



Self-presentation and gender on MySpace

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ABSTRACT

Within the cultural context of MySpace, this study explores the ways emerging adults experience social networking. Through focus group methodology, the role of virtual peer interaction in the development of personal, social, and gender identities was investigated. Findings suggest that college students utilize MySpace for identity exploration, engaging in social comparison and expressing idealized aspects of the selves they wish to become. The public nature of self and relationship displays introduce feedback mechanisms by which emerging adults can legitimize images as associated with the self. Also, male–female differences in self-presentation parallel, and possibly intensify, gender norms offline. Our study suggests that social networking sites provide valuable opportunities for emerging adults to realize possible selves; however, increased pressure for female sexual objectification and intensified social comparison may also negatively impact identity development. A balanced view, presenting both opportunities and drawbacks, should be encouraged in policies regarding youth participation in social networking sites.

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1. Introduction

In 2008, 530 million people across the world are visiting social networking sites. MySpace and Facebook are the most popular, each with more than 100 million visitors per month (Comscore, 2008). Released in 2003, MySpace was originally a site in which aspiring bands advertised themselves. But MySpace immediately experienced phenomenal growth, initially among adolescents and emerging adults. By 2006, MySpace had expanded its appeal to a greater age range. Nonetheless, more than ten million emerging adults between 18 and 24 were visiting MySpace every month (Comscore, 2006). The present study investigated how emerging adults experience the issue of self-presentation as they and others interact with peers on MySpace. The goal of this investigation was to conceptualize the impact of these online self-presentations on identity development. For analytic purposes, we differentiate three components of identity: personal, social, and gender.

1.1. The role of cultural context and cultural tools in identity development

Identity forms over time from the bidirectional interaction between the individual and his or her context (Lerner, 2002). Adams and Marshall (1996) theorize that cultural values manifest in social institutions, which impact the dialogue and interactions between individuals. These interpersonal processes then influence identity. Socio-cultural researchers have also proposed that adaptation to cultural context through social processes is central to identity formation (e.g. Baumeister & Muraven, 1996; Cote & Levine, 2002). We suggest that MySpace introduces a cultural context in which norms of social interaction and self-presentation develop and create new possibilities for experimentation and reflection on both actual and possible selves.

In addition, the socio-historical approach to development has asserted that a culture's tools, the byproducts of technologies, are internalized in the development of intellectual skills (Bruner, 1966; Cole & Griffin, 1980; Maynard, Subrahmanyam, & Greenfield,

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2005; Vygotsky, 1978). This notion is based on a fundamental idea in Vygotskian psychology, well expressed by the Russian psychologist, Tikhomirov (1974, p. 374): “Tools are not just added to human activity; they transform it”. Up to now, this powerful idea has been applied only to cognitive development, never to social development. In the present article, we take a socio-historical approach to the development of self-presentation as a marker of identity and examine how the tool of an online social networking site, MySpace, is transforming the human activity of constructing personal, social, and gender identities.

1.2. Personal identity

Emerging adulthood has been described as a critical period for identity development (Arnett, 2000). Building on Erikson (1968), researchers have conceptualized identity as an ongoing process of exploration and commitment to possible selves (Waterman, 1999). Emerging adulthood, roughly from eighteen throughout the twenties, represents a period of extended exploration afforded by the circumstances of contemporary society (Arnett, 2004). Emerging adults are in a liminal stage characterized by instability and self-focus, exploring a variety of possibilities in work, relationships, and beliefs before committing to adult roles (Arnett, 2004).

One important way that emerging adults engage in exploration is through peer interactions. Erikson (1959) viewed adolescents' interactions with peer groups as the primary mechanism by which they create a healthy sense of self. Research has confirmed that friendships are related to adolescents' abilities to create a coherent identity (Reis & Youniss, 2004). But in our culture it is not until emerging adulthood that a coherent identity is typically established (Waterman, 1999) and a variety of research demonstrates the important role peers play in emerging adults' transitions into adulthood (Nurmi, 2004).

Social scientists such as Cooley (1902) have long believed that a sense of self derives from individuals' reflections from others in social interactions. Symbolic interactionists such as Goffman (1959) have theorized that the way individuals present themselves to others through impression management is involved in the development of self. Similar to the notion of the “looking-glass-self” (Cooley, 1902), Goffman's theory posits that individuals develop a sense of self from creating an impression they wish to give to others.

By the time individuals reach emerging adulthood, they possess abstract notions of the self, internalizing the social approval they have received for their self-presentations (Harter, 2003). As emerging adults present themselves within social interactions, they share goals and reflect common values, helping one another consolidate identities as they move into adulthood (Nurmi, 2004). Also, research increasingly illuminates the role that self-presentation through narrative plays in identity development (McAdams, 1999). The autobiographical stories we tell ourselves and others are used to develop and maintain the self (McLean, Pasupathi, & Pals, 2007).

Researchers have suggested that the online environment differs from other media environments in that participants co-construct their own environment. Subrahmanyam, Smahel, and Greenfield (2006) suggest that the flexibility of communication capacities, in formats such as chat, frees individuals from existing at the effect of an externally created media environment. Rather, they are creating and co-creating their virtual environments through social interaction. Identity becomes socially constructed in environments such as a chat room (Greenfield, Gross, Subrahmanyam, Suzuki, & Tynes, 2006), actualizing adolescent identity issues in new forms.

Compared with chat, the flexibility of the MySpace “profile” provides many additional ways to present oneself to others. It is a personalized, prefabricated webpage that displays personal information and links users to networks of friends. Users utilize profiles to describe themselves and whom they want to meet; to list their favorite music, movies, and books; and to post videos, pictures, music, art, and blogs. All aspects of the MySpace profile page are customizable from the background to photos. Profiles are often a cacophony of media. One user described the profile as “another way to express ourselves; how we feel, and how we view life” (Flores, 2006).

The nearly infinite number of ways to display oneself to others through the profile may give users expanded opportunities to realize aspects of selves limited in their offline lives. Indeed, research has demonstrated that adolescents often experiment with their online identities, with some pretending to be older or someone else entirely (Greenfield et al., 2006). The potential for anonymity and expression of multiple selves online has been cited by postmodernists as evidence of increased fragmentation of the self (e.g., Turkle, 1995). Turkle claims that with human–computer interactions, individuals accept reality as it appears, with disparate role-playing identities all having legitimacy in their own right, no longer integrated within the individual.

However, others, such as Wynn and Katz (1997) challenge this point of view, arguing that multiple aspects of the self are not unique to the Internet but are also experienced in different contexts in the offline world. Further, they point to evidence showing interactions online are socially grounded and connected to lives in the offline world, rather than anonymous. Others concur, finding that online interactions facilitate intimacy and self-disclosure, actually allowing individuals to express what they feel are their true selves, rather than false selves (McKenna & Bargh, 2000).

Researchers are only just beginning to question the ways in which emerging adults are navigating the social norms and virtual affordances of online networking sites. Youth are at the forefront of technologies that are transforming social interactions in ways we have yet to fully understand (boyd, 2007). In the present study, we were interested in how virtual rather than physical and real-world presentations of self might express personal identity.

1.3. Social identity

Individuals' memberships in social groups help to define who one is, and people are motivated to have positive feelings toward their group (Tajfel & Turner, 1979). A large body of work in social psychology has elaborated upon Tajfel and Turner's Social Identity

Theory. Generally speaking, this research demonstrates how the attributes and status of a group are internalized by the individual through self-categorization processes (Hogg, 2003). In addition, individuals also derive a “relational self” from their connections to particular others (Brewer & Gardner, 1996). In this sense, we not only define ourselves in terms of our alliance with others but our self-definitions interconnect with the cognitive representations we have for significant others.

Group memberships for today's emerging adults increasingly involve virtual communities on the Internet (Konstam, 2007). On MySpace, emerging adults “hang out” with each other by sending private messages or by publicly posting on each others’ “walls”. The “wall” is a space dedicated to postings from others that often includes greetings, jokes, praise, or sharing of photos and videos between friends. Researchers have pointed out the persistent and public nature of these online interactions (boyd, 2007). Words that are written on a blog, comment wall, or email message resonate for longer periods of time and may be shared with others who were not the intended audience. Expanded and invisible audiences are created in these virtual communities when an individual posts information about herself, or engages in social interactions publicly on the profile “wall”, for it is unclear exactly who will be observing that communication.

Most important for the present study, users' social identities are displayed on MySpace in ways not exhibited offline. “Friends” photos and names are displayed on users' profiles, with a select few making it to the list of “top friends,” ranging from a “top four” to a “top 40”. (We use the word “friend” or “friends” in quotation marks to indicate person(s) listed as friends on a user's MySpace profile and therefore part of the user's MySpace social network. Without quotation marks, the word friend is used in the traditional sense.) The “top friends” is an automatic feature of the profile; thus, most users utilize it to rank their friends unless they know some basic computer programming skills to remove the feature. Users can view all their “friends” contacts from their “friends” profiles with click of a mouse. MySpace profiles also include a list of the user's memberships in special interest groups such as “Red Sox Nation” or “World Artists Network.” The opportunities to engage in social exchanges and relationship displays in ways that are public, replicable and persistent, presents a kind of interactivity that has been little studied (boyd, 2007). Our study endeavored to fill this gap.

1.4. Gender identity

Cultural notions of gender influence children's beliefs and self-concepts through daily interactions with peers, family, and media (Leaper & Friedman, 2007). Burgeoning sexuality and matchmaking goals become important in adolescence, activating gender-related self-perceptions (Hannover, 2000). In emerging adulthood, gender has a salient role in new identity questions of future family and career roles (Archer, 1985). For many, emerging adulthood is a time to explore a variety of romantic partners and delay marriage until later in life (Arnett, 2004).

Social interactions create gendered behaviors through perceivers' gender stereotypical expectations and actors' identity negotiation and impression management (Deaux & Major, 1987). Interpersonal interactions may be experienced differently by young women and men as gender schemas influence and reflect differing identity and self-presentation concerns. For example, women tend to use more affiliative communication strategies, whereas men tend to use more power- and status-oriented speech strategies (Carli & Bukatko, 2000). In addition, women disclose more than men, and both men and women self-disclose more to other women than to other men (Dindia & Allen, 1992).

Identity processes may also differ for women and men because they negotiate different kinds of social roles for interpersonal behaviors (Archer, 1989). Unlike men, women tend to ascribe greater importance to sexual–interpersonal aspects of self-definition than to ideological ones (Bilsker, Schiedel, & Marcia, 1988). A review of gender differences in identity development revealed few gender differences, except in the domains of sexuality and family roles (Kroger, 1997). These findings support Gilligan's (1982) theory that relationships are more important to women's identity formation than they are to men's.

Research suggests that issues of gender and sexuality are central to online social interactions among adolescents and emerging adults. For instance, in chat rooms where nicknames substitute for one's physical identity, gendered nicknames are prevalent and often used to attract potential sexual partners (Subrahmanyam, Greenfield, & Tynes, 2004). Smahel and Subrahmanyam (2007) found that older adolescents are more likely than younger ones to specify the gender of the partner they are seeking, consistent with increased sexual concerns. College students are increasingly utilizing the Internet to fulfill intimacy and sexuality needs (Morahan-Martin, 2001); and Internet pornography has become a common part of life for many emerging adults, especially men (Carroll et al., 2008).

Characteristics of Internet communication may affect gender self-presentation. For example, physical and auditory gender cues are not present in online communications. This situation can provide a more level playing field for women and men (Herring, 2003). The anonymity of some modes of Internet communication like chat may also allow men to take greater risks in being more open, intimate and genuine (Morahan-Martin, 1998).

The Internet may also be utilized as a tool for gender and sexual exploration in ways not possible offline. For example, in one study, a third of adolescents reported having their first sexual experience over the Internet and some reported that they changed their gender to explore their sexual identity (Smahel, 2003). Women may take more authoritative roles when communicating online; for example, a greater proportion of declared females made partner requests than did declared males in teen chat rooms (Smahel & Subrahmanyam, 2007). These findings parallel those of Rodino (1997) who notes that the relative anonymity and bodilessness of computer-mediated communication may liberate women from the often subordinate position they experience in offline romantic or sexualized interactions.

At the same time, research also indicates that other aspects of gender norms are replicated online. Similar to offline behaviors in romantic pursuits, those who identified as female online were more likely to utilize implicit sexual communication, whereas those

identifying as male were more likely to utilize explicit sexual communication (Subrahmanyam, Smahel, & Greenfield, 2006). In addition, a content analysis of MySpace profiles found that, similar to the offline world, female emerging adults were more likely to display themselves through relationships than were male emerging adults (Magnuson & Dundes, 2008). Because current findings regarding gender and the Internet are equivocal, our study endeavored to clarify the influence of virtual environments on gender norms and on the gendered nature of social interactions.

1.5. The present study

This study explored the ways in which college students understand and interpret the MySpace experience, focusing on interactions with and self-presentations to other members of the network. The goal of this exploration was to conceptualize how online social networking might impact the development of personal, social, and gender identities in emerging adulthood. A focus group procedure was chosen because of its suitability for eliciting participants' own interpretations of the MySpace experience. The fluid and dynamic nature of focus group interaction provides space for new ideas and phenomena to emerge, ideas and phenomena not envisioned in advance by the researchers. A facilitator guided the conversations to focus participants on issues of self-presentation in the MySpace environment.

2. Methods

2.1. Participants

Twenty-three undergraduate students participated in six ethnically diverse focus groups of 3–5 people each. The mean age was 20.5 years, and the range was 18 to 23. Eleven women and 12 men participated in the study. Students who stated they were active users on MySpace were recruited from psychology classes via a Psychology Department website in exchange for credit. Participants comprised eight European Americans, five Asian Americans, five Latinos, four Persian Americans, and one African American. Sixteen participants indicated that both parents had at least some college education, four indicated that only one parent had at least some college education, and three indicated both parents had less than a college education. Participants reported logging into MySpace an average of 4.2 days out of the week and, on average, reported spending 20.11 min each time they logged on.

2.2. Design

All participants and the facilitator of each focus group were of the same sex. Same sex groups were chosen because participants are more likely to disclose in same sex groups, especially when discussing sensitive topics such as sexuality (Folch-Lyon & Trost, 1981). Participants sat in a circle around a table in a small, casual campus meeting room. Focus group conversations were audio-recorded. Participants filled out demographic questionnaires upon completion of the group discussion.

2.3. Procedure

Participants were assigned to a same-sex focus group that fit with their schedule. After all participants arrived at the meeting room, the facilitator administered a list of ground rules encouraging participants to speak openly and respect others. After they agreed, the facilitator turned on the recorder and began asking the questions found in Appendix A. The questions were meant to encourage discussion among the participants, who stimulated each other with further comments. In addition, the facilitator often used follow-up probes as appropriate. The focus group discussions lasted between 60 min and 100 min. The average group lasted 92 min, providing enough time for in-depth discussion.

2.4. Data analysis plan and reliability

Audio files from group interviews were fully transcribed, even preserving ungrammatical discourse when it occurred. Interviews were then analyzed for the following themes utilized in the present report: self-presentation (personal identity), self-presentation through relationships (social identity), and gendered self-presentation (gender identity). The first and the last author separately read through the interviews and assigned a code (or no code if no theme was present) to each turn in the transcript. A turn was counted each time a new person spoke. A single turn could incorporate multiple themes, and so the codes were not mutually exclusive. Because of the intrinsic lack of independence of conversational turns and the possibility of a single turn touching upon more than one theme, we limit ourselves to descriptive statistics in presenting quantitative results.

Coder reliability was calculated for 33% of the data, including one male and one female focus group. The kappa for personal identity was .88, for social identity .90, and for gender identity .94. All of these kappas are in the excellent range, as defined by Landis and Koch (1977).

Within each of these codes, important sub-themes were identified using the methodology of discourse analysis. In order to be reported, these sub-themes had to appear in at least two focus groups and also had to appear in both gender groups (unless it was a gender-related theme that only applied to one gender). In this way we were able to develop a qualitative typology of the ways in which the peer interaction of emerging adults may express or influence their identity development. We used this qualitative methodology because our primary goal was to investigate MySpace phenomenology and the meanings that users constructed for

their MySpace experience. A secondary goal was to identify and describe important processes that could guide future quantitative research.

3. Results and discussion

3.1. Frequency of self-presentation themes

As Table 1 shows, the topic of self-presentation elicited much discussion in the focus groups. Across the six groups, distinct self-presentation themes occurred a total of 978 times, often with more than one theme coming up in a single conversational turn. Overall, personal identity was the most popular of the four themes, followed by social identity. Gender identity was the least popular theme, albeit still frequent. There was a good deal of consistency across the six groups, both male and female, in the relative popularity of the three themes.

3.2. Discourse analysis of self-presentation themes

3.2.1. Personal identity

3.2.1.1. Reification of self through public performance. To reify is to make real; MySpace users reify their selves through external representations intended for an audience of others. For example, focus group participants talked about the profile as an opportunity to promote social impressions that they perceive as desirable:

Whenever you put any kind of information out there you have the intention of what you want people to think about you. (female)

They even use the commercial metaphor of marketing, connoting a large, anonymous public, as in the following example:

I feel like people... try to show themselves more than what they really are, kind of like advertise themselves and market themselves so like people will think, "oh this guy's a G" [short for "gangster" and signifying the ultimate man with money, power and fame] (male)

Photos or witty self-descriptions are created with a user's network of "friends" in mind, and most of the individuals in our study said their networks consisted of an average of 185 "friends". The ease of communication on MySpace allows college students to remain connected to a large number of others, such as people from high school, acquaintances met at a party, friends of friends, or music bands. This large network of "friends" creates what one participant described as a "second circle of friends" – a group of people with whom users would never keep in touch, or in some cases even meet, without MySpace as a tool – although participants said they had met most of their "friends" offline. (See Subrahmanyam, Reich, Waechter, & Espinoza, 2008-this issue for a quantitative analysis of the overlap between the online and offline social networks of emerging adults.)

With this large sphere of friendship networks, a new kind of "audience" is created for one's self-presentation on the profile. Rather than friendship circles representing a small clique of people who interact face-to-face in meaningful ways and share common experiences, the friendship network is now a larger and more abstract mass of people. It is more abstract because members can be commercial entities like bands or friends of friends with either an exclusively virtual link or a fleeting offline link, rather than a consistent real-world link (see Subrahmanyam, Reich, Waechter, & Espinoza, 2008-this issue, for quantitative distribution of the different types of link for online friendship networks). The fact that many MySpace "friends" are distant acquaintances makes the group more like an audience than a traditional group of face-to-face friends. Thus, MySpace users are not necessarily presenting themselves through one-on-one interactions, but rather displaying the self as if on a stage to a mass audience observing a performance.

The online performance of self allows one to alter one's physical appearance, likes/dislikes, tastes, humor, popularity, etc. in a way that offline interactions would not permit. The MySpace user can reify a desired self-image through an online performance to an audience. This performance may incarnate an idea of who one wants to be, as in the following example:

I know one [guy] that actually does Photoshop because he has acne problems... but people know that he does anyway and he doesn't care...I think maybe it's to make himself feel better. (female)

Table 1

Frequency of themes within focus group comprised of female and comprised of male participants

Themes	Total	Female focus groups			Male focus groups		
		1	2	3	1	2	3
Self-presentation (personal identity)	440	64	65	107	78	69	53
Self-presentation through relationships (social identity)	366	56	69	78	59	56	52
Gendered self-presentation (gender identity)	172	19	24	32	37	31	29
Total	978	139	158	217	174	156	134

Regardless of his friends' knowledge of his acne problem, the acne-free image may achieve a level of reality from its display, possibly enabling the young man to realize his ideal image. According to his friend, he derives emotional pleasure from this desired acne-free image now occupying a place in virtual social exchange, despite the impossibility of this image in an offline world.

Public performance even provides virtual applause through the public comment wall, as in the next two examples:

I think a lot of people like the attention and like getting a comment... cause comments are usually praising you in some way. (female)

A comment would be something like I saw on their page. Like, "oh that's cool." (male)

Public approval may be a heightened form of reinforcement for self-displays. Because self-displays are available to an audience, the feedback provides social verification. This verification may authenticate the portrayal by endowing it with social legitimacy. Thus, the portrayal may be more likely to be incorporated as a convincing and attractive aspect of the self.

When users display images that do have veracity in the offline world, the online display strengthens the reality of the event and its relationship to the individual. The next example shows how a particular image can lead the audience to attribute the symbolic characteristics of the image to the host of the profile:

We took it [his new car] up to Skyline Blvd which is like this super long windy road and we topped it out at 133 or something, put the video clip on that day and I just remember, I checked his page like two days after he did it and it was like a brand new, like his entire comment list was all like new people, like, "dude that was really cool" and I was like, that was really cool. (male)

In this case, the positive response of the audience substantiates the connection between the individual posting the video and the idea of him as bold, adventurous and "cool". Without the existence of MySpace, a few people might have seen the video; but the site facilitates a much more expansive broadcast of the event. The more people that see the image and respond to him as the bearer of this image, the more the reality of this association is legitimized. That the image has been reflected off so many others on the comment wall may make it more likely to become integrated into the individual's personal identity.

3.2.1.2. Virtual reality creates opportunities for identity exploration. MySpace users are aware that the profile can communicate potentially misleading impressions because of the lack of physical reality. They recognize the power of online images to make real the unreal, with the audience adding validity to what is posted. The next comment exemplifies this point:

I just feel like it's so easy for you to come off any way you want to come off. Just based on random people commenting on your page. (female)

While MySpace users may be vulnerable to deriving opinions based on false assumptions, it appears that impressions of contacts online are also informed by offline experiences. Few participants said they used MySpace to meet complete strangers; thus impressions are grounded in offline realities, confirmed or contradicted from experiences in the physical world. The following two extracts provide examples in which a viewer realizes a contradiction between the profile and the reality:

Like one of my friends from high school I saw her profile and I was like, "whoa she's changed so much from high school" and I see her this summer and I'm like, no she's exactly the same. Her MySpace is just a whole other level. (male)

They're trying to look all hard, and they've got pictures of them with guns and drugs and stupid stuff... they're trying to portray that they're this gangster hard type. I know these people and it's like, that is not who that person is. (male)

On the other hand, data also suggest that, rather than being duped by, or skeptical of, false impressions, some users perceive alternative, ideal, or hidden aspects of their friends that might never have been seen in the physical world. The next two extracts show how profiles can manifest hidden aspects of another's personal identity:

I mean obviously some people wouldn't want to go to school and like flex their muscles in front of everybody but it's like, "hey if you check out my MySpace, I'll show you the real cool side of me. (male)

Just looking at their page, you're actually getting to know stuff about them that you probably wouldn't be able to unless you were very close to them. (male)

Profiles are also utilized to manifest incipient aspects of personal identity that users want to cultivate. Profiles can represent the authentic self, selected aspects of the multifaceted self, the idealized self, or experiments with possible selves. Thus, the MySpace profile is a tool perfectly suited for the expanded identity exploration characteristic of emerging adults. The following extract points to the use of the MySpace profile to express both idealized and aspirational identities:

I could say for certain that there is no one out there with a profile that one hundred percent matches who they really are. If you look nice in a photo then you throw it up there. If you're doing something cool like skydiving, you throw that up there. At least if

it's not things you're doing now it could be things that you aspire to do in the future, or if you're making yourself appear as a player or someone poetic, it may not be exactly who you are now but it could be someone who you aspire to be in the future. (male)

The ambiguous line between the real and the unreal opens opportunities for emerging adults to experiment with aspects of the self that might be inhibited in the offline world, as the following two examples show:

I think MySpace and the Internet in general makes things more free and like ok, like it's just a comment on MySpace and people don't usually take stuff that seriously. (female)

It's really laid back. It's like MySpace is a place to come when you want to have a somewhat private party... it's not a time to be serious...like a real fantasy thing sort of. (female)

That many participants said they do not take MySpace *too* seriously suggests that this context is ideal for trying out different identities without full commitment.

3.2.1.3. Portrayal of self through social comparison.

Oh so much social comparison happens on MySpace...it's always interesting to see how people develop, you always want to keep tabs on the most popular girl in school because you want to see, four years down the line, yeah I'm doing better than her. (female)

Similar to offline social interactions, the preceding example shows that emerging adults utilize MySpace to construct a sense of self in relation to what their peers are doing, gauging their progression in comparison to others. Many participants said they spend time observing other profiles. Social comparison may be intensified on MySpace because many peers are easily accessible on the network and their personal information is open for observation. Also, because users are observing peers who often manifest only their most positive self-aspects on the Internet, emerging adults are comparing themselves with idealized images. This situation produces pressure to keep up, as the next example shows:

[What is cool] changes at times, the stereotypes and what is out there, every season and every year something new is hot so like as long as you keep up with those stuff and then you try to incorporate those into your page somehow. (male)

The next comment suggests the potential for a negative impact of social comparison on MySpace for personal identity. When one's profile does not measure up to others' virtual displays, the deficit may be internalized:

I have a few friends who are artistic and they have a lot of their own art or they mutilate pictures in an artsy way so you can just tell that they are artistic people. Mine is very plain, I'm a very plain person I guess. (female)

Social comparison can help emerging adults realize how they wish (or do not wish) to progress into adulthood:

I look at MySpace and I see that they're like engaged or married or having kids, I'm like, they're still trying to make their life look glamorous, but I mean if that's what you wanna do then I'm more than happy for you, but I can't imagine being twenty with two kids and a husband right now. (female)

MySpace gives users the opportunity not to just present a static ideal image, but to present an image that changes and grows:

It's just a way to promote yourself to society and show everyone, "I'm moving up in the world, I've grown, I've changed a lot since high school. (male)

In this way, MySpace gives emerging adults a tool to manifest images of themselves that mark their transitions into adulthood.

3.2.2. Social identity

3.2.2.1. *Relationship displays.* Relationships are performed publicly on MySpace through the comment wall. Comments are not just conversations between two people; they are conversations before an audience:

If you leave someone a comment, not only are you gonna see it but all your other friends are gonna see it. (male)

When communication between people on a profile wall becomes a spectacle for the audience, the conversation takes on additional meanings, and individuals are portrayed to the wider audience through the relationship connection:

There's totally an ulterior motive to writing on the wall than just sending a message. You're putting it out there for everyone, like look I'm cool and I'm talking to this person and I'm telling him about the party that I went to last night. (female)

Public comments showcase social skills and connections to valuable others:

Everybody looks at our MySpaces and like... says you guys are so close, I wish I could be like you guys...it just, maybe doing that shows other people how close we are. (female)

Comments can also help deepen an association between individuals, thereby making the relationship feel more intimate:

I have this friend that's a girl and I don't even feel like she's that close to me but on MySpace she leaves me the sweetest comments, like wow, she really likes me....I leave her messages back... [Interviewer: do you think you will become closer friends?] yeah than if we didn't have MySpace. (female)

This outcome may result because, not only are individuals exerting effort toward each other, they are also committing to a public display of their association.

3.2.2.2. Inside jokes and insider information. Inside jokes were often placed on the comment wall, as if to display the exclusivity of social connection:

[Comments] are all normally inside jokes that no one will ever understand. If you read it it's such a random wall because people are like ok, nothing makes sense except for the person leaving it and that's the kind of comments I leave on other people's pages. (female)

The contrast of the insider's knowledge to the outsider's lack of knowledge heightens insiders' perceptions of intimacy:

I leave comments on my sister's page, it kind of brings us closer together, we can relate in this aspect of our own little language, and you know what I'm saying but other people don't know what I'm saying to you. (female)

Inside jokes and insider information communicate to the audience that the individual is wanted by others and is a desirable member of an exclusive group.

3.2.3. Gender identity

There was a consensus among both men and women in our focus groups that men tend to portray themselves on MySpace according to stereotypical norms of masculinity in which playboys embody strength and power and that women portray themselves as attractive and affiliative. The next two examples illustrate this gender contrast:

I have godfather, scarface, power figures and cool people that I want to be seen as. (male)

Girls tend to put a lot of pretty pictures of themselves and their best girlfriends. (female)

Participants perceived that women work harder on profiles to impress others, especially in terms of physical beauty. Increased effort was associated with less accurate portrayals of self:

I feel like people kinda tend to put their best face forward. You know like they put up the best pictures. I think you see it a lot more with girls, kind of putting like the deceptive, like low light shot from like a distance, showing off the boobs. (male)

I just think that whatever pictures a boy can get his hand on he puts up because I don't think boys bring cameras around like "Oh my god we look so cute". (female)

That men are less concerned about what others think about them and put less effort into their profiles, may be more a myth than a reality. MySpace seems to be a context where men, like women, wish to put forth attractive images:

My brother's girlfriend is a photographer and she took some pictures of me and like, they look great so I put them up there...so it's like everything of my best qualities. (male)

Like I was definitely going through my pictures like no I gotta get the perfect one, and like, if more than one person said like, why d'you have that picture up then I'd be like, well what's wrong with it, and I'd take it down. (male)

One reason for a man to expend effort on a profile may be the reaction of women:

A lot of them [men's profiles] are really plain, like boring, and you don't want to look at it, and boys that really do go all out it's really nice." (female)

On the other hand, the way that male participants in our study talked about women's quest for social rewards based on physical attractiveness suggest that they perceive this situation as disadvantageous; therefore, they may be motivated to distance themselves from this quest:

Male 1: I'm a psychology major, but I mean, I think girls tend to be more self-conscious of presentation, they've been getting judged their whole lives on how pretty they are and they probably think that their MySpace page is the same way.

Male 2: I don't think they [guys] get judged in the same sense, they get judged by how many cool pictures they have with their boys, not like how bubbly and cute it looks.

Male 1: People would probably think you're gay or something, honestly.

Women also can share the view that men should not be overly concerned about their physical image:

Girls do it cause they want pretty pictures of themselves online, you know? And I see guys doing it and it's just like ok you should be playing sports somewhere not sitting taking pictures of yourself. (female)

Both men and women perceive many women on MySpace as presenting themselves in sexualized ways; they realize that this strategy brings social rewards. Here are two examples:

I've been on girls' pages who they've probably not had those provocative pictures and have no comments and the girls who just are looking nice have 40 comments on each picture saying "you're hot". (female)

Cause the girls have all the sexy shots, but it's funny cause they put up all these bikini shots, then they complain that these random guys are sending them messages. (male)

Young women are also balancing the pressure to portray a desirable sexual image with pressure from other women to avoid being labeled as promiscuous.

I've seen a lot of girls wearing really provocative stuff... and I remember this one girl left a comment to her, it's like negative but she made it funny... it was making fun of her. (female)

I'm really physically flexible so I put different stuff [on my profile], but I don't want people to portray me the wrong way. (female)

The balance women negotiate in their self-presentation of sexy and innocent is also not new. The situation may be intensified on MySpace because much is communicated about the self through photos. Sexualized photos are especially rewarded for women through public comments on MySpace, in the same breath that negative notions about female promiscuity are endorsed.

4. Conclusions

Consonant with what the socio-historical theorist [Tikhomirov \(1974\)](#) would have predicted, our data suggest that MySpace provides emerging adults with new cultural tools for identity construction. This is particularly profound for emerging adults who are in a period of expanded identity exploration ([Arnett, 2004](#)). These tools provide a means to construct personal, social, and gender identities.

4.1. Personal identity

Others have discussed the complexity of online impression management that blurs the distinction between the ideal and the authentic ([Ellison, Heino, & Gibbs, 2006](#); [Suler, 2002](#)). Our study extends the idea, suggesting 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 virtual reality. Emerging adults objectify possible identities through profile images, displaying them to a new kind of public audience. Transcending physical limitations, public presentation presents a new mechanism for young adults to realize experimental aspects of their identities.

Shared reality theory ([Hardin & Higgins, 1996](#)) as well as empirical research demonstrate that aspects of one's sense of self derive from public displays of behavior (e.g. [Baumeister, 1986](#)). In the absence of a physical reality on MySpace, users utilize social verification and validation processes to reify aspects of personal identity that are absent from their everyday physical lives. Festinger's theory of social comparison posits that individuals are more likely to rely on the consensus of others in situations where physical reality is ambiguous ([Festinger, 1950](#)). Thus, in the MySpace environment, public comments authenticate virtual self-displays that may or may not exist in the offline world.

Possible selves may be transformed into actual selves when a MySpace user transforms ideas about the self into an objectified image, and that image receives public social approval from his or her audience of friends. Experimental research has demonstrated that individuals are more likely to report behavior enacted with peers as a reflection of their "true selves" than the same behavior enacted in privacy ([Tice, 1992](#)). Thus, emerging adults who display images of themselves without acne or driving a sports car to their MySpace audience may be more likely to incorporate these aspects of themselves into their identities than if these same things had been done without an audience of peers.

Does the online display of an impossible physical reality (e.g., acne-free complexion, above) get internalized in the same way as does an actual physical reality (e.g., driving a sports car, above)? The answer to this question is beyond the scope of our data; however, [Hardin and Higgins \(1996\)](#) do not distinguish between "physical" and "social" realities, but instead speculate that all human

experiences are made meaningful through mutual construction of shared realities. According to their theory, the more one shares certain features of the self with others, the more these features become a foundation of reality in the experience of the self and the more they become resistant to change.

4.2. Social identity

Participants' reports regarding social identity and group membership processes indicate that MySpace may facilitate integration, rather than fragmentation, of identity development. In the offline world, individuals are able to present certain aspects of the self differently to different groups, varying their social identities for different groups (Roccas & Brewer, 2002). For instance, young adults might brag to their friends about how much alcohol they drank last night, but tell their families about how much they studied last night. But, as [boyd \(2008\)](#) notes, with one heterogeneous public audience on social networking sites, aspects of the self cannot be presented differently to different groups. Therefore, MySpace actually may introduce pressure for an integration of self-presentations into one that is appropriate to everyone, from your best friend who shares your value system to a distant acquaintance who may not.

The public performance of relationships and memberships in social groups through comment walls and the display of friends also indicate that circumstances on MySpace may intensify one's commitment to group memberships, which may also be another method for solidifying a coherent sense of self. According to social identity theory ([Tajfel & Turner, 1979](#)), individuals' social group membership helps to define who one is, and people are motivated to have positive feelings toward their group.

4.3. Gender identity

Results suggest that overall, gender role constructions on MySpace seem to correspond to gender role constructions in mainstream U.S. culture: females as affiliative and attractive, males as strong and powerful. While new contexts may obviate the need for roles divided along traditional gender lines, previous scripts for behavior may still be utilized in the creation of new norms. MySpace users do not arrive at their computers devoid of previous social norm knowledge and gendered notions may provide a foundation for what to expect in this new medium. Further, the MySpace online context does not appear to be completely removed from users' offline lives, but rather represents an extension or elaboration of offline interactions, such that social realities and roles translate into this online context (see also [Steinfeld, Ellison, & Lampe, 2008-this issue](#), as well as [Subrahmanyam et al., 2008-this issue](#)). As one participant in our study articulated, "It's not something where it's like, ok this is a dream world". This study suggests that social norms are not completely reinvented online; rather, offline gender scripts and roles guide expectations for appropriate behavior online.

Data demonstrate that there is increasing pressure for men to display their physical attractiveness on MySpace; however both men and women showed discomfort with men's concern over their own physical beauty, possibly because the incorporation of feminine aspects of self-portrayal into masculine self-portrayals represents an attenuation of men's superior social status or represents an infringement on physical beauty as a feminine domain. On the other hand, data clearly indicated the pervasiveness of sexualized female self-presentation on MySpace. This is not surprising considering the prevalence of female sexualized bodies in media and in the culture as a whole ([Kilbourne, 1995](#); [L. Greenfield, 2002](#)). The pressure to display sexualized images comes with a strong caveat. Young women negotiate discrepant cultural messages that communicate their value as sexual objects while at the same time punish those who embrace sexual behavior with the label of "slut" ([White, 2002](#)). College women on MySpace seem to face this paradox at a more intense level because of the pressure on MySpace to depict desirable and attractive images on profiles that will draw comments and attention from the MySpace public.

4.4. Limitations and future directions

The focus group procedure of this study generated new insights into the ways emerging adults' peer interactions on social networking sites may impact the construction of personal, social, and gender identities; however, this study is only a first step. The discussions reveal the experiences and phenomenology of a limited number of MySpace users; they also shed light on MySpace as a cultural environment. However, they do not reveal individual differences in patterns of identity construction on MySpace; nor can the generalizability across individuals be assessed. Focus groups are also limited in the extent to which they can illuminate the actual processes of identity exploration and commitment. Longitudinal studies that observe participants' MySpace behaviors and track self-perceptions over time would better ascertain whether self and relationship displays and public feedback actually lead to idealized self-displays becoming integrated into the self.

4.5. Implications for practice and policy

Data from this study provide evidence for both benefits and dangers of online social networking sites in emerging adults' identity development. On the one hand, MySpace gives emerging adults a tool to explore possible selves and express ideal selves that they may want to become. Ease of communication on social networking sites allows emerging adults to remain connected to a variety of people (see [Subrahmanyam et al., 2008-this issue](#), as well as [Steinfeld et al., 2008-this issue](#)). On the other hand, increased pressure on young women to objectify their sexuality while also preserving their innocence may be a confusing and detrimental influence on their development. Further, the intensified social comparison to idealized self-presentations that may or

may not have veracity may also be discouraging to emerging adults who may not feel like they can live up to these flawless images. A balanced view, one that presents both opportunities and drawbacks, should be encouraged in policies regarding youth participation in social networking sites.

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Appendix A. Focus group questions

- 1) Why do you use MySpace? What do you use it for?
- 2) What do you like about MySpace? What do you dislike about MySpace?
- 3) Lets talk about friends for a second? How many friends do you have on the MySpace network?
 - Do you know them all?
 - How do you decide whether or not to approve friends?
 - Do you ever add strangers? What do you look for in people's profiles that determine whether you add them (race, gender, age, level of attractiveness?)
- 4) Does everybody have a list of their top friends?
 - How do you dictate who's on your top friends?
 - Do you guys ever change your top friends and if so, why?
 - Has that ever caused problems on the network or in your real life?
- 5) Lets go back to dislikes for a second, speaking of dislikes, have you ever experienced problems (anything that causes you distress) with MySpace?
 - If so what types of problems have you experienced?
 - Have problems on the MySpace network caused problems in your real life?
 - What do you think are the most common type of problems experienced on the network?
- 6a) How active are you on the MySpace network?
 - How often do you log on?
 - How often do you receive new messages/comments?
 - How often do you leave new messages/comments?
 - Is your profile privacy settings on public or private? Why?
 - How often do you change your profile?
- 6b) I want to talk about comments for a second. What kind of comments do you get on the network?
 - Who are the comments from?
 - With what frequency do you get comments?
 - Have the comments ever been negative at all?
 - How often do you leave comments?
 - What kind of comments do you leave?
 - What is the thought process that leaves you to leave messages vs. comments?
 - Have the comments ever disrupted your lives at all?
- 7) Lets talk a little more about the actual profiles for a second. Obviously MySpace gives one an opportunity to selectively show other people on the network various aspects of oneself through the pictures and the type and amount of personal information one puts on his or her profile?
 - Do any older relatives or parental figures ever see your profile?
 - Do you feel that people use their profiles to present themselves in a certain way on MySpace?
 - What does the profile of somebody who is cool (male and female) look like on the MySpace network? What about someone who is not cool?
 - Do you feel like people you know on MySpace present themselves on the network in a different light from who they actually are or do you feel like it's an accurate portrayal of themselves?
 - What about the pictures people put on their profiles, why do you guys think most people choose the pictures they do?
- 8) While we're still on the topic of self-presentation, do you guys feel like there are any gender differences in the way girls portray themselves on the MySpace network, and the way guys do?
 - What kind of differences do you see?
 - What about the pictures? Are there any differences in the way men and women portray themselves in the pictures?
- 9) Do you guys ever present yourself in a different way on MySpace than you actually are or do you feel it's an accurate portrayal of yourselves?
 - Why do you guys choose the pictures you do?

- Do you (participants) have pictures of your face, your whole body, or both?
Have your pictures changed at all over time?
- 10) We've talked about likes, dislikes, social relationships, self-presentation etc. How have these issues and everything about the MySpace network in general changed you and your lifestyle? (Friends, time on computer, etc.)
- Do you think these changes are positive or negative?
- 11) Overall do you like MySpace?
- Do you feel like it has enhanced your life or hindered it? How so?
- If you feel the latter, why do you still go on MySpace?

References

- Adams, G. R., & Marshall, S. (1996). A developmental social psychology of adolescence: Understanding the person in context. *Journal of Adolescence*, *19*, 429–442.
- Archer, S. L. (1985). Career and/or family: The identity process for adolescent girls. *Youth and Society*, *16*, 289–314.
- Archer, S. L. (1989). Gender differences in identity development: Issues of process, domain, and timing. *Journal of Adolescence*, *12*, 117–138.
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, *55*, 469–480.
- Arnett, J. J. (2004). *Emerging adulthood: The winding road from the late teens through the twenties*. New York: Oxford University Press.
- Baumeister, R. G. (1986). *Public self and private self*. New York: Springer-Verlag.
- Baumeister, R. G., & Muraven, M. (1996). Identity as adaptation to social, cultural, and historical context. *Journal of Adolescence*, *19*, 405–416.
- Bilsker, D., Scheidel, D., & Marcia, J. (1988). Sex differences in identity status. *Sex Roles*, *18*, 231–236.
- boyd, d. (2007). Social network sites: Public, private, or what? Knowledge Tree, 13. Retrieved June 26, 2007, from http://kt.flexiblelearning.net.au/tkt2007/?page_id=28
- boyd, d. (2008). None of this is real: Identity and participation in Friendster. In J. Karaganis (Ed.), *Structures of participation in digital culture* (pp. 88–110). New York: Social Science.
- Brewer, M. B., & Gardner, W. L. (1996). Who is this we? Levels of collective identity and self representations. *Journal of Personality and Social Psychology*, *71*, 83–93.
- Bruner, J. S. (1966). On cognitive growth. In J. S. Bruner R. R. Olver & P. M. Greenfield (Eds.), *Studies in cognitive growth* (pp. 1–67). New York: Wiley.
- Carli, L. L., & Bukatko, D. (2000). Gender, communication, and social influence: A developmental perspective. In T. Ecker & H. M. Trautner (Eds.), *The developmental social psychology of gender* (pp. 295–332). Mahwah, New Jersey: Erlbaum.
- Carroll, J. S., Padilla-Walker, L. M., Nelson, L. J., Olson, C. D., Barry, C. M., & Madsen, S. D. (2008). Generation XXX: Pornography acceptance and use among emerging adults. *Journal of Adolescent Research*, *23*, 6–30.
- Cole, M., & Griffin, P. (1980). Cultural amplifiers reconsidered. In D. R. Olson (Ed.), *The social foundations of language and thought* (pp. 343–364). New York: Norton.
- Comscore (2006). More than half of MySpace visitors are now age 35 and older as the site's demographic composition continues to shift. Retrieved June 25, 2008, from <http://www.comscore.com/press/release.asp?press=1019>
- Comscore (2008). "Digital world: State of the Internet" report highlights growth in emerging Internet markets. Retrieved June 25, 2008, from <http://www.comscore.com/press/release.asp?press=2115>
- Cooley, C. H. (1902). *Human nature and the social order*. New York: Charles Scribner's Sons.
- Cote, J. E., & Levine, C. (2002). *Identity formation, agency, and culture: A social psychological synthesis*. Mahwah, NJ: Erlbaum.
- Deaux, K., & Major, B. (1987). Putting gender into context: An interactive model of gender-related behavior. *Psychological Review*, *94*, 369–389.
- Dindia, K., & Allen, M. (1992). Sex differences in self-disclosure: A meta-analysis. *Psychological Bulletin*, *112*, 106–124.
- Ellison, N., Heino, R., & Gibbs, J. (2006). Managing impressions online: Self-presentation processes in the online environment. *Journal of Computer-Mediated Communication*, *11*, 415–441.
- Erickson, E. H. (1959). *Identity and the life cycle*. New York: Norton.
- Erikson, E. H. (1968). *Identity: Youth and crisis*. New York: Norton.
- Festinger, L. (1950). Informal social communication. *Psychological Review*, *57*, 271–282.
- Flores, E., (2006). MySpace the latest online trend. The Kapi'o Newspress. Retrieved November 24, 2006, from <http://kapi.kcc.hawaii.edu/upload/fullnews.php?id=208>
- Folch-Lyon, E., & Trost, J. F. (1981). Conducting focus group sessions. *Studies in Family Planning*, *12*, 443–449.
- Gilligan, C. (1982). *In a different voice: Psychological theory and women's development*. Cambridge: Harvard University Press.
- Goffman, E. (1959). *Presentation of self in everyday life*. Garden City, NY: Doubleday Anchor Books.
- Greenfield, L. (2002). *Girl culture*. San Francisco, CA: Chronicle Books.
- Greenfield, P. M., Gross, E. F., Subrahmanyam, K., Suzuki, L. K., & Tynes, B. (2006). Teens on the Internet: Interpersonal connection, identity, and information. In R. Kraut, M. Brynyn & S. Kiesler (Eds.), *Information technology at home* (pp. 185–200). Oxford: Oxford University Press.
- Hannover, B. (2000). Development of self in gendered contexts. In T. Ecker & H. M. Trautner (Eds.), *The developmental social psychology of gender* (pp. 177–206). Mahwah, NJ: Erlbaum.
- Hardin, C. D., & Higgins, E. T. (1996). Shared reality: How social verification makes the subjective objective. In E. T. Higgins & R. M. Sorrentino (Eds.), *Handbook of motivation and cognition: The interpersonal context* (pp. 28–34), 3rd ed. New York: Guilford.
- Harter, S. (2003). Development of self-representations during childhood and adolescence. In M. R. Leary & J. P. Tangney (Eds.), *The handbook of self and identity* (pp. 610–642). New York: Guilford.
- Herring, S. C. (2003). Gender and power in online communication. In J. Holmes & M. Meyerhoff (Eds.), *The handbook of language and gender* (pp. 202–228). Oxford: Blackwell Publishers.
- Hogg, M. A. (2003). Social identity. In M. R. Leary & J. P. Tangney (Eds.), *The handbook of self and identity* (pp. 462–479). New York: Guilford.
- Kilbourne, J. (1995). Beauty and the beast of advertising. In G. Dines & J. M. Humez (Eds.), *Gender, race, and class in media* (pp. 112–125). Thousand Oaks, CA: Sage.
- Konstam, V. (2007). *Emerging and young adulthood*. New York: Springer.
- Kroger, J. (1997). Gender and identity: The intersection of structure, content, and context. *Sex Roles*, *36*, 747–770.
- Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics*, *33*, 159–174.
- Leaper, C., & Friedman, C. K. (2007). The socialization of gender. In J. E. Grusec & P. D. Hastings (Eds.), *Handbook of socialization: Theory and research* (pp. 561–587). New York: Guilford.
- Lerner, R. M. (2002). *Concepts and theories of human development*, 3rd ed. Mahwah, NJ: Erlbaum.
- Magnuson, M. J., & Dundes, L. (2008). Gender differences in "social portraits" reflected in MySpace profiles. *CyberPsychology and Behavior*, *11*, 239–241.
- Maynard, A. E., Subrahmanyam, K., & Greenfield, P. M. (2005). Technology and the development of intelligence. In R. Sternberg & D. Preiss (Eds.), *Intelligence and technology: The impact of tools on the nature and development of human abilities* (pp. 54–97). Mahwah, NJ: Erlbaum.
- McAdams, D. (1999). Personal narratives and the life story. In L. A. Perwin & O. P. John (Eds.), *Handbook of personality: Theory and research* (pp. 478–500). New York: Guilford Press.
- McKenna, K. Y. A., & Bargh, J. A. (2000). Plan 9 from Cyberspace: The implications of the Internet for personality and social psychology. *Personality and Social Psychology Review*, *4*, 57–75.

- McLean, K. C., Pasupathi, M., & Pals, J. L. (2007). Selves creating stories creating selves: A process model of self-development. *Personality and Social Psychology Review*, 11, 262–278.
- Morahan-Martin, J. (1998). Males, females and the Internet. In J. Gackenbach (Ed.), *Psychology and the Internet: Intrapersonal, interpersonal, and transpersonal implications* (pp. 169–197). San Diego, CA: Academic Press.
- Morahan-Martin, J. (2001). Caught in the web: Research and criticism of Internet abuse with application to college students. In C. R. Wolf (Ed.), *Learning and teaching on the world wide web* (pp. 191–219). San Diego, CA: Academic Press.
- Nurmi, J. (2004). Socialization and self-development. Channeling, selection, adjustment, and reflection. In R. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (pp. 85–124), 2nd ed. Hoboken, NJ: John Wiley & Sons.
- Reis, O., & Youniss, J. (2004). Patterns in identity change and development in relationships with mothers and friends. *Journal of Adolescent Research*, 19, 31–44.
- Roccas, S., & Brewer, M. B. (2002). Social identity complexity. *Personality and Social Psychology Review*, 6, 88–106.
- Rodino, M. (1997). Breaking out of binaries: Reconceptualizing gender and its relationship to language in computer-mediated communication. *Journal of Computer-Mediated Communication*. Retrieved August 19, 2008, from <http://jcmc.indiana.edu/vol3/issue3/rodino.html>
- Smahel, D. (2003). *Psychologie a Internet: Deti dospelymi, dospeli detmi. (Psychology and Internet: Children being adults, adults being children.)*. Praha: Triton.
- Smahel, D., & Subrahmanyam, K. (2007). Any girls want to chat press 911: Partner selection in monitored and unmonitored teen chat rooms. *CyberPsychology and Behavior*, 10, 346–353.
- Steinfeld, C., Ellison, N., & Lampe, C. (2008). Social capital, self-esteem, and use of online social network sites: A longitudinal analysis. *Journal of Applied Developmental Psychology*, 29, 434–445 (this issue). doi:10.1016/j.appdev.2008.07.002
- Subrahmanyam, K., Greenfield, P. M., & Tynes, B. (2004). Constructing sexuality and identity in an Internet teen chat room. *Journal of Applied Developmental Psychology*, 25, 651–666.
- Subrahmanyam, K., Reich, S., Waechter, N., & Espinoza, G. (2008). Online and offline social networks: Use of social networking sites by emerging adults. *Journal of Applied Developmental Psychology*, 29, 420–433 (this issue). doi:10.1016/j.appdev.2008.07.003
- Subrahmanyam, K., Smahel, D., & Greenfield, P. M. (2006). Connecting developmental constructions to the Internet: Identity presentation and sexual exploration in online teen chat rooms. *Developmental Psychology*, 42, 1–12.
- Suler, J. R. (2002). Identity management in cyberspace. *Journal of Applied Psychoanalytic Studies*, 4, 455–460.
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin Worchel (Ed.), *The social psychology of intergroup relations* (pp. 33–47). Monterey: Brooks-Cole.
- Tice, T. M. (1992). Self-concept change and self-presentation: The looking glass self is also a magnifying glass. *Journal of Personality and Social Psychology*, 63, 435–451.
- Tikhomirov, O. K. (1974). Man and computer: The impact of psychological processes on the development of psychological processes. In D. E. Olson (Ed.), *Media and symbols: The forms of expression, communication, and education* (pp. 357–382). Chicago: University of Chicago Press.
- Turkle, S. (1995). *Life on the screen: Identity in the age of the Internet*. New York: Simon & Schuster.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge: Harvard University Press.
- Waterman, A. S. (1999). Identity, the identity statuses, and identity status development: A contemporary statement. *Developmental Review*, 19, 591–621.
- White, E. (2002). *Fast girls: Teenage tribes and the myth of the slut*. New York: Scribner.
- Wynn, E., & Katz, J. E. (1997). Hyperbole over cyberspace: Self-presentation and social boundaries in Internet home pages and discourse. *The Information Society: An International Journal*, 13, 297–327.