

ADOLESCENT SOCIAL MEDIA USE: COPING OR AVOIDANCE?

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ABSTRACT

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The growing frequency of social media site use raises concerns regarding its psychological effects on users, particularly adolescents. The current study examined the moderating roles of social media coping and experiential avoidance within the relation between frequency of social media use and internalizing/externalizing symptoms of psychopathology in a sample of 334 college students between 17-19 years of age. It was found that neither social media coping nor experiential avoidance appeared to be related to internalizing or externalizing symptoms in the present sample.

KEY WORDS: Coping, Social media, Adolescence, Experiential avoidance, Psychopathology

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CHAPTER IIII

Introduction

Adolescent Social Media Use

Social media site use has grown tremendously in popularity over the past decade, particularly among adolescents (Valkenburg & Peter, 2008). A recent online survey of 1,060 adolescents ages 13-17 found that 87% of these youth have access to a computer at home and 75% have access to a smartphone (Lenhart, 2015). This survey also found that 71% of these youth report using more than one social media site. Of the 22% who reported using only one site, 66% use Facebook, 13% use Google+, 13% use Instagram, and 3% use Snapchat. Seventy-one percent of all U.S. adolescents ages 13-17 report using Facebook, the most used social media site of all time. In addition, this survey found that 92% of adolescents report going online daily, with 24% who report going online "almost constantly." An earlier study of TV and computer media use found that youth ages 15-18 had an average social media site use of 53 hours per week (Rideout, Foehr, & Roberts, 2010)—more hours than what a typical adolescent would spend at school. Given the overwhelming prevalence and frequency of social media site use, research has recently begun to examine its effects on psychosocial development and behavior.

Several studies have linked adolescent use of social media sites to increased social connectedness, better relationship quality, and increased social self-esteem (Valkenburg & Peter, 2009; Valkenburg, Peter, & Schouten, 2006). Specifically, a 2002 study by Kraut et al. found a significant positive relationship between Internet use and improved social connectedness and well-being within adolescent friendships. Online communication with friends appeared to enhance social support experienced within these

friendships. Valkenburg and Peter (in press) also found a direct positive relationship between online communication and quality of friendships. Additionally, they found that online self-disclosure mediated the relation between online communication and quality of friendships, suggesting that mere exposure to online communication is not enough to enhance relationships alone. Instead, online communication enhances self-disclosure, which then leads to increased quality of existing friendships. Enhanced self-disclosure may be particularly beneficial for adolescents experiencing feelings of social anxiety, since online communication reduces visual and auditory cues that may hamper in-person communication (Schouten, Valkenburg, & Peter, 2007).

Although there appear to be social benefits related to using social media, there are growing concerns about social media's effects on mental health. The American Academy of Pediatrics stated that social media has a potential to cause depressive symptoms among its youth users (O'Keeffe & Clarke-Pearson, 2011). In addition, a series of case studies by Nitzan, Shoshan, Lev-Ran, and Fennig (2011) has linked the overuse of Facebook to psychosis. Moreover, adolescents who use social media can be exposed to sexting, pornography, online predators, and cyberbullying. In fact, 20%-40% of children and adolescents have been victims of cyberbullying, with particular risk noted among females and minorities (Aboujaoude, Savage, Starcevic, & Salame, 2015). Another study by Loveless (2016) found that victims of cyberbullying and those who engage in sexting are at increased risk of sexually transmitted infections and pregnancy. In addition to the negative mental health effects and dangers that social media site use poses, a belief among parents that adolescent technology use fostered antisocial behavior was prevalent when the online activity first became popular (Turow, 1999).

Taken together, these studies have demonstrated both positive and negative effects of social media use on adolescent mental health, with overall mixed results (Best, Manktelow, & Taylor, 2014), but stress the reality that, in order to have a comprehensive understanding of adolescent development and behavior in the context of the 21st century, researchers must take social media use into account (Lloyd, 2002). The broad aim of the current study was to examine the extent to which social media relates to psychopathology in adolescents, examining its role as a coping mechanism for the first time.

Emerging Psychopathology in Adolescents

Adolescents are commonly defined as young people between the ages of 10-19 years old (World Health Organization, 2016; Canadian Pediatric Society, 2003). Other definitions extend this age period into an individual's early twenties (American Academy of Pediatrics, 2015). Adolescence is a period of increased vulnerability to affective and behavior problems and adjustment difficulties, due to maturation gaps in the developing brain, behavioral, and cognitive systems (Steinberg, 2005). In addition to their ongoing brain development, adolescents are undergoing hormonal changes, making them more prone than younger children and adults to both internalizing and externalizing disorders (Steinberg et al., 2006). Approximately 20% of adolescents in the United States have a diagnosable mental health disorder (Kessler et al., 2005). A 2014 survey from the U.S. National Survey on Drug Use and Health found an estimated 11.4% of adolescents ages 12-17 years to have had at least one major depressive episode in the past year (Center for Behavioral Health Statistics and Quality, 2015). Another survey found that, for a quarter of individuals experiencing internalizing disorders and emotional symptoms, these problems first emerged during adolescence (Rushton, Forcier, & Schectman, 2002). In

terms of externalizing behaviors, 50-75% of individuals with conduct problems or attention-deficit/hyperactivity disorder develop these during adolescence (Rushton, Forcier, & Schectman, 2002). Behavioral and mental health problems among adolescents are of particular societal importance because they may lead to poor academic performance, school attrition, engaging in risky behaviors, substance abuse, and involvement with the juvenile justice system (Skowrya & Coccozza, 2006).

Adolescence is also a high-risk period for the emergence of psychopathology due to changes in social development. During adolescence, individuals experience a shift from a focus on family relationships to a focus on peer relationships in a process known as social reorientation (Nelson, Leibenluft, McClure, & Pine, 2005). Throughout this period of psychosocial change, adolescents are exposed to the effects of peer acceptance and rejection, romantic relationships, and individualization from one's parents. Given the increased importance of social interactions during this time, adolescence is a time of particular vulnerability for the emergence of social anxiety (Rapee & Spence, 2004), increased fear of negative evaluations from peers, and more negative responses to peer rejection (O'Brien & Bierman, 1988). In order to achieve acceptance and positive social adaption, adolescents may be more likely to engage in risk-taking behaviors, novelty-seeking behaviors, and express a disregard for negative consequences in favor of more alluring positive consequences (Steinberg, 1987). Because adolescence is a period of vulnerability for psychopathology, as well as a period of social development where adolescents may clash with societal rules and parental expectations, the means through which adolescents cope with such struggles is of particular public health importance.

That, in combination with increased social media site use, raises the question of the extent to which adolescents are using social media sites to cope with emotional distress.

Social Media Use as Coping

Aforementioned links between social media use and positive outcomes may be explained by conceptualizing social media use as a form of coping through social support seeking. Coping refers to the specific way, both behavioral and psychological, in which individuals master, tolerate, reduce, or minimize stressful events (Taylor, 1998). The methods with which individuals cope with life stressors have long been of interest in psychological research. While many styles of coping have been operationalized and studied, it is important to note that coping changes over time with changing situational contexts (Lazarus, 1993). Therefore, a particular coping style may be adaptive in one context, but not in another. Although there may be no universally adaptive or maladaptive coping style, research has indicated that some coping strategies may be better than others. Two broad coping strategies have been identified: active coping and avoidant coping. Individuals often use both of these strategies, sometimes in combination, to deal with stressful events (Folkman & Lazarus, 1980). Active coping entails problem solving, seeking support, and attempts at changing one's current situation, while avoidant coping entails denial, drawing into oneself, and engaging in potentially harmful activities such as substance use. Research has found that avoidant coping strategies may be effective short-term but are maladaptive overall (Suls & Fletcher, 1985).

Several studies have found that individuals can use social media networking sites as a means of active coping for seeking social support and solving problems related to

both national crises and general life hardships. Specifically, a study involving community usage of social media sites during the October 2007 Southern California Wildfires found that these sites served as sources of information and backchannel communication for individuals affected by the fire (Sutton, Palen, & Shklovski, 2008). Another study analyzed 2,099 Twitter messages during the 2011 European *Escherichia coli* outbreak in Spain and found that users tweeted about the crisis during periods of uncertainty as a form of social coping to express acceptance and positive adaption to the crisis (Gaspar et al., 2014). A 2014 study by Naslund, Grande, Aschbrenner, and Elwyn found that a significant amount of individuals with severe mental illness used YouTube as a means of peer support. Overall, these studies have demonstrated that social media use is a form of social support seeking that people turn to during times of crisis or when dealing with personal symptoms. However, while these studies suggest that social media can be used as a coping strategy, no direct examination of this link has been undertaken. Indeed, Naslund et al. (2014) did not assess whether social media use translated to reduced symptoms as a form of coping.

While these studies suggest that social media has been used as a coping strategy in college students and adults, no studies have directly examined whether adolescents describe social media use as a coping mechanism. Whether social media is used as a form of social coping or not may explain the aforementioned mixed findings regarding the relation between social media use frequency and psychological outcomes. Thus, the first aim of the current study was to determine whether the relation between frequency of social media use and psychopathology would be moderated by self-reported use of social media for coping. The recently developed Motivations for Electronic Interaction Scale

(MEIS) includes several items related to coping (Nesi & Prinstein, 2015) which was used to assess social media as a coping strategy.

Moderating Role of Experiential Avoidance

While individuals who use social media often and endorse using social media as a form of coping may experience reduced distress, the converse may be true when individuals use social media often but report high levels of experiential avoidance. Experiential avoidance is defined as attempts to avoid thoughts, feelings, memories, and physical sensations that are associated with distressing internal states (Hayes, 1994). Experiential avoidance is thought to be maintained through negative reinforcement since it provides immediate, short-term relief from discomfort. Overall, experiential avoidance is strongly correlated with general psychopathology in both clinical and non-clinical samples (Hayes et al., 2004). A review by Chawla and Ostafin (2007) found that experiential avoidance serves as a factor in the etiology of maladaptive behavior and may be related to various forms of psychopathology. Experiential avoidance has also been associated with psychopathology in adolescents. A study by Venta, Sharp, and Hart (2012) examined experiential avoidance in a sample of inpatient adolescents and found that there was a significant positive relationship between experiential avoidance and anxiety disorders. Similarly, experiential avoidance has been found to be associated with emotional and behavioral difficulties in youth (Greco, Lambert, & Baer, 2008). Another study found that youth who exhibited lower levels of experiential avoidance and greater levels of emotional awareness and acceptance had greater prosocial tendencies and well-being (Ciarrochi, Kashdan, Leeson, Heaven, & Jordan, 2011). These findings imply that experiential avoidance can lead to psychological distress as a result of an unwillingness

to experience internally distressing situations and attempts to control and avoid them. In fact, the avoidance of negatively evaluated private psychological and emotional experiences and chronic attempts to avoid them are proposed to be a stronger contributor to psychopathology than the content of such experiences (Forsyth, Eifert, & Barrios, in press).

Moreover, experiential avoidance affects an individual's coping behavior. A 2011 study by Karekla and Panayiotou examined associations between coping and experiential avoidance. It was found that individuals high in experiential avoidance were more likely to engage in self-destruction, denial, behavioral disengagement, venting, and self-blame. Individuals low in experiential avoidance were more likely to engage in positive reframing and acceptance. A study examining experiential avoidance as a possible mediator of coping and psychopathology in chronic pain sufferers found that experiential avoidance partially or fully mediated the effects of rational coping and avoidant coping on stress and depression (Costa & Pinto-Gouveia, 2011). Similarly, Fledderus, Bohlmeijer, and Pieterse (2010) found that individuals high in experiential avoidance tended to become easily overwhelmed by their problems, were more likely to escape into a fantasy world, worry more frequently, and feel incompetent. As a result, these individuals had increased levels of depression and anxiety, suggesting that the relationship between passive coping and depression and anxiety is mediated by experiential avoidance.

There is also evidence that experiential avoidance interferes with an individual's ability to seek social support, though this has not been evaluated in the context of social media. Individuals high in experiential avoidance may behave in cold and impersonal

ways to hide anxiety and avoid social interactions in an attempt to control distressing internal states (Gerhart, Baker, Hoerger, & Ronan, 2014). Another study found that individuals seeking to control feelings of vulnerability may engage in experiential avoidance by behaving aggressively and harboring vindictive attitudes (Gardner & Moore, 2008). To further explain the impact of experiential avoidance on social relationships, it has been hypothesized that experiential avoidance may explain negative perceptions and expectations of interpersonal relationships that contribute to interpersonal problems (Grosse Holtforth, Bents, Mauler, & Grawe, 2006). It is not surprising that such behaviors and attitudes would not be conducive to social support seeking. While studies have examined experiential avoidance in the relationship between coping and psychopathology, no studies have examined experiential avoidance and social media use in any age group. Thus, the second aim of the present study was to determine whether the relationship between frequency of social media use and psychopathology would be moderated by level of experiential avoidance.

Current Study

The broad aim of the current study was to examine the extent to which social media would serve a coping function for adolescents and thereby was associated with reduced psychopathology. The current study examined the aforementioned hypotheses in a sample of 334 adolescents between the ages of 17-19 years who are currently enrolled at Sam Houston State University (SHSU) in Huntsville, Texas. The current study had two specific aims; we sought to answer the following questions. Aim 1: Is the relation between frequency of social media use and psychopathology moderated by self-reported use of social media for coping? It was hypothesized that the relation between social

media use and psychopathology would be moderated by self-reported use of social media as a coping mechanism, such that there would be reduced symptoms of psychopathology among students who use social media more frequently as a form of coping. Aim 2: Is the relation between frequency of social media use and psychopathology moderated by experiential avoidance? It was hypothesized that the relation between social media use and psychopathology would be moderated by experiential avoidance, such that when experiential avoidance was low, there would be a negative correlation between social media use and symptoms of psychopathology. Conversely, when experiential avoidance was high, no such relation between social media use and psychopathology would be noted.

CHAPTER II

Method

Participants

Three hundred thirty-four students enrolled at Sam Houston State University in Huntsville, Texas participated in the current study. Participant ages ranged from 17 to 19 years, and the average age of the participants was 18.4 years ($SD = .50$). Of participants who reported their gender identity, 40 were males (12%), 291 were females (87.1%), and 1 was transgender (0.3%). The sample consisted of 194 White (58.1%), 74 Black (22.2%), 6 Asian (1.8%), 20 Hispanic (6%), and 31 mixed race (9.3%) individuals. Participants were recruited through Sam Houston State University's online Psychology Research Participation System (PeRP). Age was the only exclusionary criteria. Participants received one research participation credit for their participation in the study.

Procedure

Participants viewed the current study on their online PeRP account among the list of available studies. Upon selecting the study link, participants were directed to SurveyMonkey and presented with an electronic consent form where they were asked to read and agree to the information contained therein. They were asked to devote 30-45 minutes of their time in order to complete the survey. Participants were then asked to select whether they agreed to participate. Upon selecting to participate, they were directed to the survey questions. The research team was automatically notified via email of survey completions by SurveyMonkey. Survey responses were collected anonymously and stored in an anonymous electronic dataset.

CHAPTER III

Measures

Demographics

A demographic questionnaire was administered to gather information on participant background. Participants were asked to provide their age, grade, race, country of origin, height and weight, GPA, and grades obtained in school. In addition, participants provided information on their sexual orientation, current relationship status, parents' relationship status, and self-reported popularity with peers. This questionnaire was used to determine potential confounds (e.g., gender) that were controlled for in subsequent analyses.

Social Media Use

The Media and Technology Usage and Attitudes Scale (MTUAS) is a 60-item measure designed to assess a range of media and technology involvement (Rosen, Whaling, Carrier, Cheever, & Rokkum, 2013). This measure contains 15 subscales with 11 subscales representing technology usage and 4 subscales representing attitudes toward technology usage. The MTUAS can be used with or without the 4 attitude subscales. The 11 technology usage subscales represent Internet searching, smartphone use, e-mailing, media sharing, text messaging, video gaming, online friendships, Facebook friendships, phone calling, watching television, and general social media usage. The current study utilized items from the general social media usage subscale ($\alpha = .97$) of this measure. This subscale consists of 9 items (items 32-40) and asks, "How often do you do each of the following activities on social networking sites such as Facebook?" for each item. Sample items include: "Check your Facebook page or other social networks," "Post status

updates," "Post photos," "Comment on postings, status updates, photos, etc." Responses for items of this subscale are based on a 10-point frequency scale (Never (1), Once a month (2), Several times a month (3), Once a week (4), Several times a week (5), Once a day (6), Several times a day (7), Once an hour (8), Several times an hour (9), All the time (10)). To address frequency of social media site use in Aims 1 and 2 of the current study, the general social media usage subscale of this measure was used.

Social Media Coping

The Motivations for Electronic Interaction Scale (MEIS) is a 22-item scale that assesses attitudes and behaviors regarding the use of social media sites (Nesi & Prinstein, 2015). In particular, this measure assesses attitudes toward using Facebook, Instagram, Twitter, Snapchat, Yeti, Yik Yak, Tumbler, Whisper, After School, and Rumr. This measure has a 1-5 rating scale (1= Not at all true, 2= A little bit true, 3= Somewhat true, 4= Very true, 5= Extremely true) that respondents use to rate the extent to which each item pertains to their attitude or behavior. This measure was developed through factor analysis. The current study utilized items from this scale assessing coping behaviors in regards to social media use. To investigate Aim 1, the current study totaled all emotional coping items from the MEIS ($\alpha = .79$). These 4 items include: "I use social media to try to get support when I am sad or upset," "I use social media to feel less lonely," "I use social media to let someone know I'm mad at them," and "I use social media to try to feel better when I'm sad/upset."

Experiential Avoidance

The Avoidance and Fusion Questionnaire for Youth (AFQ-Y) is a 17-item measure designed to assess psychological inflexibility caused by elevated levels of

cognitive fusion and experiential avoidance (Greco, Lambert, & Baer, 2008).

Respondents rate their level of inflexibility on a 0-4 scale (0=Not at all true, 1= A little true, 2=Pretty true, 3= True, 4= Very true) for each item. The psychometric properties of this measure were evaluated using confirmatory factor analysis, classical test theory, and Rasch modeling. Scores on the AFQ correlated significantly in the expected directions with measures of symptoms and functioning, supporting the construct validity of this measure. Greco, Lambert, and Baer (2008) demonstrated good internal consistency reliability of the AFQ-Y. Other studies have also demonstrated good internal consistency and both convergent and discriminant validity (Howe-Martin, Biglan, Murrell, & Hankins, in preparation; Fergus et al., 2012). To investigate Aim 2, the current study used this measure to assess each participant's level of experiential avoidance, reflected in the AFQ-Y total score ($\alpha = .90$).

Psychopathology

The Strengths and Difficulties Questionnaire (SDQ) is a 24-item measure designed to assess positive and negative attributes (Goodman, 2001). This measure consists of 5 scales representing emotional symptoms, conduct problems, hyperactivity/inattention, peer relationship problems, and prosocial behavior. The SDQ has demonstrated good internal consistency ($\alpha = .73$; Goodman, 2001). The current study is particularly interested in examining the emotional symptoms and conduct problems subscales to assess each participant's general level of internalizing and externalizing psychopathology. It is important to note that the SDQ is a screening questionnaire, and thus, is appropriate for assessing symptoms of psychopathology in a generally healthy,

non-clinical sample of adolescents. The current study included both the emotional symptoms ($\alpha = .66$) and conduct problems ($\alpha = .60$) scales as outcome variables.

CHAPTER IV

Analytic Strategy

Before data analysis, survey results were downloaded from SurveyMonkey, entered into SPSS for analysis, and cleaned. Preliminary analyses involved running frequencies and correlations between demographic variables, social media use, social media use as coping, and psychopathology (i.e., internalizing symptoms and externalizing symptoms). This determined potential confounds (e.g., gender) that were controlled for in subsequent analyses. Next, two separate moderation models were used to examine both social media coping and experiential avoidance as moderators of social media use frequency and symptoms of psychopathology. Aim 1 analysis used a general linear model to examine social media coping as a moderator of social media use frequency and psychopathology. The independent variable was frequency of social media use, the moderator variable was social media as coping, and the dependent variable was symptoms of psychopathology (first internalizing symptoms and, in a separate model, externalizing symptoms). Moderation was indicated if there was a significant interaction between social media use frequency and social media coping. Covariates were any demographic variables identified in preliminary analyses. Aim 2 analysis used a general linear model to examine experiential avoidance as a moderator of social media use frequency and psychopathology. The independent variable was frequency of social media use, the moderator variable was experiential avoidance, and the dependent variable was symptoms of psychopathology (first internalizing symptoms and, in a separate model, externalizing symptoms). Moderation was indicated if there was a significant interaction

between social media use frequency and experiential avoidance. Covariates were any factors identified in preliminary analyses.

CHAPTER V

Results

It should be noted that the present study is a subset of a larger, ongoing study that includes a larger number of participants assessed with different measures. Of the survey respondents, 334 of them were within the ages of 17-19, which was the only inclusionary criterion for this study. Of those respondents, none of them had missing data across all measures. Thirteen respondents (3.9%) were missing data regarding general social media use frequency. Four respondents (1.2%) were missing data regarding social media coping, 17 respondents (5.1%) were missing data regarding externalizing symptoms, 24 respondents (7.2%) were missing data regarding internalizing symptoms, and 24 respondents (7.2%) were missing data regarding experiential avoidance. Therefore, sample sizes varied by analyses such that moderation by experiential avoidance with regard to internalizing symptoms was tested in $n = 275$ and with regard to externalizing symptoms was tested in $n = 280$. Likewise, moderation by social media coping with regard to internalizing symptoms was tested in $n = 275$ and with regard to externalizing symptoms was tested in $n = 295$.

Preliminary Analyses

Independent samples t-tests were conducted to examine differences between gender and measures of social media use, experiential avoidance, social media coping, and psychopathology, see *Table 1* for means.

Table 1

Descriptive Statistics for Main Study Variables by Gender

	<u>Male</u>			<u>Female</u>					
	n	M	SD	n	M	SD	t	p	95% CI
MTUAS General	33	5.83	1.79	286	6.59**	1.62	-2.50	.013	[-1.35, -.16]
AFQ-Y Total	37	37.73	13.01	270	39.24	12.54	-.69	.492	[-5.86, 2.83]
SDQ Con	36	7.39**	2.25	278	6.65	1.76	2.30	.022	[.11, 1.38]
SDQ Emo	34	8.71	2.60	273	9.24	2.37	-1.22	.223	[-1.39, .33]
MEIS Cope	39	7.15	3.74	288	7.26	3.28	-1.81	.856	[-1.22, 1.02]

Note. MTUAS General = Media and Technology Usage and Attitudes Scale General Social Media Use Subscale, AFQ-Y Total = Avoidance and Fusion Questionnaire for Youth Total Score, SDQ Con = Strengths and Difficulties Questionnaire Conduct Problems Subscale, SDQ Emo = Strengths and Difficulties Questionnaire Emotional Problems Subscale, MEIS Cope = Motivations for Electronic Interaction Scale Emotional Coping Items Total.

**= mean difference significant at level of .05, **= mean difference significant at level of .01*

Specifically, males reported higher externalizing symptoms than females; $t(312) = 2.30$, $p = .006$. Females reported more frequent use of social media than males; $t(317) = -2.50$, $p = .013$.

A one-way Analysis of Variance (ANOVA) was then conducted to examine relations between race and measures of social media use, experiential avoidance, and psychopathology. A significant difference among racial groups for social media use was noted, $F(4, 308) = 4.25$, $p = .002$. Post-hoc pairwise comparisons indicated that black participants ($M = 7.05$, $SD = 1.75$) reported more frequent social media use than white

participants ($M = 6.32$, $SD = 1.54$; Tukey Test $M_{diff} = .73$, $p = .012$). Additionally, there was a significant difference among racial groups for levels of experiential avoidance, $F(4, 296) = 4.32$, $p = .002$. Specifically, Asian participants ($M = 61.00$, $SD = 6.04$) reported higher levels of experiential avoidance than white ($M = 39.09$, $SD = 13.40$; Tukey Test $M_{diff} = 21.91$, $p = .001$), black ($M = 38.16$, $SD = 10.42$; Tukey Test $M_{diff} = 22.84$, $p = .001$), mixed race ($M = 40.81$, $SD = 12.57$; Tukey Test $M_{diff} = 20.19$, $p = .009$), and other race participants ($M = 36.26$, $SD = 14.07$; Tukey Test $M_{diff} = 24.74$, $p = .001$). There was also a significant difference among racial groups for social media coping, $F(4, 316) = 7.64$, $p < .001$, such that Asian participants ($M = 14.00$, $SD = 6.60$) reported higher scores of social media coping than black ($M = 6.76$, $SD = 3.00$; Tukey Test $M_{diff} = 7.23$, $p < .001$), white ($M = 7.37$, $SD = 3.22$; Tukey Test $M_{diff} = 6.63$, $p < .001$), mixed race ($M = 7.43$, $SD = 3.22$; Tukey Test $M_{diff} = 6.57$, $p < .001$), and other race ($M = 6.25$, $SD = 2.07$; Tukey Test $M_{diff} = 7.75$, $p < .001$) participants. Finally, there was a significant difference among racial groups for internalizing symptoms, $F(4, 296) = 4.27$, $p = .002$, such that white participants ($M = 9.55$, $SD = 2.41$) reported higher levels than black participants ($M = 8.43$, $SD = 2.24$; Tukey Test $M_{diff} = 1.12$, $p = .009$). There was no difference of levels of externalizing symptoms among racial groups, $F(4, 303) = 1.94$, $p = .104$.

Finally, bivariate correlations between age and variables of interest were conducted. In the current sample of 17-19 year olds, age was significantly positively correlated with general social media use, social media coping, experiential avoidance, and internalizing symptoms. See *Table 2* for results.

Table 2

Bivariate Correlations Between Main Study Variables

	MTUAS	MEIS Cope	AFQ-Y	SDQ Con	SDQ Emo
MTUAS	-	-	-	-	-
MEIS Cope	.285**	-	-	-	-
AFQ-Y	.110	.384**	-	-	-
SDQ Con	.142*	.156**	.167**	-	-
SDQ EMO	.062	.342**	.568**	.308**	-
Age	.041	.026	.021	.053	.011

Note. MTUAS = General Media and Technology Usage and Attitudes Scale General Social Media Use Subscale, MEIS Cope = Motivations for Electronic Interaction Scale Emotional Coping Items Total, AFQ-Y = Avoidance and Fusion Questionnaire for Youth, SDQ Con = Strengths and Difficulties Questionnaire Conduct Problems Subscale, SDQ Emo = Strengths and Difficulties Questionnaire Emotional Problems Subscale.

**= correlation significant at level of .05, **= correlation significant at level of .01*

Moderation Analyses

Using Process SPSS Model 1 computational tool (Hayes, 2013), four moderation models were used to examine the relation between social media usage and internalizing and externalizing symptoms. Gender, race, and age were entered as covariates in all models. Across all models, we examined: main effect of social media usage, main effect of the moderator (coping or experiential avoidance), and the hypothesized interaction effect.

In the first model, internalizing symptoms was the dependent variable and social media coping was examined as a moderator. No evidence of a main effect of social media usage ($b = -.050$, $SE = .18$, $p = .78$), main effect of coping ($b = .278$, $SE = .17$, $p = .11$), or interaction effect ($b = -.004$, $SE = .02$, $p = .86$) was noted on internalizing symptoms.

In the second model, externalizing symptoms was the dependent variable and coping was examined as a moderator. No evidence of a main effect of social media usage ($b = .159$, $SE = .13$, $p = .25$), main effect of coping ($b = .091$, $SE = .13$, $p = .50$), or interaction effect ($b = -.004$, $SE = .01$, $p = .82$) was noted on externalizing symptoms.

In the third model, internalizing symptoms was the dependent variable and experiential avoidance was examined as a moderator. No evidence of a main effect of social media usage ($b = .346$, $SE = .23$, $p = .14$) was noted on internalizing symptoms. However, there was a main effect of experiential avoidance ($b = .179$, $SE = .03$, $p < .001$). No interaction effect ($b = -.009$, $SE = .005$, $p = .07$) was noted on internalizing symptoms.

In the fourth model, externalizing symptoms was the dependent variable and experiential avoidance was examined as a moderator. No evidence of a main effect of social media usage ($b = .355$, $SE = .20$, $p = .08$), main effect of coping ($b = .051$, $SE = .03$, $p = .12$), or interaction effect ($b = -.004$, $SE = .004$, $p = .30$) was noted on externalizing symptoms.

CHAPTER VI

Discussion

The primary purpose of the current study was to evaluate the relation between social media use and adolescent mental health in terms of both internalizing and externalizing symptoms. Additionally, the current study sought to examine the moderating roles of social media coping and experiential avoidance in such relation. These relations were evaluated using survey data from SHSU students between the ages of 17-19 years old.

Preliminary analyses yielded several notable findings worth discussing. First, general social media use was significantly positively correlated with externalizing symptoms, which is consistent with previous literature regarding negative effects of social media use in terms of increased risk of exposure to cyberbullying and online sexual activity (Loveless, 2016; Aboujaoude, Savage, Starcevic, & Salame, 2015). General social media use frequency was also significantly positively correlated with social media use coping, suggesting that individuals who report higher social media use frequency are more likely to report higher use of such social media for coping purposes than individuals who use social media less frequently. However, social media coping was significantly positively correlated with both internalizing and externalizing symptoms, which is opposite of the expected direction; a possible explanation of this finding could be that individuals who use social media to cope may have greater symptoms than those who do not report using social media for coping purposes, thus their distress is greater and perhaps makes them more likely to engage in forms of coping in addition to real-life coping mechanisms. This possibility cannot be explored with the concurrent data

collected in this study. Finally, experiential avoidance was significantly positively correlated with both internalizing and externalizing symptoms, which is consistent with previous literature in that experiential avoidance has been found to be associated with both emotional and behavioral difficulties in adolescence (Venta, Sharp, & Hart, 2012; Greco, Lamber, & Baer, 2008).

The broad aim of the current study was to examine the extent to which social media would serve a coping function for adolescents and thereby was associated with reduced psychopathology. Overall, social media use did not appear to serve a coping function and was thus not associated with reduced psychopathology in the present sample. Specific hypotheses are discussed below.

The first aim of the current study was to determine whether the relation between frequency of social media use and psychopathology would be moderated by self-reported use of social media for coping. It was hypothesized that the relation between social media use and psychopathology would be moderated by self-reported use of social media as a coping mechanism, such that there would be reduced symptoms of psychopathology among students who use social media more frequently as a form of coping. This hypothesis was explored using a total score of emotional coping items from the MEIS as the moderator variable between frequency of social media use, assessed with the MTUAS, and both internalizing and externalizing symptoms, assessed with the SDQ. Results indicate that self-reported use of social media for coping purposes did not appear to moderate social media use frequency and symptoms of psychopathology. Thus, regardless of whether participants in the current sample reported using social media as a coping mechanism, this did not relate to psychological symptoms.

The second aim of the current study was to determine whether the relationship between frequency of social media use and psychopathology would be moderated by level of experiential avoidance. It was hypothesized that the relation between social media use and psychopathology would be moderated by experiential avoidance, such that when experiential avoidance was low, there would be a negative correlation between social media use and symptoms of psychopathology. Conversely, when experiential avoidance was high, no such relation between social media use and psychopathology would be noted. This hypothesis was investigated using a total score from the AFQ-Y as the moderator variable between frequency of social media use, assessed with the MTUAS, and both internalizing and externalizing symptoms, assessed with the SDQ. Results found no support for the hypothesized moderation such that participants who reported lower levels of experiential avoidance did not experience symptom reduction, regardless of their social media use frequency. Likewise, when participants reported higher levels of experiential avoidance, there was no effect on the relation between social media use frequency and psychopathology.

Because few studies have examined social media as a form of coping, it is difficult to compare findings from the current study to those existing in the literature given that the current study is the first direct examination of social media coping to our knowledge. Regardless, several studies have demonstrated social media use serving a social support function in times of crisis (Sutton, Palen, & Shklovski, 2008; Gaspar et al., 2014; Naslund, Grande, Aschbrenner, & Elwyn, 2014). It is possible that social media coping is primarily used, and perhaps most effective, in social situations where stressors or symptoms of psychopathology are shared with others. Thus, social media coping may

be less frequently used by individuals who are dealing with stressors or symptoms that only affect themselves. Also, because current literature is mixed in terms of whether social media use has overall positive or negative effects on adolescent mental health, it is likely that social media use serves *both* adaptive and maladaptive functions for adolescents (Best, Manktelow, & Taylor, 2014); therefore, adolescents who use social media to cope may negate the positive effects of such behavior by engaging in co-occurring maladaptive behaviors online, reducing positive effects on symptoms or making them more difficult to statistically detect. Analysis of the relation between social media use and social media coping should therefore be explored in more depth, analyzing the role of moderating variables in that relation.

The lack of significant findings in the current study may be due to several factors. First, participant ages ranged only from 17-19 years old; in order to capture a true picture of social media effects on mental health among adolescents, a wider age range is likely needed. A broader participant age range would be more likely to detect age cohort effects and better represent the overall demographic of the most frequent social media users. It would also take more developmental characteristics into account throughout this critical period of psychosocial development and reorientation. Second, while the current sample consisted of older adolescents, these participants were enrolled in college. Thus, university culture and extraneous social influences may affect their results in a different manner than younger adolescents who are still high school students; the fact that participants in the present study are enrolled in college suggests they may be more likely to live with their friends and may use social media coping less often than real-life social coping as compared to younger samples in previous research. Additionally, the current

sample consisted mostly of females, so results may be different for male participants. Finally, self-reported use of social media for coping purposes was assessed totaling only 4 items from the MEIS. While the measure indeed has items that appear to relate to coping, it does not contain a psychometrically validated coping subscale and thus may not be a valid measure of the construct of social media coping.

Despite these limitations, the current study did have strengths worth noting. First, the sample size was large enough to provide ample statistical power, which is one of several benefits of conducting online survey research. Additionally, online survey research provides a high level of anonymity required for honest responding about social media behaviors and endorsement of psychopathology symptoms. Finally, SHSU has an ethnically diverse student body in relation to other universities of similar size, which was reflected in demographics of participants in the current study.

Future research should examine the use of social media as a coping mechanism in a sample of high school aged participants to address aforementioned developmental characteristics of younger adolescents. Additionally, cohort effects of social media use frequency and psychopathology should be examined among both high school and college age individuals so that age comparisons can be made; this is also likely to provide further insight into the effectiveness of social media use coping. Future studies should also assess social media coping more thoroughly and directly using a designated social media coping measure. Future research into this area is increasingly important given the growing number of social media sites and their increasing use among individuals, particularly adolescents. Given that adolescence is a period of psychosocial development and social reorientation when psychopathology starts to emerge, the effects of social media use are

of great concern to parents, educators, and mental health providers. Therefore, should future support for social media coping be found, interventions targeting symptoms of psychopathology among adolescents may increase their efficacy through incorporation of such technology. Findings from the current study provide the first attempt at directly examining social media coping and adolescent mental health.

REFERENCES

- Aboujaoude, E., Savage, M. W., Starcevic, V., & Salame, W. O. (2015). Cyberbullying: Review of an old problem gone viral. *Journal of Adolescent Health, 57*(1), 10-18. doi: 10.1016/j.jadohealth.2015.04.011
- Best, P., Manktelow, R., & Taylor, B. (2014). Online communication, social media and adolescent wellbeing: A systematic narrative review. *Child Youth Services Review, 41*, 27–36.
- Center for Behavioral Health Statistics and Quality. (2015). *Behavioral health trends in the United States: Results from the 2014 National Survey on Drug Use and Health* (HHS Publication No. SMA 15-4927, NSDUH Series H-50). Retrieved from <http://www.samhsa.gov/data/sites/default/files/NSDUH-FRR1-2014/NSDUH-FRR1-2014.pdf>
- Chawla, N., & Ostafin, B. (2007). Experiential avoidance as a functional dimensional approach to psychopathology: An empirical review. *Journal of Clinical Psychology, 63*, 871–890. doi:10.1002/jclp.20400
- Ciarrochi, J., Kashdan, T. B., Leeson, P., Heaven, P., & Jordan, C. (2011). On being aware and accepting: A one-year longitudinal study into adolescent well-being. *Journal of Adolescence, 34*, 695-703. doi:10.1016/j.adolescence.2010.09.003
- Costa, J., & Pinto-Gouveia, J. (2011). The mediation effect of experiential avoidance between coping and psychopathology in chronic pain. *Clinical Psychology & Psychotherapy, 18*(1), 34-47. doi:10.1002/cpp.699

- Fledderus, M., Bohlmeijer, E. T., & Pieterse, M. E. (2010). Does experiential avoidance mediate the effects of maladaptive coping styles on psychopathology and mental health? *Behavior Modification*, 34(6), 503-519. doi:10.1177/0145445510378379
- Folkman, S., & Lazarus, R. S. (1980). An analysis of coping in a middle-aged community sample. *Journal of Health and Social Behavior*, 21, 219-239.
- Forsyth, J. P., Eifert, G. H., & Barrios, V. (in press). Fear conditioning in an emotion regulation context: An individual difference perspective. In M. G. Craske, D. Hermans, & D. Vansteenwegen (Eds.), *Fear and learning: Basic science to clinical application*. Washington, DC: American Psychological Association.
- Gardner, F. L., Moore, Z. E. (2008). Understanding clinical anger and violence: The anger avoidance model. *Behavioral Modification*, 32(6), 897-912.
doi:10.1177/0145445508319282
- Gaspar, R., Gorjao, S., Seibt, B., Lima, L., Barnett, J., Moss, A., & Wills, J. (2014). Tweeting during food crises: A psychosocial analysis of threat coping expressions in Spain during the 2011 European EHEC outbreak. *International Journal of Human-Computer Studies*, 72, 239-254.
- Gerhart, J. I., Baker, C. N., Hoerger, M., & Ronan, G. F. (2014). Experiential avoidance and interpersonal problems: A moderated mediation model. *Journal of Contextual Behavioral Science*, 3, 291-298.
- Goodman, R. (2011). Psychometric properties of the strengths and difficulties questionnaire. *Journal of American Academic Child Adolescent Psychiatry*, 40(11), 1337-1345.

- Greco, L. A., Lambert, W., & Baer, R. A. (2008). Psychological inflexibility in childhood and adolescence: Development and evaluation of the avoidance and fusion questionnaire for youth. *Psychological Assessment, 20*(2), 93-102.
doi:10.1037/1040-3590.20.2.93
- Grosse Holtforth, M. G., Bents, H., Mauler, B., & Grawe, K. (2006). Interpersonal distress as a mediator between avoidance goals and goal satisfaction in psychotherapy inpatients. *Clinical Psychology & Psychotherapy, 13*(3), 172–182.
- Hayes, S. C., Jacobson, N.S., Follette, V. M., & Dougher, M. J. (1994). Acceptance and change: Content and context in psychotherapy. *Context Press, 13–32*.
- Hayes, S. C., Strosahl, K., Wilson, K. G., Bissett, R. T., Pistorello, J., & Toarmino, D. (2004). Measuring experiential avoidance: A preliminary test of a working model. *The Psychological Record, 54*, 553–578.
- Howe-Martin, L., Biglan, T., Murrell, A., & Hankins, M. (in preparation). Experiential avoidance in adolescence: Internalizing problems, externalizing problems, and substance abuse.
- Karekla, M., & Panayiotou, G. (2011). Coping and experiential avoidance: Unique or overlapping constructs? *Journal of Behavior Therapy and Experimental Psychiatry, 42*(2), 163-170. doi:10.1016/j.jbtep.2010.10.002
- Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Life-time prevalence and age-of-onset distribution of DSM-IV disorders in the national comorbidity survey replication. *Archives of General Psychiatry, 62*, 593-602.

- Kraut, R., Kiesler, S., Boneva, B., Cummings, J., Helgeson, V., & Crawford, A. (2002). Internet paradox revisited. *Journal of Social Issues*, 58, 49–74.
- Lazarus, R. (1993). Coping theory and research: Past, present, and future. *Psychosomatic Medicine*, 55, 234-247.
- Lenhart, A. (2015). Teens, social media & technology overview 2015. Retrieved April 4, 2016 from the Pew Research Center website:
pewinternet.org/files/2015/04/PI_TeensandTech_Update2015_040915.pdf
- Lloyd, B. T. (2002). A conceptual framework for examining adolescent identity, media influence, and social development. *Review of General Psychology*, 6(1), 73-91.
 doi:10.1037/1089-2680.6.1.73
- Loveless, M. (2016). Concerns regarding social media and health issues in adolescents and young adults. *Obstetrics and Gynecology*, 127(2), 62-65.
 doi: 10.1097/AOG.0000000000001313
- Naslund, J. A., Grande, S. W., Aschbrenner, K. A., & Elwyn, G. (2014). Naturally occurring peer support through social media: The experiences of individuals with severe mental illness using YouTube. *PLoS One*, 9(10), e110171.
 doi: <http://dx.doi.org/10.1371/journal.pone.0110171>
- Nelson, E. E., Leibenluft, E., McClure, E. B., & Pine, D. S. (2005). The social re-orientation of adolescence: A neuroscience perspective on the process and its relation to psychopathology. *Psychological Medicine*, 35, 163–174

- Nesi, J., & Prinstein, M. J. (2015). Using social media for social comparison and feedback-seeking: Gender and popularity moderate associations with depressive symptoms. *Journal of Abnormal Child Psychology*, 43(8), 1427-1438.
doi:10.1007/s10802-015-0020-0
- Nitzan, U., Shoshan, E., Lev-Ran, S., & Fennig, S. (2011). Internet-related psychosis-a sign of the times. *The Israel Journal of Psychiatry and Related Sciences*, 48(3), 207-211.
- O'Brien, S. F., & Bierman, K. L. (1988). Conception and perceived influence of peer groups- interviews with preadolescents and adolescents. *Child Development*, 59, 1360–1365.
- O'Keeffe, G. S., & Clarke-Pearson, K. (2011). The impact of social media on children, adolescents, and families. *Pediatrics*, 127(4), 800–804.
- Rapee, R. M., & Spence, S. H. (2004). The etiology of social phobia: Empirical evidence and an initial model. *Social Phobia and Social Anxiety*, 24(7), 737-767.
- Rideout, V. J. Foehr, U. G., & Roberts, D. F. (2010). *Generation M²: Media in the lives of 8–18 year olds*. Menlo Park, CA: A Kaiser Family Foundation Study.
Retrieved April 3, 2016 from the Kaiser Family Foundation website:
<https://kaiserfamilyfoundation.files.wordpress.com/2013/01/8010.pdf>
- Rosen, L. D., Whaling, K., Carrier, L. M., Cheever, N. A., & Rökkum, J. (2013). The media and technology usage and attitudes scale: An empirical investigation. *Computers in Human Behavior*, 29, 2501-2511. doi:10.1016/j.chb.2013.06.006

- Rushton, J. L., Forcier, M., & Schectman, R. M. (2002). Epidemiology of depressive symptoms in the national longitudinal study of adolescent health. *Journal of the American Academy of Child and Adolescent Psychiatry*, 4, 199-205.
- Schouten, A.P., Valkenburg, P.M., & Peter, J. (2007). Precursors and underlying processes of adolescents' online self-disclosure: Developing and testing an internet-attribute-perception model. *Media Psychology*, 10, 292-314
- Skowrya, K. R., & Cocozza, J. J. (2006). Blueprint for change: A comprehensive model for the identification and treatment of youth with mental health needs in contact with the juvenile justice system. Delmar, NY: The National Center for Mental Health and Juvenile Justice and Policy Research Associates, Inc.
- Steinberg, L. (2005). Cognitive and affective development in adolescence. *Trends in Cognitive Sciences*, 9(2), 69-74. doi:10.1016/j.tics.2004.12.005
- Steinberg, L. (1987). Impact of puberty of family relations: Effects of pubertal timing. *Developmental Psychology*, 23, 451-460.
- Steinberg, L., Dahl, R., Keating, D., Kupfer, D. J., Masten, A. S., & Pine, D. S. (2006). Psychopathology in adolescence: Integrating affective neuroscience with the study of context: Developmental neuroscience. In D. Cicchetti, & D. Cohen (Eds.), *Developmental psychopathology: Developmental neuroscience*. (2nd Edition ed., Vol. 2, pp. 710-741). New York, NY: Wiley.
- Suls, J. & Fletcher, B. (1985). The relative efficacy of avoidant and nonavoidant coping strategies: A meta-analysis. *Health Psychology*, 4: 249-288.

- Sutton, J., Palen, L. & Shklovski, I. (2008). Back-channels on the front lines: Emergent use of social media in the 2007 southern California fires. *Proc. Of the 2008 ISCRAM Conference, Washington, DC.*
- Taylor, S. (1998). MacArthur SES & Health Network | Research. Retrieved December 1, 2015, from <http://www.macses.ucsf.edu/research/psychosocial/coping.php>
- Turow, J. (1999). The Internet and the family: The view from the family, the view from the press [On-line, retrieved June 6, 2016]. The Annenberg Public Policy Center of the University of Pennsylvania. Available: <http://www.appcpenn.org/internet/family/rep27.pdf>
- Valkenburg, P.M., & Peter, J. (in press). The effects of instant messaging on the quality of adolescents' existing friendships: A longitudinal study. *Journal of Communication.*
- Valkenburg, P. M., & Peter, J. (2009). Social consequences of the internet for adolescents: A decade of research. *Current Directions in Psychological Science*, 18(1), 1–5. doi: 0.1111/j.1467-8721.2009.01595.x
- Valkenburg, P. M., & Peter, J. (2008). Adolescents' identity experiments on the internet: Consequences for social competence and self-concept unity. *Communication Research*, 35(2), 208–231. doi: 10.1177/0093650207313164
- Valkenburg, P. M., Peter, J., & Schouten, A. P. (2006). Friend networking sites and their relationship to adolescents' well-being and social self-esteem. *CyberPsychology & Behavior*, 9(5), 584–590. doi:10.1089/cpb.2006.9.584

Venta, A., Sharp, C., & Hart, J. (2012). The relation between anxiety disorder and experiential avoidance in inpatient adolescents. *Psychological Assessment*, 24(1), 240-248. doi:10.1037/a0025362

VITA

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CURRENT POSITION

PhD Student, Clinical Psychology

August 2015 - Present

Sam Houston State University
Huntsville, Texas

EDUCATION

Master of Arts, Clinical Psychology

May 2017

Thesis: Harmon, Jennifer. (Defended December 2016). *Adolescent social media use: Coping or avoidance?* Sam Houston State University, Huntsville, Texas. Chair: Amanda Venta, PhD

Bachelor of Science, Psychology

December 2013

University of Colorado Denver
Denver, Colorado

CONFERENCE PRESENTATIONS

Harmon, J., Abate, A., & Venta, A. (2017). *Adolescent PTSD and re-offending: Examining the roles of self-identity and exposure to violence*. Paper to be presented at the annual convention of the American Psychology-Law Society, Seattle, Washington.

Abate, A., **Harmon, J.**, Marshall, K., Hart, J., Ball, E., Henderson, C., Desforjes, D., & Venta, A. (2017). *Perceptions of the legal system and recidivism: Investigating the mediating role of perceptions of chances for success in juvenile offenders*. Paper to be presented at the annual convention of the American Psychology-Law Society, Seattle, Washington.

Hoskowitz, N., Schmidt, A., Marshall, K., **Harmon, J.**, & Henderson, C. (2016, March). *Psychotropic medication does not decrease delinquent behaviors in at-risk youth over a five-year period*. Paper presented at the annual meeting of the American Psychology-Law

Society, Atlanta, Georgia.

Harmon, J., Scott, S., Rhoades, G. (2014, November). *Depressive symptoms and sexual minority stress in female same-sex couples*. Poster presented at the annual meeting of the Association for Behavioral and Cognitive Therapies, Philadelphia, Pennsylvania.

PROFESSIONAL MEMBERSHIPS

Graduate Student Psychology Organization	2015 - Present
American Psychology-Law Society	2015 - Present
Association for Behavioral and Cognitive Therapies	2014 - Present

RESEARCH

NIJ Funded Interviewer **August 2016 - Present**

The Lonestar Project: A study of Offender Trajectories, Association, and Re-Entry

National Institute of Justice

Sam Houston State University

- interview gang and non-gang affiliated inmates before release

Project Leader **May 2016 - Present**

The Psychological Effects of Social Media Use in Teens

Youth and Family Studies Lab

Lab Director: Amanda Venta, PhD

Sam Houston State University

- oversee recruitment, data collection, data analyses

Graduate Research Assistant **August 2015 - May 2016**

Resilience and Social Cognition Lab

Lab Director: Adam Schmidt, PhD

The Hogg Foundation for Mental Health

Sam Houston State University

- interviewed justice-involved youth of incarcerated parents

Research Project Coordinator **February 2014 - May 2015**

Genes, Environment, and Mood Lab

Lab Director: Benjamin Hankin, PhD

University of Denver

Supervised Executive Function, Effortful Control, and Psychopathology study

Blind evaluator for Personalized Depression Prevention study using Kiddie Schedule for

Affective Disorders and Schizophrenia
 Administered WASI-II and executive functioning computer tasks
 Supervised pilot fMRI study
 Managed all lab personnel
 Submitted IRB amendments and managed grant funds
 Coded episodic and chronic stress interviews

Research Assistant

December 2013 - February 2014

Genes, Environment, and Mood Lab

Lab Director: Benjamin Hankin, PhD

University of Denver

- Managed undergraduate research assistants
- Data management
- Administrative duties

Research Assistant

May 2013 - May 2015

Marital and Family Studies Lab

Lab Director: Howard Markman, PhD

University of Denver

- Recruited participants from LGBT community
- Facilitated videotaped relationship discussions
- Coded couple discussion videos using Interactional Dimensions Coding System

TEACHING

Instructor

January 2017 - Present

Course: *Introduction to Psychology*

Mean Student Rating: TBD

Supervisor: Christopher Wilson, Ph.D.

Sam Houston State University

Instructor

August 2016 - December 2016

Course: *Introduction to Psychology*

Mean Student Rating: 4.6/5.0

Supervisor: Christopher Wilson, Ph.D.

Sam Houston State University

CLINICAL

Assistant Forensic Evaluator

October 2016 - Present

Psychological Services Center

Supervisor: Darryl Johnson, PhD, Wendy Elliott, PhD, Mary Alice Conroy, PhD

Sam Houston State University

- conduct competency and sanity evaluations for the court

Student Clinician

August 2016 - Present

Psychological Services Center

Supervisor: Darryl Johnson, PhD, Wendy Elliott, PhD, Mary Alice Conroy, PhD

Sam Houston State University

- provide therapy to clients under supervision of licensed psychologist

SERVICE

Graduate Mentor

August 2016 - Present

Sam Houston State University

- Mentor incoming doctoral student

Supervisor/Undergraduate Mentor

October 2015 - September 2016

Neuropsychology, Neuroscience, and Behavioral Genetics in the Criminal Justice

System: A Quantitative Case Law Review

Principal Investigator: Adam Schmidt, PhD

Sam Houston State University

- Supervised undergraduate research assistants

Ambassador

January 2012 - July 2015

The Phoenix Center at Auraria

Denver, CO

- Provided education on issues of interpersonal violence

- Provided resources for victims of interpersonal violence

Volunteer

March 2012 - July 2015

Alzheimer's Association

Denver, CO

- aided long term care residents at Walk to End Alzheimer's, fundraising

CONFERENCES ATTENDED

American Psychology-Law Society Seattle, WA	March 2017
Bridging the GAP: Developing Effective and Prevention and Early Identification Strategies of Borderline Personality Disorder in Adolescents Houston, TX	June 2016
American Psychology-Law Society Atlanta, GA	March 2016
Association for Behavioral and Cognitive Therapies Philadelphia, PA	November 2014
Developmental Psychobiology Research Conference Golden, CO	May 2014

HONORS

Psi Chi Honor Society Member	Fall 2012 - Present
Golden Key Honorary Society Member	Fall 2009 - Present
University of Colorado Denver Dean's List	Fall 2009 - Fall 2013
Clear Creek Valley Medical Society Scholarship Recipient	Fall 2009