

UTILIZING AN ONLINE E-COMMUNITY TO MAINTAIN  
CAMP OUTCOMES AND SOCIAL CONNECTEDNESS

A Dissertation

by

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## ABSTRACT

The role of connectedness for adolescents in their everyday lives is essential for their positive development, lifestyle, and general health. For adolescents living with Internet technology, the dimension for them to develop their sense of connectedness has extended from the physical environment to the digital landscape. Studies of digital landscape design and an examination of its impacts are critical for researchers and youth practitioners.

Previous studies indicated that adolescent's use of Internet technology promotes their sense of school and friend connectedness, but not family connectedness. Findings suggest individual's positive interaction with their social environment and the social groups from their real life are important to the positive impacts of adolescent's use of Internet technology for the sense of connectedness. The cultural immersion camps located in the U.S. specifically designed to encourage a greater sense of cultural heritage among Asian American adolescents. Attendees were expected to gain improved capacities to balance their identities between their Eastern heritage and their host Western culture. Findings suggest that strong perceptions of ethnic identity drive Asian American adolescents to create positive relationships within their social environment.

The sense of connectedness to the camp community potentially bonds adolescents with positive views of self, life, and future self-image as reported in study three. This study provided insights by utilizing an online e-community to maintain adolescent's outcomes and connectedness to camp. Three key factors to deliver an

efficient online extension activity were identified from the qualitative data analysis. Findings suggest that an online extension activity delivery requires adolescent's experiences of online project development and their expectations more than chat, messaging, and game play.

In sum, this study provided a holistic insight for utilizing the digital landscape to support the additional opportunities for adolescents' sense of connectedness. Rather than merely examining the impact of Internet technology, this study also discusses perspectives from previous researchers (i.e. systematic literature review), impacts from youth practitioners (i.e. camp outcomes) and perspectives from adolescents (i.e. focus group) for a multidimensional picture of how a digital landscape can maintain camp outcomes and social connectedness among adolescents.

## DEDICATION

I dedicate this dissertation to my families for their support, encouragement and love. Especially my husband – Chia-Hao Ko, this would not have been possible without him.

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Electronic Devices tells people's story nowadays.

From my phone call history and Dropbox folder update, I'd like to say thank you to my advisor Dr. Corliss Outley. She has always gone out of her way to help me and believed that I could succeed. Her positive voice and continued brave empowerment of my mind helped maximize my potential.

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Lastly, from the mini iPad I currently use to write this paragraph, I'd also like to thank God. Thank you for bringing me a wonderful life partner - Chia-Hao Ko, into my life. He always shows his love through thoughtful actions. Only words can't express my depth of feelings for him.

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## CHAPTER I

### INTRODUCTION

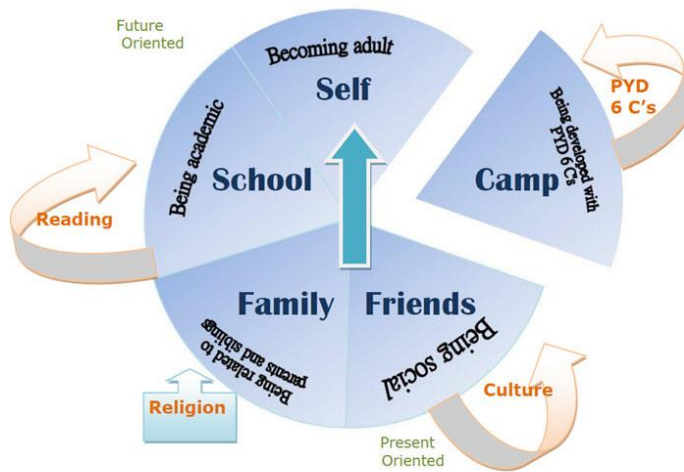
Connectedness is defined as a concept that means to experience *a sense of community, attachment, belonging and commitment* that encompasses ideas related to positive influences of institutes, policies and practices (Janis, 2007). Researchers have not only found that a higher level of social connectedness contributes to adolescent's protection against an array of risk behaviors but also that it fosters better mental health outcomes (Hawkins, Catalano, Kosterman, Abbott & Hill, 1999; Zimmerman, Bingenheimer & Notaro, 2002; Beam, Chen, & Greenberger, 2002; DuBois & Silverthorn, 2005). Adolescents naturally generate a sense of connectedness by viewing themselves as members within the camp community. Connectedness increased by a camp community not only provides opportunities for adolescents to bond with positive views of self, lives, and the future, but a chance to increase their social connectedness as a protective factor for mental health issues. However, feelings of connectedness to camp will gradually disappear due to temporal and geographical limitations for campers (Thurber, Scanlin, Scheuler, & Henderson, 2007). Although the natural characteristics of a camp community make adolescents spontaneously seek out opportunities to maintain connection to camp, the use of social media was not viewed to meet the processes of raising basic awareness to initiate connection (Stoll, Foot, & Edwards, 2012).

Positive Technology Development (PTD) provides a model of applying six technology-mediated behaviors in the digital landscape to engage adolescents via interpersonal interaction and intrapersonal involvement (Bers, 2012). An online e-

Community filled with developmental culture was constructed as a playground in the digital landscape where campers can connect with the camp phenomenon, experiences, and peers. In this study, the online e-Community is (a) the context employed to maximize positive camp experiences in influencing either camp outcomes or social connectedness for adolescents; (b) a support system for adolescents to reinforce attachment and commitment to the camp by taking the advantages of technology; (c) a social group in the digital landscape where adolescents can share the same values and beliefs.

#### The Sense of Connectedness Created By Camp Experiences

Camp is an essential socialization unit for adolescents because they directly influence on people, places, and things through certain degrees of activities during their stay at camp (Karcher, 2003). Adolescents construct developmental assets (e.g. Six C's of positive youth development) (Lerner, Roeser, & Phelps, 2008) when they naturally define themselves as a member of a particular camp community. The unique educational experiences of camp serves as a positive force in youth development for campers which leads to attachment and commitment (Catalano & Hawkins, 1996). From the perspectives of Hirschi's theory (Hirschi, 1969) of deviant behaviors, camp can be viewed as a socialization unit for adolescent's sense of connectedness. The higher degree of interaction and involvement activities at camp also make the connectedness to camp naturally emerge during their stay (Karcher, 2011).



**Figure 1.1** Connectedness to Camp Promotes Adolescent’s Social Connectedness

Connectedness to camp not only leads adolescents to apply their positive camp outcomes into their daily life but also encourages them to foster a better connectedness to family, school, and friends which leads to positive views of self, life, and future (Figure 1.1). Research found that adolescents usually have strong feelings of connectedness to camp during their stay; yet, these feelings are often not sustainable after camp (Thurber et. al., 2007; Bialeschki, Henderson, & James, 2007). For those experienced with the digital alternatives, particularly those who use the Internet daily, technology becomes an easy way for them to construct connectedness to camp. However, interaction merely via social media was not able to meet the processes of raising basic awareness to initiate connection due to the lack of involvement (Stoll, Foot, & Edwards, 2012). Thus, the context contains *intrapersonal involvement* and *interpersonal interaction opportunities* are crucial to lead adolescents intentionally to construct their connectedness to camp community.

## Online e-Community with PTD Perspective

Pew Research Center (2012) reported that 63% of young people use the Internet every day and 93% use it at least occasionally. This suggests that adolescents are getting used to technology and remaining in the digital landscape. The mission of youth practitioners is not only design programs in the real world but also become a digital landscape crafter in the virtual playground. The digital landscape allows adolescents to present their creativity by participating in a project, build confidence from using new technologies, and connect to their peers beyond face-to-face boundaries. These various activities and accessible pathways can be achieved with the use of technology.

Bers (2012) believed the most important feature of technology is to create a playground in the digital landscape where adolescents can acquire developmental assets through six technology-mediated behaviors by participating in a well-designed activity. In PTD context, adolescents become producers, designers, and creators. PTD provides a model for adolescents to construct their developmental assets by applying new technologies (Bers, Doyle-Lynch, & Chau, 2010). With PTD theoretical framework, the essential feature of technology is to provide a context where adolescents can develop sense of connectedness through additional interpersonal interaction and intrapersonal involvement opportunities with applied practice activities.

## Camp Experiences and Adolescents Social Connectedness

Asian American Pacific Islander (AAPI) Youth Violence Prevention Center (2001) reported that Asian American and Pacific Island adolescents face tremendous pressures related to mental health issues. They particularly have feelings of social disconnection and isolation that may cause severe mental health issues and risk behaviors (AAPI, 2001). Researchers found that 30% of Asian American girls in grades 5 through 12 reported depressive symptoms, and it serves as the third highest cause of death among AAPI youth ages 15 through 24 was suicide (Collins et. al., 1999). The risk factors for Asian American and Pacific Island adolescent's mental health are described in Figure 1.2 (Huang, Lee, & Arganza, 2004) below:

TABLE 1: RISK FACTORS FOR AAPI YOUTH	
DOMAIN	RISK FACTOR
<b>Cross-Cutting Risk Factors</b> (may be prominent in all domains)	<ul style="list-style-type: none"> <li>• Acculturation stress</li> <li>• Reconfigured family role structure</li> <li>• Language difficulties</li> <li>• Racism</li> </ul>
<b>Individual/Peer Domain</b>	<ul style="list-style-type: none"> <li>• Alienation and isolation</li> <li>• Devalued ethnicity</li> <li>• Absence of skills to negotiate different culture</li> <li>• Peer rejection</li> </ul>
<b>Family Domain</b>	<ul style="list-style-type: none"> <li>• Intercultural/intergenerational conflict</li> <li>• Low adult supervision</li> <li>• Isolation</li> <li>• Low socioeconomic status</li> </ul>
<b>School Domain</b>	<ul style="list-style-type: none"> <li>• Disconnection between family and school</li> <li>• School system rejection</li> <li>• Limited cultural models and understanding</li> </ul>
<b>Community Domain</b>	<ul style="list-style-type: none"> <li>• Lack of preparation for diverse cultures</li> <li>• Poor home-community linkages</li> <li>• Lack of cultural-specific institutions</li> </ul>

**Figure 1.2** Risk factors for Asian American and Pacific Island Youth

Asian American youths view these cultural institutes and cultural immersion camp programs as an alternative form of "family" where they feel accepted and

comfortable (Seráfica, 1997). Community-based cultural institute such as a cultural immersion camp creates opportunities for Asian American adolescents to construct a specific social group with other peers in the same cultural background. Asian American adolescents not only receive understanding and sympathy from the members within this specific social group, they only construct their self-identity by learning cultural knowledge. In this study, cultural immersion camp is not only a specific social group as samplings, but also an excellent setting to investigate adolescent's social connectedness growth based on camp experiences. The objectives of cultural immersion camp are to enhance their ethnicity identity to narrow down the cultural gap with other family members and further lead adolescents to construct their developmental assets, such as ethnic identity, self-esteem and social skills for a better connection within their social environment.

### Purpose of Study

The purpose of this study is to investigate whether the use of an online e-community in the digital landscape can efficiently maintain camp outcomes and social connectedness among adolescents by providing interaction and involvement opportunities with PTD perspective. The research question is: *Does the use of an online e- community in the digital landscape efficiently maintain adolescent's camp outcomes and social connectedness?* This dissertation utilized a three-article format to answer the research question.

Article I investigated *the impacts of adolescent's Internet technology use in their*

*social connectedness and mental health issues through a systematic review of the literature.* Findings suggest that the use of Internet technology increase adolescent's school connectedness and friends connectedness, but not family connectedness. Internet technology use among adolescents also increases their feelings of loneliness and anxiety. Findings also yielded three major perspectives for Internet technology use among adolescents. First, adolescents have already defined cyberspace as a space to interact with friends and manage their relationships. Second, adolescents were comfortable to take the advantages of Internet technology as a convenient path to communicate with their friends, such as Instant Message (IM). Third, adolescent's real life social network was essential for them to extend their interactive activities to the cyberspace for positive cyber-relationship development.

The Article II employed a cultural immersion camp setting *to examine the relationship between ethnic identity and social connectedness among Asian American adolescents.* Measurements included Phinney's Multigroup Ethnic Identity Measure (MEIM) (Phinney, 1992) and the Hemingway Measure of Adolescent Connectedness (Karcher, 2005), and have met appropriate reliability and validity standards. Quantitative data analysis demonstrated that Asian American adolescents have a stronger sense of social connectedness along with ethnic identity growth based upon their camp experiences. Findings suggest that strong perceptions of ethnic identity drive Asian American adolescents to create positive relationships within their social environment. The cultural immersion camp experiences also became an important intervention to foster a sense of ethnic identity and social connectedness to solve the social alienation



issue among Asian American adolescents.

The Article III provided insights by *utilizing an online e-community with Positive Technology Development (PTD) (Bers, 2012) perspective as a camp extension activity to foster adolescent's connectedness to camp*. An online e-community was the combination of the camp Facebook group page and an eStudio project. The camp Facebook group page was created for camper's interpersonal interaction. An eStudio project was also constructed using the PTD theoretical framework and it served as an additional opportunity for intrapersonal involvement in the digital landscape. Three key factors were identified from the qualitative data analysis for camp programs to develop an online extension activity: a digital playground, advantages of multimedia, and strategies to facilitate intrinsic and extrinsic motivation. Findings suggest that an online extension activity delivery requires adolescent's experiences of online project development and their expectations more than chat, messaging, and game play.

The combined results of these studies provide a holistic insight for utilizing digital playgrounds to support additional opportunities for adolescent's sense of connectedness to prevent mental health issues. Rather than merely examining the impact of Internet technology in adolescents, this study offers insights from previous research (i.e. systematic review), impacts from youth practitioners (i.e. camp outcomes) and perspectives from adolescents (i.e. focus group) for a complete picture of a virtual playground to foster social connectedness among adolescents.

ARTICLE I  
A SYSTEMATIC REVIEW OF RECENT RESEARCH  
ON ADOLESCENT SOCIAL CONNECTEDNESS AND MENTAL HEALTH  
WITH INTERNET TECHNOLOGY USE

Introduction

This study reports the findings of a systematic review of recent research addressing the associations between adolescents' sense of social connectedness and Internet technology use. The social environment for the digital generation has been extended from physical surroundings to a digital landscape where adolescents are becoming accustomed to technology and remaining in the virtual playground in part to experience the positive reinforcement of social connections. Taken collectively, the articles reviewed suggest that youth practitioners and researchers working with youth might incorporate Internet technology into their work, and consider the development of a digital landscape to promote adolescents' social connectedness.

Literature Review

Social connectedness plays an essential role in the everyday lives of adolescents, and is a key to positive personal development, lifestyle, and general health. Researchers have found that a higher level of social connectedness among adolescents not only contributes as a protective factor against an array of risk behaviors but also fosters more positive mental health outcomes by decreasing feelings of anxiety, depression, and

loneliness (Hawkins, Catalano, Kosterman, Abbott, & Hill, 1999; Zimmerman, Bingenheimer and Notaro, 2002; Beam, Chen, & Greenberger, 2002; DuBois & Silverthorn, 2005). The degree of connectedness to social domains (family, school, friends and community) in adolescence is not only a factor for their positive development, lifestyle, and general health behaviors, but also a predictor of their sense of well-being in adulthood (Olsson, McGee, & Nada-Raja and Williams, 2013).

Walton and Cohen (2012) argue that an adolescent's sense of social connectedness is generated by a process that seeks to create a social linkage to their ecological world – a world that includes self-identity formation, feelings of belonging, personal interests and motivated behaviors. The ecological environment for the digital generation has transformed from a focus on only physical surroundings to a digital landscape where adolescents spend their time on virtual playgrounds every day. The Pew Research Center (2013) reported that 93 percent of young people use the Internet at least occasionally. A national survey reported that 95 percent of all teens ages 12 to 17 years are now online in the United States (Madden et. al., 2013). This suggests that adolescents are becoming increasingly well versed in technology and the digital landscape. A virtual playground in the digital landscape becomes part of the social environment and a common destination for adolescents in the digital generation.

An increase in the usage of online technology among adolescents has influenced their mental health status in various ways. Some researchers argue that the use of online technology leads to feelings of loneliness and social anxiety, and creates mental health

challenges among adolescents (Pierce, 2009; Irvine, 2009). Other research suggests that there are positive aspects of online technology, especially in providing opportunities for people to develop and maintain a sense of connectedness in an online environment (Grieve et al., 2013). Overall, researchers believe that the potential positive impacts of technology use among adolescents should be recognized and cultivated, although it is still a challenge for young people to avoid negative influences while using this technology (Austin, Chen, Pinkleton, & Johnson, 2006; Livingstone, 2008).

Boyd (2008) argues that online technology provides adolescents a space to explore identity formation, negotiate status, and socially engage with their peers. Adolescents increase their social connectedness by utilizing higher rates of technology. Bers (2012) also proposed that one of the features of technology is to create a playground in the digital landscape where adolescents can construct a sense of connection (Bers, 2012). Internet technology can be viewed as a potentially effortless, integrated, and automated way to provide a space in a digital landscape for adolescents to construct their social connectedness. Although a substantial number of studies suggest that young people stay in the digital landscape for social activities, there have been few studies that have addressed in a systematic way the effects of adolescents' online Internet technology use on their sense of connectedness.

This study reports the findings of a systematic review of recent research that examines the associations between adolescents' Internet technology use and their social connectedness on the one hand, and their levels of depression, anxiety and loneliness, on

the other hand. The research question for this systematic review article is: *Does the use of Internet technology lead to an increased sense of social connectedness, thereby lowering levels of depression, anxiety and loneliness?* The definition of adolescent social connectedness refers to the positive bonds, interactions and relationships with people, places, and things in an adolescent's ecological environment (Kacher, 2011). Internet technology use among adolescents refers to the utilization of electronic devices connected to the Internet for interpersonal relations, interactions and communications with their ecological environment in their daily life (Mistler-Jackson & Songer, 2000).

#### *Defining Internet Technology*

The notion of "Internet technology" was originally derived from the concept of information technology. Information technology refers to the distribution of information with the delivery of technologies, such as television, telephones, and computers. Internet technology expands on the concept of information distribution by incorporating the *exchange of information* into its definition. People use Internet technology for various purposes including seeking information, entertainment, commerce, communication, and creating new relationships (Sum, Mathews, Pourghasem, & Hughes, 2008). Mistler-Jackson and Songer (2000) argue that the initial use of Internet technology in a classroom setting was designed to permit communication through interaction with one another instead of simply transmitting information. The increased use of Internet technology created new capabilities for communication and interaction with their ecological environment in their daily lives, which in turn led many adolescents to spend

a majority of their time online in order to interact with friends (Sum, Mathews, Pourghasem, & Hughes, 2008; Mistler-Jackson & Songer, 2000). Bringing these perspectives together, the term “Internet technology” as used in this review refers to *the utilization of electronic devices connected to the Internet for interpersonal relations, interactions and communications* (Mistler-Jackson & Songer, 2000).

### *Conceptualization of Social Connectedness and Mental Health*

Researchers have found that a higher level of social connectedness among adolescents not only constitutes a potential protective factor against an array of risk behaviors, but also fosters improved mental health outcomes by decreasing feelings of anxiety, depression, and loneliness (Hawkins, Catalano, Kosterman, Abbott, & Hill, 1999; Zimmerman, Bingenheimer, & Notaro, 2002; Beam, Chen, & Greenberger, 2002; DuBois & Silverthorn, 2005). Understanding the ways in which adolescents spend their daily lives is important when attempting to study how their sense of social connectedness interacts with their social environment. This review focused on literature that seeks to link adolescent social connectedness to levels of anxiety, depression and loneliness. These mental health problems are postulated to be improved by better social connectedness. Improvements in mental health achieved through enhanced social connectedness should be expected to reflect positive bonds, interactions and relationships with people, places, and things in an adolescent’s ecological environment, and result in lower levels of anxiety, depression and loneliness.

## Methods

To avoid possible selection bias, criteria for this systematic review were developed with the intent of locating all directly relevant articles. Internet technology is defined here as *the interaction or communication behaviors of adolescents through the Internet using any electronic device* (Mesch, 2009). Social connectedness refers to *the positive relationships and interactions with family, school, friends, and neighborhoods* (Karcher, 2003). Three specific mental health challenges thought to be improved by enhanced social connectedness – *anxiety, depression and loneliness* – were also targeted in selecting research to be reviewed.

### *Database Search*

The data for this review consisted of articles from the following five online databases: CINAHL, ERIC, Psychology and Behavioral Sciences Collection, Science and Technology Collection and the refined EBSCO Social Sciences database. The initial search was narrowly construed in conceptual and logical terms: (adolescent OR adolescence) + (social connectedness OR sense of connectedness) + (depression OR anxiety OR loneliness) + (Internet technology). That search returned no articles.

However, the use of a more broadly-construed search algorithm identified 308 articles. Because the difference between the first and second searches was so dramatic, it is worth spelling out the second: (teenager OR young people OR youth OR adolescents OR adolescence + (online technology OR Internet technology OR social

media OR social network OR social networking) + (social connectedness OR connectedness OR connection or connect OR relationship OR relationships OR friendship) + (mental health OR depression OR anxiety OR loneliness).

This group of 308 articles may be thought of as the initial pool.

The need for an additional, more broadly-construed, iteration illustrates an interesting characteristic of this literature: the rubric used by scholars doing work relevant to this theme is far from standardized.

#### *Inclusion and Exclusion Criteria*

The 308 articles retrieved in the initial search were then filtered through three specific inclusion/exclusion criteria. Articles were excluded if they were (1) not published in English, (2) not published in an academic journal and (3) not published after 1980. A total of 72 articles was excluded in this selection step. Two were excluded because of publication date, 40 were duplications, and 30 appeared in non-academic outlets. After this first screening, 236 articles remained for further review.

The second screening involved sifting the abstracts of the remaining 236 articles so as to narrow the study to research (1) most directly relevant to the selected substantive focus, and (2) that used systematic methods that would permit robust inferences. To accomplish this, four additional inclusion criteria were applied: (1) an unambiguous focus on *adolescents*, (2) the use of experimental or quasi-experimental research designs, (3) an explicit focus on social connectedness and its potential impacts



on *anxiety*, *depression*, and/or *loneliness*, and (4) the treatment of Internet technology use as a causal factor, or prospective intervention. If it was not clear from the abstract whether the criteria were met, the article was included in the final screening process.

A total of 220 articles was excluded in the second round. Nineteen articles were excluded because they did not focus specifically on adolescents (e.g., they dealt with young adult, college students), or did not have at least quasi-experimental research design (e.g., meta-analysis). A total of 101 articles were excluded because the outcomes treated in the articles were not the three mental issues we are focusing on (e.g., they dealt with adjustment, suicide, wellbeing, or other mental health issues). One hundred articles were excluded because Internet technology use was not treated as an intervention or prospective causal factor in the study. The inclusion and exclusion criteria used for this systematic review are provided below (see Table 2.1).

**Table 2.1** Sample Inclusion and Exclusion Criteria

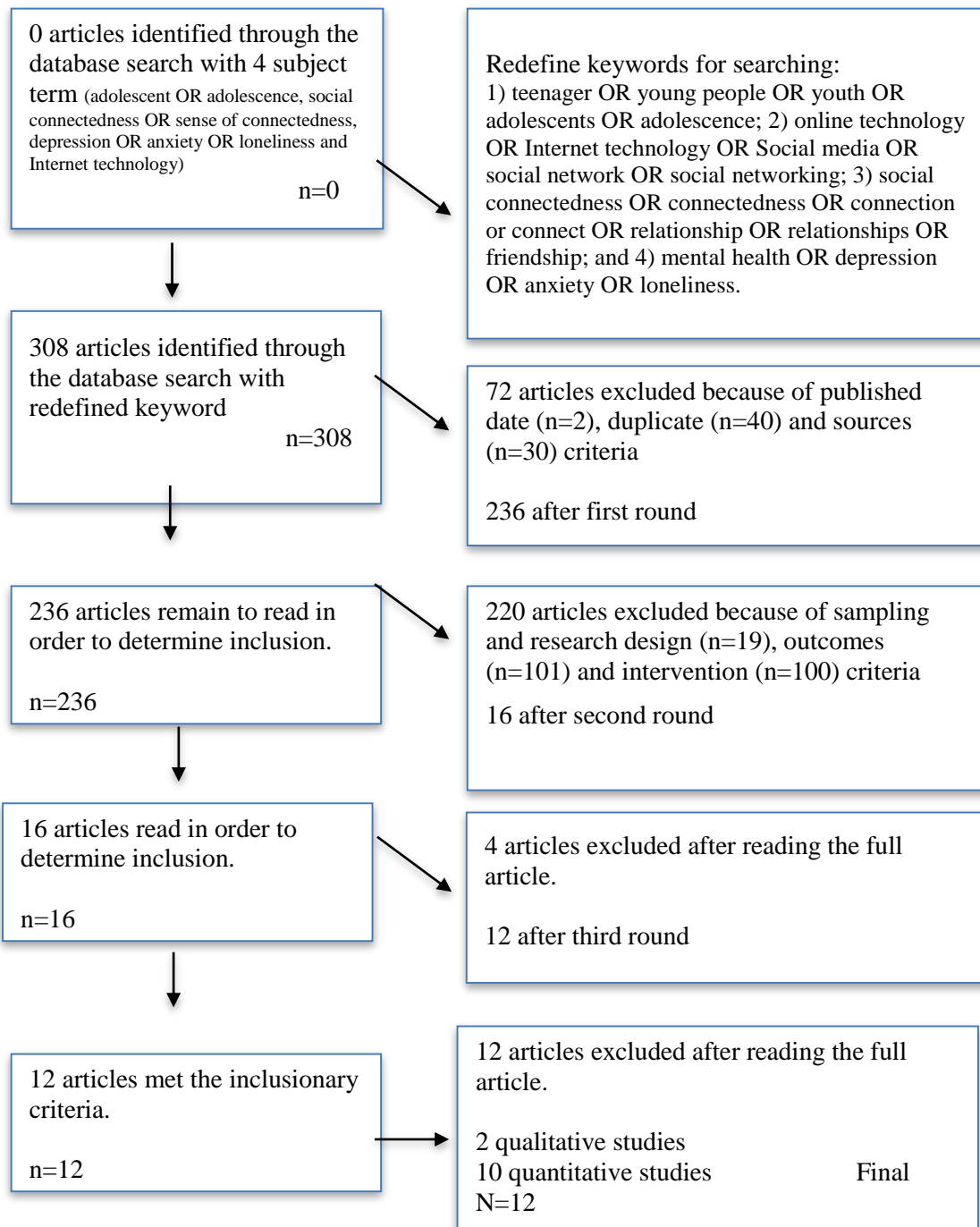
Criteria	Inclusion	Exclusion
Intervention	Internet use, social media, social network, instant messaging and email	Phone text, video, game play, Internet addiction and online entertainment
Outcomes	Social connectedness, connectedness, friendship, relationship, mental health issues for depression, anxiety, loneness, social isolation.	bullying, attitude, health behavior, satisfaction, personality, self-perception, adaptability, self-efficacy, resilience, cognition, suicide
Methodology	Experimental and observational research that seeks to investigate Internet technology on adolescent social connectedness and mental health	Literature review, Meta-analysis, non-peer reviewed literature, expert opinion and magazines
Sampling	Adolescence or teenagers or youth or young people	Young adult, college student, adult, elder, child
Language	English	Not English
Sources	Academic journal	Magazine, Dissertation, Reviews and Reports
Published Date	Studies from 1980 to current	Studies before 1980

### *The Three-tier Screening Process*

After this second screening, 16 articles remained for further review. For the third round screening process, the same inclusion criteria from the second screening were applied, but now to the full text of each article. After full text screening of the 16 articles, four were excluded on the basis of the intervention or age group criterion, resulting in a final sample size of n=12.

The inclusion/exclusion procedures listed above served as the first round of screening in the three-tier process. For the screening process, the PRISMA flow chart developed by Liberati et al. (2009) was used to determine eligible articles to be included in the final analysis. The flowchart in Figure 2.1 depicts the number of articles identified during the systematic review and indicates the number of included and excluded articles.

A total of 12 studies satisfied the above criteria for inclusion in the review (see Table 2.2).



**Figure 2.1** Flow of Articles through the Systematic Review

**Table 2.2** Summary of Study Articles

Authors/ Date	Focus	Sample number	Sample age	Sample gender	Sample recruit	Sample location	Study Meth	Themes and Major Findings
Banjanin, Banjanin, Dimitrijevic and Pantic (2015)	Relationship existed between the time spent on social networking sites and depression	n=336	mean age 18	Mixed	School	Serbia	Quantitative Survey	<ul style="list-style-type: none"> <li>- No relationship existed between the time spent on social networking sites and depression, as well as between depression symptoms and SNS-related activities such as the number of Facebook friends or the number of self-portrait photographs.</li> <li>- Another factor that must be taken into account when investigating the connection between Internet and depression, is potential relationship between Internet-based interactions and self-esteem</li> </ul>
Frisonand Eggermont (2015)	Social support seeking via Facebook	n=910	mean age 15	Mixed	School	96percent Belgium	Quantitative Survey	<ul style="list-style-type: none"> <li>- Social support seeking through Facebook only has a positive impact on adolescents' depressed mood through the perception of available emotional support from Facebook friends</li> </ul>
Huang and Yang (2013)	Cyber-relationship loneliness	n=608	13-18	Mixed	School	Taiwan	Quantitative Survey	<ul style="list-style-type: none"> <li>- 429 of 608 indicated that they have had cyber-relationships.</li> <li>- Loneliness is associated with cyber-relationship.</li> <li>- A lonely teenager tends to portray him/herself as loveable in his/her online profiles to achieve success in cyber-relationship.</li> </ul>
Park, Hong, Park, Ha, and Yoo (2013)	Internet use and Depression, stress	n= 795	12-13 15-16	Mixed	School	Korea	Quantitative Survey	<ul style="list-style-type: none"> <li>- Problematic Internet use may predispose adolescents to develop depression, probable bipolar disorder and/or suicidal ideation;</li> <li>- Adolescents with depression or suicidal ideation can develop problematic Internet use as a coping strategy to elevate mood or to avoid stressful life events.</li> </ul>
Lim, Chan, Vadrevu and Basnyat (2013)	Facebook and peer relationship	n=36	13-18	male only	Counseling center	Singapore	Qualitative Interview	<ul style="list-style-type: none"> <li>- Many of our respondents admitted to enjoying the peer interactions on Facebook, especially where peer support and affirmation was offered or received.</li> <li>- Facebook was the principal tool of online peer interaction</li> <li>- Youths who attempt to distance themselves from their delinquent peers are challenged by the persistence of their online social networks</li> </ul>
Raghavendra , Wood, Newman, Lawry (2012)	the use of the Internet as a social networking tool for social connectedness	n=15	11-18	mixed	school	Australia	Qualitative Interview	<ul style="list-style-type: none"> <li>- No participants in the study mentioned using the Internet to connect with family members.</li> <li>- Online connection was often an extension of offline connections, providing additional connection for friendships with people at school or people already known via instant messaging/email/social networking. A strong theme of connecting only with friends and people known through school, sporting clubs or friends of the family</li> </ul>
Delonga, Torres, Kamen, Evans, Lee, Koopman and Gore-Felton (2011)	loneliness	n=49	14-19	male only	Youth program	USA	Quantitative Survey	<ul style="list-style-type: none"> <li>- Loneliness to be positively and significantly associated with compulsive Internet use</li> <li>- Compulsive Internet use is the emotional, cognitive, and behavioral manifestation of anxiety</li> </ul>
Holtz and Appel (2011)	Internet use and video gaming predict depression, anxiety and loneliness	n=205	10-14	mixed	school	Australia	Quantitative Survey	<ul style="list-style-type: none"> <li>- The link between gaming and loneliness and depression.</li> <li>- No interactions between parent communication</li> <li>- Internalizing behavior problems such as depression, anxiety and loneliness were neither related to Internet communication nor to a</li> <li>- Early adolescent's externalizing behavior problems (aggression and delinquency) can be predicted by Internet communication</li> </ul>
Dempsey, Sulkowski, Nichols and Storch (2009)	Cyberspace as a social networking forum and depression and social anxiety.	n=1684	11-16	mixed	school	USA	Quantitative Survey	<ul style="list-style-type: none"> <li>- Use of cyberspace as a social networking forum creates a new medium for youth to become victims of peer aggression.</li> <li>- Peer victimization in cyberspace is a special case of peer victimization that occurs through personal computers</li> <li>- Cyber victimization was only associated with symptoms of social anxiety, not depression</li> </ul>
Punamäki, Wallenius, Hölttö, Nygård, and Rimpeläc (2009)	ICT and relationship with peer and parents	n=478	10-13	mixed	school	Finland	Quantitative Survey	<ul style="list-style-type: none"> <li>- Usage of ICT is associated with poor peer and parental relations was substantiated and Intensive ICT playing was associated with poor friendship quality among girls and younger children, and intensive Internet surfing with high loneliness among girls.</li> <li>- Younger children who were lonely and lacked supportive friendships could enjoy social participation by escaping to virtual realities of game playing. children who feel unable to communicate with their parents seek compensation by digital game playing and Internet surfing</li> </ul>
Donchiand Moore (2004)	Internet use and social relationship and loneliness	n=336	15-21	mixed	school	Australia	Quantitative Survey	<ul style="list-style-type: none"> <li>- The more friends in one domain (virtual), the more friends in the other</li> <li>- The results suggest a greater implication of Internet use in loneliness</li> <li>- Those young men who strongly emphasize the importance of their online relationships may be cutting off options for psychosocial development through the give and take of face-to-face friendships.</li> <li>- This may be a result of lack of social confidence and poor social skills leading to avoidance of real-world friendships with all their difficulties</li> </ul>
Gross, Juvonen and Gable (2002)	Internet use and loneliness, social anxiety, friendship, depressed mood	n=130	11-13	mixed	school	USA	Quantitative Survey	<ul style="list-style-type: none"> <li>- 84percent of respondents reported that they go on-line on a "typical day". And use IM to communicate</li> <li>- Adolescents communicated with on-line was found to predict peer-related psychological well-being (peer connectedness)</li> <li>- Participants who reported feeling lonely or socially anxious in school on a daily basis were more likely to communicate through IMs with people they did not know well (i.e., strangers vs. friends).</li> </ul>

## Results

### *Sample Characteristics and Locations*

From the final set of articles the smallest sample size studied was  $n=15$  and the largest,  $n=1684$ . The subjects included early adolescents (from 11 years) to late adolescents (21 years). Two of the ten studies had male-only samples and/or were recruited from non-school settings (DeLonga et al, 2011; Lim et al, 2013). The remaining ten studies had mixed-gender samples and recruitment was from schools. Three studies were conducted each in the United States and Australia, and one study was conducted in each of six countries – Finland, Taiwan, Korea, Serbia, Belgium and Singapore. The collective breadth of these studies permits drawing defensible inferences about some of the characteristics of the growing trend among adolescents to use Internet technology.

Perhaps not surprisingly, the outlets in which the respective studies were published conform to the characteristics of the sample of subjects. For example, Raghavendra, et al. (2012) conducted a study on participants with physical disabilities and published the research in *Technology and Disability*. DeLonga, et al. (2011) recruited a sample from a Lesbian, Gay, Bisexual, and Transgender (LGBT) community center, and the study was published in *Sexual Addiction and Compulsivity*.

### *Study Design and Publishing*

Two of the 12 articles – the two referred to directly above – utilized qualitative approaches. That is, the participants in one study had physical disabilities, and the subjects in the other study were identified as bisexual. For both of these groups, the research indicated that cyberspace could be a consequential setting for adolescents with special backgrounds. Ten articles were quantitative studies that utilized cross-sectional surveys. Specifically, one study collected mixed-method data and included a combination of survey responses and daily personal reports (Gross, Juvonenand, & Gable, 2002). The daily report was considered supplemental to the survey responses.

Five of the 12 studies came from sources specialized in computer use. One was focused on computer use in education (Hunag & Yang, 2013); four dealt more broadly with the impact of computer use on human behavior (Lim et. al., 2013; Frison & Eggermont, 2015; Banjanin, Banjanin, Dimitrijevic, & Pantic, 2015); and one publication was in the field of disability studies (Rachavendra, et. al., 2012). The other seven studies were carried out within the scope of adolescent development. The outlets for these studies included the *Journal of Psychiatry* (Park et. al., 2013), *Sexual Addiction and Compulsivity* (DeLonga, et. al., 2011), the *Journal of Adolescent* (Holtz & Appel, 2011), *Psychology in the School* (Dempsey et. al., 2009), *Behavioral Change* (Donchi & Moore, 2004) and the *Journal of Social Issues* (Gross, Juvonen, & Gable, 2002).

### *Study Content Focus*

Each of the articles reviewed yielded findings relevant to our research question:  
*Does the use of Internet technology lead to an increased sense of social connectedness, thereby lowering levels of depression, anxiety and loneliness?*

### **Internet Technology Use in Changes in Adolescents' Social Connectedness**

Seven out of the ten studies illustrated the influence of Internet technology use in adolescent social connectedness. Four of these focused on connectedness among friends, whereas the other study dealt with connectedness with school peers. Four of the five studies contended that Internet technology use promotes connectedness among friends (Gross, Juvonen, & Gable, 2002; Donchi & Moore, 2004; Raghavendra et. al., 2012; Lim et. al., 2013). The exception was the study done by Punamäkia et al. (2009), in which the use of Internet technology was said to lead adolescents toward poor peer and parental relationships.

Both of the studies focused on school connectedness found that this connectedness was improved by Internet technology use (Gross, Juvonen, & Gable, 2002; Raghavendra et. al., 2012). Young people do use the Internet to seek out additional opportunities to interact with school-based peers. However, they rarely used the Internet to communicate with their family members. Specifically, all three studies that dealt with family connectedness concluded that family connections declined as a result of use of Internet technology (Punamäkia et. al., 2009; Holtz & Appel, 2011;

Raghavendra et. al., 2012). Interestingly, researchers often used the term “cyber-relationship” to define an adolescent’s connection and interactions with Internet technology, and suggest that adolescents consciously seek to manage their relationship with the Internet (Gross, Juvonen, & Gable, 2002; Huang & Yang, 2013). Overall, the review of these articles leads to the conclusion that Internet technology increases the levels of friends and school connectedness, but not of family connectedness.

### **Internet Technology Use in Adolescents’ Mental Health**

Ten out of twelve studies examined the influence that Internet technology has on the mental health of adolescents. Four of the five studies concluded that there is no association between the use of Internet technology and feelings of depression (Dempsey et. al., 2009; Holtz & Appel, 2011; Frison & Eggermont, 2015; Banjanin, Banjanin, Dimitrijevic, & Pantic, 2015), and only one of five studies found a relationship between these two variables (Park et. al., 2013). Two of three studies concluded the greater the IT use, the higher the level of social anxiety (Gross, Juvonen, & Gable, 2002; Delonga et. al., 2011); one study determined that there was no association (Holtz & Appel, 2011). Five of six studies found the greater the IT use, the higher the level of loneliness (Gross, Juvonen, & Gable, 2002; Donchi & Moore, 2004; Punamäkia et. al., 2009; Delonga et. al., 2011; Huangand & Yang, 2013), but one showed no association (Holtz & Appel, 2011). Overall, these articles do not support the notion that Internet technology contributes to an adolescent’s mental health by lowering levels of anxiety or loneliness.



## Discussion

A relatively small number of studies have been reviewed here. But it is also the case that the universe of literature on the sequence of Internet technology use, the development of social connectedness, and the mental health circumstances of adolescents is still small. Expanding this area of research seems important, especially because both Internet use and mental health challenges are increasing in this population. The findings from this systematic review provide a basis for further discussion and inquiry regarding both the positive and negative dimensions of Internet technology use, and the role of adults – parents, practitioners, and researchers – in guiding and providing frames of reference for an adolescent’s Internet technology use.

### *The Use of Internet Technology Among Adolescents*

These articles generate three major findings regarding the salience – as opposed to the affect – of Internet technology use for adolescents. First, cyberspace is accepted by adolescents and used as a new medium for them to maintain and manage their relationships with peers and friends. [Recall that the concept of *cyberspace* was used to describe a space for adolescents to interact and connect by using social networks (Gross, Juvonen, & Gable, 2002; Dempsey et. al., 2009; Holtz & Appel, 2011; Huang & Yang, 2013). Second, adolescents’ use of Internet technology is seen as a way to significantly increase the *accessibility* of networks of friends. Fully 84 percent of respondents in these studies reported that they use Instant Message (IM) either by cell phone or personal computer to communicate with their friends (Gross, Juvonen, & Gable, 2002). The

convenience of IM provided a convenient access for adolescents to maintain connections, both with school acquaintances and with peers (personal friends). Third, an adolescent's *real life [as opposed to virtual] social network* is critically important for determining to what extent cyber-relationships will develop in a positive way.

Researchers found that online connections were often an extension of offline connections (Gross, Juvonen, & Gable, 2002; Raghendra et. al., 2012; Lim et. al., 2013). A stronger sense of online connectedness was linked to having friends or acquaintances known through school, sporting clubs or family. An adolescent's real life social network critically conditions the relationship between Internet technology use and adolescents' level of social connectedness, and can influence that relationship in a positive way.

### *The Positive Side and Negative Dimensions Of Internet Technology Use Among Adolescents*

Positive relationships between an adolescent's social connectedness and Internet technology use can be viewed as additional opportunities for adolescents to develop their social skills and self-identity formation. On the other hand, adolescents who over-emphasize connecting online with friends often are unable to handle real-life relationships, and have feelings of loneliness (Dochi & Moore, 2004; Delonga et. al., 2011; Huang & Yang, 2013). Teenagers who have internal feelings of loneliness work especially hard at creating appealing online profiles. Their effort is to achieve success in cyberspace that they are not experiencing in offline settings. The differences between

one's self-image in real life and in cyberspace can create dissonance, and cause feelings of loneliness when they interact with the social environment. Thus, the strength of self-identity developed from their social environment becomes critical for adolescents to avoid mental health problems that can come from the use of Internet technology.

In addition, the negative impacts from relationships in the real world were also difficult to reverse, or compensate for, through the use of Internet technology. This is true in spite of the positive relationships between Internet technology use and adolescent friend and school connectedness that were found in this review, and which are consistent with previous studies (Pierce, 2009; Irvine, 2009; Grieve et. al., 2013). Adolescents find it difficult to distance themselves, for example, from their bullying or otherwise delinquent peers, in part because it is easy to transfer, or project, their real-life social network into cyberspace. The virtues of convenient accessibility to friends brought by Internet technology are thus a mixed blessing. Adolescents need additional relationship management skills, as well as knowledge of technology, to protect their personal privacy and safety in the digital landscape. Again, the research reviewed here reveals both positive and negative aspects of Internet technology use among adolescents.

The three studies focused on adolescents with physical disabilities or bisexual identity found some basis for viewing Internet technology use as a source of psychological support (DeLonga et. al., 2011; Raghavendra et. al., 2012; Lim et. al., 2013). However, digital game playing and Internet surfing can give adolescents excuses to escape from their real-life social environment (Punamäkia et. al., 2009) and can lead

to more problematic behaviors such as online game addiction and compulsive Internet use. Though Internet technology might provide additional opportunities for adolescents to seek psychological support, real-life social skills are still a necessary foundation for them to use technology in a beneficial way.

### *The Role of Adults in Adolescents' Internet Technology Use*

The potential advantages of Internet technology use among adolescents also depend on two other aspects of this use: *whom they interact with* and *what they are doing*. Instead of ignoring or pre-emptively sanctioning an adolescent's felt needs for Internet technology use, adults should develop proactive strategies to assist adolescents in exploring the virtual landscape. The focus needs to be on cultivating the positive, rather than seeking to preclude the negative. This may be complicated by the fact that Internet use contributes to an adolescent's social connectedness with friends, but not with family.

In some respects, youth practitioners are just like coaches in sports. Before adolescents successfully "play" in the virtual digital landscape, they need basic skills acquired through practice. Youth programs originating in the local community or schools are natural sources of distinct real-life social networks for adolescents, and can be the basis for extending relationships into cyberspace. Adolescents can be expected to spontaneously take advantage of the Internet to stay connected with these distinct social groups. For adolescents in the digital generation, youth practitioners need to include cyberspace relationship management skills, as well as technology knowledge, in program design. Youth programs already are providing positive contexts to guide

adolescents in developing self-identity and social skills. With the advantages of Internet technology, the positive impacts from youth programs for adolescents can have an enhanced, and perhaps a prolonged, influence on an adolescent's connectedness maintenance.

There is some reason to believe that views of the impacts of Internet technology on adolescents are changing from negative foci (e.g., cyberbullying) to potential positive developments (e.g., better formation of self-identity). The “black box” element in Internet technology use – the fact that we can see inputs and outputs, but not processes – cannot be expected to keep adolescents from using Internet technology. Researchers believe that well-designed activities in the digital landscape can be key factors in encouraging adolescents to construct developmental assets that lead to positive outcomes (Bers, 2012). The potential benefits and challenges in using virtual playgrounds to promote adolescents' sense of connectedness, and contribute positively to their mental health, need future research exploration and discussion.

### *Limitations*

One limitation of this study results from selecting only articles that have been published in academic journals. In doing so, other findings regarding the relationship between Internet technology use and mental health indicators may have been missed if reported in other places such as magazines, program reports, or community reports. There is also the likelihood that articles were missed due to the constraints of the search. As note earlier, the breadth of formulation of the searches had a distinct effect on how

much material was retrieved. Because there is no consensus on what defines an adolescent, studies whose populations might reasonably be considered adolescents may not have been included. It is worth noting that adolescence has been variously defined as having biological, physical, chronological, cognitive, social-psychological, and life-role dimensions.

### Conclusion

From this review of 12 systematically-selected articles, we can conclude that Internet technology use increases the levels of friend and school connectedness, but not family connectedness, among adolescents. The use of Internet technology was not shown to have contributed to lower levels of anxiety or loneliness, and consequently did not lessen mental health problems, among adolescents.

ARTICLE II  
CULTURAL IMMERSION CAMP: THE RELATIONSHIP BETWEEN ETHNIC  
IDENTITY AND SOCIAL CONNECTEDNESS OF ASIAN AMERICAN  
ADOLESCENTS

Introduction

Social connectedness plays an essential role in the everyday lives of adolescents, and is a key to positive personal development, lifestyle, and general health. The degree of social connectedness to broad domains (i.e. family, school, friends and community) in adolescence is not only a factor for better health outcomes but also an indicator of positive feelings of well-being in adulthood. Numerous studies have concluded that lower levels of social connectedness among Asian American adolescents are closely related to their mental health problems (e.g., alienation and suicide). The conflict between Eastern (heritage) and Western (host) cultures for Asian American adolescents inhibits maturation processes and is a significant source of stress. Studies have found that mental health problems among Asian American youth arise when they become more acclimated to American culture and their connection with the value system of their parents diminishes. This especially can generate feelings of alienation from the family (Rick & Forward, 1992; Umemoto & Ong, 2006). The U.S. Department of Health and Human Services (2001) reported a significant cultural influence on mental health conditions and behaviors of ethnic minorities. A positive identification with an individual's ethnic group not only assists in the socialization process, with desirable

psychological and behavioral consequences, but also provides support for building social connections. The cultural immersion camp was specifically designed to encourage a greater sense of cultural heritage among Asian American adolescents. Attendees were expected to gain improved capacities to balance their identities between their Eastern heritage and their host Western culture. Camp staff members, counselors and other campers served as resources in providing psychological support. It was predicted that a cultural immersion camp might significantly reduce Asian American adolescents' mental health problems by increasing their level of ethnic identity, and thereby their social connectedness. Only a few studies have explored the relationship between ethnic identity and social connectedness. A careful examination of cultural immersion camp outcomes might help address two overlapping questions: (1) *To what extent does participation in a cultural immersion camp strengthen Asian American adolescents' positive perceptions of their ethnic identity and of their social connectedness?* and (2) *What relationships can be observed between ethnic identity and social connectedness in the perceptions of these adolescents?* The predicted positive impact of the cultural immersion camp program on Asian American adolescents would imply that an environment that positively reinforces their ethnic identity will assist them in developing their sense of social connectedness.

## Literature Review

### *Social Connectedness and Youth Development*

Social connectedness for adolescents in their everyday lives is essential for their positive development, lifestyle, and general health behaviors. The concept of social



connectedness for adolescents was originally derived from attachment theory and Hirschi's theory of deviant behavior (Karcher, 2011). Attachment endows children with a sense of safety and subsequently drives them to bravely explore their environment. Extending attachment theory from childhood to adolescence, Hirschi's theory of deviant behavior states that bonding within a socialization unit will likely affect adolescent's future behaviors (Hirschi, 1969). The degree of social connectedness to broad domains (e.g. family, school, friends and community) in adolescence is not only a factor for better health outcomes but also an indicator for positive feelings of well-being in adulthood. A 32-year longitudinal study found that adolescents' social connectedness predicts their sense of well being later in their adult life (Olsson, McGee, Nada-Raja, & Williams, 2013). Having a sense of social connectedness is a major theme of Positive Youth Development (PYD) theory. PYD theory argues that the Six C's, which include *competence, confidence, connection, character, caring, and contribution*, should be developed during adolescence to improve the capacity to build successful relationships (Lerner, et. al., 2005).

From the PYD perspective, connection is defined as holding a positive bond and building relationships with their social world (Lerner et. al., 2005). The social world of adolescents is centered on their environment including people, places, and things. All of this is essential to providing support and opportunities for young people to become fully functional adults. Research has shown that higher levels of perceived connection with the social environment among adolescents are associated with a youth's positive maturation, greater sense of well-being, protection against risk behaviors, and chronic

diseases (Uchino et. al., 1996; Barber & Schluterman, 2008; Stoddard, Jose, & Pryor, 2010; McMorris & Sieving, 2011). In contrast, the lack of social connectedness among adolescents was considered to be a potential risk factor for multiple chronic diseases and symptoms of depression (Cacioppo & Hawkley, 2003). Greater social isolation among adolescents is more likely to lead to poor mental and physical health statuses. The prevalence of mental health problems among minority adolescents in United States has created an urgent need to increase protective factors to mitigate experiences of depression and to improve physical and mental health.

#### *Research on Minority Adolescents' Social Connectedness*

Social connectedness can be defined as the relationships between individuals and community social groups (Karcher, 2001). Incorporating the sense of attachment theory and Hirschi's theory of deviant behavior from child development, social connectedness becomes a major mechanism by which adolescents learn how to interact with their social environment, as well as with their sense of self. Levels of social connectedness differ and change along with the processes through which young people interact with community members through self-identity formation. In the United States, the overall picture of adolescents' social connectedness growth is complex, especially because of demographic clustering of the population and varying levels of locational cultural diversity. Minority adolescents' sense of social connectedness may largely be influenced by their ecological world (i.e. family, school and neighborhood) when connectedness involves the formation of personal identity. The growth of levels of social connectedness

among minority adolescents may vary because of different historical backgrounds, cultural circumstances and family structure.

Minority adolescents, including African American, Latino American, and Asian American, in the United States have lower levels of social connectedness than do majority populations. In addition, the challenges faced vary somewhat among minority groups. African American adolescents have lower self-esteem when they identify with stereotypes of their racial group held by others. These thoughts can have an adverse effect on their overall development (Pinckney IV, Outley, Blake, & Kelly, 2011).

Researchers have argued that one potential buffer against society's negative assessments of African Americans is the development of self-esteem through the development of a healthy racial identity. Resilience models also support the notion that greater strength and more positive affect of one's ethnic identity will result in more positive mental health outcomes (Rosenberg & Simmons, 1971; Baldwin, 1984; Broman et. al., 1989; Mandara et. al., 2009). As with African American youth, positive reinforcement from adults is essential for Latino American adolescents' development (Castro, Stein, & Bentler, 2009). Researchers found Latino youths' conservative family values and inclination to support community traditions are sources of protection against problem behaviors (Zayas & Pilat, 2008; De Luca, Wymanand & Warren, 2012). Family connectedness can play an important role in Latino youth development, but not every Latino family enjoys the high connectedness that can contribute to this process. In some cases, Latino youth may be alienated due to the lack of family values critical of substance abuse and sexual risk behaviors (Wagner et. al., 2010). Canino and Roberts

(2001) concluded that cultural conflicts perceived by Latino family members contributed to significantly higher rates of suicidal behaviors among Latino adolescents. For Latino American and Asian American adolescents, stronger family ties can be either a protective factor or a potential liability in their mental health.

#### *Research on Asian American Adolescents' Social Connectedness*

The stronger family ties that exist within Asian American families are similar to those in Latino families, but the influences of cultural values on adolescent development are distinct. The large cultural gap between Eastern Asia (their heritage culture) and Western America (the host culture) can cause severe stress and become an inhibiting factor in the positive development of Asian American adolescents. Lorenzo, Frost and Reinherz (2000) concluded that Asian American youth felt lower positive affect and reported higher levels of internalized behaviors toward their social environment. In other words, Asian American adolescents are not supported appropriately when they construct their self-identity within an internal cultural conflict system.

The Asian American Pacific Islander (AAPI) Youth Violence Prevention Center (2001) reported that Asian American and Pacific Island adolescents face tremendous pressures that can lead to mental health problems. In particular, they have feelings of social disconnection and isolation that may cause severe problems and risk behaviors (AAPI, 2001). Researchers found that 30 percent of Asian American girls in grades 5 through 12 reported depressive symptoms. Relatedly, the third highest cause of death among AAPI youth ages 15 through 24 was suicide (Collins et. al., 1999). Asian

Americans are a distinctive group made up of immigrants or their descendants from several countries with various linguistic, cultural, and historical diversities. Despite the fact that most Asian Americans have high levels of residential integration, and despite the relatively high degree of interracial marriage involving Asian Americans, many of them still feel a distinct cultural separation from other Americans. More than half of Asian Americans say they are very different from the typical American, despite the fact that they have grown up as part of the largest group of new immigrants in the U.S. (Pew Center, 2012). The knowledge of heritage culture and cultural institutions, as well as ethnic group membership, may help minority adolescents gain additional resources or support to increase their social connectedness (Cooper & Denner, 1998). Social connectedness among Asian American adolescents may derive from knowledge of ethnic culture and positive feelings about ethnic identity, and can lead Asian American adolescents to create positive relationships with their social environment. Asian American adolescents' emotional attachments to, and psychological support from, their ethnic groups turn out to be the foundation for promoting their sense of social connectedness. Settings such as cultural immersion camps can become an intervention to improve mental health conditions among Asian American youth.

#### *Cultural Immersion Camp Experiences for Asian American Adolescents*

Studies have concluded that mental health problems among Asian American youth arise when they become more acclimated to American culture, and disconnected from their parents' value system, developments that generate feelings of alienation from

either the social environment or themselves (Rick & Forward, 1992; Umemoto & Ong, 2006). Many Asian American immigrant communities in the United States have sought to combat the onset of mental health problems through the participation of children and youth in informal settings, such as cultural immersion camps. The objectives of cultural immersion camps are, first, to enhance Asian American youths' ethnic identity so as to narrow the cultural gap with other family members; and second, to lead them to construct their developmental assets, such as self-confidence, self-esteem and social skills, so as to achieve better connections within the social environment. Researchers argue that these cultural institutions (e.g. cultural immersion camp programs) also become as an alternative form of "family" for Asian American youths, a place where they feel accepted and comfortable (Seráfica, 1997; Seráfica & Vargas, 2006). The camp staff, counselors and peers from cultural immersion camp community provide psychological support for Asian American adolescents by engaging them with people hold similar cultural values, and by enabling them to receive understanding and sympathy from other camp participants. However, the specific impacts of cultural immersion camp experiences on Asian American adolescents' levels of ethnic identity and social connectedness are still being explored and discussed.

#### *Relationship between Ethnic Identity and Social Connectedness*

U.S. Department of Health and Human Services Office (2001) reported that culture represents a significant cultural influence on the mental health thinking and behavior of ethnic minorities (2001). The relationship with an individual's ethnic group

not only assists in the socialization process, and has positive psychological and behavioral consequences, it also provides support for building social connections. Ethnic identity is an important component of self-identity, which is derived in part from an individual's experience of membership in a social group (Phinney, 1992). Researchers argue that an individual's retention and knowledge of his/her ethnic culture creates a sense of belonging that strengthens the identity formation process, and that ethnic identity significantly impacts the self-esteem and self-confidence of minority adolescents in the United States (Albaand & Chamlin, 1983; Pomales, Claiborn, & LaFromboise, 1986; Carter & Helms, 1987; Andujo, 1988; Phinney & Tarver, 1988; Parham, 1989; Helms & Cook, 1999; Chang & Ng, 2002; Phinney, 2003; Pinckney IV, Outley, Blake, & Kelly, 2011).

Minority adolescents go through a negotiation process with themselves that assists them in constructing their identity. This process is influenced by the coping resources available to them, some of which derive from identification with their ethnic culture, and others of which are sustained by beliefs about their host culture. Lorenzo, Frost and Reinherz (2000) found that Asian American adolescents perceived themselves to be less satisfied with their social support than are their Caucasian peers. Strengthened ethnic identity potentially ameliorates that dissatisfaction by inducing more positive mental health outcomes, and thus serves as a protective factor for a positive view of self, as well as a foundation for increasing levels of social connectedness among Asian American adolescents. Despite broad agreement on the potential value of strengthened

ethnic identity, the empirical relationship between ethnic identity and social connectedness has so far received relatively little attention.

### *Stages of Adolescent Development and Gender Differences*

Some youth practitioners and researchers believe that the study of youth development could contribute more directly to the maturation process if adolescent development were viewed as having two distinct stages. Notwithstanding the strong connection with family that typifies an Asian American adolescent's childhood, the major developmental challenge for them in early adolescence is to integrate one's self into the social environment (Schwartz, 2008). The cultural values of high parental expectations, strong family ties, and family harmony within the Asian American family may limit an adolescent's capacity to change and adjust what might be called the *connectedness trajectory* that is observable from early adolescence to late adolescence. These limits in turn can contribute to emotional problems. On the other hand, some research suggests that Asian Americans in their late adolescence will be more acclimated to the host American culture, and may have lower levels of family connectedness. This partial disconnect may increase emotional conflict in family relationships (Rick & Forward, 1992; Greenberger, Chen, & Greenberger, 2002). Thus the adolescent may fall into a kind of identity vacuum – inadequately acclimated to the host culture, but conflictually somewhat distanced from the anchoring influence of the family. Researchers propose that early intervention for adolescents might foster positive youth



development by supporting their opportunities for identity formation (Crocetti, Klimstra, Hale, Kiit, & Meeus, 2013).

The Asian and Pacific Islander Youth Violence Prevention Center (2001) reported that Asian American female adolescents tend to have higher suicide rates than do their male counterparts. Relatedly, these females tend to feel a higher degree of emotional isolation than do Asian American males. Karcher (2001) reported that the mean difference between males and females on the Hemingway social connectedness score can be attributed in part to the impact of programs such as cultural immersion camps. These gender differences need to be more explicitly explored, especially to determine if the adoption of cultural immersion camp experiences can be an intervention in decreasing the Asian American female adolescent's feelings of alienation, and in reducing the gap between males and females.

Some researchers recommend that youth practitioners consider using the reinforcement of traditional Asian values as a consistent and predominant theme in youth programs to address the mental health needs of Asian American adolescents (Lorenzo, Frost, & Reinherz, 2000). Understanding how the relationship between perceptions of ethnic identity and social connectedness varies in different stages of adolescence, and between genders, also can provide valuable information for youth practitioners to develop appropriate strategies.

### *The Present Study*

This study is designed to examine the proposition that cultural immersion camp experiences can reduce mental health problems among Asian American adolescents by increasing their level of positive ethnic identity, and thereby enhancing their social connectedness. In addition, this study will focus in on the dynamics of the relationship between ethnic identity and social connectedness in order to provide evidence that ethnic identity can help promote Asian American adolescents' perceptions of social connectedness. Four research questions were identified for this study.

*Q1: Do Asian American adolescents' strength of ethnic identity and social connectedness increase as a result of their experiences at a cultural immersion camp?*

Drawing upon Erikson's identity formation model (Erikson, 1968) and positive youth development theory (Lerner, Roeser, & Phelps, 2008), it was anticipated that cultural immersion camp experiences would be able to promote both the ethnic identity and the social connectedness of Asian American adolescents.

*Q2: Among Asian American adolescents, do those in early adolescence experience higher levels of growth in ethnic identity and in social connectedness than do those who are in late adolescence?*

Some researchers have proposed that early intervention for adolescents might foster enhanced social connectedness by providing supporting opportunities for improving self-identity and nurturing maturation (Crocetti, Klimstra, Hale, Kiit, &

Meeus, 2013). The differences in camp outcomes in the growth of the ethnic identity and social connectedness between early adolescence, on the one hand, and late adolescence, on the other hand, were examined in this study.

*Q3: Do female Asian American adolescents experience higher levels of growth in ethnic identity and in social connectedness than do male Asian American adolescents?*

Although most researchers indicate that female Asian American adolescents tend to have stronger feelings of alienation than do Asian American male adolescents, the mean differences of social connectedness between male and females might not be consistent with each other due to the different impacts of the program (Karcher, 2001). This study examined the gender differences in ethnic identity and social connectedness growth based upon cultural immersion camp experiences.

*Q4: Does the strength of ethnic identity contribute to the level of social connectedness among Asian American adolescents?*

The relationship between ethnic identity and social connectedness was hypothesized to be positive based on a review of relevant literature. These studies suggest that feelings of attachment, belongingness, and commitment derive from having a strong ethnic identity (Phinney, 1992; Helms & Cook, 1999; Chang & Ng, 2002; Phinney, 2003; Walton & Cohen, 2011). This study seeks to provide evidence relevant to the capacity of strong perceptions of ethnic identity to help promote Asian American adolescents' social connectedness.

## Methods

### *Participants*

A total of 84 Asian American adolescents from three cultural immersion camps participated in this study. The participants consisted of 37 males (44 percent of the participants) and 47 females (56 percent). Early adolescents (ages 11 to 14 years) totaled 32, or 38 percent of the subjects; late adolescents (ages 15 to 18 years) numbered 52 (62 percent). Approximately 70 percent (n=58) of the participants reported a GPA of 4.0, and did not receive free school lunch at school. A total of 67 (82 percent) of the participants may be classified as linguistically bi-cultural, i.e., (the family speaks both their native language and English at home). The language spoken in the households was identified as follows: 48 percent (n=40) speak English and heritage language, 32 percent (n=27) speak only English, and 20 percent (n=17) speak only heritage language.

It is worth noting that 12 percent (n=10) of the study participants reported themselves as American with no ethnic racial affiliation. Almost all of the participants' parents were immigrants. The parents of 63 percent (n=53) of the participants were born in Asia countries including Korea, Japan, Vietnam, Taiwan, China and Cambodian. Only parents of 4 percent (n=4) of the participants were born in the United States. At least one of the parents of nearly all (96 percent; n=80) participants were born in the countries other than U.S. Table 3.1 presents the characteristics of the study participants.

**Table 3.1** Participants Characteristics of the Study

<b>N=84</b>			
Gender	male	<b>n</b> =37	44.04 %
	female	<b>n</b> =47	55.95 %
Age	11-14	<b>n</b> =32	38.09 %
	15-18	<b>n</b> =52	61.90 %
GPA	Grade of A	<b>n</b> =58	69.04 %
	Grade below A	<b>n</b> =26	30.96 %
Socioeconomic Status	Do not receive free meal at school	<b>n</b> =69	82.14 %
	Do receive free meal at school	<b>n</b> =15	17.85 %
Primary Language at home	English	<b>n</b> =27	32.14 %
	Chinese	<b>n</b> =17	20.23 %
	English and another native language	<b>n</b> =40	47.61 %
Ethnic Classification	American	<b>n</b> =10	11.90 %
	Other than American	<b>n</b> =74	88.10 %
Parents country of birth	USA	<b>n</b> =4	4.76 %
	Other Asia Countries	<b>n</b> =80	95.24 %

*Setting*

The cultural immersion camp was specifically designed to encourage a greater sense of cultural heritage among Asian American adolescents. Attendees were expected to gain improved capacities to balance their identities between their Eastern heritage and their host Western culture. Camp staff members, counselors and other campers served as resources in providing psychological support.

Three cultural immersion camps participated in this research project. The objectives of cultural immersion camp are to enhance the campers' ethnic identity, and to encourage adolescents to use their developmental assets, such as ethnic identity, self-esteem, and social skills in constructing better connections with their social environment.

The three camps had certain common characteristics. They (1) were resident camps (as opposed to day camps), (2) were located in the Southwest and on the West coast of the United States, (3) had camp sessions lasting one week, (4) were managed by independent nonprofit organizations, (5) assessed affordable fees for participation, (6) were co-ed gender programs and (7) featured culture-oriented program designs.

The culture immersion camps of this study are held annually for Asian American youths in United States. The purposes of these camps are to create Asian American adolescent networks, and interpersonal relations, and to provide resources for the awareness of traditional Asian culture. Thus, the program activities include cultural knowledge sessions, social skills classes, debriefing and reflection activity, and team building. On the last day of camp, participants' parents were invited to attend a camp stage show where campers act out what they see as the results, or lessons, of their learning experiences.

### *Procedure*

Participation was entirely voluntary. Researchers contacted campsite staff by phone, emailed a research summary and then scheduled a site pre-visit meeting so that

staff could gain more information regarding the research process. A recruitment letter, parental permission forms, and personal assent forms were sent to participants by the camp staff. Parents were asked to turn in the parental permission forms if they consented to their child participating in this study when checking-in at the beginning of camp. Campers were informed that participation in this study was not required even if their parents did not decline. They were asked to fill out a pre-camp survey on the first day of camp, and then completed a post-camp survey on the last day. Both the pre and post-camp surveys included various demographic factors, as well as 64 Likert-scale response items intended to measure participants' perceptions of ethnic identity and social connectedness. Campers completed a questionnaire that assessed camp outcomes, and camp counselors assisted with the survey collection process in order to protect the confidentiality of research participants. There was a 54 percent participant response rate in the study.

### *Measures*

Questions were adopted from Phinney's Multigroup Ethnic Identity Measure (MEIM) with 4 response points Likert scale (Phinney, 1992) and the Hemingway Measure of Adolescent Connectedness with 5 response points Likert scale (Karcher, 2005). Both of these two measurement tools have met appropriate reliability and validity standards. Ethnic identity formation is a dynamic process over time. Erikson (1968) defined an achieved identity as the result of a period of exploration and experimentation during adolescence, one which leads to a commitment in various areas. In this study, the

cultural immersion camp is viewed as a mediating factor that channels other influences in such a way as to guide Asian American adolescents to commit more expressly and more fully to their ethnic identity. Phinney's Multigroup Ethnic Identity Measure (MEIM) (Phinney, 1992) was used to examine adolescents' ethnic identity achievement. This measure includes 20 items. The measure has been used with diverse groups such as African Americans, Central Americans, Mexican Americans, Dominicans, Puerto Ricans, Japanese, Haitians, and White adolescents and young adults. The items are scored based on a 4-point Likert scale ranging from strongly disagree to strongly agree. The higher values indicated greater exploration of, and eventual commitment toward, one's ethnic group; greater participation in ethnically-specific behaviors or activities; and more positive feelings and preferences toward one's ethnic group.

Social connectedness is defined as experiencing a sense of community, attachment, belonging and commitment that encompasses ideas reflecting positive influences from societal institutions, policies, and practices (Janis, 2007). The definition of adolescent social connectedness used for this study is consistent with a broader range of applications in academic research (Townsend & McWhirter, 2005; Barber & Schluterman, 2008). The Hemingway Measure of Adolescent Connectedness (Karcher, 2005) was used to measure research participants' perceptions of social connectedness. This scale is recognized as having established reliability and validity. It has been considered useful by researchers and evaluators working with adolescent connectedness between genders and across ethnic and racial groups. In this study, the scale was used as a cultural immersion camp program outcomes evaluation, in which subscales for



connectedness to parents, siblings, neighbors, friends, and self-in-present/self-in-future were applied into the camp setting. The items were scored on a 5-point Likert scale, with end points being “not at all true” = 1 and “very true” = 5 . The scale items reflect outcomes commonly targeted by youth development programs (Roth, Brooks-Gunn, Murray and Foster, 1998).

### *Data Analysis*

IBM SPSS statistics 20 was used for data analysis. Most variables on ethnic identity and social connectedness showed a normal distribution, and the residuals showed a normal distribution. The dataset satisfies the paired t-test and regression statistics criteria for robust results, making inferences from the results defensible. A paired t-test was used to examine the impact of camp experiences on adolescents’ sense of ethnic identity and social connectedness. A linear regression model was applied to analyze the relationship between ethnic identity and social connectedness. In addition, a series of linear regression model tests were used to compare the relationship between ethnic identity and social connectedness across seven demographic characteristics.

### *Results*

#### *Ethnic Identity and Social Connectedness Growth*

Asian American adolescents’ perceptions of ethnic identity and social connectedness increased based upon the cultural immersion camp experiences reported in this study. This was supported by the result of a paired t-test analysis shown in Table

3. Pair t-test analysis of variance tests were conducted to examine differences among pre and post performance on ethnic identity and social connectedness. Significant differences were found with ethnic identity ( $p < .05$ ) and social connectedness ( $p < .05$ ). The gain scores were identified from mean difference scores (Ethnic identity  $\mu=5.50$  and Social Connectedness  $\mu=13.28$ ). Table 2 presents the descriptive statistics for the ethnic identity and social connectedness in pre and post.

**Table 3.2** Camp Outcomes Growth Descriptive Statistics

Variable		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Ethnic Identity (post)	62.7619	84	7.86424	.79912
	Ethnic Identity (pre)	57.2619	84	7.32403	.85806
Pair 2	Social Connectedness (post)	126.8452	84	18.89380	1.63960
	Social Connectedness (pre)	113.5595	84	15.02717	2.06148

**Table 3.3** Camp Outcomes Growth Statistics Paired Samples t-test

PAIR		Mean	SD	Std. Error Mean	Paired Differences		t	df	Sig. (2-tailed)
					95% Confidence Interval of the Differ.				
					Lower	Upper			
1	Ethnic Identity (post) - Ethnic Identity (pre)	5.500	.94.35	.94.35	3.62969	7.3703	5.84	83	.000*
2	Social Connectedness (post)- Social Connectedness (pre)	13.28	2.18701	2.18701	8.93584	17.635	6.07	83	.000*

\* $p < .05$

*Differences between Adolescents in Early and Late Adolescence on Measures of Growth in Ethnic Identity and Social Connectedness*

The descriptive statistics (Table 3.4) characterize adolescents in early and late stages of adolescence in terms of their changes in ethnic identity and social connectedness. The significant difference between participants in early and late adolescence, respectively, in changes of ethnic identity and social connectedness strength was identified through One-Way Multivariate Analysis of Variance (MANOVA) analysis in Table 3.5 ( $p < .05$ ). MANOVA was conducted to examine if research participants in different stages of adolescent development show different rates of change in ethnic identity and social connectedness.

**Table 3.4** Descriptive Statistics of One-Way Multivariate Analysis of Variance (MANOVA) on Age in Two Dependent Variables

		Age	Mean	Std. Deviation	N
Ethnic (diff)	Identity	Age 12-14	7.3438	7.86831	32
		Age 15-18	4.3654	8.93337	52
		Total	5.5000	8.61842	84
Social Connectedness (diff)		Age 12-14	20.2188	22.02745	32
		Age 15-18	9.0192	17.61293	52
		Total	13.2857	20.04427	84

**Table 3.5** One-Way Multivariate Analysis of Variance (MANOVA) Statistics on Age in Two Dependent Variables

Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power
<b>Intercept</b>								
Pillai's Trace	.418	29.028 <sup>b</sup>	2.000	81.000	.000	.418	58.056	1.000
Wilks' Lambda	.582	29.028 <sup>b</sup>	2.000	81.000	.000	.418	58.056	1.000
Hotelling's Trace	.717	29.028 <sup>b</sup>	2.000	81.000	.000	.418	58.056	1.000
Roy's Largest Root	.717	29.028 <sup>b</sup>	2.000	81.000	.000	.418	58.056	1.000
<b>Age</b>								
Pillai's Trace	.078	3.418 <sup>b</sup>	2.000	81.000	.038	.078	6.836	.627
Wilks' Lambda	.922	3.418 <sup>b</sup>	2.000	81.000	.038	.078	6.836	.627
Hotelling's Trace	.084	3.418 <sup>b</sup>	2.000	81.000	.038	.078	6.836	.627
Roy's Largest Root	.084	3.418 <sup>b</sup>	2.000	81.000	.038	.078	6.836	.627

*p* < .05

Table 3.6 shows that there is a significant difference between adolescents in the two stages of adolescent development (*p* < .05). The sample means of growth in social connectedness in the two groups that age group 12-14 ( $\mu=20.218$ ) had stronger social connectedness growth than did age group 15-18 ( $\mu=9.019$ ) upon the cultural immersion camp experience.

**Table 3.6** One-Way Analysis of Variance (ANOVA) Statistics on the Impact of Age on Growth in Social Connectedness

Social Connectedness (diff)	N	Mean	Std. Deviation	95% Confidence Interval of the Differ.		Std. Error Mean	F	Sig
				Lower	Upper			
Age 12-14	32	20.218	.9435	12.2770	28.160	28.160	6.602	*.012
Age 15-18	52	9.019	2.18701	4.1158	13.922	13.922		

*p* < .05

In order to examine which dependent variable is impacted by the stage of adolescent development, a one-way ANOVA was applied. Table 3.7 shows that there are significant differences in social connectedness growth between the two stages of adolescence ( $F=6.602$ , *p* < .05). Table 7 shows that there is no significant difference

( $F= 2.406, p>.05$ ) between the two stages of adolescence in terms of ethnic identity growth.

**Table 3.7** One-Way Analysis of Variance (ANOVA) Statistics on the Impact of Age on Growth in Ethnic Identity

Ethnic Identity (diff)	N	Mean	Std. Deviation	95% Confidence Interval of the Differ.		Std. Error Mean	F	Sig
				Lower	Upper			
Age 12-14	32	7.3438	7.86831	4.5069	10.1806	1.39093	2.406	.125
Age 15-18	52	4.3654	8.93337	1.8783	6.8524	1.23884		

$p < .05$

Although there is no significant difference between the two stages of adolescence in terms of ethnic identity growth, we do find that research participants in the early adolescence stage ( $\mu=7.86$ ) are somewhat more likely to have higher levels of ethnic identity growth than are participants in late adolescence ( $\mu=9.019$ ).

#### *The Influence of Gender on Changes in Ethnic Identity and Social Connectedness*

Asian American adolescents' strength of ethnic identity and social connectedness growth during the cultural immersion camp were not different for males and females. The data show that gender was not a factor that influenced camp outcomes. A one-way multivariate analysis of variance (MANOVA) was conducted to see if the gender of participants showed levels of growth in ethnic identity and social connectedness. Table 3.8 shows that no significant differences were found for all variations ( $F=. 226, p>.05$ ).

**Table 3.8** One-Way Multivariate Analysis of Variance (MANOVA) Statistics for the Impact of Gender on Two Dependent Variables

Effect	Value	Hypothesis			Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power
		F	df	Error df				
<b>Intercept</b>								
Pillai's Trace	.368	23.567 <sup>b</sup>	2.000	81.000	.000	.368	47.133	1.000
Wilks' Lambda	.632	23.567 <sup>b</sup>	2.000	81.000	.000	.368	47.133	1.000
Hotelling's Trace	.582	23.567 <sup>b</sup>	2.000	81.000	.000	.368	47.133	1.000
Roy's Largest Root	.582	23.567 <sup>b</sup>	2.000	81.000	.000	.368	47.133	1.000
<b>Gender</b>								
Pillai's Trace	.006	.226 <sup>b</sup>	2.000	81.000	.798	.006	.453	.084
Wilks' Lambda	.994	.226 <sup>b</sup>	2.000	81.000	.798	.006	.453	.084
Hotelling's Trace	.006	.226 <sup>b</sup>	2.000	81.000	.798	.006	.453	.084
Roy's Largest Root	.006	.226 <sup>b</sup>	2.000	81.000	.798	.006	.453	.084

*p* < .05

*Examining the Relationship between Ethnic Identity and Social Connectedness*

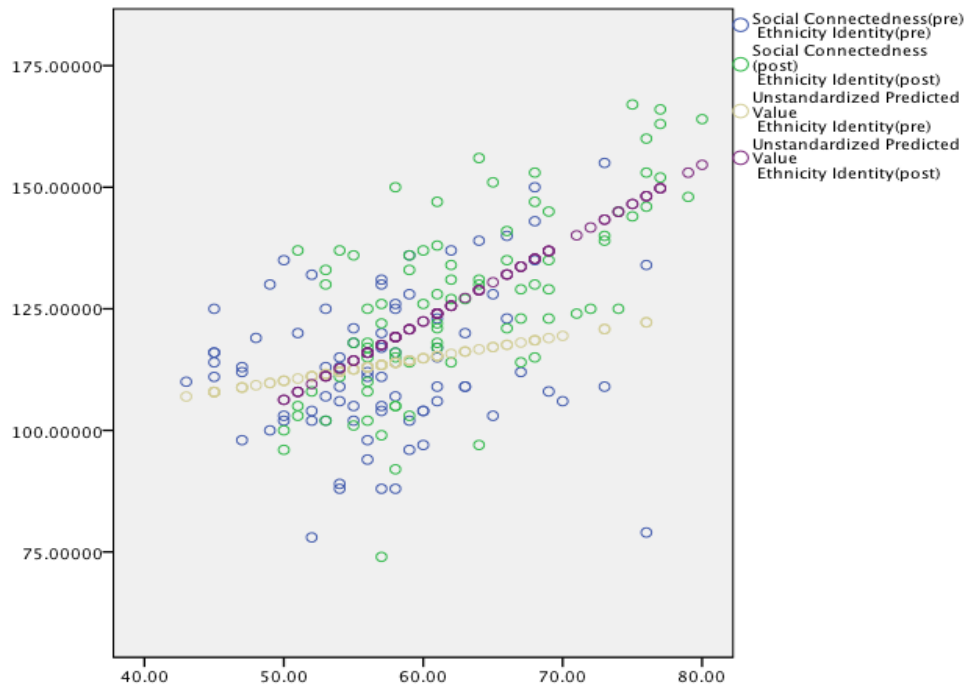
To explore the relationship between ethnic identity and social connectedness among Asian American adolescents, the linear regression model ( $Y = B_0 + X_1B_1 + e$ ;  $Y = \text{Social Connectedness}$ ,  $X = \text{Ethnic Identity}$ ) was conducted in two stages (pre- and post-camp). Significant correlations between ethnic identity and social connectedness were found in both the pre- and post-camp data as shown in Table 3.9.

**Table 3.9** Linear Regression Model of Two Dependent Variables

Variable	<i>B</i>	SE <i>B</i>	<i>R</i>	Sig
(Constant)	87.095	12.743		.000
<b>Ethnic Identity (pre)</b>	.462	.221	.225	*.039
(Constant)	25.782	12.453		.042
<b>Ethnic Identity (post)</b>	1.610	.197	.670	*.000

*p* < .05

The plot of relationships between ethnic identity and social connectedness in pre- and post-camp experiences among Asian American adolescents were shown in Figure 3.1. The positive correlations between ethnic identity and social connectedness both pre- and post-camp were identified. The results support the research hypothesis that the strength of ethnic identity contributes to the level of social connectedness among Asian American adolescents.



**Figure 3.1** Plot of Relationship between Ethnic Identity and Social Connectedness Pre- and Post Camp of Asian American Adolescents

Specifically, the slope change of the two linear regression models indicates that ethnic identity has even stronger impacts on the levels of social connectedness after camp. Therefore, the intervention of cultural immersion camp program experiences effectively promotes Asian American adolescents' social connectedness. The

intervention focuses on the construction of ethnic identity and how, through its effects on social connectedness, it becomes important in improving Asian American adolescents' social connectedness.

*Examining the Relationship between Demographic Characteristics and Ethnic identity and Social Connectedness*

The correlation of ethnic identity and social connectedness across different demographic characteristics was investigated in this study (see Table 3.10) in an effort to generate further support for the major hypothesis of the research. For the bivariate correlation model, demographic characteristics were re-coded as a dichotomy.

A positive effect of Family Culture Oriented ( $R=0.231$ ) on ethnic identity was found in pre-Community. Language use was a primary resource for enacting social identity (Miller, 2010). The positive correlation between the use of heritage language at home and perceptions of ethnic identity also supports the argument that there is a link between heritage language use and cultural identity. This finding is consistent with previous research in which language use at home was a linguistic repertoire approach providing new perspectives on ethnic identity (Gill, 2013; Becker, 2013). The data reported in this paper show a negative correlation between ethnic identity and family immigrant status, in the sense that the strength of ethnic identity among Asian American adolescents was not supported by their immigrant parents. Researchers argue that third generation Asian children and youth tend to put efforts into maintaining a bond with their family and community culture because of their lack of proficiency in their Asian



language and their parents (Mills, 2001). The relationship between language use and ethnic identity was found in several aspects of this study.

**Table 3.10** Correlations Among Demographic Characteristics, Two Dependent Variables, Pre- and Post-Camp

N=84	Ethnic identity (pre)	Ethnic identity (post)	Social Connectedness (pre)	Social Connectedness (post)
Model 1: Academic (0=GPA under A; 1=GPA=A)	-.181	-.080	.018	-.025
Model 2: Family Culture Oriented (0=speak English (non-heritage); 1= speak heritage language or both heritage and English language at home)	0.231*	-.050	-.031	-.086
Model 3: Finance (0=low-income; 1=not low-income)	-.099	-.038	.078	-.100
Model 4: Racial Classification (0=American; 1= other than American)	.033	.059	-.087	.009
Model 5: Family Immigrant Status (0= parents born in the US; 1= parents born in other countries)	-.222*	.000	-.063	-.180

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

## Discussion

These findings highlight the significance of cultural immersion camp experiences as an effective intervention in increasing levels of social connectedness among Asian American adolescents by instilling the strength of their ethnic identity. The positive relationship between ethnic identity and social connectedness among Asian American adolescents supports the notion that culture immersion camp experiences can be important for a minority adolescent's perceptions of social connectedness. The impacts of demographic characteristics on ethnic identity and social connectedness among Asian

American adolescents generally were weaker, and inconsistent. For example, age (stage of adolescence) appears to be of importance, but gender is not.

*Cultural Immersion Camp as an Intervention to Promote Positive Youth Development*

This study examined the impact of cultural immersion camp experiences on Asian American adolescents' strength of ethnic identity and social connectedness, and found these impacts to be significant. These findings are consistent with previous studies which showed that minority adolescents who gain cultural knowledge tend to develop ethnic pride, and also tend to have positive attitudes about themselves and their social environment (Phinney and Tarver, 1988; Parham, 1989; Pinckney IV, Outley, Blake, & Kelly, 2011). A cultural immersion camp represents an ethnic-based community where minority adolescents feel confident in their identity formation process. These camps also serve as a space where these youth receive sympathy and support by meeting other community members. What has been discovered so far suggests the importance of exploring the longer-term impacts of camp community membership on adolescents' development of social networks with friends and school mates, and on their relationships with their parents. These longer-term studies should inform us about how to formulate strategies to sustain camp outcomes. Subsequent research also needs to test more concretely the putative impacts of social connectedness and ethnic identity on the mental health of Asian American adolescents.

*Stage of Adolescent Development and Gender Differences in the Growth of Ethnic Identity and Social Connectedness*

The other important finding of this study was a significant growth in social connectedness for Asian American campers in the early-adolescent stage. This is especially significant given other findings that reinforce the vital role of the early stage of adolescence in long-term developmental outcomes (Seidman, Allen, Aber, Mitchell, & Feinman, 1994). Early adolescence is a period of critical transition for adolescents to construct positive connections with the social environment beyond their families – where strong ties provide youth with initial emotional sustenance. Cultural institutions such as cultural immersion camps can be an important resource for the support of an adolescent’s identity formation process, perhaps especially in the early stages of adolescence. Some researchers have suggested that intrafamilial conflict is partly latent, and can be severely worsened when Asian American adolescents attend college. This is more likely for youth who did not develop strong self-identity through the cultural negotiation process during the early stages of adolescence (Hanmdy, Chithiramohan, Ballard, & Silveira, 1991; Rick & Forward, 1992; Greenberger & Chen, 1996). This often leads to internal dissonance and conflict, and an increase in risk behaviors. The conjoint effects of cultural pressure from family ties, on the one hand, and alienation from family values, on the other hand, are difficult to manage.

The cultural immersion camp is attracting an increasing amount of research, given its potential to assist minority adolescents in their personal and social

development. The growth of social connectedness among Asian American campers in early adolescence indicates that camp communities can serve as social support groups whose support functions may be especially effective because their members have a shared emotional vocabulary. These camps also encourage early adolescent campers to debrief with senior community members. This debriefing is believed to facilitate a positive social interaction process for young campers that blends enhanced cultural knowledge with mentoring.

*Gender Differences in Asian American Adolescents' Development of Ethnic Identity and Social Connectedness*

The result of this study found no gender differences in adolescents' development of ethnic identity and social connectedness, notwithstanding other research (Youth Violence Prevention Center, 2001) that has indicated that Asian American female adolescents tend to have stronger feelings of isolation than do their male counterparts. Asian and Pacific Islander (2001) also reported that Asian American female adolescents tend to have stronger feelings of isolation, and higher suicide rates than Asian American males. The result of this study was noted that Asian American female adolescents who registered in a cultural immersion camp for this study might have better accessibility to cultural support. Another important focus of future inquiry might be to identify the extent to which specific program activities are differentially effective for females and males, respectively.

### *Ethnic Identity as a Baseline to Promote Minority Adolescents' Social Connectedness*

A positive relationship between ethnic identity and social connectedness among Asian American adolescents both pre- and post-camp demonstrated that the social connectedness was significantly influenced by ethnic identity. A stronger sense of ethnic identity drives these adolescents to create positive relationships with their social environment. These results were consistent with previous studies which argued that minority adolescents who have strong ethnic pride are more likely to have motivation for social engagement (Phinney & Tarver, 1988; Parham, 1989; Pinckney IV, Outley, Blake, & Kelly, 2011). Specifically, the degree of impact of ethnic identity on social connectedness was different between pre- and post-camp. The cultural immersion camp experience makes the relationship between ethnic identity and social connectedness stronger than it previously was. This underscores the importance of understanding the determinants of ethnic identity which create the *a priori* conditions that the cultural immersion camp intervention seeks to alter. The supportive resources which the immersion experience tries to generate need to be shaped by a more thorough understanding of the *status quo ante* of participants' ethnic identity.

### *Implications*

The eventual desired outcomes of the cultural camp experience were enhanced ethnic identity, and ultimately, increased social connectedness. End goals are filtered through intermediate goals that correspond more directly to the day-to-day activities of the camp participants. There were two sets of intermediate goals in the camp experience

studied here. The first intermediate goals were to increase cultural knowledge and develop social skills. The follow-on intermediate targets were to generate comfort and trust within an ethnicity-based community. Just as the accuracy of our assumptions about the impact of ethnic identity on social connectedness need to be empirically confirmed, the correspondence of the intermediate goals to the achievement of the end goals needs to be confirmed. The question can be seen as whether the specific program strategies used represent the most efficient and effective means toward the enhancement of ethnic identity and, eventually, social connectedness. Similarly, future research might explore other latent facilitators of success in the cultural immersion camp experience, such as the demographic backgrounds, education, training, and skill sets of camp staff.

In addition, research should further examine to what extent the positive outcomes of the cultural immersion camp experience among Asian American adolescents have a correspondingly positive impact on their relationships with their parents. It is generally accepted that Asian American adolescents have – to varying degrees, of course – feelings of alienation from Asian American parents because the overall cultural contexts in which youth and parents think and behave overlap but are nowhere near congruent. This is true in every inter-generational situation, but more so in immigrant families. Knowing the extent to which the cultural immersion camp outcomes carry over into intrafamilial relationships post-camp would be another important next step.

There appear to be interesting, nonlinear patterns in the generational trajectory of ethnic identity among immigrant populations. Research has suggested that third-

generation Asian American parents tend to cling to and preserve their heritage culture at least as strongly as do second-generation parents; and this despite the fact that third-generation parents are less likely to speak the family's native language. The generally positive correlation between language use and the reinforcement of cultural identity apparently does not hold fully for third-generation parents. And their children also tend to have relatively high levels of ethnic identity. Understanding this apparent resurgence of ethnic identity in third-generation parents needs to be further understood, since we can presume that whatever factors encourage this phenomenon might be interpolated to further strengthen immersion camp experiences.

Another important step in future research would be clarifying the extent to which young adolescents are conscious of both emerging intrafamilial/intergenerational conflicts, and internal conflicts within themselves. This can be seen as an especially important element in mapping the *status quo ante* of ethnic identification for prospective participants in cultural immersion experiences.

A major concern related to the mental health of adolescents from immigrant families is the typical lack of responsive support in their immediate (especially extended family, and school) environments. Cultural programs such as immersion camps can function as an alternative form of "family" in which youth feel accepted and comfortable to share their feelings that they otherwise feel reluctant to release. Youth practitioners should realize that ethnic community institutions not only provide psychological support for adolescents by engaging them with people who hold similar values, but also

potentially serve as a resource center for these adolescents who confront active mental health issues.

### *Limitations of the Study*

The principal limitation of this study is the fact that the adolescents studied were from Eastern Asia. Much of the previous literature from which hypotheses were generated, and which started the accumulation of valuable evidence about the cultural adaptation process for immigrant families, has dealt with a culturally broader set of populations. This compromises the present study both deductively and inductively. First, there is no particular reason to believe that findings derived from culturally broader populations would apply to any given single Asian culture though the culture in Eastern Asia area was largely influenced by the Chinese culture. However, the extent to which there is correspondence between previous research and the present study does encourage us toward generalizations about regionally-defined cultural traits. Second, there is little reason to be optimistic about generalizing findings from this study of ethnic identity and social connectedness in one cultural group to the cultures of other groups of Asian Americans.

There are other potential concerns. The three campsites dealt with in this study had similar objectives and anticipated outcomes – focused on in instilling stronger ethnic identity among Asian American adolescents – despite the fact that they were held separately at locations in Texas and California. In this sense, this study constitutes a “most-similar-systems-design,” one in which there are significant similarities in settings



that limit the generalizability of this research. Also, as noted earlier, we have no way of knowing what factors influenced the participants' statuses of ethnic identity and social connectedness prior to the immersion camp experience. Not knowing the nature of prior influences makes the assessment of the impacts of the camp experience more difficult. This is the case because past patterns of causation can substantially influence what kinds of program activities are likely to be most effective. Similarly, Asian American adolescents – even those from a single (if also broad) set of cultural origins – have had remarkably diverse cultural experiences, even prior to early adolescence. Background factors such as religious beliefs, the family's immigration path to the U.S., and family occupational and socioeconomic status might represent untested exogenous variables for our study, i.e., might have explanatory relevance for understanding ethnic identity formation and social connectedness.

Finally, it is difficult to separate the effects of the generic setting (campsites) from the effects of the activities carried out on those sites. The survey instrument used did not attempt to do this.

## Conclusion

This study has taken initial steps toward an understanding of certain outcomes for cultural immersion camps for Asian American adolescents. The strength of ethnic identity and the level of social connectedness among Asian American adolescents were significantly increased after the cultural immersion camp experiences. Campers in early adolescence experienced stronger growth in social connectedness after the cultural camp

experiences than did campers in the late adolescent stage. It is reasonable to conclude that the growth of ethnic identity and social connectedness resulted from the cultural immersion camp experiences. These outcomes were not differentiated by gender, a finding seemingly at odds with some prior research. More specifically, the level of social connectedness among Asian American adolescents can be predicted by the strength of their ethnic identity. The degree to which ethnic identity contributed to social connectedness among these adolescents was stronger after the conclusion of their camp experiences, compared with the pre-camp relationship. Based on other research, we can entertain the possibility that the cultural immersion camp experiences contributed to the preparation of these adolescents for well-being in adulthood. However, this study did not generate data on that potential longer-term outcome. We can feel confident that ethnic identity can be viewed as a predictor for Asian American adolescents' social connectedness.

### ARTICLE III

## UTILIZING AN ONLINE E-COMMUNITY WITH POSITIVE TECHNOLOGY DEVELOPMENT PERSPECTIVES AS AN ONLINE EXTENSION ACTIVITY FOR ADOLESCENT'S CONNECTEDNESS TO CAMP

### Introduction

The sense of connectedness to the camp community can be maintained through supportive online activities when providing campers with interpersonal interaction and intrapersonal involvement opportunities. The sense of connectedness needs further participant interaction and involvement, and both of them can be delivered with the use of online technology by adopting a Positive Technology Development (PTD) perspective. With PTD theoretical framework, six technology behaviors can be facilitated through well-designed activities in the digital landscape for interpersonal interaction and intrapersonal involvement among adolescents (Bers, 2012). PTD provides a theoretical framework of the study to construct an e-community in the digital landscape for adolescents to continually interact and become involved with the camp community during the off-season. Although prior researchers have shown adolescents may incorporate online technology to stay connected with their camp community, this work rarely considered adopted practices where camp extension activities took place in the digital landscape. The objective of this study is to 1) *develop an online e-community extension activity utilizing the PTD framework*; and 2) *examine the use of an online extension activity to better engage campers during the off-season*. The camp researchers

and camp staff utilized the PTD framework to develop online e-communities. The online e-community is a combination of Facebook page and used to engage campers beyond the communication after camp. Accordingly, two research questions were developed:

*Q1. How do adolescents use online technology to stay connected with their camp community during the off-season?*

*Q2. How do camp program apply the online extension activity (eStudio) to engage campers during the off-season?*

In order to collect data to answer the questions, focus group interviews were conducted for gathering this information.

## Literature Review

### *Connectedness to Camp Community and Youth Development*

Researchers proposed that adolescents' sense of connectedness to key institutions provide protection against an array of risk behaviors and were related to better mental health outcomes for adolescents (Hawkins, Catalano, Kosterman, Abbott, & Hill, 1999; Resnick et. al., 1997; Zimmerman et. al., 2002; Beam, Chen, & Greenberger, 2002; DuBois & Silverthorn, 2005). Connectedness was defined as a concept that means to experience *a sense of community, attachment, belonging and commitment* that encompasses ideas related to positive influences from institutes, policies and practices (Janis, 2007). In this research, campers as the community members experience a sense of

community, attachment, belonging and commitment that encompass ideas related to positive influences from the camp experiences. Adolescents not only gain the 6 C's of positive youth development through camp experiences, but they also possess a sense of connectedness from being significant members of the camp community.

Extending the perspectives of Hirschi's theory of deviant behaviors and sense of community framework, a camp program can be viewed as a specific community where adolescents have feelings of attachment, belonging, and commitment with a shared faith to foster adolescent's sense of connectedness (Hirschi, 1969; Catalano & Hawkins, 1996; McMillian & Chavis, 1986). Karcher (2003) proposed a camp program is a space where adolescents naturally define themselves as a member of the particular camp setting. The sense of connectedness to the camp community potentially bonds adolescents with positive views of self, life, and future self-image, which are generated through positive camp experiences. Feeling connected might also encourages adolescents to make use of positive camp outcomes like the 6 C's (i.e. *Competence, Confidence, Caring, Connection, Character, and Contribution*) in their daily life (Karcher, 2011).

The camp community is also a specific social group that builds and adolescent's sense of connectedness and psychological support because it provides social acceptance and builds the self-confidence of its members (Bernat & Resnick, 2009). Researchers argued that the unique relationship-building camp environment is an excellent space for adolescents to construct social competence with intra- and interpersonal social skills and also promote their sense of connectedness (Sibthorp, Bialeschki, Moran, & Browne,

2013). Therefore, the sense of connectedness to camp is not only a strategy to maintain camp outcomes, it also positively affect connectedness to parents, school, and the future (Karcher, 2005; Karcher, Davis, & Powell, 2002; Karcher & Santos, 2011). However, researchers have found that adolescents usually have strong feelings of connectedness to camp during their stay, but these feelings are often not sustainable after camp (Thurber, Scanlin, Scheuler, & Henderson, 2007; Bialeschki, Henderson, & James, 2007). Strategies to further support campers to stay connected with the camp community and maintain positive camp outcomes are needed.

#### *The Use of Online Technology for Connectedness to the Camp Community*

Experiences in the camp program naturally lead campers to find a sense of connectedness among the relationships with other community members (Goodwin & Lieberman, 2011). Higher degree of interaction and involvement activity during the camp experience also encourages campers to stay connected with the camp community after camp. For campers that are experienced with utilization of digital alternatives, particularly those who use the Internet daily, technology becomes an accessible method for them to stay connected with the camp community. These adolescents have the advantage of using online technology such as social media to stay connected naturally because social media was already apart of their life. Barczyk and Duncan (2012) asserted that the use of Facebook and YouTube seems to have had a positive impact in terms of learning, satisfaction, and on adolescent's sense of community or connectedness. Grieve et al (2013) also indicated that Facebook might provide an

alternative social outlet and act as a social medium to develop and maintain relationships. Many camp program staff and counselors also host Facebook pages as camp network for future events announcement and uploading camp files (i.e. pictures or flyers for the coming season). Using technology to promote camp programs and keep campers engaged has become crucial for camps to remain competitive.

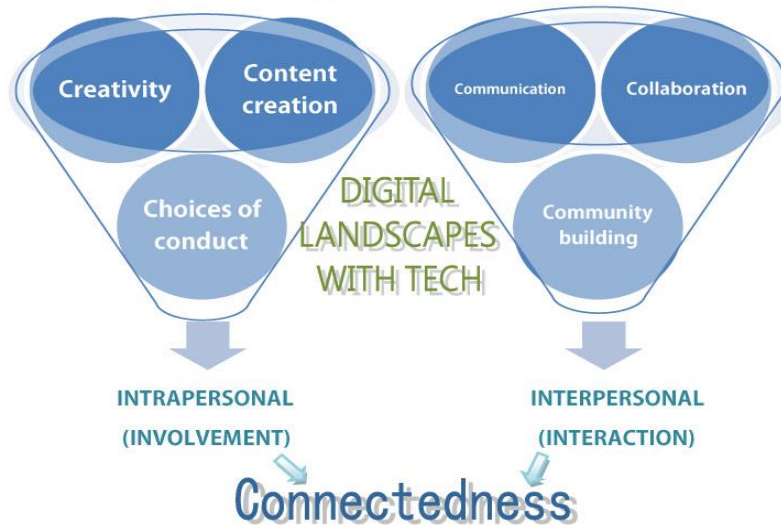
Several types of online technology have been utilized in camp settings. For example, camp program marketing, distance employee training, and online youth camp programs (Branstetter, 2008; Schoenberg, 2008; Schlag, 2008; Gillard, Witt, & Watts, 2011). Camp programs also take the advantage of online technology to engage campers after camp by creating off-season traditions or periodically post creative cyber activities on the website for campers to enjoy (Salzman, 2000; Musman & Slay, 2010). Current camp programs only utilize online technology (i.e. Internet) to promote one-way interaction with campers during the off-season but rarely do they provide additional intervention activities to foster camper's connectedness because of digital landscape limitations. Schirick (2001) argued the risk control for camper's potential misbehaviors was still the primary concerns for camp staff not to initiate online events in the digital landscapes despite research indicating that online activity for campers may lead to significant positive influences with appropriate settings. The success of an extension activity supported by a camp program not only has to be a formal educational curriculum, but it also has to be mandatory for campers to participate (Nicholas & Ng, 2009). The efficient strategies to connect campers during the off-season still need to be examined and further explored.

*Theoretical Framework Underlying the Online E-Community Community for Campers*

PTD provides a theoretical framework of applying six technology-mediated behaviors in the digital landscape to engage adolescents via interpersonal interaction and intrapersonal involvement (Bers, 2012). When adolescents start to “play” with the use of online technology, such as online game weapon exchanges, chat rooms for gossip, or discussion boards for homework, the space in a digital landscape can be treated as a playground in the physical setting. Adolescents become producers, designers, and creators with a well-designed context in a digital playground when they use online technology to interact with others or become involved in a project. Bers (2012) believes the most important feature of technology is to create a virtual playground in the digital landscape where adolescents can construct developmental assets through six technology-mediated behaviors by participating in a well-designed activity. Similar to the role of an outdoor playground, a digital landscape allows adolescents to create content and develop competence in the technical domain, to express their creativity through digital projects, to build confidence in their ability by using new technologies, to communicate with others by building connections with peers and adults that extend beyond face-to-face boundaries, and to collaborate in joint initiatives to show caring and empathy. The sense of connectedness requires adolescent’s interaction and involvement and both of them can be achieved with PTD perspective through six technology-mediated behaviors (see Figure 4.1).



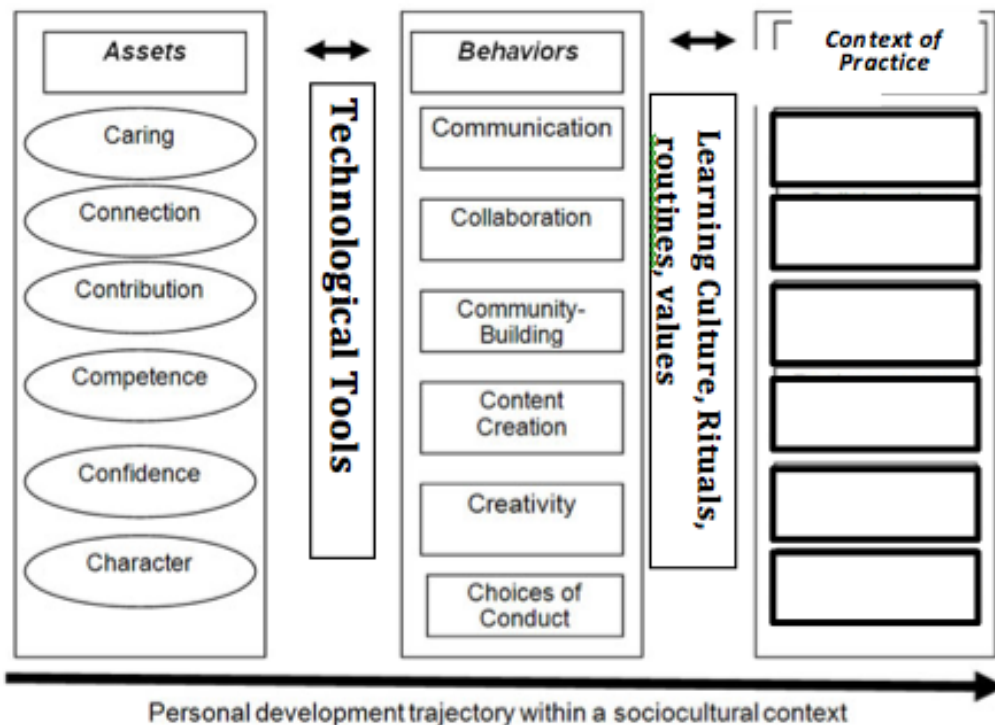
## PTD Technology-mediated behaviors



**Figure 4.1** Six Technology-mediated Behaviors lead to Connectedness.

Bers (2010) developed positive Technology Development framework with the bases of Constructionism and Positive Youth Development (PYD) beyond computer literacy (i.e. ability to use technology to improve learning) and technological fluency (i.e. ability to smoothly apply technology in a fluent way). Instead of viewing technology as instrumental machines or epistemological tools, the goal of technology use is to promote Positive Youth Development (PYD) and to facilitate youth to be an active learner (Bers, 2010). She explained that PTD is “ Informed by both constructionism and PYD, PTD is a multidimensional framework that, instead of emphasizing only developmental assets like PYD, it focuses on positive behaviors

supported by the technology and how those behaviors can in turn promote developmental assets” (Bers, 2010, p.17). The online e-community of the study was built by the PTD theoretical framework (figure 2) to further facilitate adolescent’s six technology-mediated behaviors for their sense of connectedness to camp after the camp program. With the rise of digital generations, the use of online technology for campers to stay connected with the camp community is a necessity.



**Figure 4.2** Positive Technology Development Frameworks (Bers, 2012, p. 13)

The online technology is already part of digital generation’s routine life. Pew Research Center (2012) reported that 63% of young people use the Internet every day and 93% use the Internet at least occasionally, which suggests that there is a potential for

a digital landscape to have additional interpersonal interaction and intrapersonal involvement opportunities. Youth practitioners may consider being digital landscape crafters and creating a developmental context for campers to stay connected in the virtual playground. Though most campers spontaneously stay connected with camp community members via social media (i.e. Facebook), camp program staff and researchers should be able to actively lead campers to take advantages of the online technology to maintain positive camp outcomes and sense of connectedness to the camp community. However, researchers note that the use of social media for interpersonal interaction is not able to meet the required processes needed to raise basic awareness and connection (Stoll, Foot, & Edwards, 2012). Whitlock (2004) argues that a sense of connectedness requires intrapersonal involvement that entails deep engaging opportunities for individuals. The two elements of online technology and Positive Technology Development (PTD) are both able to deliver a sense of connectedness for the digital landscape. Thus, the online e-community context, which contains *intrapersonal involvement* and *interpersonal interaction*, are expected to assist adolescents to become aware of their connectedness to camp in this study.

### *Present Study*

PTD clearly shows that a well-designed context in the digital landscape can provide interpersonal interaction and intrapersonal involvement for two main elements based on the sense of connectedness via six technology-mediated behaviors. While the concepts of PTD support the use of online technology for adolescent's sense of

connectedness, only a limited number of researchers have begun to take advantage of online technology for camp extension activity. It would be valuable to know if the use of the online technology with the PTD framework fosters adolescent's connectedness to camp and maximizes the benefits of their camp experiences.

## Methods

This research was aimed to 1) *develop an online e-community utilizing the PTD framework and to understand adolescent's perspectives of this contextual factor in order to cultivate a sense of connectedness to the camp community after camp*; and 2) *examine the use of an online extension activity to better engage campers and test how camp programs may further apply online technology to engage campers during the off-season.*

e-Community was a combination of a Facebook page and an eStudio project serving for participant's interpersonal interaction and intrapersonal involvement in the digital landscape. The camp staff and the researchers constructed an online e-community, including a Facebook page and an eStudio project, by using the PTD framework.

Accordingly, two research questions were developed:

*Q1. How do adolescents use online technology to stay connected with their camp community during the off-season?*

*Q2. How do camp program apply the online extension activity (eStudio) to engage campers during the off-season?*

In order to collect data to answer the questions, focus group interviews were conducted for gathering this information. Only the data for the focus group interviews will be presented for this manuscript. Other data includes the statistic numbers of eCommunity site visit and user were used to support the findings and discussions of the study.

### *Participants*

The number of campers selected for this study was 60 total campers consisting of 25 males (42%) and 35 females (58%) in the early adolescent stage, age 11 to 40 (23%), and late adolescent stage, age 15 to 18 (77%). A total of 99% campers came from families with an Asian cultural background (i.e. parents were born in Asian countries or classified as Asian-Americans) from different regions in Southern California State. Seven (12%) campers were under 13 years of age and were not eligible to access the online e-community. A total of 36 campers joined the Facebook page and 20 campers participated in the eStudio project with their minor assent and parental permission forms due to the IRB requirement. Most campers showed interests in participating in the eStudio project, but some parents did not give permission for their children to participate in the eStudio project. Some parents also expressed issues regarding limited access for children to use Facebook at home. Stronger family ties and parental involvement among Asian American adolescents from this study may have influenced their online technology behaviors. The limitation of this study where different ethnic family culture backgrounds are addressed will be further discussed later.

## *Setting*

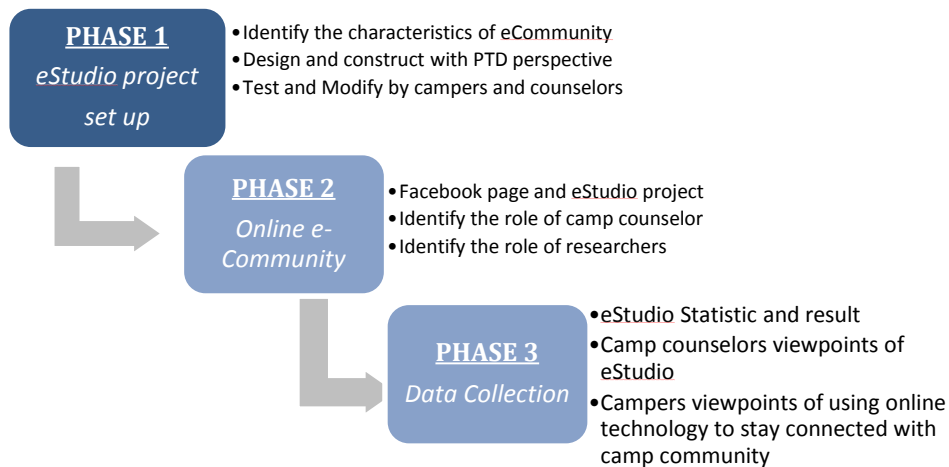
The selected camp of the study was a 5 days residential camp in the state of Southern California. The themes of the camp program were leadership, identity and development. The objectives of the camp program were to empower camper's sense of belonging to increase self-identity, instill camper's cultural knowledge and to strengthen their social skills. Cultural knowledge classes, team building activities, and group debriefing sessions were used to achieve the goals of the camp and increase camper's feelings of relatedness and connection to ethnic group. Campers were recruited via newspaper, flyer/ poster in grocery store, friend recommendations and web page advertisements. Camp counselors were college students above the age of 18 and most of them were campers at this camp before. Some of the camp staff had worked in the industry for years and also responsible for fundraising for the camp program.

An eCommunity including a Facebook page and the eStudio project were set as a virtual playground for campers after they left camp. A Facebook page was created by camp staff and used to upload group pictures and to announce reunion activities. Campers were invited to join the Facebook page and encouraged to upload pictures they took during their stay at camp. Campers were also encouraged to freely leave comments on the page and maintain connections with other camp community members through a link on the Facebook page. The eStudio project was a website platform hosted by the researchers. Only campers who turned in their minor assent form and parental permission form could access the site with assigned codes. Camp staff and camp

counselors participated in the eStudio project as facilitators for team assignments. A team music album including personal video introduction, piano audio file, album cover design and team assignment were made by campers themselves after they completed a 10 hours session on eStudio.

### *Procedure*

Three phases of the study were conducted including eStudio development, e-Community development (i.e. a Facebook page and eStudio project) and data collection. In the first phase, the e-Studio was developed by the researchers; reviewed and tested by two youth assistants; and then final modifications based on the reviews and feedbacks from camp counselors and staff. In the second phase, the online e-community was activated for four weeks after camp. In third phase, two focus group interviews were conducted to gather the important information for understanding camper's viewpoints on using online technology to stay connected with camp community and camper staff and counselors viewpoint on the online extension activity (i.e. eStudio). The statistical data on the numbers of eStudio site visits were used to further support the findings of the study. The detailed actions for each phase are presented in Figure 4.3.



**Figure 4.3** Research Procedure of the Study

### **Phase 1: eStudio Development**

In this study, eStudio was defined as an alternative but complimentary online extension activity for the original camp program. Different from the typical online learning camp program, campers were lead by camp counselors from the physical camp they attended. The team-oriented project was to create a team music album as a substitute for the traditional camp book. To further extend the objectives of the physical camp, the theme of the eStudio project was expected to strengthen self-identity via personal assignment and social skills through the teamwork discussion.

Three sub-phases of the eStudio construction were conducted of this study. First, the first author developed the eStudio project based on her online learning design background including a certificate in e-Learning instructional development and yearly experiences in teaching online courses for a major university. The eStudio project design was framed by PTD theoretical framework. The activity design of eStudio was



intentionally selected to facilitate participant's interpersonal interaction and intrapersonal involvement. In addition, the platform for eStudio was determined by site support functions such as code protection, flash embedded, and webs submit, etc.

Only the researchers (i.e. site host) could access the statistical number of eStudio site visits and form entries submissions. Researchers can monitor the frequency of site visits, and the page members that visited. Participants could easily submit their assignment and provide feedback with one single window instead of it being a complicated process. As the project was launched, there was no direct teaching. Three steps of weekly sessions lead eStudio participants in using personal choices of the materials to undertake individual's creativity for content creation. Team assignments required weekly group discussions either via Facebook page or another approach and were facilitated by campers through collaboration, communication and community building behaviors.

Researchers recruited two youth assistants for eStudio site navigation. They were 14 and 16 years old from Texas, and both participated in a similar cultural immersion camp in 2014 summer as a camper and a camp counselor. With their assessment of eStudio, researchers confirmed the language use, learning map and the navigation instruction were appropriate for their age. They also reflected that the project like eStudio was inspiring and exciting for them to participate as well. They also believed that research participants supposed own a range of skills for computer literacy (i.e. ability to utilize computers and related technology efficiently) because they were

required to take computer classes at school. The eStudio page layout design, 3 steps instruction, and clear learning map were easy to follow by adolescents (see Figure 4.4).

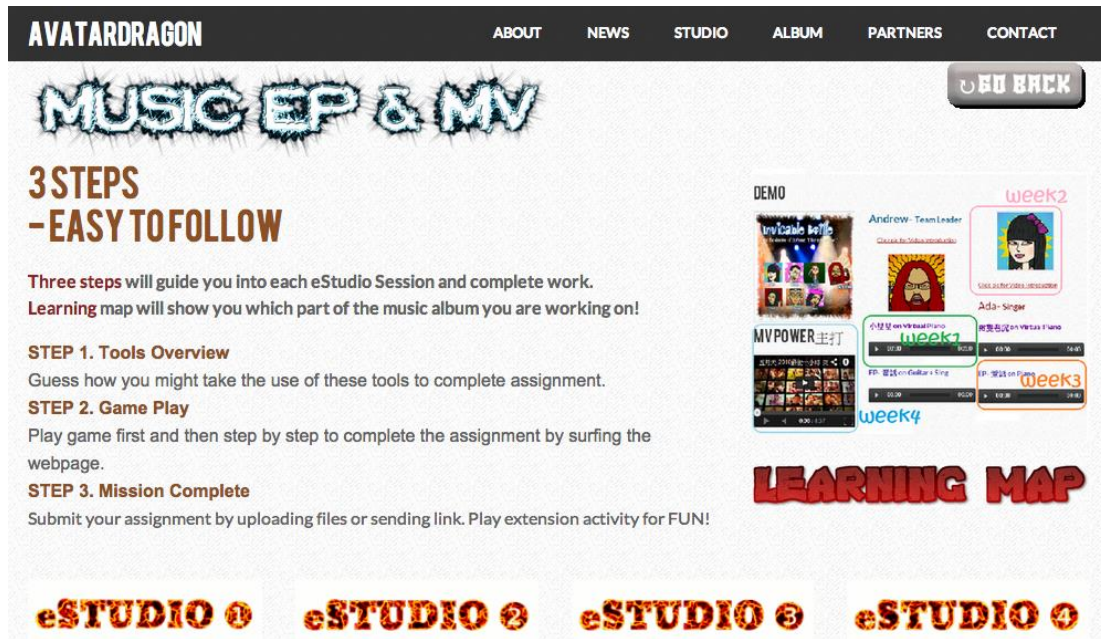


Figure 4.4 The Page Layout of eStudio project Design

## Phase 2: Online e-Community Activation (Facebook Page and eStudio Project)

Before officially launched the eStudio, researchers attended the physical camp program for observation and to meet with camp counselors and staff. Camp observation notes and counselor feedback of the eStudio was also used for final modification. Campers were assigned into the same groups and led by the same counselors they had at camp for the eStudio project. Camp counselors were the primary contact person with the campers and served as the mediator between campers and researchers.

Six technology-mediated behaviors were facilitated among e-Community participants with additional intervention through the Facebook page and eStudio project. The camp director hosted a meeting during the last day of camp regarding the use of the Facebook page and eStudio project after camp to identify the role of campers, camp counselors, staff and the researchers in eCommunity. The Facebook group was constructed and managed by the camp director. Camp counselors were asked to set up a specific friend group for privacy issues if campers add friend on Facebook. Campers were encouraged to join the Facebook page for the reunion events announcements and camp picture post. Campers turned in their minor assent form and parental permission form for eStudio project were asked to leave their contact information to their counselors for sending them eStudio project information. eStudio projects were expected to complete after four weeks. The music albums made by each team were posted on the site and shared with the public. The design framework for the eStudio learning activity for six technology-mediated behaviors is presented as figure 4.5.

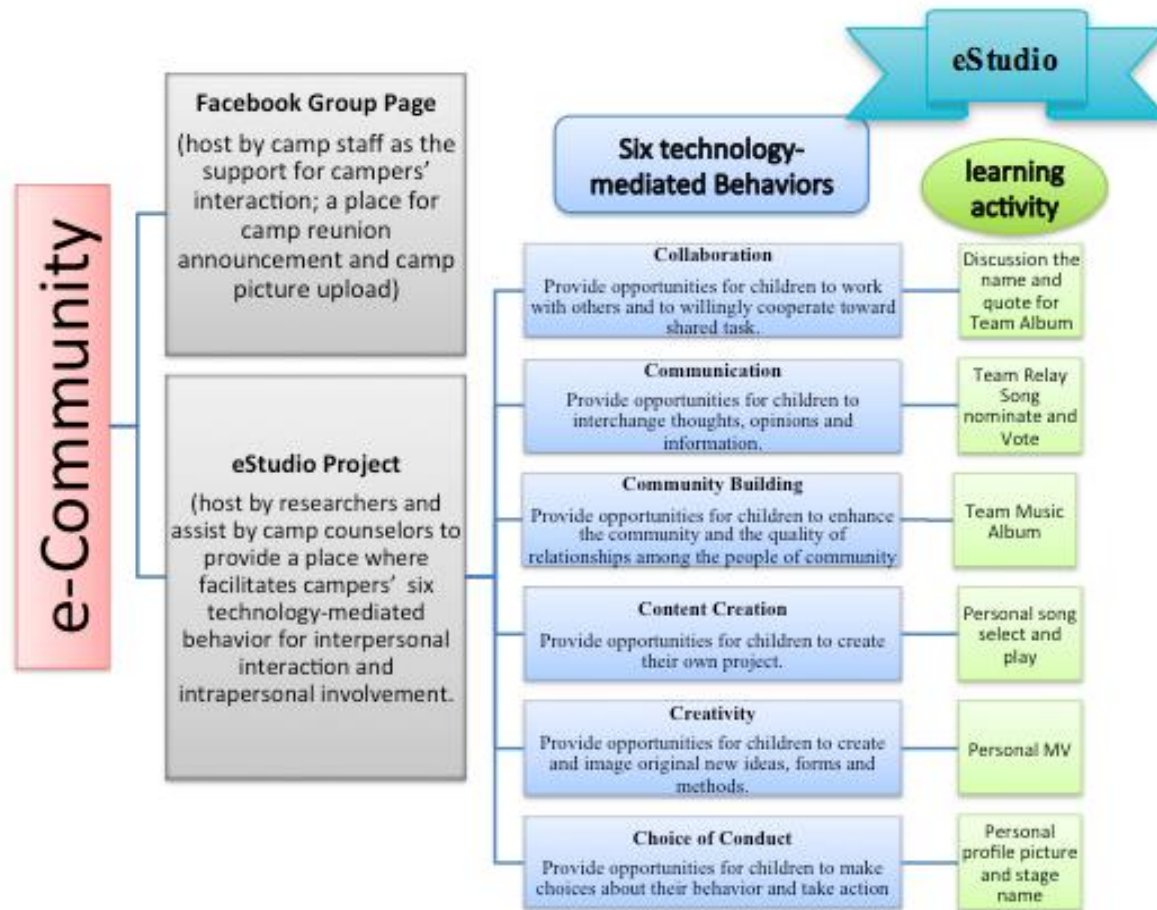


Figure 4.5 eStudio project Design Framework with PTD Perspective

### **Phase 3: Data Collection through Focus Group**

To understand how campers stayed connected with the camp community after camp by using online technology, data collection involved (a) a focus-group interview with 9 campers regarding their viewpoints of using online technologies to stay connected with camp community during the off-season; and (b) a focus-group interview with a total of 9 camp counselors and camp staff regarding their perspective of using eStudio as a camp extension activity for fostering adolescent's connectedness. The focus group interviews were conducted two months later after camp, during a reunion event. The Facebook observation, eStudio site visit statistic numbers, and eStudio team project were also used to explain the findings of the study.

From observation of the Facebook group, the camp videos and group pictures were uploaded to the Facebook page by camp staff. Campers joined Facebook page automatically tagged themselves and other campers through the pictures or videos. The campers also left comments under these pictures and videos and told stories about their stay during camp. Most campers changed their profile pictures to picture of them wearing the camp T-shirt and they left reflections regarding their camp experiences on their own walls. They also uploaded camp pictures on their own walls and tagged other campers. The comments left by other campers can also be seen from the statuses and pictures on their walls.

The statistical number of eStudio site visits one day after camp was 135, one week after camp it was 39 and then decreased to 24 in the middle of the 2<sup>nd</sup> week after

camp had ended. Though campers went to surf the eStudio site, none of the teams completed their team music album. Campers cooperated and worked with the same camp peers and camp counselors for the eStudio project. The obstacles and potential issues for eStudio completion rate will be discussed later.

### *Data Collection and Analysis*

Data were collected through two focus group interviews and only the data from the focus group will be presented for this manuscript. Focus group interviews have become increasingly popular to researchers for exploring why individuals behave in the ways research participants do (Rabiee, 2004). Two focus group interviews were conducted by the researchers and assisted by camp staff at the camp reunion in Southern California State two months after camp had ended. Through researcher's involvement as a guest researcher of the camp program and a constructor of the complementary extension activity eStudio project, researchers established rapport and the trust necessary to obtain cooperation from camp staff and camp counselors.

One focus group focused on the conversation around adolescent's perspectives of using online technology to stay connected with the camp community. Specific questions were used to gain adolescent's perspectives on using online technology in connecting with their camp community and maintaining camp experiences: "What technology (e.g. social media, mobile text/app) have you used/ needed to stay connected with camp members (friends, counselors and staff) and camp experiences (what you learned from

camp, such as culture and teamwork)?)” and “What activities would you like to see for online activity in camp program?”

The other interview focused on the insights of camp staff and camp counselors regarding the use of eStudio as an extension camp activity in the digital landscape after camp. Specific questions for camp staff and camp counselor’s insight for the eStudio included “What is your overall opinion of eStudio?” “Was there anything on the eStudio that caught your attention?” The narratives arising from these and related questions comprise the data for this study.

The qualitative data collection of this study aimed to bring a tentative explanation of a phenomenon and the meaning of the use of online technology after camp. A framework analysis of the qualitative data was adopted for the purpose of the study. Five key stages outlined by Ritchie & Spencer (1994) were used to analyze the focus group data: (1) familiarization; (2) identifying a thematic framework; (3) indexing; (4) charting; (5) mapping and interpretation.

The audiotapes were transcribed for data organization. The narrative data was numbered at each sentence level. Krueger and Casey (2000) suggested the analysis of qualitative data should be driven by the purpose of the study and the use of five criteria can be framed for codes to interpret data: frequency, motion, specificity of responses, and extensiveness and big picture. The codes were assigned into different categories with the keywords of the specificity of responses to extract from these transcriptions.

After data collection and transcription, the thematic framework identification was used to analyze the data.

## Results

### *Focus Group Interview with Campers*

Three major themes emerged for adolescent’s perspective of using online technology to stay connected with camp community (Table 4.1). These themes included: *Social Media, Social Interaction, and Sense of Community.*

**Table 4.1** The Use of Online Technology to Stay Connected with Camp Community

Theme	Sub-themes
Social Media	- Convenience Path - Multimedia Support
Social Interaction	- Common Interest - Social Life
Sense of Community	- Social group - Positive Support

### **Social Media**

In the study, social media becomes an essential online tool for campers to continually interact with camp community because of its convenience and multimedia support function. Eight of nine campers own a Facebook account and connect to the camp community through the Facebook page. As one camper stated “I needed camp Facebook page to stay connected with other camp friends”. The Facebook page was a



place where campers could easily keep track of other camp members via picture tags or any other type of interaction.

“Facebook group page, messenger and posting, these are what I used to stay connected with camp friends”

When adolescents did not have online technology support, they tend to use cellphone or texts to stay connected as a way of convenience for them to reach each other during their daily routine. Also, various interactions can be delivered in many ways with online technology.

“I’ll use messenger or phone call to stay in touch with camp friends if I am not able to use online technology”.

Campers used a combination of different contact forms such as multimedia to interact instead of text-only. As one camper stated: “I change Facebook profile picture in wearing camp T-shirt because it’s an event in my life so I want to highlight it”. They use Facebook to add camp friends, message camp community members, leave comments under someone’s camp pictures, and post personal reflections regarding their camp experiences or stories. This was reiterated by another camper that stated, “ It’s good to see someone’s picture posting and then I can leave comment”.

Utilization of social media like Facebook or Instagram encourage campers to interact in various ways, such as pictures post, video uploading, and leaving comments to others, “Instead of Facebook, I prefer to use Instagram to upload camp pictures”.

Despite the high use of technology among campers, less than half of the campers in focus group said they would submit articles for the camp newsletter if necessary. Results indicate that short messaging or visual data is preferred for communication.

The limited access to the Internet and PC availability are hardly an issue for adolescents to stay connected with camp community peers in the digital landscape.

“If I didn’t have technology, I would not be able to stay in touch with camp friends, or I’ll plan to get together like socials or reunion”.

According to camper’s responses in the focus group, the primary reasons adolescents take advantages of the virtual playground in the digital landscape are convenient paths and multimedia supportive functions.

### **Social Interaction**

Most campers in the focus group reflected that they prefer to participate in the online activity focusing on social interaction as camper stated, “For not able to physically meet each other, I’d like to see camp host an online hangout using Google hangout”. In addition to the use of Facebook, over half of the campers also play online games and some of them play games together after camp. They asked each other if there is any common interest they can do together in the digital landscape after they left camp. Many felt that, “Common interest was an essential element that we can do online and to stay connected through technology”.

Most campers (7 out of 9) responded that a video chat session is necessary to have feelings of connection with camp friends. They used online chat to talk or check someone's Facebook pictures to stay connected with camp community members by sharing one's social life. This type of interaction was emphasized by many of the campers:

“We have a Facebook group chat and share what happen daily to each other”

“It's always good to see someone's picture on Facebook for his/her life update”.

The camper sought alternative interactions and wanted to see if the camp could host a live chat as an online activity event, “Would like to use video chat substitute as face time for online activity host by camp”. Through this activity, they would acquire feelings of connectedness with each other by sharing each other's life story.

In this study, the common interest for campers to interact online was through game play.

“Three of us play LofL tournament game together online now”

“I'd like to see if camp host video game competition online”.

The other way campers interacted through common interests was by viewing pictures on Facebook or chatting via Skype or Google hangout. Many campers requested the use of social media to facilitate more connections between the campers, “If I am unable to physically attend reunion, I'd like to see camp host an online chat using Skype

then we are able to meet in an alternative way”. All campers in the focus group also responded that they would not participate in an online workshop hosted by the camp to learn about cultural knowledge. This is similar to how they responded to the eStudio project.

Campers noted that feelings of connection with the use of online technology is about interacting with one another through common interest and being a part of each other’s life by sharing one’s social life.

### **Sense of Community**

The theme of sense of community describes an essential foundation to prompt campers to use online technology to stay connected after camp. The similar family cultural background leads all campers defined themselves as a member of the distinct social group.

“People that go to it have the same cultural background, also learn their back-story”

“Meet a lot of great people and Connect with same level of maturity friends”

“You can quickly establish relationships with people at camp”.

They naturally bonded with each other and shared emotional connections and levels of maturity.

The other important element developed from the sense of community is *positive support* among the camp community members. Based on feelings they obtained during their stay at camp where they felt that camp members matter to one another and to the whole group, they naturally seek opportunities with to continue this by using online technology to stay connected with camp friends after camp.

“Develop personality throughout camp, can't put up fused no matter how weird you are, they will accept you...”

“Inspiring experiences because I learned from other people, you are not alone...”

“Enjoy to do silly thing with these people”.

Feelings of inspiration and acceptance from other camp members also prompt campers to continually stay connected with group members for positive support after camp.

Feelings of ease from their interactions during their stay at camp are essential for them to play together in the digital playground after camp.

The sense of community derived from a distinct social group based on their feelings of positive support serves a large role for adolescents to develop the positive peer social interaction especially when they use social media to play together in the digital landscape. Findings support that adolescents use online technology for *social interaction* (i.e. game play, chat) with a specific *social group* (camp community) through the *social media* use (i.e. Facebook). In particular, the discussions shared by those campers provided new insights on how adolescents cope with online technology to

pursue a sense of community with camp community members to understand how camp programs may further support campers for their connectedness with camp in a digital landscape.

*Focus Group Interview with Camp Staff and Counselors*

Three themes were successfully developed from the data on camp staff and counselors viewpoints about the use of eCommunity in the summer of 2014 and strategies to promote camp extension activity in the digital landscape were identified through the focus group with camp staff and counselors in Table 4.2. The themes included: (1) Accessible Path; (2) Multimedia Use, and (3) Attractive Incentive.

**Table 4.2** The Use of An Online Extension Activity to better Engage Camper

Theme	Sub-themes
Accessible Path	- Daily Routine - Flexible Option
Multimedia Use	- Visual Information - Interaction Action
Attractive Incentive	- Trophy& Awards - Future Needs

**Accessible Path**

The accessible path is always the primary factor for camp program to create the relationship with campers either in pre-Community recruitment or post-camp engagement. The focus group reflected that the camp online extension activity should

become a part of the camper's daily routine for optimum use in a social media setting to maximize participations.

“Facebook (already part of young people's daily routines, because they are on it everyday), introducing something new might be too complex or not part of daily ability”

“Use social media because more accessible”.

In this study, Facebook was used by most campers and selected by camp staff for one of the communication tools after camp. Camp staff and counselors also proposed the challenges for eStudio execution.

“Campers don't do it if it is not convenient, not part of daily route so they will not go out of their way to use eStudio”

“introducing something new (eStudio) might be too complex or not part of daily ability”.

Deep discussion regarding the reason why campers choose to use social media in their daily routine was conducted. Social media was a space where campers share their social life with camp friends based on their preference and time in adding friends and posting comments.

“With Facebook they can just post and then the other person can respond on their own time”.

“Facebook form groups, so they can freely add each other and stay in touch”,

“timing of camp is right before school starts so if assigned hard to get them involved (eStudio) because of demand for start of school prep time”.

The flexible option of social media (i.e. Facebook) also encourages campers to use it without any inconvenience.

### **Multimedia Use**

The features supported by multimedia including visual information exchange and interactive action were critical for campers to play together in the digital playground. Camp staff and counselors believe that visual information such as pictures and video provides a mediator to recall camper’s memories from camp and extend the positive interaction among campers through the use of online technology after camp.

“Pictures or videos that capture memories, comment on photos even they can't see each other after camp is over, so use technology to stay connected”

“Need visual evidence of experience they had together, or use text message or use any form of media”.

One of the important features supported by multimedia was interactive action. Adolescents not only display their creativity by sharing pictures, music, and videos but also by sending and receiving comments from their peers.



“We care more about pictures/video & tagging friends, such as Instagram or Snapchat”,

“Good way (eStudio) for campers to get their creativity going and pursue video/music editing”

“(eStudio) the layout was colorful for visual attention attraction and it's cool to learn how to edit video”

“Music is good, campers like to KTV”, “eStudio has steeper learning curve because need to take class/watch video to learn how to do it (video/music editing)”.

The visual attention presented by multimedia was necessary to catch adolescent's attention and encourage adolescents to become involved in deep interactive action.

### **Attractive Incentive**

The focus group also noted that an attractive incentive was necessary to get campers to spend extra time on the online extension activity. The incentive was critical (e.g. trophy& awards) to motivate campers to participate and complete the online extension activity because it was not demanding like school activities.

“Difficult to get them to participate (eStudio) because not much incentive, unless they want to learn more.

“Not much of reward for campers, kids not invested and don't want to put the time into it”.

Without stronger incentives, campers might not spend time on eStudio project because it was not required and was assigned right before school started as a camp counselors stated: “timing of camp is right before school starts so if assigned hard to get them involved because of demand for start of school prep”.

The deep discussion regarding the types of incentives need to attract campers was also conducted. The use of incentives might vary depending on personal preference and resources. Staffers believed that incentives may need to move beyond just a trophy or an award. These types of incentives were viewed as very limited and did not conform to the cultural needs of the campers. Staffers suggested that campers might participate in the camp online extension activities if they found the outcomes were part of their future needs, such as future college courses or careers.

“eStudio could be useful in future and see it (eStudio) mostly helping with social connectedness”

“It's cool to learn how to edit video, could be useful in future college course/careers”.

The incentives can be the trophy and awards, or beneficial outcomes for camper's future needs. Following this desire, camper's ability to create the expected

outcomes should also be taken into considerations when developing camp online extension activities.

## Discussion

This study took a qualitative approach to understanding adolescent's perspectives with the use of online technology to stay connected with the camp community after they left camp. It also researched how camp programs may apply an online extension activity to engage campers during the off-season. In this study, findings support the argument that campers are willing to use online technology for positive social interaction (i.e. camp supportive context) with specific social groups (i.e. camp community) through social media/ network use (i.e. Facebook). Three key factors were also identified to deliver online extension activities from focus group with camp counselors and staff. Three obstacles for adolescents to actively participate in the online extension activities were also discussed through the critiques of PTD perspectives regarding six technology-media behavior in digital landscape.

### *Key Factors for Adolescents Sense of Connectedness in Digital Landscape*

Findings of this study support that a *reliable social group* with *positive social interaction* context through an *accessible digital playground landscape* are imperative for adolescents to have a positive socialization process in the digital landscape. With these essential elements in digital playground landscape, adolescents are expected to

construct the positive developmental assets instead of problematic internet behaviors or other mental health issues.

Adolescent's sense of connectedness was fostered and maintained in the digital landscape once they recognized a distinct social group to attach to and was supported by previous positive interaction phenomenon. Researchers have recognized that the positive sides of social media use among adolescents, such as the sense of privacy and intimacy, self-expression and knowledge gain (Austin, Chen, Pinkleton & Johnson, 2006; Livingstone, 2008). Though other researchers argue that the use of social media lead to feelings of loneliness and social anxiety among adolescents (Pierce, 2009; Irvine, 2009), this might be because of the lack of social group and positive interaction from the real world.

A virtual playground becomes a common destination for the young generation where they can explore self-enclosure, status negotiation, and peer socialization (Boyd, 2007). Social media/ network sites have become a common destination for the young generation because its convenient path and multimedia support function. Adolescents not only message their friends or leave comment under friend's wall status, but also store their personal growth story life by updating life special events or pictures, writing wall status or notes, and announced the results of online game or online competition etc. Though the bad sides of social media/ network have been expected, the positive sides of social network cannot be ignored. Youth practitioners and researchers should re-estimate the potentials and the positive side of social media utilization to further extend the

positive youth development scope from physical environment to the digital playground landscape.

### *Key Factors to Deliver Camp Extension Service in the Digital Landscape*

Three key factors including *accessible path*, *multimedia use* and *incentive motivation* were proposed through the findings of this study for camp programs to successfully deliver online camp extension activity. Personal computer facilities and Internet usage are no longer the main concern to successfully deliver online camp extension activity for adolescents live in digital generation. Nowadays the challenges for youth practitioners and researchers to successfully deliver online extension activities are about how to take advantages of online technology to promote positive youth development in the boundless digital landscape.

The first key factor was to *expand the digital playground*. The focus group showed it was necessary for online extension activity to be apart of adolescents' daily routine with flexible options in order to higher participation rates. The camp program should set up the online extension activity by taking accessible daily routine into consideration as well as the preference such as timing control and personal choice to actively provide an accessible path for campers to use it. Beyond the computer facilities and internet accessibility, optimizing the accessible path to engage adolescents in digital landscape becomes a new mission and challenge for camp programs because adolescents daily routine and preference may change sooner than people's expectation because of the rise of social media sites.

The second key factor has to do with *advantages of multimedia*. Researchers proposed a re-conceptualization of new literacy education that enables learners to understand how visual media works to produce meanings (Davis, 1993; Senali, 2010). Multimedia can be utilized to exchange visual information and various interactions. After media stream, words such as media literacy, visual literacy, visual language and visual image have thrived and are used to describe how human brain processes visual images to turn it into information (Davis, 1993; Herman, Melancon, & Marshall, 2000; Senali, 2010). Adolescents also use social media to express their voice (i.e. Facebook and Instagram) (Livingstone, 2008). In this study, the visual evidence of camp experience was important for adolescents to remember their connectedness to camp. The interactive action supported by multimedia such as uploading pictures and tagging camp peers also allowed campers to continually interact in the digital landscape.

The third key factor was *incentive motivation*. Successfully facilitating adolescent's intrinsic and extrinsic motivation to having adolescents involved in the online activity was a key factor in delivering the positive impacts of the digital playground. A successfully deliver online extension activity was reported under a school demanding situation (Nicholas & Ng, 2009). Different from demanding online project, *incentive motivation* becomes a major issue of eStudio project. Either the attractive incentives such as trophy or awards, or useful learning outcomes might increase the participation rate. In this study, camp staff and counselors realized that eStudio was beneficial for camper's future needs, but campers did not. The primary mission for camp program was not only to design an online extension activity but also think of the

incentives for adolescent's interests and the potential learning outcomes for their future needs. Furthermore, adolescent's experiences on online projects and online activity might determine the outcomes and the results of their involvement in the online extension activity.

### *Challenges to Deliver Online Extension Activity in Digital Landscape*

The idea to use eCommunity as a camp program extension service was driven by the gap in current literature and PTD perspective. Two essential elements including interaction and involvement were able to deliver the sense of connectedness with PTD perspective in the digital landscape. A virtual playground in the digital landscape became a place where adolescents could continually develop camp outcomes through six technology-mediator behaviors. However, the lower completion rate on the eStudio project represented potential challenges of the online extension activity design. Challenges of eStudio usage among adolescents in digital landscape were discussed.

The challenges for youth practitioners and researchers to deliver online extension activity are not only about the content design, but also about setting the online extension activity in the right location for adolescents to access. The purpose of eStudio project was to support the online extension activity in eCommunity because only using a Facebook page did not serve enough opportunities for camper's involvement after camp. However, the location of eStudio was not set in adolescent's daily routine (e.g. social media/ network) either for peer's interaction (e.g. messaging) or personal involvement (e.g. update daily status) because it was defined as a formal learning session of the study.

Youth practitioners and researchers may further discuss the strategies to set up a formal learning session in adolescents' daily routine with the consideration of their preference.

In addition, *the lack of adolescent's experiences for online project development* seems to prevent them from completing the eStudio project. With the rise of multimedia stream including Youtube, Instagram or Picasso, the visual messages become the main way for adolescents to absorb the information in digital playground landscape. They did not engage in abstract thinking of the online learning session because they only processed the messages with visual image information. Interpreting visual languages and translating the message into something abstract become obstacles for adolescents to process the knowledge gain and linking when they involve in an online extension activity. Though the features of multimedia caused them to extend their playground to the digital landscape, it might also limited adolescent's ability for content creation in digital landscape.

Different from demanding online project, *adolescent's willingness to access* the online extension activity becomes a major issue of eStudio project. Researchers reported they successfully deliver online extension activity under a demanding situation (Nicholas & Ng, 2009). The strategies to increase adolescents' expectation of online extension activity may encourage them to take make an effort on knowledge gain for personal growth in digital landscape. Adolescents' attitude and expectation toward the online activity in the digital landscape may determine how much they can take from the use of online technology in the digital landscape. When they only expect to leave a short



comment under someone's status or upload pictures instead of making efforts to create content creatively, behaviors for intrapersonal involvement will not be fostered.

Adolescents need additional guidance from adult people to understand the higher levels outcomes of online extension activity and the significance of online extension outcomes in their current and later life.

### *Critiques to Construct Digital Landscape with PTD Perspective*

PTD proposed that adolescents were able to construct developmental assets in the digital playground through technology-mediated behaviors via a well-designed context; however, additional elements for this ideal pictures are needed to address. The results of the study indicate that social group with positive interaction from real life is essential for adolescents' positive outcomes in the digital landscape. Other necessary elements to deliver developmental assets to adolescents in digital landscape might further explore by youth practitioners and researchers. In addition, the role of adult in developing positive assets in digital landscape should be considered because of the specific characteristic of adolescence. Researchers argue that parents have started to evaluate the websites their child visits to be sure that the site was appropriate for their age (O'Keeffe & Clarke-Pearson, 2011). Parental negotiation might also determine an adolescent's opportunity to access digital playground. In particular, during the recruitment of participants in this study the researchers discovered that Asian parents did not allow their children to use online technology, such as Facebook. The higher expectation of academic achievement

among Asian families limited Asian adolescent's accessibility to construct developmental assets online.

Other potential influential elements include *cultural differences* and *timing circumstance* might also be considered when youth practitioners and researchers design online extension activity with PTD perspectives. Not only Asian parents tend to have higher academic expectation for their children that limited camper's accessibility to use the eStudio, the timing of eStudio activation was the main reason for the low completion rate. The eStudio was activated right before the school semester start that crucially affect the usage rate of eStudio project because of the nature research design. If campers were allowed to freely choose time to complete the eStudio project or having more time during the summer, they might willing to participate in eStudio project. Youth practitioners and researchers should may further consider the circumstances of different cultural and school schedule time and examine the role of adult people in adolescents' online behaviors and parent's perspectives regarding the online extension activity.

#### *Limitation*

Youth's experiences with online technology such as an online project or social networking might differ because of individual preferences, parental expectations, and family socioeconomic status. Also, the diversity background and geography location of the camp selected for this study, which was held in California State area, might have slightly influenced the results of the study. The result of the study might not apply to the particular circumstances of all camp settings.

## Conclusion

In particular, the discussions in the focus group interviews provided new insight on how adolescents cope with using online technology to pursue connectedness to camp. It also provided new insight on the key factors of how camp programs might better develop their online camp extension activity in a digital landscape. In addition, considerations to develop an online activity including adolescent capacity, the social group, positive social interaction, parental negotiation, cultural difference and timing circumstance in the digital landscape with PTD perspective was also discussed. The results of this study have implications for researchers and youth practitioners who have a desire to take advantage of online technology by delivering an online extension activity. Adolescent's perspectives, camp staff and camp counselor's perspectives, and the application of PTD theoretical framework in e-Community online extension activities were examined for this study.

## CHAPTER V

### CONCLUSIONS

The purpose of this study was to take advantages of the virtual playground to provide additional opportunities for adolescents to construct their sense of connectedness. With the rise of Internet technology use among young people, their primary domain for their sense of connectedness and ability to manage relationships has extended beyond the traditional playground to the digital playground.

Article I, the relationship between Internet technology use and adolescent's sense of connectedness and mental health was systematically reviewed. The results yield that Internet technology use increases with the level of friends and school connectedness, but not family connectedness among adolescents. The use of Internet technology did not contribute to lowering the number of mental health issues among adolescents specifically the rates of anxiety and loneliness. Findings suggest that the use of Internet technology has provided an additional space for adolescents to construct their sense of connectedness, and in turn influences their mental health in feelings of loneliness and anxiety if there is no appropriate social network from their social environment.

Article II study concluded a stronger sense of ethnic identity drives Asian American adolescents to positively create relationships within their social environment. The quantitative data analyses demonstrated that cultural immersion camp experiences influenced Asian American adolescent's perception of ethnic identity and social connectedness. Specifically, Asian American adolescents have a stronger sense of social

connectedness related to their perception of ethnic identity growth, which is based upon the camp experience. Promoting Asian American adolescent's ethnic identity allows adolescents to feel like a valued family and community member, which may foster their social connectedness and create better mental health outcomes. The positive relationship between ethnic identity and social connectedness makes the perception of ethnic identity a predictor for higher levels of social connectedness. The cultural immersion camp experience was an important mediator to facilitate perception of ethnic identity and became a critical intervention to solve the social alienation issues among Asian American adolescents. This study is significant because it provides an overview of the cultural immersion camp outcomes and potential interventions for mental health issues among Asian American adolescent.

The final study as presented in Article III provided insights from the discussions shared by focus group interviews on how adolescents cope with online technology to pursue connectedness to camp. It also presented key factors on how camp programs might better develop their online camp extension activities in a digital landscape. In addition, considerations to develop an online activity including adolescent capacity, the social group, positive social interaction, parental negotiation, cultural difference and timing circumstance in digital landscape with PTD perspective. Findings suggest that camp programs should set up online extension activities by considering their daily routine to actively provide an accessible path for campers to utilize it. In addition, camp program need to take advantages of multimedia for visual information exchange and various interactive actions. Finally, successfully facilitating adolescent's intrinsic and

extrinsic motivation and having them involved in the online activity was a key factor in delivering a positive impact on the digital playground. The results of this study have implications for researchers and youth practitioners who desire to take advantage of online technology in delivering online extension activities.

### Researcher Reflexivity

The mixed methods of this study brought insights from researchers (i.e. systematic review), youth practitioners (i.e. camp outcomes) and perspectives from adolescents (i.e. focus group). This allowed the researcher from this dissertation to examine the gap between the theories and the practices about the perspective of using digital playgrounds to promote positive youth development.

From the researcher's reflection, the digital playground was just a context extended from adolescent's social environment. Virtual playgrounds sound appealing, but are not a destination for adolescents. A well-designed context in a digital playground can be a context for adolescents to construct developmental assets under specific circumstances.

The distinct social group and positive social interaction models are imperative for adolescents to construct positive developmental assets in the digital playground. When adolescents become attached with the right peers and are supported positively, they can comfortably explore themselves and confidently bring positive influences to others.

Youth programs and youth summer camps are excellent settings for adolescent benefit through digital landscapes. Adolescents become aware of connectedness when they perceive themselves as valued members of the group. Youth programs and youth summer camps offer experiences in which adolescents naturally define themselves as members of the social group. At camps, adolescents can construct a positive self-perception, and later, share their experiences at camp and this can influence their lives in positive ways.

With the support of Internet technology, the positive impacts from youth programs and youth summer camps for adolescents can have a prolonged impact on an adolescent's connectedness maintenance. Adolescents spontaneously take advantages of the Internet to stay connected with their distinct social groups for the positive interaction and to potentially construct their developmental assets. The strategies to maximize the potential of digital landscapes are still waiting for exploration and discussion.

While the researcher made efforts to develop an online e-Community community as the camp extension activity in the digital landscape, the gaps between adolescents and adults (e.g. researchers, camp staff and camp counselors) in regards to the use of Internet technology still exist. When adolescents are expected to construct developmental assets in the digital landscape, they might need prior knowledge about the potential of the online world. Adults also need to use appropriate language when trying to communicate with adolescents in the digital landscape.

The findings of this study provide a holistic insight of how adolescents extend their playground from the real world to the digital landscape.

## Future Research Agenda

The results from this dissertation suggest several avenues for future research. The findings from Article I suggest that future research might further explore the positive and negative influences for adolescent's online technology use and further examine the necessary elements from adolescent's social environment for positive outcomes with the use of Internet technology. In addition, it also suggests that future research may further analyze the impacts of different internet technology use among adolescents and design various online activities for adolescent's needs. Finally, the relevant internet technology use researches may very because of the development of social media among adolescents. It also suggested that future research might examine the history and evolution of adolescent's internet technology use behaviors and further expand adolescent's developmental opportunities to the digital playground landscape.

Article II's findings suggest that the positive outcomes of a cultural immersion camp can also be used to improve minority adolescent's mental health issues. It suggested that research might utilize the benefits of the cultural immersion camp to positive youth development. In addition, other latent variables (e.g. self-esteem), external factor (e.g. camp staff attitude) and camp programming (e.g. courses structure) of cultural immersion camp to promote adolescent social connectedness were also needed to further identify. Finally, Asian American adolescents' motivation to participate in the culture immersion camp should be examined to further analysis if the expected outcomes of cultural camp meet Asian American adolescents' needs.



The findings from Article III suggest that the potential benefits and challenges for using virtual playgrounds to promote adolescent's sense of connectedness are still unsure. First, parent's negotiation still plays an essential role for adolescents' accessibility to virtual digital playground. It suggested that research should explore the factors behind parent's expectation and consideration for adolescent's internet technology use. In addition, adolescents of this study agree that the use of internet technology brings them the feeling of connection when they lose face-to-face contact with camp social group though they may not be able to fully participate an online extension activity. It suggested that the use of online technology to maintain camper's sense of connectedness to camp should still be studied. Adolescent's expectations of online extension activity also determine the their levels of online extension activity involvement. It suggested that research should consider other influential factors beyond the strategies of a well-design online activity.

### Final Thoughts

In sum, the findings provide a holistic insight into utilizing the digital playground to support adolescent's additional opportunities to increase their sense of connectedness. Rather than merely examining the impact of Internet technology, this study offers insights from other researchers (i.e. systematic review), impacts from youth practitioners (i.e. camp outcomes) and perspectives from adolescents (i.e. focus group) for a complete picture of how a virtual playground can foster adolescent's social connectedness. The findings hold important implications for both researchers and practitioners and can

inform the future development of the theoretical frameworks employed in this study.

## REFERENCES

- Alba, R., & Chamlin, M. B. (1983). A preliminary examination of ethnic identification among Whites. *1983, 48*, 240-242.
- Andujo, E. (1988). Ethnic identity of Transethnically adopted Hispanic adolescents. *Social Work, 33*, 531-535.
- Asian/ Pacific Islander Youth Violence Prevention Center. (2001). National Council on Crime and Delinquency (1st ed.). Oakland, CA: Asian/ Pacific Islander Youth Violence Prevention Center.
- Austin, E. W., Chen, Y., Pinkleton, B. E., & Johnson, J. Q. (2006). Benefits and costs of *channel one* in a middle school setting and the role of media-literacy training. *Pediatrics, 117*(3), 423-433.
- Azibo, D. A. (1989). African-centered theses on mental health and anosology of black african personality disorder. *Journal of Black Psychology, 15*, 173-214.
- Baldwin, J. A. (1984). African self-consciousness and the mental health of african-americans. . *Journal of Black Studies, 15*, 177-194.
- Barber, B. K., & Schluterman, J. M. (2008). Connectedness in the lives of children and adolescents: A call for greater conceptual clarity. *Journal of Adolescent Health, 43*, 209-216.

- Barczyk, C. C., & Duncan, D. G. (2012). Social networking media: An approach for the teaching of international business. *Journal of Teaching in International Business, 23*(2), 98-122.
- Beam, M. R., Chen, C., & Greenberger, E. (2002). The nature of adolescents' relationships with their "very important" nonparental adults. *American Journal of Community Psychology, 30*(2), 305-325.
- Bernat, D. H., & Resnick, M. D. (2009). Healthy youth development: Science and strategies. In R. J. DiClemente, J. S. Santelli & R. A. Crosby (Eds.), *Adolescent health: Understanding and preventing risk behaviors*, 376-387.
- Bers, M. U. (2012). *Designing digital experiences for positive youth development from playpen to playground* (1 edition ed.). MA: Oxford University Press.
- Bers, M. U. (Ed.). (2012). *Designing digital experiences for positive youth development: From playpen to playground* (1 edition ed.). USA: Oxford University Press.
- Bers, M. U. (2010). Beyond computer literacy: Supporting youth's positive development through technology. *New Directions for Youth Development, 2010*(128), 13-23.
- Bers, M., Doyle-Lynch, A., & Chau, C. (Eds.). (2010). *Positive technological development: The multifaceted nature of youth technology use towards improving self and society*. Cambridge: Cambridge University Press.

- Bialeschki, M. D., Henderson, K. A., & James, P. A. (2007). Camp experiences and developmental outcomes for youth. *Child & Adolescent Psychiatric Clinics of North America*, 16(4), 769-788.
- Boyd, D. (2008). In Buckingham D. (Ed.), *Why youth (heart) social network sites: The role of networked publics in teenage social life*". *MacArthur foundation series on digital learning – youth, identity, and digital media volume*. MA: MIT Press.
- Branstetter, S. (2008). Technology: New technologies to improve camp marketing. *Camping Magazine*. Retrieved March 1, 2015, from <http://www.acacamps.org/content/technology-new-technologies-improve-camp-marketing>.
- Brown, P. A., Harniss, M. K., Schomer, K. G., Feinberg, M., Cullen, N. K., & Johnson, K. L. (2012). Conducting systematic evidence review: Core concepts and lessons learned. *Archives of Physical Medicine and Rehabilitation*, 93(2), 177-184.
- Cacioppo, J. T., & Hawkley, L. C. (2003). Social isolation and health, with an emphasis on underlying mechanisms. *Perspect Biol Med*, 3, 39-52.
- Canino, G., & Roberts, R. E. (2001). Suicidal behavior among Latino youth. *Suicide and Life-Threatening Behavior*, 31, 121-131.

- Carter, R., & Helms, J. (1987). The relationship of black value-orientations to racial identity attitudes. *Measurement and Evaluation in Counseling and Development, 19* (185), 195.
- Catalano, R. F., & Hawkins, J. D. (1996). The social development model: A theory of antisocial behavior. *Delinquency and crime: Current theories* (pp. 149-197). Cambridge: Cambridge University Press.
- Chang, H. H., & Ng, K. S. (2002). The perception of resiliency mechanisms in Chinese American families: Implications for family therapy. *Family Therapy, 29*(2), 89-100.
- Cooper, C. R., & Denner, J. (1998). Theories linking culture and psychology: Universal and community-specific processes. *Annual Review of Psychology, 49*, 559-584.
- Crocetti, E., Klimstra, T. A., Hale, W. W. I., Koot, H. M., & Meeus, W. (2013). Impact of early adolescent externalizing problem behaviors on identity development in middle to late adolescence: A prospective 7-year longitudinal study. *Journal of Youth Adolescence, 42*, 1745-1758.
- Cross, W. E. (1991). *Rethinking Nigrescence in shades of black: Diversity in African-American identity*. Philadelphia: Temple University Press.
- Davis, M. (1993). Media streams: An iconic visual language for video annotation. *Visual Languages*, Bergen. 196-202.

- De Luca, S. M., Wyman, P., & Warren, K. (2012). Latina adolescent suicide ideations and attempts: Associations with connectedness to parents, peers, and teachers. *Suicide and Life-Threatening Behavior, 42*(6), 672-683.
- Delonga, K., Torres, H. L., Kamen, C., Evans, S. N., Lee, S., Koopman, C., & Gore-Felton, C. (2011). Loneliness, internalized homophobia, and compulsive internet use: Factors associated with sexual risk behavior among a sample of adolescent males seeking services at a community LGBT center. *Sexual Addiction & Compulsivity, 18*, 61-74.
- Dempsey, A. G., Sulkowski, M. L., Nichols, R., & Storch, E. A. (2009). Differences between peer victimization in cyber and physical settings and associated psychosocial adjustment in early adolescence. *Psychology in the Schools, 46*(10), 962-972.
- DuBois, D. L., & Silverthorn, N. (2005). Natural mentoring relationships and adolescent health: Evidence from a national study. *American Journal of Public Health, 95*(3), 518-524.
- Erikson, E. H. (1968). *Identity: Youth and crisis*. NY: W. W. Norton & Company.
- Gillard, A., Witt, P. A., & Watts, C. E. (2011). Outcomes and processes at a camp for youth with HIV/AIDS. *Qualitative Health Research, 21*(11), 1508-1526.

- Goodwin, D. L., & Lieberman, J. L. (2011). Connecting through summer camp: Youth with visual impairments find a sense of community. *Adapted Physical Activity Quarterly*, 28, 40-55.
- Goodwin, D. L., Lieberman, L. J., Johnston, K., & Leo, J. (2011). Connecting through summer camp: Youth with visual impairments find a sense of community. *Adapted Physical Activity Quarterly*, 28(1), 40-55.
- Grieve, S. M., Korgaonkar, M. S., Koslow, S. H., Gordon, E., & Williams, L. M. (2013). Widespread reductions in gray matter volume in depression. *Neuroimaging Clinical*, 3, 332-339.
- Gross, E. F., Juvonen, J., & Gable, S. L. (2002). Internet use and well-being in adolescence. *Journal of Social*, 58(1), 75-90.
- Hawkins, J. D., Catalano, R. F., Kosterman, R., Abbott, R. D., & Hill, K. G. (1999). Preventing adolescent health-risk behaviors by strengthening protection during childhood. *Archives of Pediatrics & Adolescent Medicine*, 153(3), 226-234.
- Helms, J. E., & Cook, D. A. (1999). In Heights N. (Ed.), *Using race and culture in counseling and psychotherapy: Theory and process*. MA: Allyn& Bacon.
- Herman, I., Melancon, G., & Marshall, M. S. (2000). Graph visualization and navigation in information visualization: A survey. *Transactions on Visualization and Computer Graphics*, 6(1), 24-43.



- Hirschi, T. (1969). *Causes of delinquency*. Berkeley: University of California Press.
- Holtz, P., & Appel, M. (2011). Internet use and video gaming predict problem behavior in early adolescence. *Journal of Adolescence*, *34*(1), 49-58.
- Huang, C. L., & Yang, S. C. (2013). A study of online misrepresentation, self-disclosure, cyber-relationship motives, and loneliness among teenagers in taiwan. *Journal of Educational Computing Research*, *48*(1), 1-18.
- Irvine, C. (2009). Excessive chatting on Facebook can lead to depression in teenage girls. *The Telegraph*. Retrieved March 1, 2015, from <http://www.telegraph.co.uk/technology/facebook/4405741/Excessive-chatting-on-Facebook-can-lead-to-depression-in-teenage-girls.html>.
- Janis, W. (2007). The role of adults, public space, and power in adolescent community connectedness. *Journal of Community Psychology*, *35* (4), 499-518.
- Jose, P., & Pryor, J. (2010). Does social connectedness lead to a greater sense of well-being in new zealand adolescents? Findings from the youth connectedness project. *Psychology Aotearoa*, *2*(2), 94-97.
- Jose, P. E., Ryan, N., & Pryor, J. (2012). Does social connectedness promote a greater sense of well-being in adolescence over time? *Journal of Research on Adolescence*, *22*(2), 235-251.

- Karcher, M. J. (2003). *The Hemingway: Measure of adolescent connectedness: Validation studies*. Unpublished manuscript. Retrieved March 1, 2015, from <http://files.eric.ed.gov/fulltext/ED477969.pdf>.
- Karcher, M. J. (2005). The effects of developmental mentoring and high school mentors' attendance on their younger mentees' self-esteem, social skills, and connectedness. *Psychology in the Schools, 42*(1), 65-77.
- Karcher, M. J. (2011). *The Hemingway: Measure of adolescent connectedness*. Unpublished manuscript. Retrieved March 1, 2015, from <http://adolescentconnectedness.com/>.
- Karcher, M. J., & Santos, K. T. (2011). Promoting connectedness through developmental Interventions: Adapting the cross-age mentoring Program (CAMP) for youth in Asia. *Asian Journal of Counseling, 18*(1&2), 125-147.
- Karcher, M. J., Davis, C., & Powell, B. (2002). The effects of developmental mentoring on connectedness and academic achievement. *School Community Journal, 12*(2), 35-50.
- Krueger, R. A., & Casey, M. A. (2000). *Focus groups: A practical guide for applied research*. (3rd ed.). CA: Thousand Oaks: Sage Publications.
- Leong, J. (2012). White house briefs students on Asian-American youth issues. *Penn Current*. Retrieved March 1, 2015, from

<http://www.upenn.edu/pennnews/current/2012-01-13/latest-news/white-house-briefs-students-asian-american-youth-issues>.

Lerner, R., Lerner, J., Almerigi, J., Theokas, C., Phelps, E., & Gestsdottir, S. (2005). Positive youth development, participation in community youth development programs, and community contributions of fifth-grade adolescents: Findings from the first wave of the 4-H study of positive youth development. *Journal of Early Adolescence, 25*(1), 17-71.

Lerner, R. M., Roeser, R. W., & Phelps, E. (Eds.). (2008). *Positive youth development and spirituality: From theory to research*. West Conshohocken: Templeton Foundation Press. Retrieved March 1, 2015, from [https://www.andrews.edu/services/jacl/article\\_archive/4\\_2\\_fall\\_2010/05-bookreviews/jacl\\_4-2\\_mendez.pdf](https://www.andrews.edu/services/jacl/article_archive/4_2_fall_2010/05-bookreviews/jacl_4-2_mendez.pdf).

Lim, S. S., Chan, Y. H., Vadrevu, S., & Basnyat, I. (2013). Managing peer relationships online – investigating the use of Facebook by juvenile delinquents and youths-at-risk. *Computers in Human Behavior, 29*, 8-15.

Livingstone, S. (2008). Taking risky opportunities in youthful content creation: Teenagers' use of social networking sites for intimacy, privacy and self expression. *New Media & Society, 10*(3), 393-411.

- Lorenzo, M. K., Frost, A. K., & Reinherz, H. Z. (2000). Social and emotional functioning of older Asian American adolescents. *Social Work Journal, 17*(4), 289-304.
- Madden, M., Lenhart, A., Duggan, M., Cortesi, S. & Gasser, U. (2013). Teens and technology 2013. Retrieved March 1, 2015, from <http://www.pewinternet.org/Reports/2013/Teens-and-Tech.aspx>
- Mandara, J., Gaylord-Harden, N. K., Richards, M. H., & Ragsdale, B. L. (2009). The effects of changes in racial identity and self-esteem on changes in African American adolescent's mental health. . *Child Development, 80*, 1660-1675.
- McMillian, D. W., & Chavis, D. M. (1986). Sense of community: A definition and theory. *Journal of Community Psychology, 14*, 6-23.
- Mesch, G.S. (n.d.) The Internet and youth culture. Retrieved March 1, 2015, from <http://www.iascculture.org/THR/archives/YouthCulture/Mesch.pdf>.
- Miller, J. M. (2010). Language use, identity, and social interaction: Migrant students in Australia. *Research on Language and Social Interaction, 33*(1), 69-100.
- Mistler-Jackson, M., & Songer, N. B. (2000). Student motivation and internet technology: Are students empowered to learn science? *Journal of Research Science Teach, 37*, 459-479.

- Mussman, J., & Slay, A. (2000). Keeping campers connected.com: Using the internet to communicate with campers in the off-season. *Camping Magazine*, 73(6), 22-24.
- Nicholas, H., & Ng, W. (2009). Engaging secondary school students in extended and open learning supported by online technologies. *Journal of Research on Technology in Education*, 41(3), 305-328.
- O'Keeffe, G. S., & Clarke-Pearson, K. (2011). The Impact of Social Media on Children, Adolescents, and Families. *Council on Communications and Media*, 127(4), 800-804.
- Olsson, C. A., McGee, R., Nada-Raja, S., & Williams, S. M. (2013). 32-year longitudinal study of child and adolescent pathways to well-being in adulthood. *Journal of Happiness Studies*, 14(3), 1069-1083.
- Park, S., Hong, K. M., Park, E. J., & Yoo, H. J. (2012). The association between problematic internet use and depression, suicidal ideation and bipolar disorder symptoms in Korean adolescents. *Australian & New Zealand Journal of Psychiatry*, 47(2), 153-159.
- Pew Research. (2013-03-13). Teens and technology 2013. Retrieved March 1, 2015, from <http://www.pewinternet.org/2013/03/13/teens-and-technology-2013/>.
- Phinney, J. (1992). The multigroup ethnic identity measure: A new scale for use with diverse groups. *Journal of Adolescent Research*, 7, 156-176.

- Phinney, J. (2003). Ethnic identity and acculturation. In K. Organista, P. Chun & G. Marin (Eds.), *Acculturation: Advances in theory, measurement, and applied research* (pp. 63-81). Washington, DC: American psychology association.
- Phinney, J., & Tarver, S. (1988). Ethnic identity search and commitment in black and white in eight graders. *Journal of Early Adolescence, 8*, 265-277.
- Pierce, T. (2009). Social anxiety and technology: Face-to-face communication versus technological communication among teens. *Computers in Human Behavior, 25*(6), 1367-1372.
- Pierce, T. (2009). Social anxiety and technology: Face-to-face communication versus technological communication among teens.. *Computers in Human Behavior, 25*(6), 1367-1372.
- Pinckney, H. P. I., Outley, C., Blake, J. J., & Kelly, B. (2011). Promoting positive youth development of black youth: A rites of passage framework. *Journal of Park and Recreation Administration, 29*(1), 98-112.
- Pomale, J., Claiborn, C., & LaFromboise, T. (1986). Effect of black students' racial identity on perception of white counselors varying in cultural sensitivity. *Journal of Counseling Psychology, 33*, 57-61.
- Punamäkia, R., Walleniusa, M., Hölttöa, H., Nygårdc, C., & Rimpeläc, A. (2009). The associations between information and communication technology (ICT) and peer

and parent relations in early adolescence. *International Journal of Behavioral Development*, 33(6), 556-564.

Rabiee, F. (2004). Focus-group interview and data analysis. *Proceedings of the Nutrition Society*, 63, 655-660.

Raghavendra, P., Wood, D., Newmanc, L., & Lawryd, J. (2012). Why aren't you on facebook? Patterns and experiences of using the internet among young people with physical disabilities. *Technology and Disability*, 24, 149-162.

Resnick, M. D., Bearman, P. S., Blum, R. W., Bauman, K. E., Harris, K. M., Jones, J., & Udry, J. R. (1997). Protecting adolescents from harm: Findings from the national longitudinal study on adolescent health. *Journal of the American Medical Association*, 278(10), 823-832.

Rick, K., & Forward, J. (1992). Acculturation and perceived intergenerational differences among youth. *Journal of Cross-Cultural Psychology*, 23, 85-94.

Ritchie, J., & Spencer, L. (1994). In Bryman and RG Burgess (Ed.), *Qualitative data analysis for applied policy research in analyzing qualitative data*, London: Rutledge.

Rosenberg, M., & Simmons, R. (1971). *Black and white self-esteem: The urban school child*. Washington, DC: American Sociological Association.

- Salzman, J. (2000). Blending technology with camp tradition: Technology can simplify camp operations. *Camping Magazine*. Retrieved March 1, 2015, from <http://www.acacamps.org/print/27212>.
- Schirick, E. (2001). Continue training all summer. *Camping Magazine*, 74(4), 14-15.
- Schlag, P. A. (2008). Online learning comes to camp. *Camping Magazine*. Retrieved March 1, 2015, from <http://www.acacamps.org/campmag/issues/0809/schlag>.
- Schoenberg, D. (2008). Technology: Ka-Ching! Using technology to improve fee collection – international staff. *Camping Magazine*. Retrieved March 1, 2015, from <http://www.acacamps.org/content/technology-ka-ching-using-technology-improve-fee-collection-%E2%80%93-international-staff>.
- Schwartz, S. J. (2008). Self and identity in early adolescence: Some reflections and an introduction to the special issue. *Journal of Early Adolescence*, 28, 5-15.
- Senali, L. (2003). Ways with visual languages: Making the case for critical media literacy. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 76(6), 271-277.
- Serafica, F. C., & Vargas, L. A. (2006). CHAPTER 15: Cultural diversity in the development of child psychopathology . In D. Cicchetti, & D. J. Cohen (Eds.), *Developmental psychopathology*.



- Sibthorp, J., Bialeschki, M. D., Morgan, C., & Browne, L. (2013). Validating, norming, and utility of a youth outcomes battery for recreation programs and camps. *Journal of Leisure Research, 45*(4), 514-536.
- Stewart, M., Barnfather, A., Magill-Evan, J., Ray, L., & Letourneau, N. (2011). Brief report: An online support intervention: Perceptions of adolescents with physical disabilities. *Journal of Adolescence, 34*, 795-800.
- Stoddard, S. A., McMorris, B., & Sieving, R. E. (2011). Do social contexts and hope matter in predicting early adolescent violence? *American Journal of Community Psychology, 48*, 247-256.
- Stoll, J., Edwards, W. K., & Foot, K. A. (2012). Between us and them: Building connectedness within civic networks. Seattle, Washington, USA. , CSCW 237-240.
- Sum, S., Mathews, M. R., Pourghasem, M., & Hughes, I. (2008). Internet technology and social capital:How the internet affects seniors' social capital and wellbeing. *International Communication Association, 14*, 202-220.
- Thurber, C. A., Scanlin, M. M., Scheuler, L., & Henderson, K. A. (2007). Youth development outcomes of the camp experience: Evidence for multidimensional growth. *Journal of Youth and Adolescence, 36*(3), 241-254.

- Townsend, K. C., & McWhirter, B. T. (2005). Connectedness: A review of the literature with implications for counseling, assessment, and research. *Journal of Counseling and Development, 53*(2), 191-202.
- U.S. Department of Health and Human Services. (2001). *Mental health: Culture, race, and ethnicity A supplement to mental health: A report of the surgeon general*. Rockville, MD: Author.
- Uchino, B. N., Cacioppo, J. T., & Kiecolt-Glaser, J. K. (1996). The relationship between social support and psychological processes: A review with emphasis on underlying mechanisms and implications for health. *Psychological Bulletin, 119*, 488-531.
- Umemoto, K., & Ong, P. (2006). Asian American and Pacific Islander youth: Risks, challenges, and opportunities. *APPI Nexus, 4*(2), 5-6.
- Wagner, W., Kronberger, N., Nagata, M., & Sen, R. (2010). Essentialist theory of 'hybrids': From animal kinds to ethnic categories and race. *Asian Journal of Social Psychology, 13*(4), 232-246.
- Walton, G. M., & Cohen, G. L. (2011). A brief social-belonging intervention improves academic and health outcomes of minority students. *Science, 331*, 1447-1451.
- Whitlock, J. L. (2004). *Place to be and place to belong: Youth connectedness in school and community*. Ithaca, NY: ACT for Youth Family Life Development Center.

- Yoon, E., Lee, R. M., & Goh, M. (2008). Acculturation, social connectedness, and subjective well-being. *Cultural Diversity and Ethnic Minority Psychology, 14*, 246-255.
- Zayas, L. H., & Pilat, A. M. (2008). Suicidal behavior in latinas: Explanatory cultural factors and implications for intervention. *Suicide and Life-Threatening Behavior, 38*, 334-342.
- Zimmerman, M. A., Bingenheimer, J. B., & Notaro, P. C. (2002). Natural mentors and adolescent resiliency: A study with urban youth. *American Journal of Community Psychology, 30*(2), 221-243.

APPENDIX A  
CAMP OUTCOMES AND  
CONNECTEDNESS QUESTIONNAIRE

## CAMP OUTCOMES AND CONNECTEDNESS QUESTIONNAIRE

Please read each statement carefully. Then, for each statement, circle "4" if you "Agree a Lot." Circle "3" if you "Agree a Little", Circle "2" if you "Disagree a Little," and circle "1" if you "Disagree a Lot". Try to answer every question. If any questions make you feel uncomfortable, you can skip them. Remember – THIS IS NOT A TEST, and there are no right or wrong answers. We just want to know what you think!

**1<sup>st</sup> part:** Below is a list of statements dealing with your feelings about yourself.  
**MARK the circle.**

	Agree a Lot	Agree a Little	Disagree A Little	Disagree A Lot
1. On the whole, I am satisfied with myself.	4	3	2	1
2. At times I think I am no good at all.	4	3	2	1
3. I feel that I have a number of good qualities.	4	3	2	1
4. I am able to do things as well as most other people.	4	3	2	1
5. I feel I do not have much to be proud of.	4	3	2	1
6. I certainly feel useless at times.	4	3	2	1
7. I feel that I'm a person of worth, at least on an equal plane with others.	4	3	2	1
8. I wish I could have more respect for myself.	4	3	2	1
9. All in all, I am inclined to feel that I am a failure.	4	3	2	1
10. I take a positive attitude toward myself.	4	3	2	1
11. I have spent time trying to find out more about my own ethnic group, such as its history, traditions, and customs.	4	3	2	1
12. I am active in organizations or social group that includes mostly members of my own ethnic group.	4	3	2	1
13. I have a clear sense of my ethnic background and what it means for me.	4	3	2	1
14. I like meeting and getting to know people from ethnic groups other than my own.	4	3	2	1
15. I think a lot about how my life will be affected by my ethnic group membership.	4	3	2	1
16. I am happy that I am a member of the group I belong to.	4	3	2	1
17. I sometimes feel it would be better if different ethnic groups didn't try to mix together.	4	3	2	1
18. I am not very clear about the role of my ethnicity in my life.	4	3	2	1
19. I often spend time with people from ethnic group other than my own.	4	3	2	1
20. I really have not spent much time trying to learn more about the culture and history of my ethnic group.	4	3	2	1
21. I have a stronger sense of belonging to my own ethnic group.	4	3	2	1
22. I understand pretty well what my ethnic group membership means to me, in term of how to relate to my own group and other groups.	4	3	2	1
23. In order to learn more about my ethnic background, I have often talked to other people about my ethnic group.	4	3	2	1
24. I have a lot of pride in my ethnic group and its accomplishments.	4	3	2	1
25. I don't try to become friends with people from other ethnic groups.	4	3	2	1
26. I participate in cultural practices of my own group, such as special food, music, or customs.	4	3	2	1
27. I am involved in activities with people from other ethnic groups.	4	3	2	1
28. I feel a strong attachment towards my own ethnic group.	4	3	2	1
29. I enjoy being around people from ethnic groups other than my own.	4	3	2	1
30. I feel good about my cultural or ethnic background.	4	3	2	1

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<b>2<sup>nd</sup> part: MARK the circle that best describes how true that statement is for you.</b>	Very true	True	Sort of true	Not really true	Not at all true
1. I like hanging out around where I live (like my neighborhood).	5	4	3	2	1
2. Spending time with friends is not so important to me.	5	4	3	2	1
3. I can name 5 things that others like about me.	5	4	3	2	1
4. My family has fun together.	5	4	3	2	1
5. I have a lot of fun with my brother(s) or sister(s).	5	4	3	2	1
6. I will have a good future.	5	4	3	2	1
7. I spend a lot of time with kids around where I live.	5	4	3	2	1
8. I have friends I'm really close to and trust completely.	5	4	3	2	1
9. There is not much that is unique or special about me.	5	4	3	2	1
10. It is important that my parents trust me.	5	4	3	2	1
11. I feel close to my brother(s) or sister(s).	5	4	3	2	1
12. Doing well in school will help me in the future.	5	4	3	2	1
13. I get along with the kids in my neighborhood.	5	4	3	2	1
14. Spending time with my friends is a big part of my life.	5	4	3	2	1
15. I can name 3 things that other kids like about me.	5	4	3	2	1
16. I enjoy spending time with my parents.	5	4	3	2	1
17. I enjoy spending time with my brothers/sisters.	5	4	3	2	1
18. I do things outside of school to prepare for my future.	5	4	3	2	1
19. I often spend time playing or doing things in my neighborhood.	5	4	3	2	1
20. My friends and I talk openly with each other about personal things.	5	4	3	2	1
21. I really like who I am.	5	4	3	2	1
22. My parents and I disagree about many things.	5	4	3	2	1
23. I try to spend time with my brothers/sisters when I can.	5	4	3	2	1
24. I do lots of things to prepare for my future.	5	4	3	2	1
25. I hang out a lot with kids in my neighborhood.	5	4	3	2	1
26. I spend as much time as I can with my friends.	5	4	3	2	1
27. I have special hobbies, skills, or talents.	5	4	3	2	1
28. My parents and I get along well.	5	4	3	2	1
29. I try to avoid being around my brother/sister(s).	5	4	3	2	1
30. I think about my future often.	5	4	3	2	1
31. My neighborhood is boring.	5	4	3	2	1
32. My friends and I spend a lot of time talking about things.	5	4	3	2	1
33. I have unique interests or skills that make me interesting.	5	4	3	2	1
34. I care about my parents very much.	5	4	3	2	1

-Gender:  Male  Female -Age:  Under 10  11-14  15-18  above 18

-What is your overall GPA in last semester?  A  B  C  Other:

-Which language do you speak at home?  Chinese  English  Other:

-Do you receive supplemental free meal at school?  Yes  No  Other:

-How would you classify yourself?  American  Chinese American  Chinese  Taiwanese  Other:

-Where were your parents born?  USA  China  Taiwan  Other:

Thank you for taking time to complete survey



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