Antioch University

2012

Exploring the Role of Identity Development in Social Networking Web Pages

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Submitted in partial fulfillment of the requirements for the degree
of Doctor of Psychology in the Department of Clinical Psychology
of Antioch University New England, 2012

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EXPLORING THE ROLE OF IDENTITY DEVELOPMENT IN SOCIAL
NETWORKING WEB PAGES

presented on April 16, 2012

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Dedication

For my dad, Dr. John Stahl. Without his support, in every imaginable way, this would not have been possible

Acknowledgements

First and foremost, a large thank you is owed to my dissertation chair, Dr. Ted Ellenhorn.

Throughout my time at Antioch, his patience and encouragement as allowed me to grow as a

student, clinician, and person.

Dr. Susan Hawes and Dr. Jim Graves deserve my eternal gratitude for working with me through

this dissertation process. Their expertise and insight has been invaluable throughout this process

and they are greatly valued for their time and assistance.

I am deeply appreciative for my family, whose support and nagging has dragged me through this

process. The time they (namely Mom) dedicated to helping me complete my dissertation has not

gone unnoticed.

And words cannot describe my gratitude for my tablemate, Matty, who's eternal optimism has

kept me energized and enthusiastic.

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Abstract

This study investigates young adults' social networking web pages for aspects related to identity development. The study is primarily based on the theory of identity development presented by Berzonsky (1997). Raters assessed selected web pages for characteristics associated with different styles of identity development. A principal component analysis was used to determine that there are three components that relate to identity development that are manifested in the web pages. It was established that there were three main components that described aspects of identity within the social networking pages. These components were determined to be a "Self Focused Type," an "Inconsistent Type" and a "Withholding Type." Though these components were statistically distinct, the items included in each component were not the items that were hypothesized to be correlated. Implications of the results are discussed.

Keywords: social networking; identity development; young adulthood; webpages

Exploring the Role of Identity Development

in Social Networking Web Pages

Access and use of the Internet has now become a normal and regular activity for the majority of adolescents and young adults. This study investigated the aspects of identity development that are exhibited through the Internet use of young adults. More specifically, it is believed that the way in which an individual creates a social networking profile page is indicative of the manner in which he or she is engaging in the process of identity development. This study analyzed social networking pages in a systematic way to assess for aspects of the identity development process.

Introduction

Advances in Internet technology are changing the way people grow and develop more than ever before. A study conducted by the National Center for Education Statistics (2003) reported that 90% of children between the ages of 5-17 use computers on a regular basis. Furthermore, 75% of adolescents between the ages of 15-17 regularly access the Internet. While the Internet can be used for an array of different tasks, from doing research for school to playing online games, the majority of teenagers use the Internet to keep in touch with their peers. The Internet has provided a forum for everyone from adolescents to adults to interact with others and engage in self-presentation in a variety of ways. The most prominent of these being social networking sites, such as Friendster, Facebook, and MySpace. By investigating these sites, researchers may be able to gain important information not only on an individual's sense of identity, but how one is going about developing it. This study systematically investigated the social networking site MySpace to gain a greater understanding of how identity development is displayed on these web pages.

During normative development, adolescents begin to have a heightened interest in their peer group and the desire to build friendships with others. Using these social networking sites allows adolescents to engage in communication with peers when not in physical contact. In order to engage with their friends in this virtual world, they are first asked to define themselves through the creation of a personal homepage. The process of virtual editing can be seen throughout the adolescent stage as they begin to enter into young adulthood.

At the same time, these sites provide a forum for adolescents to express themselves through the information that they choose to present on the page. They can list interests, goals, artwork, music, and photographs, and then align with groups that share the same hobbies. Adolescents are led to define themselves through the manner in which they create a page. Through interacting with peers and choosing what to disclose or post on their homepages, users have a distinct way to express their own personal identity.

Identity is not always a permanent thing. Many people engage in different trends and activities in an effort to decide who they really are. If social networking sites allow the creation of a profile to convey a message and users are in the process of trying to understand their sense of self, then studying these sites might help one gain insight into the process of identity development.

Conceptual Framework

This project is rooted in a developmental perspective of identity formation. Erikson (1963) stated that the primary purpose of adolescence is to create a sense of identity. Marcia (1980) later expanded on Erikson's idea of identity development, creating a two-dimensional assessment for the development process to account for the level of exploration and commitment. The way in which individuals begin to create an understanding of who they are in the world has implications for how they present themselves in both the physical and virtual world.

Identity Theory

During adolescence, biological and social developments occur within an individual that produces the ability and desire to begin engaging in creating an identity. Erikson (1963) proposed that the primary concern of the adolescent stage is creating an identity, or an understanding of who one is within the world. With the sense of identity and individuality comes a need for autonomy, as adolescents begin to establish a life for themselves outside of their family of origin (Muuss, 1996). During adolescence, teenagers experience a great deal of physical and intellectual growth. While their bodies begin to mature, their brains also develop greater capacity for reflection and thought. In particular, growth in the prefrontal cortex allows for a greater range of executive functioning. Teenagers are capable of more abstract reasoning and are now able to think about situations in the hypothetical. This also allows them to be more self-reflective and able to make objective assessments of themselves.

The newfound ability to think abstractly helps lead an adolescent to developing an identity. Identity is fostered by self-evaluation as well as comparison to others (Muuss, 1996). Through assessment of relationships, adolescents can begin to understand who they are by establishing who they are not. Adolescents also begin to form ideas about their own identity based on personal beliefs, as well as their peer group's values (Erikson, 1963). In order to form a healthy sense of identity, adolescents need time and room to explore both the self and the world (Erickson, 1963).

The Internet has provided an interesting new venue for this process to occur. Social networking sites are not only a virtual space for presentation of identity, but they also immediately connect users to others. Through using these sites, adolescents are able to connect with peers, make formal announcements of self, and reinforce that they belong to certain groups.

Identity Development

Erikson (1959) was one of the first theorists to assert that creating a sense of identity was a major task for youth during development. His framework of development stated that during each designated stage of development an individual encounters a crisis that must be faced and addressed. The success at conquering the crisis impacts the individual's ability to further confront and undertake crises in later stages of life. During adolescence, individuals are faced with the task of understanding their role in the world and then feeling assured and confident in what they have discovered. If they are successful at creating an understanding of themselves, they will be considered identity achieved. If they are unable to create an understanding of themselves, they enter identity confusion.

Marcia (1980) elaborated on the understanding of identity by classifying individuals based on whether they have explored possible identities and committed to one. Through years, he researched the concept of identity through conducting interviews with individuals on their experiences with identity development. He discovered that at the end of adolescence, it was not as simple as deciding whether the individual had an identity or was identity confused. General themes from his interviews concluded that some individuals would actively engage in the identity development process through exploration while others did not. Exploration involved actively seeking out information about the self, learning and understanding about personal worldviews, trying new things, and challenging assumptions that one tends to make about the world. It was also apparent that some individuals were reporting a strong sense of identity without having had this exploration experience. Marcia created a classification system to better describe the outcome of the adolescent crisis. The four classifications that Marcia created are: Diffuse, Foreclosed, Moratorium, and Identity Achieved. Those who have not explored possible identities and have not committed are considered identity Diffuse. Those who have not explored,

but have committed to a specific identity are considered Foreclosed. Those that have explored, but have yet to commit to an identity are considered to be in Moratorium. Those that have successfully explored themselves and committed to an identity that is their best fit are then considered Achieved.

While these theories do well to explain the status of identity development, Berzonsky (1997) postulated that there is more to the exploration process and that the process can vary from person to person. He created three basic styles that detail the approach that an adolescent can take during the exploration of identity: Informational, Normative, and Avoidant. Those that implement the Informational style actively seek out information about themselves through several sources. They use this information to create hypotheses about who they are and test them out while interacting with others. Individuals who use this approach tend to have higher cognitive functioning, an openness to those with differing views, as well as an openness to conflicting ideas about themselves. They work to incorporate these aspects into their overall sense of self. Bezonsky identified that individuals who use the Informational approach tended to, at the end of adolescence, be most closely linked with those who were Identity Achieved or in Moratorium from Marcia's perspective (Berzonsky, 1989).

The Normative style more heavily relies on input from important others in determining identity. Individuals who follow this style tend to be rigid in their concept of self and defend against information contrary to their self view. They will strongly align with beliefs or values that are endorsed by others. Acceptance and belonging tend to be the most important to those using the Normative style, and they will seek out approval from those that they feel hold power or importance to them. Information about themselves that does not fit the view or standards of these important others will likely be denied or ignored. This style is most closely related to

Marcia's understanding of those who were classified as Identity Foreclosed, as a great lack of exploration is evident (Berzonsky, 1989).

Finally, those that are not interested in engaging in the identity development process are considered to have an Avoidant style. These individuals tend to be reluctant to make decisions and are not future-oriented. They may cater to their current audience, but will alter their opinions to best suit their needs in the moment. There is often not a sense of internal standards. An unwillingness or inability to reflect on the self and process self-relevant information causes those that use the Avoidant style to delay exploration or decision making. They are likely not to act until it is clear what rewards for the self can come from their behaviors. Those that use the Avoidant Style tend to be most closely related to those that are Identity Diffuse by Marcia's standards (Berzonsky, 1989).

Though identity development tends to be the most prominent theme during adolescence, identity issues can occur at any point during the lifespan. Erikson first identified the importance of identity in later life stages, as his theory stated that the success at each stage of development will impact the success at the subsequent stages (Erikson, 1963). Therefore, if there is role confusion leaving adolescence, there may be problems for young adults trying to maintain intimate relationships (intimacy vs. isolation) with others or may make older adults unable to identify with their chosen profession acknowledge their achievements (generativity vs. stagnation). In each of the following stages of life, Marcia acknowledged that it is likely for individuals to engage in identity exploration again. Though one might leave adolescence with an achieved identity, later life events might prompt one to investigate the understanding of self (Marcia, 2002). These events are often major, unexpected life changes that challenge the current concept of self (i.e., a divorce, loss of job, death in the family), but can also merely be meeting major age milestones (mid-life crisis). While there may be what can be considered a regression

in behavior, one will typically engage in the exploration process in order progress past the event. Those that explored their identities during adolescents are more likely to continue to do so throughout life. Marcia identified what he called "MAMA cycles," a pattern in which one goes from moratorium to achievement to moratorium to achievement throughout their life in a process of gaining greater personal understanding.

Berzonsky also did not subscribe to the idea that identity is stagnant. He proposed that an identity is very similar to a "theory of self," where the individual, much like a scientist, must learn, hypothesize, and test the hypothesis to create a working understanding of who one is (Berzonsky, 1997). The approach that one takes, again, is not necessarily fixed. Each style of identity development is available to all adolescents at some point in development. There is some indication, however, that life experiences or situations make one style more likely to be used than another. Similar to Marcia's postulation that exploration can happen at any point in life, all of the identity development styles are able to be used, regardless of what styles have been used by the individual in the past.

While adolescents can employ any or all of these approaches during their identity development, those that engage in the Informational style tend to have the best overall well-being as young adults. A study conducted by Phillips and Pittman (2007) compared high school students' identity style to scores on various different measures of mental health and social well-being. This study's sample consisted of 93 adolescents who attended a summer camp in Kentucky, as well as 169 students from a high school in Alabama. The participants were administered the Identity Style Inventory Grade 6 Reading Level (ISI- 6G) survey, as well as the Rosenburg Self-Esteem Scale, Hopelessness Scale for Children, and Delinquent Attitude Scale. The subjects were also asked to answer two questions to capture their expectation for future educational attainment and their optimism for future success. The study first used the ISI- 6G to

classify the participants as a particular identity style. They then used t-tests to ascertain differences between identity style and each of the aforementioned measures. The results indicated that those who engage in the Informational and Normative styles tended to score better on all of the measures than those identified as Avoidant. The Normative style has been associated with mild forms of psychopathology, such as anxiety and depression. The Avoidant style adolescents tended to be less optimistic than their peers and, in turn, had lower self-esteem and a greater risk for delinquency. They would also most greatly benefit from therapeutic intervention (Phillips & Pittman, 2007).

If an individual employs a particular identity development style in the real world, it is highly likely that this will also apply to activities that one is engaging in on the Internet. Through understanding how the process of identity development is played out on social networking pages, mental health workers can learn important information about how the creators of these pages understand themselves and others. These insights can have implications for future treatment.

Identity Development Beyond Adolescence

Individuals tend to revisit the concept of self and identity throughout the remaining stages of their life. In late adolescence, individuals enter a new stage in life where the focus on self changes, along with their roles. The concept of emerging adulthood was created based on a change in the social patterns of adolescents. The time an individual spends as a youth has seemed to be increasing over the past 100 years. Since the industrial revolution, there has been movement away from working and employment for young adults (Furstenberg, 2000). More and more teenagers began to extend schooling to college or graduate level. In order to attend school, students began to put off major milestones of adulthood, such as marriage and childbearing. Breaking into the job market has also become more difficult, so some individuals have had difficulty creating a career. All of these markers of adulthood have now become staggered and

difficult to obtain (Furstenberg, 2000). Many young adults are left in limbo—feeling like they

are no longer children and not at the status of adults. This phenomenon has become known as

Emerging Adulthood (Arnett, 2000).

Emerging Adulthood is now used to describe the period in the lifespan between the ages

of 18-25. At this point in life, individuals are no longer dependent on their parents to meet their

daily needs. In fact, many enroll in college or move out of their parents' homes. While no longer

regulated by their parents' rules, these individuals also do not have the serious daily

responsibilities associated with adulthood. These factors allow emerging adults the freedom to

explore their identities in such areas as love, work, and worldview (Arnett, 2000). Though it can

be an exciting time marked with great personal growth, there is also a significant amount of

instability while the emerging adult gains mastery over these areas of life. Many individuals feel

as if they need to meet specific standards before they can consider themselves adults, such as

finding their own residence, completing their schooling, establishing a career, and getting

married. While some or all of these markers may be met, an individual might not consider him or

herself an adult. Generally, the status of adulthood is reached when the person feels self-

sufficient financially and interpersonally (Arnett, 2000).

It is during this time period when the Internet becomes extremely accessible. Many

young adults have more opportunities to use the Internet because they do not have parents or

teachers monitoring their use. They also have more free time to use these sites, as compared to

high school students and adults in the workforce. Emerging adults are still exploring self,

engaging in identity development, and relying on others as a social reference points.

Forums for Identity Development

Historically, identity development occurred in two places: within the peer group and on

one's own. The advent of the Internet has created a unique space that bridges both public and

private lives. The Internet offers a virtual space for an individual to be seen by peers and others while still providing the safety of physical distance (Livingstone, 2008). Social networking sites are also unique because they provide a record of the adolescents' development over time as illustrated through postings of photos, messages and comments.

Congruent with the growing importance of the peer group during adolescents, social networking sites revolve around others. In a study conducted on college undergraduates, Pempek, Yermolayeva, and Calvert (2009) discovered that the majority of users reported that the primary function of the site was to keep in contact with current friends. This study recruited 92 undergraduate students to participate in the study that used a diary measure, where the participants reported their Facebook usage for one week, including the times when they logged on and off, the activities in which they engaged in on the site and the purpose for engaging in these activities. Following that week, the researchers had the participants complete a survey to rate their perception of their usage for the week, as well as answer questions regarding how they view their use of the site. This study found that all of the users logged in daily for a minimum of 30 minutes. The participants typically would disseminate personal information about themselves to all of their friends at once. The participants also spent the majority of their time learning about others through their pages. In addition, when they would contact an individual on the site, they almost always had a pre-existing relationship with the person offline. Other studies have shown that college-aged users tended to use the social networking sites to reinforce existing relationships with those that they are not in physical contact with, rather than build new relationships or promote themselves (Zhao, Grasmuck, & Martin, 2008; Subrahmayan & Greenfield, 2008).

While the purpose of these social networking sites is to do just that, network with others, it does not alter the fact that users must create a virtual version of themselves to do so. In a study

of college-aged users, Manago, Graham, Greenfield, and Salimkhan (2008) discovered that there tended to be trends in the way in which individuals created their pages. This study recruited 23 undergraduate students to participate in a focus group with same sex peers and a same sex leader. The interviews lasted for an average of 90 minutes and were later analyzed for themes about self- presentation, self -presentation through relationships, and gender presentation. The discussion overall tended to focus on how the participants were greatly interested in the way in which others viewed them. For example, most users expressed the desire to be seen as popular (shown by the number of friends they have), well rounded (shown by the number of interests they have), and thoughtful (shown by the display of insightful commentary posted on the page). In a time when peer relationships are so important, these users attempted to display how connected they were through their pages. The most common representation of self was found to be the "hoped-for self." This is not necessarily an accurate reflection, but rather an idealized expression of a future self.

Peer relationships are also documented through interactions on these sites. The feedback that creators receive on their pages has been shown to have an impact on their vision of self. A study of Dutch teenagers has shown that positive feedback from others has a positive impact on self-esteem and overall well-being, while negative feedback had a negative impact (Valkenburg, Peter, & Schouten, 2006). The data from this study was collected through conducting an online survey of users of a popular Dutch social networking site. When the users signed into their accounts on the site, a pop-up message appeared. This pop-up invited them to participate in a survey that asked questions about their frequency of use, their perceptions of how others react to their profiles, the types of the relationships they have, as well as Harter's measure of self-esteem and a self-satisfaction measure. Analysis of the data indicated that those who received more positive feedback scored better on the measure of self-esteem and well-being. It is important to

note, however, that there was no objective measure of feedback and that the participants were reporting their perception of whether or not the feedback they were receiving was positive. This could indicate that individual interpretation mediates the impact of the feedback on their self-perception. The value that is put on other's opinions and the value that is put on one's own page can temper the reaction from feedback (Livingstone, 2008). Manago et al. (2008) found that "this ambiguous situation opens up a new space for those experiencing a period of identity exploration to cultivate ideal selves by trying them out in a virtual reality" (p. 454). Through this shared, but often intimate, space of social networking sites, the truth of who one is becomes less important. The process of experimentation and exploration takes center stage.

It is the hope that this study will expand on the identity development literature to look at a contemporary outlet for identity expression and development. This study will use concepts from Berzonsky's theory of identity development to look at social networking pages and examine the manner in which an individual might be using the site as a forum to engage in identity exploration.

Statement of Problem

The Internet has created a new venue for presenting and sharing the self with others. Through social networking sites, individuals are able to make connections with others and can express their identity thought words, images and media use. While studies have shown that these sites are used to build relationships and connections, there has been no research on how these sites are being used to explore and develop an identity (Livingstone, 2008; Pempek et al., 2009; Valkenburg et al., 2006; Zhao, Grasmuck, & Martin, 2008; Subrahmayan & Greenfield, 2008).

The very nature of these sites requires users to make a public statement of who they are through creating a profile page. MySpace, in particular, provides the greatest degree of freedom in design and presentation of the profile page by enabling the user to change the layout and

background; upload pictures, music, and videos; create journal entries; and add icons. The use of these features by the profile creators may be able to provide information about the identity development process.

This study will examine the manner in which MySpace pages are being used to express the creator's identity. Information from randomly selected pages will be analyzed for content and imagery. It is expected that there are distinct ways in which users create these pages and that there will be specific style types based on the approach users take in constructing their page. It is believed that the results from this study will provide a better understanding of how identity development is engaged while using social networking sites.

Research Focus

1. Using the concepts from Berzonsky's (1997) theory of identity development, MySpace pages will be assessed and rated based on dimensions of the three styles of identity development.

2. These dimensions will correlate into meaningful groupings.

3. The groupings will correspond with one of the three styles of identity development (Berzonsky, 1997). It is expected that users who are engaging in an Informational style will have a higher level of conflicting ideas, higher ownership over these ideas, use the first person more often, and have a longer or more detailed "About Me" section. Those that are engaging in the Normative style are likely to have a higher need for feedback from others, rely on quotes from others, and have fewer conflicting ideas. Those that are engaging in the Avoidant style will likely have a more bare profile, make fewer "I" statements and references about themselves, and have a less friendly tone when addressing their audience.

Methods

This section describes the methodology used to investigate different ways in which identity development is displayed through the creation of MySpace pages. It outlines how identity theory was used to identify variables that contribute to identity exploration and determine if particular variables appear on the same pages to create specific styles of profile page authorship. This section presents the proposed method for participant selection, procedure, and measures used in this research.

Social Networking Site Selection

This study examines the profiles of individuals located on the Myspace web site. There have been many popular social networking sites since Internet access became universally available. The first to rise to general public popularity, though, was the Myspace social networking site. The programming for Myspace was based on the then popular social networking site Friendster, which was first released in 2002 ("History of MySpace," 2008). Myspace first launched in 2003 and had an almost immediate following made up of members of the Southern California music scene. Many bands and club promoters would use the site to advertise music and shows, and this became the base of what Myspace continues to be known for today ("History of MySpace," 2008). The Myspace user population grew drastically in 2005 when it went from 2 million users to 80 million users. The scope of the general Myspace user grew from musicians and artists to the general population.. The user age ranged from teenagers and young adults to older adults, and the site was primarily used for making connections and communicating with others. Myspace was considered the premier social networking site at this time and continued to be the preferred social networking site until Facebook surpassed its total number of users in 2009 (Owyang, 2010).

Many have investigated if Facebook users and Myspace users are fundamentally different. In 2007, sociology researcher Danah Boyd purported that there were racial and class lines that divide the two sites. She reported that Facebook users were primarily white and of middle or upper class, while those using MySpace were more likely to be immigrants or from working class households (Ingram, 2010). There have been many arguments against Boyd's conclusions with the main argument being that when Boyd was conducting her research (in 2007) Facebook has just expanded from being a site for those enrolled in college to a site for the general public. Having this original base of college students may have set up Facebook to be a networking site for the upper-class (Ingram, 2010). More recent trends in patterns of social networking show that many Internet users will visit each of these sites back to back, possibly indicating that the users hold accounts on both venues (Tanger, 2007). It has been shown that teenagers and college students are much more likely to hold an account with both MySpace and Facebook. Adults typically have an account with only one site (Vercillo, 2011). Seeking to increase its usage, MySpace released a tool in 2010 which allows users to sync their MySpace page to Facebook. Therefore, users are now able to hold and operate both MySpace and Facebook accounts and can access and operate both sites simultaneously through one web site.

The primary difference between these two sites appears to be the general purpose the user has of maintaining a site. Many report that Facebook is used more as a tool for professionals to network and to maintain contact with friends. The relationships on this web site tend to mirror those in real life. For example, it is not considered proper etiquette to correspond with an unknown person (Callan, 2008). MySpace, on the other hand, is considered a place of fantasy. The users do not expect that information presented on the page is rooted in reality, and the general public regards it more as space for artists to create, share, and correspond (Tancer, 2007). Interactions with other people, even if one doesn't know them personally, are encouraged in this

medium. MySpace is also a great deal less structured than Facebook, providing many more adjustable features when it comes to the presentation of the webpage. This aspect may be more appealing to teens, which leads them to select this site and have continue to utilize it as they grow into adulthood (Vercillo, 2011)

Participant Selection

The study used MySpace profile pages as the source of data for analysis. When creating a Myspace account, users are informed that their profile pages are posted in a public venue and can be viewed by anyone visiting the site, member or otherwise, unless the member chooses to protect the page by altering their privacy settings (MySpace, 2008). Since these pages are on an open web site and users agree to this when first creating an account, then their information can be considered public domain. To protect the best interest of the users, no personal information (eg, name, location, place of employment, date of birth) was recorded. In addition, each page created by the user was assigned a code number. Once the page was rated, there was no link to the creator of the page or the information collected. Furthermore, no page was used and analyzed independently from the whole; therefore, no user could be identified.

For the integrity of the study, it was necessary that the users were not aware that their profiles were being monitored or analyzed. It was expected that alerting the users to the fact that their pages were being scrutinized would likely alter their presentation of the pages. Therefore, pages from the MySpace site were selected randomly from profiles that were not restricted from view through privacy settings.

This study analyzed 100 pages created by MySpace users on the dimensions described below. Fifty male and 50 female profiles created by users between the ages of 18-21 (M=19) were randomly selected for analysis and documentation. This age group was selected for two reasons. First, at age 18, the users are legally able to consent to MySpace's privacy policy.

Second, at this stage of young adulthood, issues of identity development are still prominent in normative development. While investigating individuals who are in the midst of adolescence, ages 13-17, is ideal, the decision to use late adolescence is more practical. Myspace allows users to select whether or not their page can be viewed by the general public through its privacy policies. Individuals under the age of 18 are not legally adults and cannot give their consent so their pages are automatically blocked from public view. Due to the reasons stated above, it was necessary to study users over the age of 18 to conduct the study in the desired manner. Of the profiles selected, 51% reported that have a high school education, 5% reported that they were attending community college, and 9% reported they were currently enrolled in a college or university. Thirty-five percent did not disclose their education status. Of the profiles selected, 10% reported being unemployed, 13% reported being employed, and 77% did not report their employment status.

Procedures

Raters

This study utilized the help of two research assistants. Their role was to aid in the collection and coding of the profile pages. They were provided three hours of training, which consisted of learning background information about identity development theory, using the attached coding sheet (see Appendix A), and practicing coding profile pages to aid with their understanding of the coding process. Coder reliability was calculated following the collection of the first 20% of the data collected by using the Kappa Measure of Agreement to compare the research assistants scores to that of the researcher. The kappa value was determined to be .78, which is in the above average range, as defined by Landis and Koch (1977).

Data Collection

The MySpace web site provides a search feature that allows users to browse profiles based on particular search criteria, such as age, geographic region, relationships status, or gender. This feature was used to gather a collection of profile pages that meet the age criteria (18-21). A random number table was used to select the profile pages from the search results for analysis. From the randomly selected pages, demographic information was collected, such as age, gender, education, and employment status. The raters then used the coding system described below to document the presence of the defined identity dimensions.

Measures

Based on the theory of identity development proposed by Berzonsky (1997), the following analysis coding sheet was created (see Appendix A). The Style Coding Sheet has been designed to capture aspects of the Identity Style Index, created by Berzonsky, as presented in visual form in the MySpace profile pages. Each of the Style Coding Sheet items represents a dimension of identity development and will be used in the process of creating user type groupings.

Style Coding Sheet Validity

This measure consists of 9 categories that were rated on a scale from 0-3 based on the level or frequency or intensity of each identity construct as it appears on the profile page. Items were created to have both content and construct validity.

Content validity. Content validity refers to the degree in which the information collected by the measure captures a representative sample of the phenomenon that it is attempting to measure. This can best be accomplished through a thorough and deliberate selection of items within the measure (Anastasi & Urbina, 1997). The content of this measure was based largely on Berzonsky's (1989) ideas of how identity style can be measured. In his work, Berzonsky

identified what he considered to be key characteristics to the way in which an individual

approaches identity development. Actions such as seeking out information, asking for and

incorporating feedback, willingness to conform to normative standards, ability to see multiple

perspectives, postponing making definitive decisions, and restricting exposure to opposing views

were all seen as important to understanding one's style of identity development. It was the

research from this article that determined the sampling of content within the Style Coding Sheets

used in the project. Each criteria on this measure was selected in order to correspond with an

activity of identity development from this study.

Berzonsky (1989) noted several concepts that were important to the development of his

measure, the Identity Style Inventory (later revised to the ISI-6G). Items on this measure were

created to describe the interest and depth that an individual has in learning about themselves and

others. This measure also asked questions meant to assess the degree to which one conforms to

standards as well as how much effort is placed on entertaining new or different point of views.

All of these concepts were considered and implemented when developing the Style Coding

Inventory (see Appendix B).

Construct validity. Construct validity is the level at which the measure accurately

captures the theory or construct that it proposes to (Anastasi & Urbana, 1997). In this case, it is

important to establish that the criteria being considered do in fact correlate with the theory of

identity style development. Many measures have based their own construct validity by showing a

correlation of the new measure with a previously established valid measure (Anastasi & Urbana,

1997). In this case, Berzonsky (1998) had created an empirically supported measure, The

Identity Style Inventory: Revision with a Sixth-Grade Reading Level (ISI-6G) that was able to

identify the style approach that an individual is employing. This measure was used as a basis for

the creation of the Style Coding Sheet used in this project. Items were adapted so that the

constructs represented were no longer captured as a self report measure but rather as how that construct or idea would look as visual presentation within a web page. A special attention was played to the content that the item from the ISI-6G was referring to in Identity Development Theory. For example, the item "I'm not sure which values I really hold" on the ISI-6G is represented within the Style Coding Sheet as the identity criteria "conviction" (see Table 1).

Items. There are 9 categories developed from the ISI-6G that were rated after viewing each webpage. These categories were defined as: (a) Conflicting ideas, the frequency at which contradictory themes or ideas are presented; (b) Conviction, the level of force or tentativeness ideas are presented with; (c) I statements, use of the first person; (d) Personal Creations, posting things created by the user to share with the public; (e) Feedback, level at which the user encourages interactions; (f) Risk behaviors, reporting of behaviors considered risky for young adults; (g) Quotes, the user using the words of others to describe self; (h) Tonality, the level of friendliness the user has in addressing audience; (i) Definitions of self, dimensions and manners in which the user identifies self; and (j) Clutter, the degree to which is page is filled with items and how well organized it is in presentation. In addition to these items, each page was documented based on the layout, or background use. It was identified to either have the basic (or standard) layout, a design layout (e.g., a background that shows a sport team logo or another pattern), or a custom layout (one that is unique to the use, like a personal photo or drawing). Of the sample, 34% of the profiles were using a standard layout, 54% were using a design layout, and 11% were using a custom layout. Finally, each user has the ability to write about how they view themselves in the "About Me" section. In the original collection of data, the number of sentences the user composed was counted and documented. This information was collected as a measure of how much information an individual is willing to share in terms of the number of statements or sentences they need to define themselves. During the analysis stage of this study, it

was discovered that the number of sentences varied greatly (from 0-20 sentences, M=2.64). It

was decided to recode the "About Me" item to better reflect the other categories on the Coding

Style Sheet. It was recoded so that users who wrote 0 sentences in their "About Me" section

would be given a score of 0, users who wrote 1-3 sentences would be given a score of 1, users

who wrote 4-10 sentences would be given a score of 2, and users who wrote more than 10

sentences would be given a score of 3.

Results

The 10 categories from the Style Coding sheet, a dimension that assessed the type of

layout the user had (standard, design, or customized), and the number of sentences used within

the "About Me" section were subjected to principal component analysis (PCA). The purpose of

this was to investigate the underlying pattern of correlations between the items measures and

determining if the items could be grouped together as components based their ability their ability

to explain the variance within the sample. Prior to performing PCA, the suitability of the data for

factor analysis was assessed. The correlation matrix revealed the presences of many coefficients

with a value of 0.3 and above. The Kaiser-Meyer-Olkin value was 0.68, which exceeds the

recommended value of 0.6 (Kaiser, 1970). The Bartlett's Test of Sphericity reached statistical

significance, supporting the factorability of the correlation matrix. At this point, it was noted

when reviewing the communalities table that one of variables, Creations, explains a very small

variance within the sample (0.158). Upon further investigation of the data, there were very few

cases in which personal creations were found on the web pages (17%) and of those cases, none

scored over 1 within the coding system. It was decided that this variable was not a good fit for

the data set, and thus it was eliminated from further analysis.

Table 1

Component Matrix of Factor Loadings for PCA for Unrotated Loadings

	Component			
Item	1	2	3	4
I Statements	**.75**	-.35	.25	-.13
Definitions of Self	**-.74**	-.27	.14	.12
About Me	**.68**	**-.46**	.07	.14
Conflicting Ideas	**.57**	.03	**.49**	-.01
Conviction	**.56**	-.34	-.06	-.24
Feedback	**.43**	-.29	-.34	.29
Tonality	.23	**.57**	**.54**	.06
Clutter	**.43**	**.55**	**-.51**	.03
Quotations	.23	**.53**	.32	**.52**
Layout	**.40**	.35	**-.51**	.19
Risk Behaviors	.16	**.47**	-.02	**-.74**

Note. Factor Loadings > .40 are in boldface.

Principal components analysis revealed the presence of four components with

eigenvalues exceeding 1, explaining 26.1%, 17.3%, 12.4%, and 9.5% of the variance

respectively. The Component Matrix demonstrating the unrotated loadings for these four

components shows several items load on the first three components with only two items loading

on the fourth component (see Table 1). An inspection of the scree plot revealed a break after the

third component and it was decided to retain three components for further investigation. This

was further supported by the results of Parallel Analysis, which showed three components with

eigenvalues exceeding the corresponding criterion values for a randomly generated data matrix

of the same size (11 variables X 100 cases).

Table 2

Pattern Matrix of PCA with Oblimin Rotation of Three Factor Solution

Item	Pattern Coefficients			Communalities
	Component 1	Component 2	Component 3	
I Statements	**.86**	.16	.07	.55
About Me	**.83**	-.07	.03	.56
Conviction	**.66**	-.15	-.05	.48
Conflicting Ideas	.56	**.53**	.12	.74
Feedback	.43	-.34	-.27	.38
Tonality	.00	**.83**	.00	.25
Quotations	-.04	**.63**	-.14	.44
Clutter	-.07	.05	**-.86**	.68
Layout	.02	-.08	**-.74**	.64
Definitions of Self	-.43	-.24	**.56**	.74
Risk Behaviors	-.13	.31	-.34	.67

Note. Major loadings for each item are in boldface.

The three-component solution explains 55.6% of the variance in the sample, with Component 1 contributing 26%, Component 2 contributing 17.3%, and Component 3 contributing 12.3%. A oblimin rotation was performed and the solution indicated that each of the items only strongly loaded on one of the factors. The items "I statements," "About Me," and "Conviction" loaded on Component 1. The items "Conflicting Ideas," "Tonality," and "Quotes" loaded on Component 2. The items "Clutter," "Layout," and "Definitions of Self" loaded on Component 3. Two of the items ("Feedback" and "Risk Behaviors") did not strongly load on any of the three factors (See Table 2, Table 3).

Table 3

Structure Matrix of PCA with Oblimin Rotation of Three Factor Solution

Item	Pattern Coefficients		
	Component 1	Component 2	Component 3
I Statements	**.84**	.13	-.07
About Me	**.83**	-.08	-.07
Conviction	**.67**	-.16	-.12
Conflicting Ideas	.53	**.50**	-.02
Feedback	.47	-.31	-.28
Tonality	-.01	**.83**	-.11
Quotations	-.03	**.65**	-.22
Clutter	.05	.17	**-.87**
Layout	.12	.02	**-.74**
Definitions of Self	-.49	-.31	**.65**
Risk Behaviors	-.09	.36	-.37

Note. Major loadings for each item are in boldface.

There are weak correlations between the three components, indicating that the three

components identified are not likely related and are independent factors (See Table 4).

Table 4

Correlation Matrix of Three Factor Solution

Component	1	2
1		
2	-.017	
3	-.130	-.136

Results from analysis indicate that the items on the Item Style Coding Sheet can in fact be separated into three independent, statistically significant groups or components, which supports the hypothesis. The items that loaded together and were identified as independent components, however, where not the groupings expected by the hypothesis.

Discussion

This study set out to determine if Berzonsky's (1997) theory of identity development explains the manner in which an individual creates a social networking web page. More specifically, it sought to operationalize the self report measure of Identity Style Inventory (Revised Version) with a Sixth Grade Reading Level (ISI-6G) into a method of assessment for MySpace web pages (Berzonsky, 1998). It was the hope that assessing MySpace web pages in this manner would yield information specific to how the user was engaging in the identity development process. An assessment tool was created to collect information from the web pages and was analyzed statistically to assess for the suitability of the tool's application. PCA was used to determine the relationship among the items recorded. Results from the analysis indicated the factorability of the items into three distinct components, as predicted. The items identified within each component, however, were different than hypothesized.

Components of the Style Coding Sheet

The first component identified by the PCA included the items "I Statements," "About Me," and "Conviction." These items indicate a page that will have many references to the self, have a higher ownership of their ideas, and use many sentences to describe the self in the "About Me" section. This component therefore has been determined to be a Self-Focused Type.

The second component identified in the PCA included the items "Conflicting Ideas," "Tonality," and "Quotations." The items in this component indicate that the creators of these pages are more likely to use words of others, present ideas that are contradictory and make negative statements on their page. This component has been identified as a Inconsistent Type.

The third and final component identified by the PCA included the items "Clutter," "Layout," and "Definitions of Self." The items in this component indicate the pages do not have many extra add ons it uses the standard layout with little personalization, and has very few references to the self. This component has been identified as a Withholding Type.

There were three items from the Style Coding Sheet that did not appear to have any relationships with the other items being assessed. The first was the "Personal Creations" item, which assessed for the degree in which the creator of the page shared his or her original work. It looked for items like art work, music, journal entries, or personal writing. MySpace was chosen for analysis because it was believed that the site's freedom to post to original work surpassed that of other social networking sites. The sample selected for this study showed a limited amount of sharing in regards to original work. This could be due to many reasons. The first is that given the age of the sample, many of the creators of the web pages are still self conscious of their own work, which makes them less likely to share it. More probable, however, is that since this study was first proposed the amount of web sites dedicated to artists sharing work has increased greatly. There are many web sites available for individuals to post their work and get feedback

from fellow artists, and these sites tend to be exclusive to specific mediums (e.g., sketching, painting, blogging, short stories). MySpace has and continues to be a prominent venue for music artists to display their work. While this sample displays few personal creations in regards to this, it is likely because artists on MySpace typically have a separate account and web page to display their music/band, which is independent from their personal Profile page.

Another item that did not appear to have a strong relationship with the other variables is "Risk Behaviors." This item assessed the level at which the page reported engagement in behaviors that are considered risky for adolescents and young adults, for example under-age drinking, drug use, and promiscuous sexual behaviors. It did not load strongly on any of the components mentioned above, nor were there any strong correlations between this item and the other items measured. This is likely due to the fact that reporting risk behaviors can be inconsistent on the whole, with some individuals under-reporting and others over-reporting their behaviors. Therefore, this item, within the realm of this study, is not a helpful predictor of identity development.

Finally, the item "Feedback" did not yield any strong relationships to other items within the PCA. This item assessed the level that the creator of the page asks for and responds to feedback from those viewing the pages. This item was not strongly correlated to other items within the measure, nor was it closely associated with other items in the extracted components. This may be due to the fact that these Profile pages are created to share information about the self. While those who are actively engaging in the identity development process consider the opinions of others important to their choices (Berzonsky, 1997), the site is used more frequently to make statements about the self or how one wants to be view. The item of Feedback as defined by the Style Coding Sheet does not accurately reflect the process of seeking and obtaining feedback from others in a way in which feedback may be applied in the larger context of the

community as a whole. A longitudinal study that captures changes made to the web pages over a

period of time might better capture the role that feedback plays in the online development of

identity.

   Self-Focused Type. The first component identified by the PCA is identified mainly by

the focus on the self. All three items associated with this component indicate that the users were

referencing themselves frequently throughout the profile page and use great detail in explaining

how they view themselves. This component also addressed a level of confidence in the

information presented by the user, as these users tend to have higher scores on the Conviction

item. These users have shown that they are interested in communicating with others about

themselves, illustrated by the frequency that they reference themselves and take ownership of

their ideas shown by often using "I" statements. This component does not include any of the

items that were designed to capture aspects of exploration, but does show a strong level of

commitment by the user. When considering the different types of identity style, this component

appears to be a closest fit to the Information Style of exploration. It was hypothesized that those

creators who were using the Information style would have a high level of ownership over their

ideas and be willing to share more details about themselves in free form through the "About Me"

section. This was hypothesized based on the certain items from the ISI-6G such as 'I spend a lot

of time thinking about what I should do with my life' and 'I've spent a lot of time reading and/or

talking to others about their religious ideas' (White, Wampler, & Winn, 1998).

   It was also hypothesized that one would be able to tell that the Information style was

being used by these creators because exploration would be reflected in the pages, through the

expression of conflicting ideas and seeking of feedback. These items did not load as heavily on

this component as the others. While there are some aspects of the Information style reflected in

this component, one could also make the argument that the individual was using the Normative

style because although their ideas are presented with confidence, it is unclear if exploration took place. Therefore, it is easier to make a statement about the identity status of these creators (Identity Achieved) rather than be able to identify for certain the exact approach that was used in the creation of their profile page (Marcia, 1980). These pages were more focused on the self and less about others and their interactions with others. The items associated with the Information style on the ISI-6G are mainly about how open one is to discussing and respecting the views of others (for example 'When I talk to someone about a problem, I try to see their point of view' and 'I've spent a lot of time talking to people to find a set of beliefs that works for me'). Items on the ISI-6G that are associated with commitment to an identity seem to fit this component better. Some of these items are 'I know what I want to do with my future' and 'People need to be committed to a set of values to live a full life' (White, Wampler, & Winn, 1998).

  Inconsistent Type. If the first component determined by the PCA revolved around ideas about the self and commitment to it, the items in component two are about ambivalence and discrepancy. The items associated with this component demonstrate that the creators of these pages had many ideas that were contradictory as well as interactions with others on the page had a tendency to involve hostility and conflict. Creators of these pages also lacked a strong voice of their own and would rather use quotes or the words of others to express themselves. It was originally hypothesized that those using the Diffuse/Avoidant style would use more forceful language when presenting ideas (Conviction item) but high scores on the Conflicting Ideas item also seem to be aligned with concept of the Diffuse-Avoidant Style. Having many ideas presented throughout the page shows that the user has little confidence or commitment to their ideas and may be presenting multiple points of views to appeal to many different audiences. This is consistent with Berzonsky's (1997) conception of that style, along with the apparent avoidance of addressing problems and committing to ideas.

The items in this component appear to be most closely aligned with items associated with the Diffuse/Avoidant identity development style. The items on the ISI-6G that support this are the Diffuse/Avoidant items, such as 'I don't know what I am doing in life' and 'I don't worry about problems' (White, Wampler, & Winn, 1998). The inconsistent ideas paired with what seems to be a lack of concern for relationships with others seems to support that those creating these pages do not have many worries about problems or feel like they have direction for their life.

Withholding Type. The three items identified by the PCA described the lack of engagement or design of the profiles in the third component. The item "Definition of Self" indicated that users in this group did not use many different ways or mediums to describe themselves. This is, paired with a profile that uses the standard layout with little add-ons, describes a type of profile that is not personalized or unique. These users tend to lack displays of self self-expression in conforms closely to the standard layout design. The items in this component make it difficult to ascertain the level of commitment or exploration due to the lack of information and bare presentation. Due to the apparent resistance of sharing personal information, it can be supposed that the users who created these pages have either been reluctant to explore themselves or very guarded about the information about themselves that they care to release to others.

It is difficult to make any speculation about identity style approach the creators of the profiles with the characteristics of component three due to the general lack of information. It was originally hypothesized that those who were using the Diffuse/Avoidant style would have the barest profiles due to their lack of interest in self exploration. Upon further consideration, however, it became apparent that those using the Diffuse/Avoidant style would actually be more likely to present many different conflicting ideas in order to best cater to their audience and meet

their personal needs (Berzonsky, 1997). The presentation of the profiles identified by component three really only corresponds with one item from the ISI-6G, which is the normative item 'I stick to the values I was brought up with' (White, Wampler, & Winn, 1998). This item only capture the adherence to norms without question and it is still difficult to state anything definitively about this component and identity style to being unable to understand if there has been any exploration or commitment.

      Style coding sheet effectiveness. The results from the PCA indicated that the information on the items collected by the Style Coding Sheet can be sorted into different user types that have distinct characteristics to the design of the profile page. Each of these users types makes a different comment on the manner in which the user is displaying information about the self. It is unclear from the results, however, how actively each type is participating in activities associated with identity exploration. Therefore, it is quite difficult to tell for certain what style of exploration is being used by the creator of the page. This tool appears to be much better at predicating the category of identity achievement (Marcia, 1980) rather than being able to describe the qualitative style of identity exploration.

Understanding Social Networking User Types

      Three very clear and distinct types of profile pages were determined by the PCA. However, these three types are not clearly consistent with the identity development theory being examined by this study. There are many possible ways to interpret these results. The first, of course, being that the measure used to capture and assess the social networking data did not accurately represent all of the constructs associated with identity development effectively, as discussed in brief above. There may also be other factors at play within social networking that this study did not anticipate would influence results.

This study assessed information that was being placed within the creator's personal homepages. It did not assess for how the creator regularly used the website. Some information that might have been helpful to collect is the frequency at which the creators used the site and the purpose for using it. The information that a creator chooses to display might be different if their primary purpose for holding the account was to communicate with others that they know, as opposed to making connections with new people who are unknown to them. Some users may be using the site to gain attention or received contact from others and may engage in a provocative manner to elicit this response. Research on social networking conducting by Livingstone (2008) indicated that younger users had a larger desire to 'be seen' and invested more time and effort into the visual presentation of their websites, while older adolescents were more interested in maintaining relationships with their friends, and therefore they did not spend as much time on the appearance of the page as they did leaving messages or communicating with peer. Further studies on social networking usage and page presentation could help to identify if the primary purpose for holding the account effect the information that the creator chooses to share on their personal homepage.

Another factor that could have influenced the page presentation in this study is the creator's ability or style of communicating with others. The understanding of self and process of identity development can rely heavily on feedback from others and influences from the environment. As stated by Zhao et al. (2008), "… it (identity) is not an expression of something innate in a person, it is rather a social product, the outcome of a given social environment and hence performed differently in varying social contexts" (p.1831). The importance of others in the individual's life may directly impact the information that he or she chooses to share on their webpage. For example, those that where identified as the Self-Focused Type, may be very invested in receiving feedback from others and incorporating it to their sense of self therefore

they are very forthcoming with their conception of self. Those identified as Inconsistent may be less invested in the opinions of others, therefore not much thought or foresight is used when creating their pages, resulting in coming across as hostile or contradictory. Finally, those identified to be the Withholding Type might be completely others focused. Rather than investing time on their own page, they are more invested in spending their time on the site interacting with others or seeking information about others.

Finally, it is also possible that Berzonsky's theory of identity development does not fully explain identity processes in the venue of cyber-space. Luyckx et al. (2006) proposed a Dual-Cycle model to describe identity formation. Based on this theory, an individual will experience two distinct cycles, one following the other, throughout the identity development process. The first cycle is the classic model presented by Marcia (1980) and is identified as commitment formation. An individual is challenged to explore their world and options in breadth through confronting choices and weighing alternatives. Following this exploration, the individual then accepts and commits to an understanding of self. Following this processes, however, it is likely that the choice will continue to be challenged by life events. This begins a second cycle, identified as commitment evaluation. This is a time for an individual to examine his or her choices and explore the implication of those decisions. It is classified by exploration in depth, to better understand and reflect on the impact of their choices in the broader context of the world.

The results from this study maybe be illustrating the presence of this Dual-Cycle process. For example, those pages identified as Inconsistent Type may be illustrating the first cycle of commitment formation. The contradictory nature of the ideas presented as well as the tendency to use the words of others may be indicative of the breadth of exploration taking place without committing yet to an identity. The Self-Focused Type would then be engaged in the second part of the development cycle, with a strong sense of the self established and presented prominently.

The level of conviction in the ideas presented indicate a commitment to the established identity, but the effort in maintaining the page indicates a desire to continue to evaluate it. Those identified as Withholding Type may have yet to engage in identity development process and have not yet entered either cycle.

While it is certainly plausible that any of these explanations best account for the results obtained by this study, it is more likely that all of these factors have played some sort of role in the presentation of these social networking pages. While it is clear that there a pattern to the manner in which these pages are created, there are so many variables that could be contributing to the outcome. Further research in this area is definitely warranted to better understand this complex and intricate process.

Limitations

While the Style Coding Sheet was able to capture important information about the creator of each profile page, it was unable to distinctively discern the style of identity development. This is most likely due to the fact that the information collected from each page was from a single visit and created only a 'snapshot' of the use of the page. More often than not, the creators of the pages visit their pages regularly and make changes to the appearance and information displayed over time. Because identity development is a process, it is logical to assume that changes made to the pages over time might be able to better capture the identity development process. An area of further research could focus on a longitudinal study that collects information from the same profile pages over a period of time to better capture the process of exploration.

It should also be stated that the Style Coding Sheet inventory was a measure created for this study in an attempt to apply concepts from the self report measure ISI-6G to visual content. While the items on the Style Coding Sheet were designed to represent different concepts from the ISI-6G, this was its first practical application (Winn, Wampler, & White, 1998). Through this

study, it was determined that there were several items on the Style Coding Sheet that did not appear to be support by the model being investigated. This is not an unusual occurrence, especially when developing a new measure (Abelson, 1995). To better establish the construct validity, however, further studies must be conducted. A study that recruits volunteers to disclose to researchers their personal profile page and then has the recruits complete the ISI-6G will allow for adequate collection of data to determine if the presentation of the profile pages correlates with certain identity styles.

Implications

This study was able to determine that there are certain characteristics of Myspace profile pages that allow the pages to be sorted into user types. Based on the display of the profile pages, a viewer should be able to tell if the creator was a person focused on the self, ambivalent about their views, or conforming to standards and guarding personal information. It is clear that the information on these pages are closely linked to the user's sense of identity. This study was able to establish some preliminary characteristics of the user in regards to their view of themselves. Further investigation is needed however to better understand the over all process of identity development and how it pertains to social networking. It might be helpful to speak to the users of these sites through a series of interviews to better understand how the users conceptualize their pages and themselves as well as gain a better understanding about their reasoning in posting different things.

Clinical implications. All populations tend to be using social networking sites with increasing frequency. Many practicing therapist and clinicians encounter clients daily that regularly use the internet and more specifically have social networking profile pages. Adolescents, in particular, not only use social networking sites but also tend to be willing to share information about the sites and their experiences on them. Having an understanding of how

the identity development process plays out in social networking can provide valuable

information about clients for a therapist. The style of identity development can say a lot about an

individual's ability to explore self relevant information as well as their capacity for cognitive

processing.

Being able to identify identity development style can assist practicing clinicians in

understanding and applying the best theoretical approach to work with a client. Those individuals

who use the information style tend to be people who seek out information when making

decisions. They value the opinions of others, work collaboratively when solving problems and

enjoying thinking about themselves and others (Berzonsky & Sullivan, 1992). A Diffuse-

Avoidant person tends to avoid processing information about themselves and tend not to be open

to the opinions or values of others. When working with a Diffuse-Avoidant person, one can

expect to run into a person who avoids or ignores problems. If a client chooses to share their

social networking page with their therapist, an understanding of how the identity development

styles are portrayed on the internet can be diagnostic to the clients openness, willingness, and

capacity to benefit from treatment.

As the Style Coding Sheet is further investigated and developed as a tool, there might

also be further studies that implements its use in clinical settings. For example, investigating the

social networking sites of individuals that have been diagnosed with an established mental

disorder for commonalities in presentation using the Style Coding Sheet might be able to

establish a link between certain disorders and items on the coding sheet. With information like

this, clinicians might be able to begin to use social networking sites as a diagnostic tool within

their practice.

This study as just begun to scratch the surface of the possibilities of using information

from social networking sites in psychology. While it was the first time Style Coding Sheet was

used to measure and assess information on identity development within Myspace pages,

continued refinement and investigation with these concepts will most certainly yield interesting

and helpful insight into the internet phenomenon of social networking.

References

Abelson, R.P. (1995). *Statistics as a Principled Argument*. New Jersey: Lawrence

      Erlbaum Associates.

A History of Myspace (2008 August 14). Retrieved September 11, 2011 from

      http://randomhistory.com/2008/08/14_myspace.html.

Anastasi, A. & Urbina, S. (1997). *Psychological Testing*. New Jersey: Prentice Hall.

Arnett, J.A. (2000). Emerging adulthood: A theory of development from the late teens

      through the twenties. *American Psychologist, 55*(5), 469-480.

Atal, M. (2007, July 2). MySpace, Facebook: A tale of two cultures. *Bloomberg*

      Businessweek On-Line. Retrieved on April 27, 2011 from

      http://www.businessweek.com/innovate/content/jul2007/id2007072_502208.htm.

Berzonsky, M.D. (1989). Identity style: Conceptualization and measurement. *Journal of*

      Adolescent Research, 4(3), 268-282.

Berzonsky, M.D., & Sullivan, C. (1992). Social-cognitive aspects of identity style:

      Need for cognition, experiential openness, and introspection. *Journal of*

      Adolescent Research, 7 (2), 140-155.

Berzonsky, M.D. (1997). Identity development, control theory, and self-regulation: An

      individual differences perspective. *Journal of Adolescent Research, 12*(3), 347-

      353.

Callan (2008, October 23). The difference between Facebook and MySpace. Message

      posted to http://www.dontdrinkthekoolaidblog.com

Erikson, E. (1959). *Identity and the life cycle.* New York: International Universities

      Press.

Erikson, E. (1963). *Childhood and society.* New York: Norton.

Furstenberg, F. (2000). The sociology of adolescence and youth in the 1990s: A critical

    commentary. *Journal of Marriage and the Family. 62*(4), 896-910.

Harter, S., Bresnick, S., Bouchey, H.A., & Whitesell, N.R. (1997). The development of

    multiple role-related selves during adolescence. *Development and*

    Psychopathology, 9, 835-853.

Hinduja, S., & Patchin, J.W. (2008). Personal information of adolescents on the internet:

    A quantitative content analysis of Myspace. *Journal of Adolescence, 31,* 125-

    146.

Ingram, M. (2010, July 16). Is the difference between MySpace and Facebook black and

    white?. *Tech News and Analysis.* Retrieved on April 27, 2011 at

    http://gigaom.com/2010/07/16/myspace-facbook-race/

Kramer, N.C., & Winter, S. (2008). Impression management 2.0: The relationship of

    self-esteem, extraversion, self-efficacy, and self-presentation within social

    networking sites. *Journal of Media Psychology, 20*(3)*,* 106-116.

Landis, J.R., & Koch, G.g. (1977). The measurement of observer agreement for

    categorical data. *Biometrics, 33,* 159-174.

Liu, H. (2008). Social network profiles as taste performances. *Journal of Computer-*

    Mediated Communication, 13, 252-275.

Livingstone, S. (2008). Taking risky opportunities in youthful content creation: teenagers

    use of social networking sites for intimacy, privacy and self-expression. *New*

    Media and Society, 10(3), 393-411.

Luyckx, K., Soenens, B., & Goossens, L. (2006). A developmental contextual perspective

    on identity construction in emerging adulthood: Change dynamics in commitment

    formation and commitment evaluation. *Developmental Psychology, 42*(2), 366-380.

Luyckx, K., Soenens, B., Berzonsky, M.D., Smits, I., Goossens, L., & Vansteenkiste, M.

(2007). Information oriented identity processing, identity consolidation, and well being:

The moderating role of autonomy, self reflection, and self-rumination. *Personality and*

Individual Differences, 43, 1099-1111.

Magnuson, M.J., & Dundes, L. (2008). Gender differences in "social portraits" reflected

in MySpace profiles. *CyberPsychology & Behavior, 11*(2), 239-241.

Manago, A.M., Graham, M.B., Greenfield, P.M., & Salimkhan, G. (2008). Self

presentation and gender on Myspace. *Journal of Applied Developmental*

Psychology, 29, 446-458.

Marcia, J.E. (1980). Identity in adolescence. In J. Adelson (Ed.), *Handbook of adolescent*

psychology. New York: Wiley.

Marcia, J.E. (2002). Identity and psychosocial development in adulthood. *Identity: An*

International Journal of Theory and Research, 2 (1), 7-28.

Mikami, A.Y., Szwedo, D.E., Allen, J.P., Evans, M.A., & Hare, A.L. (2010). Adolescent

peer relationships and behavior problems predict young adults' communication on

social networking websites. *Developmental Psychology, 46*(1), 46-56.

Muuss, R. (1996). *Theories of adolescence.* New York: McGraw- Hill.

MySpace. (February 28, 2008). Privacy policy. Retrieved from

http://www.myspace.com/index.cfm?fuseaction=misc.privacy.

Nelson, L.J., & Barry, C.M. (2005). Distinguishing features of emerging adulthood: The role of

self-classification as an adult. *Journal of Adolescent Research, 20*(2), 242-

262.

Owyang, J. (2010, January 19). A collection of social network stats for 2010. *Web*

Strategy by Jeremiah Owyang. Message posted to http://www.web-strategist.com/blob

Pempek, T.A., Yermolayeva, Y.A., & Calvert, S.L. (2009). College students' social

networking experiences on Facebook. *Journal of Applied Developmental*

Psychology, 30, 227-238.

Pfeil, J., Arjan, R., & Zaphiris, P. (2009). Age Differences in online social networking: A

study of user profiles and the social capital divide among teenagers and

older users in MySpace. *Computers in Human Behavior, 25*(3), 643-654.

Phillips, T.M. & Pittman, J.F. (2007). Adolescent psychological well-being by identity

style. *Journal of Adolescence, 30,* 1021-1034.

Raacke, J & Bonds-Raacke, J. (2008). MySpace and Facebbok: Applying the uses and

gratification theory to exploring friend-networking sites. *CyberPsychology &*

Behavior, 11(2), 169-174.

Sherman, R.C., End, C., Kraan,E., Cole, A., Campbell, J., Klausner, J., & Birchmeier, Z.

(2001). Metaperception in cyberspace. *CyberPsychology & Behavior, 4,* 123-129.

Slater, M.D. (2007). Reinforcing spiral: The mutual influence of media selectivity and

media effects and their impact on individual behavior and social identity.

Communication Theory, 17, 281-303.

Stern, S. (2004). Expression of identity online: Prominent features and gender differences

in adolescents' world wide web home pages. *Journal of Broadcasting and Electronic*

Media, 48(2), 218-243.

Tancer, B. (2007, October 24). Myspace v. Facebook: Competing addictions. *Time On*

Line. Retrieved April 27, 2011 from

http://www.tiome.com/time/business/acticle/0,8599,1675244,00.html

Valkenburg, P.M., Peter, J., & Schouten, A.P. (2006). Friend networking site and their

relationship to adolescents' well-being and social self esteem. *CyberPsychology & Behavior, 9*, 584-590.

Vercillo, K. (2011, April 27). MySpace vs.Facebook 100. Message posted to http://hubpages.com/hub

White, J.M., Wampler, R.S., & Winn, K.I. (1998). The Identity Style Inventory: A revision with a sixth-grade reading level (ISI-6G). *Journal of Adolescent Research, 13*(2), 223-245.

Zhao, S., Grasmuck, S., & Martin, J. (2008). Identity construction on Facebook: Digital empowerment in anchored relationships. *Computers in Human Behavior, 24,* 1816-1836.

Appendix A

ID:		Date:		Assessor:
DEMOGRAPHICS:				
Sex:	**Age**:	**Relationship** :	**# Friends:**	**# Photos:**
Employment :	Full time	Part time	None	
Education:	High School	College/University	Community College None	
Most Recent Login:		**Online Now:**	**Layout:** Standard	Design Custom
Comments				

IDENTITY CRITERIA

Conflicting ideas:	Frequency at which contradictory themes or ideas are presented
0	No evidence of conflicting idea, consistent themes throughout page
1	Follows consistent idea or theme throughout page, but there may be one or two items that conflict with main theme of the presentation
2	Page displays two themes or ideas that are directly contradictory to each other, this can be in the form of political ideas, moral stances, identity descriptors, or interest areas
3	Page displays many different themes or ideas, often contradictory to each other, in the form of political ideas, moral stances, identity descriptors, or interest area

Conviction:	Level of force or tentativeness ideas are presented
0	Page has no use of word "maybe" or other probable language, ideas are presented with strongly worded language
1	Page displays use of probable language 1-3 times, ideas are presented with strongly worded language
2	Page displays probable language 3-6 times, ideas are often presented in tentative terms
3	Page displays probable language more than 6 times, ideas are presented in tentative language, others' opinions are sought out

I Statements:	Use of first person
0	Page has no use of first person or self reference
1	Page contains "I" or "me" in direct reference to self 1-5 times only in the "About Me" section
2	Page contains "I" or "me" 1-5 times in direct reference to self in several different sections
3	Page contains "I" or "me" over 5 times in direct reference to self in several different sections

Personal Creations:	Posting of things created by creator on page for sharing
0	No original work of any kind found on page
1	1-2 samples of one type of original work found (poem, music, artwork, blog entry)
2	More than two of one type of original work found on page
3	More than one of several types of original work found on page

Feedback:	Level at which creator encourages interaction
0	Creator does not ask others to comment or interact within page
1	Creator provides contact information, but does not outwardly ask for interaction
2	Creator makes request to contact through page or other provided contact information
3	Creator interacts actively with viewers through page by commenting, inviting interactions, and providing multiple methods to contact or provide feedback

Risk Behaviors:	Reporting of behaviors considered risky for young adults, including underage drinking, drug use, promiscuous sexual behaviors, suicidal ideation, eating disorders
0	No reporting of problem behaviors
1	Page makes 1-2 references of a risk behavior
2	Page makes one to two references of 2-3 different risk behaviors
3	Page makes reference to more than one risk behavior in different mediums (photos, narratives, activities, interests, comments from others)

Quotations:	Creator using words of others to define self
0	Page does not display any quotes from sources other than self
1	Page displays 1-2 quotes from a single type of source (movie, TV, music, literature)
2	Page displays 1-2 quotes from several types of sources
3	Page displays multiple quotes from multiples sources, including friends/peers

Tonality:	The level of friendliness the creator uses in addressing audience
0	Creator has an overall friendly tone, uses positive language throughout, and invites interactions with others; and there are no negative interactions within comments
1	Creator often uses a friendly tone, but there is at least one hostile or negative statement within the page; there are no negative interactions within comments
2	Creator has at 1-3 hostile or instigative statements, and there is evidence of negative interactions with one person within the comments
3	Creator makes more than three hostile or instigative statements within the page, and there is evidence of negative interactions with at least two others within comments

Definitions of self:	The manner and degree to which one is identifying self
0	Creator uses more than three different dimensions to reference self, including listing roles, qualities, peer group, physical characteristics, and quiz results
1	Creator uses 1-3 different dimensions to reference self, including listing roles, qualities, peer group, physical characteristics, and quiz results
2	Creator makes reference to self, but this is using only one type of dimension throughout page
3	Creator does not use any indentifying dimensions to indentify self

Clutter:	This dimension rates the degree to which the page is organized and filled
0	Page is empty except for the standard boxes, standard layout is used
1	Page is empty except for the standard boxes, but a customized or unique layout is used
2	Page makes use of 1-3 different features, such as decals, posters, banners, photos, and music players, but is consistent with layout and placed in an organized manner
3	Page makes use of at least two different features, such as decals, posters, banners, photos and music player, but is not organized in a meaningful way and is difficult to navigate or is overwhelming to the viewer

About Me:	Comments on the About Me section	**Sentence Count**	

Appendix B

Style Coding Sheet Descriptive Information

Item	Description	Content from theory	Construct from ISI- 6G
I statements	Frequency of use of first person	Level of Commitment to understanding of self	"I have a strong set o of beliefs that I use to make decisions"
Definitions of Self	The number of dimensions used to describe self	Extent of Exploration	"I am not sure what I want to do in the future"
About Me	The number of sentences written	Willingness to discuss aspects of self	
Conflicting Ideas	Frequency of presence of contradictory ideas	Willingness to entertain ideas other than own	"When I talk with others about a problem I try to see it from their point of view"
Conviction	Level of tentativeness ideas are presented with	Level of Commitment to understanding self	"I'm not sure which values I hold"
Feedback	Level that interaction and feedback is solicited	Extent of Exploration	"Its best to get advice when I have a problem"
Tonality	Level of friendliness in addressing audience	Willingness to entertain ideas of others	
Clutter	Level at which the page is organized and filled	Extent of Exploration	
Quotations	Frequency at which words of another is used to describe self	Conforming to standards	"Its best to get advice from experts when I h have a problem"
Risk Behaviors	Reporting of behaviors considered to be dangerous for youth	Lack of long term planning/concern	"I don't take life too seriously, I just enjoy it"
Personal Creations	Creator posting original work to share	Extent of Exploration	

Note. Construct from ISI-6G is a sample from that measure (White et al. 1998) and is not limited to that single item.