THE SELF, INFORMATION TOPICS OF INTEREST, AND MEDIA USE AS INFORMATION SOURCE

by

Hyun Joo Lee

December 20, 2010

A dissertation submitted to the
Faculty of the Graduate School of
the University at Buffalo, State University of New York
in partial fulfillment of the requirements for the
degree of

Doctor of Philosophy

Department of Communication

ProQuest LLC
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106-1346

To my parents, two brothers, sister-in-laws and my family who have always supported me and made my education one of their top priorities

ACKNOWLEDGEMENTS

The completion of my dissertation and subsequent Ph.D. has been a long journey. At last I've finished my dissertation, but not alone. I could not have completed my dissertation without the invaluable support and encouragement of a few select people.

I would like to give special thanks to Dr. Joseph Woelfel who has always given me a deep insight when I faced a problem to solve in the analysis of the data as well as encouraged me to do better work on the development of the dissertation. His faith in me during the dissertation process has motivated me to push myself to do my best. Without his good and gentle advice, I could not finish my dissertation. Also, I would like to sincerely thank my committee members, Dr. Junhao Hong and Dr. Michael Stefanone not only for their comments and suggestions but also for genuine caring and concern.

My heartfelt gratitude is extended to Heasun Chun and Carolyn Evans who have helped me with their intellectual knowledge and cordial support. With their help I could analyze and interpret the data much more easily. I am also very grateful for Daejoong, Yunjae, older Hyunjung, younger Hyunjung, Kyunghee, Shinil, Kietae, and Chunngjoo.

Finally, I have not found the words that express how I feel for my loving and dearest parents, two brothers, Jaeeun and Jaewon, sister-in-laws, Banghyun and other nephews. Thank you for what I have done with all my heart. My family's unconditional love and care have carried me through my entire doctoral program.

CONTENTS

LIST OF TABLES

Page

LIST OF FIGURES

Page

ABSTRACT

From the theoretical viewpoint, the dissertation attempts mainly to contribute to an insight on the perspectives of interactionism and media repertoire of transitioning and seamless media use for information seeking. On the other hand, the dissertation seeks to apply the Galileo model to information seeking media use patterns, which takes into account self-reflexivity from the theoretical and methodological point of view. From this perspective on the changing and emerging relational properties of the communication network, the dissertation reveals that the cognitive process of information-seeking media use is the multidimensional structure on the Galileo spatial-linkage and thus shows the composition of patternized activities in the boundary of media repertoire. Evidence that information-seeking media use forms a multidimensional and multilayered cognitive structure that displays consistent usage patterns across clusters of media channels and information topics is also discussed.

The dissertation reveals the role of the self in information-seeking media use. From the self-concept, self-points of the Galileo space are placed at different locations in the US and Korean samples. In the Korean sample, self-point is positioned as a liaison between all the information topics and media channels, while in the US sample, self-point is located close to face-toface (FtF) and local news, and also interpersonal-mediated media channels. The different positionings of the self-points reflect the difference of the roles in both samples. For the Korean participants, it seems that self-concept is regarded as the mediator of information-seeking media use. On the other hand, for the US participants, it seems that self-concept is regarded as the main agent of controlling interpersonal and conversational communication activities.

The dissertation reveals a tendency for non-linear relationships between the number of weekly hours of media use seeking a specific information topic and the distance from the self-

concept. The findings imply that as they perceive a specific information topic as closest to themselves across all media channels, participants in the US and Korean samples spend media time on those information topics at the maximum amount. In contrast, the findings also imply that as they perceive a specific information topic as farthest to themselves, participants spend media time on those information topics at the minimum amount. The dissertation also reveals a tendency for inverse relationship between the number of weekly hours of each medium use seeking all information topics and the distance from the self-concept in the US and Korean samples.

The dissertation reveals the multilayered clusters that comprise the nested subgroups through hierarchical analyses. The big two separate clusters are created along with nested subgroups; one is the cluster of traditional media, news online and hard news types, and the other is the cluster of new media such as interpersonal-mediated and interactive media. Under the two separate clusters, the nested subgroups are visualized as different combinations of memberships depending on the applied methods of hierarchical clustering.

The dissertation reveals gender-stereotyped differences in perceiving information topics and media channels in both samples, indicating that the Korean sample shows more statistically significant gender differences in the perception than does the US sample. As common denominators, males prefer sports news to females in both samples, but only the US sample shows a statistically significant difference. Females also prefer FtF and magazine to males in both samples.

CHAPTER I

INTRODUCTION

The media disseminates information and news, playing an essential role mediating between people and the social world in modern society (McCombs & Reynolds, 2002). Lippmann (1922) describes the role of media news as the mirror of the social world, pointing out that people cannot experience all the events directly but experience them indirectly through mediation of media news. Media use behavior for news and information seeking allows people to learn about social events. This has therefore become a common task among people's daily activities in modern society.

In their information-seeking media use, people are also aware of all the available media channels such as news or information sources to which they can make viable access. People's perception of media availability for news and information is based on the familiarity with media use of information seeking. Despite a plethora of information from a variety of sources provided to people and a wide range of media selections, they can recognize specific information and media available to them in the process of the interaction between themselves and the media environment. The trajectory of the transition of media technology use characterized by a certain culture and society is the prerequisite for this interaction. The trajectory of the socially and culturally cumulated media use experience for information seeking, helps engage and reposition people involved in media use in the transition of the media environment.

Prior studies have provided evidence that the intrinsic attributes of media technologies themselves and information-seeking perceptions are among the main purposes in media use (Flanagin & Metzger, 2001; Lee, Ryu, & Kim, 2010). Particularly, the uses and gratifications

theory dealing with the motivational needs of media use (Blumler, 1979; Katz, Blumler, & Gurevitch, 1974) provides evidence for this interpretation. Furthermore, in this theory, the concept of the self has sometimes been conceptualized as motives of media use consisting of components such as personality, social identity, and social symbols displaying the positive self (Ang, 1995; Flanagin & Metzger, 2001; Harwood, 1999; Lee, Ryu, Lee, & Kim, 2009; Trevino, Daft, & Lengel, 1990), when compared to other motivational needs (e.g., information or entertainment needs). This theory and its findings argue that identity has indirect or direct effects on intention and behavior of media use. For example, self-identity is regarded as the psychological tendency toward personal characteristics which could be predictors of intention and behavior of media use. But in the theory, the concept of the self tends to be treated as an intrinsic individual disposition, not as the subject of the interaction with the media environment (Cheong, et al., 2010). Mainly because it focuses on motivational typologies drawn from media uses and the linkage of particular needs with particular media use (Katz, Blumler, & Gurevitch, 1973), however, the theory may easily ignore the interaction of the structural and relational interconnection between the environment and the self. The interrelation between media channels and people's perception of categorizing them as principal information sources, therefore, need to be developed on the basis of self-reflexivity.

Strictly speaking, the role of self-concept has not been empirically studied in relation to information topics or news in which media users are involved or have interest. More precisely, the role of self-concept has not been studied in terms of the relationship between the self and media sources which individuals seek for the acquisition of information topics or news. Accordingly, the current study aims at providing theoretical and empirical insight on the role of self-concept by using information topics of interest and media sources for obtaining such topics.

It is also designed to test the proposal of exploratory and explanatory research that identifies the role of self-concept in the context of information-seeking media use.

In media use as information sources, Reagan's source studies (Reagan, 1996; Reagan, Pinkleton, Chen, & Aaronson, 1995) revealed that the greater the interest in information topics, the greater the number of information sources available for the topics of interest. In the electronic and digital media environment, the sources for information have expanded from a few limited channels to almost limitless channels. Currently, along with the pervasiveness of the Internet and mobile-based devices, a greater diversity of sources can afford a highly flexible choice of information content to media users. Hence, in the investigation of the role of self-concept, this study considers that one of the effects of the changing and convergent media environment on people's information-seeking behaviors is a rich user experience of such media as a variety of information sources.

Purpose of the Study

The seemingly limitless extension of information channels of media may affect media use patterns of information-seeking behaviors in one way or another. This study attempts to explore media use patterns, pinpointing how particular media as information sources and purveyors of concrete information topics (e.g., international, national, and local news) are located and interrelated. To make the study of media use as an information source meaningful, it is necessary to take into account 1) the tendency to shift from one-way to an interactive media environment, 2) the composition and configuration of different media, and 3) how people perceive information topics provided by the diverse media, integrate them into a media ensemble, and use them on a routine basis. Therefore, another purpose of the present study is to examine how the pervasive use of the environment of interactive media has changed people's perceptions of media use and how people have practiced media use patterns for information seeking. Based on the results, this study also attempts to identify the future trend of media sources, media use patterns, and likely causes of change and stability in information-seeking behaviors.

CHAPTER II

THEORY BACKGROUD

Self-Concept and Media Use

Social Interactionism and Symbolic Interactionism

The conceptual framework of the interrelationship between self, identity, and society is ascribable to George Herbert Mead's work. According to Mead (1934), *social structure shapes the self and the self shapes social behaviors*. Social structure is the embedded constitution which is embodied by situated individuals playing roles or maintaining status in a given social context (e.g., role taking of gender and occupation is socially defined by norms and values). The main argument of the idea is that social structure is antecedent to the individual self but the relation between social structure and the self is redefined continuously not as the consequence but as the process in which the self interacts with the social structure. Therefore, the essential key to Mead's thought lies in the interactive process of the social structure and the self; that is, in the flux of structure and the self interacting with the structure (Mead, 1934).

From an interactionist perspective, the social structure as a whole is considered as the framework of collective consciousness that reflects "group properties," not "an aggregate of individual intrinsic cognitive and psychological attributes" (Woelfel, Scott, & Yum, 1988, p. 2). Likewise, Wolff et al. (1960, p. 335) argued that "a plurality of individual consciousness enter into communication and are fused into a common consciousness [in the community or society]." Common or collective consciousness means that beliefs, attitudes, values, and even acts are formed in the intermediate relationship between the involved members and the objects and/or concepts. The relativity of the interrelationship that exists between them is defined by culture and language, or consented and agreed to by a given society or community, which reflects the

negation of the permanent determination. This relative interrelationship displays the collective consciousness observable in the overlaying gradation of the structure, which constitutes a subset of the consecutive continuum of meanings (Woelfel, et al., 1988). Independent individuals in the society or community can acquire the same characteristics as group properties, whether achieving social cohesiveness, obligating social norms or playing social roles. Individuals in a society or community can without a doubt personally share, negotiate, and consent to the process of forming collective consciousness, sometimes adhering to or transforming it through social actions. Due to varying degrees of individual social consciousness and action, it is important to keep in mind that individual consciousness is not the same aspect of collective consciousness as group mind (Woelfel, et al., 1988). For this reason, collective consciousness as a whole cannot be composed of the simple aggregation of individual consciousness.

Contrary to the perspective of attitudes, beliefs, and actions in conventional studies, collective consciousness can be considered as a result neither of the attributes inherent in individuals nor those embedded in objects. Rather, "situations are structured by individuals who, in the course of interaction, establish a joint sense of the present, develop a corresponding sense of shared past, open common horizons to the future, and shape their conduct with respect to this collectively-established and situationally-sustained time-frame" (Shalin, 1986, p. 16).

To recapitulate the interactionism perspective, it is worth paying attention to Shalin's argument. He points out that social interactionism has four features of a paradigmatic setting: "the philosophical perspective on reality as being in the state of flux, the sociological view of society as emergent interaction, the methodological quest for a logic of inquiry sensitive to the objective indeterminacy of the situation, and the ideological commitment to ongoing social reconstruction as a goal of sociological practice" (Shalin, 1986, p. 9).

As an extension of cognitive processing, symbolic interactionism delves into socio-cultural perceptions as mediated by symbols and language. The way individuals practice social interaction reflects the shared meanings that they attach to things or objects. The way shared meanings come into being depends on the interaction between the self and others or social objects in the society. Blumer (1969, p. 5) described the basic principles of symbolic interactionism as the following: 1) human being's act toward things on the basis of the meanings which these things have for them; 2) the meaning of a thing for a person arises through the process of interaction between people, i.e., through the ways that other people act toward the person with regard to the thing; and 3) the use of meanings by an actor occurs through a process of interpretation. Stated differently, the pivotal principles of symbolic interactionism depend on the importance of the arbitrary attributes of language and symbols which attach to objects or concepts in a given society. The meanings of language and symbols, therefore, are generated from the interaction with people and the agreed-upon interpretation in the process of the interaction, that is, the shared meanings. The shared meanings are made complete by the response of others in the situated contexts. Accordingly, shared meanings cannot be defined by the experience or act of a single individual. Despite considerable variations of contextual contingencies, shared meanings surround the use and development of social objects and/or concepts, and are achieved through the stable and routine patterns of social activities in the social life of a group.

Context of Symbolic Meanings and the Reflexive Self

The interactionist perspective emphasizes the indeterminate situation, but the temporary determination in concrete situations is created by the active being. The relativity of the environment and the organism in the natural situation means that an organism continuously

adapts to the environment, changing his or her action to meet the situation and transforming the situation to gratify his or her needs (Shalin, 1986, p. 11). In this light, the organism and the environment can be jointly determined (Mead, 1922). The adaptation of the organism to the natural environment is evolutionarily developed in the stimulus-response process through the interaction of the organism with the given environment. Likewise, the formation of shared meanings is in the stimulus-interpretation-response process through the symbolic interaction of the active self with the social world (Zhang, 2006). Such a process is considered communication in the form of information processing in a given situation at a certain point in time.

Shared meanings in the community or within groups are based on collective memories which have been gathered through experience so that they can be generalized and universalized, eventually taking the form of principles or guidelines for different situations of everyday interactions between the self and the environment or for conversations between the members of the group. This continuously regenerated process of particulars and universals is structured into the expansion of common meanings which are allowed to be communicated from one individual to another. Therefore, the departure from individual actions depends on a social prototype rather than a situational contingency.

The self interacts with the social structure, depending on the specific social context with which the self is confronted (e.g., social interactions of individuals, groups, organizations, or institutions based on social roles and statuses). In this perspective, the self is viewed as a component of the social structure. Here attention needs to be paid to Cheong et al's (2010, p. 4) discussion about the relationship between self-concept and the situated context:

> The trajectory of ongoing behavior is assumed to be controlled by the self concept. The self concept is people's evolving understanding of who they are and how they are related to the situations in which they find themselves. Each "situation" consists of a set of symbolic "objects" whose meaning is defined only in relation

> to still other objects in peoples' experience. One object that is present in every situation is the self, which, as a symbolic object, is defined only in relation to the other objects of experience. Another important set of objects which may be found in any situation is a set of behaviors. Behaviors are also symbolic objects and are defined only in relation to the other objects.

The shared meanings, socially and continuously redefined, are derived from and arise out of this complex process through self-reflection and interaction with others. The self is complicatedly processed in the interaction with the social objects or beings outward and inward. The reflective, purposive, and interacting self perceives oneself as an object by defining and evaluating situational contexts. Subsequently, on the basis of this definition and evaluation, the self determines his or her social actions. In the process of making social actions, the self-relevant meanings are defined out of self-reflexive objectivity toward oneself, that is, the interaction of "I," the subjective self, with "me," the objective self, in the internalized process (Griffin, 2002, p. 60). The reflexive self communicates with others or contextual situations in the outward process.

From a symbolic interactionist perspective, therefore, information-seeking behaviors can be analyzed from the contexts of uses and practices of media or content. These uses and practices are socially constructed not only through the daily experience of individuals' interaction with the media environment at the micro level but also through the collective consciousness converged and accumulated into the shared meanings at the macro level. In other words, the social meanings around media use as an information source are closely interrelated with the contexts of media uses and practices. Because individuals recognize respective media's own trajectory through the experience of use and practice, they can form shared meanings around an array of media technologies on the basis of technological affordance and continuous redefinition of the use of those technologies. It should be noted that any communication technology and its use takes on meaning as symbolized in society and culture. Meanings surrounding communication

technology and its use are also arbitrarily attached by the community members and are positioned into the web of meanings in the course of the social construction. However, at the macro level, collective consciousness of media use is not the simple sum of the individuals' perceptions. Rather, whether or not they perceive the shared meanings of respective media usage, the cognitive process of information-seeking media use is typical of the temporarily determined representation of all the individuals' perceptions.

Self-Concept as a Predictor of Media Use

In our media technology-dominated society, the recognition of social reality can be achieved through the delivery and acquisition of information provided by every medium including face-to-face (FtF) communication surrounding human beings. For information acquisition, individuals perceive social reality through the ongoing interaction between the reflexive self and media environment. Media use behaviors for acquiring information are closely related to the shared meanings of media technology as information sources. Considering the shared meaning given to specific media technology and the accumulated collective experience of media technologies through their use, whether historically or culturally, we are able to recognize the overall media arrangement by comparing the similarity and dissimilarity of individual mediums. This comparative process reflects the trajectory of media use on the basis of the spatial-time frame.

Our fundamental understanding of the whole media landscape is based on the informative needs of the self to realize social reality on the one hand and, on the other, how this "landscape" is developed by the self applying to media or media content through the experience of seeking information. The active self perceives media configuration by mapping out a series of media for informative uses, placing them into informative categories (e.g., international, national, financial,

or entertainment news), defining him or herself or his or her actions by those categories. Subsequently, information-seeking behaviors are performed on the basis of the collective consciousness or the shared meaning of the general other surrounding semantic networks of the use of media as information sources. The relationship between the self and the use of media as information sources is described as the behavior of reflective media use. The self forms or changes the relationship by classifying the categories based on the similarities to or differences from him or herself. Information-seeking behavior, therefore, is a constructive process in the time-space context. Indeed, the experience of information acquisition contributes to reinforcing the perceptions of media use as information sources, at least until a new medium appears, extending or sometimes transforming these perceptions.

Traditional Media Use as Information Source

Media Displacement and Supplementation

Once a new medium has been disseminated, the concern about the impact of the new medium on traditional media usage patterns has always been one of the most important issues among communication scholars. With the emergence of diverse new media technologies, the differences in media consumption among media users' needs to be examined so as to clarify the potential impact of the new medium either on the reinforcement or on the change of existing media use patterns.

Previous research about the impact of a new medium on traditional media use patterns have shown mixed, sometimes contradictory, results supporting either a media displacement or supplementation effect. A media displacement effect perspective[1] argues that the time spent using a new medium is allocated at the expense of time spent on other media consumption. For example, several findings support the "displacement effect" of Internet use by showing the

decrease in existing media uses (Kraut, et al., 1998; Nie & Erbring, 2000). In addition, regarding interpersonal communication, previous researches have reported that increased time spent online as well as on traditional media led to the increased social isolation and fewer social contacts with friends and family and outgoing activities (Kraut, et al., 1998; Nie, 2001; Nie & Erbring, 2000; Nie, Hillygus, & Erbring, 2002).

On the other hand, a media supplementation perspective argues that the use of new media does not slacken other communication activities and, in some cases, can even supplement preexisting media use behaviors (Robinson, Barth, & Kohut, 1997; Robinson, Kestnbaum, & Beth, 1999; Stempel III, Hargrove, & Bert, 2000). It is found that home computer users were as actively engaged in art-related content and print media activities as non-users (Robinson, et al., 1999). Moreover, Robinson, Barth and Kohurt (1997) found that Internet users were more likely to be involved in activities related to print media, radio newscasts, and movies compared to non-users. Their findings also showed that Internet users were not less likely to be involved in entertainment-oriented contents. Other studies consistently support the supplementary role of the Internet by indicating that the Internet is used as an information tool for news sources. Such Internet activity enhanced more newspaper reading and radio news listening (Althaus & Tewksbury, 2000; Stempel III, et al., 2000).

As for the relationship between interpersonal communication and new media use, Robinson et al. (2002) suggested that when controlling for demographic variables, IT users tended to attend more entertainment and cultural events and have more social contact with co-workers and friends than non-users did. They summarized from the findings that Internet users were “time enhancers” who did not give up other activities such as other media consumption and

social interactions. Likewise, Lee and Lee's study (J. H. Lee & H. J. Lee, 2010) showed that online community users were more likely to have higher levels of sociability than non-users.

However, many other studies have revealed mixed results as to the relationship of the adoption and use of a new medium and individuals' preexisting patterns of media use and communication activities (Cai, 2005; Coffey & Stipp, 1997; J. H. Lee & H. J. Lee, 2010; Lin, 2001; Shapiro, 1998; Sung, Lee, & Kim, 2005; Wei, 2001). Wei (2001) compared differences in media use between mobile phone users and non-users. His findings showed that mobile phone users tended to read newspapers and magazines more, but watch less TV than non-users. By the same token, it is expected that new media can be adopted and used to displace and supplement traditional media at the same time. Nevertheless, while Robinson and his colleagues portrayed an Internet user as a "time-enhancer," new media users may expand other media use patterns or social activities overall. This expectation results from the technological characteristics of new media as a convergent medium which accommodates the devices with broadcasting services without losing the existing function of such devices. For example, the convergent technology of mobile devices allows users to interact socially and watch media content simultaneously. Through the multimedia applications, new media may reinforce users' broadcasting viewing patterns without giving up the interpersonal function which is embedded in the mobile phone itself.

Taken together, it should be noted from previous research that the rise of a new medium can play both substitutive and complementary roles for existing communication activities and media use. In other words, it can be inferred that the multi-functionality embedded in a new medium enhances media use patterns based on the interrelated functional similarity between media technologies from the perspective of their technological characteristics.

Media Repertoire

Media use studies focusing on TV/cable viewership utilize "channel repertoire," which is defined as the total number of channels that viewers watch regularly (Heeter & Greenberg, 1985). Having been freed from limitations of time and space and thus overcoming inflexible content schedules to which users have needed to conform, new media technologies have offered consumers a larger selection of channels with more flexible content availability. The prior literature, however, witnesses that even in the multimedia environment, users' channel repertoire did not increase to match the number of available channels they could watch (Ferguson & Perse, 1993). Instead, viewing time and cable subscription were found to be strong predictors of users' larger channel repertoire (Ferguson, 1992; Ferguson & Melkote, 1997; Yuan & Webster, 2006). Despite meaningful findings, the prior channel repertoire studies did not take into account people's consistent media use compatible with their communication needs and interests, which traverse various media channels. These consistent needs and interests enable versatile utilization of a new media technology along with the existing ones.

While the notion of genre repertoire shares a similar premise with channel repertoire theory, it places emphasis on the repetitive selection of content instead of choosing the channel based on an individual's interests and needs. Genre repertoire is referred to as "the set of genres routinely enacted by [communication] members in the community" (Yates, Orlikowski, & Okamura, 1995, p. 353). Yates and Orlikowski (Yates & Orlikowski, 1992, p. 299) delineated genres as "typified communicative actions characterized by similar substance and form and taken in response to recurrent situations". Stated differently, genre defined here not only subsumes a set of media contents but also various social-communicative activities. For example, common genres in genre repertoire include not only typical TV programs such as drama, talk shows, or

news but also interpersonal activities such as FtF gatherings, phone calling, Instant Messaging or E-mailing. Genre repertoire theory is useful for making intertwined communication activities, ranging from the interpersonal to the media-based, more easily recognizable and understandable based on the audiences' media use behaviors. In the use of traditional media, people reinforce and change genres by reproducing and adapting to genre repertoire, and in the use of a new communication medium, they also attempt to reinforce their own preexisting genre repertoire that is familiar from traditional media and adjust such genre repertoire to the novel genres of a new medium (Crowston & Williams, 2000).

Genre repertoire is also relevant to Atkin's (D. J. Atkin, 1992, p. 53) conceptualization of media consumption patterns as "functional similarity [of media technologies] and need compatibility [of media channels or contents]." The premise behind these concepts is that individuals tend to perceive and use different forms of media by structuring coherent patterns in consuming various forms of media contents within the domain of their interests and needs. Hence, the audience employs his or her own genre repertoire or media repertoire by evaluating and choosing cross-channel clusters of media contents that they want to be satisfied with, either habitually or intentionally.

In line with the perception of genre repertoire, the study assumes that the functional image of new media use as information source will be different according to individuals' preexisting preferred communication activities achieved through different media use (e.g., social contacts, landline phone, mobile phone, newspaper, TV, and Internet). Also, an individual's coherent content use pattern (e.g., news, drama, social gathering), which can be defined as genre repertoire, may influence the perception and actual behavior of information-seeking media use.

Extended from the discussions of new media's supplementary role, one can assume that users of a new medium are likely to be motivated to use the content consistently with their preference for a particular genre or content. The motivation to use content compatible with an existing preference is explained by the "genre repertoire" of media use, conceived from the theory of channel repertoire. Channel repertoire refers to audiences' propensity to repeatedly use a specific set of contents that comprise the repertoire in media consumption pattern even in the multimedia environment of abundant channel choices (Crowston & Williams, 2000; Ferguson & Perse, 1993; Heeter & Greenberg, 1985; Reagan, 1996; Yuan & Webster, 2006).

Reagan's study (1996) is worth looking into in that it explored the relationship of source repertoire to the audience's interest in certain topics. His study implied that people made use of media source repertoire from FtF communication to mass media depending on the areas that they had interest in. His finding as to cross-channel clusters of information sources provides a base for this study that attempts to explore the consistency and compatibility of audience's content consumption behaviors across different media.

Media repertoire is referred to as the repeated specific media use that people engage in on a regular basis. As the converged and integrated media has increased and permeated into daily lives, they may actually come to either supplement or supplant traditional media, otherwise making the dual effect of supplementation and replacement of traditional media. From the perspective of cognitive processes, media repertoire for information seeking is defined as the patternized activity, showing the maintenance of the extant media use at any point in time as well as the adaptation to and changing pattern of the new media use in the trajectory of the transmission over time. Here individual mediums and information topics as media content can be characterized as the nodes consisting of a communication network.

Information-Seeking Media Use

According to Atkin (1972, p. 191), information-seeking behaviors are defined in two ways from the perspective of message exposure:

> (1) Information search, which refers to the seeking behavior of an individual approaching a media source in order to become familiar either with the general content or specific message; and (2) information receptivity, which describes receptive encounters with topic-related cues during routine scanning of the message environment; selection occurs if the message-induced question arouses cognitive uncertainty.

In addition to the basic definition of information-seeking behavior, definitions of media use as information source may include the development and advancement of media technologies. As D.J. Atkin (1992) pointed out, the perceived functional similarity of an array of media technologies promotes the specific clustered use of subsequent media. Accordingly, the perception of interrelated media clusters among segments of users can lead to different clustering of media technologies (Vishwanath & Chen, 2006).

Meanwhile, uses and gratifications theory assumes that media use behaviors are vigorous activities to satisfy the needs and wants individuals search for. The theory assumes from the functional and goal-oriented viewpoint that media users have social and psychological intention, motivation and orientation in media choice and content selection. Because media use is an integrated part of most daily routines, it is always interrelated with other activities (e.g., leisure, physical exercise, or conversation). To be sure, the theory includes the point of the functional alternative to interchange with other activities including replaceable media use. Media use behaviors, therefore, compete with other activities for psychological and social gratifications. To illustrate this point, the theory focuses on what gratifications people are satisfied with in the use of media (Blumler, 1979; Katz, et al., 1974; Lin, 1996; Rubin, 1983). However, this viewpoint

overlooks the relationship of people to the context of media use and content selection despite supporting the idea that the importance of specific media use stems from its gratification of information seeking for surveillance and social integration.

From the perspective of social and symbolic interactionism, it can be argued that the self interacts with media landscape as a whole. Despite the varying ways of individual media use, there exists the structure of the collective consciousness and shared meaning across and throughout the trajectory of the transition of media technology use. Instead of the personal trait of individually isolated media use, the collective consciousness and shared meaning of media technology use can be recognized as a process of the structural pattern. It is also natural that the process of the structural pattern reflects not only the acceptance and application of the existing media technology use but also the reconstruction of the changing media technology use. The self, rather than as a subject having the motivational tendency specific to individually isolated media use, is considered as an object interacting with the media landscape. Therefore, it is arguable in the sense that the uses and gratifications theory, notwithstanding showing media availability and their functional usefulness by individuals, is not able to reveal the process of the structural pattern and the connected relationships between diverse media uses for information seeking and the self. Moreover, when they encounter a new medium, individuals reorganize their use behavior by integrating the unfamiliar medium into preexisting practices of media, and repeatedly constitute and adapt their media use behaviors to their actual routines.

Gender Difference in Information-Seeking Media Use

Studies have shown there to be gender difference in communicative behaviors, specifically media use (O'Keefe & Spetnagel, 1973; Vincent & Basil, 1997) and content selection (Lee, et al., 2009; Pingree, et al., 2001; 1997) on the one hand and expressive mode in

face-to-face (FtF) (Dosser, Balswick, & Halverson, 1983; Gross & John, 1998; Highlen & Gillis, 1978; Leaper & Smith, 2004) and interactive media settings (Brunet & Schmidt, 2010; Thelwall, Wilkinson, & Uppal, 2010) on the other hand. Gender difference in media content choice has been addressed primarily with reference to gender stereotyping. Several results showed that females are more likely to choose entertainment content such as soaps, medical series, and romances, while males are more likely to prefer action-oriented content such as sports and adventure (Gibson & Drane, 2006; Hansen & Hansen, 2000; McCarty & Shrum, 1993; Oliver, 1993; Potts, Dedmon, & Halford, 1996). Knobloch-Westerwick and Alter (2007) also found gender difference in news use. The authors reported that females tend to favor interpersonal and socializing information topics such as life and community issues, whereas males are more likely to select achievement and performance information topics such as sports and business.

Along with the advance of computer-mediated communication (CMC), questions of whether there is gender difference in CMC or CMC versus FtF have been examined. Results from gender difference in email use showed that females are more likely to use email as an expressive channel to preserve emotional closeness, whereas males are likely to use email as an instrumental channel in order to schedule regular activities (Boneva, Kraut, & Frohlich, 2001). Brunet and Schmidt (2010) argued that apart FtF communication settings, gender difference in expressive modes (e.g., use of passive vs. active language or emoticons) of CMC lies in specific situations. Male participants did use passive words perceived as feminine rather than active words conceived as masculine in the visual cue provided context of the webcam. Additionally, female participants used emoticons in the webcam condition rather than in no webcam condition more than their male counterparts did, illustrating more emotional expression in the visual cue provided context. Brunet and Schmidt's findings (2010) seems to support Deaux and Major's

(1987) argument that gender differences are dynamic and changing due to the influence of culture and society, and are found to be context and situation specific. Spence and Buckner (2000) also pointed out that the key reason for the decline in gender gap lies in the changes of social status, social roles, and life experiences in women. They found that although females have had egalitarian attitudes over time, females have still recognized themselves as more expressive traits than males.

Changing Information-Seeking Media Use Patterns

Architectural Limits of Traditional Media

Due to architectural features of closed and centralized systems, traditional media tended to impede a two-way communication between providers, creators, and users in a truly meaningful manner. The availability of the limited architectural characteristic should have allowed only for the considerably quantitative increase of communication means from which to provide various sources of users' information acquisition (e.g., various forms and types of print media and different programming of television and cable channels). Despite such quantitative increase, traditional media have still not realized the property of user's control over content. Delayed feedback and provider-dominated content creation have traditionally restricted active information-seeking media use.

The Internet's architecture of an open and decentralized network, on the other hand, offers a larger potential for two-way communication than any other medium had before. The Internet facilitates speedy feedback applications in a lower barrier to entry on the part of both content creators and providers. Therefore, it can be noted that the diversity of sources available to users is actually realized through the proliferation of converged and interactive media.

Architectural Characteristics of Interactive Media

Above all things, technological upgrade of communication technologies can be regarded as critical factors leading to the changing media environment as well as media use behaviors. Inherent attributes of interactive media consist of the following: 1) a boundless and decentered structure, 2) synchronicity and asynchronicity, 3) interactivity, 4) multimedia, and 6) portability and mobility, all of which have formed central elements of media-mediated communications. As a result, interactive media are encouraging inherent capabilities of their own, thereby enhancing individualized social communication. Over the interactive media, different types of communication modes from one-to-many to one-to-one which traditional media could not have provided are able to be realized.

Berman and Weitzner (1995, p. 1620) described the key features of new media technologies architecture as "*decentralized open access*" and "*user control over content*." An enduring development of Internet technology has provided an opportunity for advancing user control over content for interactive communication. The advance of user control over content has made it possible for Internet users to access diverse sources. Additionally, it has enhanced self-tailored or self-produced information content created and distributed via platforms and applications of homogeneous and heterogeneous interactive media. Such a user's increasing empowerment is embedded in the bottom-up rather than top-down structure, which leads to the participative environment of the common characteristic in web 2.0 applications (Kolbitsch & Maurer, 2006). The technical characteristic of web 2.0 architecture allows users to actively engage in producing and delivering content in cooperation with others (Bruns, 2007; van Dijk, 2009). As such, web 2.0 has developed user-centered design for information and knowledge, sharing and collaborative work on the ground for interactive communication.

Under the umbrella of web 2.0, the shift to Internet-based and mobile-based media may change the existing media environment, radically and evolutionally, and at the same time have enhanced both interactive and individualized communication. Centered upon the individual rather than the mass, on information sharing rather than upon one-way message delivery, interactive media appear to be expanding their own area into that of traditional media. Increasing use of individualized media through a variety of forms of interactive communication — for example, web logs (blogs), online videos, social networking sites, iPod and mobile phones — have brought changes in the dominant mode of communication. In this sense, these types of media channels take on social media because they have individualized networks and interactive information flow, thereby stimulating collaborative action for information gathering, dissemination and sharing.

User-generated content (e.g., reading posting on blog and watching posting online video on websites) is one exemplary case of interactive communication. The report published by OECD describes user-generated content (UGC or user-created content UCC) as one with 1) content made publicly available over the Internet, 2) which reflects a certain amount of creative effort, and 3) which is created outside of professional routines and practices (OECD, 2006, p. 4). However, due to the increase in market-driven UGC sites, these concepts need to be extended to include professionally produced content such as cable or network TV channel websites or business blogs. Therefore, instead of adhering to strict standards, a broader concept of UGC that fits into the changing interactive media environment is applied to the current study.

The report also points out the impetus to encourage user-generated content to be activated: 1) technical drivers — more broadband availability, the spread of easier software or platforms to create UGC and the increase in media technology devices for audio, photo and video; 2) social

drivers — the desire for interactivity and self-expression, the willingness to share, the spread of collaborative works online and among other things, and the stratified media use patterns such as content publishing by the younger, mainly under 25, generation with relatively high technology skills and content use by a large number of people; 3) economic drivers — increased availability of tools for the creation of UGC, increased financing of UGC-related sites by media companies or communications industry and lower cost of broadband connections; and 4) flexible licensing and copyright schemes such as the Creative Commons licenses and the increase of the creation of derivative works built on the original content (OECD, 2006, pp. 13-14).

For another example of interactive media, mobile communication technologies have been increasingly integrated into the Internet and multimedia functions (e.g., mobile TV and portable multimedia player). Mobile networks have extended to include Internet services such as e-mailing or transmission of TV programming. The penetration of mobile networks fosters and increases more interactive communication not only between user-to-media but also between user-to-user.

Interactive Media and Changing Information Channels

As the penetration of the Internet being saturated in the advanced countries (See International Telecommunication Union, 2009), the power shift from traditional media to the Internet has led the web market concentration in the news industry. Struggling with a stiff decline in revenue, news publications pointed to Internet portals and search engines as the key contributor to the sharp declines of newspaper readership and their serious financial earnings. They criticized search engines for performing news aggregation service. In the Korean context, legal sanctions on Internet portals and search engines were enforced in 2009 through the modification of media law in order to reduce the web market concentration of news and

information (Hwang & Yang, 2009). Media reform law was presumed to restrict news aggregation service and editorial rights of Internet portals legally. In the US context, the debate of the paywall policy, charging for access to news content, between search engines and newspaper publications, has emerged as a hot issue due to the web market concentration of news and information through news crawling and indexing of search engines (Heald, 2009). Korea tends to enhance legal restrictions on online media as a disseminator and mediator to take accountability for the greater role of the press (Hwang & Yang, 2009). Meanwhile, the US tends to impose economic restrictions on search engines to enable more profit sharing opportunities to print media. Despite the contextual difference in the news industry of both countries, the key to controversial arguments can be summarized as newspaper publications that face a subscription and financial crisis are trying to reduce the web market concentration that exists today.

Such situational context of the changing news industry could have made an impact on the transformation of information-seeking media use. In addition, thanks to a variety of information platforms on the Internet including the news features of search engines, online news search and browsing already became a part of daily information seeking. Online news readership almost emulated to newspaper readership and cable viewership (Kohut, 2008).

The survey results conducted by *the Pew Research Center for the People & the Press* showed the changing information-seeking media use. The survey results reported that news audiences are segmented into four groups: Integrators, who use both traditional media and the Internet for getting news, Net-Newsers, who refer to the Web rather than traditional media, Traditionalists, who still adhere to traditional media, and the Disengaged, who rarely have an interest in news or consume news (Kohut, 2008). Integrators, who are well-educated, affluent and middle-aged, use television as their main information source and have greater interest in

national and sports news than the other groups. Net-Newsers, who are affluent, well-educated and relatively young, mainly men and heavily technology-oriented, regularly engage in news consumption online rather than watching nightly network news broadcasts, and have interest in technology news. Traditionalists, who are older, less-educated and less affluent, rely heavily on TV news because they easily understand visual information. They rarely use the Internet to get news and have a strong interest in the weather and little interest in science and technology news (Kohut, 2008).

With regard to the relationship between news media and news sources, respondents still mention TV as the main news source. However, the majority of participants use the Web and traditional media at the same time. Age is found to be the critical factor determining the difference of media use as information source. The younger the media users, the more likely they are to use the Internet as a news source. The older they are, the more likely they are to spend the time watching TV and reading newspapers to get news (Kohut, 2008).

In the case of Korea, Korea Internet and Security Agency (KISA) (2009) reported in a survey result that the most common Internet activity is to get information and data (89.7%) , followed by leisure activities such as playing games and listening to music (88.4%) and communication with others such as e-mail and instant messaging (87%). The survey result also revealed that thirty-seven percent of participants over 12 years old employ the Internet as the secondary information source to learn more about the acquired information from other media such as TV, newspaper and radio (KISA, 2009). In addition to the use of the Internet as a major information source, main information channels of Internet users were found to be different from those of Internet non-users. For Internet users, TV (92.3%) was considered as the most important information source, followed by the Internet (89.8%). Conversely, for Internet non-users, TV

(98.9%) was conceived as the main information source, followed by interpersonal routes such as family, friends, and co-workers (94.8%) (KISA, 2009).

From another point of view, the availability of new information channels may have caused the change of overall news or information consumption. Tewksbury (2006) found that news consumption is susceptible to the political environment reflecting contextual and situational conditions. Respondents were more likely to select broadcasting, cable or online channels for political news and local sites for local news during the political campaign season (e.g., Super Tuesday primary period). These results explain how the current media environment can affect diverse but specific content use for information acquisition.

It is worth noting Tewksbury's (2005) argument that news consumption for information of interest tends to be specified and focused due to the Internet's rise in popularity. As much as the increase of user control over content, user control over news selection has also increased. The implementation of online interactive tools oriented toward a two-way journalism can be one of the reasons for specific-topic news and information consumption for the niche audience. An interactive media user for information seeking and acquisition has become an information gatherer and disseminator at the same time. User-friendly interactive features such as the search engine of iGoogle, e-mail news alerts or RSS feed have been customized and popularized. For instance, news recommendation engines (NREs), that is, the most e-mailed stories list of the *New York Times* was found to show the potential of an interactive tool between user-to-user as well as user-to-editor, acting as a catalyst for the change of news consumption patterns (Thorson, 2008). The rise and ubiquity of social media may also accelerate this changing pattern of receiving and sharing information and news (Adee, 2009; Kwak, Lee, Park, & Moon, 2010). For example, tweeter is becoming a mobile medium delivering breaking news from its feed of lists of news

outlets or networked groups. Tweeter has the advantage of providing the real-time delivery of news to many people at a higher rate of speed and at a lower cost. Accordingly, it is assumed that nurtured by interactive modes of the media technology, people's news and information consumption may take on patterning activities around daily activities on a routine basis, which may be different from that of the traditional media-dominated environment.

CHAPTER III

RESEARCH QUESTIONS

The present study aims to develop notions of interactionism and media repertoire from the perspective of information-seeking media use in the extant literature, test epically its theoretical assumptions by using the Galileo method, and extend to the communication network perspective.

The cognitive construction of a Riemann space will show the interconnected relations of relative distances between the concepts observed. It is assumed that topics closer to self point are used most and topics far from the self point are used less. The self is expected to be a good predictor of the topics people are highly involved in and have a strong interest in. It is also assumed that media sources close to self point are used most and media sources far from the self point are used less. The self is expected to be a good predictor of media source use for topics in which people are highly involved. Furthermore, it is expected more interrelated concepts of information topics and respective media will be closer to each other and less interrelated concepts will be more distant from each other. Therefore, based on these assumptions, research questions posit the following:

RQ_1: What is the picture of the whole structure of the self, information topics and media sources? What is the relationship between information topics and media sources? What are the relative distances of the groupings among them?

$RQ_{2\text{-}1}$: How does the self perceive information topics and media sources?

$RQ_{2\text{-}2}$: What is the relationship between the distance from the self-concept and weekly media use time?

RQ_3: Are there gender differences in the perception of information topics and media sources? Are there gender differences in the constitution of groupings of information topics and media sources?

CHAPTER IV

METHOD

Galileo Model: Neural Network

The Galileo system maintains that interpersonal and mediated communication networks can be regarded as neural networks which consist of sets of nodes (e.g., objects and/or concepts) and in which any activation of the nodes can influence the entire network structure as a whole (Woelfel, 2009). Woelfel argues that "on the individual level, neural networks provide the organic substrate on which individual human thought and feeling take place, while on the social level, interpersonal and media networks provide the mechanism which gives rise to collective cultural experience" (2009, p. 1).

Conventional methods are problematic in that they deal with concepts or variables as exclusive and independent from one other and draw statistical inferences to the population from "an aggregate linear of some finite set of variables in the regression model"(Woelfel & Saltiel, 1988, p. 35), thereby revealing the relation between concepts or variables in correlational analysis and factor analysis. The application of the Galileo model, with the aim of applying scientific methods as applied in the physical science, to communication research has some advantages not available using conventional methods — considerations of 1) relational properties of the neural network between objects and/or concepts, 2) relatively constitutive construct structure consisting of comparison measurements between objects and/or concepts, 3) timely and contextually relevant constitutive structure on the basis of time-space frame.

Another advantage of the Galileo model lies in emphasizing the importance that rather than the direct inference to the population, observations are for the accurate measurement of the sampling parameters along with reports of sampling errors unexplained as the area of uncertainty.

At the heart of the argument of this idea is the consideration of relativity and comparison of measurement of the time-space frame, not fixed and absolute standardized measurement. Measurements mean relative values in terms of a comparison to a standard. Therefore, it is important that replications and repeated tests are made by other researchers in a timely and contextually fashion (Woelfel & Stoyanoff, 2006).

In studies of neural networks which mainly delve into the communicative processes, the existence of collective consciousness representing group properties of beliefs, attitudes, or acts can be measured by any change of sets of nodes in interpersonal or mediated communication networks (Woelfel & Fink, 1980). Group properties are referred to as the relationship between objects and/or concepts. Under the considerations of relational properties in the neural network, objects and/or concepts are hierarchically categorized with a sequent nested subset; for example, "with categories nearest to 'experience' being 'basic,' higher level concepts 'superordinate,' and lower level categories 'subordinate'" (Woelfel, et al., 1988, p. 5). Collective consciousness can be operationalized as an aggregate of individual consciousnesses by averaging all the pair measurements and yielding a vector matrix of interpoint distances in a Galileo space. The Galileo model uses a multidimensional space in which objects and/or concepts are arrayed based on distances of similarity and dissimilarity between any objects and/or concepts including the self. The very interpoint distances reflect closenesses and differences in meaning as collective consciousness. The more shared properties any objects or concepts have, the closer they are located in the Galileo space. Conversely, the more different the properties are, the further apart they are.

The Galileo model is, therefore, considered as "a fuzzy logic neural artificial network" (Woelfel, 1998, p. 12). Fuzzy boundaries imply a consecutive continuum of meanings as well as

continuous redefinition by the members involved at a time-space frame. The Galileo model develops a multidimensional structure construct which constitutes the consecutive continuum between interpoints of the distances on the Riemannian space. In addition to the spatial (geometric) map, in other words, the Galileo model graphically displays such gradation points of any move which can activate the vertical and horizontal interconnected network of the given objects and concepts as a whole, and which, therefore, represents the cognitive process at any point in time or over time.

Sampling Procedure

The survey was administered with pair-comparison questionnaire[2] which consisted of concept pairs between the self, information topics, and diverse media ranging from traditional to new media. For comparison to standard as a reference frame, the instruction that *international news and national news are 100 units apart* was suggested to the subjects as an example. Subjects self-reported the ratio number, considering the distance of each concept pair consisting of 231 questionnaire items with comparing to the standard. Subjects were instructed to report zero if they perceived the compared concept pair was the same and report any unlimited number they wanted when they perceived the compared concept pair was different from each other.

For study1, the print-based survey was completed by college students of the communication department at KunKuK University at Chungju and those of the management department at Aerospace University at Kyounggi of South Korea in June, 2008. After answering concept pairs, subjects responded to weekly media use time spent on information topics by medium. The purpose of study 1 was to evaluate the suitability of the research design as well as to investigate whether context specific differences exist between college students of the USA and Korea in terms of information-seeking media use. The final valid samples of study 1 yielded 150 responses. Males resulted in 62.6 % and females 37.4% in the data set.

An online survey for study 2 was then created using LimeSurvey software. College students from Communication 101 classes at the University at Buffalo, the State University of New York, completed the online survey questionnaire with comparison pairs and weekly media use time spent on specific information topics by medium. The online survey was conducted in November, 2009 and April, 2010, respectively in order to secure the effective sample size. After removing outliers[3], the data yielded 556 to 497 responses per concept pair — some data pairs included missing values. On the average, males resulted in 56% and females resulted in 44% in the data set.

Measurement

The interrelationship between self, information topics and mediums as information sources was reviewed from the previous literature, whose empirical findings and theoretical implications guided the present study (D. J. Atkin, 1992; Cheong, et al., 2010; Flanagin & Metzger, 2001; Reagan, 1996; Reagan, et al., 1995; Vishwanath & Chen, 2006). Afterwards, the typology of information topics was borrowed from that of Reagan's source repertoire study (1996). Mediums observed in the present study also extended into media technologies that were advanced and segmented as information sources in order to reflect the convergent and interactive media environment.

Based on literature review, twenty-two concepts were observed: yourself, 9 concepts of information topics of interest, and 12 concepts of information sources. Table 1 presents the list of twenty-two concepts observed. The nine concepts of information topics were international news, national news, what's going on in the community (local news), science/technology, medical/ health information, nutrition/food, financial information, sports, and entertainment. The twelve concepts of information sources were newspaper, magazines, TV, radio, mobile phone, FtF,

reading news on the Internet, e-mail, blogging (both reading and posting), online video (both watching and posting), Instant Messaging (IM), and IPOD/MP3 (including Podcast). Responses to the pair-comparison items were analyzed with Galileo version 5.6 (v5.6) and paired comparison measurements constructed the coordinate system for the Galileo space. T-tests using SPSS 18 software were, in turn, employed to analyze mean differences of the concept pairs between males and females. Also, regression and logarithmic regression models using SPSS 18 were applied for examining the relationship between the distance from self-point and weekly media use time.

Johnson's hierarchical clustering in UCINET 6 and the ward linkage method[5] of hierarchical clustering in SPSS were also used to display a visualization of the interrelations among information topics, mediums and self-concept. Hierarchical clustering is useful for further identifying "groupings or clusterings of the "objects [concepts]" under study that best represent certain empirically measured relations of similarity [distances]" (Johnson, 1967, p. 241). The algorithm primarily identifies partitions. It then consists of hierarchical clusters, each partitioned group corresponding to larger groupings. Thus, it contains all nested clusters produced at earlier stages of agglomeration and at the end creates a single cluster (Johnson, 1967; Nam & Barnett, under review).

On the basis of hierarchical clustering analysis, the communication network of information-seeking media use can be patterned by multilayered subgroupings into clusters representation that displays the configuration of which media cluster with which information topics. Therefore, in the present study, hierarchical cluster analyses were employed in terms of close clusters (similarities) and separate clusters (distances) among concepts observed. The shorter the brackets between the concepts are, the stronger the relations between them are. Viewed from different angles with reference to multilayered interrelations among concepts, the data of both scalar product and mean value matrices was used in the present study.

CHAPTER V

ANALYSIS AND FINDINGS

Study 1: Korean College Student Sample

The mean matrix for descriptive analysis shows the mean values of the distances between the compared pair concepts observed, indicating dissimilarities among comparison pairs (See Table 2). The average number of observations per cell was 150, and the overall mean of all observations was 142.6. The closest comparison pair was national news and news online (M = 70.9, SD = 107.3, SE = 8.76), while the farthest comparison pair was nutrition/food news and MP3 (M = 272.3, SD = 268.6, SE = 22.0).

Regarding RQ_1, Figure 1 illustrates that the trend of information-seeking media use showed consistent patterns compatible with information topics; TV was perceived as the closest to all types of information, followed by news online, newspapers, magazines, FtF, and blogging. Mobile media such as mobile phones and MP3 players, and interpersonal-mediated media such as email and IM were perceived as the farthest from all types of information. In addition, national news was located closest to almost all media channels, while nutrition and food was located farthest from almost all media channels. As illustrated in Figures 3 and 4, it was also discovered that regardless of gender, the trend of information-seeking media use shows constant patterns corresponding to information topics.

The cognitive configuration of the observed concepts was measured by the dimensionality of the multidimensional Riemann space. Table 4 lists the spatial coordinate matrix in the Riemann space, which indicates fifteen dimensions in real space with positive eigenvalues, and seven dimensions in imaginary space with negative eigenvalues, meaning this was a non-Euclidean space. The first dimension in real space explained 34.6 percent of the total variance and the second dimension in real space explained 19.3 percent, so the first two

dimensions explained 53.9 percent cumulatively. Based on the coordinate matrix (as seen in Table 4), Figure 9 visualizes the cognitive map of the whole structure in three-dimensional space, explaining 70.9 percent of the total variance in real space. Each information topic, medium, and self-concept was represented as a node in the Galileo space. Newspaper was grouped with hard news types, nutrition/food, medical/health, and financial news, constituting a single group. TV and news online were found to be located in the neighborhood of national news and self-concept. News online and self concept also tended to be located at the intermediary points not only between soft news (e.g., sports and entertainment news) and hard news (e.g., international and national news), but also between traditional (e.g., TV, radio, magazine, and FtF) and new media (e.g., email, blogging, and video online). Online media tended to constitute a single cluster, indicating that blogging and email were surrounded by news online and video online.

In order to further explain the interrelation between information topics, media channels, and self-concept, hierarchical cluster analyses were utilized. Figure 15 shows a dendrogram of Johnson's hierarchical cluster analysis of the Korean college student sample, using the scalar product matrix. Two separate clusters were identified in information-seeking media use; the first cluster was further broken into three subgroups, and the second cluster consisted of new mediums. In the first cluster, the first subgroup consisted of the bond of international news and financial news linked to news online and TV. The second subgroup was composed of the bond of nutrition/food news and medical/health news grouped together with local news and then science/technology news. The third subgroup was the grouping of entertainment news, magazine, newspaper, and sports news interrelated to radio, and then national news. In the second cluster, the link of mobile phone, MP3, and self-concept bonded to the link of email and IM and the link of blogging and video online, and then these links were clustered with FtF. Table 12 lists the

cluster memberships using the scalar product matrix based on Johnson's hierarchical cluster analysis.

In the hierarchical clustering analysis using the mean value matrix of the Korean college student sample, the visualization of the cluster structure was found to be different from that in the analysis using the scalar product matrix (See Figure 16). The first cluster membership was the tie of international news and blogging linked to the bond of TV, video online, and sports news, and the bond of entertainment news and news online. The second membership was the bond of national news and financial news connected to FtF, local news, and radio, and the bond of nutrition/food news, medical/health news, and science/technology news, and then these bonds were related to the bond of newspaper and magazine. The third membership was the bond of mobile phone and self-concept loosely connected to MP3 and IM. The fourth membership was only email. Table 13 lists cluster memberships using the mean value matrix based on Johnson's hierarchical cluster analysis.

Cluster analysis using the scalar product matrix in SPSS ward linkage also showed multilayered but different dimensions from those of Johnson's hierarchical clustering visualization (See Figure 27). The first membership was made up of nutrition/food news, medical/health news, science/technology news, financial news, and international news. The second membership consisted of sports news, newspaper, magazine, national news, TV, news online, radio, FtF, and local news. The third membership consisted of self-concept and new mediums such as mobile phone, IM, blogging, video online, email, and entertainment news. The fourth membership consisted of only MP3. Table 14 lists cluster memberships using the scalar product matrix based on ward linkage in the SPSS hierarchical cluster analysis.

The Korean participants' cluster analysis using the mean value matrix in SPSS ward linkage clearly showed two separate clusters under which four cluster memberships were constituted (See Figure 27). The first cluster membership was composed of the link of nutrition/food news and medical/health bonded to the link of financial news, magazine, science/technology news, and newspaper, and then these links were connected to international news. The second cluster membership consisted of the link of news online and self-concept related to the link of email and blogging. TV, video online, and radio fell into the third cluster membership. The fourth cluster membership contained the link of entertainment news and sports news bonded to the connection of the link of local news, FtF, and IM with the link of national news, MP3, and mobile phone. Table 15 lists the cluster memberships using the mean value matrix based on ward linkage in the SPSS hierarchical cluster analysis.

With regard to $RQ_{2\text{-}1}$, from the distances of information topics, self-concept was closest to national news (M = 87.0, SD = 99.2, SE = 8.10). The point farthest from self-concept was international news (M = 181.2, SD = 169.2, SE = 13.8), followed by local news (M = 146.8, SD = 157.0, SE = 12.8). From the distances of media, self-concept was located closest to mobile phone (M = 89.1, SD = 151.6, SE = 12.4), followed by IM (M = 95.2, SD = 134.7, SE = 11.0), and then news online (M = 97.8, SD = 148.6, SE = 12.1). Table 2 shows the interpoints of information topics and media channels with self.

For $RQ_{2\text{-}2}$, the relationship between the distance from self-point and time spent on all media seeking a specific information topic and the relationship between the distance from self-point and time spent on each medium seeking all information topics provide additional and meaningful data. The R-squared values on Figures 33, 34 and 35 indicate that the total variations in y can be explained by the relationships between x and y in linear regression and logarithmic

regression models (based on the formula of logarithmic regression equation, y = ln x + a). Based on the R-squared values in Figures 33 and 34, rather than linear regression equation models, logarithmic regression equations fit the better estimation of time spent on the use of all the media channels seeking a specific information topic. Figure 34 shows that when international news was not considered, both models (F (1, 6) = 36.07, ρ = .001, adjusted R^2= .83 in the linear regression model and F (1, 6) = 56.13, ρ = .000, adjusted R^2= .87 in the logarithmic regression model) presented a better model fit for estimating the relationship than the models presented in Figure 33. Figure 35 also shows that logarithmic regression (F (1, 10) = 6.87, ρ = .025, adjusted R^2= .39) was a better model fit for estimating the time spent on the use of each medium seeking all information topics than linear regression model (F (1, 10) = 6.14, ρ = .033, adjusted R^2= .32).

For RQ_3, the distances of other concepts from females were greatly different than those from males. The self-points of females were located closer to all concepts than were those of males, except for sports news, which was closer to the self-point for males. The closest comparison pair for females was entertainment and TV (M = 51.8, SD = 76.8, SE = 10.3), and the farthest comparison pair was international and local news (M = 221, SD = 159.3, SE = 21.3). The closest comparison pair for males was national news and TV (M = 74.1, SD = 112.3, SE = 11.6), and the farthest comparison pair was nutrition/food news and MP3 (M = 311, SD = 293.7, SE = 30.5). In order to test whether there were statistical gender differences of comparison pairs, t-tests by gender were performed. Table 7 presents the means, SD (Standard Deviation), SE (Standard Error), RSE (Relative Standard Error)[4], and t-values for the significant differences between the self and the concept pair. The t-test results indicate that from the distance of the self-point, there were gender differences in information topics of interest in: local information (t = 2.77, $p < .01$), medical and health information (t = 1.85, $p < .10$), nutrition and food information

($t = 3.92$, $p \leq .000$), and entertainment ($t = 2.35$, $p < .05$). The t-test results also demonstrate that females had a higher tendency to perceive more media channels as familiar than did males. Accordingly, females were more likely than males to perceive media channels such as magazines ($t = 3.32$, $p \leq .001$), TV ($t = 1.78$, $p < .10$), radio ($t = 3.04$, $p \leq .01$), FtF ($t = 4.09$, $p \leq .000$), mobile phones ($t = 2.54$, $p \leq .01$), news online ($t = 1.96$, $p < .05$), blogging ($t = 2.50$, $p \leq .01$), and online videos ($t = 1.72$, $p < .10$) as close to themselves. When *SE* and *RSE* are considered in comparison with the differences of the concept pairs by gender, the differences of some of the percent relative errors by gender must be interpreted carefully. For instance, the difference of the percent relative error regarding the distance of TV from self-concept was more than a 10 percent difference due to the small sample size of females. In addition to the differences of the distances of other concepts from self-points, there were significant gender differences in perceiving the distances between other concept pairs. Tables 9 and 10 list the t-test results of the perceived gender differences of the concept pairs. The results demonstrate that female participants in the Korean sample were likely to perceive the distances between information topics, as well as between media channels and also between information topics and media channels, as closer to themselves than their male counterparts.

As seen in Figure 17, the hierarchical cluster of females using the scalar product matrix shows a similar pattern in forming interactive media clustering as that of the Korean total sampling. The difference between the two cluster structures was three subgroups in the first cluster. The first subgroup was international news and sports news connected to news online, and then these were associated with entertainment news and magazine, and subsequently, national news. The second subgroup consisted of financial news and newspaper associated with local news and then radio. The third subgroup contained the pair of nutrition/food news and medical

health news connected to science/technology news and then TV. The second cluster contained the bond of MP3, mobile phone and self-concept linked to FtF and IM, and in turn, was loosely associated with email, video online and blogging. In the Korean male student sample, two separate clusters were formed (See Figure 19).The first cluster also had three subgroups. The first subgroup constituted international news and financial news connected to news online, and consecutively, TV. The second subgroup consisted of nutrition/food news and medical/health news connected to local news and then science/technology news. The third subgroup was composed of the brackets of entertainment news, magazine, and newspaper associated with the bond of sports news and radio, and lastly, these were connected to national news and then FtF. The fourth subgroup was made up of self-concept and interactive mediums such as the brackets of mobile phone, self-concept, and MP3, the bond of email and IM, and finally, video online and blogging. Table 12 lists the cluster memberships by gender using the scalar product matrix based on Johnson's hierarchical cluster analysis.

In Johnson's hierarchical clustering analysis using the mean value matrix, Korean females' clusters were classified into three subgroups, showing a different cluster structure than all the Korean participants' (See Figure 18). The first cluster membership consisted of nutrition/food news and medical/health news associated with science/technology news and then international news. The second cluster membership was the link of national news, sports news, and news online attached to the link of TV, entertainment news, and radio, and subsequently, these two links were associated with the bond of blogging and video online as well as the bond of newspaper, magazine, and financial news. The third cluster membership was the link of mobile phone, self-concept, and FtF loosely connected to MP3, IM, and email. In the clusters of Korean males (See Figure 20), the first cluster membership consisted of the bond of international

news and financial news tied to the link of news online, national news, sports news, TV, radio, and the link of entertainment news, newspaper, and magazine. The second cluster membership was the bond of nutrition/food news and medical/health attached to local news and science/technology news. The third cluster membership was the bond of MP3, self-concept, and mobile phone associated with the bond of blogging and video online, and the bond of email and IM. The fourth cluster membership was only FtF. Table 13 lists the cluster memberships using the mean value matrix based on Johnson's hierarchical cluster analysis.

The female cluster analysis using the scalar product matrix in the SPSS ward linkage showed four cluster memberships (See Figure 28). The first cluster membership was composed of the link of TV, news online, national news, and radio connected to newspaper and magazine. Subsequently, these were associated with sports news, international news and financial news. The second cluster membership consisted of nutrition/food news and medical/health news bonded to science/technology news. The third cluster membership contained FtF and self-concept related to local news. The fourth cluster membership consisted of mobile phone and MP3 grouped with the link of blogging, video online, email, and IM, and then merged with entertainment news. In the male cluster analysis using the scalar product matrix in the SPSS ward linkage (See Figure 29), the first cluster membership contained the bond of national news, TV, news online, and FtF tied to science/technology news and international news, and then the bond of sports news and entertainment news. The second cluster membership included the bond of newspaper, magazine, radio, and local news tied to the bond of nutrition/food news, medical/health, and finanacial news. The third cluster membership consisted of the bond of blogging, video online, email, and self-concept linked to the bond of mobile phone and IM. The

fourth cluster membership was only MP3. Table 14 lists cluster memberships by gender using the scalar product matrix based on ward linkage in the SPSS hierarchical cluster analysis.

The female clusterings using the mean value matrix in the SPSS ward linkage were also sorted into four memberships (See Figure 28). The first cluster membership was the link of nutrition/food news, medical/health, science/technology news, which was then attached to financial news and international news. The second cluster membership was the link of national news, news online, TV, and radio bonded to the link of blogging and video online. In addition, these links were associated with the newspaper, magazine, sports news, and entertainment news. The third cluster membership was the link of FtF, self-concept, and local news. The fourth cluster membership constituted the bond of mobile phone and MP3 connected to the bond of email and IM. As displayed in Figure 29 of the male cluster analysis, the first cluster membership was the link of nutrition/food news and medical/health news bonded to the link of science/technology news, financial news, and international news. The second cluster membership was the link of national news, TV, and news online connected to the link of entertainment news and sports news and the link of newspaper, magazine, radio, and local news. The third cluster membership was the link of blogging, video online, email, and IM connected to the link of mobile phone, self-concept, and FtF. The fourth cluster membership was only MP3. Table 15 lists the cluster memberships by gender using the mean value matrix based on ward linkage in the SPSS hierarchical cluster analysis.

Study 2: US College Student Sample

The mean matrix for descriptive analysis includes the mean values of the distances between the compared pair concepts observed, indicating dissimilarities among comparison pairs (See Table 3). The average number of observations per cell was 527, and the overall mean of all

observations was 81.3. The closest comparison pair was sports news and TV (M = 40.2, SD = 66.6, SE =2.94), while the farthest comparison pair was international news and FtF (M = 142.7, SD = 119.1, SE = 5.07).

Regarding RQ_1, Figure 2 suggests that the trend of information-seeking media uses illustrated consistent patterns compatible with information topics; TV was perceived as the closest to all types of information, followed by newspapers, and then by news online, radio, and magazines. FtF and interpersonal-mediated media such as mobile phones, IM, and MP3 players were perceived as information sources located far from all types of information. In addition, entertainment news and sports news were located closest to almost all media channels, while international news was located farthest from almost all media channels. As demonstrated in Figures 5 and 6, it was also revealed that regardless of gender, the trend of information-seeking media use shows constant patterns corresponding to information topics.

Table 5 shows the spatial coordinate matrix, which has sixteen dimensions with positive eigenvalues, and six dimensions in imaginary space with negative eigenvalues. Based on the coordinate matrix in Table 5, Figure 12 illustrates the cognitive map of the whole structure in three-dimensional space, explaining 63.5 percent of the total variance in real space. Overall, the cognitive structure tended to have a separate boundary between new media and traditional media. Moreover, news online and traditional media tended to be located around hard news types, while new media tended to be located around soft news types. News online clustered around hard news types, national news, financial news, nutrition/food, medical/health news, and science/technology as well; it was also located close to the grouping of traditional media. Online media, except for news online, tended to cluster into a single group, indicating that blogging, video online, and email were more closely located to one another. FtF and interpersonal-

mediated media such as mobile phone, IM, and MP3 tended to be clustered around self-concept. Soft news types such as entertainment and sports news, and local news tended to be located nearby. From self-concept, these news types were likely to be closer to self-point than hard news types.

To describe the groupings among the concepts observed, hierarchical cluster analyses were also applied. Figure 21 presents a dendrogram of Johnson's hierarchical clustering using the scalar product matrix in the US college student sample. It indicated two separate clusters in the information-seeking media use: the first cluster was further broken into three subgroups and the second cluster consisted of interpersonal-mediated and interactive mediums. In the first cluster, international news, news online, newspaper, financial news, national news, radio, magazine and TV were in the first subgroup. The second subgroup was composed of nutrition/food news, medical/health news, and science/technology news and then loosely connected to the first subgroup. In the second cluster, the first subgroup consisted of FtF, self-concept, sports news and local news. The second subgroup was entertainment news, MP3 and video online merged with mobile phone, IM, email, and blogging. Table 16 lists the cluster memberships using the scalar product matrix in Johnson's hierarchical cluster analysis.

Figure 22 shows a dendrogram of Johnson's hierarchical clustering using the mean matrix in the US college student sample. In the first cluster, the first subgroup was only international news. The second subgroup included the link of national news, news online, and financial news bonded to local news and newspaper, and the link of sports news, TV, entertainment news, magazine, and radio. The third subgroup consisted of FtF and self-concept, and the fourth subgroup was nutrition/food news, medical/health news, and science/technology news. The second cluster was composed of mobile phone, email, IM, and blogging with video

online and MP3. Table 17 lists the cluster memberships using the mean value matrix in Johnson's hierarchical cluster analysis.

Cluster analysis using the scalar product matrix in the SPSS ward linkage also shows multifaceted but different arrangements from those of Johnson's hierarchical clustering visualization (See Figure 30). Two separate clusters diverged, and the clusters constituted four memberships. The first cluster membership was only international news. The second cluster membership was made up of the link of magazine, TV, radio, and news online related to the link of financial news and newspaper. These two links, in turn, joined national news and the bond of nutrition/food news, medical/health news, and science/technology news. The third cluster membership consisted of the tie of FtF and self-concept merged with local news. The fourth cluster membership contained the link of entertainment and sports news related to the link of email, blogging, and video online, and the bond of mobile phone, IM and MP3. Table 18 lists the cluster memberships using the scalar product matrix based on ward linkage in the SPSS hierarchical cluster analysis.

In the cluster analysis of the US participants using the mean value matrix in the SPSS ward linkage (See Figure 30), the first cluster membership was the link of national news, newspaper, news online, magazine and financial news grouped with international news. The second cluster membership was the bond of nutrition/food news, medical/health news and science/technology news. The third cluster membership was the link of FtF and self-concept attached to the link of entertainment news and sports news and the link of TV, radio, and local news. The fourth cluster membership was the link of mobile phone, IM, and email attached to the link of blogging, video online, and MP3. Table 19 lists the cluster memberships using the mean value matrix based on ward linkage in the SPSS hierarchical cluster analysis.

With regard to $RQ_{2\text{-}1}$, from the distances of information topics, self-concept was closest to entertainment news (M = 53.6, SD = 62.3, SE = 2.75), followed by sports news (M = 64.7, SD = 76.6, SE = 3.38), and then local news (M = 67.8, SD = 82.7, SE = 3.52) and nutrition/food news (M = 69.6, SD = 72.6, SE = 3.16). The point farthest from self-concept was international news (M = 136.1, SD = 133.6, SE = 5.68), followed by national news (M = 99.0, SD = 106.1, SE = 4.50). From the distances of media, self-concept was located closest to FtF (M = 51.9, SD = 70.4, SE = 3.14), followed by mobile phone (M = 57.4, SD = 75.1, SE = 3.35), and then TV (M = 66.9, SD = 68.4, SE = 3.05) and email (M = 70.5, SD = 75.0, SE = 3.37). Table 3 shows the interpoints between the information topics or media and the self.

Moreover, in the $RQ_{2\text{-}2}$ analysis of the relationship between the distance from self-point and time spent on all media seeking a specific information topic, it is also found that the US sample showed the same tendency as the Korean sample, following the solid lines of the overall trends of the data (See Figures 36 and 37). Based on the R-squared values, logarithmic regression equation shows a better model fit than does linear regression equation model. Figure 37 shows that when international and national news were not considered, both models (F (1, 5) = 21.03, ρ = .006, adjusted R^2= .77 in the linear regression model and F (1, 5) = 26.23, ρ = .004, adjusted R^2= .81 in the logarithmic regression model) presented a better model fit for estimating the relationship than the models suggested in Figure 36. In terms of the time spent on each medium seeking all information topics, there was not big difference between the two equation models (See Figure 38). Also, the two equations were not allowed to fit the models.

For RQ_3, the closest comparison pair for females was sports news and TV (M = 35.4, SD = 57.0, SE = 3.81) and the farthest comparison pair was international and local news (M = 143.6, SD = 89.3, SE = 5.68). The closest comparison pair for males was sports news and radio (M = 40.7, SD = 51.2, SE = 3.03) and the farthest comparison pair was international news and FtF (M

= 149.3, *SD* = 134.9, *SE* = 7.76). Table 8 displays the gender differences between self and the concept pair. Differing from those of study 1, the t-test results from the relationship between self-point and the concept pair in the present study reveal that the gender-perceived difference was significant only in sports news ($t = 2.27$, $p < .05$). Consequently, males were more likely than females to perceive sports news as close to them, and females were more likely to perceive magazines ($t = -3{,}17$, $p < .01$) and FtF ($t = -2.36$, $p < .05$) as close to themselves than males. When *SE* and *RSE* are considered to compare the differences of the concept pairs by gender, the small differences by gender denotes that there were significant gender differences in perceiving the distances between these concept pairs. Except for gender differences between these concept pairs, the mean values of the distances between other concepts and females were not statistically different from those of males, indicating that gender differences were not likely to exist in terms of the distances of other concepts from self-point of gender.

As seen in Table 11, the distances between other concept pairs were also significantly different between females and males: international news and newspaper ($t = -2.14$, $p < .05$); international news and magazine ($t = -1.89$, $p \leq .06$); international news and news online ($t = -2.01$, $p \leq .05$); international news and email ($t = -1.91$, $p \leq .06$); national news and nutrition/food news ($t = -1.86$, $p \leq .06$); local news and science/technology news ($t = -1.65$, $p \leq .10$); local news and medical/health news ($t = -3.30$, $p \leq .000$); local news and financial news ($t = -1.98$, $p \leq .05$); science/technology news and newspaper ($t = -1.63$, $p \leq .10$); science/technology news and TV ($t = -1.73$, $p < .10$); medical/health news and nutrition/food news ($t = -2.28$, $p < .05$); medical/health news and newspaper ($t = -2.28$, $p < .05$); nutrition/food news and magazine ($t = -1.72$, $p < .10$); nutrition/food news and TV ($t = -2.28$, $p < .05$); financial news and mobile phone ($t = 2.03$, $p < .05$); sports news and magazine ($t = -1.67$, $p \leq .10$); entertainment news and radio

(t = -2.08, p < .05); entertainment news and IM (t = -1.64, $p \leq .10$); newspaper and TV (t = -2.43, p < .05); magazine and news online (t = -2.65, $p \leq .01$); magazine and blogging (t = -2.04, p < .05); TV and radio (t = -2.04, p < .05); TV and news online (t = -1.76, p < .10); and blogging and IM (t = -1.73, p < .10). The differences of mean values by gender suggest that females were more likely than males to perceive the distances of these concept pairs as close to themselves.

As seen in Figure 23, Johnson's hierarchical clustering using the scalar product matrix of the US female college student sample shows a similar pattern of cluster structure as that of the US total sample. The hierarchical cluster memberships of the US male student sample, however, were different from those of the US total and female samples (See Figure 25). Although two separate clusters were formed, the configuration of subgroups was found to differ from those of the US total and female samples. The first cluster was partitioned into two subgroups. The first subgroup was made up of the link of international news, TV, and financial news connected to the link of national news and radio. Subsequently, these two links were merged with the bond of local news and newspaper and then news online. The second subgroup was nutrition/food news, medical/health news, and science/technology news. The second cluster consisted of self-concept and new media subgroups. The first subgroup contained FtF, self-concept and sports news. The second subgroup included entertainment news and MP3 attached to video online and then this grouping was combined with interactive mediums as the bracket of mobile phone and IM associated with email and blogging. Table 16 lists cluster memberships by gender using the scalar product matrix in Johnson's hierarchical cluster analysis.

Johnson's hierarchical cluster analysis using the mean matrix of the US females was found to be different from that of all the US participants (See Figure 24). The first cluster had

three partitions. The first subgroup was composed of the link of international news, news online, and financial news. The second subgroup combined the bond of local news and newspaper with the link of sports news, TV and the link of entertainment, radio, and then loosely connected to magazine and national news. The third subgroup contained the link of nutrition/food news and medical/health news with science/technology news. The second cluster had three subgroups that were loosely clustered into a single group: one constituted the bond of self-concept and FtF associated with mobile phone; another combined the link of blogging and IM with email; and the other was the bond of video online and MP3. As shown in Figure 26, the cluster structure of the US male college student sample shows a similar composition as that of the US total college student sample. Two separate clusters were created. The first cluster was organized into three subgroups: one merged the link of national news and news online with financial news; another consisted of the bond of local news and newspaper, the bond of sports news, radio and TV loosely connected to the bond of entertainment news and magazine, and then these bonds were merged with the bond of FtF and self-concept; and the other was the link of nutrition/food news and medical/health news with science/technology news. The second cluster was made up of interpersonal-mediated and interactive communication channels: one merged the link of email and IM with mobile phone, and then with blogging; another was the bond of video online and MP3. The final cluster was only international news. Table 17 lists cluster memberships by gender using the mean value matrix in Johnson's hierarchical cluster analysis.

Using the scalar product matrix in the SPSS ward linkage, the US females' clusters were classified into four groupings, showing a cluster structure different from all the US participants' (See Figure 31). The first cluster was only international news. The second cluster consisted of two subgroups: one was the link of nutrition/food news, medical/health and science/technology

news; and the other was the bond of TV and radio, and the link of national news, newspaper, and magazine merged with financial news. The third cluster was composed of the link of self-concept, FtF, and local news. The fourth cluster contained the bond of email and blogging, and the bond of mobile phone, IM, and MP3 merged with the bond of sports news and entertainment news, which was, in turn, connected to the bond of news online and video online. The US male clusters were also classified into four groupings, showing a cluster structure different from those of all the US participants and females (See Figure 32). The first cluster membership was only international news. The second cluster membership consisted of the link of nutrition/food news and medical/health news merged with the link of news online, video online, and science/technology news. These two links were consecutively interrelated with the link of TV and radio, and the link of newspaper, magazine, national news and financial news. The third cluster membership was made up of the tie of sports news and entertainment news and the tie of mobile phone and self-concept connected to the tie of local news and FtF. The fourth cluster membership was the link of email, IM, and blogging connected to MP3. Table 18 lists the cluster memberships using the scalar product matrix based on ward linkage in the SPSS hierarchical cluster analysis.

Figure 31 presents the female cluster structure using the mean value matrix in the SPSS ward linkage. The first cluster membership of the US females was only international news. The second cluster membership was the link of nutrition/food news, medical/health news, and science/technology news bonded to the link of TV and radio and the link of national news, newspaper, magazine, and financial news. The third cluster membership was the link of entertainment news and sports news and the link of news online and video online connected to FtF, self-concept, and local news. The fourth cluster membership was the link of email, IM and

mobile phone connected to the link of blogging and MP3. Figure 32 shows the male cluster structure; the first cluster membership of the US males was the link of national news and financial news bonded to the link of newspaper, TV, news online, magazine, and radio, and then these links were grouped with international news. The second cluster membership was the link of entertainment news and sports news, and the link of FtF, self-concept, and local news. The third cluster membership was nutrition/food news, medical/health news, and science/technology news. The fourth cluster membership was the link of blogging and video online bonded to the link of mobile phone, IM, email, and MP3. Table 19 lists the cluster memberships using the mean value matrix based on the ward linkage in the SPSS hierarchical cluster analysis.

CHAPER VI

GENERAL DISCUSSION

Comparison between the US and Korean Samples from the Perspective of the Contextual Differences

The findings support the patternized communicative activity of information-seeking media use, which comprises the media repertoire of consistency and regularity across clusters of information topics and media channels. The analyses of cognitive maps of the Galileo space, hierarchical clusterings, and relationships between media use time and self-concept as well as gender-preferred information topics and media channels showed the patterns of media repertoire.

The results regarding the interrelation among information topics and media use as information sources revealed that information seeking in the Korean and US college student samples assumes a patternized trend, maintaining consistency across media channels and information topics (see Figures 1 and 2). Traditional media such as TV, newspapers, and magazines were still perceived as major news sources for information acquisition. TV tended to be the main news source for almost all information types, while news online also appeared to be a major news sources. Viewed from the distances of the information topics, however, the results of both samples are different. The Korean respondents were inclined to identify national news as the closest to almost all media channels, while identifying nutrition/food was farthest away from them. In contrast, the US participants tended to perceive soft news types of entertainment and sports news as the closest to almost all media channels, while perceiving international news as farthest away from them. In addition to the changing but stable news sources in the use of media to seek information, such interpersonal-mediated communication technologies as email, mobile

phone, IM, and MP3 players were not likely to serve as information and news sources, when considering points located farthest from almost all information topics.

Both females and males in the Korean sample demonstrated that TV is the most important news source to gain almost all types of information. News online was more likely to be favored than newspapers and magazines for obtaining all information. Such consistent media channel use pattern showed no significant gender difference. Meanwhile, entertainment news in the Korean female sample was located closest to almost all media channels, followed by national and sports news. On the other hand, in the Korean male sample, national news was placed closest to almost all media channels, followed by entertainment and sports news (see Figures 3 and 4).

In the US sample, the patterned trend of the use of media to seek information matched with information topics took on a similar mode irrespective of gender. For both males and females, the most preferred media channel to obtain almost all information topics was TV, followed by news online. Both males and females also tended to perceive traditional media as more closely interrelated to all types of information topics than online and interpersonal-mediated media. Female participants, however, were more likely to perceive entertainment news as close to almost all media channels, while male counterparts viewed sports news as close to almost all media channels (see Figures 5 and 6).

The coordinate systems show the multilayered dimensions, as demonstrated in Tables 4 and 5. The three dimensional cognitive maps of the Galileo space were found to visualize similar and different structures between the US and Korean samples (see Figures 9 to 14). Online mediums such as email, blogging, and video online tended to form a single cluster in both samples, but interactive mediums such as IM, mobile phone, and MP3 in the US sample were more likely to be located tightly close together while those in the Korean sample tended to be

located loosely grouped. The cognitive maps also visualized differences in interpoint distances between the two samples. For the Korean participants, news online tended to be located at the intermediary point between traditional and online media as well as between hard and soft news types. For the US participants, news online also tended to be located at the intermediary point between traditional and online media but, as in the clustering with other traditional media, it tended to be in the center of hard news types rather than soft news types. These findings showed that along with traditional media such as TV, newspapers, magazines and radio, reading news online is an important additional information source that supplements hard news types for the US participants.

The self-point of the Korean sample was located in the middle of the Galileo space, which means that self-concept tended to be a liaison not only between traditional and new media but also between hard and soft news types. Conversely, the self-point of the US sample was usually clustered around interpersonal, interactive, and portable media channels, showing the strong bond to FtF. Moreover, self-points of the US sample tended to be grouped into soft news types such as entertainment and sports news, and local news, which reflects geographical proximity. Female self-points in the Korean sample tended to be closer to traditional rather than new media, while male self-points in the Korean sample tended to be closer to interpersonal-mediated media channels. However, self-points of the US sample showed no difference between males and females. The overall patterns in hierarchical cluster analyses of both samples indicated that self-concepts tend to be clustered with the bond of FtF and local news or interpersonal-mediated media technologies such as mobile phone and/or MP3 player.

Both linear regression and logarithmic regression equations were applied to the estimation of time spent on all media when seeking a specific information topic by the US and

Korean samples. International news in both samples and national news in the US sample did not fit either the linear regression or logarithmic regression models well, positioning a point away from the trendline. When logarithmic regression equations without international and/or national news in both samples were used, the model-fits[6] of the logarithmic regression showed better estimations. In addition, logarithmic regression equations presented better model-fits, the trendlines indicating a non-linear relationship. This means that when respondents perceived a certain information topic as closest to themselves, they used those information topics at the maximum amount. The level-off of the decrease rate in the trendlines also implies that when respondents perceived a certain information topic as farthest away from themselves, they used them at the minimum amount. In the Korean sample displayed in Figure 34, the results suggest that respondents spent the most time on national news and the least time on nutrition/food news. Results for the US sample shown in Figure 37 reveal that respondents spent the most time on entertainment and sports news and the least time on financial and medical/health news. As a result, the logarithmic pattern of media use explains the relationship between a specific information topic and self-concept. However, the exceptional case of international news as the unexpected pattern needs to be more carefully examined in future studies to better understand the pattern.

On the other hand, when based on the R-squared values, logarithmic and linear regression equations did not reveal a big difference in the relationship between each medium use time seeking all information topics and the distance from the self-point (see Figures 35 and 38). Also, in the US sample, neither equation presented a good model fit at the .05 significant level, although the trendlines shared a tendency of inverse relationship. As a result, these findings

partially support Cheong et al.'s study (2010) but more replication needs to be conducted to confirm the accuracy of that evidence.

Both samples show gender differences in terms of distances of information topics and media channels. These results are consistent with those of several previous studies (Brunet & Schmidt, 2010; Dosser, et al., 1983; Gross & John, 1998; Highlen & Gillis, 1978; Leaper & Smith, 2004; Lee, et al., 2009; O'Keefe & Spetnagel, 1973; Pingree, et al., 2001; Vincent & Basil, 1997). In the US sample, a significant gender difference was found only for the distance of sports news from the self-point, indicating males' preferred information topic. Females in the Korean sample, however, were likely to perceive more information topics as close to themselves than males in the Korean sample. Korean females also identified more media channels as close to themselves, while US females were more likely to perceive only the distances of FtF and magazines as closer to themselves than their male counterparts.

Therefore, despite the differences between the Korean and US samples, gender-stereotyped media use behaviors for information seeking were found and these findings are consistent with prior research (Boneva, et al., 2001; Knobloch-Westerwick & Alter, 2007). Specifically, females in both samples made more importance of FtF, that is, offline interpersonal communication functioning as emotional and interactive channels than did males.

As shown in portions of the resulting dendrograms from Figure 15 to 32, the hierarchical cluster analyses support the patterned information-seeking media use in the US and Korean college student samples. First of all, clustering representations illustrated the multilayered constellation of the relations between information topics, media, and self, which displayed the hierarchically nested subgroups. More generally, the cluster analyses revealed that two separate clusters tend to be created as drawing a boundary between traditional and new media. Under the

two separate clusters, combinations of subgroups had relatively different variations according to Johnson and SPSS's ward linkage hierarchical analyses using the scalar product and the mean value matrices.

The main finding was that news online is closer to traditional media rather than to interpersonal-meditated media in both samples. Additionally, hard news information topics tended to be classified into two separate groupings. One grouping tended to consist of international, national, and/or financial news, indicating a strong bond to traditional media and news online. Comparatively, the other type had a tendency to comprise nutrition/food news, medical/health news, and science/technology news, indicating a loose bond to traditional media and news online. It was discovered that young adults in both samples are likely to consider news online as one of the main information sources for hard types of news along with traditional media. News online as one of the main information sources is also consistent with national surveys in both countries (KISA, 2009; Kohut, 2008). Present findings, therefore, imply the interconnection of information topics and transitional but relatively stable information sources in information seeking for young adults. The findings further suggest that young adults in both samples use both traditional and news online for obtaining news and information, specifically hard news acquisition.

However, the relation of soft news types such as sports and entertainment news to media channels shows differences between the two samples. These news types were likely to cluster either into traditional or new media, making no uniform composition of the hierarchical structure. Soft news types for both Korean female and male participants were more likely to cluster into traditional media and news online. For US female and male participants, however, soft news types were more likely to cluster with local news, self-concept, and/or FtF.

Other intriguing findings were the areas of self-concept and new media memberships. In the Korean sample, the bond of local news and FtF tended cluster with traditional media, and self-concept had an inclination to be included in the grouping of new mediums such as mobile phone, email, blogging, video online, IM, and MP3. In the US sample, the close bond of self-concept to FtF and/or local news tended to cluster either into a single group, into the grouping of science/technology news, nutrition/food news, and medical/health news, or into the grouping of entertainment news and sports news. The bond of self-concept to FtF and/or local news reflects the importance of FtF as information source and the pursuit for local news as local proximity. In both samples, however, interpersonal-mediated and/or interactive mediums such as IM, email, mobile phone, blogging, email, video online, and MP3 were likely to cluster into a single group.

Accordingly, the results imply the perspective of Atkin's (D. J. Atkin, 1992) conceptualization of functional similarity and need compatibility. Although interpersonal-mediated and interactive media have the potential of being considered as information sources in the changing information-seeking environment, young adults of both samples still tend to remain loyal to the initial functions attached to these mediums. Despite the convergent media environment in which informative, entertaining, and communicative functions have been integrated across all media channels, young adults, in neither sample, have considered interpersonal-mediated and/or interactive mediums as information channels specifically but as communicative channels. Such information-seeking media use patterns hold regardless of gender in the US and Korean samples.

CHAPTER VII

CONCLUSION

Summary of the Study

In Chapter I, the dissertation began by discussing the limitations of a conventional approach (i.e., Uses and Gratification Theory, especially in relation to the conceptualization of self-concept) as a theoretical and methodological perspective in research on information-seeking media use. The main purpose of this dissertation lay in understanding information-seeking media use perceptions and behaviors in the convergent media environment by revealing the composition and configuration of information topics and media channels from the perspective of self-concept.

Chapter II focused on the theoretical background supporting the investigation of the present study: that is, using an interactionist and symbolic interactionist perspective to probe the interaction between the environment and objects and/or concepts, the reflexive self-concept perspective, self-concept as a predictor of media use, media repertoire conceptualization, gender difference in general media use including information seeking, and changing information-seeking media use patterns based on technological and social points of view.

Chapters III and IV dealt with the methodological approach and research questions of the present study. These chapters discussed the application and significance of the Galileo model. The Galileo model is the theory and methodology that is used to examine the multidimensionality of the network of interconnected information-seeking media use concepts from the perspective of self-concept. Questionnaires were completed by college students in both Korea and the US. Research questions were posited to examine the multidimensional associations of the given concepts in the Galileo spatial-linkage model. Research questions were

also suggested to investigate whether the analyses of the structure of the nested associations using hierarchical clustering method techniques would be useful to reveal the relationships between the self concept (self-point), media channels, and information topic. The final research question asked whether there were gender differences in the perception of information topics and media sources.

Chapters V and VI described and explained the main findings of how the network structures of information-seeking media use are composed and what the implications of the findings are when viewed from theoretical and methodological perspectives. Lastly, in the present chapter, the overall framework and the significance of the study are restated and summarized. The direction of future studies should take into account the limitations of the present study as well as develop and check the results found in this study.

Significance of the Study

From the theoretical viewpoint, the dissertation attempts mainly to contribute an insight on the perspectives of interactionism and the media repertoire of transitioning and seamless media use for information seeking. The dissertation also seeks to confirm the effectiveness of the Galileo model which takes into account self-reflexivity.

The network structure of interrelations between information types, media use as information source, and self-concept across stable but changing media channels as news sources that come together with information topics was explored. As previously demonstrated by Woelfel (Woelfel & Saltiel, 1988; Woelfel, et al., 1988), findings were consistent with the collective consciousness of attitudes and beliefs in a given society or community as characterized as a group property of objects and/or concepts. These attitude and belief systems may, in turn, be passed on to the communication network of cognitive process like the neural network of the

human brain. From this perspective on the changing and emerging relational properties of a network, the dissertation revealed the cognitive process of information-seeking media use as a multidimensional structure using the Galileo spatial-linkage model, thus showing the composition of patternized activities in the boundary of media repertoire.

An exemplary case is the location of news online being closely tied to traditional media and far away from interpersonal-mediated media. Although news online in the Korean sample is located in the center of the Galileo space, news online in both samples has some common features with the roles of hard news sources along with traditional media. Additionally, interpersonal-mediated and interactive media channels are grouped together. In the case of the US sample, these media channels cluster around self-concept. Online media such as email, blogging, and video are also clustered together in both samples.

Another main contribution was to reveal the role of the self in information-seeking media use. It was discovered that the self-points of the Galileo space are placed at different locations in both samples. In the Korean sample, the self-point was positioned as a liaison between all the information topics and media channels, while in the US sample, the self-point was located closest to FtF and local news and also close to interpersonal-mediated media channels. These differing self-point positions are felt to reflect role differences in the two samples. For the Korean participants, self-concept was the mediator of information-seeking media use but for the US participants, self-concept was most instrumental in controlling interpersonal and conversational activities.

A third contribution was to reveal the non-linear relationship between the number of weekly hours of media use seeking information topics and the distance from the self-point. This finding implies that respondents spend the most time considering information topics they

perceive to be closest to themselves across all media channels. In the same manner, it also suggests that participants spend the least time on information topics considered to be farthest from themselves. Meanwhile, in the Korean sample, both the logarithmic and linear regression models present a good model fit to explain the relationship between the number of weekly hours of each medium use seeking all information topics and the distance from self-point. In the US sample, however, the relationship between the number of weekly hours each medium seeking all information topics and the distance from the self-point presents a good model fit neither in logarithmic nor in regression equation. These findings support at least an inverse relationship between media usage and self-concept, although additional research to further confirm this relationship is desirable.

A fourth contribution was to reveal the multilayered clusters that comprise the nested subgroups through hierarchical analyses. Two large separate clusters are created along with nested subgroups; one is the cluster of traditional media, news online and hard news types, and the other is the cluster of new media such as interpersonal-mediated and interactive media and/or online media. Under these two separate clusters, the nested subgroups are visualized as different combinations of memberships depending on the applied methods of hierarchical clustering. In the analyses of both the Galileo method and hierarchical clustering, news online plays the role of the main information source for hard news, which means that participants are integrators who use both traditional media and read news online for hard news. In addition to the role of integrators, participants use interpersonal-mediated and interactive media as communicative functions rather than information functions, when considering these media channels as far away from hard news types and sometimes close to FtF and/or soft news types. Interestingly, video

online in both samples tends to be clustered with entertainment news, implying the functionality of the entertainment source.

Finally, t-tests by gender showed gender-stereotyped differences in perceiving information topics and media channels in both samples, although the Korean participants displayed more total pair differences by gender than did US participants. According to t-tests, although males prefer sports news more than females prefer sports news in both samples, only the US sample shows a statistically significant difference. Females in both samples also prefer FtF and magazine more than males in both samples.

Limitations and Future Directions

Despite the theoretical and methodological contributions, the dissertation has some external and internal limitations. From the aspect of external limitation, the converged tendency of media technologies that had their own inherent functions of respective audio, video, and data may have influenced the ambiguous responses of participants. For example, in Korea, some mobile phones are embedded in mobile TV function. Although the present study considers only functions of data and interpersonal communication, respondents may have answered the questions while considering mobile TV function. Also, in the case of reading news online, the present study does not consider a distinction between reading news on specific news websites and reading news on search engines. The continuous trend of the converged media technologies and at the same time more specified media content and features may have held back accurate responses of the respondents.

The internal limitations of the study can be identified as coming from three areas. First, the dissertation does not investigate the dynamic and varying relational properties of the communication network for information seeking due to the limit to a one-time survey and relying

on a relatively homogeneous group of young adults with the same educational level. Although both the US and Korean samples revealed contextual difference as well as similarity of young adults' cognitive structure in information-seeking media use, the results of a one-time survey are difficult to use in predicting a patternized trend of information-seeking media use over time. On this point, the additional evidence of time series data should be used in future studies.

Second, the data of media use time measured by weekly unit may have been inflated in self-reports more than respondents' actual time usage. Subsequently, the data may influence the relationship of media use time to the distance from self-point, concealing underestimations of the errors of the data. For this reason, future studies need to make an effort to carefully measure the media use time. Third, the small sample size of the Korean sample, specifically female subjects, tends to increase standard error in the results of gender differences in concept pairs. Therefore, future research should make a replication of the present study by securing the effectiveness of the sample size.

In conclusion the dissertation presents evidence that information-seeking media use forms a multidimensional and multilayered cognitive structure and shows consistent usage patterns across clusters of media channels and information topics. To further develop this area of study, however, it is essential that the limitations of the present study, as well as the suggestions for future research to confirm or correct the findings of the present study, be considered.

NOTE

1. The premise behind this hypothesis is that time spent with the existing media decreases because the introduction of a new medium makes a person reallocate overall time spent with media use (Robinson & Godbey, 1999). On this point, some scholars have argued that when there is a new medium for the same purpose as that of an old medium, the new medium is functional for particular needs (Dimmick, Yan, & Zhan, 2004; Heikkinen & Reese, 1986; Levy & Windahl, 1984).
2. N objects and/or concepts are obtained by asking questionnaire items to find out how different or far apart "concept X and concept Y" are from one another (Woelfel & Evans, 2009, p. 2); N(N-1)/2 times (N is the number of concepts) pairs are asked (Vishwanath & Chen, 2006). Because the present study observed twenty-two concepts, the Galileo questionnaire consisted of 231 pair-comparisons.
3. Outliers were removed from the point at which the mean of all the means adds to the mean of three standard deviations in order to minimize the magnitude estimations of outliers. Outlier values in study 1(Korean college student sample) above 1000 were removed and values above 1067 in study 2 (US college student sample) were removed.
4. The ward linkage technique is one of the hierarchical cluster methods. This technique starts with one cluster that contains all objects, concepts, or variables and subsequently splits the nested sub-groupings into partitions. This method is used to minimize the sum of squared distances of each case in a cluster from the means of all objects, concepts, or variables when the cluster is created at a given stage (Lim, 2009; Ward, 1963).
5. Percent relative error can be expressed as % relative error = $100(\sigma/\mu)$, where σ is the standard error and μ is the mean. The measurement of the data is always the estimation along with an error because it cannot yield the exact value but only the approximate value. In comparison with the absolute error, which estimates the difference between the exact value and the approximate value, the relative error — that is, the percent relative error — is calculated to compare the degree of the magnitude between different sample sizes. If there is no or only a small difference between the percent relative errors, this means there is really a big difference between the samples observed. On the other hand, if there is a big difference between the percent relative errors, this means that there is no difference between the samples observed.
6. When the original data was filtered as the data with 2*SD* and 3*SD* and compared with it, the relationships between all media use time seeking a specific topic and self-point in linear and logarithmic regression models also made no big differences among the three datasets. This indicates that there is no effect of extreme values from individual cases of the data and thus the relationships in the present results tends to show the logarithmic pattern of media use for seeking a specific topic except for international news in both samples.

Table 1

Concepts Observed in the Study

No.	Concepts Observed (Abbreviations)
1	International News (Int)
2	National News (National)
3	Local News (Local)
4	Science and Technology News (SciTech)
5	Medical and Health News (MediHealth)
6	Nutrition and Food News (NutritionFood)
7	Financial News (Financial)
8	Sports News (Sports)
9	Entertainment News (Ent)
10	Newspaper
11	Magazine
12	TV
13	Radio
14	Face-to-Face Communication (FtF)
15	Cellular (Mobile) Phone
16	Reading News Online (News Online)
17	Email
18	Reading and Posting on Blogging (Blogging)
19	Watching and posting on Online Video (Video Online)
20	Instant Messaging (IM)
21	IPOD and MP3 including Podcast (MP3)
22	Yourself

Table 2

Mean Matrix of Korean College Student Sample

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	---	146.8	253.3	123.2	139.8	154.0	112.4	114.9	167.6	151.6	150.1	99.9	163.7	200.7	195.4	88.8	158.3	136.7	126.7	178.6	211.1	181.2
2		---	142.8	108.1	116.7	109.5	91.4	87.0	94.5	88.7	116.5	74.0	92.3	120.2	119.9	70.9	102.5	94.6	112.9	140.0	164.2	87.0
3			---	126.2	122.7	113.6	115.0	130.1	139.1	94.5	151.4	104.4	118.0	144.9	155.1	106.4	163.3	149.6	158.6	179.5	208.6	147.0
4				---	106.7	110.7	118.1	151.0	224.8	120.6	131.6	106.7	151.8	165.6	143.1	94.4	149.3	127.5	135.9	168.6	144.0	136.8
5					---	95.6	146.4	153.7	199.7	135.6	134.7	109.7	136.9	160.8	186.7	124.7	184.2	140.4	169.1	207.8	246.4	132.1
6						---	195.6	184.7	222.1	139.2	128.2	107.9	155.7	153.4	235.3	139.2	191.8	146.9	183.6	203.1	272.3	130.8
7							---	206.7	211.2	104.5	124.7	94.9	107.3	145.0	181.4	99.6	146.9	145.9	183.0	208.7	259.5	121.2
8								---	99.3	92.6	92.2	80.2	97.7	126.3	165.9	89.9	186.7	140.9	128.0	170.7	245.7	131.6
9									---	84.4	82.7	78.9	87.6	141.3	152.2	84.0	156.8	110.7	115.5	140.5	154.7	124.0
10										---	98.5	112.1	121.6	142.8	170.4	123.0	175.6	154.5	184.3	203.2	240.1	127.6
11											---	138.7	144.8	159.9	178.8	139.7	172.5	155.7	169.3	191.2	232.2	156.7
12												---	86.4	116.3	118.0	96.0	151.4	140.3	113.2	149.1	181.8	104.1
13													---	149.6	173.1	139.5	178.6	164.1	188.5	184.3	178.4	164.9
14														---	123.2	145.1	150.7	165.6	167.3	141.9	206.6	115.0
15															---	159.7	154.3	164.1	149.9	117.4	103.4	89.1
16																---	118.7	105.7	105.6	129.4	166.7	97.8
17																	---	130.7	130.2	126.3	168.3	108.9
18																		---	102.3	106.9	143.1	106.9
19																			---	134.4	151.2	132.1
20																				---	171.0	119.3
21																					---	95.2
22																						---

Note: 1 = International news, 2 = National news, 3 = Local news, 4 = Science & Tech news, 5 = Medical & Health news, 6 = Nutrition & Food news, 7 = Financial news, 8 = Sports news, 9 = entertainment, 10 = Newspaper, 11 = Magazine, 12 = TV, 13 = Radio, 14 = Face to Face (FtF), 15 = Cellular phone, 16 = News online, 17 = E-mail, 18 = Blogging, 19 = Video Online, 20 = Instant Messaging (IM), 21 = MP 3, 22 = Yourself

Table 3

Mean Matrix of US College Student Sample

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	---	84.9	139.7	95.9	92.0	109.5	85.3	105.4	108.4	61.6	87.7	61.9	80.7	142.7	133.3	59.5	112.1	113.3	96.5	133.3	136.6	136.1
2		---	86.2	82.6	76.3	84.1	68.6	68.9	72.9	54.8	67.3	57.0	57.5	109.7	106.4	55.1	94.0	96.5	84.5	116.4	118.8	99.0
3			----	87.6	68.5	74.8	71.3	58.8	69.4	46.0	86.0	50.2	54.5	66.8	78.8	60.5	81.8	82.9	83.9	90.9	102.3	67.8
4				----	59.3	64.6	85.0	102.0	102.9	71.4	77.3	67.5	79.7	95.3	69.8	64.8	78.3	76.7	75.2	82.6	80.1	77.5
5					----	51.8	86.6	84.1	108.8	77.4	81.1	71.1	87.6	86.5	105.5	72.9	98.0	98.5	96.2	112.6	111.7	77.8
6						----	106.0	74.1	95.7	85.3	77.1	73.4	93.8	83.2	111.3	87.4	107.5	104.6	99.9	117.6	120.2	69.6
7							----	102.0	102.0	55.2	68.7	61.3	73.7	78.4	90.0	65.5	88.6	97.4	96.2	112.1	116.2	84.0
8								----	47.4	50.6	50.3	40.2	40.8	52.7	72.1	54.4	78.2	63.4	55.1	80.9	83.5	64.7
9									----	55.5	44.1	42.9	45.2	56.1	67.7	58.0	72.2	59.9	53.0	64.3	53.5	53.6
10										----	62.2	65.2	63.3	75.7	93.9	63.4	83.3	82.6	90.4	105.1	109.5	91.4
11											----	73.0	81.1	84.4	94.2	75.2	95.2	81.8	91.7	99.6	98.1	82.2
12												----	68.0	88.0	88.0	77.1	93.3	92.2	68.8	96.4	90.4	66.9
13													----	89.1	87.0	88.5	100.8	97.2	98.3	102.3	73.9	77.1
14														---	83.9	99.5	95.8	99.6	102.0	89.6	107.7	51.9
15															---	95.2	74.4	86.1	88.6	66.8	84.6	57.4
16																---	76.7	72.5	68.3	83.9	89.8	74.8
17																	---	75.0	86.9	66.7	90.7	70.5
18																		---	78.3	68.2	82.3	92.9
19																			---	78.6	75.7	79.4
20																				---	86.2	75.7
21																					---	78.5
22																						---

Note: 1 = International news, 2 = National news, 3 = Local news, 4 = Science & Tech news, 5 = Medical & Health news, 6 = Nutrition & Food news, 7 = Financial news, 8 = Sports news, 9 = entertainment, 10 = Newspaper, 11 = Magazine, 12 = TV, 13 = Radio, 14 = Face to Face (FtF), 15 = Cellular phone, 16 = News online, 17 = E-mail, 18 = Blogging, 19 = Video online, 20 = Instant Messaging (IM), 21 = MP 3, 22 = Yourself

Table 4

Spatial Coordinate Matrix of Korean College Student Sample

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	-26.1	-63.5	114.0	32.5	-2.3	27.2	-7.6	-8.3	0.1	2.4	-5.3	8.2	-5.9	1.5	-8.6	-0.3	0.2	-0.5	-18.9	-49.2	-26.7	49.0
2	-4.9	3.3	0.4	7.1	-6.5	-6.5	2.5	-24.4	-10.1	-12.2	-3.8	-25.5	24.8	-20.7	20.5	0.0	4.5	3.4	10.6	-26.1	-8.7	29.3
3	-36.3	39.9	-90.9	-22.1	18.8	-41.8	-17.7	47.1	7.6	-0.5	1.9	5.1	-5.4	-0.9	-2.4	0.3	-0.9	4.2	-10.7	-55.1	-21.1	46.9
4	-18.4	-80.6	-26.2	12.0	45.9	18.9	22.0	27.2	31.8	-11.3	-18.4	-1.2	8.4	4.1	-1.8	0.1	0.0	0.2	24.7	33.7	-57.2	7.4
5	-77.8	-39.5	-18.1	-21.4	25.5	17.7	-4.6	-4.6	-22.0	23.6	35.1	-29.3	-24.2	2.0	-6.8	0.1	2.8	-6.1	17.3	-3.6	3.5	-21.2
6	-96.8	-46.0	-24.8	-78.6	12.5	1.0	-4.2	-40.0	1.6	-18.1	-9.5	20.3	2.8	-6.7	2.0	0.1	0.3	0.7	-28.2	4.2	-1.9	-62.3
7	-66.0	-36.8	-24.0	92.2	-50.6	-25.4	-11.1	12.1	-3.9	17.2	9.1	11.5	9.0	5.2	8.4	0.1	-1.6	-3.7	0.8	-8.2	-5.8	-78.5
8	-33.4	67.5	55.1	-27.4	8.2	38.6	0.5	31.3	1.9	-0.3	-18.6	-29.7	4.4	2.4	3.8	-0.2	-5.3	8.5	0.5	-13.9	7.2	-60.4
9	42.5	106.4	48.1	-2.6	6.9	-33.4	2.3	-15.0	-11.3	0.4	7.0	13.1	-7.5	0.5	-4.1	-0.1	2.6	1.4	7.1	14.1	-76.4	-41.1
10	-67.6	47.7	-4.9	25.0	1.6	-11.0	38.6	5.2	-9.9	9.3	-31.7	4.3	9.6	-14.0	-19.6	0.0	2.4	-15.5	4.1	4.4	43.1	3.9
11	-57.0	34.7	27.5	2.4	1.1	-7.6	68.6	-8.1	30.7	-12.1	30.8	13.7	-10.9	8.5	11.6	-0.1	-1.2	3.3	4.5	-1.6	30.1	29.4
12	-19.6	10.9	5.3	11.0	11.8	30.8	-40.8	4.1	-19.2	-8.8	6.3	31.4	-3.2	-18.2	-1.3	0.0	-1.3	22.6	30.3	13.6	29.8	19.8
13	-30.4	50.3	-7.2	46.1	41.1	-3.6	-53.9	-37.4	29.6	-5.5	5.5	-14.1	0.6	2.1	0.3	0.0	-2.2	-15.2	-14.2	33.0	9.9	35.8
14	1.8	35.0	-46.2	-14.7	-58.8	52.9	-9.0	-17.1	-3.6	-12.0	0.8	2.0	16.6	35.9	-7.3	0.1	2.2	2.3	6.6	-5.7	-0.6	20.7
15	84.3	14.1	-45.3	31.2	-3.5	61.1	21.7	21.4	0.9	12.2	13.2	-1.3	-4.4	-16.5	0.8	0.1	2.0	8.9	-40.1	23.6	-6.2	-5.2
16	-1.8	-13.9	26.0	-0.5	-2.4	-29.0	-16.1	25.7	-11.1	4.3	-34.3	-1.4	-23.7	19.4	14.0	-0.1	4.2	7.3	-9.7	30.5	28.2	16.4
17	47.7	-37.4	-4.8	8.5	-63.1	-41.6	3.7	-5.7	3.7	-45.5	2.8	-24.1	-14.6	-9.6	-13.7	0.0	-1.8	9.9	-0.6	11.7	4.7	-4.1
18	31.0	-29.7	22.1	-33.3	2.8	-46.8	3.5	-12.1	7.3	46.9	10.2	-6.0	26.0	5.1	-7.6	-0.1	-1.4	21.2	-6.0	20.6	10.6	22.7
19	50.4	-22.4	45.7	-35.7	5.6	-10.3	-11.0	50.7	-24.6	-21.8	27.6	7.8	20.1	1.6	1.9	-0.1	-0.2	-24.6	-5.4	18.5	14.3	6.5
20	82.9	-5.7	5.8	-47.0	-54.1	12.1	-19.4	-0.5	48.0	26.5	-7.9	8.5	-11.5	-13.6	3.7	0.0	0.6	-16.7	17.7	-12.2	9.1	-10.1
21	154.0	-22.1	-19.7	25.1	70.9	-7.9	7.1	-22.3	-1.2	-9.3	-4.7	4.1	-0.4	12.0	-1.8	0.1	0.3	0.6	6.1	-40.1	36.5	-51.7
22	41.2	-12.4	-37.9	-9.5	-11.4	4.8	25.0	-29.3	-46.3	14.7	-16.2	2.8	-10.6	0.0	8.0	0.1	-6.2	-12.1	3.6	7.9	-22.5	46.8
Eigenvalues	79375	44256	38993	27094	23431	19219	13809	13625	9353	7864	6771	5374	4116	3527	1754	0	-150	-2863	-5669	-13312	-17295	-30168
Variance (%)	34.6	19.3	17.0	11.8	10.2	8.4	6.0	5.9	4.1	3.4	3.0	2.3	1.8	1.5	0.8	0.0	0.1	1.3	2.5	5.8	7.5	13.2

Table 5

Spatial Coordinate Matrix of US College Student Sample

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	78.2	-45.3	2.8	-0.6	2.4	13.9	-12.3	-9.6	-13.1	-13.6	-1.8	-1.0	-2.2	-4.0	2.5	-0.3	0.0	1.8	3.1	-1.0	25.9	-29.1
2	42.6	-2.4	-14.1	1.2	-2.1	-14.6	4.3	-8.7	28.4	20.9	-4.9	0.4	2.9	15.3	1.9	4.1	0.0	-2.5	-1.2	5.4	16.0	-7.8
3	-11.9	37.8	-9.8	12.3	-3.2	-38.0	14.5	5.5	-7.2	3.7	3.0	8.1	0.1	-8.5	-6.9	-2.9	0.0	1.8	3.8	-5.8	21.8	-26.2
4	6.3	-4.1	52.0	-5.4	19.7	7.8	11.9	-0.6	-6.0	11.3	1.1	3.7	14.2	1.8	0.1	0.0	0.2	-3.6	-4.7	-17.9	-15.0	-19.6
5	30.1	31.4	35.9	-14.9	-1.0	-5.8	7.4	1.7	-3.5	-11.1	-5.2	-9.4	-13.5	6.7	-10.3	6.3	0.0	4.1	1.7	2.6	-14.5	1.4
6	21.3	44.9	23.5	-37.2	-14.0	7.7	0.4	-8.9	3.9	2.3	4.7	7.1	5.9	-4.9	8.5	-4.9	-0.1	0.2	8.3	15.2	-4.4	5.5
7	29.8	10.0	1.2	49.9	18.5	2.0	-10.2	24.7	1.7	2.5	0.5	0.4	-6.7	3.6	4.7	-4.1	0.2	-0.4	1.7	10.2	-23.6	-13.2
8	-9.5	5.3	-32.6	-18.3	-20.0	-3.6	-0.4	-12.5	-6.0	-0.5	-2.9	-17.2	-8.4	-1.9	-0.7	-3.8	-0.2	-6.0	-6.9	-0.6	-19.4	-26.3
9	-25.7	-14.9	-40.9	-10.3	-6.0	8.0	-5.0	1.0	7.1	-2.2	2.8	10.9	7.4	-2.4	0.5	5.9	-0.1	4.3	8.4	-4.0	-29.0	-25.3
10	30.8	5.1	-18.2	20.9	-8.9	1.2	14.0	-4.4	-13.2	-4.9	9.0	-2.4	18.9	-4.7	-3.6	2.8	-0.1	1.4	-13.2	12.9	-4.2	17.9
11	16.8	2.4	-14.4	-4.1	-11.3	39.0	6.8	13.3	14.8	13.8	0.5	1.7	-5.3	-5.4	-13.0	-4.0	-0.1	1.2	-1.5	-7.0	8.4	13.5
12	21.0	2.5	-11.4	-11.9	13.2	-9.6	-23.8	-2.3	-13.5	7.7	13.5	15.5	-13.0	-3.7	-1.2	3.8	0.1	-5.1	-2.0	-3.7	-2.4	26.9
13	12.2	2.3	-32.8	-5.4	38.2	-4.1	19.6	-16.0	-3.0	-7.9	-10.1	1.1	-1.7	6.9	4.2	-4.9	0.4	3.3	1.4	-9.3	-6.6	28.3
14	-28.3	49.5	-14.6	12.1	-9.5	20.3	-9.2	9.4	-13.0	-12.0	-2.9	-5.3	7.7	12.1	3.4	2.8	-0.1	-3.8	6.8	-7.6	20.0	6.1
15	-43.2	-0.6	9.4	21.5	21.0	7.4	-6.4	-19.2	-4.0	22.9	-4.1	-15.3	-1.2	-13.4	0.5	3.1	0.2	1.2	7.6	5.3	5.4	6.6
16	18.1	-20.1	8.8	4.2	-17.4	-17.4	-1.3	13.5	13.1	-12.7	-20.4	-1.4	5.3	-15.1	2.6	1.4	-0.2	-3.7	3.5	-5.7	-5.3	25.5
17	-23.8	-18.4	20.7	28.4	-13.2	-4.4	-1.8	-20.8	20.1	-19.0	21.6	-1.8	-1.8	3.9	-3.3	-2.5	-0.1	-0.9	4.3	-5.3	-2.5	9.3
18	-21.6	-28.4	7.8	2.6	-28.4	2.3	31.6	11.3	-10.3	9.3	6.9	0.1	-13.2	1.8	13.7	2.0	-0.3	2.0	-1.7	-2.8	5.0	7.2
19	-10.9	-30.7	3.9	-21.6	-8.8	-20.0	-28.3	15.2	-7.9	11.6	4.7	-12.0	9.8	9.2	-1.9	-4.0	-0.1	4.6	0.7	-2.8	0.2	14.7
20	-52.5	-24.1	16.0	10.6	-15.5	3.9	-6.0	-12.1	-11.4	0.2	-19.8	18.2	-2.0	8.4	-6.2	-2.2	-0.2	-0.3	-3.5	11.0	0.2	-0.5
21	-45.4	-30.6	-1.6	-28.4	36.0	0.9	15.3	18.6	5.8	-13.2	6.2	-2.7	0.9	-0.4	-3.5	0.6	0.4	-3.7	1.0	14.7	12.9	-6.3
22	-34.7	28.4	8.4	-5.5	10.3	3.0	-21.0	1.0	17.3	-9.0	-2.4	1.4	-3.9	-5.4	8.0	0.8	0.1	4.3	-17.5	-3.9	11.2	-8.6
Eigenvalues	23099	14160	10538	8196	6759	4933	4528	3424	3159	2903	1885	1639	1543	1286	793	269	1	-225	-881	-1570	-4551	-6742
Variance (%)	30.7	18.8	14.0	10.9	9.0	6.6	6.0	4.6	4.2	3.9	2.5	2.2	2.1	1.7	1.1	0.4	0.0	0.3	1.2	2.1	6.1	9.0

Table 6

Distance of Other Concepts from Self in US College Student Sample

Total	MEAN	SE	RSE	N	Female	SE	RSE	N	Male	SE	RSE	N
International News	136.08	5.676	4.2	554	135.71	7.652	5.6	247	136.14	8.303	6.1	302
National News	98.96	4.498	4.5	556	102.08	7.211	7.1	247	97.33	5.783	5.9	303
Local News	67.78	3.524	5.2	550	69.43	6.17	8.9	242	66	4.047	6.1	302
Science & Tech News	77.51	3.233	4.2	540	80.48	5.267	6.5	236	75.97	4.088	5.4	298
Medical & Health News	77.82	3.15	4	534	74.96	4.482	6	234	79.78	4.439	5.6	294
Nutrition & Food News	69.57	3.162	4.5	527	65.89	4.684	7.1	229	72.46	4.36	6	292
Financial News	83.98	3.361	4	518	85.37	5.051	5.9	224	83.1	4.595	5.5	288
Sports News	64.69	3.375	5.2	515	73.56	5.689	7.7	225	58.06	4.094	7.1	284
Entertainment News	53.57	2.746	5.1	515	51.46	4.073	7.9	222	55.03	3.781	6.9	287
Newspaper	91.4	4.337	4.7	509	85.82	6.655	7.8	217	95.14	5.824	6.1	286
Magazine	82.19	3.782	4.6	508	69.11	4.647	6.7	218	92.3	5.654	6.1	284
TV	66.87	3.045	4.6	504	64.93	4.365	6.7	217	68.7	4.272	6.2	280
Radio	77.07	3.035	3.9	501	73.47	4.364	5.9	215	80	4.276	5.3	279
FtF	51.91	3.136	6	504	43	4.427	10.3	214	57.97	4.39	7.6	283
Cellular phone	57.42	3.352	5.8	502	51.83	5.432	10.5	213	61.58	4.281	7	282
Reading News Online	74.78	2.889	3.9	500	76.51	4.555	6	212	72.82	3.755	5.2	281
E-mail	70.49	3.366	4.8	497	66.67	5.555	8.3	211	73.16	4.229	5.8	279
Blogging	92.92	3.781	4.1	495	97.33	6.294	6.5	211	89.17	4.688	5.3	277
Online Video	79.39	3.846	4.8	496	86.45	6.638	7.7	210	73.85	4.588	6.2	279
IM	75.68	3.706	4.9	498	78.57	6.772	8.6	211	74.07	4.122	5.6	280
MP3	78.54	4.305	5.5	497	78.15	7.162	9.2	211	78.71	5.409	6.9	279

Note: *Relative Standard Error (RSE) means Percent Standard Error.*

Table 7

Distance of Information Topics and Media from Self by Gender in Korean College Student Sample

Concept Pairs	GENDER	N	Mean	SD	SE	RSE	t	Sig.	SE Mean Difference
Local--Self	male	94	170.9	176.1	18.2	10.6	2.77	0.01**	23.2
	female	56	106.8	108.1	14.4	13.5			
Medicine & Health--Self	male	93	148.3	154.8	16.1	10.1	1.85	0.07#	23.3
	female	56	105.2	102.9	13.8	13.1			
Nutrition & Food--Self	male	93	161.6	177.3	18.4	11.4	3.92	0.00***	20.9
	female	56	79.6	74.9	10.0	12.6			
Entertainment--Self	male	94	146.1	179.3	18.5	12.7	2.35	0.02*	25.3
	female	56	86.8	129.1	17.2	19.9			
Magazine--Self	male	93	187.3	191.8	19.9	10.6	3.32	0.00***	24.6
	female	56	105.9	107.7	14.4	13.6			
TV--Self	male	94	121.0	158.0	16.3	13.5	1.78	0.08#	25.5
	female	56	75.6	137.9	18.4	24.4			
Radio--Self	male	94	195.8	225.0	23.2	11.9	3.04	0.00***	27.2
	female	56	113.1	106.1	14.2	12.5			
FtF--Self	male	94	148.1	192.1	19.8	13.4	4.09	0.00***	21.7
	female	56	59.4	66.5	8.9	15.0			
Cellular Phone--Self	male	94	108.8	182.2	18.8	17.3	2.54	0.01**	20.8
	female	56	56.1	66.2	8.8	15.8			
News Online--Self	male	94	113.4	174.4	18.0	15.9	1.96	0.05*	21.3
	female	56	71.6	85.4	11.4	15.9			
Blogging--Self	male	94	125.3	155.6	16.0	12.8	2.50	0.01**	19.7
	female	56	76.0	85.9	11.5	15.1			
Video Online--Self	male	94	149.6	171.8	17.7	11.8	1.72	0.09#	27.2
	female	56	102.7	141.9	19.0	18.5			

*Note: P value is #<.10, *≤..05, **≤.01 and ***≤.000. Relative Standard Error (RSE) means Percent Standard Error.*

Table 8

Distance of Information Topics and Media from Self by Gender in US College Student Sample

Concept Pairs	GENDER	N	Mean	SD	SE	RSE	t	Sig.	SE Difference
International --Self	female	247	135.7	120.3	7.7	5.6	-0.037	0.971	11.5
	male	302	136.1	144.3	8.3	6.1			
National--Self	female	247	102.1	113.3	7.2	7.1	0.521	0.603	9.1
	male	303	97.3	100.7	5.8	5.9			
Local--Self	female	242	69.4	96.0	6.2	8.9	0.481	0.631	7.1
	male	302	66.0	70.3	4.0	6.1			
Science & Tech --Self	female	236	80.5	80.9	5.3	6.5	0.687	0.492	6.6
	male	298	76.0	70.6	4.1	5.4			
Medical & Health--Self	female	234	75.0	68.6	4.5	6	-0.755	0.45	6.4
	male	294	79.8	76.1	4.4	5.6			
Nutrition & Food--Self	female	229	65.9	70.9	4.7	7.1	-1.02	0.308	6.4
	male	292	72.5	74.5	4.4	6			
Financial—Self	female	224	85.4	75.6	5.1	5.9	0.331	0.741	6.9
	male	288	83.1	78.0	4.6	5.5			
Sports—Self	female	225	73.6	85.3	5.7	7.7	2.266	0.024*	6.8
	male	284	58.1	69.0	4.1	7.1			
Entertainment—Self	female	222	51.5	60.7	4.1	7.9	-0.638	0.524	5.6
	male	287	55.0	64.1	3.8	6.9			
Newspaper—Self	female	217	85.8	98.0	6.7	7.8	-1.053	0.293	8.8
	male	286	95.1	98.5	5.8	6.1			
Magazine—Self	female	218	69.1	68.6	4.6	6.7	-3.168	0.002**	7.3
	male	284	92.3	95.3	5.7	6.1			
TV—Self	female	217	64.9	64.3	4.4	6.7	-0.609	0.543	6.2
	male	280	68.7	71.5	4.3	6.2			
Radio—Self	female	215	73.5	64.0	4.4	5.9	-1.054	0.293	6.2
	male	279	80.0	71.4	4.3	5.3			
FtF—Self	female	214	43.0	64.8	4.4	10.3	-2.358	0.019*	6.3
	male	283	58.0	73.8	4.4	7.6			
Cellular Phone—Self	female	213	51.8	79.3	5.4	10.5	-1.43	0.153	6.8
	male	282	61.6	71.9	4.3	7			
News Online--Self	female	212	76.5	66.3	4.6	6	0.63	0.529	5.9
	male	281	72.8	62.9	3.8	5.2			
E-mail—Self	female	211	66.7	80.7	5.6	8.3	-0.947	0.344	6.9
	male	279	73.2	70.6	4.2	5.8			
Blogging—Self	female	211	97.3	91.4	6.3	6.5	1.062	0.289	7.7
	male	277	89.2	78.0	4.7	5.3			
Online Video—Self	female	210	86.5	96.2	6.6	7.7	1.612	0.108	7.8
	male	279	73.9	76.6	4.6	6.2			
IM—Self	female	211	78.6	98.4	6.8	8.6	0.595	0.552	7.6
	male	280	74.1	69.0	4.1	5.6			
MP3--Self	female	211	78.2	104.0	7.2	9.2	-0.064	0.949	8.8
	male	279	78.7	90.3	5.4	6.9			

*Note: P value is *<.05, **<.01. Relative Standard Error (RSE) means Percent Standard Error.*

Table 9

T-Test between Concept Pairs by Gender in Korean College Student Sample

Concept Pairs	GENDER	N	Mean	SD	SE	RSE	t	Sig.	SE Mean Difference
Int-National	male	94	163.7	151.2	15.6	9.5	2.42	0.02	18.8
	female	56	118.3	78.3	10.5	8.8			
Int-Local	male	94	272.5	231.3	23.9	8.8	1.61	0.11	32.0
	female	56	221.0	159.3	21.3	9.6			
Int-SciTech	male	94	136.7	135.6	14.0	10.2	1.79	0.08	20.2
	female	56	100.6	86.0	11.5	11.4			
Int-Medicine/Health	male	94	162.0	167.6	17.3	10.7	2.73	0.01	21.9
	female	56	102.4	100.0	13.4	13.1			
Int-Nutrition/Food	male	94	173.7	166.8	17.2	9.9	2.06	0.04	25.6
	female	56	121.0	122.8	16.4	13.6			
Int-Sports	male	94	140.0	151.9	15.7	11.2	3.87	0.00	17.4
	female	56	72.7	57.2	7.6	10.5			
Int-Ent	male	94	191.2	206.7	21.3	11.2	2.06	0.04	30.6
	female	56	128.1	126.5	16.9	13.2			
Int-Newspaper	male	94	169.2	154.5	15.9	9.4	2.02	0.05	23.4
	female	56	122.1	105.7	14.1	11.6			
Int-TV	male	94	113.7	100.6	10.4	9.1	2.40	0.02	15.4
	female	56	76.7	72.9	9.7	12.7			
Int-Cellular Phone	male	94	219.3	225.2	23.2	10.6	2.21	0.03	29.0
	female	56	155.4	129.6	17.3	11.1			
Int-Blogging	male	94	155.0	149.2	15.4	9.9	2.62	0.01	18.7
	female	56	106.1	78.9	10.5	9.9			
Int-Video Online	male	94	142.5	162.0	16.7	11.7	2.13	0.04	19.9
	female	56	100.0	81.4	10.9	10.9			
Int-MP3	male	94	239.2	273.9	28.3	11.8	2.11	0.04	35.7
	female	56	163.9	162.7	21.7	13.3			
National-Sports	male	94	101.1	138.3	14.3	14.1	1.89	0.06	20.0
	female	56	63.2	73.9	9.9	15.6			
National-Blogging	male	94	108.6	142.3	14.7	13.5	2.18	0.03	17.2
	female	56	71.1	67.8	9.1	12.7			
National-Video Online	male	94	129.1	157.8	16.3	12.6	2.15	0.03	20.2
	female	56	85.8	89.9	12.0	14			
National-IM	male	94	157.2	189.2	19.5	12.4	1.91	0.06	24.2
	female	56	111.1	107.2	14.3	12.9			
National-MP3	male	94	189.8	224.5	23.2	12.2	2.39	0.02	28.7
	female	56	121.2	127.4	17.0	14.1			
Local-TV	male	94	123.6	145.0	15.0	12.1	2.97	0.00	17.3
	female	56	72.3	64.8	8.7	12			
Local-Radio	male	94	134.5	133.3	13.8	10.2	2.21	0.03	20.0

	female	56	90.3	88.9	11.9	13.2			
Local-FtF	male	94	165.2	150.3	15.5	9.4	2.19	0.03	24.7
	female	56	110.9	139.9	18.7	16.9			
Local-Blogging	male	94	177.5	211.5	21.9	12.4	2.86	0.01	25.9
	female	56	103.3	103.7	13.9	13.4			
Local-Video Online	male	94	183.4	225.2	23.2	12.7	2.47	0.02	26.9
	female	56	117.1	101.0	13.5	11.5			
Local-IM	male	94	212.5	237.3	24.5	11.5	3.08	0.00	28.6
	female	56	124.3	110.8	14.8	11.9			
Local-MP3	male	94	250.0	279.8	28.9	11.5	3.33	0.00	33.2
	female	56	139.1	123.5	16.5	11.9			
Local-Self	male	94	170.9	176.1	18.2	10.6	2.77	0.01	23.2
	female	56	106.8	108.1	14.4	13.5			
SciTech-Medicine/Health	male	93	128.1	136.1	14.1	11	3.47	0.00	16.4
	female	56	71.2	62.9	8.4	11.8			
SciTech-Nutrition/Food	male	93	130.7	158.0	16.4	12.5	2.89	0.00	18.4
	female	56	77.5	62.6	8.4	10.8			
SciTech-Financial	male	93	141.0	142.9	14.8	10.5	3.54	0.00	17.2
	female	56	80.1	65.5	8.7	10.9			
SciTech-Sports	male	93	180.7	187.8	19.5	10.8	3.47	0.00	22.8
	female	56	101.7	88.7	11.9	11.7			
SciTech-Magazine	male	94	151.1	167.0	17.2	11.4	2.22	0.03	23.5
	female	56	98.9	119.5	16.0	16.1			
SciTech-TV	male	94	123.5	130.2	13.4	10.9	2.34	0.02	19.2
	female	56	78.7	78.2	10.5	13.3			
SciTech-Radio	male	94	176.7	179.9	18.6	10.5	2.79	0.01	23.9
	female	56	110.0	112.6	15.1	13.7			
SciTech-Cellular Phone	male	94	174.0	200.9	20.7	11.9	3.35	0.00	24.8
	female	56	91.2	101.3	13.5	14.8			
SciTech-News Online	male	94	109.1	113.7	11.7	10.8	2.93	0.00	14.0
	female	56	68.0	57.5	7.7	11.2			
SciTech-Email	male	94	167.8	183.4	18.9	11.3	1.98	0.05	25.1
	female	56	118.2	123.4	16.5	13.9			
SciTech-Blogging	male	94	151.3	160.4	16.5	10.9	3.40	0.00	18.8
	female	56	87.6	66.2	8.8	10.1			
SciTech-Video Online	male	94	160.8	179.9	18.6	11.5	3.16	0.00	21.1
	female	56	94.0	75.7	10.1	10.8			
SciTech-IM	male	94	193.5	233.1	24.0	12.4	2.29	0.02	29.1
	female	56	126.8	122.9	16.4	12.9			
SciTech-MP3	male	94	169.7	237.7	24.5	14.4	2.34	0.02	29.4
	female	56	101.0	121.0	16.2	16			
Medicine/Health-IM	male	93	236.6	219.9	22.8	10.2	2.26	0.03	33.9
	female	56	160.0	163.4	21.8	13.6			

Medicine/Health -MP3	male	93	286.0	278.0	28.8	9.6	2.84	0.01	37.0
	female	56	180.7	173.8	23.2	12.9			
Medicine/Health -Self	male	93	148.3	154.8	16.1	10.1	1.85	0.07	23.3
	female	56	105.2	102.9	13.8	13.1			
Nutrition/Food-Financial	male	92	220.4	206.4	21.5	9.8	2.11	0.04	31.0
	female	56	155.0	135.3	18.1	11.7			
Nutrition/Food-Newspaper	male	93	162.0	161.3	16.7	10.3	2.87	0.01	21.1
	female	56	101.5	96.0	12.8	12.6			
Nutrition/Food - Magazine	male	93	148.2	141.5	14.7	9.9	2.52	0.01	21.1
	female	56	95.1	89.0	11.9	12.5			
Nutrition/Food -TV	male	93	123.0	117.0	12.1	9.9	2.24	0.03	17.9
	female	56	82.8	84.4	11.3	13.6			
Nutrition/Food -FtF	male	93	177.6	153.9	16.0	9	2.73	0.01	23.6
	female	56	113.3	110.9	14.8	13.1			
Nutrition/Food – Cellular Phone	male	93	260.6	243.3	25.2	9.7	1.71	0.09	39.5
	female	56	193.3	215.9	28.8	14.9			
Nutrition/Food – News Online	male	93	158.6	144.9	15.0	9.5	2.11	0.04	24.5
	female	56	107.0	144.3	19.3	18			
Nutrition/Food -Email	male	93	219.6	191.4	19.8	9	2.68	0.01	27.6
	female	56	145.7	143.0	19.1	13.1			
Nutrition/Food -Blogging	male	93	178.8	179.0	18.6	10.4	3.57	0.00	23.8
	female	56	93.9	111.0	14.8	15.8			
Nutrition/Food – Video Online	male	93	216.8	203.5	21.1	9.7	3.10	0.00	28.5
	female	56	128.5	143.8	19.2	15			
Nutrition/Food -IM	male	93	240.0	243.5	25.2	10.5	2.96	0.00	33.2
	female	56	141.8	160.9	21.5	15.2			
Nutrition/Food -MP3	male	93	311.0	293.7	30.5	9.8	2.49	0.01	41.2
	female	56	208.2	207.8	27.8	13.3			
Nutrition/Food -Self	male	93	161.6	177.3	18.4	11.4	3.92	0.00	20.9
	female	56	79.6	74.9	10.0	12.6			
Financial-Newspaper	male	93	123.3	137.9	14.3	11.6	2.96	0.00	16.9
	female	56	73.3	67.4	9.0	12.3			
Financial-Magazine	male	93	145.1	135.9	14.1	9.7	3.28	0.00	16.5
	female	56	90.8	64.9	8.7	9.6			
Financial-TV	male	93	107.1	120.9	12.5	11.7	2.12	0.04	15.2
	female	56	74.7	64.8	8.7	11.6			
Financial-Radio	male	93	123.3	110.4	11.5	9.3	2.99	0.00	14.3
	female	56	80.6	63.8	8.5	10.6			
Financial-FtF	male	93	164.1	124.4	12.9	7.9	2.58	0.01	19.7
	female	56	113.3	101.1	13.5	11.9			

Financial-Cellular Phone	male	93	205.4	207.0	21.5	10.5	2.08	0.04	30.7
	female	56	141.5	128.7	17.2	12.2			
Financial-News Online	male	92	115.0	124.2	13.0	11.3	2.48	0.01	16.4
	female	56	74.4	74.9	10.0	13.5			
Financial-Blogging	male	93	165.0	163.8	17.0	10.3	2.02	0.05	25.3
	female	56	114.0	121.7	16.3	14.3			
Financial-Video Online	male	93	204.8	204.2	21.2	10.3	1.79	0.08	32.2
	female	56	146.9	165.5	22.1	15.1			
Financial-IM	male	93	233.1	229.6	23.8	10.2	1.80	0.07	36.1
	female	56	168.2	183.3	24.5	14.6			
Financial-MP3	male	93	300.5	276.1	28.6	9.5	2.78	0.01	39.1
	female	56	191.5	199.8	26.7	13.9			
Sports-Newspaper	male	94	108.6	120.2	12.4	11.4	2.94	0.00	14.6
	female	56	65.7	57.9	7.7	11.8			
Sports-Magazine	male	94	106.5	112.4	11.6	10.9	2.77	0.01	13.8
	female	56	68.2	55.9	7.5	11			
Sports-Radio	male	94	112.5	113.0	11.7	10.4	2.57	0.01	15.5
	female	56	72.7	76.4	10.2	14			
Sports-News Online	male	94	105.8	157.2	16.2	15.3	2.36	0.02	17.9
	female	56	63.4	57.4	7.7	12.1			
Sports-Email	male	94	208.9	219.3	22.6	10.8	1.78	0.08	33.4
	female	56	149.5	155.9	20.8	13.9			
Sports-Blogging	male	94	164.0	198.1	20.4	12.5	2.56	0.01	24.2
	female	56	102.1	97.0	13.0	12.7			
Sports-MP3	male	94	275.7	283.6	29.3	10.6	2.00	0.05	40.2
	female	56	195.3	206.8	27.6	14.2			
Ent-Magazine	male	94	98.8	140.3	14.5	14.7	2.49	0.01	17.2
	female	56	55.8	70.076	9.364	16.8			
Ent-TV	male	94	95.1	153.5	15.8	16.6	1.97	0.05	22.0
	female	56	51.8	76.8	10.3	19.8			
Ent-Radio	male	94	101.7	102.1	10.5	10.4	2.43	0.02	15.5
	female	56	63.9	71.1	9.5	14.9			
Ent-Cellular Phone	male	93	174.2	207.3	21.5	12.3	1.96	0.05	30.0
	female	56	115.5	156.8	20.9	18.1			
Ent-Email	male	94	187.1	212.8	22.0	11.7	3.22	0.00	25.2
	female	56	105.9	92.5	12.4	11.7			
Ent-Blogging	male	94	134.8	187.0	19.3	14.3	2.96	0.00	21.9
	female	56	70.1	77.3	10.3	14.7			
Ent-Video Online	male	94	138.8	211.6	21.8	15.7	2.53	0.01	24.6
	female	56	76.6	84.6	11.3	14.8			
Ent-IM	male	94	161.8	216.3	22.3	13.8	1.94	0.05	29.4
	female	56	104.8	143.7	19.2	18.3			
Ent-MP3	male	94	179.6	238.2	24.6	13.7	2.03	0.04	32.8

	female	56	112.9	163.0	21.8	19.3			
Ent-Self	male	94	146.1	179.3	18.5	12.7	2.35	0.02	25.3
	female	56	86.8	129.1	17.2	19.9			

Note: Relative Standard Error (RSE) means Percent Standard Error.

Table 10

T-Test between Concept Pairs of Media by Gender in Korean College Student Sample

Concept Pairs	GENDER	N	Mean	SD	SE	RSE	t	Sig.	SE Mean Difference
Newspaper-Magazine	male	94	114.8	109.9	11.3	9.9	3.33	0.00	13.1
	female	56	71.1	49.8	6.7	9.4			
Newspaper-TV	male	94	127.6	137.8	14.2	11.1	2.01	0.05	20.6
	female	56	86.1	90.2	12.1	14			
Newspaper-Radio	male	94	137.1	122.7	12.7	9.2	2.19	0.03	19.0
	female	56	95.6	93.0	12.4	13			
Newspaper-FtF	male	94	159.3	134.3	13.8	8.7	2.06	0.04	21.3
	female	56	115.3	111.9	15.0	13			
Newspaper-Cellular Phone	male	94	190.8	196.2	20.2	10.6	1.87	0.06	29.1
	female	56	136.3	122.5	16.4	12			
Newspaper-News Online	male	94	145.5	175.4	18.1	12.4	2.71	0.01	22.2
	female	56	85.3	96.1	12.8	15.1			
Newspaper-Email	male	93	196.4	197.0	20.4	10.4	1.77	0.08	31.4
	female	56	140.9	165.4	22.1	15.7			
Newspaper-Blogging	male	94	191.3	203.9	21.0	11	4.07	0.00	24.2
	female	56	92.8	89.7	12.0	12.9			
Newspaper-Video Online	male	94	220.7	212.8	22.0	9.9	3.63	0.00	26.9
	female	56	123.1	115.9	15.5	12.6			
Newspaper-IM	male	94	240.9	231.6	23.9	9.9	3.50	0.00	28.9
	female	56	139.8	121.9	16.3	11.7			
Newspaper-MP3	male	94	285.6	284.6	29.4	10.3	3.47	0.00	35.1
	female	56	163.8	143.8	19.2	11.7			
Magazine-Radio	male	94	165.2	175.5	18.1	11	2.36	0.02	23.2
	female	56	110.5	108.5	14.5	13.1			
Magazine-FtF	male	94	186.2	192.7	19.9	10.7	2.41	0.02	29.3
	female	56	115.6	136.0	18.2	15.7			
Magazine-Cellular Phone	male	94	203.1	210.3	21.7	10.7	2.20	0.03	29.7
	female	56	137.9	152.1	20.3	14.7			
Magazine-News Online	male	94	158.2	156.1	16.1	10.2	2.30	0.02	21.6
	female	56	108.6	107.5	14.4	13.2			
Magazine-Email	male	94	201.1	193.6	20.0	9.9	3.14	0.00	24.4
	female	56	124.5	104.7	14.0	11.2			
Magazine-Blogging	male	94	190.8	194.9	20.1	10.5	4.01	0.00	23.5
	female	56	96.7	90.6	12.1	12.5			
Magazine-Video Online	male	94	196.8	197.6	20.4	10.4	2.95	0.00	25.0
	female	56	123.1	108.2	14.5	11.8			
Magazine-IM	male	94	218.9	231.9	23.9	10.9	2.51	0.01	29.6
	female	56	144.6	130.5	17.4	12.1			

Magazine-MP3	male	94	277.9	274.6	28.3	10.2	3.62	0.00	33.8
	female	56	155.6	138.0	18.4	11.9			
Magazine-Self	male	93	187.3	191.8	19.9	10.6	3.32	0.00	24.6
	female	56	105.9	107.7	14.4	13.6			
TV-Radio	male	94	101.3	115.6	11.9	11.8	2.89	0.01	13.8
	female	56	61.4	52.3	7.0	11.4			
TV-FtF	male	94	132.7	147.3	15.2	11.4	1.83	0.07	24.1
	female	56	88.7	134.5	18.0	20.3			
TV-Cellular Phone	male	94	137.6	154.7	16.0	11.6	2.68	0.01	19.6
	female	56	85.2	84.7	11.3	13.3			
TV-News Online	male	94	108.7	132.3	13.6	12.5	1.78	0.08	19.2
	female	56	74.6	71.8	9.6	12.9			
TV-Email	male	94	167.0	193.2	19.9	11.9	1.74	0.08	24.1
	female	56	125.1	100.8	13.5	10.8			
TV-Blogging	male	94	171.2	191.2	19.7	11.5	3.52	0.00	23.5
	female	56	88.5	95.5	12.8	14.4			
TV-Video Online	male	93	130.3	148.5	15.4	11.8	2.25	0.03	20.2
	female	56	84.9	97.8	13.1	15.4			
TV-IM	male	94	176.4	203.0	20.9	11.9	2.92	0.00	25.0
	female	56	103.5	102.0	13.6	13.2			
TV-MP3	male	94	225.5	247.2	25.5	11.3	4.02	0.00	29.1
	female	56	108.4	105.0	14.0	12.9			
TV-Self	male	94	121.0	158.0	16.3	13.5	1.78	0.08	25.5
	female	56	75.6	137.9	18.4	24.4			
Radio-FtF	male	94	181.6	197.5	20.4	11.2	3.66	0.00	23.4
	female	56	96.0	85.7	11.5	11.9			
Radio-Cellular Phone	male	94	212.9	233.1	24.0	11.3	3.90	0.00	27.4
	female	56	106.3	97.9	13.1	12.3			
Radio-News Online	male	94	164.8	151.4	15.6	9.5	3.61	0.00	18.7
	female	56	97.2	77.6	10.4	10.7			
Radio-Email	male	94	208.7	218.4	22.5	10.8	3.07	0.00	26.3
	female	56	128.0	101.7	13.6	10.6			
Radio-Blogging	male	94	196.1	194.4	20.1	10.2	3.58	0.00	23.9
	female	56	110.5	96.9	13.0	11.7			
Radio-Video Online	male	94	229.0	252.7	26.1	11.4	3.78	0.00	28.8
	female	56	120.4	91.4	12.2	10.1			
Radio-IM	male	94	211.3	229.9	23.7	11.2	2.47	0.02	29.4
	female	56	139.0	129.7	17.3	12.5			
Radio-MP3	male	94	213.9	242.0	25.0	11.7	3.17	0.00	30.0
	female	56	118.8	124.3	16.6	14			
Radio-Self	male	94	195.8	225.0	23.2	11.9	3.04	0.00	27.2
	female	56	113.1	106.1	14.2	12.5			
FtF-Cellular Phone	male	94	149.0	184.5	19.0	12.8	3.11	0.00	22.2

	female	56	79.8	86.0	11.5	14.4			
FtF-News Online	male	81	171.2	180.5	20.1	11.7	2.42	0.02	29.7
	female	46	99.1	148.7	21.9	22.1			
FitF-Email	male	93	169.1	174.3	18.1	10.7	1.75	0.08	27.9
	female	56	120.2	148.6	19.9	16.5			
FtF-Blogging	male	94	194.0	205.4	21.2	10.9	2.36	0.02	32.3
	female	56	117.9	164.3	22.0	18.6			
FtF-Video Online	male	94	199.3	210.4	21.7	10.9	2.92	0.00	29.4
	female	56	113.5	148.5	19.8	17.5			
FtF-IM	male	94	174.3	218.1	22.5	12.9	3.44	0.00	25.2
	female	56	87.5	85.6	11.4	13.1			
FtF-MP3	male	94	249.3	244.2	25.2	10.1	3.66	0.00	31.3
	female	56	135.0	138.5	18.5	13.7			
FtF-Self	male	94	148.1	192.1	19.8	13.4	4.09	0.00	21.7
	female	56	59.4	66.5	8.9	15.0			
Cellular Phone-News Online	male	94	185.5	201.8	20.8	11.2	2.73	0.01	25.3
	female	56	116.4	107.7	14.4	12.4			
Cellular Phone-Email	male	94	176.0	220.0	22.7	12.9	2.11	0.04	27.6
	female	56	117.8	117.3	15.7	13.3			
Cellular Phone-Blogging	male	94	187.9	214.9	22.2	11.8	2.31	0.02	27.5
	female	56	124.3	122.2	16.3	13.1			
Cellular Phone-Video Online	male	94	179.8	212.4	21.9	12.2	3.11	0.00	25.8
	female	56	99.6	101.8	13.6	13.6			
Cellular Phone-IM	male	94	132.8	190.3	19.6	14.8	1.71	0.09	24.2
	female	56	91.4	105.4	14.1	15.4			
Cellular Phone-MP3	male	94	125.8	170.8	17.6	14	3.03	0.00	19.8
	female	56	65.9	67.3	9.0	13.7			
Cellular Phone-Self	male	94	108.8	182.2	18.8	17.3	2.54	0.01	20.8
	female	56	56.1	66.2	8.8	15.8			
News Online-IM	male	94	144.9	177.4	18.3	12.6	1.75	0.08	23.6
	female	56	103.5	111.7	14.9	14.4			
News Online-MP3	male	94	192.8	218.3	22.5	11.7	2.50	0.01	27.9
	female	56	122.8	123.7	16.5	13.5			
News Online-Self	male	94	113.4	174.4	18.0	15.9	1.96	0.05	21.3
	female	56	71.6	85.4	11.4	15.9			
Email-MP3	male	94	189.8	219.4	22.6	11.9	1.77	0.08	32.5
	female	56	132.2	135.3	18.1	13.7			
Blogging-IM	male	94	120.8	151.4	15.6	12.9	1.91	0.06	19.6
	female	56	83.5	88.1	11.8	14.1			
Blogging-MP3	male	94	173.3	214.1	22.1	12.7	3.07	0.00	26.3
	female	56	92.4	107.1	14.3	15.5			
Blogging-Self	male	94	125.3	155.6	16.0	12.8	2.50	0.01	19.7
	female	56	76.0	85.9	11.5	15.1			

Video Online-IM	male	94	153.9	169.2	17.4	11.3	2.08	0.04	25.1
	female	56	101.7	105.1	14.0	13.8			
Video Online-MP3	male	94	181.7	213.1	22.0	12.1	3.03	0.00	26.9
	female	56	100.0	116.3	15.5	15.5			
Video Online-Self	male	94	149.6	171.8	17.7	11.8	1.72	0.09	27.2
	female	56	102.7	141.9	19.0	18.5			
IM-MP3	male	94	201.3	237.9	24.5	12.2	2.82	0.01	28.7
	female	56	120.2	111.9	15.0	12.4			

Note: Relative Standard Error (RSE) means Percent Standard Error.

Table 11

T-Test between Concept Pairs by Gender in US College Student Sample

Concept Pairs	GENDER	N	Mean	SD	SE	RSE	t	Sig.	SE Mean Difference
International--Newspaper	female	247	54.8	66.8	4.25	7.8	-2.143	0.03*	5.9
	male	303	67.4	70.65	4.06	6			
International--Magazine	female	247	81.2	76.03	4.84	6	-1.887	0.06#	6.8
	male	301	94.1	82.11	4.73	5			
International--News Online	female	247	51.9	61.56	3.92	7.5	-2.007	0.05*	7
	male	303	66	101.93	5.86	8.9			
International--Email	female	245	103	79.38	5.07	4.9	-1.906	0.06#	9
	male	302	120.1	128.46	7.39	6.2			
National--Nutrition/Food	female	247	91.7	91.18	5.8	6.3	1.856	0.06#	7.2
	male	304	78.4	73.11	4.19	5.3			
Local--Sci/Tech	female	245	81.5	70.66	4.51	5.5	-1.652	0.10#	6.9
	male	303	92.9	87.08	5	5.4			
Local-- Medical/Health	female	246	59.1	51.2	3.27	5.5	-3.304	0.00***	5.2
	male	304	76.3	70.64	4.05	5.3			
Local--Financial	female	247	63.2	74.11	4.72	7.5	-1.984	0.05*	6.1
	male	302	75.4	69.56	4	5.3			
Sci/Tech--Newspaper	female	240	66	59.88	3.87	5.9	-1.629	0.10#	6
	male	300	75.7	75.63	4.37	5.8			
Sci/Tech--TV	female	240	61.5	64.12	4.14	6.7	-1.725	0.09#	6.4
	male	300	72.5	80.3	4.64	6.4			
Medical/Health--Nutrition/Food	female	236	43.2	61.32	3.99	9.2	-2.277	0.02*	6.6
	male	299	58.2	90.23	5.22	9			
Medical/Health --Newspaper	female	236	68.2	73.47	4.78	7	-2.275	0.02*	7.4
	male	296	85.2	93.62	5.44	6.4			
Nutrition/Food--Magazine	female	232	71.1	59.53	3.91	5.5	-1.724	0.09#	6.5
	male	293	82.3	83.68	4.89	5.9			
Nutrition/Food--TV	female	232	65.3	56.76	3.73	5.7	-2.282	0.02*	6.3
	male	292	79.8	81.83	4.79	6			
Financial--Cellular Phone	female	228	97.6	82.55	5.47	5.6	2.032	0.04*	6.7
	male	290	83.9	70.74	4.15	5			
Sports--Magazine	female	225	44.7	60.28	4.02	9	-1.666	0.10#	5.7
	male	289	54.2	67.42	3.97	7.3			
Entertainment--Radio	female	223	38.6	73.03	4.89	12.7	-2.078	0.04*	5.7
	male	285	50.5	56.54	3.35	6.6			
Entertainment--IM	female	222	57.5	77.84	5.22	9.1	-1.637	0.10#	7.1
	male	288	69.2	81.47	4.8	6.9			
Newspaper--TV	female	219	55.4	65.94	4.46	8	-2.426	0.02*	7.1
	male	286	72.7	87.72	5.19	7.1			
Magazine-- News Online	female	217	64.6	68.4	4.64	7.2	-2.651	0.01**	7

	male	284	83.1	83.15	4.93	5.9			
Magazine--Blogging	female	217	74	75.88	5.15	7	-2.044	0.04*	6.9
	male	284	88.1	77.51	4.6	5.2			
TV--Radio	female	217	60.1	68.94	4.68	7.8	-2.039	0.04*	7.1
	male	284	74.6	86.13	5.11	6.8			
TV--News Online	female	217	68.3	66.47	4.51	6.6	-1.76	0.08#	7.3
	male	283	81.2	91.19	5.42	6.7			
Blogging--IM	female	211	62.1	62.83	4.33	7	-1.731	0.08#	6.1
	male	279	72.7	70.08	4.2	5.8			

Note: P value is #≤1.0,≤.05, **≤.01. Relative Standard Error (RSE) means Percent Standard Error.*

Table 12

Korean Participants' Cluster Analysis of Scalar Products
Using Johnson's Hierarchical Clustering of UCINET

All Participants	Concepts Observed	Female Participants	Concepts Observed	Male Participants	Concepts Observed
1	Int	1	Int	1	Int
3	National	1	National	3	National
2	Local	2	Local	2	Local
2	SciTech	3	SciTech	2	SciTech
2	MediHealth	3	MediHealth	2	MediHealth
2	NutritionFood	3	NutritionFood	2	NutritionFood
1	Financial	2	Financial	1	Financial
3	Sports	1	Sports	3	Sports
3	Ent	1	Ent	3	Ent
3	Newspaper	2	Newspaper	3	Newspaper
3	Magazine	1	Magazine	3	Magazine
1	TV	3	TV	1	TV
3	Radio	2	Radio	3	Radio
4	FtF	4	FtF	3	FtF
4	Cellular Phone	4	Cellular Phone	4	Cellular Phone
1	News Online	1	News Online	1	News Online
4	Email	4	Email	4	Email
4	Blogging	4	Blogging	4	Blogging
4	Video Online	4	Video Online	4	Video Online
4	IM	4	IM	4	IM
4	MP3	4	MP3	4	MP3
4	Yourself	4	Yourself	4	Yourself

Note: The membership does mean only the affiliation with the given number without exception.

Table 13

Korean Participants' Cluster Analysis of Mean Values
Using Johnson's Hierarchical Clustering of UCINET

All Participants	Concepts Observed	Female Participants	Concepts Observed	Male Participants	Concepts Observed
1	Int	1	Int	1	Int
2	National	2	National	1	National
2	Local	2	Local	2	Local
2	SciTech	1	SciTech	2	SciTech
2	MediHealth	1	MediHealth	2	MediHealth
2	NutritionFood	1	NutritionFood	2	NutritionFood
2	Financial	2	Financial	1	Financial
1	Sports	2	Sports	1	Sports
1	Ent	2	Ent	1	Ent
2	Newspaper	2	Newspaper	1	Newspaper
2	Magazine	2	Magazine	1	Magazine
1	TV	2	TV	1	TV
2	Radio	2	Radio	1	Radio
2	FtF	3	FtF	4	FtF
3	Cellular Phone	3	Cellular Phone	3	Cellular Phone
1	News Online	2	News Online	1	News Online
4	Email	3	Email	3	Email
1	Blogging	2	Blogging	3	Blogging
1	Video Online	2	Video Online	3	Video Online
3	IM	3	IM	3	IM
3	MP3	3	MP3	3	MP3
3	Yourself	3	Yourself	3	Yourself

Note: The membership does mean only the affiliation with the given number without exception.

Table 14

Korean Participants' Cluster Analysis of Scalar Products
Using Ward Linkage of SPSS

All Participants	Concepts Observed	Female Participants	Concepts Observed	Male Participants	Concepts Observed
1	Int	1	Int	1	Int
2	National	1	National	1	National
2	Local	3	Local	2	Local
1	SciTech	1	SciTech	1	SciTech
1	MediHealth	2	MediHealth	2	MediHealth
1	NutritionFood	2	NutritionFood	2	NutritionFood
1	Financial	2	Financial	2	Financial
2	Sports	1	Sports	1	Sports
3	Ent	4	Ent	1	Ent
2	Newspaper	1	Newspaper	2	Newspaper
2	Magazine	1	Magazine	2	Magazine
2	TV	1	TV	1	TV
2	Radio	1	Radio	2	Radio
2	FtF	3	FtF	1	FtF
3	Cellular Phone	4	Cellular Phone	3	Cellular Phone
2	News Online	1	News Online	1	News Online
3	Email	4	Email	3	Email
3	Blogging	4	Blogging	3	Blogging
3	Video Online	4	Video Online	3	Video Online
3	IM	4	IM	3	IM
4	MP3	4	MP3	4	MP3
3	Yourself	3	Yourself	3	Yourself

Note: The membership does mean only the affiliation with the given number without exception.

Table 15

Korean Participants' Cluster Analysis of Mean Values Using Ward Linkage of SPSS

All Participants	Concepts Observed	Female Participants	Concepts Observed	Male Participants	Concepts Observed
1	Int	1	Int	1	Int
4	National	2	National	2	National
4	Local	3	Local	2	Local
1	SciTech	1	SciTech	1	SciTech
1	MediHealth	1	MediHealth	1	MediHealth
1	NutritionFood	1	NutritionFood	1	NutritionFood
1	Financial	1	Financial	1	Financial
4	Sports	2	Sports	2	Sports
4	Ent	2	Ent	2	Ent
1	Newspaper	2	Newspaper	2	Newspaper
1	Magazine	2	Magazine	2	Magazine
3	TV	2	TV	2	TV
3	Radio	2	Radio	2	Radio
4	FtF	3	FtF	3	FtF
4	Cellular Phone	4	Cellular Phone	3	Cellular Phone
2	News Online	2	News Online	2	News Online
2	Email	4	Email	3	Email
2	Blogging	2	Blogging	3	Blogging
3	Video Online	2	Video Online	3	Video Online
4	IM	4	IM	3	IM
4	MP3	4	MP3	4	MP3
2	Yourself	3	Yourself	3	Yourself

Note: The membership does mean only the affiliation with the given number without exception.

Table 16

US Participants' Cluster Analysis of Scalar Products
Using Johnson's Hierarchical Clustering of UCINET

All Participants	Concepts Observed	Female Participants	Concepts Observed	Male Participants	Concepts Observed
1	Int	1	Int	1	Int
1	National	1	National	1	National
3	Local	2	Local	1	Local
2	SciTech	3	SciTech	2	SciTech
2	MediHealth	3	MediHealth	2	MediHealth
2	NutritionFood	3	NutritionFood	2	NutritionFood
1	Financial	1	Financial	1	Financial
3	Sports	2	Sports	3	Sports
4	Ent	4	Ent	4	Ent
1	Newspaper	1	Newspaper	1	Newspaper
1	Magazine	1	Magazine	1	Magazine
1	TV	2	TV	1	TV
1	Radio	2	Radio	1	Radio
3	FtF	3	FtF	3	FtF
4	Cellular Phone	4	Cellular Phone	4	Cellular Phone
1	News Online	1	News Online	1	News Online
4	Email	4	Email	4	Email
4	Blogging	4	Blogging	4	Blogging
4	Video Online	4	Video Online	4	Video Online
4	IM	4	IM	4	IM
4	MP3	4	MP3	4	MP3
3	Yourself	3	Yourself	3	Yourself

Note: The membership does mean only the affiliation with the given number without exception.

Table 17

US Participants' Cluster Analysis of Mean Values
Using Johnson's Hierarchical Clustering of UCINET

All Participants	Concepts Observed	Female Participants	Concepts Observed	Male Participants	Concepts Observed
1	Int	1	Int	1	Int
2	National	2	National	2	National
2	Local	2	Local	2	Local
4	SciTech	3	SciTech	3	SciTech
4	MediHealth	3	MediHealth	3	MediHealth
4	NutritionFood	3	NutritionFood	3	NutritionFood
2	Financial	1	Financial	2	Financial
2	Sports	2	Sports	2	Sports
2	Ent	2	Ent	2	Ent
2	Newspaper	2	Newspaper	2	Newspaper
2	Magazine	2	Magazine	2	Magazine
2	TV	2	TV	2	TV
2	Radio	2	Radio	2	Radio
3	FtF	4	FtF	2	FtF
5	Cellular Phone	4	Cellular Phone	4	Cellular Phone
2	News Online	1	News Online	2	News Online
5	Email	4	Email	4	Email
5	Blogging	4	Blogging	4	Blogging
5	Video Online	4	Video Online	4	Video Online
5	IM	4	IM	4	IM
5	MP3	4	MP3	4	MP3
3	Yourself	4	Yourself	2	Yourself

Note: The membership does mean only the affiliation with the given number without exception.

Table 18

US Participants' Cluster Analysis of Scalar Products Using Ward Linkage of SPSS

All Participants	Concepts Observed	Female Participants	Concepts Observed	Male Participants	Concepts Observed
1	Int	1	Int	1	Int
2	National	2	National	2	National
3	Local	3	Local	3	Local
2	SciTech	2	SciTech	2	SciTech
2	MediHealth	2	MediHealth	2	MediHealth
2	NutritionFood	2	NutritionFood	2	NutritionFood
2	Financial	2	Financial	2	Financial
4	Sports	4	Sports	3	Sports
4	Ent	4	Ent	3	Ent
2	Newspaper	2	Newspaper	2	Newspaper
2	Magazine	2	Magazine	2	Magazine
2	TV	2	TV	2	TV
2	Radio	2	Radio	2	Radio
3	FtF	3	FtF	3	FtF
4	Cellular Phone	4	Cellular Phone	3	Cellular Phone
2	News Online	4	News Online	2	News Online
4	Email	4	Email	4	Email
4	Blogging	4	Blogging	4	Blogging
4	Video Online	4	Video Online	2	Video Online
4	IM	4	IM	4	IM
4	MP3	4	MP3	4	MP3
3	Yourself	3	Yourself	3	Yourself

Note: The membership does mean only the affiliation with the given number without exception.

Table 19

US Participants' Cluster Analysis of Mean Values Using Ward Linkage of SPSS

All Participants	Concepts Observed	Female Participants	Concepts Observed	Male Participants	Concepts Observed
1	Int	1	Int	1	Int
1	National	2	National	1	National
3	Local	3	Local	2	Local
2	SciTech	2	SciTech	3	SciTech
2	MediHealth	2	MediHealth	3	MediHealth
2	NutritionFood	2	NutritionFood	3	NutritionFood
1	Financial	2	Financial	1	Financial
3	Sports	3	Sports	2	Sports
3	Ent	3	Ent	2	Ent
1	Newspaper	2	Newspaper	1	Newspaper
1	Magazine	2	Magazine	1	Magazine
3	TV	2	TV	1	TV
3	Radio	2	Radio	1	Radio
3	FtF	3	FtF	2	FtF
4	Cellular Phone	4	Cellular Phone	4	Cellular Phone
1	News Online	3	News Online	1	News Online
4	Email	4	Email	4	Email
4	Blogging	4	Blogging	4	Blogging
4	Video Online	3	Video Online	4	Video Online
4	IM	4	IM	4	IM
4	MP3	4	MP3	4	MP3
3	Yourself	3	Yourself	2	Yourself

Note: The membership does mean only the affiliation with the given number without exception.

Figure 1

Distances of Information Topics from Media by All Participants in Korean College Student Sample

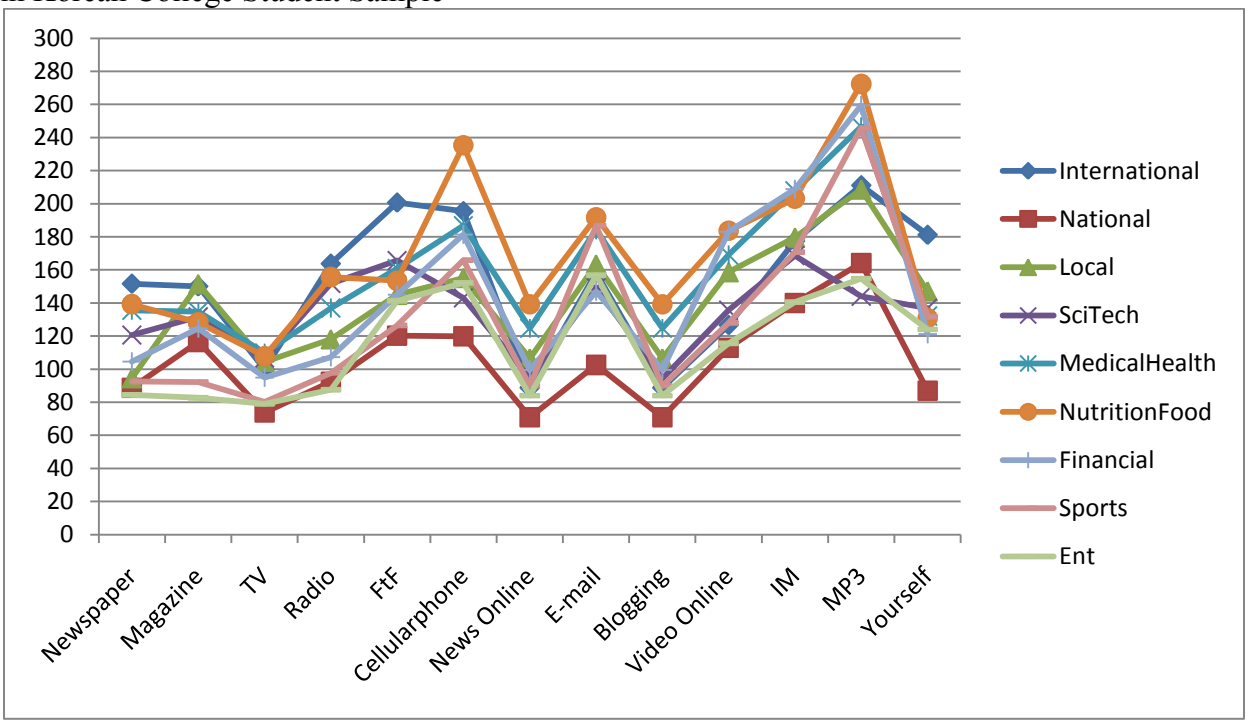


Figure 2

Distances of Information Topics from Media by All Participants in US College Student Sample

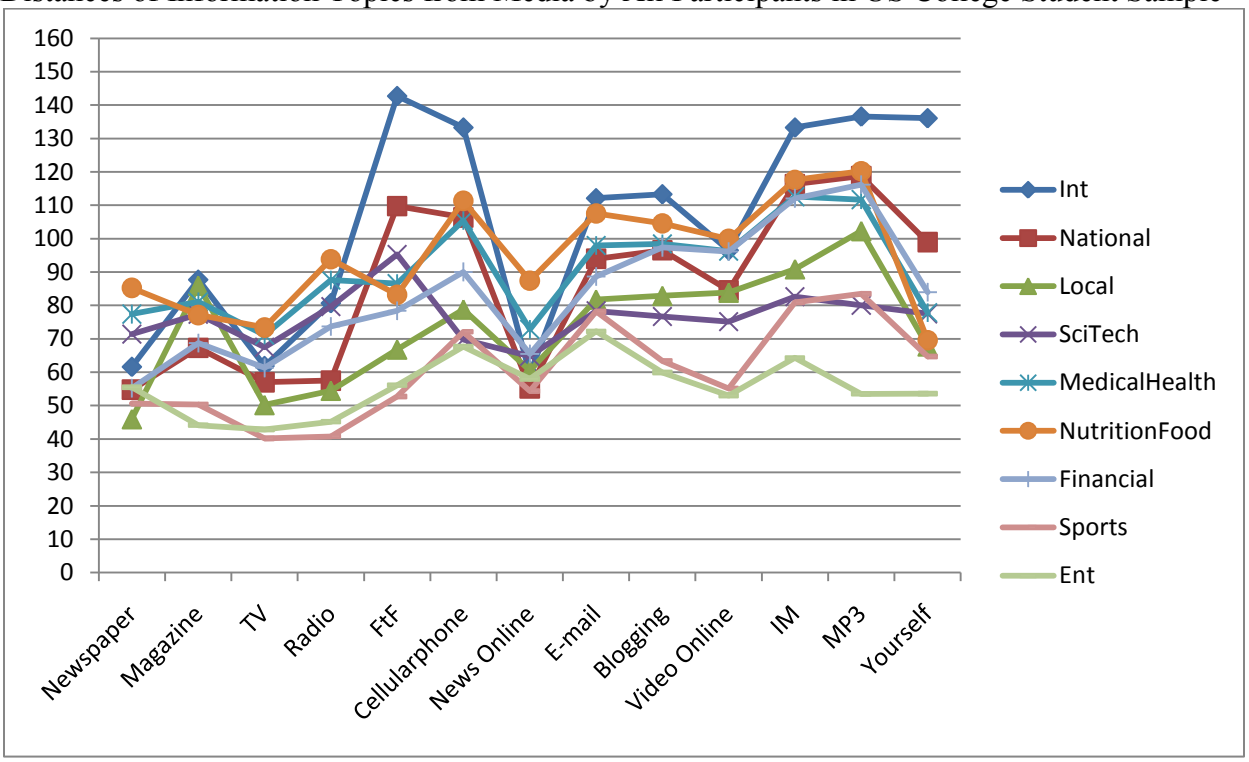


Figure 3

Distances of Information Topics from Media by Females in Korean College Student Sample

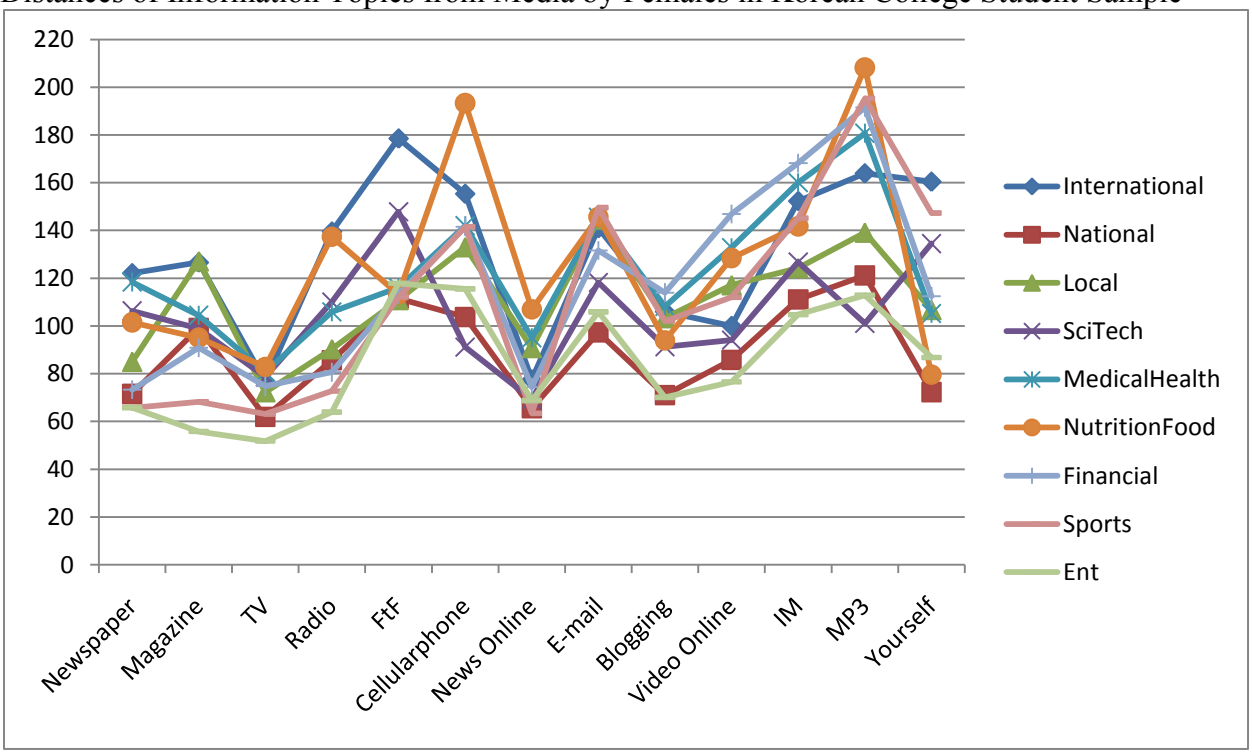


Figure 4

Distances of Information Topics from Media by Males in Korean College Student Sample

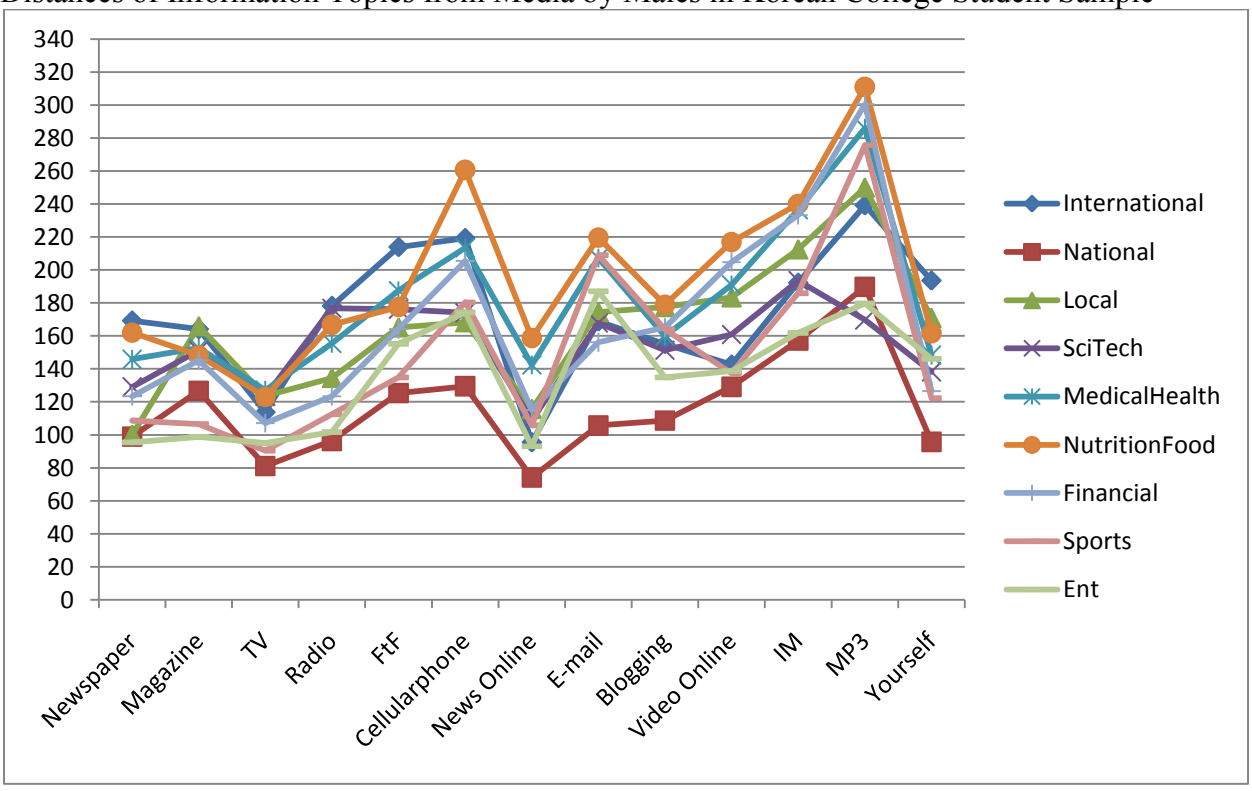


Figure 5

Distances of Information Topics from Media by Females in US College Student Sample

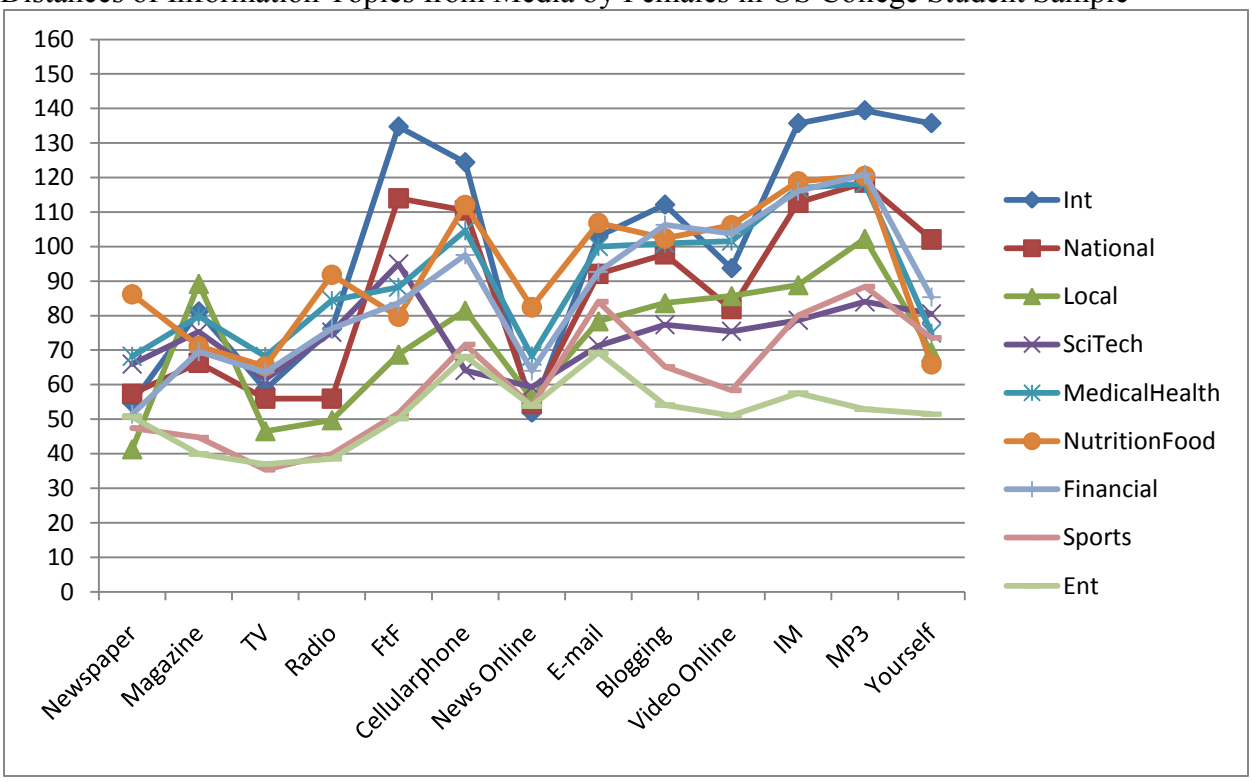


Figure 6

Distances of Information Topics from Media by Males in US College Student Sample

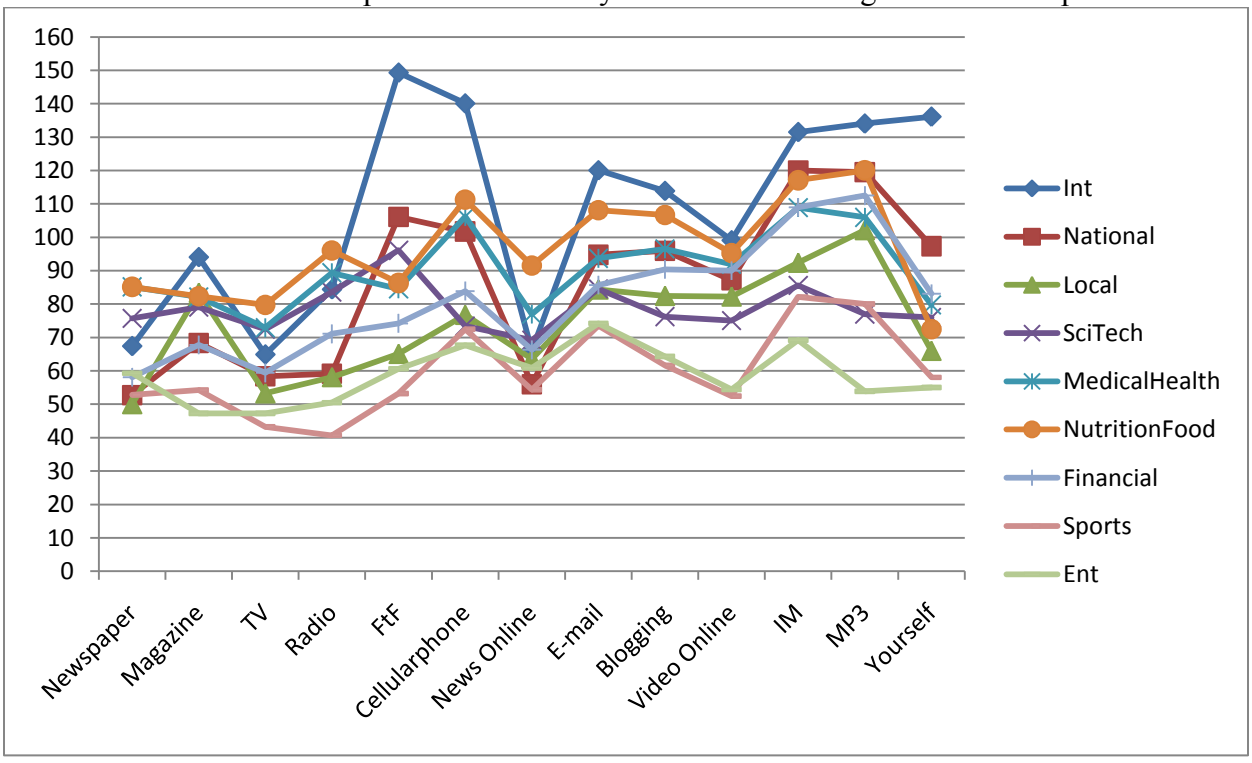
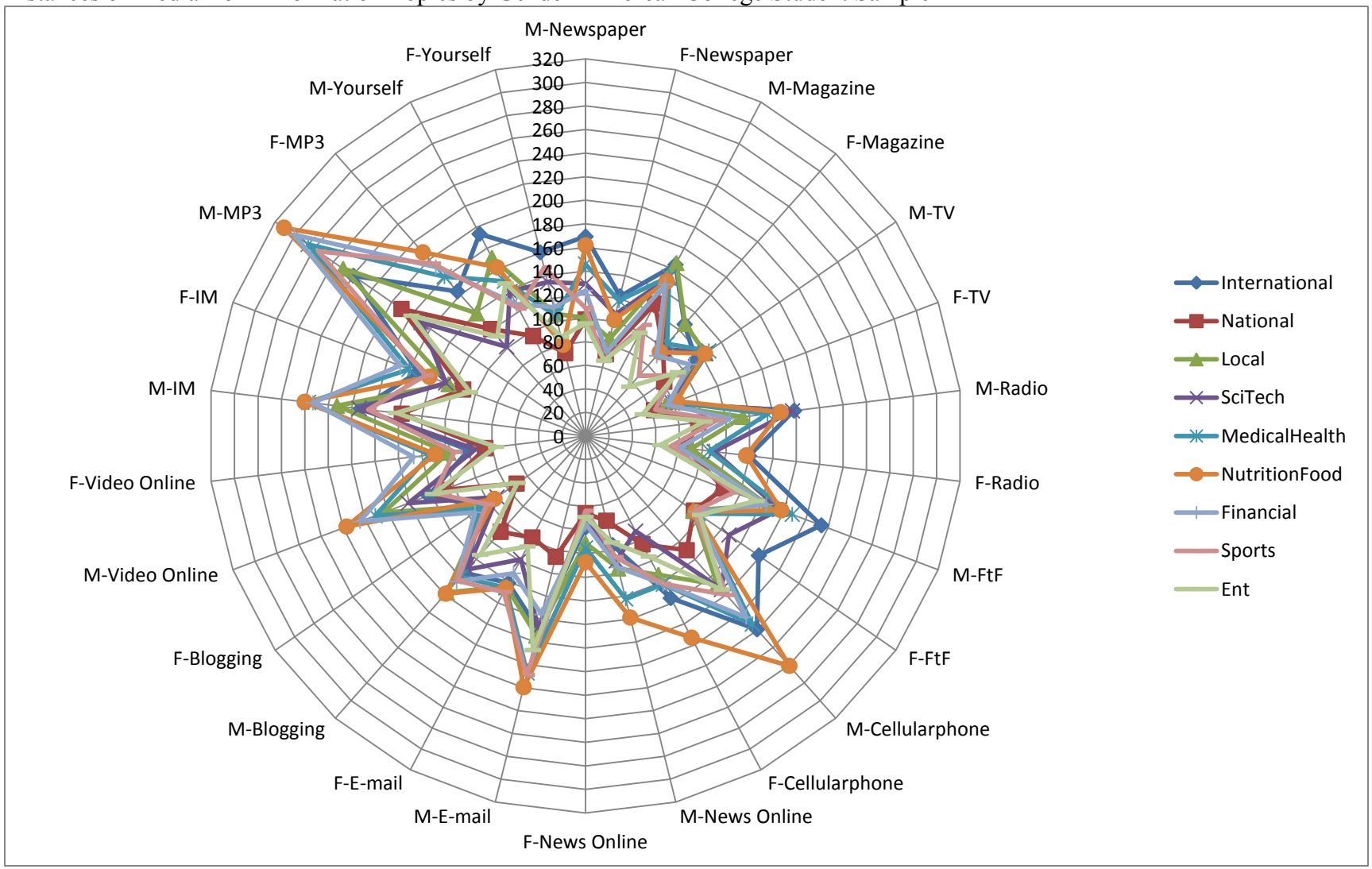


Figure 7

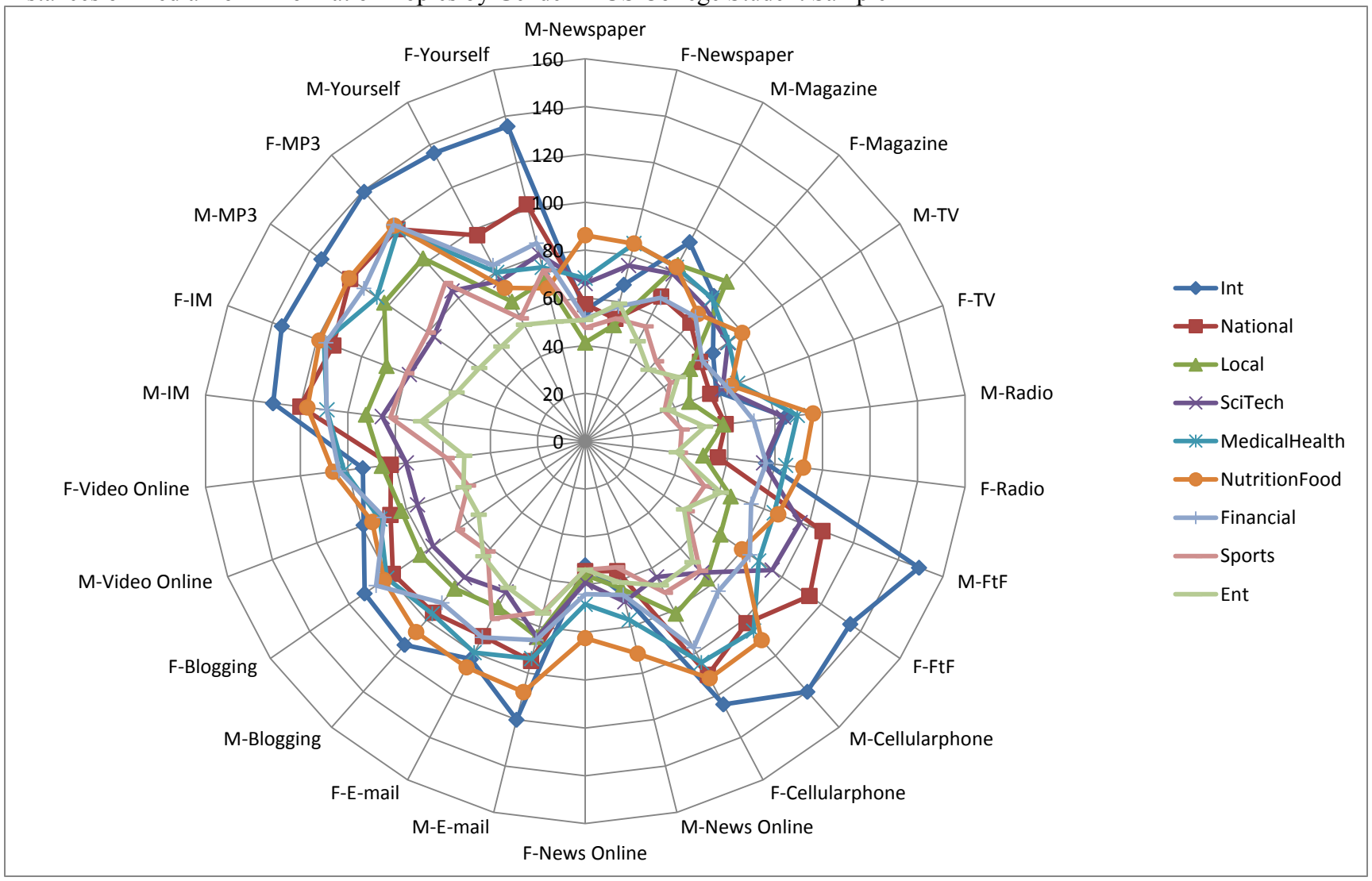
Distances of Media from Information Topics by Gender in Korean College Student Sample



Note: The initial Ms of each medium are males' distances from information topics and the initial Fs are females' distances.

Figure 8

Distances of Media from Information Topics by Gender in US College Student Sample



Note: The initial Ms of each medium are males' distances from information topics and the initial Fs are females' distances.

Figure 9

All Participants' Thoughtview of Korean College Student Sample

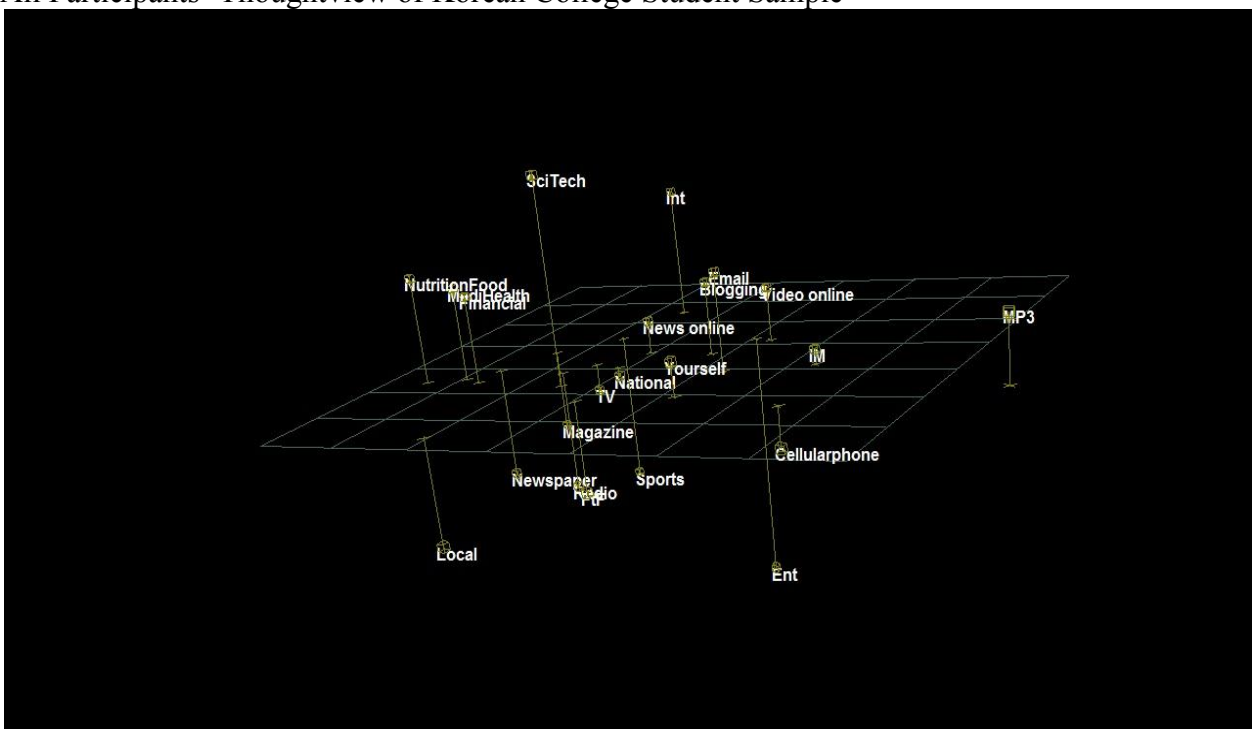


Figure 10

Females' Thoughtview of Korean College Student Sample

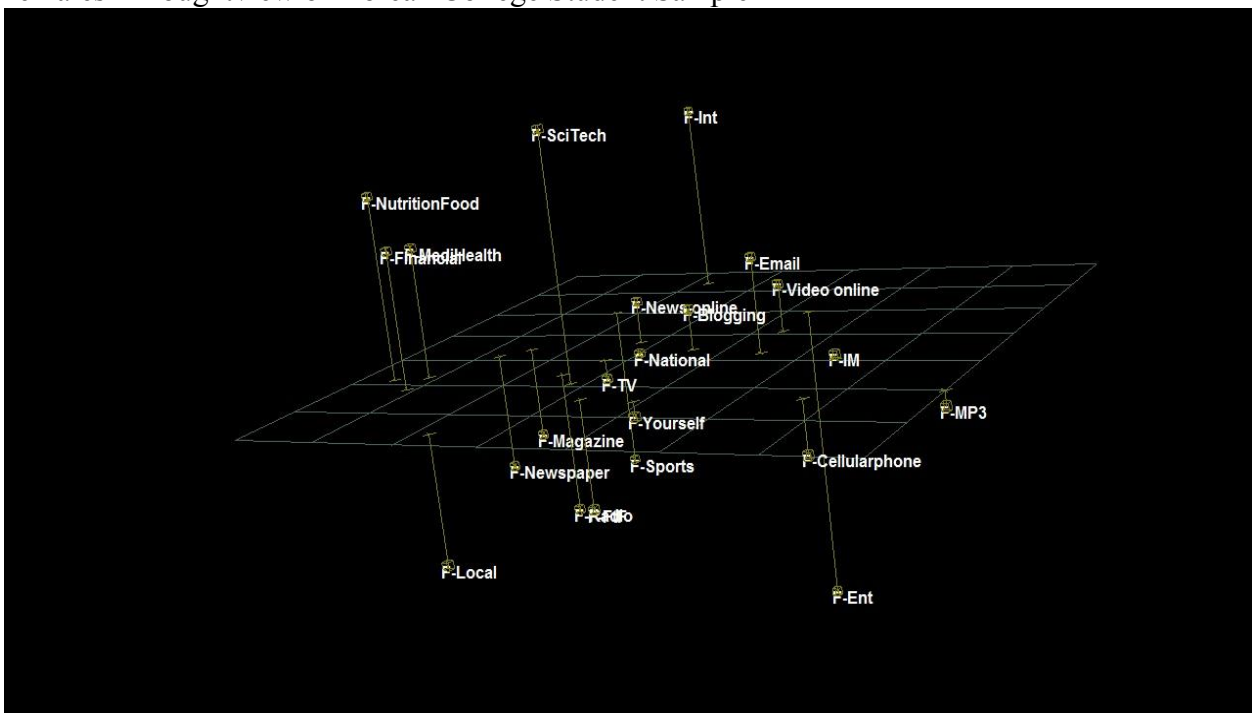


Figure 11

Males' Thoughtview of Korean College Student Sample

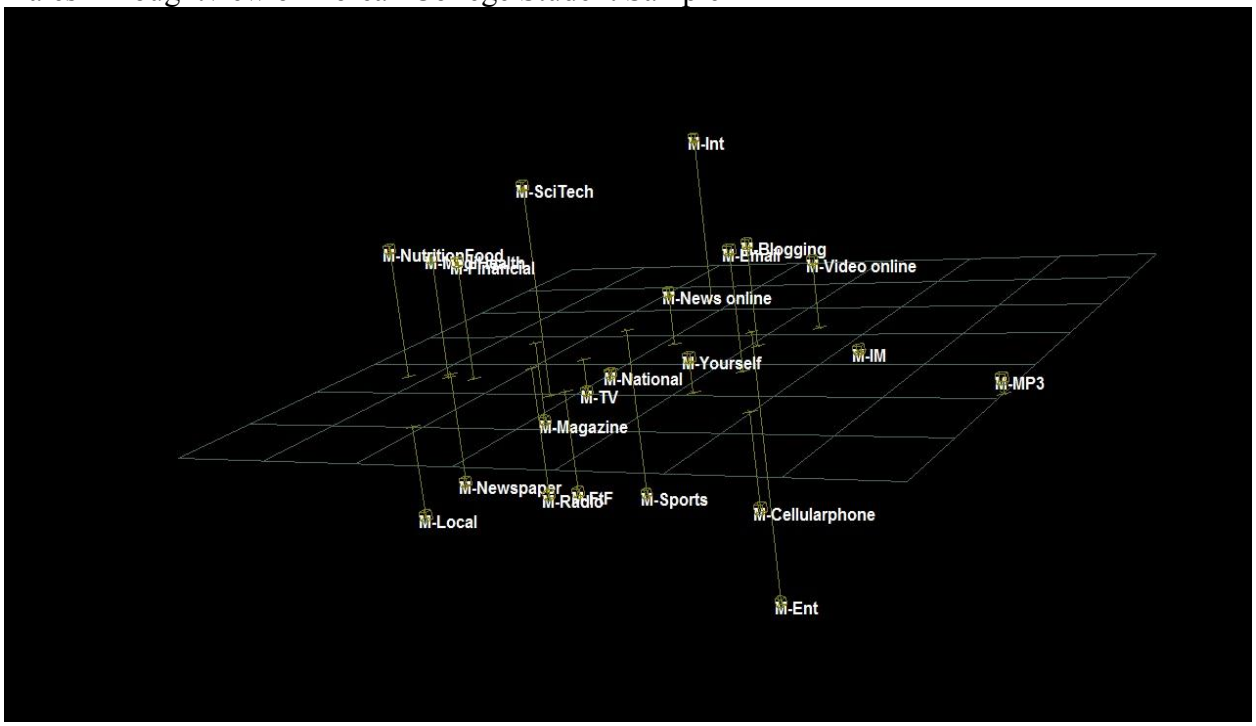


Figure 12

All Participants' Thoughtview of US College Student Sample

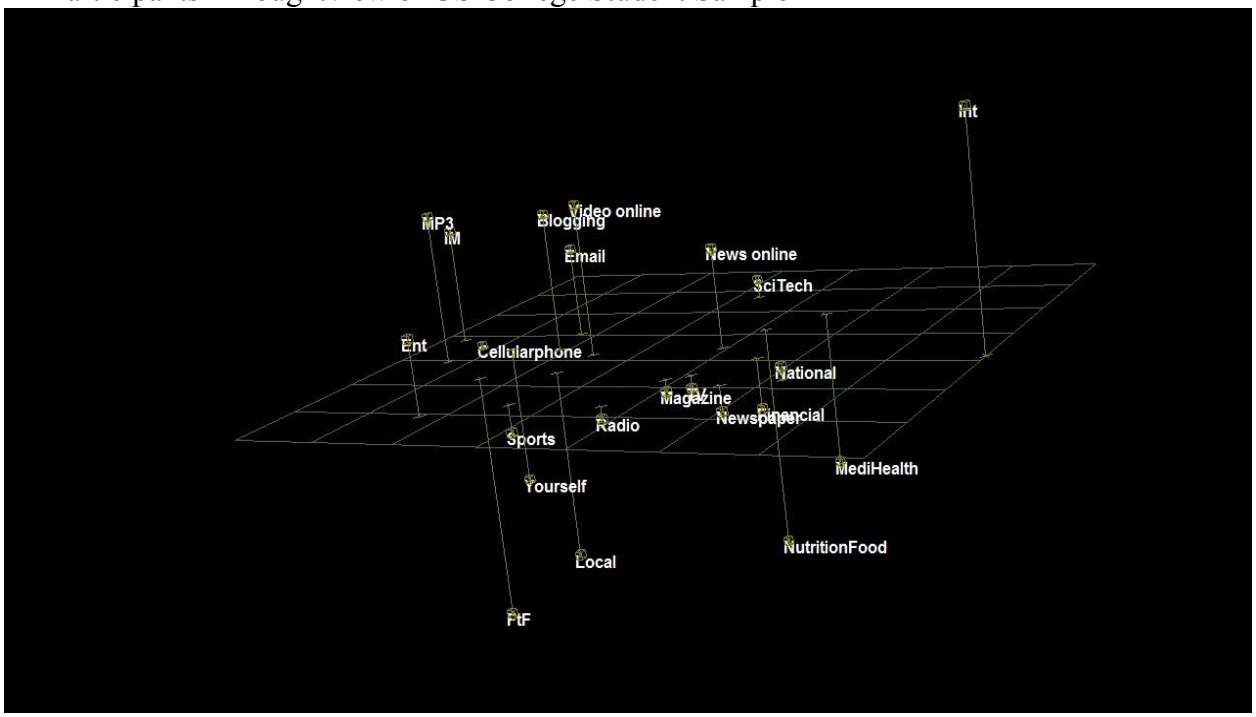


Figure 13

Females' Thoughtview of US College Student Sample

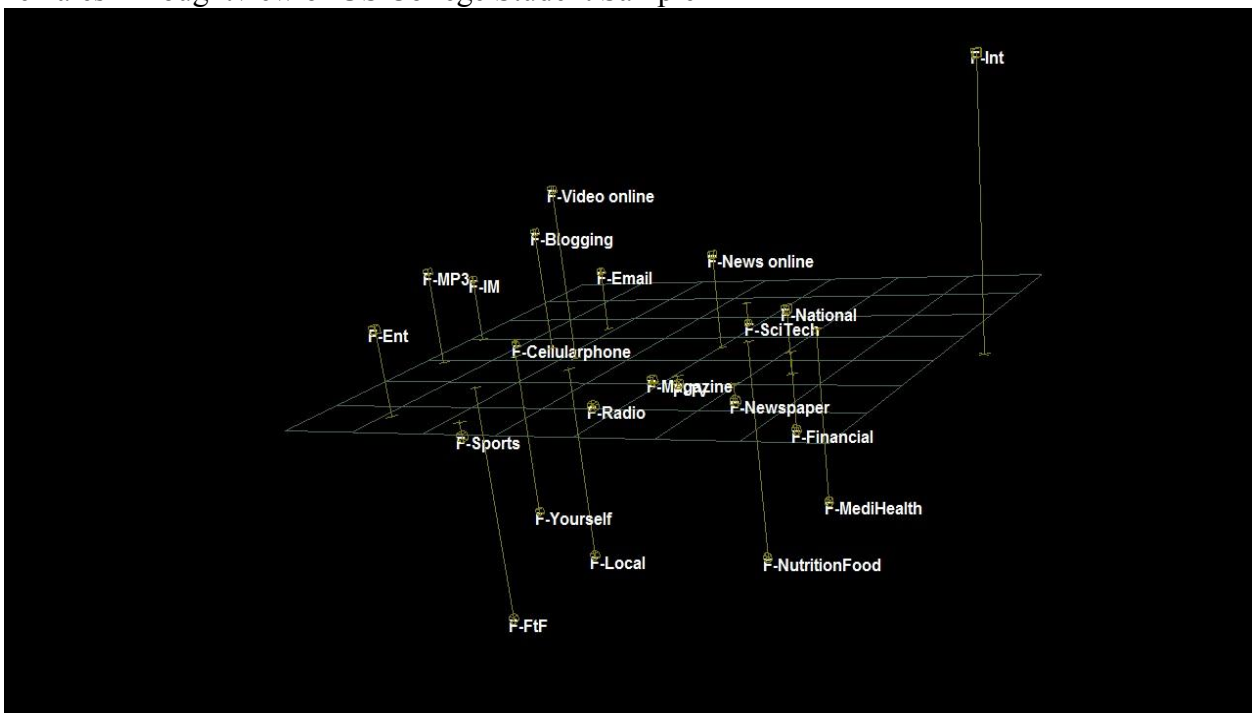


Figure 14

Males' Thoughtview of US College Student Sample

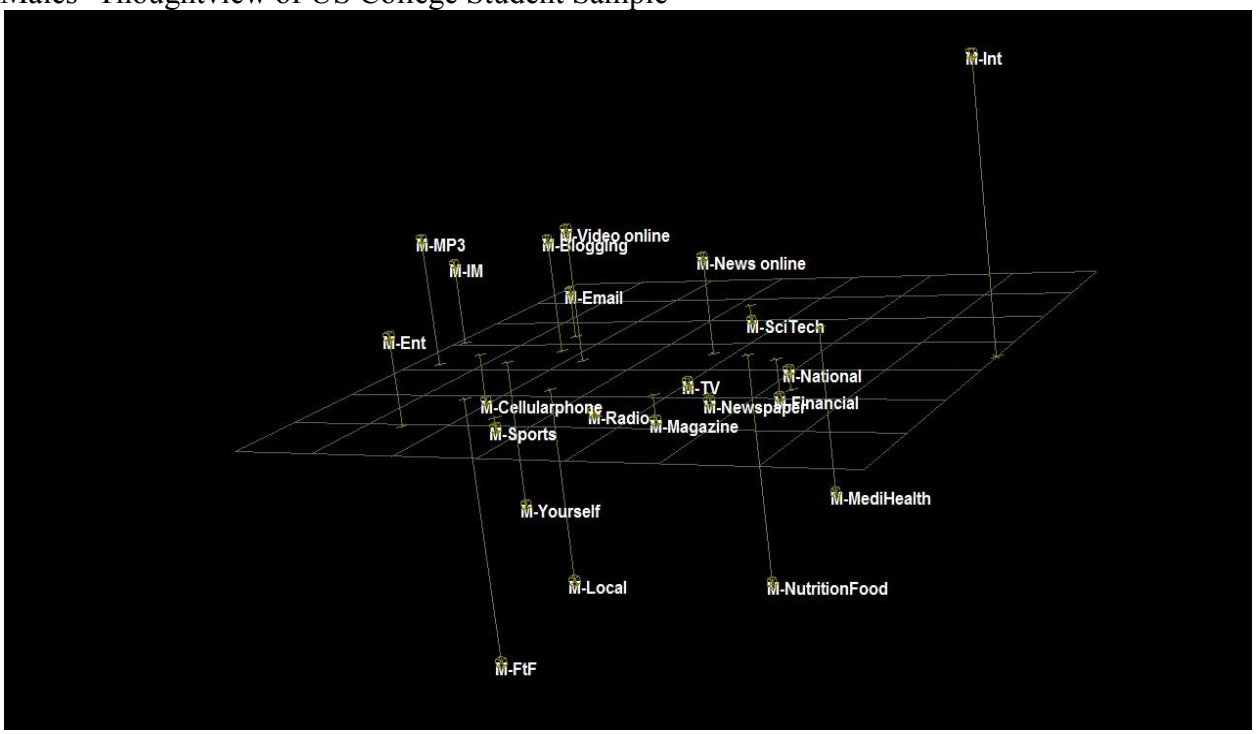


Figure 15

All Participants' Dendrogram Using Scalar Product Matrix
in Johnson's Hiearchical Clustering in Korean College Student Sample

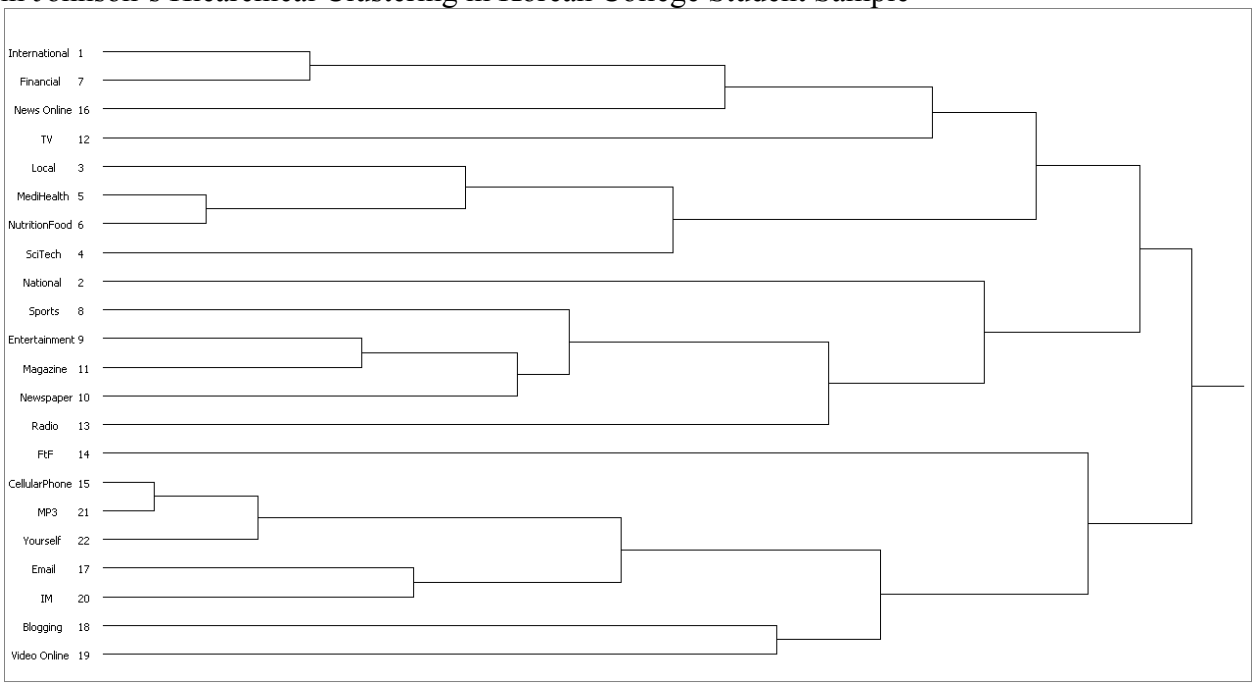


Figure 16

All Participants' Dendrogram Using Mean Value Matrix
in Johnson's Hiearchical Clustering in Korean College Student Sample

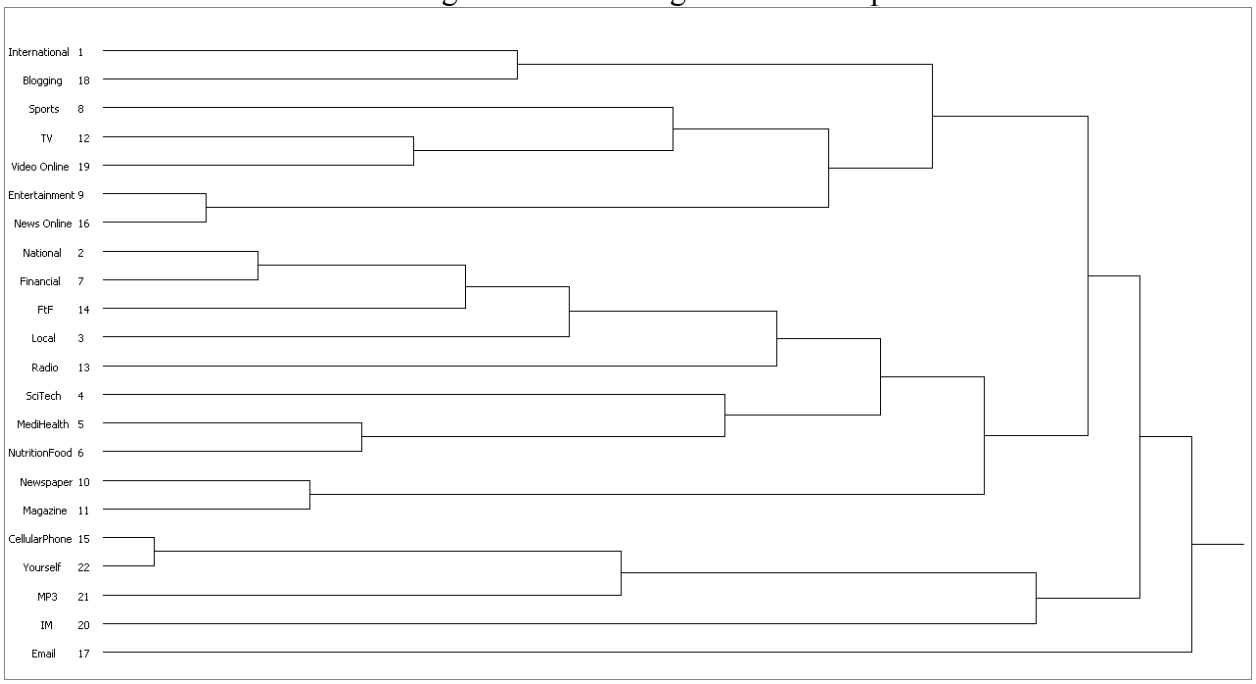


Figure 17

Females' Dendrogram Using Scalar Product Matrix in Johnson's Hiearchical Clustering in Korean College Student Sample

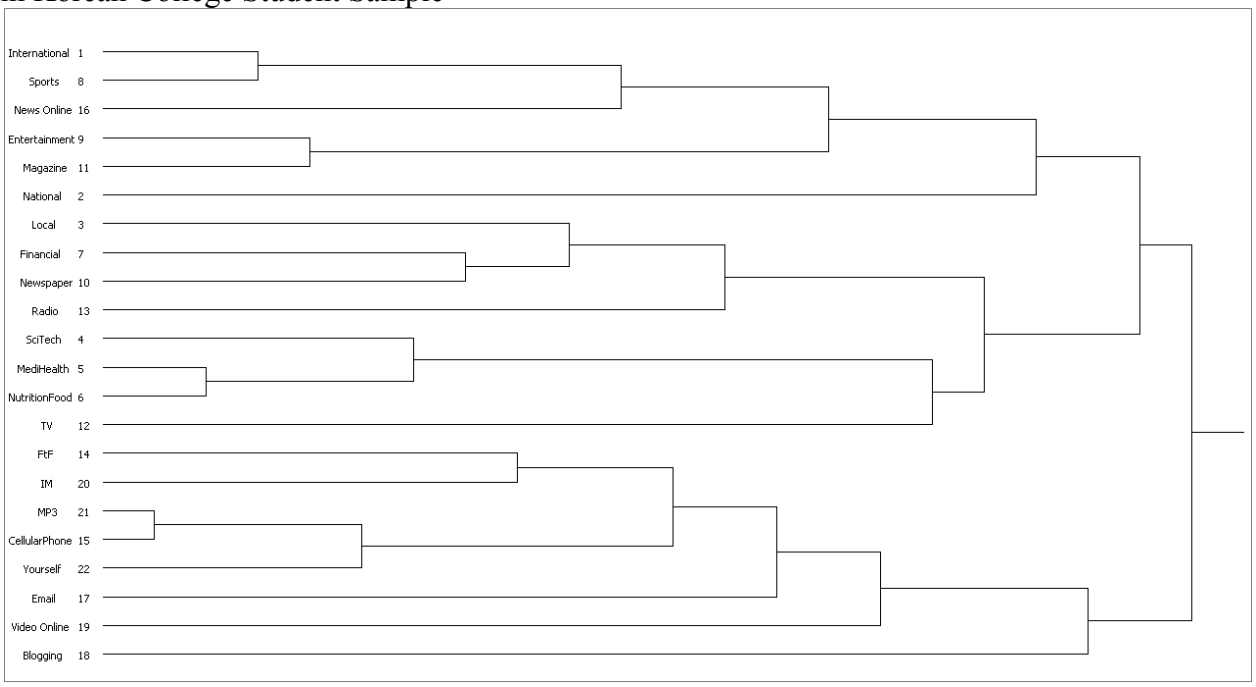


Figure 18

Females' Dendrogram Using Mean Value Matrix in Johnson's Hiearchical Clustering in Korean College Student Sample

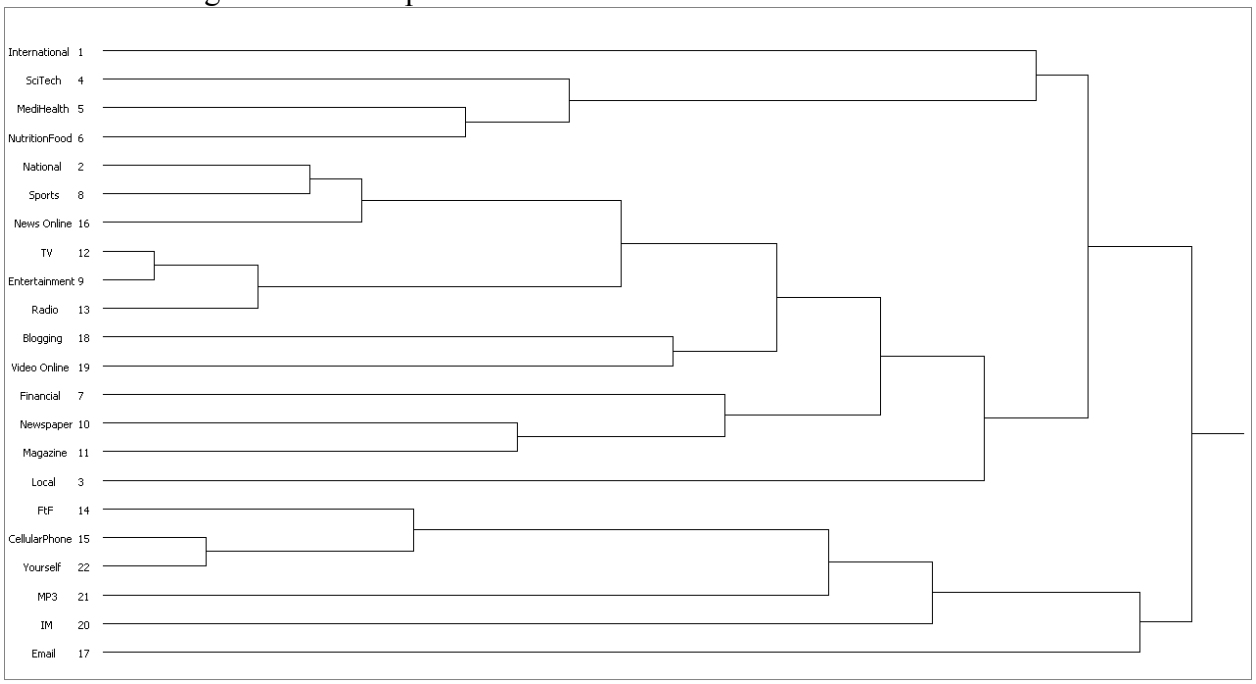


Figure 19

Males' Dendrogram Using Scalar Product Matrix in Johnson's Hiearchical Clustering in Korean College Student Sample

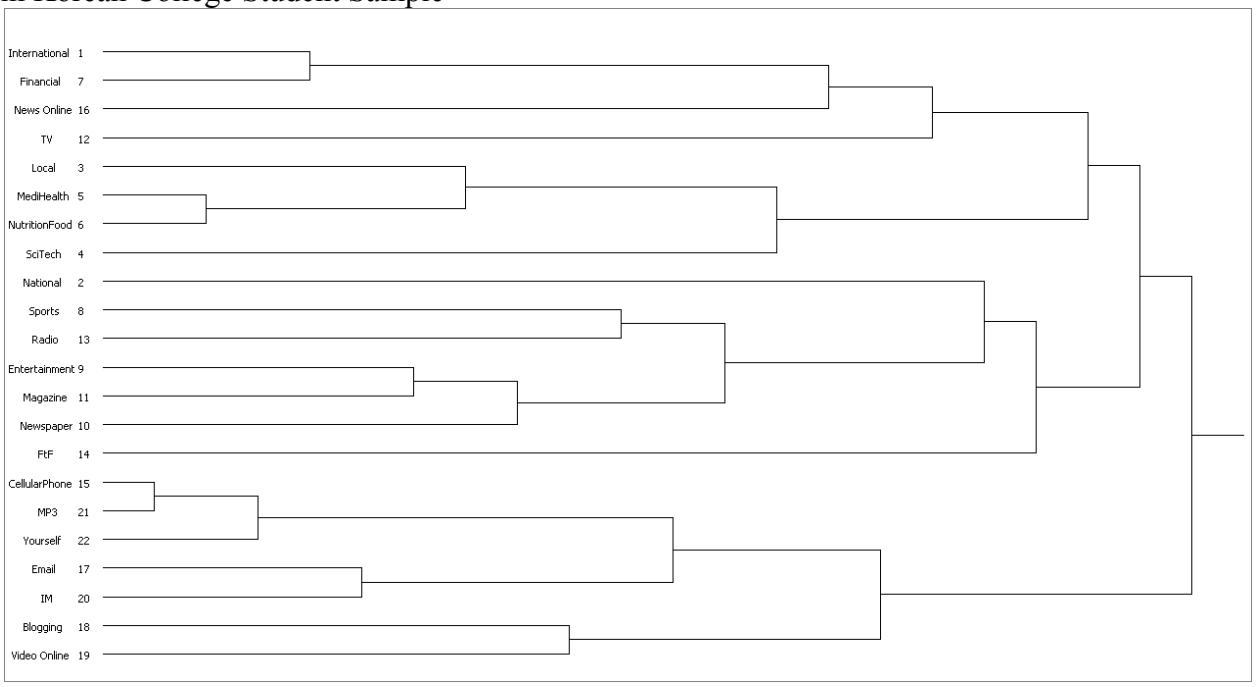


Figure 20

Males' Dendrogram Using Mean Value Matrix in Johnson's Hiearchical Clustering in Korean College Student Sample

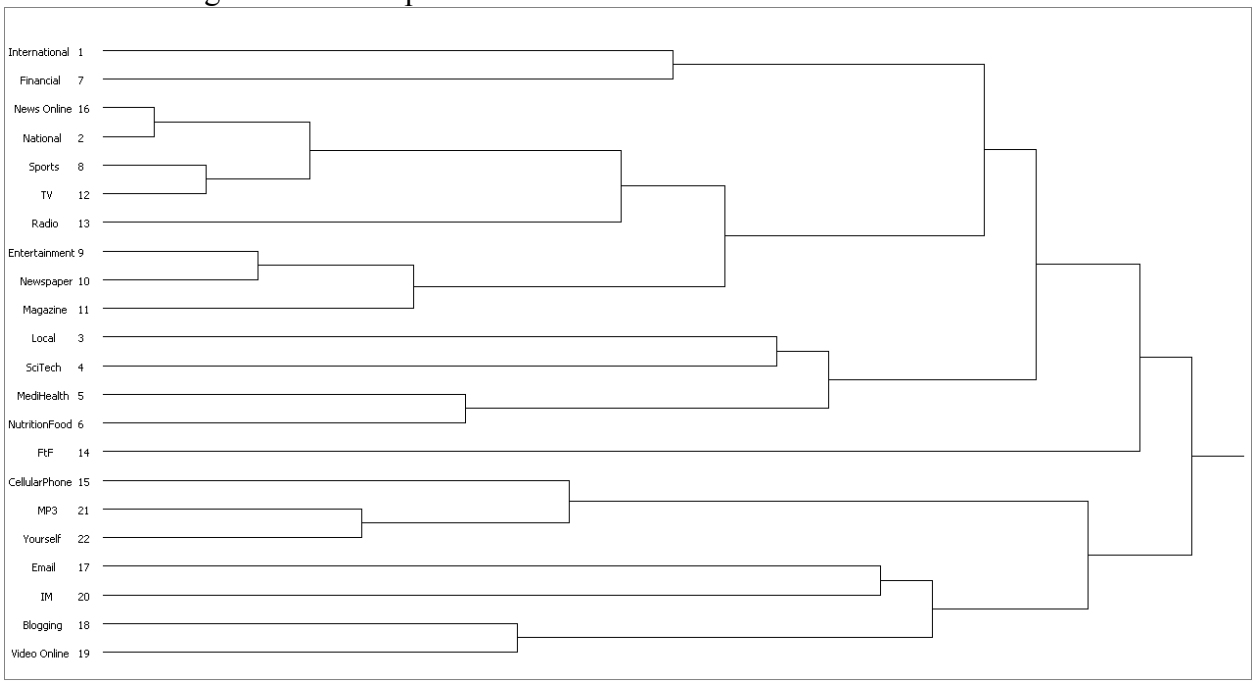


Figure 21

All Participants' Dendrogram Using Scalar Product Matrix
in Johnson's Hiearchical Clustering in US College Student Sample

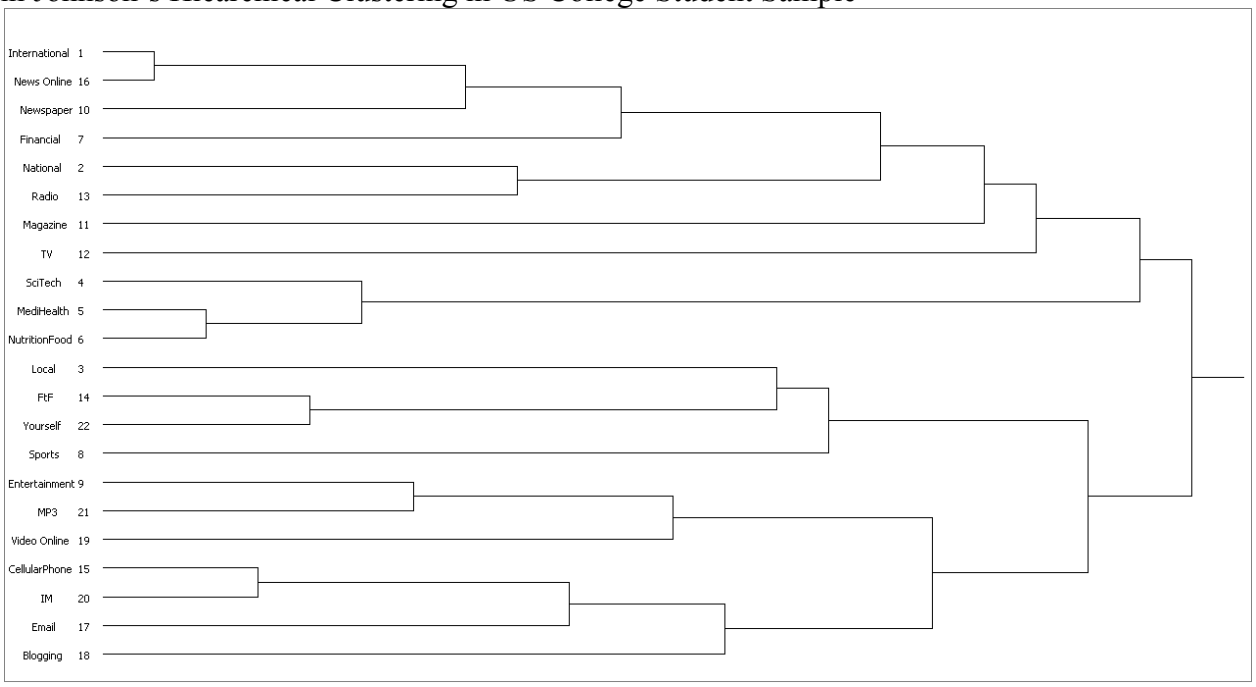


Figure 22

All Participants' Dendrogram Using Mean Value Matrix in Johnson's Hiearchical Clustering
in US College Student Sample

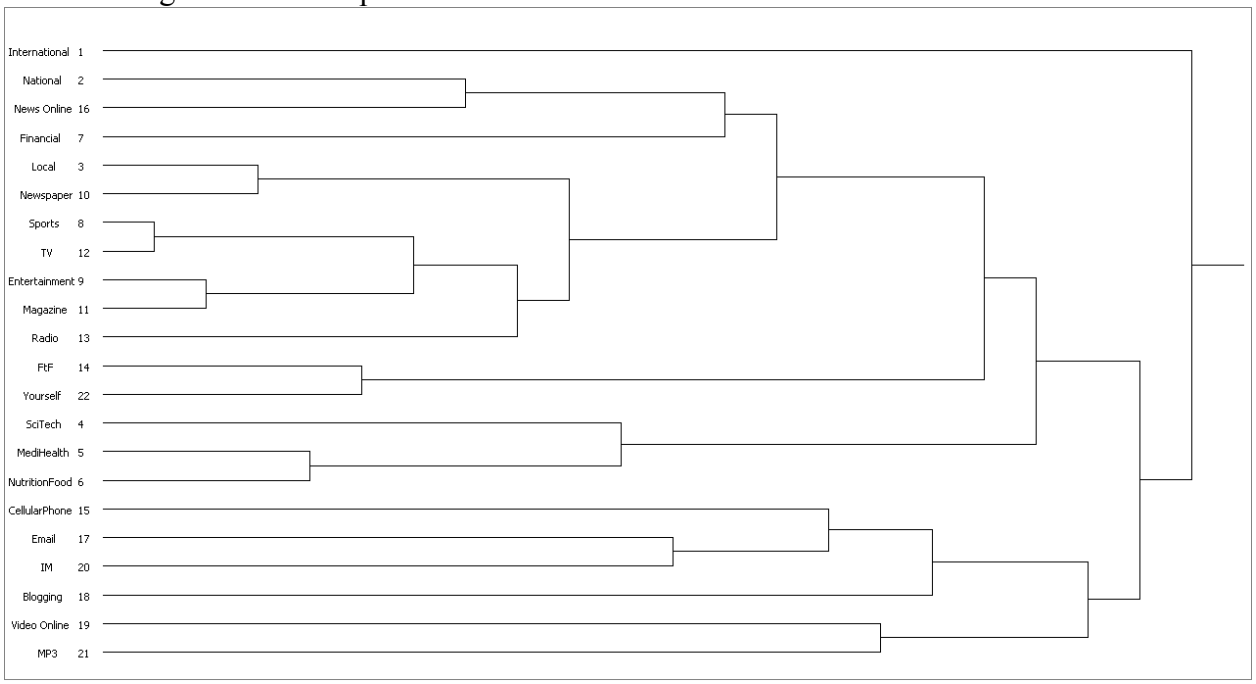


Figure 23

Females' Dendrogram Using Scalar Product Matrix in Johnson's Hiearchical Clustering in US College Student Sample

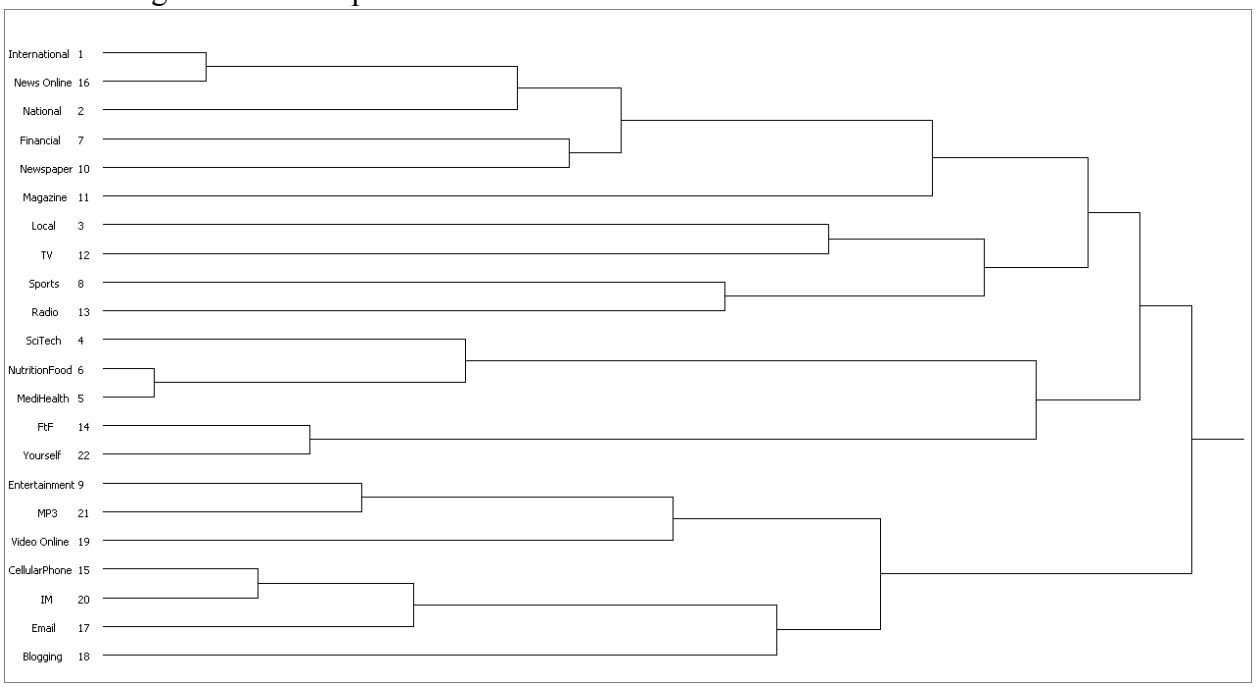


Figure 24

Females' Dendrogram Using Mean Value Matrix in Johnson's Hiearchical Clustering in US College Student Sample

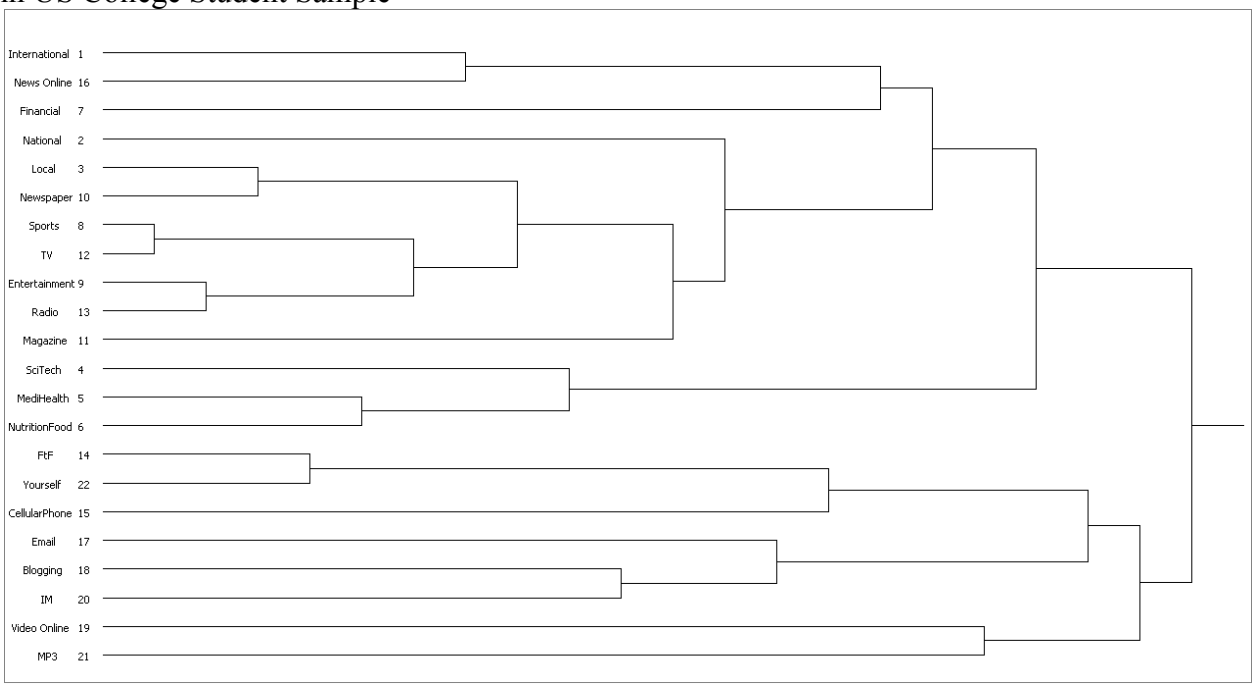


Figure 25

Males' Dendrogram Using Scalar Product Matrix in Johnson's Hiearchical Clustering in US College Student Sample

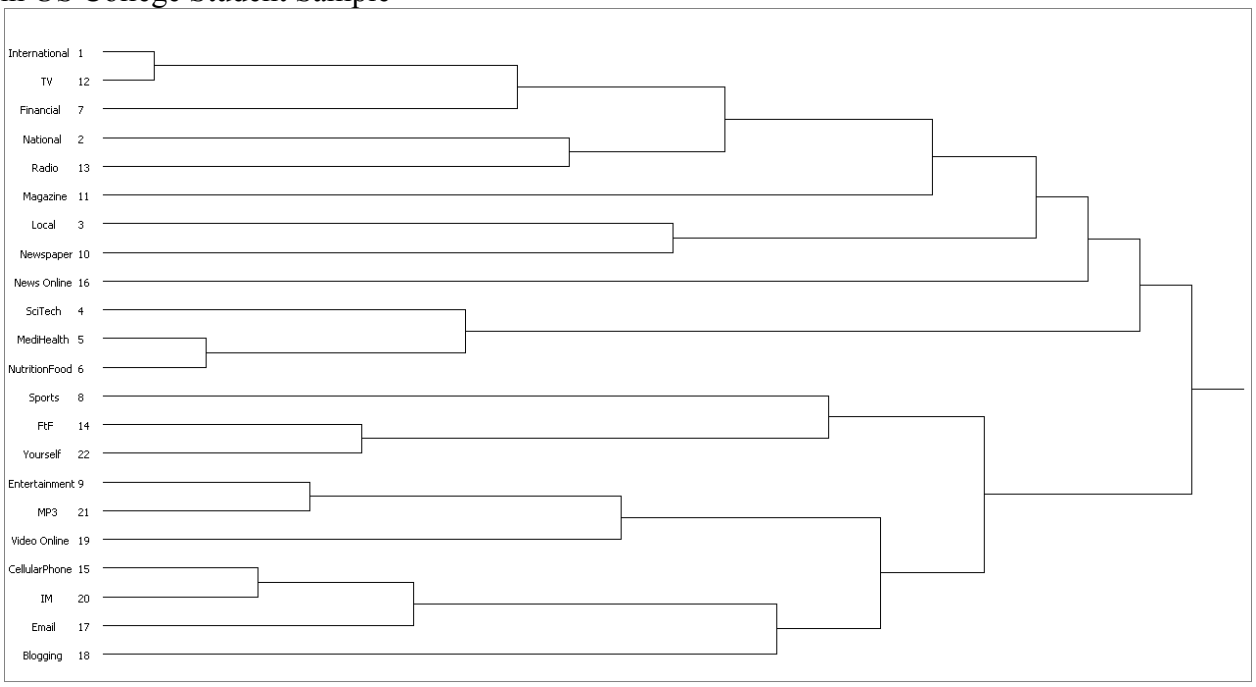


Figure 26

Males' Dendrogram Using Mean Value Matrix in Johnson's Hiearchical Clustering in US College Student Sample

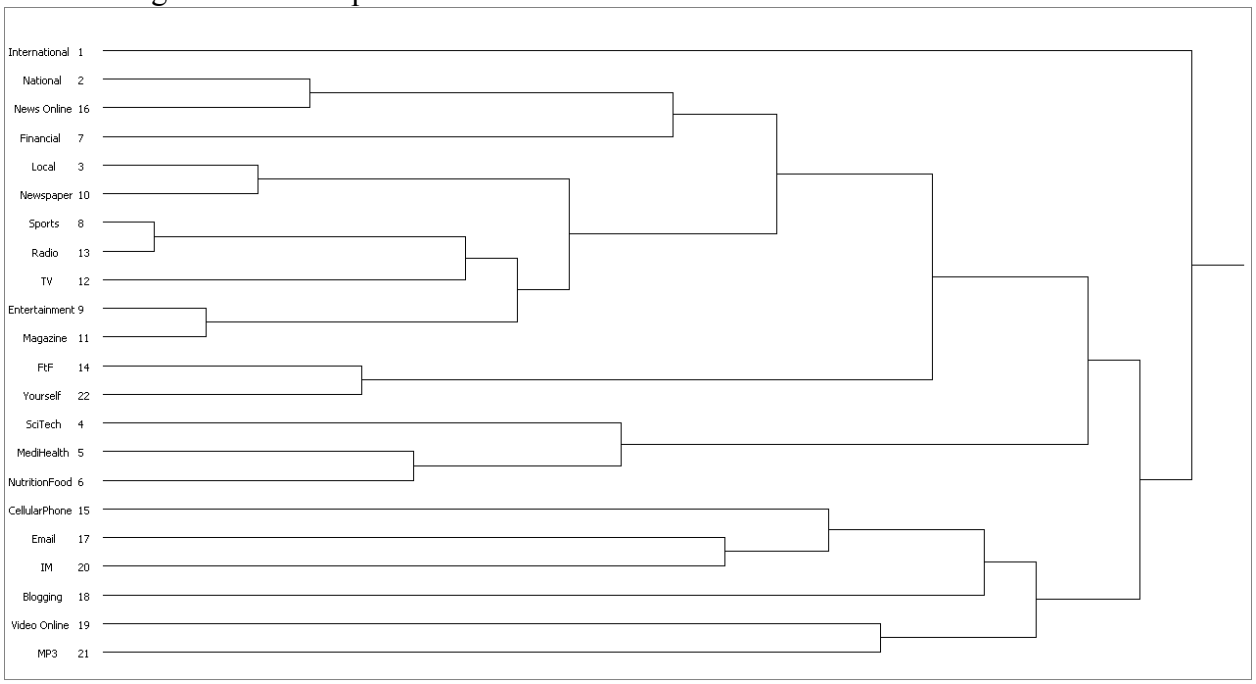
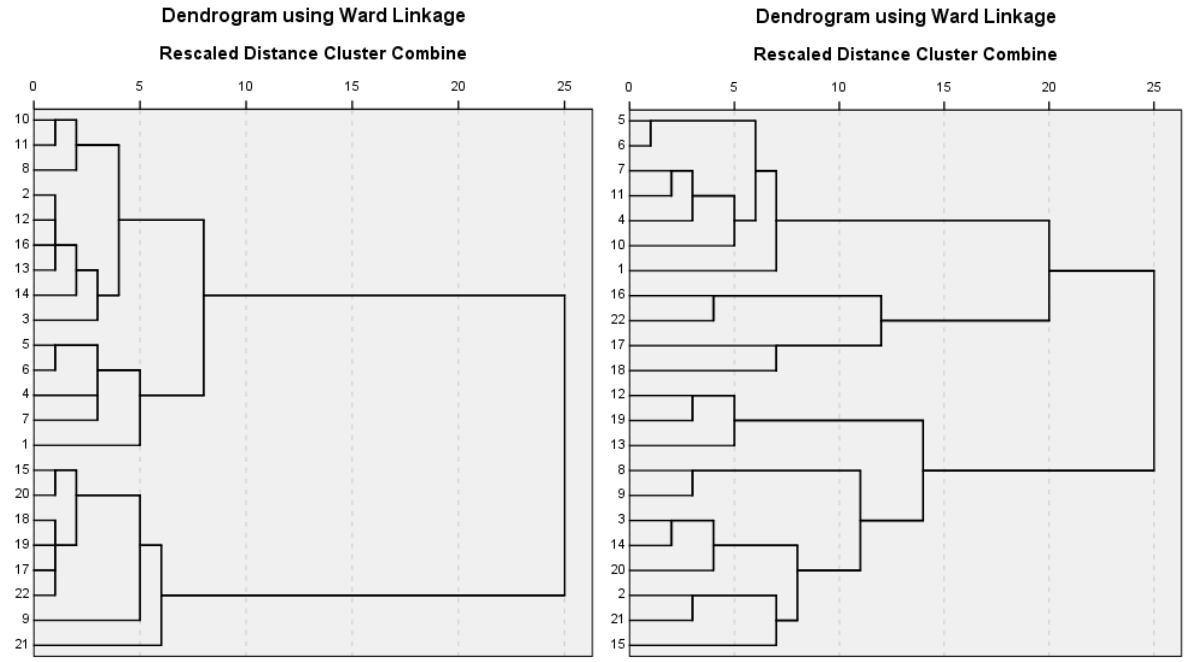


Figure 27

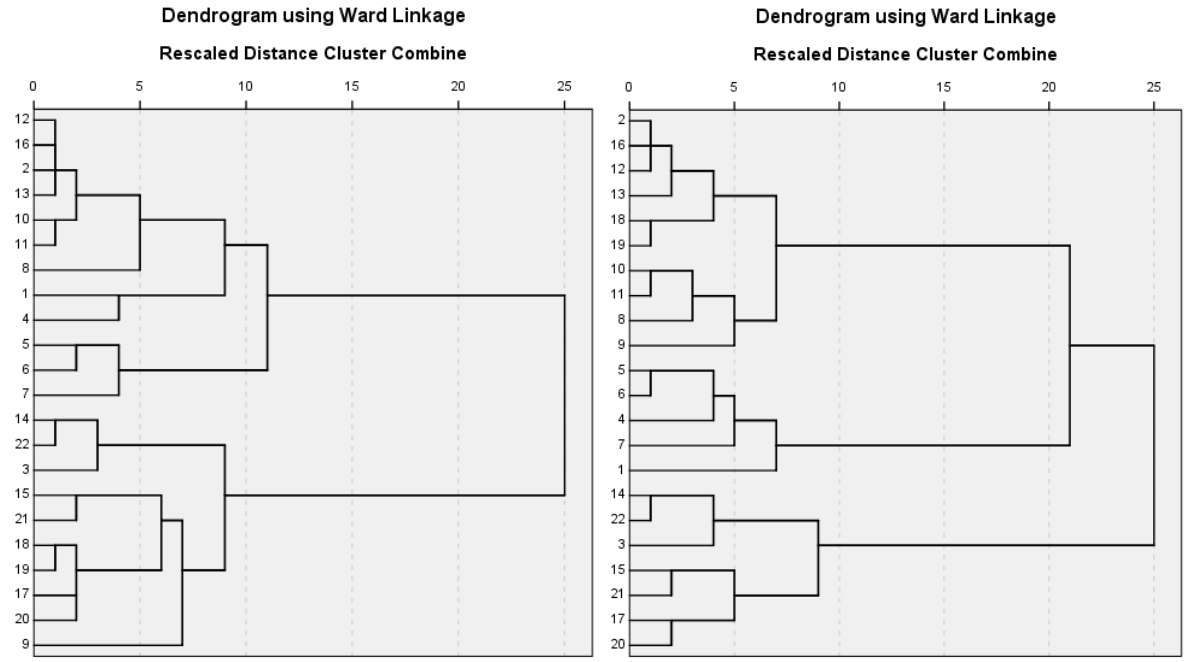
All Participants' Dendrogram Using SPSS Ward Linkage in Korean College Student Sample



Note: The first dendrogram is using scalar product matrix and the second is using mean value matrix.
1 = International news, 2 = National news, 3 = Local news, 4 = Science & Tech news, 5 = Medical & Health news, 6 = Nutrition & Food news, 7 = Financial news, 8 = Sports news, 9 = entertainment, 10 = Newspaper, 11 = Magazine, 12 = TV, 13 = Radio, 14 = Face to Face (FtF), 15 = Cellular phone, 16 = News online, 17 = E-mail, 18 = Blogging, 19 = Video online, 20 = Instant Messaging (IM), 21 = MP 3, 22 = Yourself

Figure 28

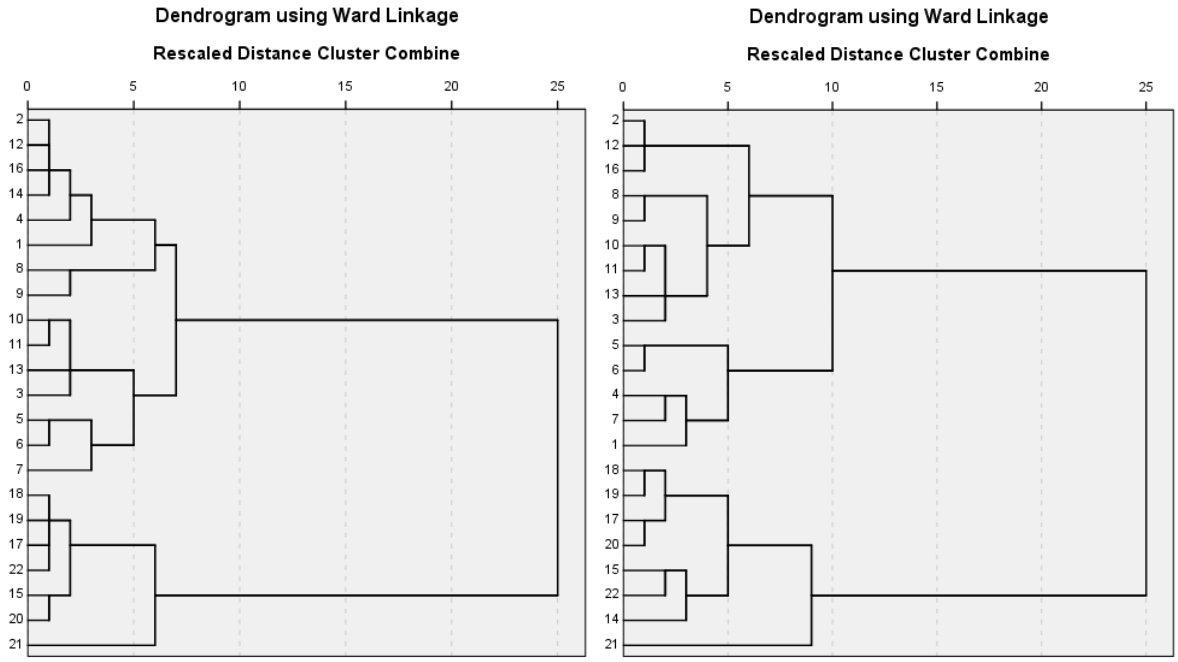
Females' Dendrogram Using SPSS Ward Linkage in Korean College Student Sample



Note: The first dendrogram is using scalar product matrix and the second is using mean value matrix.
1 = International news, 2 = National news, 3 = Local news, 4 = Science & Tech news, 5 = Medical & Health news, 6 = Nutrition & Food news, 7 = Financial news, 8 = Sports news, 9 = entertainment, 10 = Newspaper, 11 = Magazine, 12 = TV, 13 = Radio, 14 = Face to Face (FtF), 15 = Cellular phone, 16 = News online, 17 = E-mail, 18 = Blogging, 19 = Video online, 20 = Instant Messaging (IM), 21 = MP 3, 22 = Yourself

Figure 29

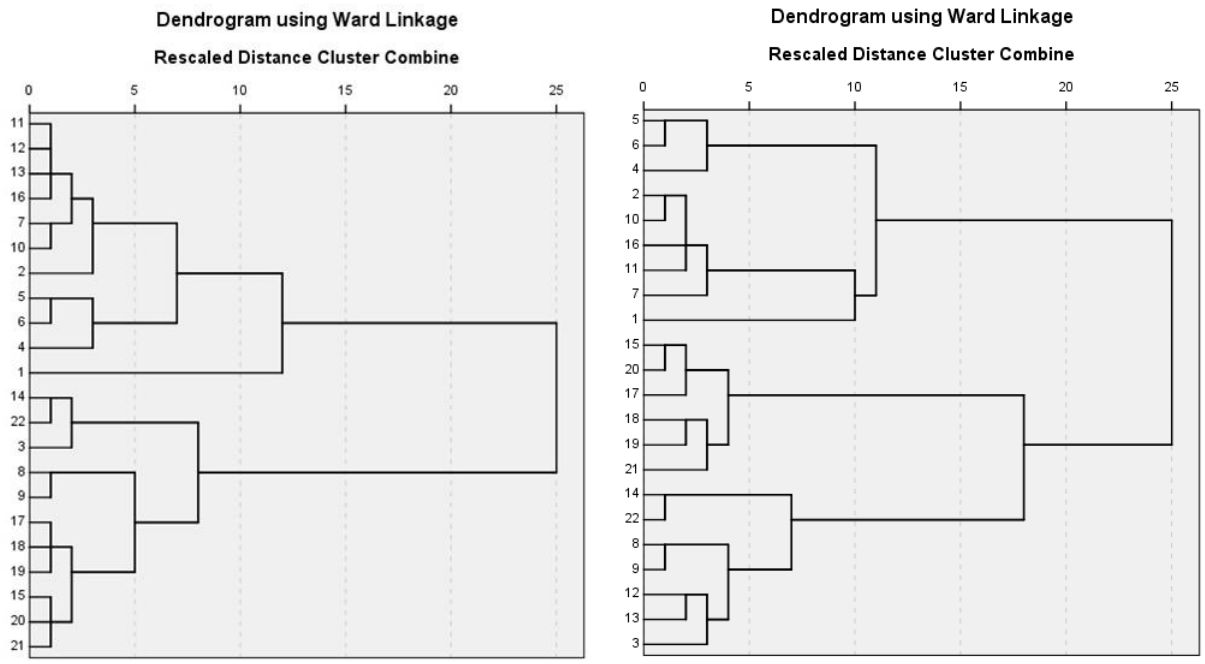
Males' Dendrogram Using SPSS Ward Linkage in Korean College Student Sample



Note: The first dendrogram is using scalar product matrix and the second is using mean value matrix.
1 = International news, 2 = National news, 3 = Local news, 4 = Science & Tech news, 5 = Medical & Health news, 6 = Nutrition & Food news, 7 = Financial news, 8 = Sports news, 9 = entertainment, 10 = Newspaper, 11 = Magazine, 12 = TV, 13 = Radio, 14 = Face to Face (FtF), 15 = Cellular phone, 16 = News online, 17 = E-mail, 18 = Blogging, 19 = Video online, 20 = Instant Messaging (IM), 21 = MP 3, 22 = Yourself

Figure 30

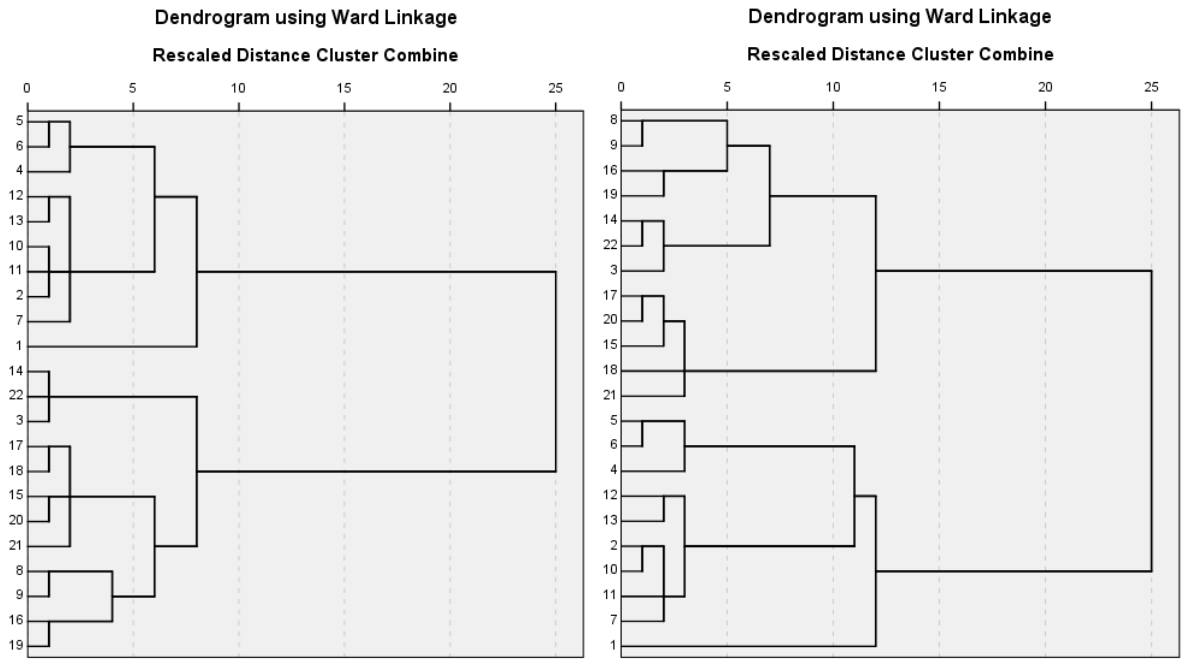
All Participants' Dendrogram Using SPSS Ward Linkage in US College Student Sample



Note: The first dendrogram is using scalar product matrix and the second is using mean value matrix.
1 = International news, 2 = National news, 3 = Local news, 4 = Science & Tech news, 5 = Medical & Health news, 6 = Nutrition & Food news, 7 = Financial news, 8 = Sports news, 9 = entertainment, 10 = Newspaper, 11 = Magazine, 12 = TV, 13 = Radio, 14 = Face to Face (FtF), 15 = Cellular phone, 16 = News online, 17 = E-mail, 18 = Blogging, 19 = Video online, 20 = Instant Messaging (IM), 21 = MP 3, 22 = Yourself

Figure 31

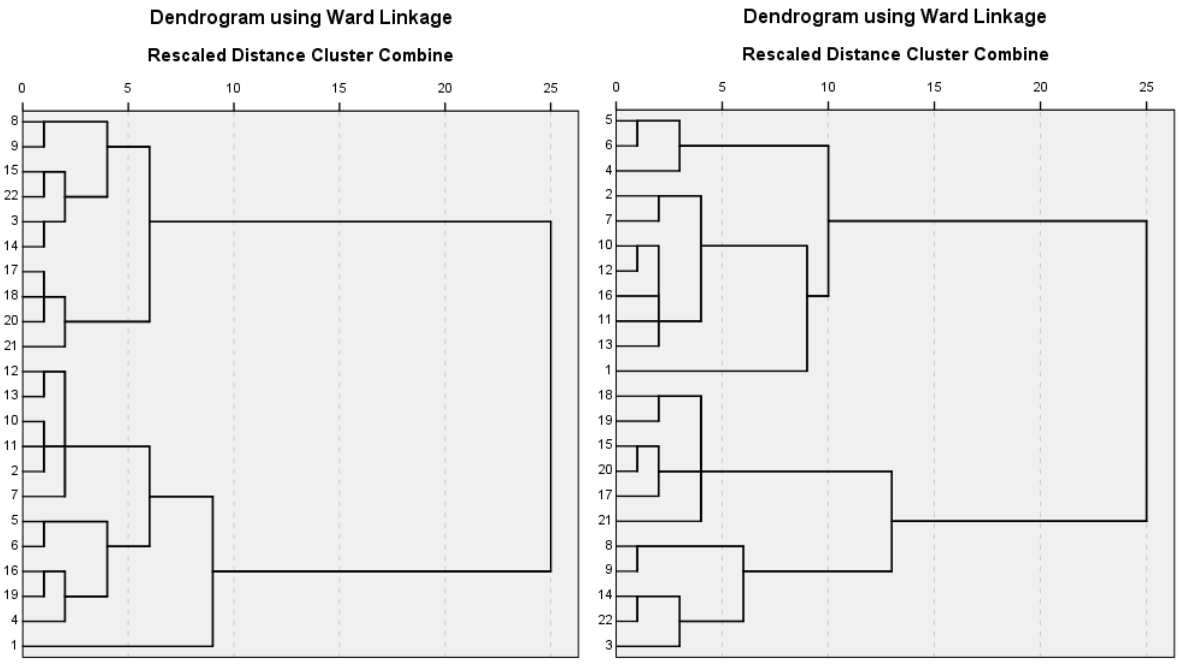
Females' Dendrogram Using SPSS Ward Linkage in US College Student Sample



Note: The first dendrogram is using scalar product matrix and the second is using mean value matrix.
1 = International news, 2 = National news, 3 = Local news, 4 = Science & Tech news, 5 = Medical & Health news, 6 = Nutrition & Food news, 7 = Financial news, 8 = Sports news, 9 = entertainment, 10 = Newspaper, 11 = Magazine, 12 = TV, 13 = Radio, 14 = Face to Face (FtF), 15 = Cellular phone, 16 = News online, 17 = E-mail, 18 = Blogging, 19 = Video online, 20 = Instant Messaging (IM), 21 = MP 3, 22 = Yourself

Figure 32

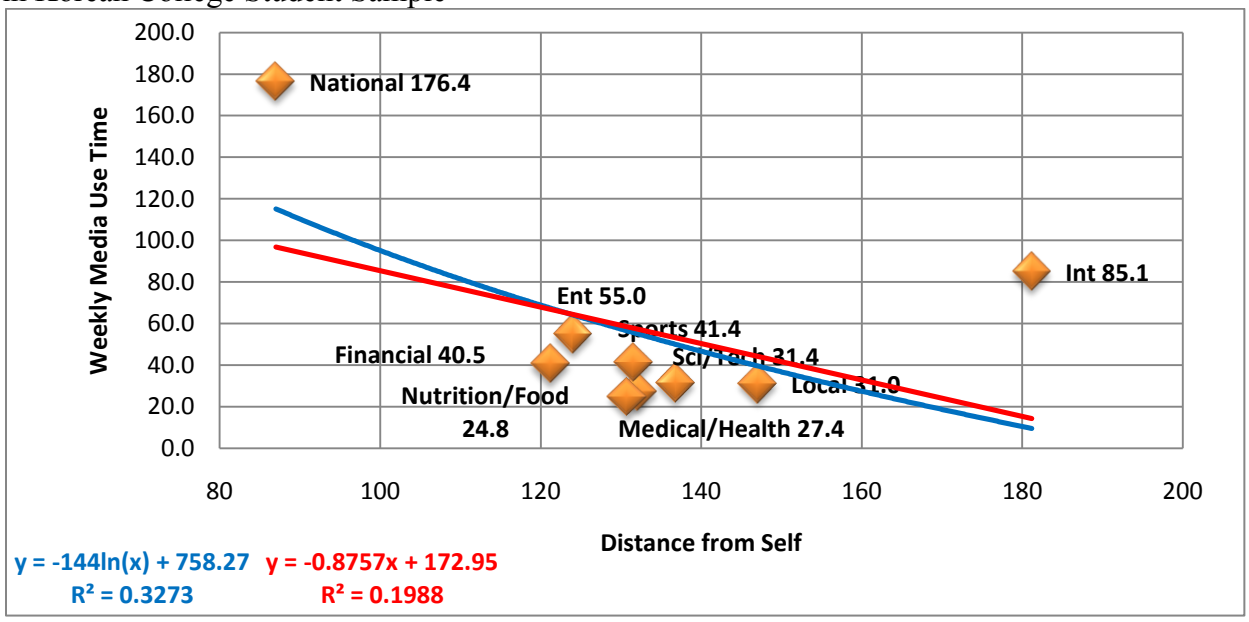
Males' Dendrogram Using SPSS Ward Linkage in US College Student Sample



Note: The first dendrogram is using scalar product matrix and the second is using mean value matrix.
1 = International news, 2 = National news, 3 = Local news, 4 = Science & Tech news, 5 = Medical & Health news, 6 = Nutrition & Food news, 7 = Financial news, 8 = Sports news, 9 = entertainment, 10 = Newspaper, 11 = Magazine, 12 = TV, 13 = Radio, 14 = Face to Face (FtF), 15 = Cellular phone, 16 = News online, 17 = E-mail, 18 = Blogging, 19 = Video online, 20 = Instant Messaging (IM), 21 = MP 3, 22 = Yourself

Figure 33

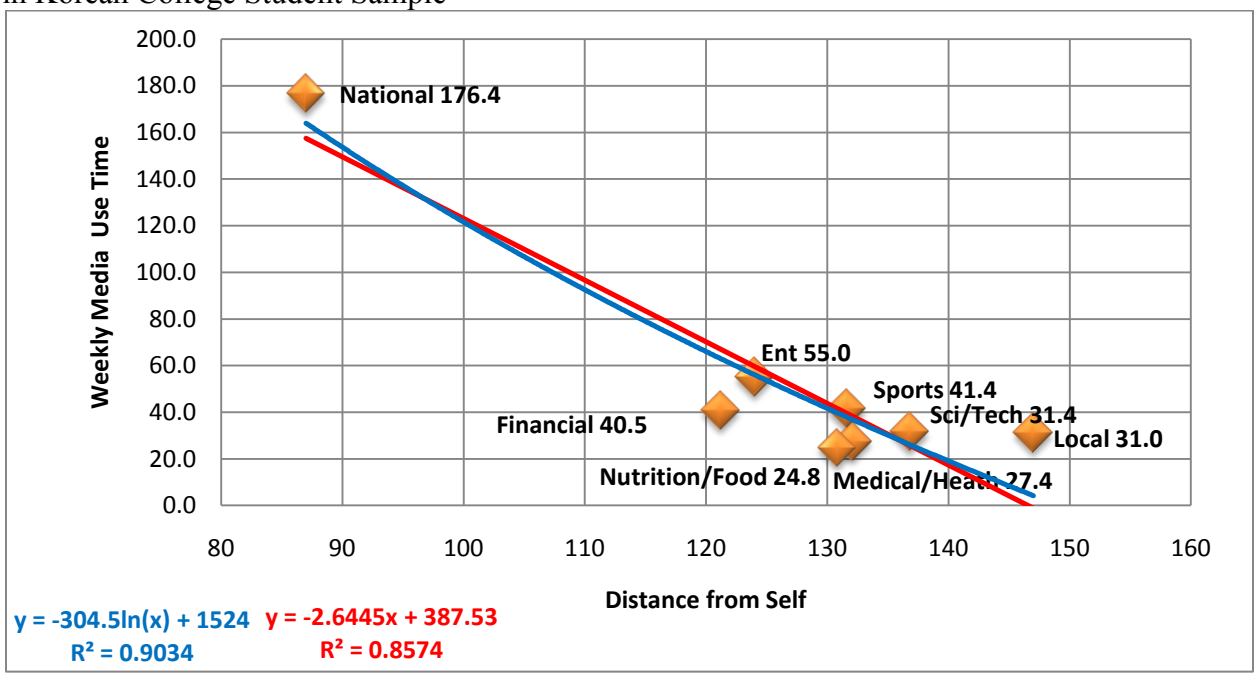
Time Spent on All Media Seeking Specific information Topic
in Korean College Student Sample



Note: Weekly media use time is the mean value of time spent on all media seeking a specific information topic and self-point is the mean distance of the specific information topic from the self-concept.

Figure 34

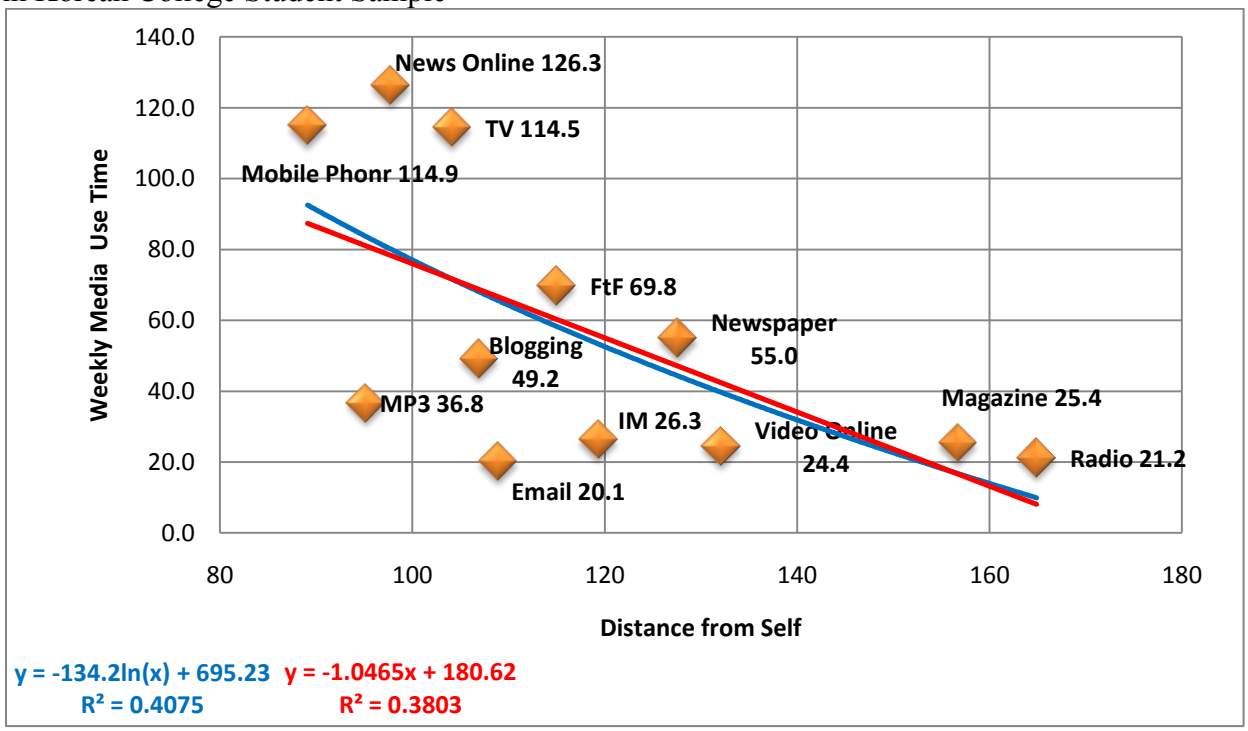
Time Spent on All Media Seeking Specific information Topic
in Korean College Student Sample



Note: International news is removed from Regression and Logarithmic Regression Equations for a better model fit.

Figure 35

Time Spent on Each Medium Seeking All Information Topics
in Korean College Student Sample



Note: Weekly media use time is the mean value of time spent on each medium seeking all information topics and self-point is the mean distance of each medium from the self-concept.

Figure 36

Time Spent on All Media Seeking Specific information Topic in US College Student Sample

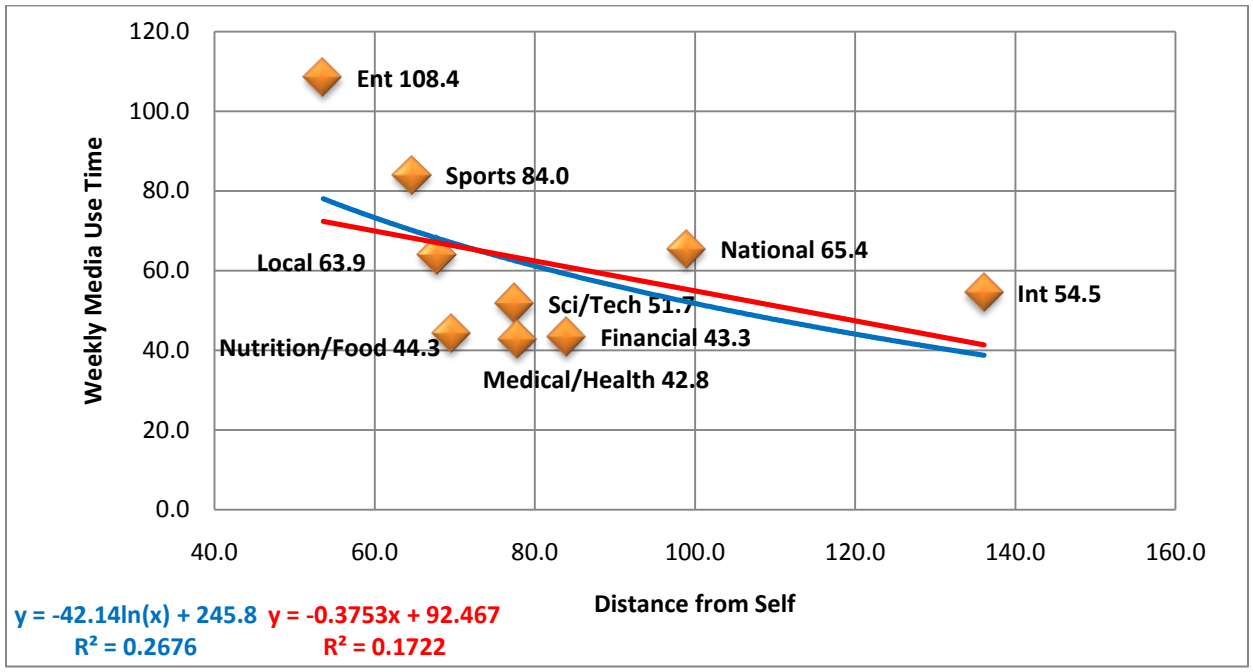
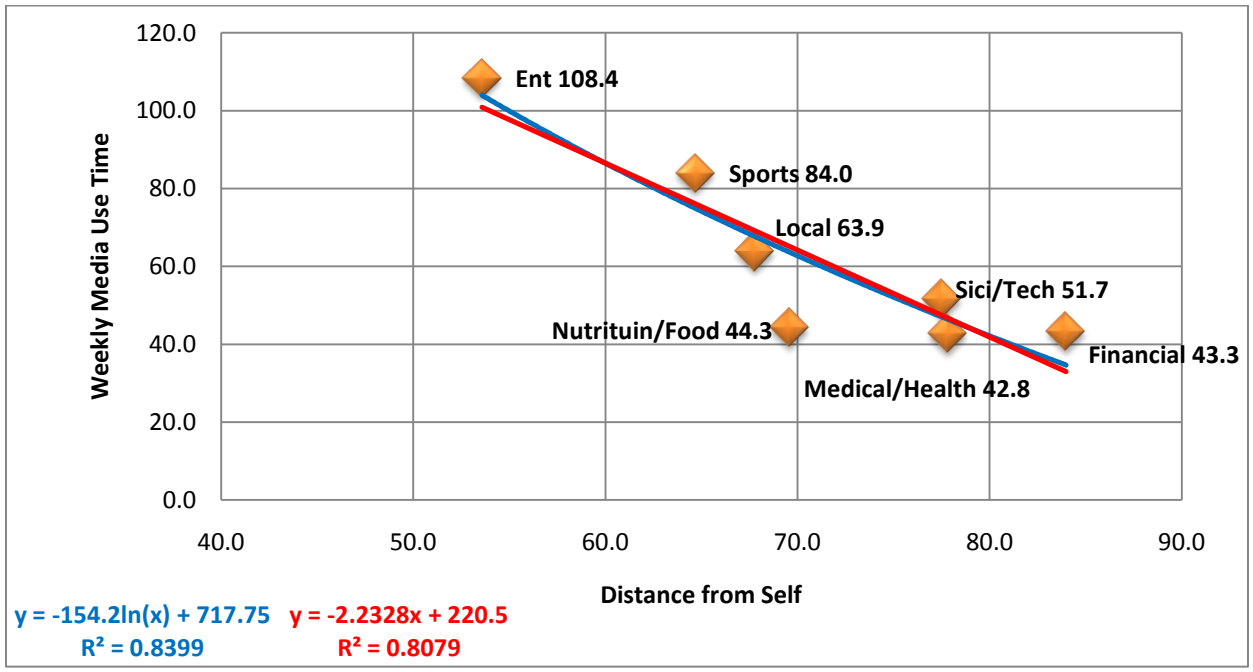


Figure 37

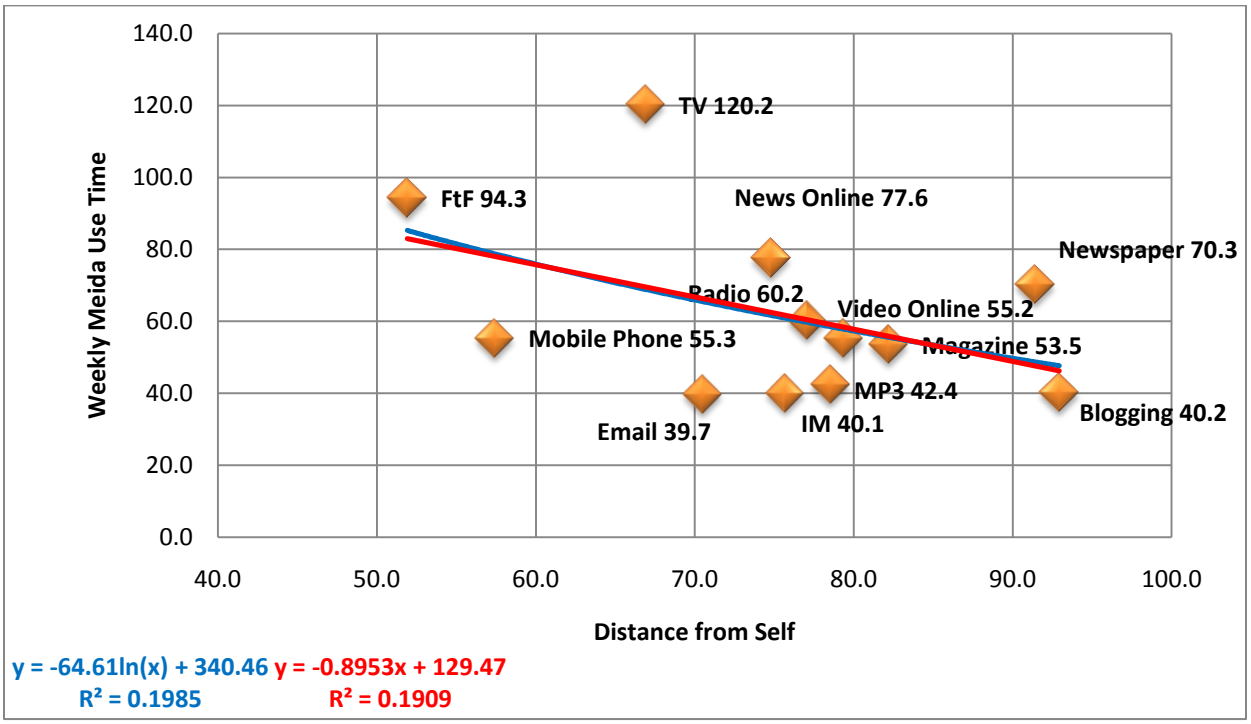
Time Spent on All Media Seeking Specific information Topic in US College Student Sample



Note: International & national news are removed from Regression and Logarithmic Regression Equations for a better model fit.

Figure 38

Time Spent on Each Medium Seeking All Information Topics in US College Student Sample



REFERENCES

Adee, B. (2009). Let's Talk: Journalism and Social Media. Retrieved November, 11, 2010, from http://www.nieman.harvard.edu/reports/issue/100058/Fall-2009.aspx

Althaus, S. L., & Tewksbury, D. (2000). Patterns of Internet and Traditional News Media Use in a Networked Community. *Political Communication, 17*(1), 21 - 45.

Ang, I. (1995). The Nature of the Audience. In J. Downing, A. Mohammadi & A. Sreberny-Mohammadi (Eds.), *Questioning the Media: A Critical Introduction* (pp. 207-220). Thousand Oaks, CA: Sage.

Atkin, C. K. (1972). Anticipated Communication and Mass Media Information-Seeking. *The Public Opinion Quarterly, 36*(2), 188-199.

Atkin, D. J. (1992). Adoption of Cable amidst a Multimedia Environment. *Telematics & Informatics, 10*(1), 51-58.

Berman, J., & Weitzner, D. J. (1995). Abundance and User Control: Renewing the Democratic Heart of the First Amendment in the Age of Interactive Media. *The Yale Law Journal, 104*(7), 1619-1637.

Blumer, H. (1969). *Symbolic Interactionism : Perspective and Method*. Berkeley: University of California Press.

Blumler, J. G. (1979). The Role of Theory in Uses and Gratifications Studies. *Communication Research, 6*(1), 9-36.

Boneva, B., Kraut, R., & Frohlich, D. (2001). Using E-mail for Personal Relationships: The Difference Gender Makes. *American Behavioral Scientist, 45*(3), 530-549.

Brunet, P. M., & Schmidt, L. A. (2010). Sex Differences in the Expression and Use of Computer-Mediated Affective Language. *Social Science Computer Review, 28*(2), 194-205.

Bruns, A. (2007, June). *Produsage: Towards a Broader Framework for User-Led Content Creation*. Paper presented at the Creativity and Cognition 6, Washington, DC.

Cai, X. (2005). An Experimental Examination of the Computer's Time Displacement Effects. *New Media & Society, 7*(1), 8-21.

Cheong, P., Hwang, J., Elbirt, B., Chen, H., Evans, C., & Woelfel, J. (2010). Media Use as a Function of Identity: The Role of the Self Concept in Media Usage. In v. M. Hinner (Ed.), *Freiberger Beiträge zur interkulturellen und Wirtschaftskommunikation: A Forum for General and Intercultural Business Communication* (Vol. 6, pp. 365 - 381). Berlin: Peter Lang.

Coffey, S., & Stipp, H. (1997). The Interactions between Computer and Television Usage. *Journal of Advertising Research, 37*(2), 61-67.

Crowston, K., & Williams, M. (2000). Reproduced and Emergent Genres of Communication on the World Wide Web. *The Information Society, 16*(3), 201 - 215.

Deaux, K., & Major, B. (1987). Putting Gender into Context: An Interactive Model of Gender-Related Behavior. *Psychological Review, 94*(3), 369-389.

Dimmick, J., Yan, C., & Zhan, L. (2004). Competition Between the Internet and Traditional News Media: The Gratification-Opportunities Niche Dimension. *Journal of Media Economics, 17*(1), 19-33.

Dosser, D. A., Balswick, J. O., & Halverson, C. F. (1983). Situational Context of Emotional Expressiveness. *Journal of Counseling Psychology, 30*(3), 375-387.

Ferguson, D. A. (1992). Channel Repertoire in the Presence of Remote Control Devices, VCRs and Cable Television. *Journal of Broadcasting & Electronic Media, 36*(1), 83-91.
Ferguson, D. A., & Melkote, S. (1997). Leisure Time and Channel Repertoire in a Multichannel Environment. *Communication Research Reports, 14*, 189-194.
Ferguson, D. A., & Perse, E. M. (1993). Media and Audience Influence on Channel Repertoire. *Journal of Broadcasting & Electronic Media, 37*(1), 31-47.
Flanagin, A. J., & Metzger, M. J. (2001). Internet Use in the Contemporary Media Environment. *Human Communication Research, 27*(1), 153-181.
Gibson, A. K., & Drane, D. (2006). Do the Demographic Variables of Gender, Age, and Race Significantly Predict Frequency of Viewing Behaviors of Sport-Related Media among Undergraduate Sport Management Students? *The Sport Journal, 9*(2). Retrieved September, 2009, from http://www.thesportjournal.org/article/gender-age-and-race-predictors-sports-viewing-behavior-sport-management-undergraduates
Griffin, E. A. (2002). *A First Look at Communication Theory* (5th ed.). NY: McGraw-Hill Higher Education.
Gross, J. J., & John, O. P. (1998). Mapping the Domain of Expressivity: Multimethod Evidence for a Hierarchical Model. *Journal of Personality and Social Psychology, 74*(1), 170-191.
Hansen, C. H., & Hansen, R. D. (2000). Music and Music Videos. In D. Zillmann & P. Vorderer (Eds.), *Media Entertainment: The Psychology of its Appeal* (pp. 175-196): Mahwah, N.J. : Lawrence Erlbaum Associates Publishers.
Harwood, J. (1999). Age Identification, Social Identity Gratifications, and Television Viewing. *Journal of Broadcasting & Electronic Media, 43*(1), 123-136.
Heald, E. (2009). Google Enters the Paid Online Content Fray. Retrieved October, 15, 2010, from http://www.editorsweblog.org/analysis/2009/09/google_enters_the_paid_online_content_fr.php
Heeter, C., & Greenberg, B. (1985). Cable and Program Choice. In D. Zallman & J. Bryant (Eds.), *Selective Exposure to Communication* (pp. 203-224). Hillsdale, NJ: Lawrence Erbaum.
Heikkinen, K., & Reese, S. (1986). Newspaper Readers and a New Information Medium: Information Need and Channel Orientation as Predictors of Videotext Adoption. *Communication Research, 13*(1), 19-36.
Highlen, P. S., & Gillis, S. F. (1978). Effects of Situational Factors, Sex, and Attitude on Affective Self-Disclosure and Anxiety. *Journal of Counseling Psychology, 25*(4), 270-276.
Hwang, Y. S., & Yang, S. H. (2009). *Online Journalism of Korea [In Korean]*. Seoul, Korea: Korea Press Foundation.
International Telecommunication Union (ITU). (2009). Measuring the Information Society: The ICT Development Index. Retrieved October, 15, 2010, from http://www.itu.int/ITU-D/ict/publications/idi/2009/material/IDI2009_w5.pdf
J. H. Lee, & H. J. Lee. (2010). The Computer-Mediated Communication Network: Exploring the Linkage between the Online Community and Social Capital. *New Media & Society, 12*(5), 711-727.
Johnson, S. (1967). Hierarchical Clustering Schemes. *Psychometrika, 32*(3), 241-254.
Katz, E., Blumler, J. G., & Gurevitch, M. (1973). Uses and Gratifications Research. *The Public Opinion Quarterly, 37*(4), 509-523.

Katz, E., Blumler, J. G., & Gurevitch, M. (1974). Utilization of Mass Communication by the Individual. In J. G. Blumler & E. Katz (Eds.), *Uses of Mass Communication* (pp. 19-34). Beverly Hills, CA: Sage.

Knobloch-Westerwick, S., & Alter, S. (2007). The Gender News Use Divide: Americans' Sex-Typed Selective Exposure to Online News Topics. *Journal of Communication, 57*(4), 739-758.

Kohut, A. (2008). Audience Segments in a Changing News Environment: Key News Audiences Now Blend Online and Traditional Sources Pew Research Center Biennial News Consumption Survey. *The Pew Research Center for the People & Press*.

Kolbitsch, J., & Maurer, H. (2006). The Transformation of the Web: How Emerging Communities Shape the Information we Consume. *Journal of Universal Computer Science, 12*(2), 187-213.

Korea Internet and Security Agency (KISA). (2009). Survey on the Internet Usage. Retrieved October, 14, 2010, from http://isis.nida.or.kr/eng/board/?pageId=040100&bbsId=10&itemId=310

Kraut, R., Patterson, M., Lundmark, V., Kiesler, S., Mukopadhyay, T., & Scherlis, W. (1998). Internet Paradox: A Social Technology That Reduces Social Involvement and Psychological Well-Being? *American Psychologist, 53*(9), 1017-1031.

Kwak, H., Lee, C., Park, H., & Moon, S. (2010, April). *What is Twitter, a Social Network or a News Media?* Paper presented at the Proceedings of the 19th International Conference on World Wide Web.

Leaper, C., & Smith, T. E. (2004). A Meta-Analytic Review of Gender Variations in Children's Language Use: Talkativeness, Affiliative Speech, and Assertive Speech. *Developmental Psychology, 40*(6), 993-1027.

Lee, H. J., Ryu, J. H., & Kim, D. J. (2010). Profiling Mobile TV Adopters in College Student Populations of Korea. *Technological Forecasting and Social Change, 77*(3), 514-523.

Lee, H. J., Ryu, J. H., Lee, S. J., & Kim, D. J. (2009, May). *Age Identity, Gratification Opportunities, and Genre Choice of Mobile TV Viewing: Exploring the Effect of College Students' Perceptions of Age Identification and Gratifications on Content Interest of DMB in Korea*. Paper presented at the Annual Conference of International Communication Association, Chicago.

Levy, M. R., & Windahl, S. (1984). Audience Activitiy and Gratifications: A Conceptual Clarification and Exploration. *Communication Research, 11*(1), 51-78.

Lim, Y. S. (2009). *Persuasive Message Strategy for International Development Campaigns: A Theoretical Application of the Galileo Spatial-Linkage Model (Doctoral Dissertation).* Unpublished (UMI No. 3342134), State University of New York at Buffalo, United States, New York.

Lin, C. A. (1996). Looking Back: The Contribution of Blumler and Katz's Uses of Mass Communication. *Journal of Broadcasting & Electronic Media, 40*(4), 574-581.

Lin, C. A. (2001). Audience Attributes, Media Supplementation, and Likely Online Service Adoption. *Mass Communication & Society, 4*(1), 19-38.

Lippmann, W. (1922). *Public Opinion*. New York: Harcourt, Brace and Co.

McCarty, J. A., & Shrum, L. J. (1993). The Role of Personal Values and Demographics in Predicting Television Viewing Behavior: Implications for Theory and Application. *Journal of Advertising, 22*(4), 77-101.

McCombs, M., & Reynolds, A. (2002). News Influence on Our Pictures of the World. In J. Bryant & D. Zillmann (Eds.), *Media Effects : Advances in Theory and Research* (pp. 1-18). Mahwah, N.J.: L. Elbaum Associates.

Mead, G. H. (1922). A Behavioristic Account of the Significant Symbol. *The Journal of Philosophy, 19*(6), 157-163.

Mead, G. H. (1934). *Mind, Self & Society from the Standpoint of a Social Behaviorist*. Chicago: Ill., University of Chicago Press.

Nam, Y., & Barnett, G. A. (under review). Global Technology Transfer: Network Analysis of Global Patents and Trademarks. *Technological Forecasting and Social Change*.

Nie, N. H. (2001). Sociability, Interpersonal Relations, and the Internet: Reconciling Conflicting Findings. *American Behavioral Scientist, 45*(3), 420-435.

Nie, N. H., & Erbring, L. (2000). Internet and Society: A Preliminary Report. Retrieved October, 21, 2007, from http://www.stanford.edu/group/siqss/Press_Release/press_release.html

Nie, N. H., Hillygus, D. S., & Erbring, L. (2002). Internet Use, Interpersonal Relations and Sociability. In B.Wellman & C. Haythornthwaite (Eds.), *The Internet in Everyday Life* (pp. 215-243). Malden, MA: Blackwell Publishing.

O'Keefe, G. J., & Spetnagel, H. T. (1973). Patterns of College Students' Use of Selected News Media. *Journalism Quarterly, 50*, 543-548.

OECD. (2006). Participative Web: User-Generated Content. Paper presented at Working Party on the Information Economy, DSTI/ICCP/IE(2006)7/FINAL. Retrieved June, 10, 2008, from http://www.oecd.org/dataoecd/57/14/38393115.pdf

Oliver, M. B. (1993). Exploring the Paradox of the Enjoyment of Sad Films. *Human Communication Research, 19*(3), 315-342.

Pingree, S., Hawkins, R. P., Hitchon, J. C. B., Gilligan, E., Radler, B., Kahlor, L., et al. (2001). If College Students Are Appointment Television Viewers. *Journal of Broadcasting & Electronic Media, 45*(3), 446 - 463.

Potts, R., Dedmon, A., & Halford, J. (1996). Sensation Seeking, Television Viewing Motives, and Home Television Viewing Patterns. *Personality and Individual Differences, 21*(6), 1081-1084.

Reagan, J. (1996). The `Repertoire' of Information Sources. *Journal of Broadcasting & Electronic Media, 40*(1), 112-121.

Reagan, J., Pinkleton, B., Chen, C.-f., & Aaronson, D. (1995). How Do Technologies Relate to the Repertoire of Information Sources? *Telematics and Informatics, 12*(1), 21-27.

Robinson, J. P., Barth, K., & Kohut, A. (1997). Social Impact Research: Personal Computers, Mass Media, and Use of Time. *Social Science Computer Review, 15*(1), 65-82.

Robinson, J. P., & Godbey, G. (1999). *Time for Life: The Surprising Ways Americans Use their Time* (2nd ed.). University Park, PA: Pennsylvania State University Presss.

Robinson, J. P., Kestnbaum, M., & Beth, J. M. (1999). The Personal Computer, Culture and Other Use of Free Time. *Social Science Computer Review, 17*(2), 209-216.

Robinson, J. P., Kestnbaum, M., Neustadtl, A., & Alvarez, A. (2002). The Internet and Other Uses of Time. In B.Wellman & C. Haythornthwaite (Eds.), *The Internet in Everyday Life* (pp. 244-262). Malden, MA: Blackwell Publishing.

Rubin, A. M. (1983). Television Uses and Gratifications: The Interactions of Viewing Patterns and Motivations. *Journal of Broadcasting & Electronic Media, 27*(1), 37-51.

Shalin, D. N. (1986). Pragmatism and Social Interactionism. *American Sociological Review, 51*(1), 9-29.
Shapiro, E. (1998, June 12). Web Lovers Love TV, Often It's Not Coming out of the Same Box. *The Wall Street Journal,* pp. A1, A6.
Spence, J. T., & Buckner, C. E. (2000). Instrumental and Expressive Traits, Trait Stereotypes, and Sexist Attitudes: What Do They Signify? *Psychology of Women Quarterly, 24*(1), 44-62.
Stempel III, G. H., Hargrove, T., & Bert, J. P. (2000). Relation of Growth of Use of the Internet to Changes in Media Use from 1995 to 1999. *Journalism & Mass Communication Quarterly, 77*(1), 71-79.
Sung, E. J., Lee, H. J., & Kim, H. S. (2005, November). *Factors Influencing Choice of Bandwidth and the Impact on Media Use Behavior*. Paper presented at the National Communication Association, Boston, MA.
Tewksbury, D. (2005, May). *Online News Reader Specialization and its Boundaries: Implications for the Fragmentation of American News Audiences*. Paper presented at the International Communication Association, New York, NY.
Tewksbury, D. (2006). Exposure to the Newer Media in a Presidential Primary Campaign. *Political Communication, 23*(3), 313-332.
Thelwall, M., Wilkinson, D., & Uppal, S. (2010). Data Mining Emotion in Social Network Communication: Gender Differences in MySpace. *Journal of the American Society for Information Science and Technology, 61*(1), 190-199.
Thorson, E. (2008). Chaging Patterns of News Consumption and Participation. *Information, Communication & Society, 11*(4), 473-489.
Trevino, L., K, Daft, R. L., & Lengel, R. H. (1990). Understanding Managers' Media Choices: A Symbolic Interactive Perspective. In J. Fulk & C. W. Steinfield (Eds.), *Organizations and Communication Technology* (pp. 71-94). Newbury Park, CA: Sage Publications.
van Dijk, J. (2009). Users like you? Theorizing Agency in User-Generated Content. *Media Culture Society, 31*(1), 41-58.
Vincent, R. C., & Basil, M. D. (1997). College Students' News Gratifications, Media Use, and Current Events Knowledge. *Journal of Broadcasting & Electronic Media, 41*(3), 380 - 392.
Vishwanath, A., & Chen, H. (2006). Technology Clusters: Using Multidimensional Scaling to Evaluate and Structure Technology Clusters. *57*(11), 1451-1460.
Ward, J. H. (1963). Hierarchical Grouping to Optimize an Objective Function. *Journal of the American Statistical Association, 58*(301), 236-244.
Wei, R. (2001). From Luxury to Utility: A Longitudinal Analysis of Cell Phone Laggards *Journalism and Mass Communication Quarterly, 78*(4), 702-719.
Woelfel, J. (1998). *User's Guide Catpac II: version 2.0*. Amherst, NY: RAH Press.
Woelfel, J. (2009). *Cognitive Processes and Communication Networks: A General Theory [written in 1990]*: Amherst, NY: RAH Press.
Woelfel, J., & Evans, C. (2009). *Galileo and Multidimensional Scaling*. Amherst, New York: RAH Press.
Woelfel, J., & Fink, E. L. (1980). *The Measurement of Communication Processes : Galileo Theory and Method*. New York: Academic Press.

Woelfel, J., & Saltiel, J. (1988). Cognitive Processes as Motions in Multidimensional Space. In G. A. Barnett & J. Woelfel (Eds.), *Readings in the Galileo System: Theory, Methods, and Applications* (pp. 35-53). Dubuque, IA: Kendall/Hunt.

Woelfel, J., Scott, D., & Yum, J. (1988). A Cognitive Theory of Collective Consciousness. Unpublished Manuscript. Retrieved April, 21, 2009, from http://www.galileoco.com/literature/collectiveConsciousness.pdf

Woelfel, J., & Stoyanoff, N. J. (2006). The Galileo System: A Rational Alternative to the Dominant Paradigm for Social Science Research. In v. M. Hinner (Ed.), *Freiberger Beiträge zur interkulturellen und Wirtschaftskommunikation: A Forum for General and Intercultural Business Communication* (Vol. 3). Peter Lang: Berlin.

Wolff, K. H., Durkheim, E., & Bohannon, P. (1960). *Essays on Sociology and Philosophy*. New York: Harper & Row.

Yates, J., & Orlikowski, W. J. (1992). Genres of Organizational Communication: A Structurational Approach to Studying Communication and Media. *The Academy of Management Review, 17*(2), 299-326.

Yates, J., Orlikowski, W. J., & Okamura, K. (1995). Constituting Genre Repertoires: Deliberate and emergent patterns of electronic media use. *Academy of Management Journal*, 353-357.

Yuan, E. J., & Webster, J. G. (2006). Channel Repertoires: Using Peoplemeter Data in Beijing. *Journal of Broadcasting & Electronic Media, 50*(3), 524-536.

Zhang, J. (2006). Public Diplomacy as Symbolic Interactions: A Case Study of Asian Tsunami Relief Campaigns. *Public Relations Review, 32*(1), 26-32.

Appendix A: Survey Questionnaire

Part I. Galileo Survey

Instructions: Below you will see some information topics in which you may be INTERESTED and INFORMATION SOURCES that you might use for finding out about these topics. Please tell how different or how "far apart" each word or phrase is from the other in the pair. The MORE DIFFERENT they are the LARGER number you should enter. If there is NO DIFFERENCE between them, enter 0. To help you know what size number to write, think about this phrase:

INTERNATIONAL NEWS and NATIONAL NEWS are 100 units apart.

If any two concepts seem twice as different as INTERNATIONAL NEWS and NATIONAL NEWS, you might enter 200. If they are only half as different, you might write 50. There is no limit to the size of the number you may enter. If you don't know an answer, just leave it blank.

INTERNATIONAL NEWS and NATIONAL NEWS are 100 units.

0102	INTERNATIONAL NEWS	and	NATIONAL NEWS	_____
0103	INTERNATIONAL NEWS	and	LOCAL NEWS	_____
0104	INTERNATIONAL NEWS	and	SCIENCE\TECHNOLOGY	_____
0105	INTERNATIONAL NEWS	and	MEDICAL\HEALTH INFORMATION	_____
0106	INTERNATIONAL NEWS	and	NUTRITION\FOOD	_____
0107	INTERNATIONAL NEWS	and	FINANCIAL INFORMATION	_____
0108	INTERNATIONAL NEWS	and	SPORTS	_____
0109	INTERNATIONAL NEWS	and	ENTERTAINMENT	_____

INTERNATIONAL NEWS and NATIONAL NEWS are 100 units.

0110	INTERNATIONAL NEWS	and	NEWSPAPER	_____
0111	INTERNATIONAL NEWS	and	MAGAZINE	_____
0112	INTERNATIONAL NEWS	and	TV	_____
0113	INTERNATIONAL NEWS	and	RADIO	_____
0114	INTERNATIONAL NEWS	and	FACE-TO-FACE	_____
0115	INTERNATIONAL NEWS	and	MOBILE PHONE	_____
0116	INTERNATIONAL NEWS	and	READING NEWS ONLINE	_____
0117	INTERNATIONAL NEWS	and	E-MAIL	_____

INTERNATIONAL NEWS and NATIONAL NEWS are 100 units.

0118	INTERNATIONAL NEWS	and	BLOGGING (READING & POSTING)	_____
0119	INTERNATIONAL NEWS	and	ONLINE VIDEO	_____
0120	INTERNATIONAL NEWS	and	INSTANT MESSAGING\CHAT ROOM	_____
0121	INTERNATIONAL NEWS	and	PODCATING/MP3\IPOD	_____
0122	INTERNATIONAL NEWS	and	YOURSELF	_____
0203	NATIONAL NEWS	and	LOCAL NEWS	_____
0204	NATIONAL NEWS	and	SCIENCE\TECHNOLOGY	_____
0205	NATIONAL NEWS	and	MEDICAL\HEALTH INFORMATION	_____

INTERNATIONAL NEWS and NATIONAL NEWS are 100 units.

0206	NATIONAL NEWS	and	NUTRITION\FOOD	_____

0207	NATIONAL NEWS	and	FINANCIAL INFORMATION	_____
0208	NATIONAL NEWS	and	SPORTS	_____
0209	NATIONAL NEWS	and	ENTERTAINMENT	_____
0210	NATIONAL NEWS	and	NEWSPAPER	_____
0211	NATIONAL NEWS	and	MAGAZINE	_____
0212	NATIONAL NEWS	and	TV	_____
0213	NATIONAL NEWS	and	RADIO	_____

INTERNATIONAL NEWS and NATIONAL NEWS are 100 units.

0214	NATIONAL NEWS	and	FACE-TO-FACE	_____
0215	NATIONAL NEWS	and	MOBILE PHONE	_____
0216	NATIONAL NEWS	and	READING NEWS ONLINE	_____
0217	NATIONAL NEWS	and	E-MAIL	_____
0218	NATIONAL NEWS	and	BLOGGING (READING & POSTING)	_____
0219	NATIONAL NEWS	and	ONLINE VIDEO	_____
0220	NATIONAL NEWS	and	INSTANT MESSAGING\CHAT ROOM	_____
0221	NATIONAL NEWS	and	PODCATING/MP3	_____

INTERNATIONAL NEWS and NATIONAL NEWS are 100 units.

0222	NATIONAL NEWS	and	YOURSELF	_____
0304	LOCAL NEWS	and	SICENCE\TECHNOLOGY	_____
0305	LOCAL NEWS	and	MEDICAL\HEALTH INFORMATION	_____
0306	LOCAL NEWS	and	NUTRITION\FOOD	_____
0307	LOCAL NEWS	and	FINANCIAL INFORMATION	_____
0308	LOCAL NEWS	and	SPORTS	_____
0309	LOCAL NEWS	and	ENTERTAINMENT	_____
0310	LOCAL NEWS	and	NEWSPAPER	_____

INTERNATIONAL NEWS and NATIONAL NEWS are 100 units.

0311	LOCAL NEWS	and	MAGAZINE	_____
0312	LOCAL NEWS	and	TV	_____
0313	LOCAL NEWS	and	RADIO	_____
0314	LOCAL NEWS	and	FACE-TO-FACE	_____
0315	LOCAL NEWS	and	MOBILE PHONE	_____
0316	LOCAL NEWS	and	READING NEWS ONLINE	_____
0317	LOCAL NEWS	and	E-MAIL	_____
0318	LOCAL NEWS	and	BLOGGING (READING & POSTING)	_____

INTERNATIONAL NEWS and NATIONAL NEWS are 100 units.

0319	LOCAL NEWS	and	ONLINE VIDEO	_____
0320	LOCAL NEWS	and	INSTANT MESSAGING\CHAT ROOM	_____
0321	LOCAL NEWS	and	PODCATING\MP3	_____
0322	LOCAL NEWS	and	YOURSELF	_____
0405	SICENCE\TECHNOLOGY	and	MEDICAL\HEALTH INFORMATION	_____
0406	SICENCE\TECHNOLOGY	and	NUTRITION\FOOD	_____
0407	SICENCE\TECHNOLOGY	and	FINANCIAL INFORMATION	_____
0408	SICENCE\TECHNOLOGY	and	SPORTS	_____

INTERNATIONAL NEWS and NATIONAL NEWS are 100 units.

0409	SICENCE\TECHNOLOGY	and	ENTERTAINMENT	_____
0410	SICENCE\TECHNOLOGY	and	NEWSPAPER	_____
0411	SICENCE\TECHNOLOGY	and	MAGAZINE	_____
0412	SICENCE\TECHNOLOGY	and	TV	_____
0413	SICENCE\TECHNOLOGY	and	RADIO	_____
0414	SICENCE\TECHNOLOGY	and	FACE-TO-FACE	_____
0415	SICENCE\TECHNOLOGY	and	MOBILE PHONE	_____
0416	SICENCE\TECHNOLOGY	and	READING NEWS ONLINE	_____

INTERNATIONAL NEWS and NATIONAL NEWS are 100 units.

0417	SICENCE\TECHNOLOGY	and	E-MAIL	_____
0418	SICENCE\TECHNOLOGY	and	BLOGGING (READING & POSTING)	_____
0419	SICENCE\TECHNOLOGY	and	ONLINE VIDEO	_____
0420	SICENCE\TECHNOLOGY	and	INSTANT MESSAGING\CHAT ROOM	_____
0421	SICENCE\TECHNOLOGY	and	PODCATING\MP3	_____
0422	SICENCE\TECHNOLOGY	and	YOURSELF	_____
0506	MEDICAL\HEALTH INFO	and	NUTRITION\FOOD	_____
0507	MEDICAL\HEALTH INFO	and	FINANCIALFINANCIAL INFORMATION	_____

INTERNATIONAL NEWS and NATIONAL NEWS are 100 units.

0508	MEDICAL\HEALTH INFO	and	SPORTS	_____
0509	MEDICAL\HEALTH INFO	and	ENTERTAINMENT	_____
0510	MEDICAL\HEALTH INFO	and	NEWSPAPER	_____
0511	MEDICAL\HEALTH INFO	and	MAGAZINE	_____
0512	MEDICAL\HEALTH INFO	and	TV	_____
0513	MEDICAL\HEALTH INFO	and	RADIO	_____
0514	MEDICAL\HEALTH INFO	and	FACE-TO-FACE	_____
0515	MEDICAL\HEALTH INFO	and	MOBILE PHONE	_____

INTERNATIONAL NEWS and NATIONAL NEWS are 100 units.

0516	MEDICAL\HEALTH INFO	and	READING NEWS ONLINE	_____
0517	MEDICAL\HEALTH INFO	and	E-MAIL	_____
0518	MEDICAL\HEALTH INFO	and	BLOGGING (READING & POSTING)	_____
0519	MEDICAL\HEALTH INFO	and	ONLINE VIDEO	_____
0520	MEDICAL\HEALTH INFO	and	INSTANT MESSAGING\CHAT ROOM	_____
0521	MEDICAL\HEALTH INFO	and	PODCATING/MP3	_____
0522	MEDICAL\HEALTH INFO	and	YOURSELF	_____
0607	NUTRITION\FOOD	and	FINANCIALFINANCIAL INFORMATION	_____

INTERNATIONAL NEWS and NATIONAL NEWS are 100 units.

0608	NUTRITION\FOOD	and	SPORTS	_____
0609	NUTRITION\FOOD	and	ENTERTAINMENT	_____
0610	NUTRITION\FOOD	and	NEWSPAPER	_____
0611	NUTRITION\FOOD	and	MAGAZINE	_____

0612	NUTRITION\FOOD	and	TV	_____
0613	NUTRITION\FOOD	and	RADIO	_____
0614	NUTRITION\FOOD	and	FACE-TO-FACE	_____
0615	NUTRITION\FOOD	and	MOBILE PHONE	_____

INTERNATIONAL NEWS and NATIONAL NEWS are 100 units.

0616	NUTRITION\FOOD	and	READING NEWS ONLINE	_____
0617	NUTRITION\FOOD	and	E-MAIL	_____
0618	NUTRITION\FOOD	and	BLOGGING (READING & POSTING)	_____
0619	NUTRITION\FOOD	and	ONLINE VIDEO	_____
0620	NUTRITION\FOOD	and	INSTANT MESSAGING\CHAT ROOM	_____
0621	NUTRITION\FOOD	and	PODCATING/MP3	_____
0622	NUTRITION\FOOD	and	YOURSELF	_____
0708	FINANCIAL INFORMATION	and	SPORTS	_____

INTERNATIONAL NEWS and NATIONAL NEWS are 100 units.

0709	FINANCIAL INFORMATION	and	ENTERTAINMENT	_____
0710	FINANCIAL INFORMATION	and	NEWSPAPER	_____
0711	FINANCIAL INFORMATION	and	MAGAZINE	_____
0712	FINANCIAL INFORMATION	and	TV	_____
0713	FINANCIAL INFORMATION	and	RADIO	_____
0714	FINANCIAL INFORMATION	and	FACE-TO-FACE	_____
0715	FINANCIAL INFORMATION	and	MOBILE PHONE	_____
0716	FINANCIAL INFORMATION	and	READING NEWS ONLINE	_____

INTERNATIONAL NEWS and NATIONAL NEWS are 100 units.

0717	FINANCIAL INFORMATION	and	E-MAIL	_____
0718	FINANCIAL INFORMATION	and	BLOGGING (READING & POSTING)	_____
0719	FINANCIAL INFORMATION	and	ONLINE VIDEO	_____
0720	FINANCIAL INFORMATION	and	INSTANT MESSAGING\CHAT ROOM	_____
0721	FINANCIAL INFORMATION	and	PODCATING/MP3	_____
0722	FINANCIAL INFORMATION	and	YOURSELF	_____
0809	SPORTS	and	ENTERTAINMNET	_____
0810	SPORTS	and	NEWSPAPER	_____

INTERNATIONAL NEWS and NATIONAL NEWS are 100 units.

0811	SPORTS	and	MAGAZINE	_____
0812	SPORTS	and	TV	_____
0813	SPORTS	and	RADIO	_____
0814	SPORTS	and	FACE-TO-FACE	_____
0815	SPORTS	and	MOBILE PHONE	_____
0816	SPORTS	and	READING NEWS ONLINE	_____
0817	SPORTS	and	E-MAIL	_____
0818	SPORTS	and	BLOGGING (READING & POSTING)	_____

INTERNATIONAL NEWS and NATIONAL NEWS are 100 units.

0819	SPORTS	and	ONLINE VIDEO	_____
0820	SPORTS	and	INSTANT MESSAGING\CHAT ROOM	_____
0821	SPORTS	and	PODCATING\MP3	_____
0822	SPORTS	and	YOURSELF	_____
0910	ENTERTAINMENT	and	NEWSPAPER	_____
0911	ENTERTAINMENT	and	MAGAZINE	_____
0912	ENTERTAINMENT	and	TV	_____
0913	ENTERTAINMENT	and	RADIO	_____

INTERNATIONAL NEWS and NATIONAL NEWS are 100 units.

0914	ENTERTAINMENT	and	FACE-TO-FACE	_____
0915	ENTERTAINMENT	and	MOBILE PHONE	_____
0916	ENTERTAINMENT	and	READING NEWS ONLINE	_____
0917	ENTERTAINMENT	and	E-MAIL	_____
0918	ENTERTAINMENT	and	BLOGGING (READING & POSTING)	_____
0919	ENTERTAINMENT	and	ONLINE VIDEO	_____
0920	ENTERTAINMENT	and	INSTANT MESSAGING\CHAT ROOM	_____
0921	ENTERTAINMENT	and	PODCATING/MP3	_____

INTERNATIONAL NEWS and NATIONAL NEWS are 100 units.

0922	ENTERTAINMENT	and	YOURSELF	_____
1011	NEWSPAPER	and	MAGAZINE	_____
1012	NEWSPAPER	and	TV	_____
1013	NEWSPAPER	and	RADIO	_____
1014	NEWSPAPER	and	FACE-TO-FACE	_____
1015	NEWSPAPER	and	MOBILE PHONE	_____
1016	NEWSPAPER	and	READING NEWS ONLINE	_____
1017	NEWSPAPER	and	E-MAIL	_____

INTERNATIONAL NEWS and NATIONAL NEWS are 100 units.

1018	NEWSPAPER	and	BLOGGING (READING & POSTING)	_____
1019	NEWSPAPER	and	ONLINE VIDEO	_____
1020	NEWSPAPER	and	INSTANT MESSAGING\CHAT ROOM	_____
1021	NEWSPAPER	and	PODCATING\MP3	_____
1022	NEWSPAPER	and	YOURSELF	_____
1112	MAGAZINE	and	TV	_____
1113	MAGAZINE	and	RADIO	_____
1114	MAGAZINE	and	FACE-TO-FACE	_____

INTERNATIONAL NEWS and NATIONAL NEWS are 100 units.

1115	MAGAZINE	and	MOBILE PHONE	_____
1116	MAGAZINE	and	READING NEWS ONLINE	_____
1117	MAGAZINE	and	E-MAIL	_____
1118	MAGAZINE	and	BLOGGING (READING & POSTING)	_____
1119	MAGAZINE	and	ONLINE VIDEO	_____
1120	MAGAZINE	and	INSTANT MESSAGING\CHAT ROOM	_____
1121	MAGAZINE	and	PODCATING\MP3	_____

1122	MAGAZINE	and	YOURSELF	_____

INTERNATIONAL NEWS and NATIONAL NEWS are 100 units.

1213	TV	and	RADIO	_____
1214	TV	and	FACE-TO-FACE	_____
1215	TV	and	MOBILE PHONE	_____
1216	TV	and	READING NEWS ONLINE	_____
1217	TV	and	E-MAIL	_____
1218	TV	and	BLOGGING (READING & POSTING)	_____
1219	TV	and	ONLINE VIDEO	_____
1220	TV	and	INSTANT MESSAGING\CHAT ROOM	_____

INTERNATIONAL NEWS and NATIONAL NEWS are 100 units.

1221	TV	and	PODCATING/MP3	_____
1222	TV	and	YOURSELF	_____
1314	RADIO	and	FACE-TO-FACE	_____
1315	RADIO	and	MOBILE PHONE	_____
1316	RADIO	and	READING NEWS ONLINE	_____
1317	RADIO	and	E-MAIL	_____
1318	RADIO	and	BLOGGING (READING & POSTING)	_____
1319	RADIO	and	ONLINE VIDEO	_____

INTERNATIONAL NEWS and NATIONAL NEWS are 100 units.

1320	RADIO	and	INSTANT MESSAGING\CHAT ROOM	_____
1321	RADIO	and	PODCATING/MP3	_____
1322	RADIO	and	YOURSELF	_____
1415	FACE-TO-FACE	and	MOBILE PHONE	_____
1416	FACE-TO-FACE	and	READING NEWS ONLINE	_____
1417	FACE-TO-FACE	and	E-MAIL	_____
1418	FACE-TO-FACE	and	BLOGGING (READING & POSTING)	_____
1419	FACE-TO-FACE	and	ONLINE VIDEO	_____

INTERNATIONAL NEWS and NATIONAL NEWS are 100 units.

1420	FACE-TO-FACE	and	INSTANT MESSAGING\CHAT ROOM	_____
1421	FACE-TO-FACE	and	PODCATING/MP3	_____
1422	FACE-TO-FACE	and	YOURSELF	_____
1516	MOBILE PHONE	and	READING NEWS ONLINE	_____
1517	MOBILE PHONE	and	E-MAIL	_____
1518	MOBILE PHONE	and	BLOGGING (READING & POSTING)	_____
1519	MOBILE PHONE	and	ONLINE VIDEO	_____
1520	MOBILE PHONE	and	INSTANT MESSAGING\CHAT ROOM	_____

INTERNATIONAL NEWS and NATIONAL NEWS are 100 units.

1521	MOBILE PHONE	and	PODCATING/MP3	_____
1522	MOBILE PHONE	and	YOURSELF	_____
1617	READING NEWS ONLINE	and	E-MAIL	_____
1618	READING NEWS ONLINE	and	BLOGGING (READING & POSTING)	_____

1619	READING NEWS ONLINE	and	ONLINE VIDEO	_____
1620	READING NEWS ONLINE	and	INSTANT MESSAGING\CHAT ROOM	_____
1621	READING NEWS ONLINE	and	PODCATING\MP3	_____
1622	READING NEWS ONLINE	and	YOURSELF	_____

INTERNATIONAL NEWS and NATIONAL NEWS are 100 units.

1718	E-MAIL	and	BLOGGING (READING & POSTING)	_____
1719	E-MAIL	and	ONLINE VIDEO	_____
1720	E-MAIL	and	INSTANT MESSAGING\CHAT ROOM	_____
1721	E-MAIL	and	PODCATING\MP3	_____
1722	E-MAIL	and	YOURSELF	_____
1819	BLOGGING	and	ONLINE VIDEO	_____
1820	BLOGGING	and	INSTANT MESSAGING\CHAT ROOM	_____
1821	BLOGGING	and	PODCATING\MP3	_____

INTERNATIONAL NEWS and NATIONAL NEWS are 100 units.

1822	BLOGGING	and	YOURSELF	_____
1920	ONLINE VIDEO	and	INSTANT MESSAGING\CHAT ROOM	_____
1921	ONLINE VIDEO	and	PODCATING\MP3	_____
1922	ONLINE VIDEO	and	YOURSELF	_____
2021	IM\CHAT ROOM	and	PODCATING\MP3	_____
2022	IM\CHAT ROOM	and	YOURSELF	_____
2122	PODCATING/MP3	and	YOURSELF	_____

Part II. MEDIA USE TIME AS INFORMATION SOURCES

Instructions (1-12): I would like to ask how many HOURS a week you attend to specific media sources for the interested topics. Please tell me **how many hours (and/or minutes) a week you use them.**

You should write a number from zero to as large a number as you wish on the blank to indicate how much time you attend to a specific media source for the interested topics. On the scale, a score of **"0"** indicates that you **DO NOT USE** it **AT ALL**. There is no limit to the size of the number you may enter. If you don't know an answer, just leave it blank.

INTERNATIONAL NEWS

1. NEWSPAPER _____ hour(s) _____ minute(s)
2. MAGAZINE _____ hour(s) _____ minute(s)
3. TV _____ hour(s) _____ minute(s)
4. RADIO _____ hour(s) _____ minute(s)
5. MOBILE PHONE _____ hour(s) _____ minute(s)
6. FACE-TO-FACE _____ hour(s) _____minute(s)
7. READING NEWS ONLINE _____ hour(s) _____minute(s)
8. EMAIL _____ hour(s) _____minute(s)
9. BLOGGING _____ hour(s) _____minute(s)
10. ONLINE VIDEO _____ hour(s) _____ minute(s)
11. INSTANT MESSAGING _____ hour(s) _____minute(s)
12. PODCATING\MP3 _____ hour(s) _____minute(s)

NATIONAL NEWS

1. NEWSPAPER _____ hour(s) _____ minute(s)
2. MAGAZINE _____ hour(s) _____ minute(s)
3. TV _____ hour(s) _____ minute(s)
4. RADIO _____ hour(s) _____ minute(s)
5. MOBILE PHONE _____ hour(s) _____ minute(s)
6. FACE-TO-FACE _____ hour(s) _____minute(s)
7. READING NEWS ONLINE _____ hour(s) _____minute(s)
8. EMAIL _____ hour(s) _____minute(s)
9. BLOGGING _____ hour(s) _____minute(s)
10. ONLINE VIDEO _____ hour(s) _____ minute(s)
11. INSTANT MESSAGING _____ hour(s) _____minute(s)
12. PODCATING\MP3 _____ hour(s) _____minute(s)

LOCAL NEWS

1. NEWSPAPER _____ hour(s) _____ minute(s)
2. MAGAZINE _____ hour(s) _____ minute(s)
3. TV _____ hour(s) _____ minute(s)
4. RADIO _____ hour(s) _____ minute(s)
5. MOBILE PHONE _____ hour(s) _____ minute(s)
6. FACE-TO-FACE _____ hour(s) _____minute(s)
7. READING NEWS ONLINE _____ hour(s) _____minute(s)
8. EMAIL _____ hour(s) _____minute(s)
9. BLOGGING _____ hour(s) _____minute(s)
10. ONLINE VIDEO _____ hour(s) _____ minute(s)

11. INSTANT MESSAGING _____ hour(s) _____minute(s)
12. PODCATING\MP3 _____ hour(s) _____minute(s)

MEDICAL OR HEALTH INFORMATION

1. NEWSPAPER _____ hour(s) _____ minute(s)
2. MAGAZINE _____ hour(s) _____ minute(s)
3. TV _____ hour(s) _____ minute(s)
4. RADIO _____ hour(s) _____ minute(s)
5. MOBILE PHONE _____ hour(s) _____ minute(s)
6. FACE-TO-FACE _____ hour(s) _____minute(s)
7. READING NEWS ONLINE _____ hour(s) _____minute(s)
8. EMAIL _____ hour(s) _____minute(s)
9. BLOGGING _____ hour(s) _____minute(s)
10. ONLINE VIDEO _____ hour(s) _____ minute(s)
11. INSTANT MESSAGING _____ hour(s) _____minute(s)
12. PODCATING\MP3 _____ hour(s) _____minute(s)

NUTRITION/FOOD

1. NEWSPAPER _____ hour(s) _____ minute(s)
2. MAGAZINE _____ hour(s) _____ minute(s)
3. TV _____ hour(s) _____ minute(s)
4. RADIO _____ hour(s) _____ minute(s)
5. MOBILE PHONE _____ hour(s) _____ minute(s)
6. FACE-TO-FACE _____ hour(s) _____minute(s)
7. READING NEWS ONLINE _____ hour(s) _____minute(s)
8. EMAIL _____ hour(s) _____minute(s)
9. BLOGGING _____ hour(s) _____minute(s)
10. ONLINE VIDEO _____ hour(s) _____ minute(s)
11. INSTANT MESSAGING _____ hour(s) _____minute(s)
12. PODCATING\MP3 _____ hour(s) _____minute(s)

FINANCIAL INFORMATION

1. NEWSPAPER _____ hour(s) _____ minute(s)
2. MAGAZINE _____ hour(s) _____ minute(s)
3. TV _____ hour(s) _____ minute(s)
4. RADIO _____ hour(s) _____ minute(s)
5. MOBILE PHONE _____ hour(s) _____ minute(s)
6. FACE-TO-FACE _____ hour(s) _____minute(s)
7. READING NEWS ONLINE _____ hour(s) _____minute(s)
8. EMAIL _____ hour(s) _____minute(s)
9. BLOGGING _____ hour(s) _____minute(s)
10. ONLINE VIDEO _____ hour(s) _____ minute(s)
11. INSTANT MESSAGING _____ hour(s) _____minute(s)
12. PODCATING\MP3 _____ hour(s) _____minute(s)

SPORTS

1. NEWSPAPER _____ hour(s) _____ minute(s)

2. MAGAZINE _____ hour(s) _____ minute(s)
3. TV _____ hour(s) _____ minute(s)
4. RADIO _____ hour(s) _____ minute(s)
5. MOBILE PHONE _____ hour(s) _____ minute(s)
6. FACE-TO-FACE _____ hour(s) _____minute(s)
7. READING NEWS ONLINE _____ hour(s) _____minute(s)
8. EMAIL _____ hour(s) _____minute(s)
9. BLOGGING _____ hour(s) _____minute(s)
10. ONLINE VIDEO _____ hour(s) _____ minute(s)
11. INSTANT MESSAGING _____ hour(s) _____minute(s)
12. PODCATING\MP3 _____ hour(s) _____minute(s)

ENTERTAINMENT

1. NEWSPAPER _____ hour(s) _____ minute(s)
2. MAGAZINE _____ hour(s) _____ minute(s)
3. TV _____ hour(s) _____ minute(s)
4. RADIO _____ hour(s) _____ minute(s)
5. MOBILE PHONE _____ hour(s) _____ minute(s)
6. FACE-TO-FACE _____ hour(s) _____minute(s)
7. READING NEWS ONLINE _____ hour(s) _____minute(s)
8. EMAIL _____ hour(s) _____minute(s)
9. BLOGGING _____ hour(s) _____minute(s)
10. ONLINE VIDEO _____ hour(s) _____ minute(s)
11. INSTANT MESSAGING _____ hour(s) _____minute(s)
12. PODCATING\MP3 _____ hour(s) _____minute(s)

Continue to next page

Part III. Demographic Questions

1. Please indicate your age: _____

2. Please indicate your gender:
___ 1. Male
___ 2. Female

3. Please indicate you ethnicity:
___ 1. African American/Black
___ 2. Asian/Asian American/Pacific Islander
___ 3. Caucasian
___ 4. Latino/Hispanic
___ 5. Multiracial
___ 6. Native American/American Indian
___ 7. Other

4. What was the range of your total family income last year? _____

Thank you for your participation.

Appendix B: Korean Survey Questionnaire

본 설문조사는 미국 뉴욕주립대학교 (State University of New York at Buffalo) 커뮤니케이션학과 박사과정에 있는 이현주의 학술적 목적을 위해 시행하는 설문조사입니다. 본 조사는 익명으로 진행되며 조사결과는 학술논문의 자료로만 사용될 뿐 그외 다른 목적으로 결코 사용되지 않음을 명확히 밝힙니다. 따라서 설문지에 이름이나 귀하의 신분을 알 수 있는 어떠한 정보도 기입하지 말아 주십시오. 본 설문조사와 관련해 의문사항이 있으시면 다음의 주소로 이메일을 주시면 즉시 답변을 해드리겠습니다.

이현주 (hyunjoolee69@gmail.com)

Part I. 갈릴레오 서베이

지시사항: 아래의 질문에서 귀하께서는 귀하가 **관심을 기울이는 정보 토픽**과 그 **정보 토픽을 찾기 위해 이용하는 미디어**에 관해 쌍으로 이루어진 일련의 목록을 보실 것입니다. 귀하께서는 쌍으로 이루어진 단어의 한 쪽이 다른 한쪽의 단어와 얼마나 다르다고 생각하는지 아니면 얼마나 멀리 떨어져 있다고 생각하는지를 수치로 표시해 주십시오. 두 단어간에 차이가 크다고 생각할수록 큰 수치를 적어 넣어 주시고, 두 단어 사이에 어떠한 차이도 없다고 생각하시면 0 으로 표시해 주십시오.

예를 들어, 차이의 기준선으로 다음의 문구를 생각하십시오.

국외 뉴스와 국내 뉴스는 100 단위에 떨어져 위치해 있다.

국외 뉴스와 국내 뉴스 사이에 2 배의 차이가 있다면 200 을, 국외 뉴스가 국내 뉴스의 1/2 이면 50 을 적어 주십시오. 적어 넣을 수치는 제한이 없습니다.

국외 뉴스와 국내 뉴스는 100 단위에 떨어져 위치해 있다.

0102	국외 뉴스	그리고	국내 뉴스	_____
0103	국외 뉴스	그리고	지방 뉴스	_____
0104	국외 뉴스	그리고	과학\기술	_____
0105	국외 뉴스	그리고	의료\건강 정보	_____
0106	국외 뉴스	그리고	영양\음식	_____
0107	국외 뉴스	그리고	경제 정보	_____
0108	국외 뉴스	그리고	스포츠	_____
0109	국외 뉴스	그리고	연예\오락	_____

국외 뉴스와 국내 뉴스는 100 단위에 떨어져 위치해 있다.

0110	국외 뉴스	그리고	종이신문	
0111	국외 뉴스	그리고	잡지	_____
0112	국외 뉴스	그리고	TV	_____
0113	국외 뉴스	그리고	라디오	_____
0114	국외 뉴스	그리고	면대면 커뮤니케이션	_____
0115	국외 뉴스	그리고	핸드폰	_____
0116	국외 뉴스	그리고	인터넷에서 뉴스 읽기	_____
0117	국외 뉴스	그리고	이메일	_____

국외 뉴스와 국내 뉴스는 100 단위에 떨어져 위치해 있다.

0118	국외 뉴스	그리고	블로그 (읽기, 쓰기 포함)	_____

0119	국외 뉴스	그리고	온라인 비디오 (UCC 포함)
0120	국외 뉴스	그리고	인스턴트 메시지\채팅
0121	국외 뉴스	그리고	MP3 (IPOD, 옙, 아이리버)
0122	국외 뉴스	그리고	내 자신
0203	국내 뉴스	그리고	지역 뉴스
0204	국내 뉴스	그리고	과학\기술
0205	국내 뉴스	그리고	의료\건강 정보

국외 뉴스와 국내 뉴스는 100 단위에 떨어져 위치해 있다.

0206	국내 뉴스	그리고	영양\음식
0207	국내 뉴스	그리고	경제 정보
0208	국내 뉴스	그리고	스포츠
0209	국내 뉴스	그리고	연예\오락
0210	국내 뉴스	그리고	종이신문
0211	국내 뉴스	그리고	잡지
0212	국내 뉴스	그리고	TV
0213	국내 뉴스	그리고	라디오

국외 뉴스와 국내 뉴스는 100 단위에 떨어져 위치해 있다.

0214	국내 뉴스	그리고	면대면 커뮤니이션
0215	국내 뉴스	그리고	핸드폰
0216	국내 뉴스	그리고	인터넷에서 뉴스 읽기
0217	국내 뉴스	그리고	이메일
0218	국내 뉴스	그리고	블로그 (읽기, 쓰기 포함)
0219	국내 뉴스	그리고	온라인 비디오 (UCC 포함)
0220	국내 뉴스	그리고	인스턴트 메시지\채팅
0221	국내 뉴스	그리고	MP3 (IPOD, 옙, 아이리버)

국외 뉴스와 국내 뉴스는 100 단위에 떨어져 위치해 있다.

0222	국내 뉴스	그리고	내 자신
0304	지역 뉴스	그리고	과학\기술
0305	지역 뉴스	그리고	의료\건강 정보
0306	지역 뉴스	그리고	영양\음식
0307	지역 뉴스	그리고	경제 정보
0308	지역 뉴스	그리고	스포츠
0309	지역 뉴스	그리고	연예\오락
0310	지역 뉴스	그리고	신문

국외 뉴스와 국내 뉴스는 100 단위에 떨어져 위치해 있다.

0311	지역 뉴스	그리고	잡지
0312	지역 뉴스	그리고	TV
0313	지역 뉴스	그리고	라디오
0314	지역 뉴스	그리고	면대면 커뮤니케이션
0315	지역 뉴스	그리고	핸드폰
0316	지역 뉴스	그리고	인터넷에서 뉴스 읽기
0317	지역 뉴스	그리고	이메일

0318 지역 뉴스 그리고 블로그 (읽기, 쓰기 포함) _____

국외 뉴스와 국내 뉴스는 100 단위에 떨어져 위치해 있다.

0319 지역 뉴스 그리고 온라인 비디오 (UCC 포함) _____
0320 지역 뉴스 그리고 인스턴트 메시지\채팅 _____
0321 지역 뉴스 그리고 MP3 (IPOD, 엡, 아이리버) _____
0322 지역 뉴스 그리고 내 자신 _____
0405 과학\기술 그리고 의료\건강 정보 _____
0406 과학\기술 그리고 영양\음식 _____
0407 과학\기술 그리고 경제 정보 _____
0408 과학\기술 그리고 스포츠 _____

국외 뉴스와 국내 뉴스는 100 단위에 떨어져 위치해 있다.

0409 과학\기술 그리고 연예\오락
0410 과학\기술 그리고 종이신문 _____
0411 과학\기술 그리고 잡지 _____
0412 과학\기술 그리고 TV _____
0413 과학\기술 그리고 라디오 _____
0414 과학\기술 그리고 면대면 커뮤니케이션 _____
0415 과학\기술 그리고 핸드폰 _____
0416 과학\기술 그리고 인터넷에서 뉴스 읽기 _____

국외 뉴스와 국내 뉴스는 100 단위에 떨어져 위치해 있다.

0417 과학\기술 그리고 이메일
0418 과학\기술 그리고 블로그 (읽기, 쓰기 포함) _____
0419 과학\기술 그리고 온라인 비디오 (UCC 포함) _____
0420 과학\기술 그리고 인스턴트 메시지\채팅 _____
0421 과학\기술 그리고 MP3 (IPOD, 엡, 아이리버) _____
0422 과학\기술 그리고 내 자신 _____
0506 의료\건강 정보 그리고 영양\음식 _____
0507 의료\건강 정보 그리고 경제 정보 _____

국외 뉴스와 국내 뉴스는 100 단위에 떨어져 위치해 있다.

0508 의료\건강 정보 그리고 스포츠 _____
0509 의료\건강 정보 그리고 연예\오락 _____
0510 의료\건강 정보 그리고 종이신문 _____
0511 의료\건강 정보 그리고 잡지 _____
0512 의료\건강 정보 그리고 TV _____
0513 의료\건강 정보 그리고 라디오 _____
0514 의료\건강 정보 그리고 면대면 커뮤니케이션 _____
0515 의료\건강 정보 그리고 핸드폰 _____

국외 뉴스와 국내 뉴스는 100 단위에 떨어져 위치해 있다.

0516 의료\건강 정보 그리고 인터넷에서 뉴스 읽기
0517 의료\건강 정보 그리고 이메일 _____

0518 의료\건강 정보 그리고 블로그 (읽기, 쓰기 포함) _____
0519 의료\건강 정보 그리고 온라인 비디오 (UCC 포함) _____
0520 의료\건강 정보 그리고 인스턴트 메시지\채팅 _____
0521 의료\건강 정보 그리고 MP3 (IPOD, 옙, 아이리버) _____
0522 의료\건강 정보 그리고 내 자신 _____
0607 영양\음식 그리고 경제 정보 _____

국외 뉴스와 국내 뉴스는 100 단위에 떨어져 위치해 있다.

0608 영양\음식 그리고 스포츠 _____
0609 영양\음식 그리고 연예\오락 _____
0610 영양\음식 그리고 신문 _____
0611 영양\음식 그리고 잡지 _____
0612 영양\음식 그리고 TV _____
0613 영양\음식 그리고 라디오 _____
0614 영양\음식 그리고 면대면 커뮤니케이션 _____
0615 영양\음식 그리고 핸드폰 _____

국외 뉴스와 국내 뉴스는 100 단위에 떨어져 위치해 있다.

0616 영양\음식 그리고 인터넷에서 뉴스 읽기 _____
0617 영양\음식 그리고 이메일 _____
0618 영양\음식 그리고 블로그 (읽기, 쓰기 포함) _____
0619 영양\음식 그리고 온라인 비디오 (UCC 포함) _____
0620 영양\음식 그리고 인스턴트 메시지\채팅 _____
0621 영양\음식 그리고 MP3 (IPOD, 옙, 아이리버) _____
0622 영양\음식 그리고 내 자신 _____
0708 경제 정보 그리고 스포츠 _____

국외 뉴스와 국내 뉴스는 100 단위에 떨어져 위치해 있다.

0709 경제 정보 그리고 연예\오락 _____
0710 경제 정보 그리고 종이신문 _____
0711 경제 정보 그리고 잡지 _____
0712 경제 정보 그리고 TV _____
0713 경제 정보 그리고 라디오 _____
0714 경제 정보 그리고 면대면 커뮤니케이션 _____
0715 경제 정보 그리고 핸드폰 _____
0716 경제 정보 그리고 인터넷에서 뉴스 읽기 _____

국외 뉴스와 국내 뉴스는 100 단위에 떨어져 위치해 있다.

0717 경제 정보 그리고 이메일 _____
0718 경제 정보 그리고 블로그 (읽기, 쓰기 포함) _____
0719 경제 정보 그리고 온라인 비디오 (UCC 포함) _____
0720 경제 정보 그리고 인스턴트 메시지\채팅 _____
0721 경제 정보 그리고 MP3 (IPOD, 옙, 아이리버) _____
0722 경제 정보 그리고 내 자신 _____
0809 스포츠 그리고 연예\오락 _____
0810 스포츠 그리고 종이신문 _____

국외 뉴스와 국내 뉴스는 100 단위에 떨어져 위치해 있다.

0811	스포츠	그리고	잡지
0812	스포츠	그리고	TV
0813	스포츠	그리고	라디오
0814	스포츠	그리고	면대면 커뮤니케이션
0815	스포츠	그리고	핸드폰
0816	스포츠	그리고	인터넷에서 뉴스 읽기
0817	스포츠	그리고	이메일
0818	스포츠	그리고	블로그 (읽기, 쓰기 포함)

국외 뉴스와 국내 뉴스는 100 단위에 떨어져 위치해 있다.

0819	스포츠	그리고	온라인 비디오 (UCC 포함)
0820	스포츠	그리고	인스턴트 메시지\채팅
0821	스포츠	그리고	MP3 (IPOD, 엡, 아이리버)
0822	스포츠	그리고	내 자신
0910	연예\오락	그리고	신문
0911	연예\오락	그리고	잡지
0912	연예\오락	그리고	TV
0913	연예\오락	그리고	라디오

국외 뉴스와 국내 뉴스는 100 단위에 떨어져 위치해 있다.

0914	연예\오락	그리고	면대면 커뮤니케이션
0915	연예\오락	그리고	핸드폰
0916	연예\오락	그리고	인터넷에서 뉴스 읽기
0917	연예\오락	그리고	이메일
0918	연예\오락	그리고	블로그 (읽기, 쓰기 포함)
0919	연예\오락	그리고	온라인 비디오 (UCC 포함)
0920	연예\오락	그리고	인스턴트 메시지\채팅
0921	연예\오락	그리고	MP3 (IPOD, 엡, 아이리버)

국외 뉴스와 국내 뉴스는 100 단위에 떨어져 위치해 있다.

0922	연예\오락	그리고	내 자신
1011	종이신문	그리고	잡지
1012	종이신문	그리고	TV
1013	종이신문	그리고	라디오
1014	종이신문	그리고	면대면 커뮤니케이션
1015	종이신문	그리고	핸드폰
1016	종이신문	그리고	인터넷에서 뉴스 읽기
1017	종이신문	그리고	이메일

국외 뉴스와 국내 뉴스는 100 단위에 떨어져 위치해 있다.

1018	종이신문	그리고	블로그 (읽기, 쓰기 포함)
1019	종이신문	그리고	온라인 비디오 (UCC 포함)
1020	종이신문	그리고	인스턴트 메시지\채팅

1021	종이신문	그리고	MP3 (IPOD, 옙, 아이리버)
1022	종이신문	그리고	내 자신
1112	잡지	그리고	TV
1113	잡지	그리고	라디오
1114	잡지	그리고	면대면 커뮤니케이션

국외 뉴스와 국내 뉴스는 100 단위에 떨어져 위치해 있다.

1115	잡지	그리고	핸드폰
1116	잡지	그리고	인터넷에서 뉴스 읽기
1117	잡지	그리고	이메일
1118	잡지	그리고	블로그 (읽기, 쓰기 포함)
1119	잡지	그리고	온라인 비디오 (UCC 포함)
1120	잡지	그리고	인스턴트 메시지\채팅
1121	잡지	그리고	MP3 (IPOD, 옙, 아이리버)
1122	잡지	그리고	내 자신

국외 뉴스와 국내 뉴스는 100 단위에 떨어져 위치해 있다.

1213	TV	그리고	라디오
1214	TV	그리고	면대면 커뮤니케이션
1215	TV	그리고	핸드폰
1216	TV	그리고	인터넷에서 뉴스 읽기
1217	TV	그리고	이메일
1218	TV	그리고	블로그(읽기, 쓰기 포함)
1219	TV	그리고	온라인 비디오 (UCC 포함)
1220	TV	그리고	인스턴트 메시지\채팅

국외 뉴스와 국내 뉴스는 100 단위에 떨어져 위치해 있다.

1221	TV	그리고	MP3 (IPOD, 옙, 아이리버)
1222	TV	그리고	내 자신
1314	라디오	그리고	면대면 커뮤니케이션
1315	라디오	그리고	핸드폰
1316	라디오	그리고	인터넷에서 뉴스 읽기
1317	라디오	그리고	이메일
1318	라디오	그리고	블로그 (읽기, 쓰기 포함)
1319	라디오	그리고	온라인 비디오 (UCC 포함)

국외 뉴스와 국내 뉴스는 100 단위에 떨어져 위치해 있다.

1320	라디오	그리고	인스턴트 메시지\채팅
1321	라디오	그리고	MP3 (IPOD, 옙, 아이리버)
1322	라디오	그리고	내 자신
1415	면대면 커뮤니케이션	그리고	핸드폰
1416	면대면 커뮤니케이션	그리고	인터넷에서 뉴스 읽기
1417	면대면 커뮤니케이션	그리고	이메일
1418	면대면 커뮤니케이션	그리고	블로그 (읽기, 쓰기 포함)
1419	면대면 커뮤니케이션	그리고	온라인 비디오 (UCC 포함)

국외 뉴스와 국내 뉴스는 100 단위에 떨어져 위치해 있다.

1420	면대면 커뮤니케이션	그리고	인스턴트 메시지\채팅
1421	면대면 커뮤니케이션	그리고	MP3 (IPOD, 옙, 아이리버)
1422	면대면 커뮤니케이션	그리고	내 자신
1516	핸드폰	그리고	인터넷에서 뉴스 읽기
1517	핸드폰	그리고	이메일
1518	핸드폰	그리고	블로그 (읽기, 쓰기 포함)
1519	핸드폰	그리고	온라인 비디오 (UCC 포함)
1520	핸드폰	그리고	인스턴트 메시지\채팅

국외 뉴스와 국내 뉴스는 100 단위에 떨어져 위치해 있다.

1521	핸드폰	그리고	MP3 (IPOD, 옙, 아이리버)
1522	핸드폰	그리고	내 자신
1617	인터넷에서 뉴스 읽기	그리고	이메일
1618	인터넷에서 뉴스 읽기	그리고	블로그 (읽기, 쓰기 포함)
1619	인터넷에서 뉴스 읽기	그리고	온라인 비디오 (UCC 포함)
1620	인터넷에서 뉴스 읽기	그리고	인스턴트 메시지\채팅
1621	인터넷에서 뉴스 읽기	그리고	MP3 (IPOD, 옙, 아이리버)
1622	인터넷에서 뉴스 읽기	그리고	내 자신

국외 뉴스와 국내 뉴스는 100 단위에 떨어져 위치해 있다.

1718	이메일	그리고	블로그 (읽기, 쓰기 포함)
1719	이메일	그리고	온라인 비디오 (UCC 포함)
1720	이메일	그리고	인스턴트 메시지\채팅
1721	이메일	그리고	MP3 (IPOD, 옙, 아이리버)
1722	이메일	그리고	내 자신
1819	블로그 (읽기, 쓰기 포함)	그리고	온라인 비디오 (UCC 포함)
1820	블로그 (읽기, 쓰기 포함)	그리고	인스턴트 메시지\채팅
1821	블로그 (읽기, 쓰기 포함)	그리고	MP3 (IPOD, 옙, 아이리버)

국외 뉴스와 국내 뉴스는 100 단위에 떨어져 위치해 있다.

1822	블로그 (읽기, 쓰기 포함)	그리고	내 자신
1920	온라인 비디오 (UCC 포함)	그리고	인스턴트 메시지\채팅
1921	온라인 비디오 (UCC 포함)	그리고	MP3 (IPOD, 옙, 아이리버)
1922	온라인 비디오 (UCC 포함)	그리고	내 자신
2021	인스턴트 메시지\채팅	그리고	MP3 (IPOD, 옙, 아이리버)
2022	인스턴트 메시지\채팅	그리고	내 자신
2122	MP3 (IPOD, 옙, 아이리버)	그리고	내 자신

Part II 정보소스로서 미디어 이용 시간

지시사항: 아래의 질문에서 귀하가 **일주일**에 관심을 기울이는 정보 토픽을 찾기 위해 이용하는 **특정 미디어의 이용 시간**을 응답해주십시오. 전혀 이용하지 않는다면 0 을 기입해 주십시오.

국외 뉴스

13. 종이신문 _____ 시간 _____ 분
14. 잡지 _____ 시간 _____ 분
15. TV _____ 시간 _____ 분
16. 라디오 _____ 시간 _____ 분
17. 핸드폰 _____ 시간 _____ 분
18. 면대면 커뮤니케이션 _____ 시간 _____ 분
19. 인터넷에서 뉴스 읽기 _____ 시간 _____ 분
20. 이메일 _____ 시간 _____ 분
21. 블로그 _____ 시간 _____ 분
22. 온라인 비디오 _____ 시간 _____ 분
23. 인스턴트 메시지/채팅 _____ 시간 _____ 분
24. MP3(IPOD, 엡, 아이리버) _____ 시간 _____ 분

국내 뉴스

1. 종이신문 _____ 시간 _____ 분
2. 잡지 _____ 시간 _____ 분
3. TV _____ 시간 _____ 분
4. 라디오 _____ 시간 _____ 분
5. 핸드폰 _____ 시간 _____ 분
6. 면대면 커뮤니케이션 _____ 시간 _____ 분
7. 인터넷에서 뉴스 읽기 _____ 시간 _____ 분
8. 이메일 _____ 시간 _____ 분
9. 블로그 _____ 시간 _____ 분
10. 온라인 비디오 _____ 시간 _____ 분
11. 인스턴트 메시지/채팅 _____ 시간 _____ 분
12. MP3(IPOD, 엡, 아이리버) _____ 시간 _____ 분

지역 뉴스

1. 종이신문 _____ 시간 _____ 분
2. 잡지 _____ 시간 _____ 분
3. TV _____ 시간 _____ 분
4. 라디오 _____ 시간 _____ 분
5. 핸드폰 _____ 시간 _____ 분
6. 면대면 커뮤니케이션 _____ 시간 _____ 분
7. 인터넷에서 뉴스 읽기 _____ 시간 _____ 분
8. 이메일 _____ 시간 _____ 분
9. 블로그 _____ 시간 _____ 분

10. 온라인 비디오 _____ 시간 _____ 분
11. 인스턴트 메시지/채팅 _____ 시간 _____ 분
12. MP3(IPOD, 옙, 아이리버) _____ 시간 _____ 분

과학/기술

1. 종이신문 _____ 시간 _____ 분
2. 잡지 _____ 시간 _____ 분
3. TV _____ 시간 _____ 분
4. 라디오 _____ 시간 _____ 분
5. 핸드폰 _____ 시간 _____ 분
6. 면대면 커뮤니케이션 _____ 시간 _____ 분
7. 인터넷에서 뉴스 읽기 _____ 시간 _____ 분
8. 이메일 _____ 시간 _____ 분
9. 블로그 _____ 시간 _____ 분
10. 온라인 비디오 _____ 시간 _____ 분
11. 인스턴트 메시지/채팅 _____ 시간 _____ 분
12. MP3(IPOD, 옙, 아이리버) _____ 시간 _____ 분

의료/건강 정보

1. 종이신문 _____ 시간 _____ 분
2. 잡지 _____ 시간 _____ 분
3. TV _____ 시간 _____ 분
4. 라디오 _____ 시간 _____ 분
5. 핸드폰 _____ 시간 _____ 분
6. 면대면 커뮤니케이션 _____ 시간 _____ 분
7. 인터넷에서 뉴스 읽기 _____ 시간 _____ 분
8. 이메일 _____ 시간 _____ 분
9. 블로그 _____ 시간 _____ 분
10. 온라인 비디오 _____ 시간 _____ 분
11. 인스턴트 메시지/채팅 _____ 시간 _____ 분
12. MP3(IPOD, 옙, 아이리버) _____ 시간 _____ 분

영양/음식

1. 종이신문 _____ 시간 _____ 분
2. 잡지 _____ 시간 _____ 분
3. TV _____ 시간 _____ 분
4. 라디오 _____ 시간 _____ 분
5. 핸드폰 _____ 시간 _____ 분
6. 면대면 커뮤니케이션 _____ 시간 _____ 분
7. 인터넷에서 뉴스 읽기 _____ 시간 _____ 분
8. 이메일 _____ 시간 _____ 분
9. 블로그 _____ 시간 _____ 분
10. 온라인 비디오 _____ 시간 _____ 분
11. 인스턴트 메시지/채팅 _____ 시간 _____ 분

12. MP3(IPOD, 옙, 아이리버) _____ 시간 _____ 분

경제 정보

1. 종이신문 _____ 시간 _____ 분
2. 잡지 _____ 시간 _____ 분
3. TV _____ 시간 _____ 분
4. 라디오 _____ 시간 _____ 분
5. 핸드폰 _____ 시간 _____ 분
6. 면대면 커뮤니케이션 _____ 시간 _____ 분
7. 인터넷에서 뉴스 읽기 _____ 시간 _____ 분
8. 이메일 _____ 시간 _____ 분
9. 블로그 _____ 시간 _____ 분
10. 온라인 비디오 _____ 시간 _____ 분
11. 인스턴트 메시지/채팅 _____ 시간 _____ 분
12. MP3(IPOD, 옙, 아이리버) _____ 시간 _____ 분

스포츠

1. 종이신문 _____ 시간 _____ 분
2. 잡지 _____ 시간 _____ 분
3. TV _____ 시간 _____ 분
4. 라디오 _____ 시간 _____ 분
5. 핸드폰 _____ 시간 _____ 분
6. 면대면 커뮤니케이션 _____ 시간 _____ 분
7. 인터넷에서 뉴스 읽기 _____ 시간 _____ 분
8. 이메일 _____ 시간 _____ 분
9. 블로그 _____ 시간 _____ 분
10. 온라인 비디오 _____ 시간 _____ 분
11. 인스턴트 메시지/채팅 _____ 시간 _____ 분
12. MP3(IPOD, 옙, 아이리버) _____ 시간 _____ 분

연예/오락

1. 종이신문 _____ 시간 _____ 분
2. 잡지 _____ 시간 _____ 분
3. TV _____ 시간 _____ 분
4. 라디오 _____ 시간 _____ 분
5. 핸드폰 _____ 시간 _____ 분
6. 면대면 커뮤니케이션 _____ 시간 _____ 분
7. 인터넷에서 뉴스 읽기 _____ 시간 _____ 분
8. 이메일 _____ 시간 _____ 분
9. 블로그 _____ 시간 _____ 분
10. 온라인 비디오 _____ 시간 _____ 분
11. 인스턴트 메시지/채팅 _____ 시간 _____ 분
12. MP3(IPOD, 옙, 아이리버) _____ 시간 _____ 분

Part III 기초 정보

1. 귀하의 성별은?
    a. 남자
    b. 여자
2. 귀하의 연령은? _____세
3. 지난해 귀하 **가정의 연수입**은 대략 얼마정도입니까? _____ 만원

협조해 주셔서 대단히 감사합니다.