte, bu ciddi sağlık harcamasının da farkında olan pek

çok gelişmiş ülke güncel sağlık sistemini değiştirerek, kamu sağlığı politikalarını neoliberal politikalara uyarlamış ve daha pazar odaklı, ticari çıkar temelli bir yaklaşımı getirmiştir. Bunu yaparak, devlet, tek sağlık hizmeti sağlayıcısı rolünden çıkarak, karmaşık sağlık sektöründe tıpkı hastaneler, sağlık sigorta şirketleri, tıbbi kuruluşlar ve ilaç firmaları gibi aktörlerden biri olmaya başlamıştır.

Gelişmekte olan ülkeler ise bu zorlukları daha çok hissetmektedir çünkü onlar eşitsiz ticaret, mesuliyet almayan pazarlama, çarpık kentleşme ve çevre bozulması gibi küreselleşmenin vahim sonuçlarına daha çok maruz kalmaktadırlar. Göze çarpan ölçüde, küresel güç sistemindeki kuvvet dengesizliği gittikçe yaşlanan ve gelişmesi yavaşlamış toplumlarda, yetersiz tıbbi araştırma ve altyapı sorunlarıyla da birlikte, mevcut eşitsizlikleri daha da derinleştirmektedir. Gelişmekte olan bir ülke olarak Türkiye de kendi sağlık sisteminde bu zorluklarla karşılaşmaktadır. Sağlık Bakanlığı'nın 2013 yılındaki Kronik Hastalıklar ve Risk Faktörleri Araştırması'na göre (Türkiye Halk Sağlığı Kurumu, 2013) hayat tarzına bağlı oluşan rahatsızlıklardaki artış dikkat çekicidir. Bu sebeple, hastalıkları önlemek ve sağlık davranışını değiştirmek için stratejik sağlık iletişimi hayati bir öneme sahiptir. Yaygın kullanımına rağmen, sağlık sivil toplum kuruluşlarının sosyal medya ve sosyal ağ sitelerinin kullanımı konusu nadiren araştırılmıştır. Öztürk ve Öymen (2013) tarafından yapılan ve kalp sağlığı alanında çalışan sivil toplum kuruluşlarının Facebook ve Twitter kullanımlarına dair bulgular içeren çalışma bu alandaki ilk çalışmalardandır.

Kent ve Taylor'un (1998) diyalog-temelli iletişim teorisinden hareket eden bu çalışma, sağlık alanında çalışan sivil toplum kuruluşlarının Facebook'u diyalog-temelli kullanıp kullanmadığını incelemeyi amaçlamaktadır. Diyalog-temelli iletişim teorisi sivil toplum kuruluşlarının sosyal ağ sitelerini iki yönlü iletişimi kurma amaçlı ve diyalog temelli kullanıp kullanmadıklarını test etmeyi sağlamaktadır. Fortune 500 firmalarından, şirketlere ve seçim adaylarına önceki dönemde pek çok çalışma yapılmıştır. Diyalog-temelli iletişim teorisi, çevrimiçi ilişki kurma, sivil toplum kuruluşları kaynaklarına dayanarak, bu çalışmada organizasyonların diyalog-temelli iletişim teorisindeki ilişki kurma prensiplerini ne ölçüde uyguladıkları mercek altına alınmıştır. Bu amaçla ve araştırma hedefleri doğrultusunda, iki bağımsız çalışma yapılmıştır. Konunun farklı açılarından sonuçlara ulaşmak için, nitel ve nicel araştırma beraber yöntemleri uygulanmıştır. Bu gibi bir yöntemsel beraberlik önemlidir çünkü kullanıcı kaynaklı içeriğin oluşturduğu dinamik platformlar hem mesaj seviyesinde hem de kuruluş seviyesindeki bir analize ihtiyaç duyarlar. Bu sebeple, bu çalışmada araştırma tasarımı çoklu yöntem olarak belirlenmiştir.

Bu noktada, bu çalışma sivil toplum kuruluşlarının Facebook sayfalarını (n=3), mesajlarını (n=140) ve yorumlarını (n=3,569) 1 aylık sürede incelemiştir. Veri, içerik analizi yöntemi kullanılarak sistematik bir şekilde tanımlanmıştır. Bununla beraber, söz konusu sivil toplum kuruluşlarının iletişimden sorumlu çalışanları ile yarı-yapılandırılmış görüşmeler düzenlenmiştir ve böylece onların Facebook'u bir iletişim ve ilişki kurma aracı olarak nasıl kullandıkları mercek altına alınmıştır.

Sonuçlar göstermektedir ki, Facebook, temel paydaşlar ile stratejik ilişkiler kurmak açısından ciddi fırsatlar sunmasına rağmen, sivil toplum kuruluşları bu önemli şansı büyük ölçüde yakalayamamakta ve platformun sağladığı iki-yönlü iletişimin sunduğu olanaklardan faydalanamamaktadır. Bunun sebebi kuruluşların kullanıcılarla diyalog temelli bir etkileşimden mümkün olduğu ölçüde kaçınmalarıdır. Veriler göz önüne sermiştir ki, sağlık alanında çalışan sivil toplum kuruluşları Facebook'u büyük ölçüde

bir çevrimiçi broşür olarak kullanmaktadır. Facebook onlar için yalnızca ve büyük ölçüde kuruluşlarına ait etkinlik ve yardımlaşma kampanyalarını duyurmak için bir araçtır. Kullanıcılar tarafından gönderilen yorumların yanıtsız kaldığı ortaya çıkmıştır.

Bu çalışma dört ardıl bölümden oluşmaktadır. Giriş bölümü büyük ölçüde genel konu başlıklarını anlatılmıştır. Birinci bölüm sağlık, sağlık iletişimi disiplininin kaynak taramasını sunmuştur ve elektronik sağlık ve dijital sağlık gibi yeni iletişim teknolojilerinin sağlığa olan etkilerini inceleyen alanları incelemiştir. İkinci bölüm araştırma tasarımını, yöntemini ve kullanılacak araçları anlatmıştır. Bununla birlikte araştırmanın gücünden, kısıtlamalarından ve etik hususlardan bahsetmiştir. Üçüncü bölüm bulgular hakkında genel bir tartışma sunmuştur. Dördüncü bölüm ise, sosyal ağ sitelerinin olası alternatif kullanımlarından bahsederek, sivil toplum kuruluşlarının iletişim sorumlularına görüş ve öneriler sunmuştur. Bunu yapmaktaki temel amaç bu platformların etkin şekilde kullanımının önünü açmaktır.

Hasta-odaklı yeni nesil sağlık hizmeti modeli düşünüldüğünde, internet ve sosyal ağ siteleri sağlık hizmetinde yaygın olan eksiklikleri giderme potansiyeline sahiptir. Gelecekteki çalışmalar bunların etkili kullanımlarının önündeki engellerin kaldırılmasına ve farklı toplumsal katmanların üzerindeki etkisini arttırmak için önemli olabilecek faktörleri tanımlamaya odaklanmalıdır. Toplumla karşılıklı uzun-vadeli, güven-odaklı, karşılıklı fayda sağlamaya yönelik bir ilişki kurabilmek, sağlık iletişimi ana hatlarını arttırmak ile birlikte giderek çevrimiçi hale gelen tüm sağlık hizmeti süreçlerinin iyileştirilmesine yol açacaktır.

Sivil toplum kuruluşları Facebook'un sunduğu sayısız iletişim fırsatlarından diyalog oluşturmak için yararlanmadırlar. Kullanıcılar, quiz, oyunlar ve mesajlaşma gibi platformun sunduğu etkileşimsel içeriğe dâhil olmaları için yönlendirilmeli ve yüreklendirilmelidir. Soru yöneltmek ve geribildirimleri karşılamak sivil toplum kuruluşlarının öncelik listesinde olmalıdır. Sonuçlar göstermiştir ki geribildirim büyük oranda ihmal edilmiştir. Bunun pratik yahut etik açıdan doğru bir seçim olmadığı açıktır. Unutulmamalıdır ki bilgi anlamında boş bırakılan alan pek çoğu zaman bilimsel doğruluktan uzak kaynaklar tarafından doldurulma tehlikesi ile karşı karşıyadır. Yönetimsel bir perspektiften bakıldığında, gelişmekte olan bir ülke olarak Türkiye, dijital sağlık alanının sunduğu ve onu işleyebilmek için gerekli olan Büyük Veri bakış açısını teknik anlamda edinmelidir. Bu, kurumların, akademinin ve yatırım perspektifinin bir arada düşünüldüğü bir ortaklaşma iradesiyle mümkündür. Birtakım yönetimsel öneriler şu şekilde sıralanabilir: dijital sistemler aracılığıyla sağlık okuryazarlığının arttırılması ve sağlık davranış değişikliğinin hedeflenmesi, sağlık hizmeti sağlayıcılarının dijital hizmet ve araçları benimsemesinin amaçlanması. Bununla birlikte, sağlık sigorta firmalarının risk değerlendirilmesinin yeniden oluşturulması, mobil sağlık fırsatlarının entegre edilmesi de buna eklenmiştir. İnsanların sağlık hizmetine erişmelerinde ve sağlıklı olmalarında bu sayılanların etkisi olacaktır.

Anahtar sözcükler: Facebook, diyalog-temelli iletişim, sosyal ağ siteleri, sivil toplum kuruluşları ve stratejik iletişim

INTRODUCTION

Wired for Health: Social Networking Sites for Health Care

Technological advancements pervade almost all aspects of human interactions. Health, as a key social activity and a practice of human right, is no exception. From the outset of the 21st century, while life expectancy increases due to advances in medicine and introduction of more sophisticated, tech-based health care methods, the burden of rapidly growing elder population and chronic diseases is dramatically increasing worldwide, which eventually lead to an extended period of disability and medical dependency before death.

With the advances in treatment technologies, behavioral and social aspects are proved to be significant behind many chronic diseases, premature deaths or non-communicable illnesses in both developed and developing countries. It is estimated that up to one-half of all deaths in the United States were due to behavioral risk factors such as poor diet, alcohol misuse, tobacco addiction or physical inactivity (Neuhauser and Kreps, 2003). In similar fashion, a crude calculation suggests that each year approximately 2.6 million years could have been saved in Wales and England by adjusting health behavior (Owen et al., 2012). An analysis also shows that cancer-related deaths could be decreased by 60 percent if early screening recommendations should have been pursued (Willett, Colditz and Mueller, 1996). When it comes to the actual cost of behavioral risk factors, picture is getting even darker. In the UK, for example, clear estimates of the financial load during the year 2006-2007 are as follows: £5.8 billion for inadequate diet-related costs, £5.1 billion for obesity costs and £3.3 billion for tobacco use related health problems (Scarborough et al., 2011).

The economic and social burden of these risks has ushered many developed countries to prioritize their public health goals with a more deliberate outlook. Thus, the strategic turn to curate public health messages, as part of a comprehensive communication strategy, by health organizations through communication mediums has marked a new style of health communication. Also, as being aware of massive care expenditure, many developed countries have begun to reframe current health care system, aligning their public health policies with neoliberal restructuring that requires acknowledging a much more market-oriented and profit-driven health care. By doing this, the state has

become no longer the only service provider, but it turned out as a player – a significant one, in a complex picture of health industry, including private hospitals, health insurance companies, medical firms and pharmaceutical companies.

Developing countries are facing these difficulties head on, as they have more exposed to dire effects of globalization such as inequitable trade, irresponsible marketing, arbitrary urbanization and environmental degradation. Remarkably, power asymmetry in global world order has made such deeply rooted disparities even worse for a rapidly aging, underdeveloped populations with a limited key infrastructure and inadequate funding for medical research. Relevant data suggests under the age 60, the death rate from non-communicable diseases is 29% in developing countries, while the same rate is 13% in developed countries (WHO, 2011: 1).

As a semi-periphery country, Turkey is also dealing with the issue of epidemiological and demographic changes as part of its nation-wide healthcare management. According to the Chronic Diseases and Risk Factors Survey Report, a cross sectional study carried out by the Health Ministry (Public Health Agency of Turkey, 2013), the prevalence of diseases which are highly associated with life style choices of Turkish population is increasing with age. The forecast suggests that 71% of all deaths are due to chronic diseases and the overall burden on the healthcare system will remain to grow. This eventually means that this burden jeopardizes the sustainability of care system (Akalın, Durusu-Tanrıöver, and Sayran, 2012: 21). Thus, the need to employ preventive care methods seems urgent.

However, the expenditure-based analysis is only part of the story. An additional, and rapidly growing, phenomenon is the personalized medicine which may refer involving people to tailor medical treatment proactively, to customize the healthcare they received and enable population to monitor their health on a regular basis without being required to any hospital visit. The motive, here, is to encourage people to maintain the quality or state of being healthy and extend the wellness condition as long as possible. Clearly, one can observe that there is an emerging trend *of self-care*, rather than health care, where the individual is located at the center and assumed to have the greatest control over her own health. This responsibility-shift to individuals can only be facilitated to the degree that communication technologies are available to them.

In the last two decades, we have seen tremendous changes in the way we live, consume and do business. Social networking sites, as a subset of social media, have enabled people to do things that were hitherto seen impossible. If this study had been written in the beginning of millennium, the tone would have been mesmerized. But, we somehow got used to the incredible pace of this technology. The age of digital technologies, which rely upon the convergence of bits and atoms, bring the abundance of information influx. Now more than ever, data is simply everywhere, and is networked through a continuous communication with things, people and processes. Researchers at Google and Yahoo!, popular web-based browsers, working on ebb and flow of influenza cases by tracking the searches of related words, which usually suits well with the CDC[1] data (Lucas, 2009; Watts, 2011: 193). Internet of Things (IoT) is leveraging new opportunities to many industries including health care by automating connections between multitude of things and devices. A smart wearable bracelet, let's say, can track medical information from a patient, then signals would be delivered to the nearest clinic if an urgency occurs.

There is an emerging literature delving into the dynamic relationship between human health and social networks. Emphasizing greatly on interconnectedness, arising mostly out of globalization debate, reflects the understanding of spreading some sort of diseases or predicting adoption of specific health behaviors such as eating skills, inactivity or tobacco use. Many researchers posit behavioral aspect of health through learning in a given social context as a result of composite of human interaction and of relationship with immediate environment (Ajzen and Fishbein, 1980; Bandura, 1986). For example, Christakis and Fowler (2007) find out that spread of obesity has been largely occurred through social ties of friendship, instead of gene transferring. They notice that if a person became obese in a given period of time, the likelihood of his or her immediate friend following the suit is 171% (ibid.: 376). What Barabasi (2007: 405) called is the *networked medicine* where network-based thinking has a role to play in understanding complex nature of diseases and their cures.

As a discipline, health communication has emerged out of overlapping scholar motives to positioning communication in processes of and relation to the public health outcomes. As a vibrant discipline and an applied behavioral research area, it tackles

[1] Central for Disease Control and Prevention is the leading national health agency in the United States of America.

with a diverse set of questions with respect to provision of health care, promotion of public health and disease prevention. It also provides insights into quality and sustainability of care while touching upon almost all aspect of communication areas including patient-physician communication, mass media and public health campaigns, and digital communication technologies, and lastly, methodological advances in social science inquiry. (Kreps, Bonaguro, and Query Jr., 1998) Such work is believed to be significant in understanding the root causes of diverse issues such as mortality rates, health accession, pain management (Wright et al., 2008). A widely shared view today is that the discipline has borne out from and started to flourish in North America from the beginning of 1970, and it has been institutionalized with the formation of *Therapeutic Communication,* a focus-group under International Communication Association, in 1972. The group was renamed then as *Health Communication* and welcomed by genuine interests of wide range of communication scholars all around the world. The increasing demand toward the discipline eventually led academic institutions to involve specific health communication degrees and undergraduate and graduate courses into their programs in the mid-1990s (Schiavo, 2014).

There exists a broad literature which proposes nuanced perspectives to health communication. The book *Health Communication: Theory and Practice* published in 1984 by Kreps and Thornton was one of the early work in the literature. Thomas's *Health Communication* (2007), Thompson et al.'s (2003) *Handbook of Health Communication* and *The Handbook of Global Health Communication* by Obregon and Waisbord (2012) are important work in delineating the theoretical lines of the discipline. Foucault's (1963) *The Birth of the clinic: An Archeology of Medical Perception* was phenomenal with respect of examining the historicity of discursive analysis of health and illness, drawing upon the field of medical sociology. His concept *medicalization* is significant in understanding legal and medical control over body and its relationship between risk and discipline. Analogously, Parrott's (2009) *Talking About Health: Why Communication Matters* offers a stimulating debate on a range of issues including social, economic and psychological factors where health is intersected. *Health Communication in the 21st Century* by Wrights et al. (2008), *Health Communication from Theory and Practice* by Schiavo (2014) reflect upon both theoretical approaches and practical applications. Kreps and Thornton (1993) provide case studies which represent practical applications within the field in their book called *Perspectives on Health Communication*. Likewise, a growing body of research is

designed to address the impact of new communication technologies on health processes. The researches which straddle the fields of communication and health technology are *Healthcare and the Effect of Technology* by Kabene et al. (2010), *Health Communication in the New Media Landscape* by Parker and Thorson (2009), *The Internet and Health Communication: Experiences and Expectations* by Rice and Katz (2001).

In Turkey, health communication is an ever-evolving discipline[2]. Although the history of health promotion campaigns has been dated back to the very first years of the foundation of Turkish Republic (Özkaya, 2016), the theoretical research on health communication as a distinct area from the discipline of public relations began in the late 1990s (Tabak, 1999). Since the interest in media effects has driven research on significant elements of health communication processes, the earlier works have been addressing the issues such as public advocacy and relations. In this respect, Çınarlı (2008) was the pioneer conducting the first dissertation in 2004 on the topic titled "The Impact of Social Marketing, Media Advocacy and Public Relations as Health Communication's Methods on Health Promotion", which has turned out a book in 2008 titled *Sağlık İletişimi ve Medya* (in English: Health Communication and Media). The study was also important regarding its emphasis to highlight the interdisciplinary nature of the field. The works by Okay (2009) and Ergin (2010) are descriptive studies and helpful for presenting alternative cases. Sezgin (2011) investigated content of health-related news in a popular daily by employing discourse analysis, and found out that communication methods should be used more effectively in order to reach public health goals in Turkey.

In recent years, the use of social media for health-related purposes has become integral part of the public health debate for many reasons:

1. The cost of health education and health literacy has dramatically diminished due to open-to-all and cost-free nature of social media

2. The *relationality* principle which social media based on allows people to engage in health dialogue

[2] For an extended discussion, see Okay (2009) and Sezgin (2011).

3. The feedback mechanisms which enable stakeholders to measure their impact are crucial regarding communicative aspects

4. The impact of message dissemination could be higher due to capability of diverse media usage (such as pictures, videos, gifs etc.) than conventional media methods.

Thus, the inception of web 2.0 technologies and subsequently, of digital tools and platforms help generate a new set of research questions and models in Turkey as well. The following studies are collectively address the use of such technologies for health outcomes in Turkey; on mobile health (Doğanyiğit and Yılmaz, 2015; Sezgin, Özkan-Yıldırım, and Yıldırım, 2016; Tezcan, 2016); on telemedicine (Aydoğdu, 2011); on the impact of social media on physician-patient communication (Yılmaz, 2011); on social networking sites (Yılmaz, 2016).

There is also an academic interest in teaching and publishing in the field, especially through university circles. Though quite few in numbers, there exists dedicated issues on communication journals. For example, the third special issue of *GSÜ İletişim Dergisi* (Galatasaray University Journal of Communication) was published in 2013 with the theme of "Health Communication." This issue consists of important studies focusing on topics such as ideology, television and health (Atabek, Atabek and Bilge, 2013); violence in health-related institutions (Çınarlı and Yücel, 2013); health campaigns and social marketing (Mumcu, Köksal, and Şişman, 2013); health literacy (Sezgin, 2013); patient, health information and the Internet (Yılmaz, 2013); strategic usage of social media in health communication (Öztürk and Öymen, 2013); men's magazines and the image of healthy man (Erdoğan, 2013); right to health and media (Şen, 2013).

Given the capability of reaching the audience and seemingly limitless information, nonprofit organizations may have great potential in providing health-related service, increasing outreach and establishing relations with key stakeholders through social media (Stone, 2009). Such services could include, but not limited to, the care provision resulting in behavior change, or maintenance of medical information and support. In this respect, examining health nonprofits might be an intriguing research of study in understanding the impact of social media. Another reason that social media is a strategic resource for nonprofits can be that social media tools and applications are

available to use for marketing efforts for any organizations with limited budget and human capacity like nonprofits. Due to high volume of adoption of the Internet and web 2.0 technologies, the digital footprints nonprofits leave behind may provide important insights for future research as well. Indeed, a quick browse on search engines might come up with various posts focusing on effective usage of social networking sites by nonprofits. Despite widespread adoption, very little research has been conducted on SNS use by health nonprofits in Turkey. A study conducted by Öztürk and Öymen (2013) on the use of Facebook and Twitter by nonprofits working on cardiovascular health in Turkey belongs to the one of the first attempts within the field. Although its results are promising, there is a need to extend the research by including other type of nonprofits. So, by employing dialogic model, the objective of this study is to understand how effective health nonprofits utilize SNS in Turkey in order to raise their voice, recruit volunteers and spread awareness. Previous studies investigated the presence of dialogic features on nonprofits' social media presence (Waters et al., 2014). The researcher aims to find out Turkey's nonprofits' potential to use SNS for engaging stakeholders. Online content analysis will be used as a methodology. Also, semi-structured interviews with the communication specialists will be conducted as a supportive inquiry. The social networking site chosen for this work is Facebook due to its massive popularity. This study will investigate the Facebook pages of KAYD, TOFD and LÖSEV, and it will draw on dialogic communication theory, that is, the prime attempt is to measure to what extent the communication with the target audience is dialogic.

This research is intended to open up a space about nonprofits and SNS. A focus on Facebook and examining how third sector organizations are using the platform to create awareness on the cause and build relationships with supporters will guide fellow nonprofits.

Moreover, the literature on social networks, online learning behavior and behavioral change demonstrates the effects of SNS on patients and care givers would be mediated by online support. As Rieder posits (2013), digital data allows researchers to make culture-related interpretations regarding personal networks. Therefore, it would be safe to say that the institutional culture of any nonprofits can come out from its digital presence, i.e. Facebook page.

Overview of the study

This study aims to better understand how nonprofit organizations in Turkey are using Facebook from the perspective of dialogical communication theory. Based on the literature on nonprofits, online relationship building, dialogical communication theory and SNS analysis, this study investigates following research questions:

RQ1. How do nonprofits use Facebook in contacting with their key stakeholders?

RQ2. How are nonprofits incorporating relationship development strategies into Facebook presence?

RQ3. Is there a relationship between the size of nonprofit and the likeliness to use dialogic principles?

RQ4. What barriers and benefits do nonprofits face in using Facebook to strategically engage with their stakeholders (i.e, target audience, public authorities and fellow nonprofits)?

This dissertation consists of four subsequent chapters. The introduction mainly discusses the general topics. Chapter 1 represents a narrative review of the literature on health, health communication, and discuss the effect of new technologies on health such as eHealth or digital health. Chapter 2 outlines overall rationale, research design and elucidates the methodology used. It also touches upon strengths, limitations, as well as ethical considerations arise which are specific to the research design. Chapter 3 provides a general discussion of findings. Chapter 4 develops discussion on alternative ways of SNS usage, and provides a projection and recommendations of nonprofits' communication practitioners that can enable themselves to enjoy with full advantages of these sites.

CHAPTER 1

CONCEPTUAL FRAMEWORK

1.1 Health Communication in the 21st Century

Communication plays a fundamental role in processes of all human interactions. The area of public health is the key element of it. So, the least attention to communication procedures is becoming canon when addressing complex health issues. Recently, the field of health communication has been garnering increased attention given the growing recognition of the role that communication plays in enhancing health promotion, adopting healthy behavior and disease prevention.

In this section, I conceptualize key terms such as health, health communication, e-health to help contextualize my approach to the study of health nonprofits' use of Facebook. In doing so, I appreciate the diversity of perspectives that abounds.

Thus, this section will address three basic questions. First, I will try to give a complete theoretical picture of the field of health communication. Second, I will touch up on the digitalization of health sector and the respective impact of new information platforms on healthcare. And then, I will critically examine pros and cons about *being healthy* in the era of digitalization.

1.1.1 Defining Concepts and Perspectives

To better understand the opportunities and challenges of health communication, an appreciation of the concept of health is necessary. There are at least three approaches that speak to the locus of health: the medical model, World Health Organization model and the cultural model. Each approach offers significant explanations of health and illness:

Medical Model

Medical model assumes health as the absence of disease and, more specifically, the absence of physical symptoms and signs associated with illness. As Freund and McGuire explain:

> "The medical model assumes a clear dichotomy between the mind and the body; physical diseases are presumed to be located within the body. As a result, biomedicine tries to understand and treat the body in isolation from other aspects of the person inhabiting it… This physical reductionism excludes social, psychological and behavioral dimensions of illness. One result is that medicine 'sees' disease as localized in the individual body." (1995: 6)

Although this model had been privileged for the past four centuries in western medicine, more sophisticated definitions of health have emerged with the development of alternative diagnosis.

WHO Model

According to World Health Organization (1946), "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." Such an encompassing definition has at its core a focus on the holistic understanding of health and well-being, which refers to the need for a balanced interaction among different physical, medical, psychological, social, and lifestyle-related factors. Similarly, Jonas and colleagues (2007: 3) describe health as "a state characterized by anatomical, physiological and psychological integrity, ability to perform personally valued family, work, and community roles; ability to deal with physical, biological, psychological and social stress; a feeling of well-being; and freedom from the risk of disease and untimely death", a definition put forth by International Epidemiological Association. In the case of *Healthy People 2010*, the official public health agenda of the U.S. federal government, health is considered instrumental to biology, personal behaviors and physical and social environment (U.S. Department of Health and Human Services, 2000).

Cultural Model

Cultural perspective focuses on the collective experience of health, as opposed to individual understanding of it. Broadly construed, this approach describes health as a paradigm of reciprocal connections of ethnic, religious, socioeconomic, and age-related factors upon the body, mind and society. Thus, healthy behavior, according to this model, is heavily influenced by a number of social and individual elements. For

example, a research by Mokhtar and others (2001: 888) that focused on etiology of obesity in North Africa, investigating cultural norms of behaviors and beauty, shows how obesity is still being viewed as a sign of high social status, fertility and prosperity especially among undereducated women. In the Western world, on the contrary, overweight is associated with poor life standards and nutrition choices, sometimes even serious poverty. Health is also defined as the state of complete wellbeing which may be linked to the desire to live a balanced life with positive and constructive feelings (Tabak, 2000: 1).

Within such diverse perspectives, discursive meaning of health and illness become continuously redefined at individual and societal level through the various communication patterns and practices. Thus, health communication as a discipline, eventually, draw on those models and disciplines which based on the dynamic nature of the meanings of health.

It is accepted that the term 'health communication' was first used in North America (Okay, 2012: 10). As Çınarlı noted (2008: 41), health communication as a scholarly discipline has emerged in the United States of America in the second half of 1970s. The Cancer Information Service, a multi-sited program designed by the National Cancer Institute as part of a much greater effort to further scientific research on cancer prevention and treatment, titled as the National Cancer Act of 1971, was organized to inform all parties of cancer, including scientists, patients, physicians and other health practitioners. Scientific recognition to the term has been received when Health Communication Division was founded in the International Communication Association (Freimuth and Quinn, 2004). In a similar fashion, Rogers (1994: 208-209) points that health communication was developed with a joint effort by cardiologists and communication specialists who have worked on Stanford Health Disease Prevention Program (SHDPP), a dedicated program for prevention of cardiovascular diseases. The program appeared to be quite successful, so it extended throughout 1980s. Thus, it can be said that health communication has grown as a deliberate response to public health challenges spanned societies with the aim of creating awareness and consciousness.

As discipline is becoming matured, the conceptual definitions of the term have flourished. Indeed, health communication is a critical and evolving concept in light of

the growing trend among public health and the nonprofit and commercial sectors. Acknowledging the true meaning of health communication, and enabling it to operationalize in effective contexts is increasingly important, and may help health practitioners, care providers and other medical professionals navigate the complex medical care system, especially their pre-service training period. Rogers (1996: 15) briefly defines health communication as any type of human communication whose content is concerned with health. In a similar vein, Kreps et al. (1998: 1) point out the pervasiveness of communication in creating, gathering and sharing health information. The emphasis of these accounts, indeed, is on *health-related exchange* between relevant parties. There is a close link between the selection sources for health-related information gathering and being health-oriented or not. Dutta-Bergman (2009) states that health-oriented individuals prefer to reach information primarily through sources such as face to face interaction, printed material and Internet-based intercourse while main sources are traditional audio visual media for the individuals without a health-oriented approach. It is important here to note that the former implies a proactive personality, and the latter a passive one.

Also, there is a substantial body of literature to show that health communication is the strategy to use of communication techniques and tactics in order to inform and influence individuals, population and organization regarding their health choice (Hanson et al., 2008; Freimuth, Cole, and Kirby, 2000: 475; Maibach and Holtgrave, 1995: 219-220; Smith and Hornick, 1999). However, health communication is much more than mere information-sharing between players in health area. A more systematic attempt to define health communication made by Schiavo in her seminal work titled *Health Communication: From Theory to Practice* (2014: 8-9). In this consecutive work[3], she digs the communication literature to gather health communication definitions in the field by paying attention to their distinguishable attributes. Based on the keywords used in those definitions, she makes a unique classification according to the emphasized characteristics of the definition of health communication which i) inform and influence (individual and community) decisions; ii) motivates individuals and key groups; iii) changes behavior and achieves social and behavioral results; iv) increases knowledge and understanding of health-related issues; v) empowers people; vi) exchange, interchange of information, two-way dialogue; vii) engages.

[3] The first version of the book was published in 2007. The second version includes alternative theoretical models, case studies and insights regarding health such as new media, urban health, health equity etc.

In line with this classification, Schiavo produces a comprehensive definition of the concept. That is, health communication is a multifaceted and multidisciplinary approach to reach different audiences and share health-related information with the goal of influencing, engaging, and supporting individuals, communities, health professionals, special groups, policymakers and the public to champion, introduce, adopt, or sustain a behavior, practice, or policy that will ultimately improve health outcomes (ibid.: 9). For the purpose of this study, Shiavo's definition will be addressed as a conceptual departure point.

Another important attribute of defining health communication is the breadth of the topic. The scope of communication practice is highly broad, as Parrott so aptly put "health communication covers a broad range of topics, including disease control and prevention, emergency preparedness and response, injury and violence prevention, environmental health, and workplace safety and health. Health promotion activities at the national level reflect a developmental life-span perspective, focusing on adolescent health, aging and elderly health, bone health, breastfeeding, men's health, women's health, school health, minority health, and reproductive health (2004: 751-752).

Health communication, as a discipline and an applied area of research, was born out of scholarly interest in issues located at the intersection of information, individual decision-making, and collective health behaviors. As numerous scholars have noted, health communication draws multiple disciplines, including health education, marketing, social marketing, information, individual decision-making, and health behaviors, anthropology, psychology (Obregon and Waisbord, 2012: 13).

The published literature contains many studies on the level of analysis in the field of communication. These studies tend to classify the methods of communication, broadly, as intrapersonal, interpersonal, organizational, group and mass/societal (Corcoran, 2007: 8; Kreps, Bonaguro, and Query, 1998: 2-3; McLeroy et al., 1988; Street, 2003). When applied to the field of health communication, intrapersonal level of analysis could be analyzed as examining communication from mental and psychological processes such as knowledge, attitude, self-concept, beliefs and values regarding health (Burton and Dimbleby, 1995; McQuail, 1987). Interpersonal health communication, on the other hand, refers to whole body of interaction of at least two participants (Berry, 2007: 11). This can include provider/consumer relationship,

dyadic provision of health education and therapeutic interaction and the exchange of relevant information in health care interviews (Kreps, Bonaguro, and Query, 1998: 2). Interventions such as family support network programs and peer support groups, for instance, to promote healthy behaviors can be examined at this level of analysis (Obregon and Waisbord, 2012). Indeed, messages, as the key unit of analysis, can be carried out through both verbal and non-verbal ways of interactions (Burgoon and Hooble, 2002).

At organizational level of analysis, communication mediums are used within formal organizations via institutional networks (Parker and Thorson, 2009) in the form of, for example, lectures, seminars, debates, meetings, memos, intranets, newsletters, workshops and displays (Corcoran, 2007: 9). An example of this way of communication could be a company that crafts health messages at the workplace for its employees to adoption of healthy behaviors. According to Kreps et al., group health communication inquiry examines the role communication performs in the interdependent coordination of members of collectives, such as health care teams, support groups, ethics committees, and families, as these group members share relevant health information for making important health care decisions (Kreps, Bonaguro, and Query; 1998:2). Lastly, health information communicated at the societal level through mass medium and news outlets such as print, visual and electronic channels (Corcoran, 2007: 8-9; Kreps, Bonaguro, and Query; 1998: 2-3). By definition, mass communication is large scale, and it may have much great impact to influence public opinion and to promote attitude and behavioral change toward better health outcomes. The success of mass communication, according to Berry, will depend on the message reaching the target audience and being interpreted and applied appropriately (Berry, 2007: 25).

Applied health communication research is a very crucial area, and it's been a pressing need to rediscover its importance. Truly, researchers have long attempted to identify and track the impact of communication to measure the success of healthcare processes (ibid., 2007; Macario et al., 2011). Roughly speaking, health communication may be well used to organize provider-patient interaction, coordinate the activities of interdependent health care providers, encourage the use of more efficient clinical practices, administer complex and multi-sectoral health care delivery systems (Schiavo, 2014: 24) which ultimately bring large impact on people's lives for the better

health, empowering them while saving time and money (du Pré, 2010). Given the fact that human behavior has significant effect on preventable disease, behavioral risk reduction became a robust factor of public health outreach.

The education is key while addressing a complex set of health management issues. In Turkey, for example, health communication courses are rarely employed by universities. Given the crucial position of the discipline has, health communication and health promotion courses should be on priority list for not only medicine faculties but also any institutions which give instructions on health (Sezgin, 2011: 108). Surely, this is necessary not only for improving public health, but also developing academic studies which intersect between health and society.

Indeed, Yıldırım-Becerikli (2013: 26) differentiates two research paths in Turkey's health communication literature according to their main focus: Interpersonal relations and mass communication instruments. Interpersonal relations, as a reference point, is mainly about doctor-patient communication. And mass communication refers either to health campaigns or representation of health-related topics on media. Based on this distinction, the author also shows that the number of dissertations written on health communication has increased in Turkey between 2002 and 2012. While she found only one dissertation written 2002 and no dissertation until 2008, 13 dissertations were written from 2010 to 2012. Therefore, 2000s can be considered as the baby-steps of health communication.

Surely, the focus central to this is the provision of relevant health information to promote public health. As Johnson (1997) suggests effective communication enables patients and providers of health care to collect relevant information that guides them regarding significant health risks and support them identify strategies for avoiding and answering to those risks. The advent of the Internet and proliferation of digital communication technologies have expanded the tools available to communicate on health and revolutionized the way people interact with health information. The next section will discuss more the theoretical perspective of public health in the digital era.

1.1.2 Rethinking Public Health in Digital Era

A number of things have to be sorted out in order to rethink public health in digital era. The first of these is: for specifically which 'public' should the rethinking be done?

The rapid growth of the Internet and unprecedented scale of new communication technologies have led social practices to become heavily digitized to a level inconceivable to early-20th-century citizens – later dubbed 'prosumers'. This interconnectedness based on or catalyzed by wireless networks has radically altered the way we communicate, collaborate and coordinate across all segments of human practices. "In 2000, roughly 740 million people owned mobile phones. By 2011, there were nearly 6 billion mobile phone subscribers, or 85 phones for every 100 people on the planet" (Zuckerman, 2013:53). In a similar vein, the access to broadband Internet has increased dramatically. The global penetration rate was estimated at 40 percent, including the following regional estimates.[4] When it comes to healthcare, it would not be wrong to say that the hype around digitalization has proved itself. The surge in use of digital technology has been simply dizzying.

The Internet has become an increasingly important medium for individuals (Kayhan, 2013: 268), the health profession and the health industry, by providing new tools for extending care into the daily lives of families and communities. Adoption of the Internet for seeking health information quickly became norm in diverse group of population (Walther, 1996; Pandolfini, Impicciatore, and Bonati, 2000). "Health information seekers on net have exponentially increased from 54 million in 1998 to 110 million (in U.S. figures) in 2012 and are ever increasing. 80% of adult Internet users have searched for at least one of the 16 major health topics online" (Taylor cited in Akerkar and Bichile, 2004: 120). As Goldsmith (2000: 151) puts, "seeking health information online is one of the top reasons why people log onto the Internet. In doing so, consumers are bypassing both the health care delivery and health insurance systems and seeking the information they need to frame their interaction with both systems."[5] A large body of health communication literature has demonstrated that the Internet helps bridge the gap in the patient-doctor relationship (Ball and Lillis, 2001: 2; Moon, 2005: 78) by challenging a rapidly approaching parity of knowledge between the public and health providers.

Patients are no longer merely passive recipient of information in the making of their health outcomes. Rather, the purposive and deliberate seeking of information by

[4] Internet World Stats News. Downloaded from the Internet at http://www.internetworldstats.com (Access date: 04.04.2017).

[5] Risk and Dzenowagis (2001) found that ninety-percent of American primary-care physicians have used the Internet.

patients and their immediate caregivers transforms the traditional paternalistic patient-provider relationship into a balanced power play (Ball and Lillis, 2001). The newly-empowered, computer-literate public actively use Internet and digital tools to search medical topics without exerting much effort.[6] As Morahan-Martin deliberately puts that patients can now search for expert information that would otherwise be difficult if not impossible to obtain for no or little cost, at their convenience, 24/7 (Morahan-Martin, 2004: 498). According to Moon (2005: 137), one reason for patients' use of the Internet is the limited time for consultation: "Given that doctors are under pressure to see more patients in a given time, the Internet is an alternative for consumers to educate themselves on their health concerns."

Using the Internet for medical knowledge offers prime advantages for acknowledging alternative therapies as well. For instance, medical providers are using Web 2.0 portal to disseminate health information and educate patients (Nordqvist et al., 2009), researchers are conducting web-based intervention to change health behaviors (Stoddard et al., 2005; Simon-Arndt, Hurtado, and Patriarca-Troyk, 2006; Whitten, Buis, and Love, 2007), and patients are pursuing online support groups (Tanis, 2008; Ancker et al., 2009). Diaz et al. (2002: 183) found that patients were seeking information on a wide variety of topics, including treatment side effects, second opinions, complementary or alternative medicines, and specific diagnoses. Also, Mittman and Caine (1999: 18) suggests that information can equip consumers to lead healthier lifestyles, detect potential medical problems early, work more collaboratively with (their provider) to treat illness, and learn of effective treatments that a local provider may not have access to.

The second intellectual avenue for us to rethink public health in digital age is the presence of a growing literature examining the role of behavioral factors in health promotion and disease prevention. As discussed a great deal in the health communication literature, a large body of epidemiological research during 20th century proved the high correlation between leading causes of death and preventive health behaviors such as smoking, poor diet, physical inactivity, and high blood pressure. (McGinnis and Foege, 1993; Colditz et al., 1996; Willett, Colditz, and Mueller, 1996).

[6] For a comprehensive analysis of using Google for accessing health information, see Jennifer P. D'Auria (2012) "Googling for Health Information", **Journal of Pediatric Healthcare,** 26: e21-e23.

As illustrated below, there is already an increasing trend in mortality caused by preventable health decisions in years.

Table 1.1 Actual Causes of Death in the United States, 1990 and 2000

Actual Cause	**Number of Deaths (%*) in 1990**	**Number of Deaths (%*) in 2000**
Tobacco	400,000 (19)	435,000 (18.1)
Poor diet and physical inactivity	300,000 (14)	400,000 (16,6)
Alcohol consumption	100,000 (5)	85,000 (3.5)
Microbial agents	90,000 (4)	75,000 (3.1)
Toxic agents	60,000 (3)	55,000 (2.3)
Motor vehicle	25,000 (1)	43,000 (1.8)
Firearms	35,000 (2)	29,000 (1.2)
Sexual behavior	30,000 (1)	20,000 (0.8)
Illicit drug use	20,000 (<1)	17,000 (0.7)
Total	1,060,000 (50)	1,158,000 (48.2)

Source: Mokdad et al. (2004)

Given the changing demographics and rapidly aging population, behavioral factors have emerged as an increasingly significant factor as the cost of health care becoming bothersome even for developed countries. For example, in the USA, chronic and lifestyle diseases such as cancer, heart disease and diabetes account for the large majority of health care costs, with 86 percent of all health care spending in 2010 on people with one or more chronic medical conditions. (Koeppl and Robertson, 2015: 2) As a result, health care policies worldwide encourage citizens to take greater control over their own health. Examples vary as the US Healthy People 2010 Report, the Canadian Framework for Health and the World Health Organization's report on Health Promotion: Milestones on the Road to a Global Alliance.

Now more than ever, patients are in the center of healthcare. As Servaes and Malikhao (2009: 42) point, the international agreement such as the Declaration of Alma Ata (1978) and the Ottawa Charter (1986) representing a sea change that helped transform healthcare system to an increased participatory and empowerment-based approach from a hospital-based care approach. They argue that later developments helped encourage the population to be proactive its choice of healthy lifestyles and participative in its management of personal care by giving patients an active role in decision-making process (Kassirer, 2000) Echoing neoliberal states' understanding of

public rights, the emphasis must therefore be on *selfcare*, rather than on healthcare per se.

Solidifying and enriching the field of health care in digital era, a couple of new terms have been coined. At this point, I continue to conceptualize theoretical extensions of public health in the era of digital communication technologies. Throughout the next section, I will critically discuss these concepts upon their promises to healthier lifestyles.

The history of medical assistance across distance through telecommunication technologies and electronic information has dated back to the first introduction of electronic devices such as telegraphy, telephony, radio and television. Despite the debate over the first official usage, the term *telemedicine*[7], according to Jordanova (2010: 39), could be attributed to Einthoven who has published a paper on *telecardiology* in 1906. Until then, telemedicine has been used as a method to encompass advanced communication technologies for clinical care that permits remote consultations for the direct benefit of patients. (Strehle and Shabde, 2006; Turner, 2003) Roughly speaking, telemedicine can be classified in two areas (WHO, 2010: 10):

1. Between health professionals (teleradiology, telepathology, teleoncology etc.)

2. Between patient and health professional (homecare, telehealth, teleconsultations etc.)

The primary objective of telemedicine applications which are formed through data, voice and image transformation between health institutions is to be able to obtain experts' opinion from major institutions to secondary and tertiary institutions which lacks specialists. Indeed, it offers a plethora of health-related applications included such as "patient care, training, research, administration, and public health to diagnose, provide care, transmit health information, examine X-rays, provide services, and train health professionals." (Matusitz & Breen, 2007: 74) Given the advances in software and wireless technology, nowadays telemedicine may provide opportunities for many not only for remote health care but also for preventive medicine through monitoring

[7] This word is a combination of two Greek words τήλε = tele - meaning "at a distance" and "medicina" or "ars medicina" meaning "healing".

people by using wearable or implanted sensors in an effort to spot diseases at an early stage.[8] It is believed that healthcare delivery in home helps eliminate redundant workload and irrelevant costs in diverse hospital settings. Additionally, it also eventually may preserve the patients' independence.

Beginning in the 1980s, a number of new methods of communication were flourished with the use of computers and digital media tools. Health sector is one of the area convenient to adoption of communication technology. Yet, few, if any, advancements in recent decades have more deeply transformed health domain than the emergence of eHealth. There are various competing definitions to describe eHealth in the literature, each emphasizing different parts of its dynamic nature of application. One reason of this conceptual affluence could be the attempt to distinguish it from telemedicine. Jordanova (2010: 39) classifies this attempt as follows:

> "For many authors telemedicine and e-health are synonyms [..] Others accept that e-health is a broader term and includes telemedicine. A third group of authors separate both expressions, acknowledging that telemedicine incorporates telecardiology, teleradiology, telepathology, teleophthalmology, teledermatology, telesurgery, telenursing, etc., while e-health comprises e-Santé, information and communication technologies in health (ICTHealth), all types of health communication services, patient information systems, e-education, e-prescription, etc."

Similarly, Eng (2001: 1) defines eHealth as "the use of emerging information and communication technology, especially the Internet, to improve or enable health and health care" U.S. Department of Health and Human Services (2006: xi) discusses a similar definition of it as "eHealth is a broad term for the heterogeneous and evolving digital resources and practices that support health and health care". These particular definitions of eHealth, and many others, are exceedingly broad. Eysenbach (2001) reviewed the extensive literature and arrived at the following definition, which is also relevant for this study.

> "eHealth is an emerging field in the intersection of medical informatics, public health and business, referring to health services and

[8] "Telemedicine Comes Home," **Economist,** June 5, 2008, www.economist.com/node/11482580.

information delivered through the Internet and related technologies. In a broader sense, the term characterizes not only a technical development, but also a state-of-mind, a way of thinking, an attitude, and a commitment for networked, global thinking, to improve health care locally, regionally, and worldwide by using information and communication technology."

Table 1.2 Definitions of other tech-driven health care concepts

Terms	Definitions
Mobile Health (mHealth)	"mHealth defined as medical and public health practice supported by mobile devices, such as mobile phones, patient monitoring devices, personal digital assistants (PDAs), and other wireless devices." (WHO, 2011: 6)
Consumer Health Informatics	"the branch of medical informatics that analyzes consumers' needs for information; studies and implements methods of making information accessible to consumers; and models and integrates consumers' preferences into medical information systems" (Eysenbach, 2000: 1713)
Interactive Health Communication	"Interactive Health Communication (IHC) is the interaction of an individual - consumer, patient, caregiver, or professional - with or through an electronic device or communication technology to access or transmit health information or receive guidance and support on a health-related issue." (Murray et al., 2005: 2)
Interactive Health Communication Applications	"The operational software programs or modules that interface with the end user. This includes health information and support web sites and clinical decision-support and risk assessment software (which may or may not be online), but does not include applications that focus exclusively on administrative, financial, or clinical data, such as electronic medical records, dedicated clinical telemedicine applications or clinical decision-support systems for providers." (Eng et al., 1999: 10)
Medical Internet of Things (mIoT)	"IoT describes a system where items in the physical world, and sensors within or attached to these items, are connected to the Internet via wireless and wired Internet connections.…In the healthcare industry, IoT can help a hospital track the location of

	everything from wheelchairs to cardiac defibrillators to surgeons."[9]
New Media (for health)	"New media—defined as those media that are based on the use of digital technologies, such as the Internet, computer games, mobile phones, and digital television— are seen as potentially valuable tools for implementing public health communication campaigns." (Abroms, Schiavo, and Lefebvre, 2008: 3).
Computer-mediated health communication	"CMC media refers to computer-based systems that allow individuals to communicate with others" (Rice et al., 1990) on health care programs such as telemedicine, patient support groups or patient-provider communication."

As mentioned above, numerous other terms and definitions are being used to describe tech-based approach to health and health care. Table 1.2 aims to represent a clear picture of this vast literature.

Major advantages of using eHealth applications have been noted by many scholars in the field. Apart from the ease of access to information, which discussed above, there are numerous benefits of eHealth. First of all, they argue that eHealth offers diverse communication techniques which enable people to make health behavior decisions in more efficient ways. Unlike the conventional way of health communication such as mass media campaigns, the use of computer-tailored information and customized health promotion materials can provide more relevant, and eventually more persuasive health interventions. (Bull, 2012; Kreps and Neuhauser, 2003)

Efficiency is another promise of eHealth. It has been argued that opportunities germane to eHealth can provide efficiency in healthcare by decreasing cost through resource-saving mechanisms such as "avoiding duplicative or unnecessary diagnostic or therapeutic interventions" (Eysenbach, 2001: e20) or "making transactions more efficient, reduce medication errors, and entice doctors to prescribe less expensive drugs."(Perrone, 2008) The term *interactivity* seems to serve as a generic "buzzword" in eHealth debate. It has been basically described as the "degree to which a communication technology can create a mediated environment in which participants can communicate (one-to-one, one-to-many, and many-to-many), both synchronously

[9] Please see the report online at http://www.cisco.com/c/dam/en_us/solutions/trends/iot/introduction_to_IoT_november.pdf

and asynchronously, and participate in reciprocal message exchanges"[10] (Kiousis, 2002: 372). This electronic exchange of information is particularly crucial in making health outcomes because it assumes to encourage of a new form of a relationship between patient and provider where clinical decisions are made in a much more balanced way thanks to the patients' active role (Kassirer, 2000). So, is it still legit to call the patient as *patient as we know it?* Tom Ferguson urges us not to do. He proposes "medical end user" instead of patient (2002: 555-56), emphasizing the capability of "interpreting complex medical information" and the ability to "form sophisticated online and offline networks" of people who are dealing with health issues. Many other authors use different terms for patients. For example, Moon (2005: 80) discusses the empowerment of *consumers* "to make informed decisions and reduces their dependency on the physician".

The issue of anonymity is another touchstone in the eHealth discussion. Anonymity is basically described as the lack of ability of people to reveal someone's name or other personal information. This could be either in the form of social interaction such as an assembly of people or person-to-person interaction via the Internet. According to Hayne and Rice (1997: 432), the two forms of anonymity are technical and social anonymity. Technical anonymity refers such circumstances where there is no material signifier to reveal one's identity within an interaction. Sending messages without signature or name can be a basic example of this. On the other hand, social anonymity describes the situations that people do not identify others or oneself because of the lack of cues to utilize to attribute an identity to them. In other words, being *socially anonymous* have something to do more with someone's perception. Given the sensitiveness of health issues, the chance of remain incognito might be especially crucial for people who feel ashamed about the very situation they face or tries to deal with severe health conditions such as substance abuse or AIDS. The anonymity that the Internet and digital communication might provide empowerment and safety, eliminating stereotype-based judgements toward patient (Tanis, 2008: 703). It is definitely helpful when patients feel their situation is stigmatized in society they live.

[10] The emphasis on *communicability* on the web recalls Michael Strangelove's statement in Putnam's prominent Bowling Alone: "The Internet is not about technology, it is not about information, it's about communication…The Internet is a community of chronic communicators." (quoted in Putnam, 2000: 171)

Not only between patient and provider, eHealth may offer opportunities for peer patients or caregivers. As Darrell and Miller suggest (2009: 2) "digital communications allow people with rare diseases to find others who suffer from the same disorders and to learn from their experiences." According to Kreps and Neuhauser (2010: 330), eHealth improves interactivity. "The vast array of eHealth technologies and applications including interactive websites, web portals, telehealth applications, e-mail, voice recognition, online communities, gaming, and many others are rapidly challenging the old, linear "expert message sender to receiver" approach. EHealth communication enhances the user's control of information searching, initiating connections with health providers, and linking with others in online spaces."

Another issue central to the eHealth debate is the claim that it has the power to enhance the quality of care. As several authors point out, communication technologies empower patients by allowing them to reach different providers or specialists in distance (West and Miller, 2009; Eysenbach, 2001) as in the form of second opinion. This may facilitate access to the best methods of certain therapies or disease management programs.

Not surprisingly, eHealth applications are welcomed by researchers in the field. From the outset, eHealth has received an ample amount of attention, both in health industry as well as among health communication scholars because of number of reasons such as automated data collection, flexibility and modifiability. Thus, the extent to which researchers have focused on data should come as no surprise.

Previous studies have long attempted to pursue eHealth applications to measure its efficiency and affordability. For example, a study conducted in Portugal shows that users of the Internet for health-related purposes considered it as their most crucial source of medical information (Santana, 2009). There are scientific investigations showing patients welcome the use of information and communication technologies (ICTs), having much more finely grained control over their own medical experiences. (Eysenbach and Köhler, 2002) In similar fashion, Akesson and his colleagues (2007) documented reports of patients using eHealth applications, noted that those receiving computer-tailored messages feel more confident, healthier, and more likely to build trust-based relationship with their health providers. Cotton and Gupta (2004) reported

that people who use the web as a source of health information are more likely to stay healthy and happy than those who only use conventional way to acquire knowledge.

Fox et al. (2000) reports that half of the people those who do web search align their diet to what they see on the Internet. This may help us to better understand the potential of the Internet as a knowledge arsenal. Online social platforms, as sub-set of social media, are becoming much popular because they allow users to communicate interactively. For example, the recent years witnessed a myriad of social networking platforms such as Sermo, Doximity and QuantiaMD where physicians exchange information and experience. As Kevin Pho once states "social media is where the future is, and most importantly, that's where our patients are going to be."[11] Additionally, social support through social media use improve one's health and wellbeing. It is founded that 40% of people with severe health problems are using Facebook for social support which increase self-efficacy (Van Uden-Kraan et al., 2009). Social media data can also be a potential epidemiological source to capture risky health behavior or to estimate epidemics through online networks.

Despite all of those, the above-mentioned discussion should not direct us an extreme version of techno-optimism. Technology is not intrinsically good or bad. So, the next section will reflect a critical stance towards technology's positive influence on healthcare.

1.1.3 Are We Becoming Healthier?

Communicating about health is so deeply woven into dynamics of daily life. Our everyday interactions with each other about health-related topics have a significant role to play in our emotional and physical well-being. In a simple clinical environment, our relationship with physicians and other health professionals may end up having deep – sometimes intimate – conversations that eventually reach through our family health history, our addictions, our very private records or specific details embedded in our health insurance coverage. Sometimes, we find ourselves challenged to make sense of casual conversations with friends and families that contradict with guidance from physicians we've visited, an advice from a health expert who regularly talks on TV or a book by that prominent doctor whom we read recently. So, we feel we need to know

[11] For more information please check www.kevinmd.com

more, explore more and experience more about alternative ways of what makes us and our beloved ones healthy. Previous sections have granted a concrete introduction to the potentials of the Internet and digital communication technologies for this purpose, and generally, their capacity to dramatically reshape the healthcare delivery. Yet, critiques envision that this may not give the ultimate picture of what technology does to ourselves, our health. So, this section will focus on this – so-called impotent, slightly unequal and even uncorroborated side of health technology. While it deliberately aims to understand whether it is possible, reliable and sustainable to hope for a magic wand to make everyone healthier.

One skeptical view regarding eHealth and medical technologies is that their allegedly dehumanizing effect. The computer-mediated healthcare, long the purview of techno-skeptics, is seen as a critical step, rejecting the view that technology always brings better health outcomes. It is argued that (Hughes-Evans, 1993: 82-83) the use of technology in medical care increases the social distance between the patient and the doctor, and may create more impersonal encounters. Such criticism likely to suggest that electronic medicine should focus more on the quality of patient care, rather than focusing on high-tech machines. The published literature contains many studies suggesting that physical exam, let's say, with an ordinary stethoscope or "doctor touch" is still anticipated by patients far beyond cold data of evidence-based medicine such as M.R.I.s, angiograms or PET scanners. (Ofri, 2010: 2) That need for human touch, in turn, is believed to be determining factor in nourishing the trust between the doctor and the patient (Yılmaz, 2011: 20). The emphasis on trust also proves the findings of studies that highlight that patients who rely on electronic consultation worry about the quality of care they would receive. (Sciamanna et al., 2002) Perhaps a middle ground can be established between relying too much on high-tech medical medicine and insisting stubbornly on conservative methods of care.

The access to the Internet affordable to all has been accepted as one of the fundamental human rights in modern world (Rice and Katz, 2001). Since it is evident that adoption of information and communication technologies (ICT) is a significant measure to market efficiency, that it promotes financial opportunities and encourages social participation as well. Thus, it is plausible to argue that the technology facilitates and foretells economic growth by expanding repertoires of actions and practices in all human settings. So, is this game going to be played between equals? Research says no.

Despite the adoption of the Internet has spread quickly and widely, the notion of *availability to all* remains questionable. Principally, the gap between those who have access to the Internet and those who do not have constitutes the pivotal element for digital divide. In a similar vein, reflecting on eHealth debate aims to understand whether it holds the promise to sustain the same pace of healthcare development throughout the world. In essence, for a balanced eHealth development requires the balanced growth of ICT. Yet, literature suggests that the Internet penetration is still a socially stratified experience depends on gender, age, race, ethnicity, education, household income and geographic place, global lingua-franca proficiency and cognitive ability. For example, Kolko, Nakamura, and Rodman (2000) and Nakamuro (2008) found that racial digital disparity remains prevalent. Economic status and age are other determining measures in access to the Internet and medical software. It is likely that people who have lower income and who are older less able to utilize ICTs. Comparing to urban or suburban ones, rural residents are less likely to own broadband at home (Collins and Wellman, 2010).

Truly, digital divide or information gap is such a complex social phenomenon, and it is not as easy as binary yes/no access question. To clarify the fundamental question of access, one must look at the defining elements of it. Van Dijck (1999) describes four types of obstacles to access.

i. *Mental access* defines the absence of experience led by computer-phobia or the lack of attraction toward technology or tech-related issues.

ii. *Material access* describes the lack of technical materials such as computers, connection substructures and network operating systems.

iii. *Skill access* refers those circumstances in which people often lack or have limited education, technical capabilities or social assistance that are not sufficient for establishing access.

iv. *Usage access* implies the affordability of the access, regarding the limit and costs of usage.

This classification may be helpful when measuring the impact of pre-existing inequalities regarding the adoption of such technologies. According to Rainie and Wellman (2012: 76), those circumstances also have the potential to result in a

boomerang effect. They argued that disparities in skilled use of digital tools can exacerbate existing inequalities for people who are traditionally considered have nots, since income or education attainment are highly correlated with internet skills.

In fact, the access does not matter by itself – instead, the quality and speed of the access do. Rains (2008: 283-284) argues that the principal divide essentially occurs between those who have broadband connectivity[12] and those who have conventional dial-up connection. Clearly, his research demonstrated that people who are younger, city-dwellers, and have high-level income and education are more likely to have high-speed connectivity, in turn, they have greater tendency to enjoy it for health-related purposes. So, this brings us a very important challenge. With cyber medicine depends on widespread deployment of broadband access and the extensive use of the Internet, there are significant barriers to match the needs and potentials (Goldsmith, 2000: 153). Despairingly enough, those who are the urgent need of those information such as patients with preventable diseases are in the ones least likely to access to those technologies (Eng et al., 1998). Adopting from Tudor Hart's concept of inverse care law[13] (1971), it is likely that acquisition of online health care such as health information is particularly hard for those who would need it most. That's to say, for instance, elderly people who use health services extensively and needs remote caregiving should have been engaged with broadband access. Otherwise, that power asymmetry in accessing to the Internet remains highly questionable for an effective health communication, that is, for a sustainable and equitable healthcare provision.

A related challenge can be seen associated with the quality of knowledge because of anonymous nature of the Internet. In considering the integration of medicine technology into our lives, we need to embrace the quality of information on the Internet. Several studies have shown that the issue of credibility has reached beyond a very critical level that patients, when online, usually confront with misleading claims or inaccurate, noisy information about their health-driven questions. (Bierman et al., 2000; Berland et al., 2001) The behavioral factors on learning has seen its fair share of the Internet influence. A recent work (Rowlands et al., 2008) found that while web

[12] The delivery of broadband connectivity is a brand new service which enables an advanced version of telecommunications activities, and it's been currently deployed through cable modems and digital subscriber lines (DSL). This is simply a network that offers transfer rates 200 kilobits per second (Kpbs) in at least one direction. (Crandall, Hahn and Tardiff, 2002: 295)

[13] Hart's inverse care law states that the high-quality medical care tends to vary inversely with the need for it in the population served. (1971: 405-412)

searching, people do not actually read with what they came across on the web. They, research suggests, throw a cursory glance at headlines, skim few sentences or making "power browse" through titles, avoiding cognitive effort needed for reading in the traditional sense. This, the authors conclude, eventually result in highly questionable evaluation of the information in terms of its relevancy, accuracy or authority. Indeed, it is hardly possible to discern true information from trivial one (Morahan-Martin and Anderson, 2000) because of decentralized and non-hierarchical structure of the virtual space. In order to emphasize the importance of high-quality knowledge, the public officials warned against "the possible harm from inaccurate information" found on the web in Healthy People 2010, compatible with the objectives of health communication (U.S. Department of Health and Human Services, 2000: 11-16) Unlike traditional modes of knowledge production, the lack of fact-checking mechanism or any editorial process eventually undermine the accountability of contributors on the Internet (Ayonrinde, 1998; Lindberg and Humphreys, 1998) Counter to the expectation of techno-celebratory discourse, the Internet does not always empower the patients. Instead, there are barriers and risks for many to acquire online health information. To overcome these difficulties, the need for health literacy seems urgent (Çınarlı and Yılmaz, 2007).

Health literacy as a concept was first used by S.K. Simonds in 1974, and in Turkey, Sezgin (2013) made a detailed investigation of the field. Although health literacy is not new, the sources necessary to become informed have dramatically changed in the last couple of years. By definition, health literacy is described as a combination of cognitive and social skills that can trigger potentials and capabilities of individuals to have access to, acknowledge and utilize health information in order to enhance their health status and wellbeing (WHO, 1998: 10) Low health literacy is a prevalent problem for almost all countries in the world, independent from their development levels (Kutner, Greenberg, and Baer, 2005), and an extensive body of research exists that demonstrate the link between low health literacy and inadequate knowledge on medical treatment (Council on Scientific Affairs, 1999). Parrott (2009: 118) states, in her canonical book *Talking About Health* that basic level of geometry and algebra is a must for all to numerically understand what is written on drugs, clinical documents and cognitive skills to make sense of patterns and relationship between things related to health. If these are not required, she elaborately puts, the profit is there to fill the gap. Given the sensitivity of medical knowledge, it should be therefore clear that health

illiteracy can cause morbidity, mortality and unnecessary healthcare costs. (Bernhardt and Cameron; 2003: 587) With the emergence of broad adoption of the ICTs and digital networks for health-driven purposes, computer literacy has been considered among the requisite skills.

Changing role of the state in neo-liberal era left a vacuum in healthcare provision to all in equal terms. This gap has begun to be filled by both profit-seeking and nonprofit actors. With the arrival of digital technologies and the increased access to the Internet, nonprofits organizations no longer face financial and technical constraints. They enjoy free access to communication mediums, and have strengthened their hands against for-profit companies.

1.2 Nonprofit Organizations and SNSs

The World Wide Web (WWW) connects people to share opinion and knowledge, search for information and discuss issues that are relevant to them. The networked public, then, constitutes globally wired communities in which knowledge, goods and values transferred in an unprecedented speed. It is evident that understanding the true nature of social networking sites requires the undertaking of the appropriate meaning of network.

The study of networks and networked systems has been popular since 2000s, drawing on the long and complex tradition of network analysis in social sciences, and of graph theories of discrete mathematics. Indeed, the revealing nomenclature that accounts for both qualitative and quantitative attributions of a network is *graph* in mathematics.[14] Whereas, each *node* of a network, depicts as an *actor* or *agents* (in sociology) connected by lines (or *edges*) which display some form of relationship or social ties between them (Borgatti and Foster, 2003). Agents can be everything including individuals, concept or teams. The *degree* of a node is based on the number of edges connected to it and a *strength* is defined by total weight of the edges (Porter, Onnela, and Mucha, 2009). The absence of ties is basically described as structural hole.

[14] Note that Jeff Rothschild, the vice president of technology, calls Facebook as “social graph” (Zeichick, 2008).

Basically, network analysis helps us “to understand the pattern and content of the interactions that takes place within and between social units” (Nelson, 1989: 380) and it takes social interactions as complex combinations of nodes and ties.

In order to understand the flow of information and influence in a given network, research on social ties could be illuminating. Granovetter’s thesis of weak ties (1973) has been important in many respects. In his seminal work, Granovetter asks a basic question: How people do find jobs? One could have argued that people like family members or intimate friends are more likely to help us finding a new job. Yet, counter to expectations, he argues that supportive relationship with acquaintances, rather than close friends, provide people more novel news, i.e. finding a position. He argues that the structure of social network in a given society are maintained largely by those weak ties, since they are more inclined to bridge knowledge gaps. In a similar vein, media sociologist, Manuel Castells (2000: 500), posits that networks “constitute the new social morphology of our societies”, thereby constituting the core element of modern society. So, in Castell’s vocabulary, the term “network society” refers to unbounded human interaction based on “weak ties” in a rapidly changing environment.

The rising affordability of computers worldwide and flourishing of electronic dataset have enabled a vast range of researchers from diverse disciplines to revisit some fundamental questions on human social ties or rethink about their contested answers regarding them, and developed new theories of social interactions and structures. As Internet sociologists Boyd and Ellison put, social network sites are defined as a web-based services that enable individuals (i) to construct a public or semi-public profile, (ii) to gather a list of other users with whom they engaged, (iii) to view their connections and those made by others. (boyd and Ellison, 2008: 211) In other words, SNSs such as Facebook allows us to network with our existing social ties. Indeed, Boyd and Ellison use “social network site” because their research shows that the main drive for participating in Facebook is derived from conservation and improvement of already established ties, instead of “networking”, which implies the introduction of new interactions online. This also resonates with Lenhart and Madden’s (2007) conceptualization that emphasize the feature of social networking sites seek to connect with people whom we know from offline realm, differentiating them from online dating sites. The table below intends to show the applications and types of social media based on the literature.

Table 1.3 Classification of Social Media Tools

	Types of Social Media
Mangold and Faulds (2009: 358)	Examples of social media: i) Social Networking Sites (MySpace, Facebook, Faceparty) ii) Creativity works sharing sites - Video sharing sites (Youtube) - Photo sharing sites (Flickr) - Music sharing sites (Jamendo.com) - Content sharing combined with assistance (Piczo.com) - General intellectual property sharing sites (Creative Commons) iii) User sponsored blogs iv) Company-sponsored websites/blogs v) Company-sponsored cause/help sites (Dove's Campaign for Real Beauty, click2quit.com) vi) Invitation-only social networks (ASmallWorld.net) vii) Business networking sites (LinkedIn) viii) Collaborative websites (Wikipedia) ix) Virtual worlds (Second Life) x) Commerce communities (eBay, Amazon.com, Craig's List, iStockphoto, Threadless.com) xi) Podcasts ("For Immediate Release: The Hobson and Holtz Report") xii) News delivery sites (Current TV) xiii) Educational materials sharing (MIT OpenCourseWare, MERLOT) xiv) Open Source Software communities (Mozilla's spreadfirefox.com, Linux.org) xv) Social bookmarking sites allowing users to recommend online news stories, music, videos, etc. (Digg, del.icio.us, Newsvine, Mixx it, Reddit)
Kaplan and Haenlein (2010)	i.) Collaborative Projects ii.) Blogs iii.) Content Communities iv.) Social Networking Sites v.) Virtual Game Words vi.) Virtual Social Worlds.

Acknowledging its ample potential of usages and styles, this thesis will employ the concept of "social networking sites" to describe social media platforms, especially Facebook. As Table 1.3 shows the classification of connection differs in each site. There are a myriad number of social media tools, providing an online platform for a broad range of purposes and practices. Since the introduction of *sixdegrees.com* in 1997, similar sites mushroomed into tens of thousands. There are also social networking sites that have specific geographic, ethnic or religious orientations such as Orkut, CyWorld (Mendelson and Papacharissi, 2011: 253). From their inception in the late 1990s, social networking sites (SNSs) have become an inevitable part of our

everyday lives. In a sense, they became extensions of ourselves, our 'real' life. Emphasizing their inseparable nature, Karppi (2014), for example, shows how difficult for one to disconnect from a popular SNS, such as Facebook. In a similar vein, Van Dijck (2013) talks about a sort of a clandestine social pressure that makes people stay connected on the site at the end, especially teenagers, who don't want to miss anything of vigorous social life.

Amidst of this new challenge, there is a popular debate of whether SNSs are fundamentally novel communication tools or they are just another channel to communicate. Researchers from the first camp focus on the role of the social networking sites as tools by which civic engagement is bolstered through robust online speech, horizontal participation and decentralized information flow. They argued that SNSs drastically altered the cost of interaction and increased the repertoire of possible actions. Given the unprecedented scale of usage, many believe that existence of an organization, let's say, depends to a large extent its performance on virtual sphere. Contrary to this, there are critiques stating that SNSs are neither novel nor effective tool, emphasizing the hype around their participatory and democratizing attributions. (Denyer, Parry, and Flowers, 2011)

SNSs were considered by many to be crucial for reporting on the ground during disasters[15], mass emergencies[16], political protests[17] and elections[18] worldwide. They have, at least allegedly, appeared as prominent actors in digitally fueled social changes across the world, such as *Arab Spring*, *Occupy Movement* or *Indignados*.

[15] In May 2008 Chinese earthquake, Twitter was quicker than USGS (US Geological Survey) in disseminating the information about the world's largest natural disaster in recent history. (Li and Rao, 2010) For critical analysis of the role of Twitter under an emergency situation, see the work of Mendoza, Poblete, and Castillo (2010) which explores the users' behavior and fact-checking mechanisms during the 2010 Chilean earthquake. For a comprehensive understanding of using social networking sites during emergencies, see Vieweg et al., 2010; Hoover, 2011; Yates and Paquette, 2011; Mersham, 2010.

[16] There are many academic researches that formulate social media as an effective crisis management tool during mass emergencies. For pioneering works, see Briones et al., 2011; Jewitt, 2009; and Schultz et al., 2011 that conducted one of the first experiments in examining the effects of using SNSs in crisis communication.

[17] Numerous case studies suggest social networks are increasingly effective in all levels of political mobilization process such as campaigning, coordination of protests and dissemination and discussion of the news. (Kavanaugh et al., 2005; Della Porta and Mosca 2007; Bennett, 2008)

[18] Candidates and voters have used SNSs actively in a diverse range of elections around the world. See the case studies of the 2010 Swedish election (Larsson and Moe, 2011), the 2010 UK elections, 2012 presidential USA election and the 2013 Italian elections.

As digital communication technologies have been utilized more broadly, many academic disciplines launched to focus its effects on social lives.

Literature suggests that organizations that heavily utilize SNSs in marketing, branding and self-presentation on virtual world can improve their service satisfaction, organizational innovation capabilities and operational promptness (Kaplan and Haenlein, 2010; Standing and Kiniti, 2011; Berthon et al., 2012) Companies are long aware of this fact, recruiting social media experts in their public relations team and allocating budget for digital expenditure. Nonprofits are also seeking professional or volunteer expertise to keep the track of digital era. The next discussion will elaborate more on this.

1.2.1 Adoption of technology in the nonprofit sector

Although nonprofits, the key third sector agents, may profoundly differ in terms of their expanse, origin, scope, financial resources, activities and the type of audience, there are common attributes to be shared by these organizations. Apart from few, densely-networked, globally-spanned nonprofits such as Doctors Without Borders, Oxfam, the majority of organizations are small-sized, community-based. In most cases, they are self-governing bodies that are able to operate independently. Additionally, nonprofits are typically member-driven communities which gather around common concerns and causes such as environmental issue, child care, water protection or disabled rights etc. Interaction with volunteers, donors, supporters and the media are extremely crucial for them to strengthen the organizational trust and to broad their membership base, thereby the organization can amplify its financial, volunteer and advocacy volume with the aim of generating more social good. For this reason, along with the profit-seeking companies and government agencies, non-profit organizations are also using the Internet, social networking platforms and other digital communication opportunities. According to *2017 Global NGO Online Technology Report* based on a research health among 4,908 nonprofits from 153 countries, the subject of health and safety constitutes 11.2% of total causes of nonprofits' online technology usage worldwide. Similarly, in Europe, 11% of causes are occupied by health and safety.[19]

[19] Please see http://www.techreport.ngo/english/2017report.pdf for the details.

Results from various prior research point out that although the use of Web 1.0, primarily websites, in nonprofit sector increases exponentially, there was surely inefficiency and incompetence to benefit from its full potential in realizing the organizations' missions (Saxton, Guo, and Brown, 2007; Kent, Taylor, and White, 2003). Perhaps this was due to their limited financial capabilities, the lack of know-how and finite resources for technical infrastructure. Many nonprofits, in this position, utilize in-house resources to launch and maintain their websites or mailing groups, as they lack interactive features which eventually seems nothing but *online brochures*. Therefore, nonprofits have been usually lagged behind from others in their adaptation into the new technologies (Jamieson, 2000).

Yet, with the advent of social media and networking sites, it seemed that this did not last longer. There is a growing literature presenting the potentials of the SNSs for organizations. The social networking sites like Facebook and micro blogging tools like Twitter may help organizations; (i) to further their relationship with volunteers and donors to better mobilize them, (ii) to recruit others in the wider community, (iii) to boost their management functions, (iv) to educate the greater community about their cause, and to inform regarding programs and services (v) to streamline the conversation between stakeholders (vi) to retrieve data to assess the impact of outreach endeavors (vii) to enhance accountability and trust (viii) to enhance their fundraising efforts (Waters et al., 2009; Rybalko and Seltzer, 2010; Saxton and Waters, 2014; Lovejoy and Saxton, 2012; Saxton and Guo, 2011) *2017 Global NGO Online Technology Report* indicates that 92% of global nonprofits have a Facebook page. This rate increases to 96% for European nonprofits.[20]

Another important promise of the online networked platforms, according to Kenix (2008), is to empower nonprofits toward conventional mass media which twists their motives or polarizes agendas. They, newly wired with interactions with their base, now could verify the information from their own accounts if necessary. Unlike traditional modes of communication, individuals in social network platforms can interactively reach knowledge, exchange it with their fellows for relatively no cost. Any organization, big or small, can open up an account on these platforms for free, and start to raise the cause to a wider audience base.

[20] See http://www.techreport.ngo/english/2017report.pdf

To many, social interaction technologies are welcomed to a great extent by third sector (Porter and Sallot, 2005). They adopt new technologies such as web-based fundraising with a great ease and comfort. One can argue that this is a survival act for nonprofits. Corder (2001), for instance, suggests that the social media use of stakeholders might increase the possibility of utilizing interactive technologies by the nonprofits.

One of the most iconic example of this, of course, is KONY 2012, the social media campaign launched by the US-based nonprofit called Invisible Children aiming to raise public awareness to the atrocities perpetrated by Joseph Kony's Lords Resistance Army (LRA) and particularly their use of child soldiers in Uganda, Central Africa. Soon after the video's release on Youtube, the story quickly went viral, having tremendously been shared across a various of online platforms. The phenomenal success of this video has captured the attention of broadcast and print media, making the issue open to vast public debate. Being the fastest-growing online humanitarian campaign of all times, KONY 2012 is a mere example of how social media can be used to build consciousness and connections between like-minded people and institutions.

Another one is the "Ice Bucket Challenge", a charity campaign dedicated to raise awareness for amyotrophic lateral sclerosis, aka A.L.S, took social media by storm in summer of 2014. The 'challenge' is a simple, yet enjoyable one: Film yourself dumping a bucket of water over your head, post it on Facebook or Instagram, and then challenge your friends to do the same thing in a day or donate $100 to the Amyotraophic Lateral Sclerosis (ALS) Association for further research on disease. Many did both, despite the critics of *slacktivism* – a term for social media activism, often derogatorily, refers to the online campaigns that give people an illusion of making a change on a social phenomenon just by clicking, yet do actually nothing to make this change (Morozov, 2009). More than 1.2 million videos have been shared on Facebook during a two-month period. Celebrities like Mark Zuckerbeg, Bill Gates have joined the viral promptly, and the ALS Association announced total amount of donation reached 115m$, making possible to develop a research program, and to discover a specific gene, called NEK1, which tied to ALS cases. The campaign was phenomenal in many ways in which nonprofits could benefit massive amount of influence and popularity from social media, mainly social networking sites.

1.2.2 Facebook in the Agenda: Online Health Communities

Social relationships play an integral role in the development of certain health outcomes. The relationship between social networks and health behavior has been documented within different theoretical foci. For example, in social cognitive theory, Albert Bandura (1986) proposes that people learn from others, they obtain and maintain certain behavioral patterns by simply observing other people. Given the fact that human health is a social product and heavily influenced by health outcomes of an immediate environment, many studies have begun to consider the network effect on health such as role modelling. Likewise, the theory of reasoned action developed by Ajzen and Fishbein (1980) envisions that individuals' belief systems regarding the desirability of a specific health action is an important factor to understand behavioral intentions. Other theoretical frameworks include but not limited to group norms (Christiakis and Fowler, 2007), homophily (McPherson, Smith-Lovin, and Cook, 2001) and diffusion of innovation (Rogers, 2003) and all have examined the impact of networks on member behaviors. Certain health behaviors like obesity, excessive alcohol use, smoking and drug addiction are in fact associated with social ties and this depends the very idea behind social influence in a given environment: *similarity nurtures connection.* As discussed in the first section, Christiakis and Fowler (2007) state that a person has more chance to be become obese if he or she has an obese friend. The same authors examined the clusters of smokers and nonsmokers and found out that smokers are more inclined to develop social ties with other smokers and nonsmokers are the same with other nonsmokers, with few interactions between those clusters.

With the advent of the Internet and digital communication platforms, the networked effect on health has become increasingly revisited research interest. Since online and offline networks are profoundly different from each other, online social networks brought additional dimensions to our understanding on networked health. First and foremost, online social networks are not constrained by geography or simply, any physical constraints that may be relevant for the formation of offline networks. This eventually effects the size of a network. Additionally, online networks are conducive to diverse in terms of ethnicity, age or gender. Therefore, increasingly networked online population offers significant insights about dynamics of networks, peer influence and health outcomes. So, the following part focuses on Facebook, it aims to

discuss communication conventions the site offered and its ability to form community on a specific topic.

Established in early 2004, only open to Harvard students and recent alumni at first, Facebook now claims 1.86 billion monthly active users worldwide who produce thousands of posts in almost every 60 seconds.[21] After Google and YouTube, Facebook is the third-most-visited web site around the world.[22] As of this writing, Facebook is still the primary focus and the most popular social networking site in the world. It emerged as a social network tool for a distinct college, yet it rapidly turned into as an online identity (Cassidy, 2006) for diverse groups of global public. The widespread adoption of Facebook was mainly followed by the uptake of the service by a range of individuals and organizations including politicians, journalists, governments, celebrities, sports stars, corporations and nonprofits. The main goal of Facebook, as its CEO puts, is to give people to create and share content, thus creating a more interconnected world.[23] Here is the thing: It is nearly impossible for someone not having a Facebook account, if he or she has the Internet access. As often repeated, if Facebook were a country, it would be the most populous after China and India.

What makes Facebook unique and appealing as comparing with to other social networking sites is that it allows the use of applications that improve one's profile (boyd and Ellison, 2007) These applications include birthdays, games, gifts, check-ins, travels etc. The major objective of the applications is to enhance and multiply the interactions between profiles and to make them personalized. Additionally, there are plenty of third-party applications available on the web and mobile platforms. The veteran technology writer David Kirkpatrick states in his book, *The Facebook Effect,* that Facebook became a strategic power plant in digital communication technology that it is not possible for a modern individual or society to remain unaffected by (2010: 15).

Regarding communication conventions, there are many ways to diffuse information on Facebook. Since Facebook is about connecting, the information design of the platform made accordingly. The *wall,* one of the most popular feature of Facebook,

[21] Available on https://investor.fb.com/investor-news/press-release-details/2017/facebook-Reports-Fourth-Quarter-and-Full-Year-2016-Results/default.aspx
[22] Found on http://www.alexa.com/topsites/category
[23] Please see whole story on https://www.wired.com/2012/02/zuck-letter/

for example, allows users to publish posts which are visible to much wider public, thus encouraging to start conversations. Like blogs, posts are broadcasted in each user's page in reverse chronological sequence. At the top of each profile, there is special area called *status*, whereby empowering users to broadcast immediate updates to their chosen community. The *News Feed* is generated through a constantly-updating stream of posts which are searchable and available to anybody on friend list. A Facebook user can post messages, share photos and notes, videos and links, join groups or create fan pages. Through forming a group or page, the user can create event pages for organizations and disseminate them to her/his fans and followers. Each group has its own board in which members can comment or like. In 2013, with the aim of deepening the user engagement, Facebook launched its *the Graph Search* where users can do sophisticated searches about objects and individuals whom they browse for.

Unlike other social networking sites, 'friending' on Facebook necessitates a bidirectional interaction in which a user can befriend someone only if he or she accepts the friend request received. So, there is a technical requirement of reciprocity, although social expectation of such is not needed. Whereas unfriending someone on Facebook is bidirectional, and the platform does not notify the person who is defriended.

As of this writing, a Facebook user can use social buttons such as "like", "love", "haha", "thanksful", "sad", "angry" with a specific post, and can share or make a comment on it.[24] Tagging is another convention of Facebook. Similar to many other social networking sites, by tagging other individuals or profiles, user can identify a specific person or page, simply notifying them on its status, photos or videos. Tagging is useful for any relationship building purpose.

Authenticity, using real names and identities to register, is another key feature of Facebook. For many, this is what differentiates Facebook from other platforms. Yet, unlike others, Facebook does not allow a profile to be completely public. Moreover, users of Facebook can block other users so their profile cannot be seen by others or limit their profile content by configuring the privacy settings and review posts from other users just before they make them published. Although Facebook has many features which can be seen complicated at the first place, learning curve is relatively low for almost everyone accustomed to texting.

[24] As Richmond (2011) suggests social buttons are mere vehicles of Facebook advertising.

For Miller (2011: 217), Facebook's real success lies in its ability to reconstruct relationships with families and friends, which tends to be disregarded due to difficulties faced in modern human life. Due to the high volume of expansion, however, some critiques Facebook with the idea that it endangers face-to-face interaction, creating isolation on individual side. In reality, Facebook challenges us what we thought about friendship, and about questions of privacy, intimacy and distance.

It is clear that Facebook is learning and evolving. It is a social phenomenon of dynamic nature of social networking. Since the platform expands its registration to anyone in September 2006, the service was welcomed by not only English-speaking countries outside the USA, but also non-English speaking publics of many countries. As Kirkpatrick indicates Facebook is "the least American feeling of American services" (2010: 276). By 2017, Facebook is available in 101 languages, and it operates for people, organizations and nonprofits all around the world.

Regarding the effectiveness, globally surveyed nonprofits consider Facebook as he most effective social media tool with higher rates than Twitter and Instagram for their objectives. However, Facebook is still accepted less effective way of communication than e-mail updates, text-messaging or blogging. Comparing to other regions, for Europe, Facebook is still fruitful tool for outreach, comparing to Twitter and Instagram.[25]

The next section will zoom in Turkey, a country where Facebook is extremely popular and discusses the potential of health nonprofits' use of the service.

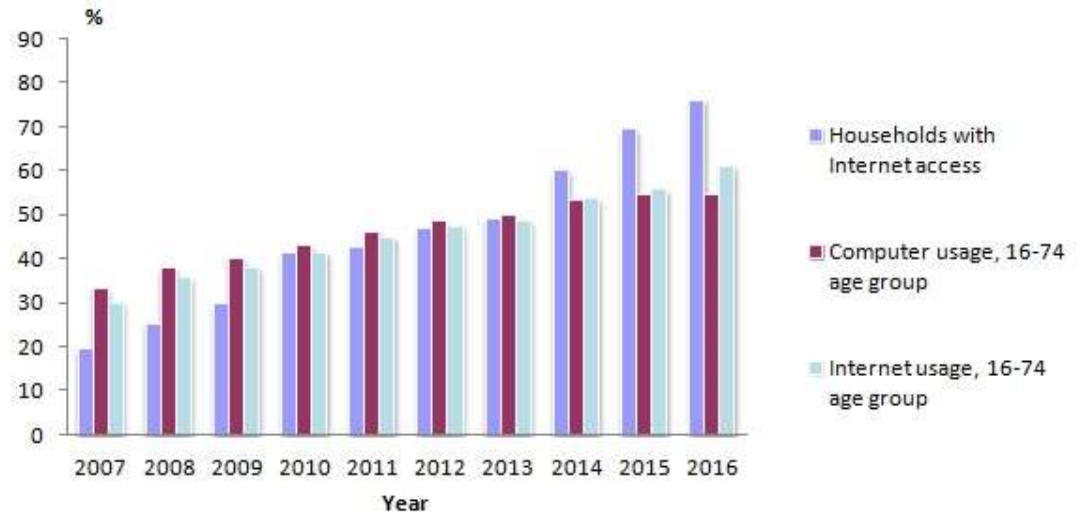
1.2.3 Navigating Facebook for Social Good: The Case of Turkey's Health NGOs

As a developing country with predominantly young population, Turkey's Internet engagement is still impressive, with the penetration rate reaching 58% of the population. In Turkey, 73.1% of household had access to the Internet. It is important to note that the Internet usage in the country has dramatically increased between 2000 and 2015, and risen from 2.9% to 59.6%. While there were 2 million Internet users by

[25] Please check http://www.techreport.ngo/english/2017report.pdf

2000, the number of Internet users became 46 million by 2015.[26] E-trade is promising for almost all sectors. Market is growing with a significant increase of consumer spending online. Recent report of the Economist has indicated Turkey as emerging market, with Russia and China, for in-country online commerce. The role of domestic Internet access is crucial in understanding this growth.

Figure 1.1 Main Indicators about Internet Usage, 2007-2016



Source: http://www.internetworldstats.com/euro/tr

Figure 1.1 shows the number of households with access to the Internet at home has gradually increased.

One of the strong indicator of Turkey's Internet usage is social media. Indeed, Turkish people have strong appetite for social media. According to *WeAreSocial*, the average number of hours that Turkish Internet users spend in online is 3:01. Social media, being the first reason of the Internet use for many Turks, are becoming the major tool to communicate. The recent inquiry done by Turkish Institute of Statistics indicates that by 2016, 82.4% of population used the Internet to join social networking sites. This followed by video-watching with the percent of 74.5; and by respectively reading news (69.5%), seeking health information (65.9%), obtaining information about specific goods and services (65.5%) and listening to music (63.7%).

[26] http://www.internetworldstats.com/euro/tr

It is estimated that there are 1.6 billion Facebook users all around the world by June 2016 with a penetration rate of 22.9%. It must be also noted that penetration rate has increased by 224.4% in the world between 2010 and 2016.[27]

In 53 European countries, there are approximately 615 million Internet users in total with a penetration rate of 73.9% by June 2016, and around 330 million Facebook users with a 39.5% penetration rate in same period.[28] Contrary to Europe, according to Derya Matraş, the head of Facebook Turkey, 97% of around 47 million Internet users in the country also has Facebook presence.[29] Additionally, most Facebook users in Turkey is belong to the age group of 18-24, meaning that the platform may be inseparable part of adolescence.

While the exact data is difficult to come by, it is suggested that more than there is a significant trend in Facebook adoption by elder people. The so-called colonization of Facebook by aging users may be resulted from the drive for being a part of a larger family, seeing posts and pictures of children and grandchildren. Given the high penetration and ease of use of the service, older people are another important user group on Facebook (Onat, 2010). This is also meaningful due to their excess free time and the desire for accessing to information, increasingly health-related subjects.

Given the high frequency of usage, Facebook is especially influential medium for nonprofits in Turkey to distribute information and engage with audience base. Few studies examine the use of Facebook by health nonprofits.

The review by Mendi (2015) view trends and types of current practices of Facebook campaigns which applied in the framework of health promotion in Turkey and around the world. The author concludes that the use of social media for health promotion purposes is proven to be very crucial, but it needs to be tailored upon the preferences, rechecked for accuracy and rescaled according to the size of the population. Likewise, Şener and Samur (2013) review health-related content on Facebook profiles in Turkey. Despite the frequent usage, the study finds out that the majority of information shared on Facebook lacks reliable sources. Moreover, the fair amount of posts include

[27] http://www.internetworldstats.com/facebook
[28] www.internetworldstats.com/europa2.htm
[29] Interview with Derya Matraş can be seen on http://www.hurriyetdailynews.com/turks-most-active-facebook-users.aspx?pageID=517&nID=104518&NewsCatID=374

advertisement about firms or cosmetic companies which have completely different interests regarding health information seekers. In their work, Samsunlu and Baş (2016) view the *Ice Bucket Challenge*, a viral Facebook campaign which focused on ALS disease and they found out the relationship between campaign outreach and demographic features. The analysis of the survey with 620 people show that demographic factors like gender, education level are crucial to participate in the campaign. Considering the extent of cases, one of the important studies belong to Öztürk and Öymen (2013)'s work on cardiac nonprofits. The nonprofits are analyzed through content analysis via their Facebook and Twitter profiles. The authors found out the presence of social media is significant for organizations, but they state that the platforms are not used effectively.

Campaigns can also be in the form of collaboration with companies. For example, in cooperation with *Eti Burçak*, the food company, World Wide Fund for Nature (WWF) Turkey launched a Facebook campaign[30] in order to call attention to the wheat production.

1.3 SNSs and Relationship Building

Over the past decade, the field of public relations has witnessed a clear theoretical shift from one-way communication to a multi-sited way of communicating. With the increasing digital communication technologies, one of the key functions of public relations is to build relationships. At the gist of this process, the relationship between organization and the audience is two-way communication. Applying dialogic communication with publics is a way of building relationships (Kent and Taylor, 2002). The study by Seltzer and Mitrook (2007) reveals that there is a gap between the use and functionality of blogs and the use of conventional web sites to stimulate dialogue and sustain relationships. They determined that blogs have more tendency to include dialogic elements, unlike static web sites.

1.3.1 Revisiting Model: Dialogic Communication Theory

Apparently, dialogic theory had become part of public relations before it became part of social networking sites. Kent and Taylor (2002: 22) investigated the prominence of dialogue in public relations, starting from its different meanings in theology,

[30] More information about the campaign can be found on http://bugdayolmasa.com/

psychology, communication and finally, in public relations. Citing from Grunig and White and also Heath, they distinguish two descriptions about dialogue in public relations: i) "communicating about issues with publics", ii) "debate" or "rhetorical dialogue". They also give emphasis on Pearson's pioneering work titled *A Theory of Public Relations Ethics* with regard to "the consideration of dialogue as a public relations theory". Based on this, one can see the close link between ethics and dialogue. Dialogue is, therefore, "a product rather than process" (Kent and Taylor, 1998; Kent and Taylor, 2002). It is a product that is connected to ethical concerns of the communicating organizations.

Martin Buber approached the concept of dialogue from a theological-philosophical perspective and developed an ethical understanding so-called *dialogic ethics* to interpret the interactions between individuals. He primarily classifies these interactions as *I-It* and *I-Thou* relationships. An I-It relationship is basically single-sided interaction where there is hardly few or no dialogue between relevant parties. Unequal in nature, this sort of relationship can be manipulative in essence that only one side can reap rewards of. Contrary to this, I-Thou relationship provides two-sided relationships where both participants can engage with the communication in true and equal sense. To Buber, this type of communication is based on mutual recognition of values and views of both sides, and dialogue ethics that led people to speak freely and sincerely independent from any misunderstanding or misjudgment. Indeed, his understanding of communication lies on the desire to understand the others, to acknowledge the others' views and values. For him, communication has an end in itself as in the formulations of Kantian Moral Law and it has an intrinsic value of making relationships more ethical and powerful.

Adopting his Buber's philosophy of dialogue cited from his notable *I and Thou,* Kent and Taylor (1998: 325) defined dialogic communication as "any negotiated exchange of ideas and opinions. The most important goal of the interaction, in dialogical communication, is nothing but to communicate (Kent and Taylor, 1998). The dialogic communication is a two-way communication that requires reciprocity. For example, some elements of public relations tools including press releases, brochures and newsletter do not offer two-way communication, since no reciprocity occurs here. Also, dialogic communication occurred in dynamic, fluid and multi-faceted processes where each party relies on but do not foresee each other. There are various kinds of

measures which has an impact on dialogue, such as our perception, cognitive skills and environment. Dialogue may happen either synchronously (identical time) or asynchronously (different time). One example of a synchronous dialogue, for instance, is responding to a message immediately.

As an initial step to discuss the role of dialogue in public relations theory, Kent and Taylor (2002) originated five fundamental tenets of dialogic focus.

(i) Mutuality refers the recognition of the organization, the possibility to connection and collaboration between publics and organizations, and between diverse parties. Therefore, it assumes a level of inter-subjectivity. The sense of mutual equality is key here, since neither party could dominate or manipulate each other. Ethical dialogue needs the recognition of the 'other' in equal terms.

(ii) Propinquity describes the immediacy of interactions and the patterns of accessibility of an organization to its stakeholders. It occurs when the organization confers with its publics, in turn, publics communicate with its demands and concerns. In other words, propinquity is composed of some dimensions such as immediacy of presence, temporal flow and engagement.

(iii) Empathy is the level of trust between the organization and its public, a climate of support. Three characteristics that are connected to empathy in dialogic focus are supportiveness, communal orientation and confirmation. Supportiveness can be defined as the empowerment of parties to participate in communication. Communal orientation refers to the ability for community building. Lastly, confirmation speaks to the generation of trust and understanding.

(iv) Risk involves the willingness to interact with individuals and publics on their own terms. In dialogical focus, the sides involved may risk relationship, yet since that dialogue itself requires the sharing of information or knowledge, the vulnerability is indispensable. But vulnerability has also a positive potential. Also, dialogue has "unanticipated consequences" and therefore necessitates "the recognition of strange otherness".

(v) Commitment concerns the authenticity and commitment to conversation and interpretation. It's believed that authenticity would bring mutually beneficial solutions in a given dialogue.

As can be seen from the above-mentioned discussion, the dialogue is always fragile product. Therefore, the authors offer three means of adopting dialogue in public relations. First, interpersonal skills are essential mediums between organizations and its target audience. Those skills help internal and external relationship building. Besides interpersonal skills, mediated instruments such as television, radio and the Internet can be used to increase organizations' interaction capacities. Finally, some organizational procedures might be initiated to be followed by organizational leadership.

Given the wide-range adoption of the Internet, Kent and Taylor (1998) build five principals for the organizational use of dialogical communication that can guide public relation practitioners who works on online.

(i) The dialogic loop defines the two-way symmetrical communication between the organization and its publics. It implies the dynamic exchange of information, meaning the publics can ask questions, and the organization respond to the questions. This principle is only satisfied if the organization replies to the feedback. Many websites and social networking platforms such as Facebook and Twitter intrinsically have this feature because of their formats, whereby enabling publics to ask questions or make comments. Since the feedback is essential, the trained staff is needed to cover required tasks in responding.

(ii) The usefulness of information emphasizes the quality of information that the organizations provided to their stakeholders. This principle suggests extending important and useful information that appeal to wider audience, and the public should also feel and recognize that the relevant information is valuable to them. When extending, the organizations should be careful in ordering the information in terms of its significance (Waters and Jamal, 2011). The given information should be perceived for publics as a way to satisfy their curiosities.

(iii) The generation of return visits describe the ability of web platforms to appeal the public for return visits. The organizations should make the stakeholders feel to visit the website again. Interactivity is key here, and it's ensured by some tactics including the creation of visually engaging, aesthetically-rich websites, FAQ pages, forum spaces or readily downloadable materials.

(iv) The ease of interface demands intuitiveness or ease of website's interface. This is important since publics prefer easy-to-use web sites to navigate into well-organized information in order to facilitate the dialogue. The organization's image should, therefore, be consistent with all other public relations attempts.

(v) The conservation of visitors intends to make publics stay on the website, rather than visiting other organization's sites. The main purpose is to maintain the dialogue between the organization and its stakeholders, so anything that have the potential to distract the visitors' attention such as advertisements or unnecessary links outside the site should be eliminated.

Rybalko and Seltzer (2010) implements the principles derived by Kent and Taylor's above-mentioned study in their work investigating the dialogical communication on Twitter through sampling of *Fortune 500* companies. Although their focus is not on nonprofit sector, their findings are worth to be engaged with because of its representativeness. As previous studies did, they emphasize the role of dialogical communication in developing relationship with publics (ibid.: 336). The authors straightforwardly state that ease of interface principle is equally valid for all Twitter accounts. On the other hand, they try to show that companies create useful content for main publics. Obviously, this is also the case for nonprofits. They reveal that conservation of visit time on Twitter is one of the major goal of organizations. Regarding the principle of conversation of return visits, regular posting is major activity, therefore any study probing dialogic communication must also focus on posting frequency. As can be understood from the companies' performance on Twitter, dialogic loop is another principle that always has positive contribution in the organizations if they reply to questions of the followers. This is another dimension that might be also true for nonprofits. Lastly, if the social media practitioners become patient enough in their relationship building activities and share posts and reply to the questions, that's listen to their followers and interact with them, more return visits can be generated.

1.3.2 Dialogical Communication and Facebook

Since Facebook is home to many organizations after the platform opens up its registration to them in 2006, communication scholars increasingly explore the dialogic potentials of this platform. One of the first researches in this regard was conducted by

Sweetser and Lariscy (2008). The authors explore the communication formulas of online dialogue through content analysis of Facebook wall posts the during 2006 midterm elections. This, according to the researchers, could be seen as a historical move in strategic communication online since for the first time in the U.S. elections, candidates could reach their constituents by "friending" with them, and they have a "wall" where they broadcast campaign messages or respond what the audience is asking for. During the study period, the authors coded 5,735 wall comments from 67 candidates with Facebook profiles.[31] They observe one-side relationship with candidates as in the form of para-social interaction where most of the comments are either supportive, motivational or affirmative. This case study found that only on the rare occasions, the voters are being responded. Although the lack of candidate reaction can be harmful for dialogic communication, it is found that voters are highly engaged with their fellows on the page. The authors conclude that having a Facebook profile can generate immense political rewards by establishing a health relationship with their constituents, especially with the young people who are new to voting experience.

Another work that sought to examine Facebook's potential for dialogical communication is the descriptive analysis of Bortree and Seltzer (2009). They scrutinize the dialogical prospective of environmental advocacy groups' Facebook pages. They measure two dialogical outcomes: i) on-site posts by the organization and users and ii) the linkage between Facebook profile and website. A sample of 50 Facebook profiles were analyzed with utilizing the dialogic principles set by Kent and Taylor (1998). The authors modified dialogical strategies to make them more suited with social networking sites. New strategy is inserted as organization engagement. Furthermore, Bortree and Seltzer (2009) identified six outcomes of dialogical outcomes as user posts, network activity, user responses to others, organization response to others, network extensiveness and network growth. They discovered that there is a significant correlation between generation of return visits and number of user responses to others. Moreover, reciprocal relationship was detected between conservation of visitors and network graph and organization response to others. At large, the authors decided that the advocacy groups unsatisfactorily utilize the interactive capacity of Facebook, thereby they fail to appreciate its strategic potentials.

[31] The actual number of candidates with profile was 87, but the coders decide to eliminate the Third party candidates (Sweetser and Lariscy, 2008).

Waters et al. (2009) also conduct an inquiry into nonprofits' profile on Facebook. They examined three key principles, spring from Kent and Taylor's work, in online relationship cultivation. The first of them involves openness/disclosure. By this, they argue that nonprofits should disclose themselves by providing a detailed information about the organization and its background, making connections to the organization's website, employing its visual identity such as logo and listing the stuff who are responsible for the SNS's maintenance. Secondly, the authors suggest that organizations should be open to disseminate knowledge. Given the publics' increasing demand on transparency, the usefulness of information, they argued, remains as the key for stakeholder engagement. According to the Waters et al., the most typical forms of message diffusion involves posting links to external news about the organization or its causes; posting visual, audio and written materials about the organization and its advocates; utilizing the discussion wall or message board for announcements or reply to questions. The last principle is interactivity. For authors, this is also a very key aspect of developing strong relationship with stakeholders. Organizations should increase the interactivity, for instance, by providing them the means and methods to contact, donate and participate in activities. This can be in the form of asking their e-mail addresses or sharing information regarding online donation. The idea here is to further connections with the stakeholders as intense as possible. Their sample includes 275 nonprofits who use Facebook profiling, and the authors tested the variables whether they are present or absent on the profiles. It was found that organizations frequently use the elements of disclosure to a great extent, whereby providing the informational substance of themselves such as descriptive materials, logos etc. This, the authors suggest, is a sign that they realize how important to maintain transparency during their effort. Yet, a gap occurs in organizations' capability when it comes to message dissemination. Results show that most of the strategies regarding the concept of usefulness of information are employed by only few organizations. Surprisingly, despite the rich opportunities they offer, multi-media capabilities of Facebook applications are rarely appreciated by organizations. Moreover, they point out that nonprofits do not employ stakeholder engagement tactics efficiently. Results have suggested that only few nonprofits in the sample utilize involvement strategies such as message boards, volunteering lists and calendar of events. Even the educational and healthcare nonprofits, assumingly the most capable of organizations in donation recruitment, did not perform well on online donation pooling. To conclude, Waters et

al. suggest that nonprofits are likely to fail to publicize their efforts on Facebook. They argue that practitioners like to be shown up on Facebook, and they value on it. Yet, they do not know how to use the site in an efficient way. The reason of this could be the lack of guidelines available to use Facebook. Like almost every user, the organizations, too, are learning by doing, which may result in low efficiency or might cause dissatisfaction on audience side. In order to overcome this, the organizations usually recruit young interns who reputably are more capable of maintaining social networking sites and digital media. This brings us with a much practical solution as public relations literature has already departed on: Social networking sites strategically important tools for the stakeholder engagement, only if the organizations understand how their target audience are actually using it. So, it is the duty of organizations to find the ways in which their stakeholders can be more integrated into with their profiles.

Another study that applied the theory of dialogical communication is Briones et al.'s (2010) qualitative inquiry. The authors made 40 in-depth interviews with American Red Cross employees in order to understand how the organization uses social media platforms to foster two-way communication with its publics. The authors tested the presence of dialogic communication, using Kent and Taylor's principles, and applied them into Hallahan's (2008) relationship management concepts. As a result, the authors note that American Red Cross is successfully integrate dialogic loop into its relationship building patterns.

1.4 Hypotheses

Based on the literature review and guided by the theories presented above, the current study aims to examine the following hypotheses:

H1. Nonprofit organizations use Facebook to strategically dialogue with their key stakeholders.

H2. Nonprofit organizations incorporate diverse relationship development strategies into their Facebook presence.

H3. There is a relationship between the size of nonprofit and likeliness to use dialogical communication principles.

H4. Nonprofit organizations face several barriers when using Facebook, while they enjoy a great extent with the benefits that the platform offered at the same time.

The next section will present the methodology with which the hypotheses will be tested.

CHAPTER 2

METHODOLOGY

This chapter consists of seven sections. The first section covers the purpose and significance of the phenomenon of the interest. The second section states the research design and overall procedures that are employed to test the research questions. Research design is comprised of the multi-method research that incorporates qualitative descriptive approach and quantitative content analysis methods. The third section briefly outlines sampling procedures. The fourth section discusses data collection techniques. Coding is discussed through fifth section. The sixth section addresses ethical consideration and validation strategies, while the final section provides data analysis.

2.1 Purpose and Significance

The purpose of this study is to take a comprehensive look at how and to what extent dialogic communication principles (Kent and Taylor, 1998) are incorporated into Facebook posts by nonprofit organizations that operate in health area. Since Facebook provides organizations with several tools to engage and outreach with the broader audience, nonprofits may take these greater advantages by employing requisite techniques of dialogic principles in communicating their base on social media. However, literature suggests that nonprofits are not able to use Facebook in the most efficient way. Therefore, this research study measures nonprofit organizations' use of Facebook based on dialogic principles. It, then, seeks to draw some conclusions regarding the current use of the platform.

For this purpose, two independent studies will be developed and conducted in association with research objectives. The combination of quantitative and qualitative methods will be used in order to understand the phenomenon from its various angles. This combination is significant one, because such research on dynamic nature of user-generated content necessitates making both message-level and organization-level analyses.

2.2 Research Design

The inquiry method for this study include multi-method research design to explore the role of dialogic principles as a strategy to build and cultivate relationships with target publics of health nonprofits.

By definition, multi-method research incorporates quantitative and qualitative approaches that are comparatively accomplished by themselves, and then draw together to frame the necessary elements of one broad research plan (Morse, 2003). In essence, research is contrived in relation to a fundamental research question, different studies are projected and conducted to shed light on certain sub-questions and research intentions. A simultaneous approach can be taken while conducting multi-faceted research, so this paves the way for facilitating studies simply to supplement each other. Alternatively, studies can be done sequentially which enable subsequent researches are able to discover the issues that were unpacked by the previous one or to develop further patterns associated with the results of the first study.

Multi-method research design is inherently a type of mixed method research (Bender, 2011). Since mixed method can acquire knowledge about diverse facets of a case under study, it is believed to be highly appropriate for the enquiry of complex social phenomenon, which is not suitable for neither pure qualitative nor pure quantitative methods. For example, computer-mediated communication, as a social phenomenon based on complex dynamics, is dependent on personal, social and economic factors although its applications such as social networking sites or digital environments are developed and becoming matured in technical field. By employing both methods and collecting data from quantitative and qualitative techniques, the researcher can eventually obtain results which affirm, supplement or confront with each other. In so doing, the researcher can enrich the extent of analysis whereby obtaining a better and more comprehensive explanation to the research questions. It can be said that there are many other benefits to conduct multi-method research design include providing opportunities to invent paradoxes to advance further research (Hoyles et al., 2005), availability of triangulation of research outputs (Harden and Thomas, 2005). Whereas there are also disadvantages of the methods which include that multi-method researches demand further costs such as time and resources, in stark contrast to mono-method work, (Blatchford, 2005) which for many academics, who are under tight

publication pressures within the time constraint, are hard to deal with (Mingers, 2001). However, this study substantially enjoys vast opportunities that multi-method research offers.

2.2.1 Research Methods

This research study has two main objectives, and two distinct studies will be performed to tackle with the objectives. Each study design will be discussed in detail throughout the next sections. In order to answer and elaborate on research questions, study's objectives are as follows:

1.) To recognize and describe the general attributes and modes of Facebook messages posted by nonprofits.

2a.) To explore the overall patterns of nonprofits' experience with Facebook.

2b.) To determine how, why and under what circumstances they utilize Facebook as a strategic tool to build sustainable follower base.

For the first objective, the study will be designed as an analysis of Facebook posts in an effort to understand the extent to which dialogic principles are valid. Content analysis will be used as a method.

For the second objective, semi-structures interviews will be conducted as a method, and the respective study will be designed to examine how practitioners of nonprofits perceive and use Facebook for communicative purposes with their target audience.

By employing both methods, the study tries to understand two different perspectives in combination: that of the users and the administrators.

2.2.1.1 Content Analysis

Content analysis dates back to the 18th century, where identification and indexing of messages for written symbols had been prevalent (Neuendorf, 2002: 30-31). It also used for intelligence purposes during the World War II, as a technique of a greater propaganda plan, in which that U.S government has measured military positioning of German forces through monitoring and categorizing radio waves (Msimangira, 2012). As a popular research method, it has been predominantly utilized in social science

research as a powerful technique in such diverse discipline of communication, public relations, sociology and anthropology. With the adoption of social media and computer-mediated communication, content analysis has expanded its reach to online visual, textual or electronic media data, which makes the method still favorable for researchers who intend to work on user-generated content.

Content analysis can be defined as a "summarizing, quantitative analysis of messages that relies on scientific method and is not limited as to the types of variables that may be measured or the context in which the messages are created or presented" (Neuendorf, 2002: 10). In other words, content analysis provides a methodology where data is quantified into categories (Kerlinger and Lee, 2000).

As Hsieh and Shannon (2005) states that content analysis is suitable for both qualitative and quantitative techniques. They remark that that quantitative content analysis can be described as coding of text data into categories and then of describing it with using statistics. Quantitative analysis is suitable for both deductive and inductive methods in coding. Development of software applications are welcomed by researchers aiming to conduct quantitative content analysis. Whereas qualitative content analysis, appropriate mainly to induction, comprise subjective interference of the messages which then systematically coded and identified. Which approach would be taken depends on the theoretical concerns of the researcher and practical needs of the research question being investigated. Therefore, the researcher is the only responsibility holder in determining the type of method (Elo and Kynäs, 2008).

The materials to be coded and analyzed by the method can be listed as web sites, pictures, text messages, symbols, social media posts etc. It can be utilized to investigate both the manifest and latent content of a respective message. While the manifest content implies to some specific materials such as words, pictures which are visible and countable parts of the message, latent content refers to the interpretation of content like meaning or quality (Hsieh and Shannon, 2005).

Content analysis offers numerous advantages as well as challenges to the researcher and acknowledging them is a requisite action to develop the research. Advantages of the method include absence of time constraints, being relatively inexpensive as compared to other methods and having free-access to documents (ibid.). As disadvantage, it can be said that content analysis may have risk of having

coder/researcher bias in either coding or analyzing process. This risk is much higher in qualitative content analysis where researcher can be able to interpret data based on his or her own disposition.

Therefore, this study will use a deductive form of quantitative content analysis and both type of content (manifest and latent) will be coded and analyzed to satisfy research objectives.

2.2.1.2 Semi-Structured Interviews

Qualitative description as a subgroup of qualitative research methods has descriptive characteristics and it has been widely used in qualitative studies. As opposed to established qualitative perspectives such as grounded theory, narrative research or ethnography, qualitative description has less to do with theoretical predispositions. Sandelowski (2000: 337), for instance, describes the study as being the "the least encumbered by pre-existing theoretical and philosophical commitments" and more align with the "general tenets of naturalistic inquiry". In their comprehensive review about the existing literature on qualitative description, Kim et al. (2017: 23-24) also suggest basic characteristics of qualitative description. They state that it is less theory-driven, and this may provide the researcher a certain amount of flexibility to maintain research framework.

Data collection strategies include semi-structured or minimally-structured interviews guide. Neergaard et al. (2009) emphasize the level of appropriateness to employ qualitative description for a group of small interviews in order to provide insights. For this objective in mind, this study will use employ qualitative description method to conduct semi-structured interviews.

2.3 Sampling

This section includes sampling. It introduces the sampling processes and describes the unit of analysis for this research.

Study of Sample

During the four-week period between April 1 and May 1, 2017, content from Facebook posts of the three health nonprofits was sampled. During the period, the organizations have their current campaigns.

Sampling of nonprofits

The researcher firstly introduced the legally incorporated nonprofits working on health and health promotion in Turkey. The shortlist was generated through initial search on the social-media monitoring sites, *Social Bakers*, and a subsequent search on *Google.* Restriction was made whether nonprofit has an active presence on the social platform. Those who do not have social media page were excluded from the list. After this process, the three nonprofits were selected with regard to their size and type. Their Facebook profiles were checked and it has been observed that their Facebook presence is an active one. Regarding the size, organizations can be described as small, medium and large-scale nonprofits, respectively. As of the type, the researcher observed that nonprofits should have diverse field of interest.

The detailed information about the organization is listed below:

About the Organizations

LÖSEV

The Foundation for Children with Leukemia - *LÖSEV* as can understood from its name, was founded in 1998, in Ankara, as a small initiative to help children with leukemia. Later on, it has continuously grown to become one of the biggest health nonprofit in Turkey. The latest data says that it has 22,723 registered patients and 2,827,494 volunteers nationwide. *LÖSEV* is also awarded by some awards such as one of the top 10 esteemed brand of Turkey, the most sincere corporate social responsibility brand, and the best social media using NGO.[32] On Facebook pages, *LÖSEV* is seen as "non-profit organization in Çankaya, Ankara" preferring to define itself as an organization working in the field of "medical & health – education." The organization's Facebook page has 614,241 likes (as of 21 May 2017) and this makes *LÖSEV* the only health nonprofit among top 10 regarding the number of Facebook followers.

[32] For details, both *LÖSEV*'s web page (http://www.losev.org.tr/v2/tr/default.asp) and Facebook page (https://www.facebook.com/losev1998/) can be checked.

KAYD

The second health nonprofit that is closely analyzed in this study is *Kansersiz Yaşam Derneği - KAYD* (which can be translated into English as the Association for Life without Cancer). *KAYD* defines itself as "community organization in Istanbul, Turkey" aiming to raise awareness for a future without cancer. The nonprofit was founded in 2010, and rapidly increased the number of its supporters. Currently, it has almost 200,000 volunteers and its Facebook page has 170,392 likes (as of 21 May 2017). Differently from *LÖSEV* it prefers to be known as community organization on Facebook. *KAYD* was also awarded with Quality Social Responsibility Project of the Year 2014.[33]

TOFD

Last but not least, this study investigates how The Spinal Cord Paralytics Association of Turkey / *Türkiye Omurilik Felçlileri Derneği – TOFD* employs social media for its strategy. Founded in 1998, *TOFD* aims to solve medical, occupational, economic and social problems of disabled people and to raise awareness about the spinal cord paralysis in Turkey. *TOFD* also defines itself as "community organization" but did not prefer to be located in Istanbul but only in Bakırköy, a district of Istanbul. Although *TOFD*'s Facebook page has 13,131 likes it's widely known among Turkish citizens. Therefore, it is important to understand how this nonprofits uses its Facebook page to interact with its current and potential supporters.[34]

Unit of Analysis

As Wimmer and Dominick (2011) suggest, a unit of analysis in content analysis can be delineated as the most basic entity that researcher analyses. This study considers Facebook posts as the unit of analysis. Other unit of analysis are the number of 'likes' that a nonprofit received and the number of 'like', 'comment' and 'share' that each post obtained. The reason of this is because each like may bring distinct motives to the research objectives. In order to analyze this data, the researcher extracts quantitative data provided by Facebook on nonprofits' Facebook pages.

[33] For updated data, please see *KAYD*'s web page (http://www.kayd.org.tr/tr/anasayfa) and Facebook page (https://www.facebook.com/KansersizYasamDernegi/).

[34] *TOFD*'s web page (http://www.tofd.org.tr/) and Facebook page (https://www.facebook.com/tofdgenelmerkez/) can be followed for additional information.

2.4 Data Collection

Data Collection of Study 1

As above-mentioned, Study 1 aims to recognize and describe the general attributes and modes of Facebook messages posted by nonprofits. It examines health nonprofits' Facebook pages defined by predetermined categories through using principles of dialogical communication.

According to Rieder (2013), the two main types of data extraction through Facebook can be categorized as questionnaires and standard data sets. The data can be obtained directly from the active users who fill out the questionnaires and also from standard data sets prepared by applications. This study deliberatively adopts the second approach in order to overcome response biases, the cognitive prejudice which is prevalent among survey respondents. Therefore, Netvizz[35], a new-generation Facebook application, is employed. Netvizz is one of various data extractors that are compatible with Facebook. There are also other extractors such as NameGenWeb[36], Social Network Importer[37], NodeXL[38], Facebook Report[39] etc. Yet, Netvizz has a relative advantage in data extraction from personal networks as well as pages and groups. It is applicable to extract 999 posts at a time. It was first initiated in 2009. Later, it became a widely-used application for diverse research purposes including investigating online diasporic patterns of transnational communities (Kok and Rogers, 2017), using of Facebook by political actors during permanent political campaigns on online environment (Larsson, 2016), and that of municipalities (Steinfeld and Lev-On, 2014), measuring leadership on contemporary mass mobilization (Poell et al., 2016), analyzing the stakeholder relationship in mental health nonprofit services (Wyllie et al., 2016) and understanding the spread of information during pandemics by using behavioral data of Facebook (Seymour et al., 2015). The application also used to reach exploratory results of, for example, learning behavioral patterns of online communities (Giglio and Palmieri, 2017).

[35] Netvizz, https://apps.facebook.com/netvizz/ (Access date: 1 May 2017)
[36] NameGenWeb, https://apps.facebook.com/namegenweb/ (Access date: 1 May 2017)
[37] Social Network Importer, https://socialnetimporter.codeplex.com/ (Access date: 1 May 2017)
[38] NodeXL, https://nodexl.codeplex.com/ (Access date: 1 May 2017)
[39] Facebook Report, https://app.reportgarden.com/users/sign_up (Access date: 1 May 2017)

To achieve the main objective of this work, Netvizz has a potential to analyze the engagement between users and posts. The researcher also implements Netvizz as an accessible way of acquiring big data from the same organizations' Facebook pages. The emphasis on Facebook pages has been endorsed by existing literature. Gulati and Williams (2013: 581) argues, for example, that Facebook pages have comparative advantage in engagement with greater audience. Additionally, having a Facebook page can be interpreted as a sign of professionalization (Vaccari and Nielsen, 2012) to organizations. Hale et al. (2014: 3) also discuss the greater advantage of Facebook pages over groups. According to them, comparing to the groups, Facebook pages, which were introduced by 2007 with the aim of more powerful advertising, are more; i.) prone to internal promotion since it generates a feed story right after making a new like, ii.) adaptable for further customization, iii.) convenient to web search iv.) useful for administrators if they want to remain anonymous v.) empowering for the user to manage the content they get from the page.

Data Collection of Study 2

As previously stated, Study 2 has two objectives:

1. To explore the overall patterns of nonprofits' experience with Facebook.

2. To determine how, why and under what circumstances they utilize Facebook as a strategic tool to build sustainable follower base.

With these objectives in mind, a semi-structured interview guide was developed. The interview questions were developed through a careful review of the existing literature. A pilot interview was conducted with a chief communication officer of a health care nonprofit in order to enhance interview questions and to test research design before data collection. The interview was audio-recorded but not included in the study.

It should be note that nonprofits were extremely responsive to the researcher's initial email indicating the interview request. All responded very quickly, seemed to be willing to participate in the study and directed the request to communication practitioners who are also responsible for nonprofit's social media use. Upon their acceptance, the meetings were set in accordance with their preferences, and interviews were conducted either in nonprofit's office (n=2) or outside (n=1). Regarding the place for the outside meeting, the researcher suited with the participant's choice. All

interviews done by the same researcher (CED) via face-to-face meetings. For each semi-structured interview, the recording lasted approximately 40-45 minutes. Audio-recorded interviews (n=3) were transcribed verbatim afterwards.

The respondents were asked to talk about their experiences with Facebook. They were asked how they use the site, and respond to questions received by users. They were also asked to talk about whether they have difficulties while using the site. The researcher took notes during interviews. As germane to the nature of qualitative research, new questions were arisen out and directed in successive interviews.

2.5 Coding Procedures

Coding process begins with developing a content analysis codebook using quantitative parameters of Kent and Taylor (1998). Coding categories which used in this research were tailored by Rybalko and Seltzer (2010).

Three coding sheets are generated for each nonprofit. The dialogic loop and generation of return visits are operationalized for Facebook profiles, whereas all four principles are operationalized for Facebook posts. The principle of ease of interface is omitted from the analysis since the interface is the uniform and, unlike websites, SNS is easy to use.

The operationalization of remaining principles are as follows:

2.5.1 Usefulness of Information

Usefulness of information is applied in eight different ways on the Facebook profiles. This principle is proven if the nonprofit's profile providing i.) a detailed description about nonprofit, ii.) the foundation year, iii.) information concerning the organization's history, iv.) the mission of the nonprofit, v.) the link of web site page, vi.) the logo of the nonprofit as its profile picture, vii.) a cover photo with regard to the nonprofit, viii.) the verification icon. The rationale behind this the users may find useful to obtain some knowledge indicating what the nonprofit can provide.

2.5.2 Dialogic Loop

The study operationalizes the principle of dialogic loop as whether the nonprofit stimulate dialogue with the key audience by posing questions, or developing

relationships by responding directly to a question or comments made by the users. In addition to this, the use of tagging and hashtag is used to test the presence of dialogic loop. Since the feature of tagging is designed to organize discussions around ideas and events (Fitton et al., 2009: 127), their usage enables the organizations to improve dialogic communication. Therefore, if a post is tagged or include hashtag, the nonprofit is coded as responsive.

In addition to these items, the presence of multi-media item as providing video or picture and the providence of a positive tone in message syntax are included as indicators of usefulness of information. Last but not least, the principle is tested whether the nonprofit posts follow up messages. The profile is coded as responsive if a nonprofit further the dialogue, or non-responsive if it does not respond following messages.

2.5.3 Conservation of Visitors

The principle of conservation of visitors implies to motivating the audience to remain on the profile as long as possible. Posting statues frequently on Facebook profile will make users to stay for a longer period of time. This may result in engaging with community or donating the nonprofit. This principle is applied in two different ways. First, the element of activeness is tested. If a nonprofit has at least three posts during a week, the organization is coded as active, thereby the principle of conservation of visitor is proven. Secondly, the profile considered as responsive if nonprofit provides links to other social media pages where users could request additional information.

2.5.4 Generation of Return Visits

As Kent and Taylor argued (1998), generating of relationship takes time and many efforts. For the current study, the principle of generation of return visit is applied in one way for the Facebook profile and many ways for the Facebook posts. The principle is proven if nonprofit allows it users to post on the profile.

2.6 Ethical consideration and Limitations

Since this study focuses on Facebook profiles, rather than personal networks, and pages are social mediums for public interactions, there is no direct ethical

consideration in regard to collecting data from these sources. Additionally, the interviewees have already asked for permission before voice recording.

This study has several limitations. One limitation is related to the number of nonprofits. While this study did investigate health nonprofits (n=3), it could have utilized a more expansive population consisting of all nonprofits from all branches in subject and cause. This study cannot be generalized to all of nonprofits since only a small sample was analyzed.

An additional limitation to this study was the use of SNS, Facebook and the nature of communication itself. Due to the short term of analysis, a small sample of posts were analyzed. Although the constructed week method was adapted to fit a full year, the posts analyzed (n=140) may not have fully represented all posts provided by the nonprofit.

It should also be noted that not all principles could be operationalized for the Facebook profiles because the characteristics of the dialogic communication principle do not apply to the uniformity of the platform.

The final limitation of this study is related to the nature of Facebook and its strategy to disseminate the content. Facebook employs an algorithm that decides which content can be seeable on a specific user's feed. This algorithm shows content from pages that the user frequently visits or that Facebook supposes to be relevant or important to that specific user. Hence, even if a user likes a nonprofit's profile, based on the algorithm, the user may not be readily exposed to a message posted.

2.7 Data Analysis

Data Analysis of Study 1

140 Facebook posts and 3,569 Facebook comments were coded and analyzed by using Statistical Package for the Social Sciences (SPSS) 2.0 for Windows. The date was prescreened for errors and missing data. A copy of codebook is included in APPENDIX.

Data Analysis of Study 2

Each interview transcriptions were carefully read twice, analyzed by hand and notes were taken. Using computer software would be unnecessary due to small data sets. Data emerged from interviews were analyzed using qualitative description approach with the method of thematic analysis. Inductive perspective was held since there had been no pre-determined theory before conducting the interviews.

The application of thematic analysis begun with identifying main themes within the interview data. Emerging concepts were mapped and grouped. The identified themes, then, organized into the categories which describe the nonprofits' Facebook use.

CHAPTER 3

FINDINGS

This chapter will analyze the findings of the research.

3.1. Examining the results

The qualitative investigation showed that three main frameworks were emerged among key themes and concepts. The first framework describes Facebook *as a tool* to communicate. It became evident during the transcripts of interviews that they find Facebook highly complex tool when they need technical support about the things that trigger security of their profiles. All participants (n=3) reported that they had either security or authenticity issues on Facebook. Nonprofits (n=2) stated that they had reported fake accounts to Facebook administration previously. Also, a nonprofit (n=1) reported that they opened a case on hacking. Yet they found the responses were either so slow or ineffective. All respondents requested Facebook to become more agile to detect fake accounts since malicious efforts may hurt not only organizational reputation but also the support of people who want to donate. The second common theme is the *opportunity*. The respondents highly appreciated the great opportunities Facebook offered in terms of message dissemination, technical easiness and popularity. They acknowledged "the power of Facebook" in making their cause to recognized by many. Despite these accounts, it is extremely surprising to observe that they use only few features of the platform.

Table 3.1 Themes of Semi-Structured Interviews

Final Coding Framework	**Preliminary Categories**
1. Facebook as a tool	- Unable to get technical support from the platform
2. Facebook as an opportunity	- Popularity - Easy to use - Vast opportunities for dissemination
3. Facebook as a threat	- Negative comments - Misinformation, insecurity - Avoidance to dialogue, uncontrolled space

One explanation might be that majority of respondents (n=2) lack required knowledge regarding the sophisticated use of Facebook to promote engagement. Their usage can be stated as a random one, like a personal profile. It is clear that knowledge about

social networks and the idea behind it is key to utilize Facebook efficiently. In this respect, it is not surprising to see that the only nonprofit, KAYD, which enjoy engaging features of Facebook most is being managed by a communication expert on social media.

As Table 3.1 shows, the last emerging concept is *Facebook as a threat*. All nonprofits reported that their Facebook experience include some elements of insecurity. The nature of Facebook as an open and decentralized platform made it an "uncontrolled space" to them. They reported that they feel helpless when they encounter negative comments by users. Some organizations (n=2) reported that they delete messages if they include derogatory items. They want their pages look like "clean and professional". It is observed that this may prevent them establishing a real dialogue with their audience. So, the sense of unmanageableness may be the answer of why dialogic communication principles were not fully satisfied by health nonprofits in Turkey.

3.2 Dialogic communication and Facebook

Three Facebook profiles, 140 Facebook posts and 3,569 Facebook comments between April 2017 and May 2017 were collected and analyzed through content analysis. The profiles and posts were coded according to dialogic principles of communication as developed by Kent and Taylor (1998).

Stage 1

Usefulness of Information

At this stage, the researcher explores into Facebook profiles of each of the three nonprofits. The final results show that all nonprofits (n=3) display a detailed description on their profile. Again, every nonprofit shows their foundation year, and they also involve general information about the nonprofit which include contact information, type of organization. It is founded that all nonprofits have direct link to their websites, and they display their logo as profile picture. Additionally, nonprofits have cover photos regarding the organizations. The cover pictures provide information about how to donate the nonprofits. Another significant finding from the first stage is that only one nonprofit, LÖSEV, has verified account. The most used principle is usefulness of information.

The Conservation of Visitors

The conservation of visitors is one of the least visited principle. The data reveals that only 33% of nonprofit profiles (n=1) provide links to other social media platforms. It is shown that only TOFD has links to Instagram, Twitter and YouTube link on profile. This is interesting, since in fact, all nonprofits have active profiles on all other platforms. This might have been overlooked because nonprofits did not check their Facebook information, so not updated them. Additionally, 66% of nonprofits (n=2) can be defined as active, having at least three posts during a week. The data reveals that 100% of nonprofit profiles let audience to post on their Facebook pages.

Stage 2

This stage includes several statistically significant findings.

Generation of Return Visits

Descriptive statistics for generation of return visit show several point of significance. First and foremost, health nonprofits do slightly (n=1) utilize Facebook to transmit health information. Alternatively, they (n=2) do not use the platform for this purpose. The researcher found that majority of nonprofits use Facebook to encourage positive feeling, and to convey support and motivations.

Table 3.2 Frequencies for KAYD posts per Subject

Subject	**Frequency**	**Percent**
1	5	9.6
2	1	1.9
3	30	57.7
4	16	30.8
TOTAL	52	100

For example, 57.7% of all posts broadcasted by KAYD are curated with the aim of giving emotional support to the audience. While only 9.6% of messages provides health information. The rest is 1.9% for announcing a campaign and 16% for providing organizational news.

The participant from KAYD explains their way of using Facebook:

> *Actually, we have a strategic outlook for social media. The point is we want that false information can never have a chance to be circulated. In this respect, we are not content the idea of people using the Internet for health information. We guide them to interact with the doctors from our executive board [….]. What we share is that we have special morning posts. This sometimes get* [negative] *reactions. Some say like 'You do not know anything about our pain.' But its purpose is different. For us, there is nothing wrong with starting a day with positive, encouraging words wishing a good day. Also, we have scientific posts. We distribute them through the month. We have some criteria for publishing health information posts: It should not contain anything that can disappoint someone. It should not include any sense of advice to a physician or a specific treatment. Finally, they are inspected by our scientific committee.*

Table 3.3 Frequencies for LÖSEV posts per Subject

Subject	**Frequency**	**Percent**
1	-	0
2	6	8.3
3	18	25
4	48	66.7
Not available	1	-
TOTAL	73	100

Unlike KAYD, As Table 3.3 shows the most frequently posted message on LÖSEV's Facebook page is belong to the category of organizational news. It is significant to see that the organization did not share any information health-related. Since it is assumed that generation of return visit is encouraged with keeping the audience informed and updated about the subject, this result may be thought-provoking.

In most cases, as participant from LÖSEV explained, there is a strong demand of information for treatment from the nonprofit.

> *But they are more likely to obtain second opinion, then. This is common because they want to have more information about their illnesses. They tell us the whole process, even share test results,*

screening tests and everything. But, come on. This never happens. We never ever share this kind of information online. What we do is that we basically direct them to our social service department. This is our special department that communicate directly with patients and caregivers. There they are guided about the situation. We remind that the treatment protocol for cancer is the same all around the world and this is not about the illness but about the patient.

Table 3.4 Frequencies for TOFD posts per Subject

Subject	**Frequency**	**Percent**
1	-	0
2	7	46.7
3	1	6.7
4	7	46.7
TOTAL	15	100

Similarly, as Table 3.4 shows, TOFD is also lacking posts about information related to health such as treatment, symptoms etc.

Participants express concerns about the quality and reliability of information exchange on Facebook profile. They perceive the exchange as risky and a threat to their organizational reputation. The participant from TOFD explained that they delete some posts from users.

Yes, I delete. Because there is opinion without information. You know, this is generic to Turkish people. That is why social networks are unregulated for those who love to speak idly. Very uncontrolled! People are even swearing each other. What I do is that… Yes, I delete messages but I immediately get contacted with that person and correct that information on private chat…We are working with celebrities in our almost every campaigns. Such a great effort! So I should be so careful. You never know what to do when you break one's hearth. So, if everybody works with this mission, you end up doing something big and glorious.

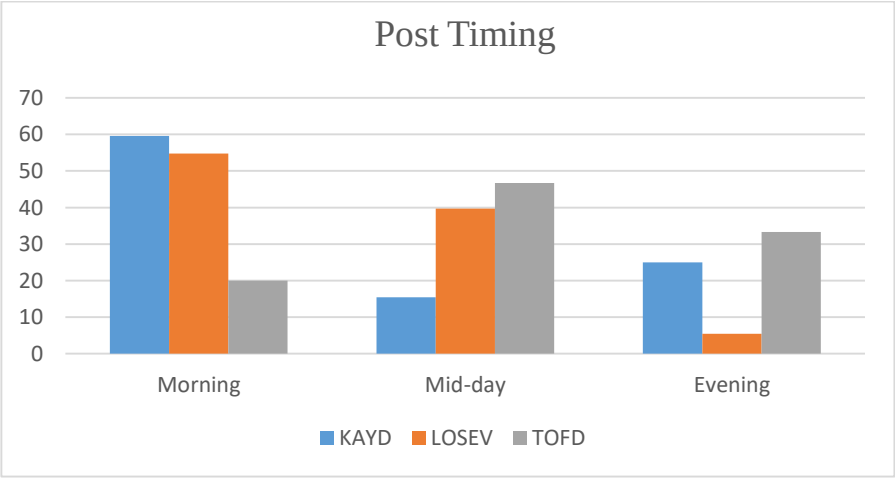
It seems paradoxical to analyze that health nonprofits avoid to use Facebook as a knowledge source to their audience. Yet, the participant from KAYD reported that information about treatment can cause misunderstanding since some of the cancer therapies are not affordable to many.

> *"[…] Of course, we sometimes share posts on alternative therapies such as hyperthermic intraperitoneal chemotheraphy or robotic-assisted surgery etc. Or we used to broadcast about high-tech screening methods… But here, there might be a problem. People feel powerless when they know they cannot afford these treatments. Our audience is not limited to those who live in the centers of Istanbul or Ankara. People live in out of nowhere in the country, people with a tight budget…They also follow us. Unfortunately, the current health care system in Turkey and elsewhere does not allow everyone to enjoy these techniques equally. So, if you post these things regularly, people get easily discouraged."*

Dialogic Loop

The defining characteristics of dialogic loop represent significant description as well. Firstly, the posting time is significant regarding dialogic communication since it has direct impact to engage with users in order to build relationships.

Figure 3.1 Timing in Comparison



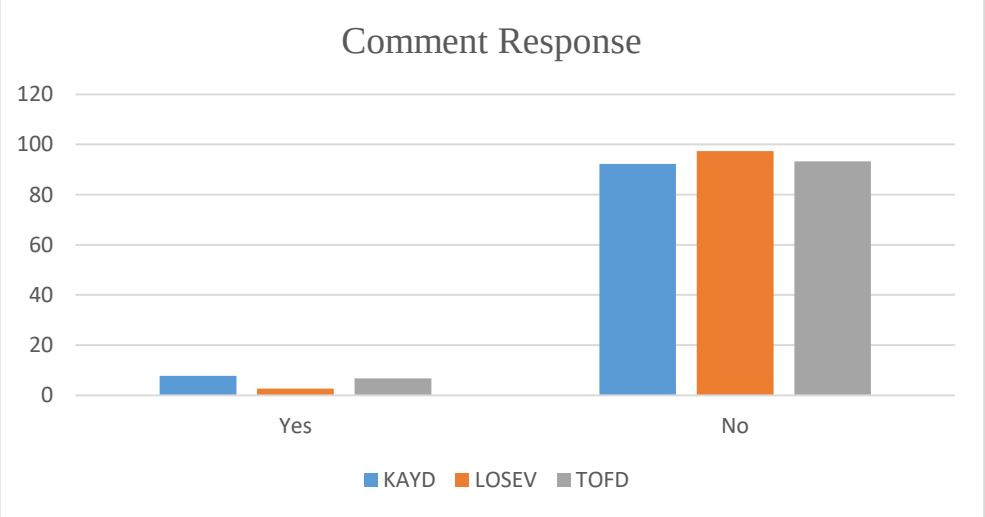
As Figure 3.1 shows, the time to post on Facebook differs according to each organization. Mornings are perceived to be preferably advantageous to post messages

for nonprofits (n=2) since that period is the most suitable to the key audience such as patients and caregivers. The respondents from two cancer-related nonprofits emphasize that a cancer patient wake up early on the mornings due to medication, while TOFD do not pay special attention to the timing.

Unlike timing, the day of posting does not provide statistically significant result. All nonprofits (n=3) have Facebook posts during weekdays and weekends.

Additionally, the researcher analyzed the tone of each Facebook posts. Since the tone is crucial to engage with stakeholders, organizations have a tendency to engage in two-way symmetrical communication with their publics. Positive tone is important for positive publicity. The results show that 76.9% of all posts done by KAYD use positive tone on Facebook. Whereas 66.7% of all posts of LÖSEV and 53.3% of all posts by TOFD is neutral.

Figure 3.2 Comment Response in Comparison



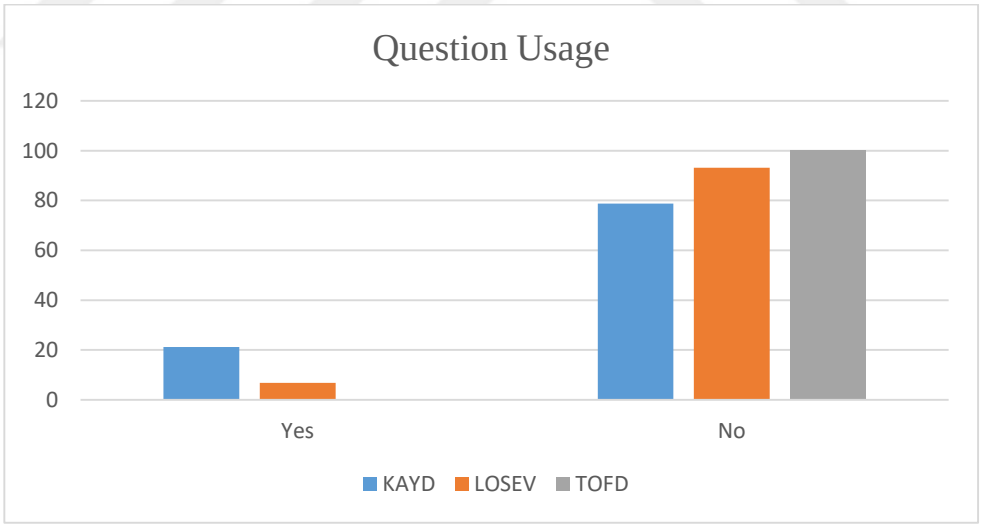
Dialogic loop is key to sustain relationship with publics. The dialogic strategy necessitates responding to the feedbacks by the users. Figure 3.2 shows the results of responding performance of the nonprofits.

It is critical to show that nonprofits respond very rarely to the comments by users on Facebook. This is important because it is found that organizations instantaneously reject to reply the feedbacks. The profile which the dialogic loop is the least visited (97.3%) is LÖSEV. The participant from LÖSEV describes the situation:

> *In fact, it does not necessary anymore for us to respond those messages. We have patient groups at LÖSEV. Be they register to LÖSEV or not, there is a group of LÖSEV fans. Because we are a family consists of 22,000 patients and more than 2.5 million volunteers. We have really serious followers. And they catch through the message threads and replied. Of course, we reply institutionally by giving our phone numbers. But before this, our fans respond to them. Without the need for organizational reply! Because it is not appropriate to discuss them on the page. We do not want to do this. And it is also not appropriate for other users. Imagine that people see those hundreds messages on the page. They might not even understand the gist of the story.*

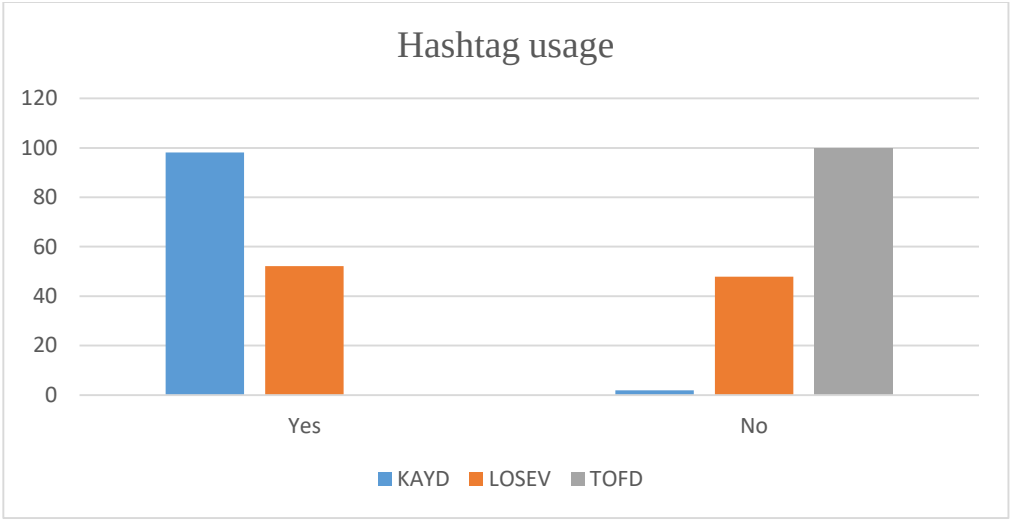
The conscious reluctance to responding shows really low frequencies of dialogue on Facebook.

Figure 3.3 Question Usage in Comparison



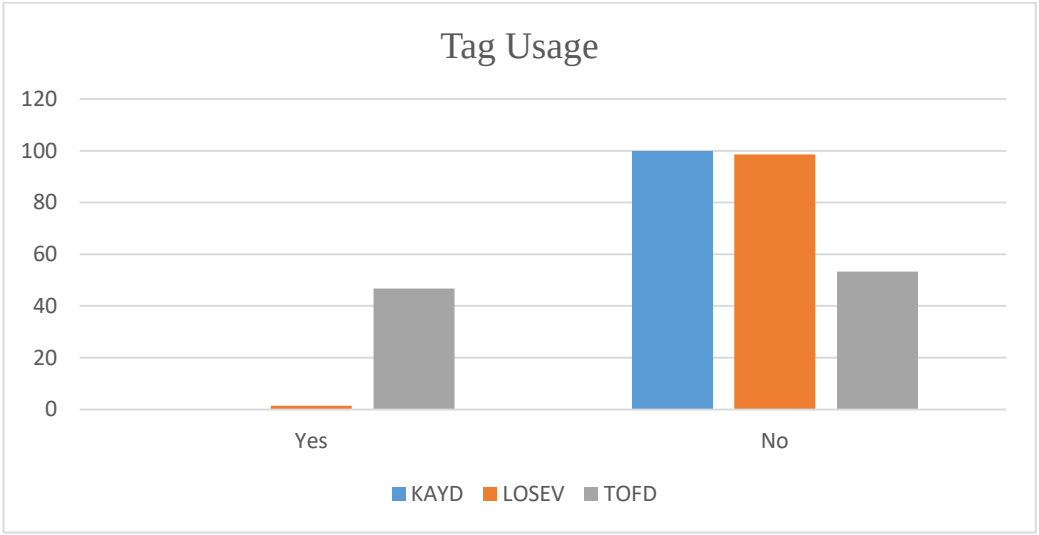
The characteristic tested for dialogic loop provide other significant results. Posing questions or making quizzes are key since they constitute a greater part of facilitating engagement and conversation on Facebook. Despite they acknowledge its importance, nonprofits do not use this feature. For example, Figure 3.3 shows that the vast majority of posts on Facebook does not include questions, meaning that the nonprofits do not constitute a dialogue with their users.

Figure 3.4 Hashtag Usage in Comparison



The use of hashtags as a community-building effort is crucial to build online relationships. As Figure 3.3 represents, the results showing that only two nonprofits utilize communicative advantages of hashtags. KAYD is the only nonprofit that enjoy hashtags with the high frequency rate of use (98.1%).

Figure 3.5 Tag Usage in Comparison



Although tagging practices differ across platforms, the use of tag is highly important to bolster engagement on many social networking platform, including Facebook. Based on the frequency data, it shows that this feature is slightly used by TOFD and LÖSEV, as Figure 3.5 shows.

Table 3.5 Correlation between the Categories of Comment and Reaction for KAYD

	Mean	**S.D.**	**Reaction**	**Comment**
Comment	3.077	3.0412	0.734*	1
Reaction	148.288	131.9790	1	0.000

*Correlation is significant at the 0.01 level (2-tailed).

Table 3.6 Correlation between the Categories of Comment and Reaction for LÖSEV

	Mean	**S.D.**	**Reaction**	**Comment**
Comment	47.562	80.3423	0.613*	1
Reaction	2316.699	1782.7567	1	0.000

*Correlation is significant at the 0.01 level (2-tailed).

Table 3.7 Correlation between the Categories of Comment and Reaction for TOFD

	Mean	**S.D.**	**Reaction**	**Comment**
Comment	0.667	1.4475	0.540*	1
Reaction	102.800	214.7694	1	0.038

*Correlation is significant at the 0.05 level (2-tailed).

Lastly, based on secondary data, Pearson Correlation test has been applied to see if there is a linear correlation between the number of comments and the number of reactions categorically. As a result, linear correlation between the variables of comment and reaction has been found. For KAYD sample, each one-unit value increase in comment variable also increases reaction by 0.734. Similarly, for LÖSEV sample, each unit value increase in comment variable is followed by an increase in reaction by 0.613. This indicates significant linear and meaningful correlation (at the 0.01 level) between the two variables for both samples. In TOFD sample, each unit value increase in comment variable leads to an increase in reaction by 0.540. This means there is also significant linear and meaningful correlation (this time at the 0.05 level) between two variables for TOFD sample. These findings might have some crucial implications for the role of dialogical communication in Facebook usage of health nonprofits. Such a correlation implies that responding any comment will lead to follow up, and this will create additional interaction. Otherwise the dialogue will be cut off. And for these nonprofits no follow up has been noted.

Stage 3

Re-examining hypotheses

Based on the findings from multi-method research conducted, the researcher re-examines the hypotheses.

H1. Nonprofit organizations use Facebook to strategically dialogue with their key stakeholders.

Since all nonprofits had less than 3% of follow up, H1 is falsified.

H2. Nonprofit organizations incorporate diverse relationship development strategies into their Facebook presence.

H2 is proven since the results show that nonprofit organizations use diverse relationship development strategies into their Facebook presence.

H3. There is a relationship between the size of nonprofit and likeliness to use dialogical communication principles.

There is no significant relationship between the size/capacity of nonprofit and its likelihood to engage dialogical tools. Therefore, H3 is falsified.

H4. Nonprofit organizations face several barriers when using Facebook, while they enjoy a great extent with the benefits that the platform offered at the same time.

H4 is proved that the findings suggest that nonprofit organizations have both barriers and benefits to face when using Facebook.

CONCLUSION

This section reviews some recommendations for nonprofits' use of SNS to enhance stakeholder engagement based on the findings of current study. Later, it discusses new trends in healthcare and new age of health communication.

Looking Forward: Recommendations for Advancing the Use of SNSs for Public Health

The results of this study offer significant insights about the efficient use of SNS which should be addressed by prospective scholarship. The point is that social networking sites and array of digital communication technologies are increasingly becoming the strategic arsenal to many organizations. This is no less relevant for nonprofits. As this study also demonstrates that, nonprofits are fully aware of the fact that they ought to use digital tools more efficiently in the new media ecosystem. They also recognize that effective use of SNS is a significant element for managing relationship with their key stakeholders, expanding their volunteer base, targeting the future donors and raising their causes to a wider audience. Despite this, only few can benefit from myriad of marketing leverages these platforms offered. This may be a result of inadequate planning of strategic resources, that is, largely due to the lack of social media strategy, as the recent Hubspot survey also indicates (Shattuck, 2014).

From the management perspective, nonprofits should be able to allocate more resources to channel ever-efficient means of strategic communication. It is crystal clear that a far-reaching plan for social media marketing to achieve these objectives needs more efficient budget and human resources management. And this, surely, is the nub of the problem. The survey found that the majority of the nonprofits do lack of a dedicated social media team, and this produce much negative results for the organization, for example they allocate only 2 hours weekly on developing social media strategies – very limited time of effort given the high significance of the medium (Shattuck, 2014). For it is one of the media planning and a fortiori of budget prioritization that nonprofits have to deal with while keeping their tasks. In this respect, a balanced responsibility should be distributed among the team, teem with communication professionals, is notable. Once again, nonprofits should not be focused solely on online traffic –getting more likes or clicks. Rather, they should look on

developing comprehensive social media planning where they focus on conversational aspects and engagement possibilities of SNS.

Results as a whole suggesting the answers to **RQ1** is that nonprofits are more likely to use Facebook as an online platform in order to broadcast their organizational activity. They enjoy the platform's open and decentralized character to a great extent and are content with the idea that the outreach of the message is significant. They utilize Facebook profile as an introductory phase of the interaction with the audience and paid an enormous attention to not to further the dialogue on the profile. They either send a private message or give the contact information to the user in order to communicate outside of the profile. As the answers to **RQ2** indicates, nonprofits are selectively using the strategies for establish relationships. While they integrate multimedia with almost all messages in order to get more attention, they rarely pose questions or use tags which trigger to conversations. As **RQ3** suggests, there is no relationship between the size of nonprofit and likeliness of appreciating dialogic principles. Using Facebook dialogically does not have to do with the initial size of the organization. This is significant because it provides competitive advantage to small-scale nonprofits which have not financial or organizational resources enough to sustain organizational reputation. As the study results offer related to **RQ4,** there are a number of barriers and benefits nonprofits face when using Facebook to interact with the key audience. The providence of technical assistance from the site administration is proven to be important. The accounts of practitioners indicate that they have faced with a very compelling process when they were dealing with security and authenticity problems on Facebook. This should be ameliorated by more effective communication based on openness with the site. Concerns regarding fake accounts and originality should be eliminated with more transparent communication. It is important to note that having an interactive online space is a necessary but not sufficient step to build a powerful reputation.

Last but not least, nonprofits should embrace fully with the myriad of communicative opportunities on Facebook to stimulate dialogic engagement. The users should be invited to join the profile by directly participating interactive content such as quizzes, games, threaded discussions etc. Posing questions and responding to the feedbacks should be on the priority list of nonprofit. The results indicate that nonprofits may neglect to respond them. This is neither practical nor ethical choice since the

information vacuum left behind may be easily filled by some whose agendas are often not based on scientifically reliable knowledge.

Thinking Bigger: Health 3.0?

With the increasing technology, there has been widespread enthusiasm about the potential of digital communication technology advancing the quality and sustainability of health systems. This enthusiasm derives from a diverse set of interests, ranging from diminishing costs in health industry to providing treatments adaptable to the preventive care methods.

Though much has been written regarding the material outcome of digital medicine, it is important to clarify some foundational tenets here. First, design thinking behind digital health should be revisited to test whether they embrace the principles of affordability and accessibility. These two principles are crucial since the desired direction will only be fulfilled when healthcare is available to all. The decision-making processes of design should entail a multi-domain approach, incorporating disciplines range from material science to anthropology.

From a policy perspective, Turkey, as a developing country, should welcome the opportunities that digital health offer and develop requisite technical design to incorporate with big data. This requires a nested cooperation between the state institutions, academia and venture capital business environment. Some policy advices include but not limited to enhancing health literacy through digital systems in order to change health behaviors, encouraging healthcare providers to internalize digital services and gadgets. Additionally, it is expected that health insurance firms should re-arrange their risk assessments whereby incorporating mHealth opportunities into their portfolio. This enable them to increase the pooling and directly impact the health of people.

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APPENDIX: CODEBOOK

Use this code book as a guide to code for each individual post made by the nonprofits.

Part 1: General Information

What is the type of the nonprofit?

1= Association 2= Foundation

Which city if the nonprofit based?

1= Ankara 2= İstanbul

Does the nonprofit have branch?

1= Yes 2= No

Does the nonprofit have representative?

1= Yes 2= No

What is the topic of the nonprofit?

1= Cancer 2= Paralytic Spinal 3= Leucemia

Does the nonprofit have a website?

1= Yes 2= No

If yes: Is the nonprofit's web site offered in multiple languages?

1= Yes 2= No

Does the nonprofit have a blog?

1= Yes 2= No

Part 2: Usefulness of Information

Disclosure

Does the Facebook page provide a concise description of the nonprofit?

1= Yes 2= No

Does the Facebook page provide the foundation year?

1= Yes 2= No

Does the Facebook page provide any other information concerning the organization's history?

1= Yes 2= No

Does the Facebook page provide the mission of the nonprofit?

1= Yes 2= No

Does the Facebook page provide the link of web site page?

1= Yes 2= No

Does the Facebook page provide the logo of the nonprofit as its profile picture?

1= Yes 2= No

Does the Facebook page provide a cover photo with regard to the nonprofit?

1= Yes 2= No

Is the Facebook page "verified"?

1= Yes 2= No

Part 3: Conservation of Visitors

Is the nonprofit's Facebook page counted as an active or inactive? (An active page is described if the page has at least three posts during a week)

1= Active 2= Inactive

Does the Facebook page provide links to other social media platforms the nonprofit has?

1= Yes 2= No

Part 4a: Generation of Research Visits

Does the nonprofit let users to post on their Facebook page?

1= Yes 2= No

Part 4b: Dialogic Loop and Generation of Research Visits (To Be Repeated for Each Post Separately)

What day was it posted?

1= (Sunday) 2= (Monday) 3= (Tuesday) 4= (Wednesday)

5= (Thursday) 6= (Friday) 7= (Saturday)

In which period of time the post shared?

1= Morning 2=Mid-day 3= Night

How many of the following does the post have?

Likes _____

Reactions _____

Shares _____

Comments _____

Are comments responded by the nonprofit?

1= Yes 2= No

If yes, please specify the number? ___

Who is the origin of the post?

1= The nonprofit

2= User

What is the subject of the post?

1= Informative: The post provides information on health issue.

2= Call-to-action: The post encourages users to take specific action (joining an event, participate a program)

3= Positive emotive appeal: The post aims to elicit positive feelings. Also includes posts that aim to generate a positive feeling about the brand.

4= Organizational: The post provides information about organizational news.

Does the post use multimedia?

1= Yes 2= No

Does the post tag to another Facebook pages or profiles?

1= Yes 2= No

Does the post ask a question?

1= Yes 2= No

Does the post use a hashtag?

1= Yes 2= No

What is the general tone of the post?

1= Positive: The post expresses sentiments, it aims to elicit positive emotions such as hope, happiness or excitement.

2= Negative: The post aims to elicit fear or other negative feelings.

3= Neutral: The post has no strongly marked positive or negative characteristics.

Regardless of the post subject, does the nonprofit respond to follow-up messages?

1= Yes 2= No

CURRICULUM VITAE

Cansu Ekmekçioğlu Dedeoğlu was born in Istanbul, Turkey in 1987. She received her BA in Political Science and International Relations from Boğaziçi University with honor degree (2011). Her research area includes health communication, social networks and the role of digital technologies on health and wellbeing. She started her professional career in the health insurance sector. Ekmekcioglu-Dedeoglu is the chief executive of Gulhane Insurance where she works to bridge insurance and technology.

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Enstitü	Sosyal Bilimler
Adı Soyadı	Cansu EKMEKÇİOĞLU DEDEOĞLU
Tez Başlığı	Networked Health: An Analysis of Health Nonprofits' Use of Facebook in Turkey
Savunma Tarihi	10.07.2017 – 14.00
Danışmanı	Doç. Dr. Nazlı AYTUNA

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