Counseling & Wellness
A Professional Counseling Journal

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The Social Psychology of College Drinking Behavior and Implications for Counseling
Cody Bayles

Abstract
Alcohol abuse among college students comes with consequences that can be academic, social, emotional, sexual, and physical in nature (Smith & Berger, 2010). Despite the penalties, college students are prone to engage in risky alcohol consumption behaviors. Social cognitive theory, developed by Albert Bandura (1989) provides a framework for understanding drinking behaviors among college students. Triadic reciprocal determinism posits a reciprocal influence exists between a person’s environment, personal factors, and behaviors. Prior research helps to understand the reciprocal influence between these three areas as they relate to college students and Greek membership (Capone, Wood, Borsari, & Laird, 2007; Phua, 2011), student housing (Hummer, LaBrie, & Pedersen, 2012), social norms (Read, Wood, & Capone, 2005), alcohol expectancies (Wood, Read, Palfai, & Stevenson, 2001; Wardell & Read, 2012; Iwamoto, Corbin, Lejuez, & MacPherson, 2013), emotional intelligence (Ghee & Johnson, 2008; Claros & Sharma, 2012), self-efficacy (Kuther & Timoshin, 2003), and alcohol use. Implications for utilizing motivational and cognitive-behavioral interventions to reduce problematic alcohol use are considered.

Several studies have been conducted identifying problems for college students related to alcohol consumption. Murphy, Hoyme, Colby, and Borsari (2006) examined the impact of alcohol use on quality of life in college student problems using the Quality of Student Life Questionnaire (Keith & Schalock, 1994). The results suggested higher levels of alcohol use problems were significant predictors of lower general life satisfaction in college males and females (Murphy, Hoyme, Colby, & Borsari, 2006). However, a surprising finding from this study is the absence of a direct negative relationship or correlation between the amount of alcohol consumption and quality of life. Hypotheses by the authors addressing this finding include the idea that consequences of alcohol problems may be dependent upon the dose. As dosage goes up, so do alcohol problems. The implications of this finding indicate that

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students receive a benefit from consuming alcohol when the dosage is not at a point that results in negative consequences. The notion that college students benefit from drinking alcohol is not uncommon in the existing literature. Murphy et al., (2006) identified social belonging for college men is greater in those who consume large amounts of alcohol together. This is also evident in college women. Smith and Berger (2010) conducted a qualitative analysis utilizing a grounded theory approach and semi-structured interviews to identify common factors in drinking among college women ($n = 10$) who met criteria for high-risk use of alcohol. Criteria used for high-risk alcohol use was based on the national standardized binge drinking definition (4 or more drinks in a row at least one time in the last 2 weeks) and reported negative consequences associated with drinking. The results from this study identified three common factors in which all ten of the participants discussed matters relating to these factors. The three factors identified include motives, the relational ritual, and consequences. The motives for drinking include being merry, meeting others including men, and managing mood. The relational ritual factor included drinking before going out with a close network of friends, going out, and telling alcohol-related stories after going out. These two factors are related to the benefits of drinking alcohol. It is implied college students are able to bond with one another and enhance their social experience through the use of alcohol.

The third factor in the Smith and Berger study (2010) was consequences related to drinking. All ten of the participants in their study spoke openly about five different negative consequences related to consuming alcohol including academic, social, emotional, physical, and sexual costs. Academic consequences were identified as missing class and grades slipping. Social consequences included getting into trouble or fighting with friends. Mood consequences were related to acting in a way that was identified as being emotional which includes mood swings. The physical consequences encompassed blackouts, hangovers, and general pain related to hangovers such as puking and purging. The consequences related to sexual behavior included becoming intimate with random partners and being the victim of a sexual assault. It is again evident in the literature that consuming alcohol has benefits, but does not always come without consequences for college women who drink four or more drinks in a row.
Smith and Berger (2010) explained that negative academic consequences were a common experience among college women in their study. In a study by Porter and Pryor (2007), the effects of binge drinking were investigated relating to academic consequences and student engagement. Porter and Pryor identified the prevalence of binge drinking behaviors that ranged from 30% in women’s colleges to 56% in males attending coed colleges. The results from their study suggest that heavy episodic drinking behavior has a significant negative effect on overall GPA as well as student engagement. Ordinal logistic regression was used to predict the probability of GPA change and heavy episodic drinking. In the highest level of binge drinking, the predicted change in GPA was -0.11 (p < .01). Findings also indicated that one of the strongest predictors of positive educational outcomes is the level of interaction between students and faculty. Heavy episodic drinking at the highest level as evidenced by drinking at least five or more drinks on at least four different occasions in the last two weeks was shown to have a significant effect on the interaction level between male students and faculty members at research institutions. Given that student-faculty interaction is a significant predictor of academic achievement (Porter & Pryor, 2007), this finding can be seen as a problem for males who binge drink at a high level in research institutions.

The negative consequences of problematic alcohol use can exist on several levels for college students. The consequences can vary in nature, but appear most prevalent in the realms of academic functioning, social functioning, and physical health (Smith & Berger, 2010). Despite the consequences of drinking, college students appear to experience benefits related to alcohol use. This includes enhanced relational bonding and social functioning. Given the benefits of alcohol use and the negative consequences, it is important to review the literature related to theory that can adequately explain drinking behaviors among college students so proper interventions might be developed.

**Social Cognitive Theory**
Albert Bandura developed a psychosocial theory of development known as social cognitive theory 1986. This theory was created to help explain human development
across the lifespan. Some of the major tenets of social cognitive theory are: a) people learn through observation; b) learning does not always lead to changes in behavior, and c) a triadic reciprocal relationship exists between a person’s environment, their behaviors, and their mental processes (Bandura, 1989). Social cognitive theory assists to explain learning and provides insight into how people may choose to behave.

A major tenet of social cognitive theory is a triadic reciprocal relationship exists between a person’s environment, their behaviors, and their mental processes or personal factors. Bandura asserts that not all three of the reciprocal determinants have to be of equal strength, but the strength of the determinants can vary based on other factors (Bandura, 1989). In the model of reciprocal determinism, the influence that personal factors have on behaviors relies heavily on the thoughts, feelings, and actions of a person. Expectations and beliefs are examples of cognitions that influence a person’s behavior.

The environment has a direct influence on a person’s cognitions as their expectations and beliefs are directly affected by social influence and persuasion. A person’s environment affects their cognitions as perceptions of social norms are constructed. Social norms, which are consistent with the environment, act to shape the cognitions about their environment and self. As the environment influences a person’s cognitions, their behaviors are then subject to be affected by their cognitions. A two-way causal relationship then exists between the environment and their behaviors. An environment helps to shape a person’s behavior, which in turn reinforces the norms of the environment. Bandura refers to this concept as people being the products and producers of their environment. The theory of reciprocal determinism may help explain the influences behind college students behaviors related to drinking.

**Social Cognitive Theory and College Drinking Behavior**

Much research has examined the influence of peers on the behaviors of an individual. This research extends into behaviors related to drinking among college students. Prior investigations have examined the influence of peers among college students who transition from high school to college, who live in certain housing arrangements, and who are a part of the Greek system. Prior research has provided
insight into the impact of peer influence as well as the influence of perceived norms on
college drinking behaviors (Read, Wood, & Capone, 2005; Capone, Wood, Borsari, &
Laird, 2007; Phua, 2011).

The transition from high school to college is a major milestone in the life of a young adult. The adjustment can be difficult as students may move to a new city and faced with several new tasks. One of the new tasks can be developing a peer group. Erik Erikson’s (1950) theory of psychosocial development contends that a person who is eighteen years old and adjusting to college would be transitioning from a stage of developing one’s identity into a stage of developing one’s community. These stages are known as identity vs. role confusion and intimacy vs. isolation, respectively. As a person transitions into the latter of these two stages, they would be interested in developing close, interpersonal relationships. It is at this junction people may feel motivated to fit in with a particular peer group. The desire to fit in with a peer group may lead to conformity to the group’s social norms.

Research on drinking behaviors of students transitioning from high school to college has provided evidence of the effect of peer influences on drinking behaviors. The effects of the environment are clear in several different studies. A study by Capone, Wood, Borsari, and Laird (2007) investigated the effects of gender and Greek affiliation on alcohol use and alcohol-related problems in the first two years of college as it relates to selection, socialization, or reciprocal influences. The authors propose gender and Greek affiliation are both associated with increases in alcohol use and alcohol-related problems. Males in the Greek system were identified as being the greatest risk for increased alcohol use and alcohol-related problems over the first two years of college.

Further research has found similar results suggesting that males in the Greek system are at the greatest risk for alcohol use. Phua (2011) studied the effects of peer norms and popularity on smoking and drinking behaviors among college fraternity members. Further support was established for the notion college males in the Greek system pose the greatest level of risk for alcohol and smoking behaviors. Phua identified popularity was another predictor contributing to increased alcohol use.
Despite the role of popularity in the increased use of alcohol and cigarettes, another mediator was identified. Conforming to peer norms was found to mediate the effect of popularity. Phua proposed popular members of the Greek system were more likely to drink and smoke more because of conformity to the group’s norms regarding alcohol and tobacco use. It is evident in the studies by Capone et al., and Phua the Greek environment imposes a heavy influence on the drinking behaviors among college students.

Alcohol use among students who are actively engaged in Greek life is significantly higher than students who participate less or not at all (Cashin, Meilman, & Presley, 1998). A study designed by Cashin, Meilman, and Presley sought to compare reported drinking behaviors, consequences, and beliefs about alcohol use among students based on their participation in Greek life activities. A 2x4 ANOVA was used to analyze involvement in Greek life and gender (independent variables) and average number of drinks per week (dependent variable) in a sample of 25,411 students from 61 universities. The results from this study provide evidence of a significant main effect for degree of involvement in Greek life ($F = 456.28, p < .001$) and gender ($F = 1506.52, p < .001$) on average number of drinks per week. A significant interaction effect was identified for Gender X Involvement ($F = 67.15, p < .001$). The findings from this study indicate males from the Greek system who are leaders and actively involved are at the greatest risk for heavy alcohol use (5 or more drinks in one sitting). One way in which this study differed from previous studies was by providing evidence that more involvement in Greek life was positively correlated with increased drinking and negative consequences associated with drinking.

The transition from high school to college has been the subject of much research as drinking tends to increase during this period. Schulenberg and Maggs (2002) hypothesize the increase in drinking is the result of increased independence and decreased parental involvement. Given the increase in drinking during this transitional period, it is important to identify the influence of peer groups on drinking behaviors. The role of perceived norms and the influence of the peer group have both been shown to have a significant role in predicting alcohol use. Hummer, LaBrie, and Pedersen (2012)
conducted a study to examine first-year college students’ perceptions of alcohol use among other students on the same floor in their dormitory. The findings from this study demonstrate first-year college males and females both overestimated alcohol use behavior and permissive attitudes towards alcohol use among their peers. The implications from this finding suggest that perceived norms among peers were strongly related to individual drinking behavior and individual permissive attitudes towards drinking. Students who perceived their peers to drink more than reported were shown to engage in greater levels of drinking.

The role of social norms in one’s choice to engage in drinking behaviors can be attributed to different sources among college students transitioning from high school including active and passive social influences (Read, Wood, & Capone, 2005). Active social influences refer to situations in which alcohol is actively offered. This is important to distinguish because college students are apt to find themselves in an environment where alcohol offers are unconcealed. Passive social influences refer to social modeling and social norms. The findings from Read et al., provide evidence for the effect of Bandura’s triadic reciprocal determinism theory on the drinking behaviors among college students. The environment and personal factors were shown to have an effect on students drinking behaviors as active alcohol offers and perceived social norms resulted in greater alcohol use.

Additional research has focused on drinking behaviors during the transition from the last month of high school to the first month of college in females. LaBrie, Huchting, Pedersen, Hummer, Shelesky, and Tawalbeh (2007) examined drinking behaviors in this population and were able to report several findings. College females’ drinking behaviors during the first month of college are significantly predicted by their previous drinking history while in high school. This finding suggests females who drink in high school are more likely to increase alcohol consumption during the first month of college. Even after controlling for several factors such as prior drinking history and family income, LaBrie et al., identified the intention to pledge to a sorority among college females significantly predicted an increase in alcohol use. This finding provides further evidence for the reciprocal effect of one’s environment and personal factors on their
behavior. This study provides evidence that the perception of drinking behaviors in the Greek system influences college females’ choice to engage in elevated drinking behaviors over the first month of college.

The study by LaBrie et al., adds to the study conducted by Capone et al., as drinking behaviors in Capone’s study were found to be greatest in the Greek system. It is apparent in the study by Labrie et al., that college females perceive the environmental influence of the Greek system and engage in behaviors that are believed to be congruent with the desired or intended environment. This finding provides support for the notion the Greek system is among the greatest risk for elevated drinking in first year college students. The evidence of the effect of perceived social norms and peer influences on individual behavior is apparent in college students as they transition from high school to college and especially for those who intend to pledge to the Greek system. These findings are consistent with prior research on a false consensus effect in which students commonly overestimated the commonality of their own drug or alcohol use on their peers (Wolfson, 2000). False consensus occurs when people choose to identify with others based on having similar behaviors of their own. An understanding of the false consensus effect helps to explain why college females who intend to join a sorority may drink more.

The Influence of Positive Alcohol Expectancies on Alcohol Use

The effects of peer influence and social norms are evident not only in first year college students, but in students at all stages in their college career in various environments. Wardell and Read (2012) examined the role of social norms and positive alcohol expectancies (PAEs) in college students between the ages of 18-24 over the first three years of students’ college careers. Positive alcohol expectancies include items such as mood management, social lubrication, and performance enhancement. It was hypothesized that PAEs are more stable whereas norms are more dynamic and change over time. The results suggest positive alcohol expectancies do indeed remain more stable over time and social norms tend to be more dynamic indicating a reciprocal influence between quantity of drinking norms and drinking quantity. Peer perceptions are also related to this concept as people who are at a greater risk for a substance use
disorder, misperceive alcohol use norms to a greater extent than those who are not at risk (Lewis & Mobley, 2010). As perceived norms of quantity and positive expectancies increased, so did the amount of alcohol used by college students. The reciprocal influence was evident as norms related to quantity increased when the quantity of alcohol consumed increased as well. These findings demonstrate further evidence of the triadic reciprocal influence between individual factors, environments, and behaviors.

Positive alcohol outcome expectancies have been researched to identify whether they act as a mediator between social influences (active and passive) and alcohol use. Wood, Read, Palfai, and Stevenson (2001) found strong evidence for perceived positive alcohol outcomes acting as a mediator between socio-environmental factors and individual drinking behaviors. It is again hypothesized personal factors play a mediating role between one’s environment and one’s behaviors. Evidence from this study suggests that PAEs influence college students’ decisions to drink alcohol as the results indicate the use of alcohol is increased when the positive expectancy value of one’s expectations are increased.

A connection between the roles of social norms and PAEs is evident in the articles by Wardell et al. (2012), and Wood et al (2001). According to Wardell et al., the reciprocal determinism theory, developed by Bandura, helps explain the role of social norms as they influence college drinking. However, the effect of positive alcohol expectancies was not deemed to have a reciprocal influence with alcohol use. PAEs influenced alcohol use, but not the converse. Wardell and Read (2012) hypothesized norms and PAEs differ in their nature. Norms are dynamic and fluid changing over time, whereas PAEs are more concrete and stable. Wood et al., found a reciprocal influence between PAEs and alcohol use, whereas Wardell et al., did not. One hypothesis regarding the stability of PAEs is PAEs are stable for people by the time they reach college. Wardell et al., proposed that PAEs are more fluid in younger adolescents who are experimenting with alcohol. By the time young adolescents reach college, the PAEs have been solidified and are not as subject to changing. The existing body of literature has additional support for the reciprocal influence of social norms and alcohol use,
whereas the support for the reciprocal influence between PAEs and alcohol use is not as well documented.

The role of positive alcohol expectancies in college men has also been researched to identify whether PAEs mediate the relationship between masculine norms and alcohol use. Iwamoto, Corbin, Lejuez, and MacPherson (2013) identified the masculine norms of playboy and risk taking were both associated with higher levels of alcohol use when controlling for Greek involvement. These two norms were also positively correlated with positive expectancies. Findings from this study suggest positive expectancies work to mediate the relationship between masculine norms and alcohol use. Seeing that PAEs may be more stable by the time students reach college, it is evident in this population that PAEs are related to alcohol use. These results are consistent with Bandura’s theory on social learning and the role that positive alcohol expectancies play in mediating the association between personal factors and problems resulting from alcohol use (Borsari, Murphy, & Barnett, 2007).

**The Role of Personal Factors in Drinking Behaviors**

Personal factors such as psychosocial and social cognitive variables are both shown to have an effect on college drinking behaviors (Kuther and Timoshin, 2003). Psychosocial predictors for drinking include levels of self-efficacy, anxiety, depression, social support and assertiveness. Social cognitive predictors refer to expectation, evaluation, and norms (parental and peer). Previous studies identified mixed results for the role of expectation in alcohol use. Positive alcohol expectancies have been found to predict alcohol use in college students, but conclusive evidence for a reciprocal influence does not exist. The conclusions from this study provide evidence for the influence of social cognitive predictors, especially expectations of the likelihood of positive and negative consequences on increased alcohol use in college students. Psychosocial predictors accounted for 1% of the variance in self-reported drinking with social support being the only significant predictor (Kuther & Timoshin, 2003). This notion provides further support for social cognitive factors such as expectation, evaluation, and norms being factors leading to increases in drinking behavior.
Kuther et al. (2003) examined the roles of negative alcohol expectancies to determine their effect on alcohol use. Their findings suggest college students who evaluate negative consequences in a more positive light tend to drink less. These results appear to be counterintuitive, but consistent with prior literature, as perceived negative consequences of drinking have provided mixed results (Kuther, 2002). Alcohol use and self-efficacy were also related as people who perceived less control over their drinking displayed lower levels of self-efficacy. This was also related to negative consequences as measured by the Comprehensive Effects of Alcohol Questionnaire (Fromme, Stroot, & Kaplan, 1993). The Comprehensive Effects of Alcohol Questionnaire measures students’ perceptions of positive and negative consequences as they relate to drinking along with the likelihood of these consequences occurring. Reliability indices for expectancy and value were calculated using test-retest analyses. The reliability ranges were $r = .66-.72$ (positive expectancy), $r = .59-.78$ (positive value), $r = .75-.81$ (negative expectancy), and $r = .53-.65$ (negative value) (Fromme, Stroot, & Kaplan, 1993). Students who become more familiar with the negative consequences of drinking begin to perceive these consequences as neutral and no longer negative. This in turn leads to perceptions of lessened control over drinking and a diminished level of self-efficacy. Social cognitive predictors for drinking appear to have a significant effect on alcohol use among college students. Self-efficacy acts as a mediator between evaluations of negative consequences of drinking and self-reported levels of drinking suggesting college students begin to view negative consequences in a more favorable light when they feel less control over their drinking.

Emotional intelligence is another personal factor that has been researched as having an influence on alcohol use. Ghee and Johnson (2008) found emotional intelligence held a mediating role between peer norms and alcohol use. The authors suggest college students with higher levels of emotional intelligence demonstrate less of an association between the variables of peer norms and alcohol use. The opposite was evident as well. Students with lower emotional intelligence demonstrate a greater relationship between peer norms and alcohol use.
The findings from Ghee and Johnson’s study are consistent with a study by Claros and Sharma (2012) that the self-efficacy variables of perception, utilization, regulation, and management of emotion were significant predictors of alcohol and marijuana use. High scores of emotional intelligence are positively associated with abilities to successfully cope with life’s stressors. Claros and Sharma identified students with higher scores of self-efficacy were associated with lower scores on the Alcohol Use Disorders Identification Test (AUDIT). The four factors of emotional intelligence (perception, utilization, regulation, and management of emotion) may help students to be aware of peer norms and make choices related to alcohol use that result in fewer or less severe consequences.

Self-efficacy, emotional intelligence, and other personal factors influence the choices that college students make with regards to drinking. Merrill, Read, and Barnett (2012) researched the role of subjective evaluations of recently experienced consequences and the effect that may have on college students’ decisions to drink throughout college. The results from this study suggest that students drank less, which correlated positively with fewer alcohol related consequences, when they evaluated their recent consequences as being negative. Merrill et al., hypothesized college students who choose to view their consequences as being aversive are more likely to engage in behavioral changes to avoid risks. These results are consistent with some of the prior literature on the effects of negative alcohol expectancies, but they don’t parallel the findings from Kuther et al., (2003).

Kuther et al. (2003), found that students who view negative consequences in a more positive light tend to drink less than their peers. Merrill et al., (2012) identified negative subjective evaluations of consequences tend to lead to less drinking as subjective evaluation scores across weeks were associated with lower alcohol consumption (p = .01) and fewer alcohol consequences (p = .002). The result from these two studies both lead to the same result which is less drinking, but the means to achieve this result are different. In one case, a favorable interpretation of negative consequences leads to less drinking and in the other case, a less favorable interpretation of negative consequences resulted in less drinking. A connection may be
made between the consideration of negative consequences and reduced alcohol use. This connection may help to inform the development of further risk reduction and alcohol-based treatments for college students.

Excessive alcohol use during college years is a norm perceived as being a part of the entire college experience. Students may hold beliefs that all their peers drink and the overuse or abuse of alcohol is a common experience among other students. Alcohol abuse among college students often results in consequences that can be perceived as positive or negative. Positive consequences may include the belief that students function better socially, may manage their mood better, and have greater social experiences. However positive the experience may be, it is also evident that alcohol abuse comes with negative consequences that are academic, social, emotional, physical, and sexual in nature.

**Implications for Counseling**

Bandura’s theory of triadic reciprocal determinism helps to explain drinking behavior among college students. In his theory, a reciprocal influence exists between the environments, behaviors, and personal factors of a person. This is evident in several studies as alcohol use is related with consequences and higher levels of use among first year students who plan to pledge to a Greek organization and among students who are already a part of the Greek system. This is an environment that poses a risk for college students and has a reciprocal influence on the perceptions, expectancies, and outcomes of college students. An understanding of the students who are at the greatest risk for excessive alcohol use, and what helps to determine this risk may then help to build effective interventions. Using social cognitive theory as a foundation, it is important to build interventions that effectively help students evaluate their environments, their behaviors, and their cognitions or beliefs that lead to risky alcohol use. Given college students who abuse alcohol may lack coping strategies (Britton, 2004), it is important to develop interventions that teach skills to reduce risky behavior and how to consume alcohol in a more responsible manner.

Given the dynamic nature of the reciprocal influence between socio-environmental factors, individual factors, and personal factors, it is important to develop
interventions that address all three of these types of influences. Interventions that address socio-environmental factors can help create awareness for students as to how their environment shapes their behavior. Addressing issues related to active influences such as direct alcohol offers can help students make choices as to what environments will be most conducive for their well-being. Students can make plans that will help reduce the possibility of experiencing negative consequences. This may include having a predetermined time to leave, a predetermined and reasonable set amount of drinks to consume, and having a friend to be accountable in that environment. It is also important to address passive influences such as social modeling and social norms. Social norms interventions are currently a popular way of trying to help college students lessen their drinking by offering them statistics and norms of campus drinking behaviors. Read, Wood, and Capone (2005) suggested it might be best to narrow the scope of the norms presented to college students because they identified social influence factors are stronger as they are closer to the individual. Given these findings, it may be better to offer norms based approaches tailored for specific populations as they relate specifically to individuals. Students interpret these norms with more meaning as they self relate as opposed to norms as they relate to less intimate groups or typical college students on a campus wide level.

Interventions seeking to help college students reduce excessive alcohol use can also be developed to address personal factors and behaviors. Given the role of perceived positive/negative consequences of alcohol use, it may be helpful to address these expectancies utilizing a motivational and cognitive-behavioral therapy (CBT) framework. A motivational approach can help reduce ambivalence to change by engaging the client, focusing on issues that a client may want to change, evoking motivation to change, and planning steps to achieve change (Miller & Rollnick, 2002). A motivational counseling approach utilizes open-ended questions, affirmations, reflections, and summaries. The purpose of a motivational approach is to reduce ambivalence to change and building enthusiasm about working towards change. A CBT approach can help identify the connections between personal factors (cognitions) and behaviors related to drinking. A cognitive-behavioral approach may include discovering
triggers for excessive alcohol use, expectations related to excessive alcohol use, past experiences (positive and negative) of excessive alcohol use, and how those in turn lead to engaging in behaviors that are consistent with a social environment in which excessive alcohol use is present.

By practicing safe behaviors related to alcohol use, students may then develop a greater sense of self-efficacy. Since levels of self-efficacy were correlated with levels of alcohol use (Kuther & Timoshin, 2003), it may be important for college students to develop self-efficacy through practicing new skills and experiencing rewards or success related to their new behaviors. Rewards or successes can be experienced through optimal social functioning without the presence of negative consequences. Utilizing Bandura’s model of triadic reciprocal determinism, it is helpful to understand college students behaviors related to drinking as they relate to socio-environmental factors, personal factors, and individual behaviors. An understanding of the presence of these three types of influences can then allow for efficient interventions to be developed and utilized so that college students may reduce the excessive and risky use of alcohol.

References
Follow the leader? *Journal of Studies on Alcohol, 59*(1), 63-70.


Wardell, J. D., & Read, J. P. (2012). Alcohol expectancies, perceived norms, and drinking behavior among college students: examining the reciprocal determinism hypothesis. *Psychology of Addictive Behaviors*. Advance online publication. doi:

Napping: An Intervention for Sleep Deprived Undergraduate and Graduate Students
Kelly Donohue

Abstract
Sleep is an important physiological process that plays a prominent role in the overall physical and mental health of individuals through impacting cognitive, emotional, and physical functioning (Gruber, 2012). Individuals who do not get adequate sleep are at risk to suffer from insomnia, experience overall activity impairment, and have significantly lower physical and mental productivity than individuals who achieve optimum amounts of sleep (Bolge, Doan, Kannan, & Baran, 2009). Unfortunately, many graduate and undergraduate students do not get sufficient overnight sleep (Forquer, Camden, Gabriau, & Johnson, 2008). One possible solution for these students is to increase their napping activity. Although overnight sleep is very important, recent research shows that napping can benefit individuals who are sleep deprived (Chen, 2013). Research suggests that napping as little as ten minutes when fatigued can have many positive benefits including an increase in energy and cognitive functioning (Tietzel & Lack, 2002). Although napping should not be used as a substitute for overnight sleep, it is a possible solution for students during stressful periods when they are unable to achieve optimum amounts of overnight sleep.

Sleep is an important physiological process that plays a prominent role in how people think, feel, and behave. Individuals who do not get sufficient sleep have higher levels of fatigue and tiredness, which hinders physical, cognitive and emotional functioning (Gruber, 2012). Additionally, achieving too little sleep can cause premature aging, depression, and other serious health issues (Wong, Lau, Wan, Cheung, Hui, & MOK, 2013). However, despite the importance of sleep and its many implications for psychological and physical wellness, many undergraduate and graduate students do not obtain sufficient levels of sleep. Sleep patterns for this population are inconsistent. During times of high stress, such as exams, sleep quality and quantity are not efficient (Forquer, Camden, Gabriau, & Johnson, 2012). Although overnight sleep is very important, recent research shows that napping can have several benefits for individuals who are sleep deprived. Naps as short as ten minutes have been shown to increase

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attention as well as improve overall mood (Chen, 2013). Hou, Huangfu, Zhang, & Miao (2007) performed a study and used an analysis of variance (ANOVA) with repeated measures to determine if napping has positive impacts on cognition and subjective mood. Hou et al. concluded cognitive performance and positive mood increase when sleep deprived individuals napped versus did not nap. This finding provides an alternative for students who are busy with course work, working, and managing their daily lives. Although napping should not be used as a substitute for overnight sleep, it can be a productive alternative for individuals who do not have stable sleeping patterns and are unable to achieve sufficient amounts of sleep during an overnight period (Chen, 2013).

The focus of this paper is on the benefits of sleep for overall wellness and how naps can be used as a temporary enhancement when overnight sleep time is diminished. Sleep is important in order to achieve optimum levels of cognition, emotion, and physical productivity. Despite the importance of sleep, undergraduate and graduate students are consistently receiving less than ideal sleep levels. This paper analyzes an alternative for this population in order to increase productivity and improve mood.

**Why Sleep is Important**

Efficient amount and quality of sleep provides many benefits that affect individuals in their ability to function on a daily basis. Sleep affects cognitive, emotional, and physical functioning (Gruber, 2012). Research has shown that sleep deprivation degrades overall memory and has negative impacts on a person’s ability to perform verbal learning and visual memory tasks (Stickgold & Walker, 2005). Sleep deprivation also negatively impacts emotional regulation and causes impulsivity and high levels of anxiety and stress. Increased levels of anxiety and stress are also correlated with difficulties sleeping, creating a cycle decreasing quality of sleep and increasing irritability and stress (Dahl & Lewin, 2002). Lastly, sleep deprivation has negative effects on overall health. Decrease in sleep quality has negative effects on the body’s immune system and ability to fight off bacterial infections and viruses (Gruber, 2012). For undergraduate and graduate students this can also be a cyclic affect. When this
population of individuals becomes sick, they are likely to have an increased level of stress trying to complete assignments, further increasing stress and anxiety levels and decreasing quality of sleep (Gruber, 2012).

Too little sleep over an extended period of time can have serious consequences. Individuals who suffer from insomnia experience overall activity impairment, and significantly lower physical and mental productivity than individuals without insomnia (Bolge, Doan, Kannan, & Baran, 2009). Insomnia is described by the Diagnostic and Statistical Manual of Mental Disorders (4th edition, text revision, 2000) as experiencing problems falling asleep, staying asleep, waking too early, and/or not feeling rested even after ample amount of time in bed. Insomnia can significantly decrease the quality of life for an individual and impact overall functioning. Graduate and undergraduate students are at risk for insomnia because of the lower levels of sleep they obtain while in school (Bolge, Doan, Kannan & Baran, 2009).

A study done by Forquer et al. (2008) researched the sleep quality and quantity of undergraduate and graduate students at a public university. This study found that there was no significant difference between undergraduate and graduate students’ sleep patterns. The study also found that 33% of students take 30 minutes or more to fall asleep, 43% wake more than once nightly, and 33% report feelings of fatigue and tiredness throughout the day (Forquer et al., 2008). This suggests that more than 1/3 of undergraduate and graduate students display symptoms related to insomnia. Furthermore, Chen (2013) emphasizes that women are at the highest risk for nighttime and daytime drowsiness. Students who exhibit these sleeping behaviors are at risk for decrease in physical, cognitive and emotional productivity.

Sleep has many implications for overall wellness of an individual. Degraded levels of both quality and quantity of sleep are associated with degraded levels of emotional, physical and cognitive productivity. In order to maximize productivity, undergraduate and graduate students must obtain sufficient levels of sleep.

**Solution for Sleep Deprived Students**

Recent research suggests that napping can be used as a substitute for sleep deprived individuals. Small amounts of sleep, as little as ten minutes, have been shown
to increase focus, creativity, memory, and overall mental alertness (Chen, 2013). This observation is important for undergraduate and graduate students struggling to find time to sleep at night. Taking short naps during the day may assist in rejuvenating productivity and ability to perform academically during stressful time periods of the semester.

**Napping Defined**

A nap is any period of time less than one half of the amount of time slept the previous night and usually lasts between 15 minutes to 2 hours (Tietzel & Lack, 2002). Naps are used to rejuvenate energy when an individual is feeling fatigued. There is no specific time an individual should nap, other than when noticing a dip in energy level. Napping should be kept to a maximum of two hours so regular sleeping patterns are not disturbed (Tietzel & Lack, 2002).

**Length of Time a Nap Should Last**

Short naps are rich in slow wave sleep, which is the most restful stage of sleep where the body is able to re-energize itself. The time that napping allows for individuals to spend in slow wave sleep makes napping a good alternative to individuals who are sleep deprived (Tietzel & Lack, 2002). A study performed by Tietzel and Lack (2002) demonstrated that a ten-minute nap significantly improves an individual’s alertness and cognitive performance when they are deprived of sleep the night before. However, shorter naps (lasting 30 seconds to 90 seconds) do not show any benefits. This suggests that the quantity of time spent napping does matter, and should be a minimum of ten minutes.

Additionally, the amount of time spent napping should depend on how sleep deprived an individual is. Longer naps are needed to follow periods of extreme sleep deprivation, such as an individual staying up all night studying for exams. These longer naps should last longer than 30 minutes. Brief 10-30 minute naps are only useful to individuals who have obtained sufficient sleep and are experiencing normal energy dips, or who are mildly sleep deprived (Milner & Cote, 2008). Furthermore, longer periods of wakefulness, at least thirty minutes, are required to see the benefits of shorter naps (Milner & Cote, 2008). When an individual wakes from a nap they often experience
feelings of tiredness and grogginess. It takes time for the benefits of a nap to be seen, and they are not immediate upon waking. In contrast, longer naps take less time to recuperate from than shorter naps. This is important to consider when an individual is engaging in napping behavior. It is not in the best interest of the individual to wake immediately before a task has to be completed (Milner & Cote, 2008).

**Benefits of Napping**

Individuals perform best when they are not fatigued. When fatigued, a person is less able to focus on work and perform to maximum capacity. Napping can be used to restore energy levels quickly, and increase personal productivity (Milner & Cote, 2009). Naps are also shown to provide better improvement in productivity than caffeine supplements such as energy drinks which are commonly used by undergraduate and graduate students (Bonnet et al., 1995). Napping is an easy way for students to regain energy levels and increase productivity when they are sleep deprived due to an increase in stress and workload. Benefits of napping include physical, emotional, and cognitive benefits (Bonnet et al., 1995).

**Cognitive benefits.** Cognitive benefits of napping include an increase in capacity of working memory and ability to perform cognitive tasks. Lahl, Wispel, Willigens and Pietrowsky (2007) conducted a study that emphasized the improvement napping can have on encoding declarative memories. This study tested free recall for two groups of individuals that had learned the same list of words, one group napped before participating in recall and the other group did not. Individuals who had napped performed significantly better on the free recall task than did individuals who had not napped, \( t = 2.57; P = 0.008 \). This finding was true for individuals who napped between six and thirty minutes (Lahl et al., 2007).

Likewise, Lau, Tucker and Fishbein (2010) found similar results when conducting a study measuring the effects of napping on declarative memories. This study focused on both relational memory and rote memory. Similarly to Lahl et al. (2007), Lau et al. (2010) found that napping during the day can significantly improve declarative memories. This study was also able to correlate improvement in relational memories with slow wave sleep occurring during periods of daytime napping (One-way ANCOVA,
The finding suggests that napping does not only assist in rote memories but also with the cognitive activities involving relational memories (Lau et al., 2010).

**Emotional benefits.** A short daytime nap can improve overall mood and emotional wellbeing (Chen, 2013). This improvement is demonstrated in a study performed by Inoue and Luo (2000) which focused on the effects of daytime napping on mental states. Inoue and Luo (2000) conducted their study using a mix of females and males averaging a napping period of 30.5 minutes and a post-nap wake-up period averaging 14 minutes. The results demonstrated improved mental states in participants, specifically focusing on moderating levels of anger, joy, relaxation, and sadness. The study concluded that after napping, the participants had overall improved mental states and were better able to monitor their own emotions. The emotional benefits from napping allow individuals to be able to monitor their own emotions and relieve feelings of anxiety and sadness (Dahl & Lewin, 2002).

**Physical benefits.** A short daytime nap lasting less than 30 minutes can provide a boost of energy lasting up to 3 hours. This energy boosts allows for more productivity and alertness throughout the day (Chen, 2013). Additionally, napping can decrease stress levels, which are harmful to the immune system. Through decreasing levels of stress the immune system is less susceptible to bacteria and viruses (Gruber, 2012).

**Nap Conclusions**

Naps differ in length between individuals, and naps of varying lengths are shown to have benefits for both sleep deprived and non-sleep deprived individuals. Napping for as little as ten minutes can increase mood and cognitive functioning as well as have other physical benefits. Napping is a useful method for undergraduate and graduate students to re-energize after being sleep deprived during stressful periods of a semester. Napping, and allowing for a period of wakefulness after a nap, can improve memory and performance for this population.

**Concluding Comments**

Undergraduate and graduate students often do not receive adequate amounts of sleep for maximum performance (Forquer et al., 2008). This lack of sleep may be due
to stress related to studying and completing schoolwork. It may also be due to staying up late to complete course work, managing social lives, and being members of the work force. Overall, sleep is an important physiological function, and getting insufficient sleep can have detrimental effects for any individual (Bonnet et al., 1995).

Sleep deprivation is associated with higher levels of anxiety, stress, fatigue, and compromised immune systems. Sleep deprivation can have negative impacts on memory including a decrease in ability to recall and form new memories (Gruber, 2012). If undergraduate and graduate students are sleep deprived, their ability to perform in an academic setting as well as their emotional and physical wellness will diminish. It is important for this population to have a means of rejuvenating energy and alertness during time periods when sleep is limited (Gruber, 2012).

One solution for undergraduate and graduate students is to take short naps during the day before or after a period of sleep deprivation. Recent studies have shown that napping can improve mood and regulation of emotions (Inoue & Luo, 2000). Napping also has other cognitive benefits including improving working memory for declarative memories (Lahl et al., 2007).

Napping is a simple intervention that both undergraduate and graduate students can utilize. Students who nap for periods as short as ten minutes can experience improvement in overall functioning (Chen, 2013). This short time period will allow students to regain energy and be more productive with course work. However, individuals with increased levels of sleep deprivation need longer periods of napping in order to regain energy. Napping should not be used as a substitute for nighttime sleep, but in congruence with nightly rest or as a means to regain energy during periods where sleep time is limited (Chen, 2013).

References
quality of life, work productivity, and activity impairment. *Quality of Life Research, 8*(4), 415-422.


Suicide Risk and Resiliency Among Sexual Minority Youth: 
Implications for Professional Counselors

William D. Beverly & Edle Aasland

Abstract

While adolescents in general are at risk for suicidal thoughts and behavior, research has shown that sexual minority youth are especially vulnerable. This elevated suicide risk is due in part to the presence of various risk factors, such as social discrimination, victimization, and increased rates of psychological and emotional distress. However, despite this heightened risk for suicidal ideation and self-harm, there is a growing body of literature regarding wellness and strengths among lesbian, gay, bisexual and transgender (LGBT) individuals, and research has shown that these client strengths are correlated with successful counseling outcomes. Professional counselors are encouraged to be aware of both risk and wellness factors when working with sexual minority youth. Awareness of these factors can be used to prevent and reduce serious psychopathology, and also to promote resiliency and growth in the lives of LGBT youth.

More adolescents and young adults die each year from suicide than the total combined deaths resulting from heart disease, cancer, cerebrovascular accidents, HIV/AIDS, chronic lung disease, pneumonia, influenza, and birth defects (Greydanus, Patel, & Pratt, 2010). Suicide among adolescents reflects not only a tragedy in the United States, but rather is a global concern. According to the World Health Organization (WHO; 2001), suicide is one of the three leading causes of death for adolescents throughout the world, and rates are increasing faster in adolescents than in other age groups. Research has identified several risk factors associated with suicide in youth, such as clinical depression, failure in school, loss of friends, social isolation, and drug and alcohol abuse, among others (Greydanus, Bhave, & Apple, 2010; Keith, 2001; Zamekin, Alter, & Yemini, 2001).

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Sexual Minority Youth and Suicide Risk

While adolescents in general are at risk for suicidal thoughts & behavior, gay and lesbian youth are two to three times more likely to attempt suicide than heterosexual young people (Rotheram–Borus, Hunter, & Rosario, 1994). In a related study with a representative, population-based sample of over 3,300 high school students, respondents answered questions regarding both suicide and sexual orientation (Garofalo, Wolf, Wissow, Woods, & Goodman, 1999). The results of the study revealed that gay, lesbian, and bisexual high school students were over three (3.41) times more likely to report having attempted suicide than their straight peers.

An additional study with samples drawn from multiple states in the U.S. reported that 36.5% of gay, lesbian, and bisexual youth grades 9-12 have attempted suicide; 20.5% of those attempts required medical care (Robin et al., 2002). Furthermore, a review of the literature that included an examination of multiple studies indicated that between 48% and 76% of gay and lesbian youth have thought of suicide; while between 29% and 42% have attempted suicide (Russell & Joyner, 2001). The general consensus in the literature is as many as one in three gay and lesbian youth have attempted suicide.

Studies investigating suicidal behaviors and risk factors of suicide among transgender youth are scarce compared to LGB youth, and additional research is warranted. However, despite this disparity in the literature, the research that does exist examining suicide rates among transgender individuals in general and youth specifically reveals the same alarming statistics. For example, a study that included participants in both the U.S. and Canada found that transgender individuals were more likely to attempt suicide than heterosexual females and males (Mathy, 2002).

In an examination of the predictors of attempted suicide among transgender persons, Clements-Nolle, Marx, & Katz, (2006), interviewed 392 male-to-female (MTF) and 123 female-to-male (FTM) individuals. The prevalence of attempted suicide among this sample of transgender persons was 32%, which is similar to the rate for adolescents reported above. However, younger age was a significant risk factor for suicide, with an elevated suicide rate of 47% for transgender individuals under 25. The
authors note that the alarming finding of nearly half of the transgender youth in the sample having attempted suicide has significant implications for professional counselors, and state: “Mental health professionals and agencies serving LGBT youth should make a special effort to provide counseling, suicide assessment, and referrals for gender questioning youth” (Clements-Nolle et al., 2006, p. 63).

**Suicide Risk Factors**

In addition to younger age, the multivariate logistic regression analysis conducted by Clements-Nolle et al. (2006) identified several other suicide risk factors associated with a sexual minority status, with gender-based discrimination, gender-based victimization and violence, depression, and a history of substance abuse treatment each being independently associated with attempted suicide in their sample. Several studies have supported the presence of such risk factors in the LGBT community (including youth), and have special implications for professional counselors.

**Social Stigma & Victimization**

Adolescence is often a time of turbulence and stress for youth due to significant physical, psychological, and cognitive changes that occur. The emergence of one’s sexual identity is a critical and sometimes confusing part of this normal aspect of human development. In their formative years, LGBT youth can begin to feel different from heterosexual peers of the same gender as early as kindergarten, and various theories of gay identity development have been proposed (see Cass, 1984; Troiden, 1988). One of the most influential theories of lifespan development is Erik Erikson’s stages of psychosocial development (Erikson, 1959; 1970; 1982). According to researchers on identity development among LGBT persons, “Erikson’s model of identity development sets the stage for models of sexual minority development through his focus on developmental tasks (crises) that must be navigated successfully in order to form a healthy personality” (Vaughan & Waehler, 2010, p. 94).

Erikson proposed that each individual goes through eight different stages to reach his or her full development. The stage of development that pertains to adolescence is *Identity Achievement vs. Role Confusion*. Peers are the dominant social influence during this stage, and a positive outcome is reflected in a sense of personal
identity and a sense of direction for the future. This process is followed by the stage of *Intimacy vs. Isolation* (young adulthood) in which the main task is the establishment of intimate bonds of love and friendship. If such bonds are not achieved, isolation, alienation, or self-absorption can emerge (Erikson, 1970). LGBT adolescents too often do not receive the acceptance and support from peers and significant adults that are necessary for healthy development of the self. In fact, sexual minority youth often face discrimination and rejection from significant others in their social world during these critical stages of development.

A review of the literature indicates that LGBT individuals encounter a greater degree of discrimination and victimization compared to heterosexual individuals, and numerous researchers have hypothesized that this pervasive social intolerance is associated with the elevated rates of LGBT suicidal behaviors (Clements-Nolle, Marx, & Katz, 2006; Herek, Gillis, & Cogan, 1999; Kulkin, Chauvin, & Percle, 2000; Mathy, 2002; Mays & Cochran, 2001). This social prejudice and discrimination ranges from verbal harassment to violence. In a review of the literature, Szymanski (2009) summarized the results of 24 published studies, in which 80% of LGBT respondents reported being verbally harassed due to their sexual orientation, 44% had been threatened with violence, 33% had been chased or followed, and 25% had been pelted with objects because someone knew or assumed they were LGBT.

Similar findings have been reported in studies with LGBT youth specifically. In a study conducted by the Gay, Lesbian, and Straight Educators Network (GLSEN), 84% of LGBT students reported being verbally harassed (name calling, threats, etc.) because of their sexual orientation, 91.5% of LGBT students reported hearing homophobic remarks, such as “faggot,” “dyke” or the expression “that’s so gay” frequently or often, and 44.7% of LGBT youth of color reported being verbally harassed because of both their sexual orientation and race/ethnicity (Kosciw, 2004). Equally troubling was the perceived responses from adults (or lack thereof). Over 80% of LGBT students in the study reported that faculty or staff never intervened, or intervened only some of the time, when teachers were present and homophobic remarks were made.
Sexual minority youth are also often the victims of violence. Over 64% of LGBT students report feeling unsafe at their school because of their sexual orientation, and sexual minority students were more than twice as likely to report being in a physical fight at school in the prior year (Kosciw, 2004). Over half of transgender youth in this same sample reported being physically attacked, and 90% of transgender youth reported feeling unsafe at school because of their gender expression.

**Psychological & Emotional Functioning**

Studies have demonstrated that this social stigma and victimization has deleterious effects on the psychological health of LGBT individuals. For example, two studies found that sexual orientation-based hate-crime victimization was related to higher levels of depression, daily stress, psychological distress, and alcohol and drug abuse among gays & lesbians (Descamps, Rothblum, Bradford, & Ryan, 2000; Szymanski, 2009). Furthermore, Herek et al. (1999) found that GLB survivors of sexual orientation-based hate crimes manifested greater anxiety, posttraumatic stress, anger, and depression than did GLB survivors of nonsexual orientation-based crime victimization. In other words, not only does this violence have detrimental effects on the lives of LGBT individuals, but the fact that such violence is based on one’s sexual orientation makes it particularly damaging.

Almeida, Johnson, Corliss, Molnar, and Azrael (2009) examined the emotional consequences regarding a youth’s perceived discrimination due to their sexual orientation. This study included a sample of 1,032 youth in ninth to twelfth grade, with 10% identifying as lesbian, gay and bisexual. All participants completed the Modified Depression Scale (MDS) to identify depressive symptoms, and they were also given a questionnaire regarding their identified sexual orientation. The results from this study showed that LGBT youth reported higher rates of perceived discrimination due to their sexual orientation, and this increased their risk for self-harm, suicidal ideation, and symptoms of depression.

Diaz, Russell, Ryan, Sanchez, & Toomey (2011) examined the implications that can occur for youth who identify as LGBT, specifically related to the youth’s mental health and adjustment into young adulthood. This study involved 245 LGBT young
adults, between the ages of 21 years and 25 years old. Among the young adults 8.6% identified as Transgender, 46.5% identified as male, and 44.9% identified as Female. Participants were administered the Adolescent School Victimization due to perceived LGBT status, The Young adult Depression Scale, and the Young Adult Suicidal Ideation and Behavior Scale, among other risk surveys.

The results from the this study showed that LGBT youth who reported high levels of school victimization during adolescence compared to those who reported low levels of school victimization were 2.6 times more likely to report depression and 5.6 times more likely to report having attempted suicide. Also, LGBT young adults who reported high levels of school victimization were twice as likely to report clinical levels of depression and STD diagnosis. This suggests that young adults who experience school victimization in adolescence due to sexual and gender identity are at risk for poorer adjustment, mental health, and physical health later in life.

In a recent publication, Mustanski and Liu (2012) discussed various risk factors for suicide among Lesbian, Gay, Bisexual, and transgender youth. They assessed specifically for clinical depression and conduct disorder among 248 LGBT youth ages 16 to 20 years of age. These youth were given the Diagnostic Interview Schedule for Children (DISC), the 6-item Brief Hopelessness Scale, the Barratt Impulsiveness Scale (BIS-11), the Multidimensional Scale of Perceived Social Support (MSPSS), and they were also measured for the rate in which they were victimized due to identifying as LGBT. The risk factors for suicide among LGBT youth in this study were symptoms of major depression, conduct disorder, and hopelessness. Mustanski and Liu (2012) also conducted a one year follow up in which they showed that if a youth had a previous attempt of suicide they were 10 times more likely to make another suicide attempt.

Although the results of Mustanski and Liu (2012) article identified several issues related to suicide risk, the authors also discussed protective factors and resiliency among LGBT youth. For example, this study also demonstrated that if the child or adolescent has supportive parents, this serves as a protective factor for the youth regarding suicide. Other supportive factors identified included support from peers, and a perceived sense of belongingness. Additional studies have begun to look at the role
of wellness and supportive variables that not only prevent suicide among sexual minorities, but also facilitate positive growth and development.

**From Risk to Resiliency: The Role of Wellness & Growth**

According to Webster's online dictionary (n.d.), *resiliency* is defined as “an occurrence of rebounding or springing back.” However, research has shown that rather than simply returning to a previous state of functioning, individuals who face societal oppression and discrimination are also able to experience unique growth and personal development. Constantine and Sue (2006) found that the stress of having a minority status can actually offer one opportunities to transform oppressive experiences into actions leading to resiliency, and even optimal functioning. This study found that for people of color, pride in one’s race and ethnicity and the experiences of oppression actually, “sharpen and hone their survival skills to such a degree that these skills are now deemed to be assets” (Constantine and Sue, 2006, p. 235). Research by Russell and Richards (2003) reveals a similar dynamic among sexual minorities, and suggests that aspects of a sexual minority identity may facilitate psychological growth and well-being. For example, in this study of resiliency during antigay political campaigns, it was found that connection to a lesbian, gay, or bisexual (LGB) community provided a source of support for lesbians and gay men, which can in turn facilitate personal growth.

**Wellness & LGBT Individuals**

As is evident in the preceding sections of this paper, substantial research exists regarding negative life events, psychopathology, and suicide risk factors within the LGBT community. Unfortunately, considerably less attention has been devoted to the positive aspects of their lives (Balsam, 2003). According to Vaughan & Waehler (2010), “the sexual minority literature has largely remained focused on negative psychological and social outcomes, virtually ignoring the growing body of theory, measures, and empirical data on positive psychological experiences” (p.95). Despite the need for more research in this area, there is an increasing amount of literature regarding positive growth and wellness among individuals with a sexual minority status.

Studies have demonstrated that positive changes in psychosocial well-being are in fact a normal occurrence during the stages of gay identity development (Halpin &
Allen, 2004). In addition, the presence of stressful experiences among LGBT individuals can actually be conducive to growth. For example, Balsam (2003) reported the relationship between trauma, stress, and resilience among sexual minority women. These experiences of stress-related growth can provide sexual minorities with unique strengths and attributes that can be subsequently utilized to successfully cope with stress (Moradi, Mohr, Worthington, & Fassinger, 2009). Such findings can be of great value to professional counselors, as affirmative psychological services for LGBT individuals should not exclusively focus on symptom reduction, but also emphasize psychosocial well-being and flourishing.

A recent study by Riggle, Whitman, Olson, Rostosky, & Strong (2008) examined the overall satisfaction with one’s sexual minority identity, and investigated the potential positive aspects of being gay or lesbian. Two hundred and three gay men and 350 lesbian women from 45 States were asked overall, how positive they feel about their current self-identification as a gay man/lesbian woman. Ninety percent of participants reported feeling extremely or very positive, 8.5% reported feeling somewhat positive, and only 1% reported feeling not very or not at all positive about their sexual minority identity (with no significant gender differences being present). The fact that over 98% of sexual minority individuals surveyed felt positive about their sexual identity reveals the potential for wellness to be more incorporated into treatment with sexual minority clients, especially youth.

As mentioned, participants in the Riggle et al. (2008) study were also asked to identify the positive aspects of being gay or lesbian. Three general constructs related to wellness emerged from the participant responses: disclosure and social support, insight into self and empathy for others, and freedom from societal definitions of stereotypical gender roles. Within each of these constructs, various themes were also identified. For example, disclosure and social support included the themes of belonging to a community, creating families of choice, having strong connections with others, and serving as positive role models (Riggle et al. 2008).

Disclosure of a gay male or lesbian identity to self or others is considered an important step in the achievement of a positive identity (Cass, 1984; Troiden, 1988).
The coming-out process is ongoing and involves continually assessing changing social environments and practical (e.g., physical safety or job security) considerations. However, for many individuals, coming out enhanced their well-being through the creation of social support systems and support for other life activities (Riggle et al, 2008). A study by Vaughan & Waehler (2010) also demonstrated that despite the stress that is often part of the coming out process, disclosing one’s sexual minority identity to others can produce significant experiences of personal growth and increased insight. The results of this study (which included a sample of 418 gay and lesbian individuals), led to the development and initial validation of the Coming Out Growth Scale (COGS), which measures the stress-related growth and wellness that can result from the coming out process (Vaughan & Waehler, 2010). Closely related to this process of coming out growth is the establishment of social support systems in the lives of LGBT individuals.

The creation of social support systems (“families of choice”) can serve a significant role with regards to wellness and growth, as many members of the LGBT community endure estrangement from members of their family of origin. For example, one in four participants in the Riggle et al (2008) study had not disclosed their sexual identity to their parents. Two-thirds were not completely out to their extended family. In response to rejection by families of origin, some gay men and lesbian women may create families of choice, which often include current partners, former partners, friends (both from the LGBT community and supportive straight allies), and select family members. This has special implications for professional counselors, as these individuals can be incorporated into the youth’s treatment plan to assist in suicide prevention, as well as positive growth and change.

Implications for Professional Counseling

In reviewing the previous four decades of psychotherapy outcome studies, Assay and Lambert (1999) identified various common factors that account for the bulk of change that clients experience in counseling. What appears to be the driving force in successful counseling outcomes is referred to as “client factors,” and this refers to the unique strengths and attributes that clients bring to the counseling experience, as well
as other forms of social support within the client system (Assay & Lambert, 1999; Duncan, Miller & Sparks, 2004). The research on wellness within the LGBT community described above consequently provides a potential resource for professional counselors to use with sexual minority clients.

For example, Diaz et al (2011) explored the role of family acceptance as a protective factor in a sample of 245 LGBT youth. They used various measures, including a measure on how these youth perceived their families acceptance of their sexual and gender orientation, and a measure of the youth’s adjustment and health, such as substance abuse, suicidality, and depression. The results demonstrated that family acceptance of the youth was related to the youths’ positive health outcomes, such as general health and self-esteem. Also, family acceptance served as a protective factor for depression, substance abuse, suicidal ideation and suicide attempts. This highlights the importance of including families in the work mental health professionals do with LGBT youth. In the past we have viewed families of LGBT youth as being negative, however supportive families can potentially protect these youth from the shocking rates of depression and suicide that they face, and can be a potential client strength to be integrated into professional counseling.

Next to what the client brings to therapy (“strengths”), the client’s perception of the therapeutic relationship appears to account for most of the gains associated with therapy (Assay & Lambert, 1999; Duncan, Miller & Sparks, 2004; Wampold, 2001). Over 1,000 studies have demonstrated that the alliance between the therapist and the client accounts for more variance in counseling outcomes than the particular model or technique utilized (Bachelor & Horvath, 1999). Thus, in addition to exploring and integrating client strengths into therapy, professional counselors will also need to be aware of the impact of the therapeutic alliance when working with sexual minority youth. For example, a study with LGBT counseling clients highlighted the importance of the therapeutic alliance in facilitating successful outcomes, especially when counselor responses were perceived as positive, validating, normalizing, and accepting (Israel, Gorcheva, Burns, & Walther, 2008). While such factors are conducive to successful
counseling outcomes in general, they are especially important when working with a population of youth that are more vulnerable to social stigma and discrimination.

**Conclusion**

Much has been written in the professional counseling literature regarding suicide assessment and prevention, and for good reason. However, mental health professionals also need to be aware of the unique risk factors that exist among diverse populations, including LGBT individuals in general, and sexual minority youth specifically. Understanding the unique risk factors and vulnerability specific to this population can assist professional counselors in developing and implementing effective programs for LGBT youth.

A defining feature of professional counseling is its emphasis on wellness, human development, and positive growth (Gladding & Newsome, 2010). This essential aspect of our profession lends itself well to working with sexual minority youth, as there is an increasing body of research documenting the significance of wellness and unique personal strengths among members of the LGBT community (Diaz et al., 2011; Riggle et al., 2008; Vaughan & Waehler, 2010). Gay and lesbian youth in the process of first coming out to themselves and others may not expect that, in addition to challenges, they can anticipate considerable positive outcomes for their lives. An understanding of the research regarding wellness and LGBT individuals strongly supports the utilization of strength-based interventions with LGBT clients, especially sexual minority youth, in the prevention of suicide and promotion of positive growth and development.

**References**


Mindfulness: Implications of and Evidence for Use in Couples Therapy
Adam Lockwood

Abstract
The practice of mindfulness has been actively integrated into psychotherapy for decades. Mindfulness has been successfully used to reduce stress, prevent relapse of major depression and substance abuse, and for the treatment of borderline personality disorder. However, its use in marriage and couples therapy settings is still somewhat novel (Carson, Carson, Gil, & Baucom, 2004; Gehart & McCollum, 2007). In this brief article the basic tenets of mindfulness and Buddhist philosophy are explained and their application in couples therapy and therapist training are explored. Specifically, the benefits of non-attachment and mindfulness to both clients and counselors are discussed as are the changes needed to promote mindfulness cultivation in therapist training programs. Additionally, research into the effectiveness of Mindfulness on marital satisfaction is examined.

Mindfulness and the Four Noble Truths
Mindfulness is a concept which is hard to define but is largely based upon Buddhist religious and philosophical foundations (Bodhi 2011; Gambrel & Keeling, 2010). According to Buddhism there are four noble truths which can be roughly expressed as: 1) Life is suffering. 2) The source of suffering is our attachments to objects, ideas and constructs. 3) The reduction or cessation of attachment reduces suffering. 4) The path to this reduction of suffering is through concentration, wisdom and morality which are gained through non-attachment or acceptance of suffering (Gehart & McCollum, 2007; Teasdale, 2011).

Mindfulness is the most common way of cultivating non-attachment and involves becoming aware of internal and external occurrences and attending to them without judging or ascribing cognitive or emotional value to these phenomena. While the most widespread form of practicing mindfulness is through seated mediation, this is not the only way to do so Gehart & McCollum, 2007; Shapiro, Oman, Thoresen, Plante & (Flinders, 2008). Gambrel and Keeling (2010) explain that mindfulness can be practiced

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anytime a person pays attention to cognitions, sensations and emotions without automatically reacting to them and can be done while practicing yoga, walking or even washing dishes.

**Suffering and Therapy**

Mindfulness and Buddhist principles can also be applied to the therapy setting. For instance the idea that to be human is to suffer is very much in-line with the reason why individuals seek treatment. Most, if not all, individuals who come into couple’s therapy do so because they are suffering distress. This may be due to some acute stress like having to cope with the loss of a child, but most often is attributed to common, consistent themes. Indeed, having a sense that one is not achieving one’s goals, feeling that a marriage is stagnate, and other common forms of distress account for the majority of reasons why couples seek counseling. Additionally, research shows that around 69% of marital quarrels revolve around the same, unresolved, issues that are largely personality characteristics instead of external events (Gehart & McCollum, 2007). Furthermore, the prevalence of Americans diagnosed with a psychiatric diagnosis is high, with an estimated 26.2% of adults suffering from a diagnosable mental illness in any given year (National Institute of Mental Health, 2008). Additionally, many others who do not meet the criteria for a mental disorder according to the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) may be close (e.g. they may meet 4 out of 5 of the criteria). This provides support for the first noble truth; it is in our nature to suffer (Gehart & McCollum, 2007).

However, in the United States the idea that with enough work we can live without suffering is pervasive. This belief in the ability to conquer all adversity has led to many viewing suffering as a life failure to be hidden which only adds to distress. This is especially true when there is no satisfactory outcome. A good example of this is a couple who must choose between staying in a dysfunctional marriage for the sake of their children and separating for their own happiness. In such a case it seems that both choices will lead to suffering (Gehart & McCollum, 2007).
Acceptance/Non-Attachment

These lose-lose situations present a problem for the therapist who is often expected by clients to come up with a solution which is painless. When this is not possible the couple often becomes unable to make any choice at all. This is a fundamental dilemma for change-therapy models; sometimes change will not lessen suffering. However, if change is not the answer, what is? According to Buddhist psychology, acceptance is the key (Gehart & McCollum, 2007; Hayes, & Plumb, 2007).

The idea of acceptance is not entirely new to family therapy. Both Integrative Couples Therapy (ICT) and Internal Family Therapy (IFT) view marital therapy as being composed of change and acceptance. IFT encourages clients, through internal dialogue, to recognize that the aspects of themselves which they view as negative are often protective. Once this insight has been achieved, acceptance and compassion of one’s own perceived flaws can begin. Additionally, as the client achieves a higher level of acceptance and compassion for himself, he is less inclined to be judgmental of his partner which ultimately leads to positive changes in his relationship (Schwartz, 2013). According to ICT, behavioral techniques should be the first approach used to improve marital quality but in more intractable situations, the solution is to encourage acceptance. ICT proposes two components in this process: viewing problems as a potential way to become more intimate and abandoning efforts to change one’s partner. Through this process change often occurs, paradoxically, as acceptance of one’s partner can often be the most effective means of generating change (Gehart & McCollum, 2007).

As mentioned previously mindfulness is a way to cultivate non-attachment as attachment is the most common cause of suffering. This is because when we are attached to objects or ideas we affix stories or expectations to them and suffer when these stories are not played out. Additionally, the more attached we are to a story the more we suffer when this occurs. This idea is at odds with approaches that utilize sociopolitical therapies such as narrative therapy which externalize distress, viewing it as being caused by the dominant culture (Gehart & McCollum, 2007; White, & Epston, 1990). Instead of ascribing distress to the dominant culture, Buddhist psychology
emphasizes the importance of reducing one’s investment in the dominant social discourse without being confrontational towards the discourse. This allows the reduction of suffering by decreasing the level of attachment to how things in life “should” be and increasing acceptance of what “is” (Gehart & McCollum, 2007).

It is important to note that non-attachment is not detachment. Detachment suggests that one be disconnected or distanced while non-attachment requires the individual to be patiently engaged while at the same time not placing value on an experience as being “good” or “bad.” To do so we must put aside cultural social narratives and previous life experiences and simply be in the moment (Gehart & McCollum, 2007; Zimberoff & Hartman, 2002). This is very much in-line with experiential approaches to family therapy which focus on the present, immediate experiences of the family members and posit that experiencing the present leads to awareness and this awareness, to change (Moan, 2012).

**Compassion/Equanimity**

Another core Buddhist concept is compassion. Mindfulness is a method by which compassion is cultivated and self-compassion is a key mechanism which accounts for the effectiveness of mindfulness based therapy (Germer & Neff, 2013). Mindfulness allows us to be aware of, and accept, all of our emotions and physiological states including those which are uncomfortable (e.g. anxiety, hopelessness) because these states are natural. Doing so increases our compassion for ourselves and others as we come to terms with the suffering which is inherent to the human condition. Additionally, as we become more mindful and accepting of suffering we learn to be better able to replace judgment of these states with a more kind, loving response. Last, this acceptance helps to cultivate a calm mind as we come to peace with uncomfortable emotional states (Gehart & McCollum, 2007).

**Implications**

Now that the basic concepts of mindfulness and Buddhist psychology have been addressed it is appropriate to examine their implications for practice. As mentioned earlier, mindfulness helps to cultivate equanimity (i.e., mental calmness), compassion and non-attachment. These are all characteristics which can be very beneficial to the
therapy process (Feldman & Kuyken, 2011). For example, remaining non-attached but fully engaged is very useful for the therapist. It allows her to remain open to what the client brings into the session without judgment, but with compassion and openness. Non-attachment to outcomes allows the therapist to focus on the therapy process instead of goals which, if the counselor becomes too concerned, can hinder the therapy process. Non-attachment is also useful when clients are struggling with terrible circumstances such as abuse and cruelty that are part of the human experience; when counseling such individuals, adopting a non-attached stance allows the therapist to be submerged in the client’s inner world without being carried away by it. Additionally, if the client is the perpetrator, non-attachment allows the therapist to address the client’s impulses without judgment (Gehart & McCollum, 2007).

Being mindful and therefore non-judgmental allows the therapist to “befriend” problems instead of rushing to “fix” them. This often leads, paradoxically, to perceived problems becoming our best “friends” in that they lead to learning about ourselves, our relationships and life in general which promotes wisdom and compassion. Therefore, both psychological and physiological problems are viewed as messages which provide insight, not as symptoms to be treated. When therapists change their relationship to a couple’s problems and begin to view them as “friends” the pressure to cure them is reduced and the counselor is allowed to become more curious and interactive. Additionally, this process reduces the therapist’s biases about the problem and clients. This frees the therapist to then introduce this unbiased viewpoint to the clients and encourage them to gain wisdom from the problem instead of trying to avoid or eradicate it. If this introduction is successful, the couple can begin to change their attitude about their problems and become more flexible and creative in how they address them. Also, it is important to note that this idea is not too far from systematic family therapy techniques such as reframing and positive connation which encourage the client to reexamine problems in a different, positive light (Weeks & Treat, 2001), and is therefore not a completely novel concept to family therapy (Gehart & McCollum, 2007).
Training

Training in mindful therapy requires significant changes in two aspects of current education and supervision: the therapist should be taught compassion before theory and more emphasis should be placed on the therapist’s self. Therapy without compassion for humanity does not appear to be beneficial in the least. Also, compassion does not come from a detached professional role but from connecting to other humans. Therefore before academic or mental health training, therapists should begin by learning to feel compassion without becoming caught up in the desire to rescue the client. This can be done through experiential exploration designed to heighten students’ sense of compassion and humanity and make them more aware of the suffering which their fellow humans and they themselves endure. One way of doing this is through meditation in which the students are trained to breathe in the suffering of others and to breathe out good will to mankind. Another way of increasing compassion is to have students spend time in homeless shelters or with the mentally ill engaging in casual conversation. By having students engage in experiential compassion building activities before learning diagnosis and treatment techniques, the student is better able to view clients as human beings instead of diagnostic labels or through the lens of their marital problems (Gehart & McCollum, 2007).

Research

The use of mindfulness and the integration of Buddhist thought into psychotherapy is not entirely new. In the early twentieth century Jung explored the use of Buddhist ideas to enlighten therapy (Gehart & McCollum, 2007). However, research into the use of mindfulness and its implications for couple’s relationships is fairly limited. Fortunately for marriage and family therapists interested in utilizing mindfulness, there are an increasing amount of studies examining the relationship between mindfulness and relationship satisfaction (Gambrel & Keeling, 2010). This article will now shift its focus from theory to evidence for effectiveness of mindfulness.

There are several recent studies that examine the role of mindfulness on couple’s relationships which have found significant correlations between mindfulness and relationship satisfaction (e.g., Jones, Welton, Oliver & Thoburn, 2011; Wach &
Cordova, 2007). However, it should be noted that whenever correlational research is conducted it is not possible to infer causation and that correlations can be attributed to many other covariates. For example highly mindful individuals may, in general, be more empathetic, have more positive views of others and be more compassionate; these factors may be what account for increased relationship satisfaction and not mindfulness. With this caveat in mind, the research is still very promising (Gambrel & Keeling, 2010).

Wachs and Cordova (2007) studied the relationship between mindfulness, emotional skills, and relationship satisfaction using a small sample (33 couples). Mindfulness was measured using the *Mindful Attention Awareness Scale* (MAAS), which measured attention to the present, a core characteristic of naturally occurring mindfulness. Marriage satisfaction was gauged using the *Marital Satisfaction Inventory-Revised* (MSI-R) a self-report measure which assesses aggressive behaviors in a marriage and the *Dyadic Adjustment Scale* (DAS) which measures couples’ agreement on issues and activities such as sex, religion and philosophy. Emotional skills were measured using the *Interpersonal Reactivity Index* (IRI) which measures level of empathy ability, the *Self-Expression and Control Scale* (SECS) which assesses how a person controls and expresses hostility and anger, the *Emotional Control Questionnaire* (ECQ) which assesses a person’s strategies for controlling emotion and the *Toronto Alexithymia Scale* (TAS-20) which gauges a person’s ability to identify and communicate emotions (Wachs & Cordova, 2007).

The results from the Wachs and Cordova (2007) study provide evidence that mindfulness is beneficial to intimate relationships. Specifically, a significant correlation between marital adjustment (as measured by the DAS) and mindfulness was found suggesting that greater attentiveness to the present helps couples maintain healthy relationships by improving their quality of emotional interactions from moment-to-moment. Next, correlations between the subscales of the TAS-20 and the MAAS suggest that partners who are higher in mindfulness are better at identifying and expressing their emotions. Also, marriage quality was negatively correlated with anger expression as measured by the SECS. Finally, it was found that the ability to identify, express and control emotions mediated between mindfulness and marital quality. This
was shown through an “anger reactivity” variable in the SECS which regression analysis showed fully mediated the association between marital quality and mindfulness (Wachs & Cordova, 2007).

The authors posit that these results suggest mindfulness allows the person to be more in contact with his/her own experience as opposed to the non-Buddhist state of being, which revolves around avoidance or distraction. As a result of this state of awareness, mindful individuals watch their feeling states more closely and become more tolerant as feelings like anger come and go. This is in contrast to less mindful individuals who bolster negative feelings by attempting to suppress or them or by rumi2nating on them. Through this process of non-judgmental awareness, mindful individuals learn skilled emotional repertoires and have decreased impulsivity and hostility which leads to greater relationship quality (Wachs & Cordova, 2007).

Jones, et al. (2011) also found evidence that mindfulness may be beneficial for relationships as well as couples therapy. Their study examined 104 married individuals age 19-66 (mean = 35 years) who had been married an average of 8.14 years. Trait mindfulness (defined as the frequency of mindful states an individual experiences) was determined by the Five Facet Mindfulness Questionnaire (FFMQ) which assesses trait mindfulness using a self-report measure. Marital satisfaction was measured by the DAS (described above) and spousal attachment was assessed using the Experiences in Close Relationships-Revised Questionnaire (ECR-R) which uses a self-report questionnaire to gauge attachment-related anxiety and avoidance in spouses.

Like the previous study, Jones et al. (2011) found that mindfulness is significantly correlated with marital satisfaction. Also, they found that the amount of the variance in this relationship can be accounted for by the level of security couples experience due to feeling dependent on, and close to, one another. While the positive relationship between marital satisfaction and mindfulness is not a completely new finding (as supported by the previous study) this experiment does provide new evidence explaining why this correlation exists. This research suggests that spousal attachment provides the mechanism by which trait mindfulness contributes to increased martial satisfaction. Support for this idea is provided by the findings that while the effects of trait mindfulness
on relationship satisfaction was significant, when the mediators (attachment avoidance and attachment anxiety) were taken into account the effect of trait mindfulness were not significant (Jones et al., 2011).

Jones et al.’s (2011) findings suggest that mindfulness on its own does not have a significant effect on relationship satisfaction but, instead, that attachment acts as the mediator. Additionally, the authors purport that mindfulness activates neural substrates which perform automatic, internal appraisals of parasympathetic activation and therefore safety. Furthermore, they contend that this activation promotes growth of the neural circuitry involved in security, safety and positive affect in a romantic relationship and it is this strengthening of neural circuitry which accounts for increased marital satisfaction. Last, the authors posit that mindfulness training can beneficial for couples therapy by enhancing relationship quality through helping to build healthy spousal attachment (Jones et al., 2011).

**Conclusion**

While mindfulness has been used successfully in individual counseling for quite some time, it is a fairly new approach to couples therapy. Mindfulness is based in Buddhist philosophy, specifically the four noble truths: 1) Life is suffering. 2) The source of suffering is our attachments to objects, ideas and constructs. 3) The reduction or cessations of attachment reduces suffering. 4) The path to this reduction of suffering is through concentration, wisdom and morality which are gained through non-attachment or acceptance of suffering (Gehart & McCollum, 2007; Teasdale, 2011). Mindfulness is the most common way of cultivating non-attachment and requires non-judgmental awareness and experiencing of all phenomena. Suffering is a common theme in therapy and mindfulness provides a mechanism for addressing it through acceptance, non-attachment, compassion and equanimity (Gehart & McCollum, 2007).

Therapists may benefit from practicing mindful non-attachment in therapy sessions which allows them to be present for, but not consumed by, clients’ suffering. Also, non-attachment allows therapists to “befriend” problems and use the wisdom gained through this process to enlighten clients and allow them to learn from their suffering. Additionally this increased mindfulness may be gained through experiential
exploration prior to counselors beginning their therapy practice (Gehart & McCollum, 2007).

While mindfulness is a fairly novel concept in couples therapy there is growing evidence supporting its relationship to marital/couple satisfaction. Mindfulness has been found to be correlated with marital adjustment and skilled emotional repertoires (Wachs & Cordova, 2007). Furthermore, mindfulness has been shown to be significantly related to marital satisfaction and there is evidence that this is due to mindfulness’ ability to increase healthy spousal attachment. Due to mindfulness’ apparent ability to increase relationship satisfaction its use in couple’s therapy may be good practice (Jones et al., 2011).

References


Recommended Movies and Television Programs Featuring Psychotherapy and People with Mental Disorders

Timothy C. Thomason

Abstract
This paper provides a list of 200 feature films and five television programs that may be of special interest to counselors, psychologists and other mental health professionals. Many feature characters who portray psychoanalysts, psychiatrists, psychologists, counselors, or psychotherapists. Many of them also feature characters who have, or may have, mental disorders. In addition to their entertainment value, these videos can be seen as fictional case studies, and counselors can practice diagnosing the disorders of the characters and consider whether the treatments provided are appropriate.

It can be both educational and entertaining for counselors, psychologists, and others to view films that portray psychotherapists and people with mental disorders. It should be noted that movies rarely depict either therapists or people with mental disorders in an accurate manner (Ramchandani, 2012). Most movies are made for entertainment value rather than educational value. For example, One Flew Over the Cuckoo’s Nest is a wonderfully entertaining Academy Award-winning film, but it contains a highly inaccurate portrayal of electroconvulsive therapy.

It can be difficult or impossible for a viewer to ascertain the disorder of characters in movies, since they are not usually realistic portrayals of people with mental disorders. Likewise, depictions of mental health professionals in the movies are usually very exaggerated or distorted, and often include behaviors that would be considered violations of professional ethical standards. Even so, psychology students and psychotherapists may find some of these movies interesting as examples of what not to do. In addition, mental health professionals should be aware of how they are portrayed in the popular media, since members of the public may form inaccurate views of what they can expect from psychotherapists. In many movies, the precise diagnosis of the

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person with a mental disorder cannot be determined because the creators of the movie did not give the character the typical symptoms or features of known disorders. However, even these movies can be interesting for a clinician to watch, since diagnosing the character can be approached as a challenging puzzle. For example, does Charles Foster Kane in Citizen Kane have a mental disorder, and if so, what is it? He is certainly narcissistic, but does he have a narcissistic personality disorder? In the film Girl, Interrupted one of the main characters is described as having borderline personality disorder, but does she? Mental health professionals usually notice that another character in the film is much more representative of that diagnosis. Does Forrest Gump have an intellectual disability, autism, or no disorder? Does the main character in Into the Wild have a mental disorder?

The names of some well-known movies about mentally disordered people, such as Psycho, appear on the list in this paper, even though the disorders are not depicted accurately. In the movie Psycho, the Norman Bates character is portrayed as a man with a dissociative disorder and transvestism, but Ed Gein, the real person the movie was based on, had schizophrenia and was a sexual psychopath (LaBrode, 2007). Several movies about people with dissociative identity disorder (DID, formerly known as multiple personality disorder) have been made, but most are misleading depictions of the disorder. For example, the movie Sybil may be entertaining, but recently it was revealed that the real person the movie was based on may not have had DID (Nathan, 2012). Since the book used as a basis for the movie contained fabricated information, the depiction of DID in Sybil cannot be taken seriously. Because of its highly unusual symptomatology, DID has been the subject of many movies and even television programs, such as The United States of Tara. This may lead the public to think that DID is common, but it is actually quite rare; most mental health professionals never encounter a patient with DID (Hersen, Turner, & Beidel, 2007).

In addition to feature films, a few of the most significant television programs are also included on the list. Following the name of each movie or program there is a notation regarding this author’s opinion of the psychological topic or mental disorder that is addressed. In many cases, the note about the disorder being portrayed is simply
speculation, since characters in movies often do not meet diagnostic criteria in any edition of the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2013). Viewers may disagree about the correct diagnosis for the characters in many movies. For example, does the main character in Shutter Island have the diagnosis of schizophrenia, dissociative disorder, delusional disorder, or something else?

It should also be noted that the names for some mental disorders change over time, and the names of some disorders in the notes may no longer be current. For example, the patients in the movie Hysteria might be diagnosed as having conversion disorder today, instead of hysteria. The labels for some mental disorders changed when the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders was published in 2013. For example, use of the term Asperger's Disorder, a mild form of autism, was discontinued in favor of autism or autism spectrum disorder.

Only a very few movies are frequently mentioned as recommended viewing for future psychotherapists. The movie Ordinary People, which won the Best Picture Academy Award in 1980, portrayed a psychotherapist who was likable and relatively competent, although it is difficult to identify his theoretical approach. The film Good Will Hunting also has a generally positive portrayal of a counselor, although it should be noted that at one point the counselor attempts to strangle his client. The television program The Sopranos has been praised as one of the best depictions of psychoanalytic psychotherapy. The single best portrayal of psychotherapy in a movie or on television can be found in the HBO television program In Treatment. In this program, which ran for three seasons, the psychotherapist was portrayed in a relatively realistic way, and he saw a wide variety of clients with various personal issues and mental disorders. More detail on these movies and programs can be found in Thomason (2008).

The list in this paper is not intended to include the names of all the movies that have addressed mental health themes, but rather the most significant or most representative such movies. An effort has also been made to include movies that are of at least moderate quality (in the author’s opinion). Sensitive viewers may wish to check
the MPAA rating of the movies, since they range from G to R. Many movies that could have been included have been left out. For example, there are hundreds of movies that depict criminals and killers who would probably qualify for a diagnosis of antisocial personality disorder. The list does not specify which character in the movie has the mental disorder mentioned, but it will be apparent to most viewers. The movies in the list are presented chronologically by decade.

Recommended Movies and Television Programs Featuring Psychotherapy and People with Mental Disorders, 1919-2012

1919-1940
Private Worlds (1935) (psychoanalysis)
Gone With the Wind (1939) (histrionic personality disorder)

1940-1949
Now, Voyager (1942) (psychiatry; avoidant personality disorder)
Spellbound (1945) (psychoanalysis; dream interpretation)
The Lost Weekend (1945) (alcohol dependence; delirium tremens)
The Dark Mirror (1946) (Rorschach and free association test)
It’s A Wonderful Life (1946) (major depression or adjustment disorder with depression)
Bedlam (1946) (institutionalization in the 18th century)
The Snake Pit (1948) (schizophrenia; institutionalization; electroconvulsive therapy)
Treasure of the Sierra Madre (1948) (paranoia; mood disorder)

1950-1959
Whirlpool (1950) (psychoanalysis; hypnotism)
A Streetcar Named Desire (1951) (histrionic/borderline personality disorder)
Marnie (1954) (psychoanalysis; word association test; kleptomania; female sexual arousal disorder; post-traumatic stress disorder?)
Rear Window (1954) (voyeurism)
The Cobweb (1955) (institutionalization)
The Bad Seed (1956) (conduct disorder)
The Three Faces of Eve (1957) (dissociative identity disorder)
Vertigo (1958) (acrophobia; erotic obsession)
North by Northwest (1959) (psychoanalytic symbolism)
1960-1969
Psycho (1960) (dissociative identity disorder)
Freud (1962) (biographical feature film about Freud)
Days of Wine and Roses (1962) (alcohol dependence)
Lolita (1962) (pedophilia)
Long Day’s Journey Into Night (1962) (substance dependence; histrionic personality disorder)
Pressure Point (1962) (has the first African American psychiatrist in a feature film)
A Child Is Waiting (1963) (intellectual disability)
The Caretakers (1963) (institutionalization)
Shock Corridor (1963) (institutionalization)
David and Lisa (1963) (schizophrenia)
What’s New, Pussycat? (1965) (psychoanalysis)
Repulsion (1965) (schizophrenia)
King of Hearts (1966) (schizophrenia; institutionalization)
Persona (1966) (dissociative disorder)
A Fine Madness (1966) (bipolar disorder)
Titicut Follies (1967) (documentary on institutionalization)
Persona (1967) (major depressive disorder; psychotherapy)
The Odd Couple (1968) (obsessive compulsive personality disorder)
Charly (1968) (intellectual disability)
The President’s Analyst (1969) (psychoanalysis)
Bob & Carol & Ted & Alice (1969) (a parody about the human potential movement)
1970-1979
They Might Be Giants (1971) (schizophrenia or delusional disorder)
A Clockwork Orange (1971) (antisocial personality disorder; behavior modification; aversion therapy)
Harold and Maude (1971) (psychiatry)
Panic in Needle Park (1971) (heroin dependence)
Play Misty for Me (1971) (borderline personality disorder; erotomania)
The Ruling Class (1972) (schizophrenia)
Last Tango in Paris (1973) (depression)
The Gambler (1974) (pathological gambling)
Badlands (1973) (antisocial and borderline personality disorders)
One Flew Over the Cuckoo’s Nest (1975) (institutionalization; inaccurate portrayal of electro-convulsive therapy; schizophrenia; malingering)
The Story of Adele H. (1975) (delusional disorder: erotomania)
Taxi Driver (1976) (schizotypal personality disorder; depression)
Face to Face (1976) (a psychiatrist in existential crisis; depression; suicide)
Sybil (1976) (TV movie) (dissociative identity disorder)
Annie Hall (1977) (sexual disorder; psychoanalysis)
An Unmarried Woman (1977) (adjustment disorder with anxiety and depression)
I Never Promised You a Rose Garden (1977) (schizophrenia; psychiatry)
Equus (1977) (psychoanalytic psychotherapy; schizophrenia; sexual paraphilia)
3 Women (1977) (psychoanalysis; dreams)
The Deer Hunter (1978) (post-traumatic stress disorder)
Invasion of the Body Snatchers (1978) (paranoia)
Being There (1979) (intellectual disability; autism?)
Starting Over (1979) (panic disorder)
All That Jazz (1979) (narcissistic personality disorder)
The Bell Jar (1979) (major depressive disorder; suicide; personality disorder)
The Rose (1979) (alcohol and drug abuse and dependence)
1980-1989
Ordinary People (1980) (major depressive disorder; post-traumatic stress disorder; dysfunctional family relationships)
Raging Bull (1980) (paranoid personality disorder; delusional jealousy; dementia pugilistica)
Dressed to Kill (1980) (homicidal transvestite psychiatrist; dissociative identity disorder?)
Still of the Night (1982) (psychoanalysis; dream interpretation)
Sophie’s Choice (1982) (bipolar disorder; mixed personality disorder; paranoid schizophrenia?)
Frances (1982) (schizophrenia; institutionalization)
Zelig (1983) (narcissistic personality disorder; psychoanalytic psychotherapy)
The Man Who Loved Women (1983) (psychoanalysis; compulsive sexual behavior)
Lovesick (1983) (psychoanalysis; analyst has affair with client)
The King of Comedy (1983) (narcissistic personality disorder)
Crimes of Passion (1984) (group therapy)
Hannah and Her Sisters (1986) (hypochondria)
The Glass Menagerie (1987) (avoidant personality disorder; panic disorder; social phobia)
Fatal Attraction (1987) (borderline personality disorder; erotic obsession)
Wall Street (1987) (narcissistic personality disorder)
Rain Man (1988) (autistic savant)
Dominick and Eugene (1988) (intellectual disability)
Girl, Interrupted (1989) (borderline personality disorder)
Blue Steel (1989) (antisocial personality disorder)
Sex, Lies and Videotape (1989) (schizoid personality disorder)
1990-1999
Miami Blues (1990) (antisocial personality disorder)
Misery (1990) (delusional disorder: erotomania)
Arachnophobia (1990) (arachnophobia)
Pacific Heights (1990) (antisocial personality disorder)
Truly Madly Deeply (1990) (bereavement; adjustment disorder with depression)
My Own Private Idaho (1991) (narcolepsy)
Prince of Tides (1991) (psychoanalytic psychotherapy; PTSD due to childhood sexual abuse; the therapist has an affair with her client’s brother)
The Fisher King (1991) (schizophrenia; delusions; hallucinations)
What About Bob? (1991) (obsessive-compulsive and dependent personality disorders; phobias)
Regarding Henry (1991) (narcissism; dementia due to brain injury)
Final Analysis (1992) (psychoanalytic psychotherapy; dream interpretation; sexual boundary violation by the therapist; malingering; idiosyncratic intoxication)
Basic Instinct (1992) (psychotherapist has an affair with her client)
Bitter Moon (1992) (borderline personality disorder)
Benny and Joon (1993) (schizophrenia)
What’s Eating Gilbert Grape (1993) (intellectual disability)
Mr. Jones (1993) (bipolar disorder; sexual boundary violation by the therapist)
When a Man Loves a Woman (1994) (alcohol dependence)
Blue Sky (1994) (bipolar I disorder)
Forrest Gump (1994) (borderline intellectual disability)
Heavenly Creatures (1994) (conduct disorder)
Nell (1994) (an un-socialized “wild child” with symptoms of autism)
Color of Night (1994) (group therapy; dissociative identity disorder)
When a Man Loves a Woman (1994) (alcohol dependence)
Blindfold (1994) (psychotherapy; therapist has affair with client)
Madness of King George (1994) (schizophrenia; dementia; symptoms of bipolar disorder)
Leaving Las Vegas (1995) (alcohol dependence; major depressive disorder)
Primal Fear (1995) (dissociative identity disorder; malingering)
Safe (1995) (somatoform disorder)
12 Monkeys (1995) (schizophrenia; delusional disorder?)
To Die For (1995) (narcissistic personality disorder)
Trainspotting (1996) (substance abuse and dependence)
Sling Blade (1996) (intellectual disability)
Shine (1996) (schizophrenia; mood disorder; personality disorder)
Bliss (1997) (a sex therapist who sleeps with his patients; many ethical violations)
As Good As It Gets (1997) (obsessive compulsive disorder and obsessive-compulsive personality disorder)
The Truman Show (1998) (delusional disorder?)
Boys Don’t Cry (1999) (gender identity disorder)
American Beauty (1999) (histrionic personality disorder)
The Talented Mr. Ripley (1999) (antisocial and narcissistic personality disorder)
Fight Club (1999) (dissociative identity disorder)
Stir of Echoes (1999) (hypnosis)
The Talented Mr. Ripley (1999) (mixed personality disorder)
Mumford (1999) (psychotherapy and issues of confidentiality)
2000-2012
Pollock (2000) (bipolar disorder)
Finding Forrester (2000) (avoidant personality disorder)
28 Days (2000) (alcohol and drug dependence)
A Beautiful Mind (2001) (schizophrenia)
Iris (2001) (Alzheimer’s disease)
Bartleby (2001) (schizoid personality disorder)
The Man Who Wasn't There (2001) (schizoid personality disorder)
K-PAX (2001) (psychotherapy; post-traumatic stress disorder; dissociative fugue)
I Am Sam (2001) (intellectual disability)
Memento (2001) (anterograde amnesia)
Mulholland Drive (2001) (amnesia)
Spider (2002) (schizophrenia)
The Hours (2002) (major depressive disorder)
Insomnia (2002) (insomnia)
Love Liza (2002) (inhalant abuse and intoxication)
White Oleander (2002) (antisocial, dependent, and histrionic personality disorder in three different female characters)
Monster (2003) (borderline personality disorder and antisocial personality disorder)
Capturing the Friedmans (2003) (a documentary on two men accused of pedophilia)
Lost in Translation (2003) (insomnia)
American Splendor (2003) (depression)
Owning Mahowny (2003) (pathological gambling)
Thirteen (2003) (oppositional defiant disorder)
House of Sand and Fog (2003) (major depression and suicide)
Identity (2003) (dissociative identity disorder)
American Splendor (2003) (depression)
Prozac Nation (2003) (major depression)
Sylvia (2003) (major depressive disorder and suicide)
Manic (2003) (group therapy with adolescents)
Matchstick Men (2003) (agoraphobia with panic; tics; antisocial personality disorder)
The Aviator (2004) (social phobia; obsessive-compulsive disorder; agoraphobia with panic; avoidant personality disorder? schizotypal personality disorder?)
Land of Plenty (2004) (paranoid personality disorder)
Birth (2004) (folie-a-deux; bizarre delusion)
Unknown White Male (2005) (dissociative fugue disorder)
Proof (2005) (schizophrenia)
Mozart and the Whale (2005) (autism)
Thumbsucker (2005) (attention deficit disorder)
Canvas (2006) (schizophrenia)
The Devil Wears Prada (2006) (obsessive-compulsive personality disorder)
Bug (2006) (paranoia; delusional disorder; Morgellon’s disorder? folie-a-deux?)
Away From Her (2006) (Alzheimer’s disease)
Lars and the Real Girl (2007) (delusional disorder?)
Numb (2007) (depersonalization disorder; sexual boundary violation by therapist)
Candy (2007) (heroin dependence)
Into the Wild (2007) (personality disorder?)
The Number 23 (2007) (delusional disorder)
Michael Clayton (2007) (bipolar disorder)
The Visitor (2007) (depression)
The Wrestler (2008) (psychological stress and physical disorders)
Revolutionary Road (2008) (major depression)
Seven Pounds (2008) (depression and suicide)
The Soloist (2009) (schizophrenia)
Helen (2009) (major depression)
A Solitary Man (2009) (compulsive sexual behavior; personality disorder?)
Shrink (2009) (grief; depression; adjustment disorder; substance abuse)
Antichrist (2009) (major depressive disorder)
Temple Grandin (2010) (Asperger’s disorder)
Black Swan (2010) (symptoms of psychosis, bulimia, obsessive-compulsive disorder)
Shutter Island (2010) (schizophrenia? dissociative disorder? identity disorder?)
Hysteria (2011) (today hysteria is called conversion disorder)
We Need to Talk About Kevin (2011) (conduct disorder)
Silver Linings Playbook (2012) (bipolar disorder)
Television Programs Available on DVD
The Sopranos (HBO, 1999-2007) (antisocial personality disorder; panic disorder; the
psychiatrist uses psychoanalytic psychotherapy and prescribes medications)
Huff (Showtime, 2006) (psychotherapist whose client commits suicide)
United States of Tara (Showtime, 2009) (dissociative identity disorder)
Web Therapy (Showtime, 2011-2012) (a comedy about web-based psychotherapy)
In Treatment (HBO, 2008-2011) (a wide variety of disorders are portrayed; the psychotherapist uses a generic, eclectic style of psychotherapy)

Discussion

This paper lists 200 feature films and five television programs that depict either psychotherapists, people with mental disorders, or both. Given the length of the list, it might be useful to list the most highly recommended of the many options, based on this author’s opinion. The most recommended movie or program is the HBO series In Treatment; it portrays a relatively realistic psychotherapist in a fairly realistic private practice setting, and also portrays a wide variety of people with personal issues and mental disorders. Gabbard (2008) wrote that “In Treatment splendidly demonstrates each patient's uniqueness and complexity,” and “the writing, acting, and directing are first-rate” (p. 29).

Of course, even the television program In Treatment is not perfect; the therapy sessions are greatly compressed and more dramatic than typical psychotherapy sessions, and the therapist never conducts intake interviews, talks with clients about insurance reimbursement, or writes notes about his sessions, which is highly unrealistic. He has some unprofessional encounters with some clients and is sued by one client. He does see his own therapist to work on his personal issues, which is good, and his sessions with his therapist are some of the best of the series.

The most highly recommended movies that depict counselors or psychotherapists are Ordinary People and Good Will Hunting. All psychotherapists would benefit from watching these movies and considering the pros and cons of the therapists’ behaviors. Miller (1999) wrote an article on how to use Ordinary People to teach psychodynamic psychotherapy, and Koch and Dollarhide (2000) wrote an analysis of Good Will Hunting.

The best movies that depict schizophrenia are A Beautiful Mind, The Fisher King, The Soloist, Shine, and Canvas. For movies about institutionalization, see One Flew Over the Cuckoo’s Nest and Frances. For intellectual disability and autism, see Charly, Rain Man, Forrest Gump, Sling Blade, and Temple Grandin. For dementia see
Regarding Henry, Away from Her, and Iris. For disorders of children and adolescents see Heavenly Creatures, Nell, Thumbsucker and Thirteen.

For movies about bipolar disorder see Mr. Jones, Pollock, Michael Clayton, and perhaps Sophie’s Choice. For depictions of depression, see Sylvia, Prozac Nation, and Helen. For post-traumatic stress disorder, see Good Will Hunting, The Deer Hunter, Born on the Fourth of July, and Prince of Tides. For obsessive-compulsive disorder see As Good As It Gets and The Aviator. For pathological gambling see Owning Mahowny. For alcohol dependence see Days of Wine and Roses, The Lost Weekend, Leaving Las Vegas, When a Man Loves a Woman, and 28 Days. For substance dependence see Trainspotting and Candy. For malingering see Primal Fear.

There is at least one good movie that depicts a person with each of the ten main personality disorders included in the DSM-IV-TR (2000). It should be noted that few of these movies are technically accurate portrayals according to standard diagnostic criteria. Even so, they can vividly illustrate some of the main features of the disorders. For paranoid personality disorder see Raging Bull. For schizoid personality disorder see Sex, Lies, and Videotape and Bartleby. For schizotypal personality disorder see Taxi Driver. For antisocial personality disorder see Badlands and Monster. For borderline personality disorder see Fatal Attraction and Girl, Interrupted. For histrionic personality disorder see Gone With the Wind and A Streetcar Named Desire. For narcissistic personality disorder see Wall Street, All That Jazz, and The King of Comedy. For avoidant personality disorder see The Glass Menagerie and Finding Forrester. For dependent personality disorder see What About Bob? For obsessive-compulsive personality style see The Devil Wears Prada.

For comic relief, recommended movies with prominent psychological themes are Zelig, Annie Hall, Being There, A Couch in New York, and Hysteria. Movies about psychotherapy that have major actors and are so bad they may be entertaining to psychotherapists include Final Analysis, Prince of Tides, Dressed to Kill, Bliss (1997) and The Color of Night.

Some organizations have recommended specific movies that address issues of mental health. The National Alliance on Mental Illness (2011) published a list of the top
ten movies about mental illness. The movies are, in order beginning with the best: A Beautiful Mind; The Fisher King; Ordinary People; One Flew Over the Cuckoo’s Nest; Girl, Interrupted; The Soloist; The Hours; Benny & Joon; Shutter Island; and Canvas.

Conclusion

This article has listed many movies and some television programs that have themes related to psychotherapy or that have characters with mental disorders. Viewing them can provide counselors and psychologists with hours of practice at diagnosing common mental disorders or debating the ways in which the films usually do a poor job of portraying psychotherapists and people with mental disorders. Some particularly good movies and television programs have been identified that could be used in counselor training programs or courses in psychopathology and diagnosis.

Viewers of the movies mentioned in this article should understand that their depictions of mental disorders may not be authentic; they are often marred by oversimplification, and they may provide misinformation (Bhagar, 2005; Greenberg, 2009; Ramchandani, 2012). For example, the films A Beautiful Mind and Spider emphasize the visual hallucinations of the characters, but auditory hallucinations are much more characteristic of schizophrenia. For the sake of drama, movies tend to have a linear plot, and neglect the nuance and complexity of mental disorders. Such oversimplification can reinforce stereotypes. Many movies suggest that childhood trauma causes a wide variety of mental disorders, and suggest that cathartic emotional breakthroughs can instantly cure them. Psychotherapy is usually portrayed as much more active and dramatic than it usually is in real life (Gabbard, 2010). Many of the movies listed here may be seen as providing valuable lessons on what not to do in psychotherapy.

There are many resources available for those who would like to read more about this topic. Several authors have described and discussed how psychiatry and psychotherapy have been portrayed in the movies (Dervin, 1985; Fleming & Manvell, 1985; Gabbard & Gabbard, 1987; Lebeau, 1995; Schneider, 1987) or in certain television programs (Gabbard, 2002). Some books have focused on how people with
mental disorders have been portrayed in the movies (Greenberg, 1975; Robinson, 2003; Wahl, 1995; Wedding, 2009).

Other authors have written about how viewing movies with mental health themes can be therapeutic for people with psychological issues or mental disorders (Hesley, 2001; Niemiec & Wedding, 2008; Sharp & Joiner, 1995; Soloman, 1995). Thomason (2008) and others (Fleming, Piedmont, & Hiam, 1984; Kinney, 1975; Nissim-Sabat, 1979) have written about how excerpts from feature films can be incorporated into coursework on counseling, psychotherapy, and psychopathology. In addition to sources in the professional literature, Wedding and Niemiec (2012) have a blog on current movies that depict people with mental disorders, and an annotated list of movies illustrating psychopathology is available at www.psychmovies.com. Seeing movies with psychological themes and characters can be an entertaining way to practice making psychological diagnoses, which is often a prerequisite for proper treatment.

References


Conceptual Change as it Relates to Motivation to Engage in Regular Physical Exercise
Sherri Ruggiero

Abstract
Most models of human balance and wellness contain similar essential dimensions such as social, emotional, spiritual, environmental, occupational, intellectual, and physical. The physical domain acknowledges the individual’s need to engage in physical activity and make healthful choices with regard to what the body is exposed to. It is in this physical domain that most Americans are generally operating at a deficit. Research documenting the benefits of engaging in regular physical exercise aligns with many of the elements included in wellness models: physical, psychological, quality of life, as well as social and financial concerns of the extended community. Despite this understanding, the vast majority of the population does not engage in routine exercise despite conveying an intention to do so. This disparity between thinking and behaving should signal those in the behavioral health field there is an unmet need. Psychologists and related skilled helpers can use this information to better address their patient’s needs and overall health goals. Whether the goal is to promote behaviors that decrease disease or alternatively increase wellness, physical exercise accomplishes both simultaneously. Mental health professionals should feel confident prescribing a health regimen for their patients that includes regular physical exercise, and bridges the gap between intention and action. Understanding the patient’s specific barriers, promoting conceptual change, and addressing motivational issues are complex tasks. The information shared in this paper is a starting place for unraveling this complexity, laying the foundation for conceptual framework, and inspiring mental health professionals to make progress both personally and professionally in the domain of physical exercise.

Research on the topic of participation in regular physical exercise has been abundant, the health benefits are clearly documented, numerous safe and effective exercise modalities have been identified, and various populations have been described in terms of their level of engagement in regular physical exercise. The World Health Organization (2002) reports that sedentary lifestyle is one of the ten leading causes of death and disability, and lack of physical exercise leads to more than two million deaths per year.

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The Healthy People 2010 objectives recommends 30 minutes of moderate activity, five days per week, or 20 minutes of vigorous activity, three days per week (USDHHS, 2005). The importance of this topic cannot be overstated, and yet approximately 15% of the U.S. population actually engages in physical exercise on a regular basis (U.S. days per week, or 20 minutes of vigorous activity, three days per week (USDHHS, 2005). Department of Health and Human Resources, 1998). Weinberg & Gould (2007) have compiled statistics from a number of studies that confirm inactivity rates in the United States and indicate that: 1) only 10 - 25% of American adults are active enough to maintain or increase cardiorespiratory and muscular fitness; 2) only 10 - 15% of adults participate in vigorous exercise regularly (three times a week for at least 20 minutes); 3) 30% of adults do not participate in any physical activity; 4) 50% of youths from 12 to 21 years of age do not participate in regular activity; and 5) physical activity declines steadily through adolescence from about 70% at age 12 to 30% by age 21. Given the ample research indicating the numerous benefits of routine physical activity and the lack of consistent engagement in exercise, the salient question is: “What is the relationship between conceptual change about physical exercise and one’s motivation to engage in regular physical exercise for overall wellness?” The purpose of this paper is to discuss the importance of this topic and gain understanding of the relationship between conceptual change about physical exercise and one’s motivation to engage in regular physical exercise for overall wellness.

**Physical Health Benefits of Regular Physical Exercise**

There are numerous physical health benefits of regular exercise ranging from disease prevention, symptom reduction, to amelioration of some diseases. The quantity of exercise that produces the optimal health effect varies from situation to situation; however, the general prescription seems to align with the recommendation for adults from the American College of Sports Medicine (ACSM) and the American Heart Association (AHA): moderate-intensity activity (i.e., noticeable acceleration in heart rate such as a brisk walk) for 150 minutes per week, or greater than thirty minutes a day, five days each week; vigorous-intensity activity (i.e., causing rapid breathing and substantial increase in heart rate such as jogging) for at least twenty minutes a day, three days
each week; 8-10 endurance exercises 2-3 times per week; flexibility exercise 2-3 days a week; and neuromotor exercise (i.e., functional fitness training) 2-3 days a week (ACSM, 2011; Haskell et al., 2007). Prospective observational studies indicate an inverse relationship between disease outcomes and regular physical activity which include thromboembolic stroke, type 2 diabetes mellitus—exercise may improve insulin function by increasing the muscle’s demand for glucose and resulting in a drop of nearly 60% for insulin resistance—obesity, breast cancer, cardiovascular disease, hypertension, osteoporosis, colon cancer, blood triglycerides, cholesterol & LDL cholesterol, lung and multiple myeloma cancers, prostate cancer, improved mortality rates, musculoskeletal health and sarcopenia, arthritis, maintenance of normal strength, peak bone mass, and joint structure (Haskell et al., 2007; Kravitz, 2007; Rethorst et al., 2009).

**Psychological Benefits of Regular Physical Exercise**

Often, when health benefits of physical exercise are discussed the focus gravitates to physical health; however, research is uncovering a wide variety of psychological benefits that are of significant value. Routine physical exercise has the capacity to improve mental health functioning, reduce the symptoms of psychological diagnoses, reverse mental health diagnoses, and even promote neurogenesis (i.e., production of new neurons).

Once again, the type and quantity of physical exercise will vary slightly from situation to situation, but generally conforms to the recommendation for adults from the American College of Sports Medicine and the American Heart Association mentioned previously (Haskell et al., 2007). Referencing research from the ACSM/AHA (2007), there is an inverse relationship between disease outcomes and regular physical activity and disease which includes anxiety (Wipfli, Rethorst, & Landers, 2008), depression (Archer, 2008; Carlson, 2013), mood states, stress, cognitive function, vitality, satisfaction with life, and chronic stress (Haskell et al., 2007; Kravitz, 2007; Wilson et al., 2008). A meta-analysis of randomized trials performed by Rethorst et al. (2009) determined that treating depression with routine exercise was just as effective as psychotherapy and antidepressant medications (without the potential side-effects such
as high monetary costs, mania, sleep disturbances, lethargy, weight loss, sexual dysfunction, bleeding, seizures, and suicidal ideations), significantly lowered depression scores, with nine out of the sixteen exercise treatment groups classified as ‘recovered’ at post-treatment, and another three classified as improved (Rethorst et al., 2009). As a result of this meta-analysis Rethorst et al. (2009) were able to provide exercise as a treatment of depression with a level 1, Grade A evidence rating. Physical exercise as adjunctive treatment for schizophrenia, somatoform disorders, and substance abuse has demonstrated positive results as well (Tkachuk & Martin, 1999). Research on the effects of regular physical exercise on the brain suggests that increased blood flow to the brain due to physical exercise is associated with neurogenesis (Carlson, 2013). Current research clearly supports the assertion that regular physical exercise has the capacity to positively impact psychological functioning.

Effects on Quality of Life Resulting From Regular Physical Exercise

Given the research data that supports the use of regular physical exercise for increased physical and psychological wellness it is logical that quality of life also has the potential for improvement. Self-esteem, self-efficacy, self-worth, and affective mood are all influenced by regular physical exercise and are indicators of quality of life. These constructs will be defined in the following section, and applicable research will be offered in support of the notion that regular physical exercise has a positive impact on quality of life.

Self-esteem has been described by Rosenberg (1965) as “…favorable or unfavorable attitude toward oneself…important for a successful and satisfying life and is a central aspect of psychological well-being” (p. 15). According to McAuley et al. (2005), physical self-esteem can be understood as being correlated with physical condition and an attractive body, and strength with correlation coefficients of .40, .33, and .24 respectively. Multiple research studies have concluded that regular physical exercise has a positive influence on self-esteem, and therefore quality of life (Kravitz, 2007; Moore, Mitchell, Bibeau & Bartholomew, 2011; Rethorst et al., 2009; Wilson, 2008).

Self-efficacy is a domain specific construct and is focused on a particular task, skill, or situation. It can be explained in terms of a person’s confidence in their ability to
carry out the behaviors required to realize a desired outcome (Bandura, 1986). McAuley et al. (2005) found a statistically significant correlation between physical activity and self-efficacy. Conversely, self-efficacy has been found to be a robust predictor of health behavior, including physical activity (Bandura, 1986). Self-efficacy has been determined through various studies to both play an important role in encouraging exercise behaviors, as well as being positively affected by participation in physical exercise, both of which contributes to increased quality of life (Duncan et al., 2011; McAuley et al., 2005).

Self-worth is considered to be the way in which one regards the self, including personal judgments of worthiness, self-acceptance, and a sense of competence (Huberty, 2012). When one feels an elevated sense of self-worth, quality of life is positively influenced. In a study by Huberty et al. (2012) self-worth was found to be significantly correlated with regular physical activity. In this study, female participants that self-reported engaging in regular physical activity had higher physical activity knowledge (knowledge about physical activity and its relationship to physical activity that may provide the individual with a sense of empowerment to be successful in physical activity), social knowledge (greater levels of support from loved ones, exercise instructors and other exercise participants increased the likelihood that one would engage in more physical activity), emotional knowledge (understanding the importance of taking care of oneself and quality of life through participation in physical activity and that this may reflect favorably onto others in their lives), and general self-worth (includes physical condition, attractive body, and strength) than those reporting only some or no physical activity. Therefore, regular physical exercise can be viewed as being positively associated with several domains of self-worth and therefore increased quality of life.

Effect Of Regular Physical Exercise At The Macro Level

So far the discussion of regular physical exercise has focused on the individual; however, each individual has a corresponding impact on those in their family, community, and society. As previously mentioned in this paper, physical inactivity can be associated with numerous physical health problems including coronary heart disease, certain types of cancer, diabetes, stroke, as well as other serious conditions.
These preventable diseases have a significant impact on lost work time, medical expenses, premature death, and disability which are estimated to exceed a cost of $70 billion a year (Macera, 2009). In addition, obesity and inactivity accounted for 9.4% of the health care expenditures in the U.S. in 1995 (Macera, 2009). Also, more than a third of high school students do not engage in regular, vigorous, physical activity. Research by Macera (2009) states that from 1991-1999 student enrollment in physical education classes reduced from 41.6% to 32.2%. Health behavior choices, especially poor ones, can have an impact on family and friends when sickness and disease keep them from engaging in meaningful and mutually beneficial relationships. It can be concluded that the effects of engaging in regular physical activity extends well beyond the individual, and attention to the wide-spread problem of inactivity is truly a societal concern.

**The Gap Between Exercise Intention and Execution**

The growing body of evidence that validates the overall benefits of physical exercise has created an awareness and movement toward implementation of regular physical exercise. The ACSM and AHA (2007) report that less than half the U.S. adult population meets the recommendation for physical activity (Haskell et al., 2007). Gibbison & Johnson’s (2011) research asserts that of the 1,513 individuals in their research sample 27% did not currently intend to make changes in their level of physical activity, 24% were considering change, 21% were making small changes, 9% were actively engaging in new physical activity behaviors, and only 19% were actually maintaining a physically active lifestyle. Of this sample, 54% of participants who reported they would like to be engaged in regular physical activities; that is, there seems to be a growing understanding for the importance of regular physical exercise. Despite this interest, only 19% of the research participants actually established physical activity as an enduring behavioral change. In addition, data gathered by the Center for Disease Control and Prevention (2010) indicates that 25% of adults are not active at all. There is an apparent disconnect between desire to engage in regular physical exercise and its execution by these well-intentioned individuals.

Consideration should be given to the individual’s conceptualization of physical exercise as a goal. When the goal of engaging in routine physical exercise becomes
challenging, problem solving must occur if the goal is to be attained. Problem solving is a higher order cognitive process that can be broken down into four parts: formation of the problem representation, creation of a plan, implementation of the plan, and monitoring of this process and end product (J. McClure, NAU Foundations of Learning lecture, April 10, 2013). Errors during the formation of the problem representation are common due to inadequate declarative knowledge, improper schema (i.e., conceptual framework) activation, or poor interpretation of the problem (Voss, 1986). If an individual is an exercise novice, understanding why they are unsuccessful at initiating or sustaining an exercise program may overtax their working memory making it unlikely to resolve. In addition, the aspiring exerciser may not have previous experience to relate to this problem situation successfully. Therefore, the problem representation relating to beginning and sustaining an exercise regimen must be clearly defined for the goal to be realized.

The next phase of problem solving requires the creation of a plan. In terms of understanding how to become engaged successfully in a regular exercise regimen there are a number of common pitfalls that novice exercisers may make since this will be their first time attempting to construct a new plan. The novice may make errors such as planning an exercise routine that is over-ambitious (e.g., working out too long and too frequently in the initial stage) (Peetz, 2011), past behavior (i.e., failed attempts) and self-defeating cognitions (Godin, Sheeran, Conner, Belanger-Gravel, Gallani & Nolin, 2010), as well as not eliciting adequate support (Gibbison & Johnsson, 2011).

As the plan is implemented the novice exerciser may lack adequate procedural knowledge, automatization of physical and mental actions, in order to implement the plan successfully. Inadequate procedural knowledge may take the form of poor nutrition habits to support energy expenditure, poor body mechanics during the motions of exercise that compromise safety and may lead to injury, or patterns of thinking that undermine the enjoyment of physical exercise (Ruby, Dunn, Perrino, Gillis & Viel, 2011). Inadequate or faulty procedural knowledge may be an inhibitory factor in the implementation of the plan to engage in regular physical activity.
Finally, a novice exerciser may not have developed proper monitoring skills or emotional intelligence (Ilyasi, Sedagati & Salehian, 2011) to evaluate and adjust the plan as needed. When an individual is new to a physical exercise routine and misses an exercise session, when social supports fail, when a strain or injury occurs, or when they just feel discouraged, the response may be to give up or decide regular exercise is not possible. There are many barriers an individual will experience in the process to becoming a regular exerciser and it is vital to be able to assess, re-evaluate, and adjust as these barriers present themselves. With these ideas in mind, it becomes clear that the problem solving process applied to establishing regular physical exercise can be challenging due to deficiencies at any of the problem solving phases.

The reader has been presented with information pertaining to the effects of regular physical exercise on physical and psychological health, effects on quality of life, impact on a macro-level, and the gap between contemplation of engaging in regular physical exercise and actual engagement in routine exercise have been presented. This introduction to the importance of regular physical exercise as it relates to overall wellness will be useful in the following discussion of the relationship between conceptual change toward physical exercise and motivation to engage in physical exercise for overall wellness.

**Conceptual Change About Physical Exercise**

Conceptual change about physical exercise will be discussed in terms of cognitive dissonance, development and learning, and information processing theory. These theories provide a framework with which an understanding of this higher order cognitive process is possible. First, it is important to understand that conceptual change is a learning process that transforms an existing conception, idea, belief, or way of thinking (Davis, 2001). There are a number of theorists that have made attempts at explaining the phenomenon of conceptual change. This section will explore these theories, present their strengths and weaknesses, and apply them to the topic of conceptual change about physical exercise and motivation to engage in regular physical exercise for overall wellness.
Cognitive Dissonance

One conceptual change model proposed by Festinger (1957) is known as cognitive dissonance and can be understood as inconsistency between cognitions that produce unpleasant feelings and motivate one to reduce these contradictions. Individuals are compelled to bring their mental processes into alignment to reduce discomfort and restore balance. Cognitive dissonance can be used to create discrepancy between an individual’s attitudes and observed behaviors to elicit motivation for change (Festinger, 1957; Stellefson, Want & Klein, 2006). Cognitive dissonance theory has strong research support, is applicable in many situations in which conceptual change is desired, and it makes predictions about human thought and behavior as well as whether individuals will seek information. This theory does not take into account the variation between individual tolerance level for more or less dissonance, the fact that individuals may choose to relieve dissonance in less preferable ways, nor for persuasive arguments that invoke greater or lesser degrees of dissonance. Researchers at the Mayo Clinic have identified some common cognitions that are not conducive to engagement in regular physical exercise: 1) “I don’t have enough time to exercise.” 2) “Exercise is boring.” 3) “I am self-conscious about how I look.” 4) “I am too tired to exercise after work.” 5) “I am too lazy.” 6) “I am not athletic.” 7) “I might hurt myself.” 8) “I have tried to exercise in the past and failed.” 9) “I can’t afford health club fees.” and 10) “My family doesn’t support my efforts.” (Mayo Clinic staff, 2011). Applying techniques that create cognitive dissonance has the effect of highlighting inconsistencies within the individual’s thought processes; it encourages the individual to examine the difference between what they say they want and what they actually do; discomfort is created by the recognition of the discrepancy; and this process promotes a desire to reconcile the discrepancy in an effort to relieve the discomfort it produced. An example of creating cognitive dissonance could be, “You say that you do not have enough time to exercise yet one of your other concerns is that you are spending too much of your time engaged in ‘screen-time’ (i.e., T.V., computer, smartphone).” In this example a connection is made between thinking there is a lack of time to engage in exercise and the reality that there are other time periods that have
been poorly allocated for watching television, checking Facebook, or playing computer games. Creating cognitive dissonance can lead to cognitive change, and can be the first step in behavioral modification.

Nussbaum and Novick (1982) formulated a very similar model of conceptual change which focused on accomplishing cognitive accommodation through ‘exposing’ (i.e., revealing the individual’s preconceptions), and ‘discrepant’ events (i.e., creating conceptual conflict within those preconceptions in addition to encouraging and guiding conceptual restructuring). These researchers contend that existing conceptual frameworks or schemas are often persistent and interfere with new information. Learners must therefore be made aware of how the preconceptions affect accurate accommodation of new material in an effort to prevent assimilation of existing and new information when inappropriate (Nussbaum & Novick, 1982). The concepts that Nussbaum and Novick present are in alignment with the idea that knowledge transfer must occur for learning to take place. Transfer is a type of learning where knowledge acquired in one situation influences performance in another one and can either aid (i.e., near transfer) or inhibit (i.e., negative transfer) the learning process. With consideration for the process of conceptual change as it relates to engaging in regular physical exercise it is prudent to account for previous knowledge or schema and how it may affect current learning or the transformation of such ideas.

**Development and learning**

The persistence of existing conceptual frameworks (i.e., pre-existing knowledge) is an important element of conceptual change to consider when attempting to change any pattern of thinking, feeling or behaving. Piaget (1978) explained cognitive development in terms of assimilation (i.e., addition of new information to existing scheme), accommodation (i.e., altering existing schemata in relation to new information), and organization (i.e., schema integration) that were determined by maturation and experience. The strengths of Piaget’s theory include the great contribution his work has made on our understanding of developmental psychology and the resulting research it has inspired. Weaknesses of Piaget’s theory of cognitive development include the observation that stages are not distinct, not always attained,
and lack socio-cultural perspective. When applied to conceptual change for regular physical activity it is important to keep in mind that challenges associated with inadequate assimilation, accommodation, and organization can occur. Psychotherapeutic interventions that identify and correct any maladaptive cognitions would increase the likelihood of more healthy views of engaging in regular physical exercise.

**Guidance During Learning**

Conceptual change is also affected by the guidance one receives during the learning process. Vygotsky (1978) proposed the zone of proximal development (i.e., space between what one can and cannot do on their own) in which one learns through the act of guidance in areas where the learner is not capable of problem solving on their own due to lack of maturity in a particular domain. Zone of proximal development is often referred to as ‘scaffolding’ in contemporary education and is considered appropriate support for the individual in their zone of proximal development that can be gradually removed as one moves into competency. Scaffolding is a technique that can assist individuals in their pursuit of making physical exercise a regular occurrence. Guidance may come in the form of psychoeducation, coaching, support groups, and psychotherapy that focuses on problem solving and cognitive change. Strengths of Vygotsky’s theory include its ability to identify the relationship between learning and development, and it also considers the socio-cultural contexts of the individual both within and between individuals within the same and different cultures. Weaknesses of this theory include a lack of accounting for the depth and reasons for the zone of proximal development (e.g. motivation, ability, comparison between individuals at the same age), the zone is not measurable, and lack of knowledge regarding the stability and generality of the zone. When this theory is applied to conceptual change as it relates to the adoption of regular physical exercise it is evident that the use of coaches, psychoeducational interventions, support groups, and problem solving assistance could be beneficial in making lasting cognitive changes.
Motivation to Engage in Regular Physical Exercise For Overall Wellness

The focus of the current section will now shift toward motivation to engage in regular physical exercise for overall wellness. Achievement motivation has been defined by Hareli & Weiner (2002) as, “...the prediction of the outcome, intensity, and persistence of achievement related strivings by an individual.” (p. 183), and by Elliot (1999) as, “...the energization and direction of competence-based affect, cognition, and behavior.” (p. 169). Motivation is a psychological process that leads to behavior, and is characterized by reflective strength (i.e., which psychological process incurs sufficient strength to surpass competing processes), duration (i.e., the length of time the psychological process endures), and direction (i.e., the expectation of what the individual will achieve). It is also beneficial to account for one’s capacity, willingness, and opportunity when considering motivation to perform. Motivation to participate in regular physical exercise can often times seem an elusive ingredient in the successful adoption and implementation of a physical exercise plan—many researchers have attempted to unravel this mystery—and as a result there are several theories of motivation to discuss. Curiosity and a desire to explain motivation extends back as early as Socrates, Plato, and Aristotle, and this search for understanding has continued to more theorists including Edward Thorndike, B. F. Skinner, Clark Hull, Abraham Maslow, Herzberg, and David McClelland to name a few. Theories of motivation have a well-established history, yet the work in this field is far from complete and more contemporary motivational theories have converged to arrive at embodying motivation pragmatically and include: Eccles’ expectancy-value model of motivation (1977), and Weiner’s attribution theory (1985). These two theories will be described next.

Expectancy-Value Model

The origins of expectancy-value model of motivation were conceived by John Atkinson (1964), Bernard Weiner (1974), and later by Jacquelynne Eccles (1977). Eccles proposed that expectancies (comprised of self-concept of ability, perception of task difficulty, others’ expectations, causal attributions, and locus of control) and values placed on a task determine an individual’s behavior (Eccles, 1977). Within this model, motivation to engage in regular physical activity can be explained by examining salient
elements of expectancy and value. Expectancy is influenced by interpretation of events and task specific beliefs (i.e., sex-role identity and personal values, and costs of success or failure). Culture and community indicate the type and amount of physical activity that is appropriate or not, and who it is appropriate for. Individuals receive these messages through mass media, their family of origin, religious affiliation, or other pertinent sources and interpret the messages in important ways. One might receive the message that “boys play sports while girls play house,” or view television commercials that advertise sports equipment, or fitness programs that highlight what is lacking in the individual and what should change to be acceptable. The acceptance and interpretation of such events influence expectancy and the probability that one will be successful in the task of engaging in physical exercise.

Values and goals are determined by one’s personal and social environment. Cultural and community influences contribute to an individual’s personal and social environment, therefore, one’s goal to engage in regular physical exercise will be shaped by family, friends, work and social culture. Goals may also be affected by content (i.e., approach or avoidance) and intensity (temporal proximity and saliency). An individual may be inclined to approach the goal of engaging in regular physical activity if there is a belief that it contains a positive outcome, or may avoid this goal if the belief is that the outcome will be negative. For instance, a person considering the adoption of an exercise program may simultaneously have the thought that exercise will reduce depressive symptoms and improve physical appearance; while at the same time, have concerns that the exercise program will be overly challenging and require a sacrifice of leisure time activities. The approach and avoidance cognitions will compete with each other, and the stronger of the two will determine the goal orientation. Temporal proximity refers to a deadline that is applied to the goal behavior (e.g. such as when a fitness program has a ‘limited time offer’). Salience relates to how prominent or important the goal is, or similarly, how urgent is the desire to reduce depressive symptoms and feel better about physical appearance. The element of value in this model can be further broken down into ‘task value’ and the subtractive concept of ‘cost’. Components of task value include: intrinsic interest value (i.e., value indicating the pleasure that is inherent
in the performance of a task regardless of outcome), utility value (i.e., completion of a task will enhance likelihood of attaining a future goal), and attainment value (i.e., one’s belief about the task and one’s ability to perform it). Cost can be viewed as effort and/or lost opportunity. Value can therefore be quantified as it relates to the motivation to engage in regular physical exercise such that, an individual may enjoy hiking outdoors (i.e., intrinsic interest value); considers it to meet the exercise specifications that contribute to reduced depressive symptoms (i.e., utility value); the quality of performance during the exercise endeavor results in pride or distance goal (i.e., attainment value), combined with the subtractive elements of physical exertion and planning (i.e., effort) and reduced television viewing time (i.e., cost). This equation would look quite different from individual-to-individual based on their own unique background, environment, interpersonal supports, and internal strengths. The expectancy-value model provides value added insight into the motivational factors contributing to one’s engagement in regular physical exercise. Expectancy-value theory provides a strong framework for thinking about how individuals make choices, redirects focus from rewards as the pervasive influence on choice, and makes intuitive sense. Limitations of this model include the difficulty with quantifying perceptions about performance, effort, and reward value; effort and performance may not be directly linked to rewards; and there is an assumption that reward is the only motivator for effort (Eccles, 1977).

**Attribution Theory**

Attribution theory of motivation is most commonly associated with the work of Bernard Weiner (1985). Weiner was interested in the cause of success and failure and how one’s attributions (i.e., beliefs about the cause) affect emotion and cognition as well as motivation as a whole. First, it is important to understand the factors that affect the perception of success or failure: bias, personal history, social comparison, and the response of others. These perceptions lead to attributions characterized by locus of causation, controllability, and stability. When applied to motivation to engage in regular physical exercise these attributions provide a clear understanding regarding cause and effect in terms of motivation. For example, locus of causation addresses whether the
cause of choosing regular physical exercise originates within or outside of the self and affects (intrinsic self) or insulates (extrinsic self) the ego. Controllability is the perception of one’s control in choosing exercise—does a person have influence over the outcome? Stability refers to whether the consequences will be the same across time, with the possibility of this being stable or unstable—not always the same across time. The way the elements in this model are applied will vary from individual to individual in order to arrive at a unique understanding of personal strengths and barriers to attaining personal physical exercise goals. The combination of factors that is most conducive to motivation to achieve (i.e., positive thoughts, feelings and ultimately motivation) are attributions that are intrinsic, controllable, and unstable. An example of this combination as it relates to engagement in regular physical exercise could be represented by the belief that, “I am the only one that can choose to apply myself to a regimen of physical exercise, I will improve with practice, my chance for success is 50/50, and my health and wellness can change depending on the level of effort I put into this endeavor.” Weiner’s attribution theory (1985) provides a solid foundation for understanding motivation and creating a situation with the most likelihood for success, and can be applied to various concepts and settings. Limitations of this theory include inaccurate attributions can cause misconceptions, and many research studies are based on hypothetical events that participants have to make assumptions about.

In conclusion, the complexity of variables that compose motivation to engage in regular physical exercise for overall wellness can at first appear quite overwhelming; however, the broader view of the expectancy-value and attribution models are sufficient to explain essential factors of the psychological process of motivation, and can be utilized as a framework for influencing motivation in a manner that supports engagement in regular physical exercise for overall wellness.

**Conceptual Change About Physical Exercise as it Relates to Motivation to Engage in Regular Physical Exercise For Overall Wellness: Research Findings**

A framework regarding conceptual change about physical exercise as it relates to motivation to engage in regular physical exercise for overall wellness is beginning to emerge; however, significant complexity exists between motivation and conceptual
change as it relates to the concept of regular physical exercise. A brief review of current research findings is provided to increase awareness and ignite interest for further exploration.

• There is a strong relationship between intention to engage in healthier diet and exercise behaviors when appearance is at risk (Stellefson et al., 2006).
• Mental imagery interventions are an effective means for influencing exercise-related cognitions (Duncan et al, 2011).
• Basic exercise education may influence health beliefs and benefit beliefs are strongly and positively associated with intention to exercise (Gill & Sullivan, 2011).
• Exercise habits of close others are associated with one's own exercise habits (depending on perceived support) (Darlow & Xu, 2011).
• Sport and physical activity involvement at any point in the life cycle almost invariably occurs within a social milieu. Effects of group involvement upon the individual will be influenced by his or her status within the group. Researchers found that training and instruction, social support, and positive feedback were the coaching behaviors most strongly associated with athlete satisfaction (Brustad & Babkes, 2004).
• Stable intention to engage in physical activity and perceived behavioral control are the key predictors of changes in physical activity (Godin et al, 2010).
• Exercise for charitable causes can be motivating. Motivators can be divided into primary (i.e., connection with the cause, improved fitness & mutual training support) and secondary (i.e., mutual support, personal growth, fundraising, family/friend response) components (Jeffery, 2012).
• Psychotherapists that exercise themselves are more likely to raise the issue with their patients (McEntee & Halgin, 1996).
• Pedometer-aided, self-monitoring and brief e-counseling increased physical activity (VanWormer, 2004).
• Aerobic exercise can be successfully used as an adjunct therapy for substance abuse (Brown et al., 2010).
• Reframing exercise time commitment increased willingness to initiate physical exercise program (Peetz, 2011).

The information provided in this paper is meant to provide awareness, encourage research, and most importantly to initiate conversations about engaging in regular physical exercise between patients and their therapists. In addition, psychologist and all skilled helpers are urged to assess for level physical activity engagement, identify maladaptive manners of thinking, feeling, and behaving related to physical activity, and engage in deliberate discussions that might promote the attainment of appropriate physical activity goals within themselves and their patients.

References
Center for Disease Control (2007). Prevalence of regular physical


The Psychology and Science of Happiness: What Does the Research Say?

David Dubner

Abstract
This paper surveys the scientific evidence regarding the nature of human happiness by drawing upon numerous studies in social science domains: namely psychology, but also related fields of business leadership and consulting, economics, and behavioral economics. Beginning with a definition and narrowing of the terminology, the review moves toward a brief sketch of measurement methods in the topic. Subjective well-being and happiness are then explored within the framework of psychological theories of happiness, including tension-reduction and goal attainment theories, activity and process theories, and genetic and biologic dispositional theory. Evolving views regarding hedonic adaptation as a key process underlying happiness is examined, as well as Lyubomirsky and Layous’ (2013) comprehensive model of happiness as a framework that encompasses the entire scope of psychological theories regarding happiness. Finally, the correlational evidence related to the various components of happiness is reviewed, concluding with the observation that although strong correlational evidence is linked to well-being, happiness is a concept that defies unequivocal causal attributions because it contains a complex amalgam of interrelated and bi-reciprocal variables.

Defining Happiness
Any serious discussion about happiness must first begin by attempting to define what we mean by the term happiness. In general, happiness can be thought of as an emotional state that reflects a high level of mental and/or emotional well-being. Current scientific perspectives typically frame happiness as a complex binary construct that encompasses subjective elements of both affect and cognition that contribute to well-being. Subjective well-being (SWB), according to Lyubomirsky and Dickerhoof (2006) “represents people’s beliefs and feelings about whether they are leading a rewarding and desirable life (p. 167).” Diener, Oishi, and Lucas (2009), define SWB as “a person’s cognitive and affective evaluations of his or her life as a whole (p.187),” including evaluations of emotional reactions to life events, and also cognitive judgments

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about satisfaction and fulfillment, and especially in important life domains, such as marriage and work (Diener, 2012).

The roots of this dichotomous view of happiness can be traced to discourse that philosophers and religious scholars have engaged in throughout the ages as they have long pondered the nature, causes, and methods of fostering human happiness. The idea of happiness as personal fulfillment; eudaimonia, and the idea of happiness as pleasure; hedonia are rooted in the classical Greek philosophy of Aristotle’s \textit{Nichomachean Ethics} (Waterman, 2013). Aristotle eschewed the idea that the seeking of pleasure (hedonism) is a worthwhile pursuit and ascribed true happiness to eudaimonia a path toward what he called \textit{the good life}, which is characterized by a focus on virtuous activities that reflect the best within us. Eudaimonia is translated from the Greek to mean “flourishing”, and can be defined as the subjective feeling of personal fulfillment that arises when our actions have reflected our highest potentials.

The positive psychology movement, which has its own historical roots in the human potential movement of Rogers and Maslow, has unabashedly adopted the Aristotelian concepts of hedonia and eudaimonia in an attempt to frame the exploration of happiness within the field of psychology. Indeed, positive psychology defines itself as the scientific study of human flourishing (Seligman & Csikszentmihalyi, 2000), and Martin Seligman’s (the oft-noted founder of the positive psychology movement) theoretical model of happiness is based on \textit{the good life} which contains three elements: the Pleasant Life, the Meaningful Life, and the Engaged Life (Seligman, Rashid & Parks, 2006).

The Aristotelian notion that virtuous actions are necessary for true human happiness has been echoed in religious teachings from the Buddhist notion of Nirvana to the Catholic theologian Thomas Aquinas’s description of felicity as a blessed happiness which requires virtuous acts in accordance with natural and divine law. In contemporary models of happiness espoused by positive psychologists, virtues are also known as character strengths, and considered to be a royal road toward increasing personal well-being and happiness. The VIA (Values-In-Action) classification system (Peterson & Park, 2009) and the Clifton StrengthFinder (Clifton Strengths School, n.d.)
are both examples of psychometric assessments that are based on the assumption that
determining one’s personal virtues (strengths) are an essential first step en route to
increasing engagement and concomitant happiness.

The scientific study of happiness and its psychological correlates is a burgeoning
research enterprise; a recent search (March 2013) of the PsychInfo database returned
over 2700 peer-reviewed articles using happiness as a key subject term. Much of the
research conducted on happiness comes under the heading of subjective well-being
(Diener, 2000, 2012). Other happiness researchers use both terms subjective well-
being and well-being interchangeably with the term happiness (Lyubomirsky &
Dickerhoof, 2006; Lyubomirsky, 2008).

Indeed, the term well-being is often used as a proxy for happiness, especially in
the popular press. To the layperson, positive psychology is virtually synonymous to the
science of happiness, a term that is largely the result of the mainstream media’s current
fascination with research on happiness within the domain of positive psychology
(Schoenberg, 2011). Research findings from scientific studies about happiness are
rapidly filtering down for public consumption through a variety of mass media sources
including documentary films (Happy, n.d.), popular magazine articles, books; and entire
websites devoted to the science of happiness (Scientific American, n.d.), and can serve
as a useful starting point for locating scientific research on happiness and well-being.

However, not all research in the scientific study of happiness is conducted within
the domain of psychological research. Some notable exceptions are studies of well-
being in the business and economic domains, with behavioral economics representing
overlap between psychology and the business and economic domains. Much of the
current scientific research on well-being, especially on the global demographics and
correlates of well-being derives from business research. Rath and Harter’s (2010)
model of well-being originates from factor analysis of research conducted by the Gallup,
Inc., a business consulting organization. In this model, the data suggests that
happiness can be conceptualized as high levels of well-being across five domains:
career, social, financial, physical, and community. An interesting sidebar related to this
research is that the aforementioned Clifton StrengthFinder (which purports to measure
personal strengths as a means to happiness) was developed as a result of the life’s work of Donald O. Clifton. Clifton’s seminal business organization Selection Research, Inc. eventually acquired Gallup, with Clifton leading the team of researchers from 1988-1999 (Clifton Strengths School, n.d.). Currently, Gallup Inc. is at the forefront of demographical national and global research that aims to delineate the dynamic nature of well-being with its U.S. National Well-Being Index and Gallup World Poll (Gallup, n.d.). Drawing on these data gathered by the Gallup World Poll (and other global data), specific information about systematic differences between the global well-being of nations and their putative causes has been summarized in the comprehensive World Happiness Report by Columbia University’s Earth Institute. According to the report, the happiest countries in the world are in Northern Europe (Denmark, Finland, Norway), while the least happy are in sub-Saharan African nations (Central African Republic, Benin, Togo). The United States was ranked 11th happiest. The report’s authors conclude that aside from income levels, crucial factors correlating to higher well-being include low political corruption, strong social networks, and political freedom. On the individual level, the correlates of high well-being are mental and physical health, social support, stable family structure, and a secure job (The World Happiness Report, n.d.).

**Measuring Happiness**

Research conducted by the Gallup organization is representative of how happiness is often measured. Individuals are surveyed about their levels of well-being and the information is compiled to develop national indices. The World Happiness Report states that “among various measures of subjective well-being, the primary distinction to be made is between cognitive life evaluations (represented by questions asking how happy or satisfied people are with their lives as a whole), and emotional reports” (The World Happiness Report, p. 11, n.d.). Emotional reports are further distinguished from those that assess current emotional status (how happy are you now) and those that are retrospective (how happy were you yesterday). These questions can be seen as an attempt to get at the dichotomous nature of happiness as discussed earlier.
Psychometric measures of personal happiness and well-being most popular with psychological researchers also reflect this duality. Early measures such as the PANAS (Positive and Negative Affect Scale) attempted to gauge happiness as relative levels of positive and negative emotion (Kercher, 1992). Currently popular psychological measures of happiness tend to be more evaluative in nature, and include the Satisfaction with Life Scale (Diener, Emmons, Larsen & Griffen, 1985) and the Subjective Happiness Scale (Lyubomirsky & Lepper, 1997). In recent past, some researchers have attempted to tease apart the differences underlying the various concepts related to well-being, e.g., life satisfaction, positive and negative affect, self-esteem, and optimism. Using Campbell and Fiske's (1959) multitrait-multimethod matrix analyses, Lucas, Diener and Suh (1996) found high discriminant validity for life satisfaction from positive and negative affect and also from optimism and self-esteem.

Self-report questionnaire assessments have long been the mainstay of research in subjective well-being and happiness, as in many areas of psychological research. For some time now, researchers have been developing hybrid methods to measure happiness in the hope that such measures might increase validity. Although technically still a measure of self-report, Csikszentmihalyi (1997) introduced the Experience Sampling Method (ESM) in the 1970s. The ESM was novel in that it used electronic prompts to signal participants to record their immediate levels of happiness (or other variables such as motivation) rather than relying on retrospective reports. Csikszentmihalyi's ESM utilizes random prompting to generate large quantities of data, that when compiled is assumed to be highly reliable. A recent attempt to improve upon self-report data in the measurement of happiness is described by Zhou (2011) as an approach that combines a happiness evaluation method developed by Ng with the day reconstruction method by Kahneman and associates. According to Zhou, the combined method moves happiness assessment toward more accuracy and standardization.

Theories and Models of Happiness

Psychological theories of happiness fall under three broad categories: need and goal satisfaction theories, process and activity theories, and genetic and personality predisposition theories. In need and goal satisfaction theories, the reduction of
tensions, removal of pain, and the satisfaction of biological or psychological needs are directly related to an organism’s happiness. Freud’s (1950) pleasure principle is an obvious example of this notion. Maslow’s (1969) hierarchy of needs can be seen as an extension of this conceptualization by including the need for psychological growth and actualization as the ultimate expression of human potential and happiness. Carl Rogers (1961) famously argued against the good life as any type of fixed state including happiness, or a state of drive reduction, tension reduction, or homeostasis. In Rogers’ view, the good life is a process and not a state of being.

Whereas need satisfaction theoreticians believe that satisfaction of basic and higher-order needs will lead to happiness, activity and process theorists posit that engaging in activities under optimal conditions leads to a state of happiness or fulfillment. Csikszentmihalyi’s (1997) concept of flow encapsulates this notion and has been embraced by positive psychology researchers, including Seligman and Lyubomirsky. According to Csikszentmihalyi, frequency of flow experiences in life correlates more highly to measures of SWB than do frequency of feelings of happiness (positive affect). Seligman’s aforementioned model of the good life (Seligman et al., 2006) uses flow as a central concept in his description of the Engaged Life. For Lyubomirsky (2007), whose research has emphasized means toward fostering sustainable happiness, increasing the frequency of activities that are truly engaging, i.e. “flow experiences” (p.75) is but one form of intentional activities that Lyubomirsky advocates in the service of boosting one’s baseline level of happiness. The earliest proponent of intentional happiness training was Fordyce (1977, 1983, as cited Boehm & Lyubomirsky, 2009) whose ‘training’ in ‘14 fundamentals’ of happiness gives preliminary evidence to the notion that short-term happiness levels can be boosted. Lyubomirsky considers her research on the identification and development of volitional strategies that contribute to long-term sustainable happiness to be an extension of Fordyce’s pioneering work.

Lyubomirsky’s focus on intentional strategies to foster sustainable happiness has not ignored research evidence that strongly suggests that happiness is in a large part determined by genetics. Lyubomirsky has proposed a model which purports that
sustainable happiness derives from three components in varying proportions. According to this model, roughly 10% of sustainable happiness is determined by life circumstances, 40% by intentional activity, and 50% is determined by a set point of biological and genetic forces. The idea that there is an element of stability in people’s levels of happiness (aside from influences due to life circumstances or the achievement of goals) due to personality dispositions is the fundamental premise of genetic and personality theory.

The notion that there is a substantial genetic component to subjective well-being is strongly supported by scientific research findings (Headey & Wearing, 1989), especially in the study of twins. Tellegren et al. (1988, as cited in Diener, et al., 2009) found that in studies comparing both monozygotic and dizygotic twins raised together and apart, approximately 50% of the emotional reactivity of life circumstances can be explained by genes. Other studies (Diener et al, 2009) have correlated specific facets of personality traits to SWB; cheerfulness (a facet of extraversion) is strongly correlated with high levels of SWB, while depression (a facet of neuroticism) is strongly correlated to low levels of SWB. Dispositional cognitive styles such as optimism and hope are also linked to higher levels of happiness (Snyder et al., 1991, as cited in Diener et al., 2009; Scheier & Carver, 1993, as cited in Diener et al., 2009).

Lyubomirsky’s tripartite model of sustainable happiness is congruent with the fact that psychological research often fails to confirm any single variable as causal, and that complex human experiences often result from the interaction of several dynamic variables. Diener’s decades-long research on SWB provides strong empirical evidence for this view, and notes that for the vast majority of people, the set point of happiness is slightly positive and is strongly influenced by temperament and externals such as cultural norms.

Diener also notes that underlying an individual’s set point of happiness is the process of adaption; that people react strongly in the short term to good and bad events, but tend to habituate (adapt) over time and return to their original level (set point) of happiness (Diener, 2000). Adaptation theory has strongly influenced modern psychological theory about happiness since Bradburn and Campbell (1971, as cited in
Diener, Lucas & Scollon, 2006) described the process and coined the term the hedonic treadmill; a theory that was scaffolded atop Helson’s automatic habituation model (1948, 1964, as cited in Diener et al., 2006). Automatic habituation is seen to be an adaptive process by which psychological systems react to deviations from one’s current adaptation level and allow constant influx of stimuli to diminish in impact. The notion of a hedonic treadmill has gained widespread appeal among many researchers, especially psychologists and behavioral economists, especially since early research with lottery winners and spinal cord victims seemed to confirm the view that humans can adapt to many events in life, and that these events do not exert a substantial long term effect on happiness levels (Brickman, Coates, & Janoff-Bulman, 1978). Brickman and colleagues posited that the theory of adaptation to happiness would explain why both a major favorable event such as winning a lottery and a major adverse event such as becoming permanently paralyzed ostensibly has little effect on SWB. The gist of the hedonic treadmill model is that the pleasures of success and the pain of failure all eventually fade away as we adapt back up or down to our stable set-point of happiness. A notable corollary to this idea is that people are poor at predicting their emotional state in the future (affective forecasting) and tend to overestimate how positive events like winning the lottery might affect their happiness, while at the same time ignoring other factors that will impact happiness levels (Kahneman, 2011).

It should be noted that Headey and Wearing (1989) originally contended that the idea of the hedonic treadmill was subject to over-interpretation. Recent psychological research has confirmed this to be true, and is rapidly revising the traditional view of the hedonic treadmill, which is now known as hedonic adaptation (HA). Diener et al. (2006) note five important revisions to the established theory of HA, all of which are based on individual temperaments and differing underlying components of well-being, and Sheldon and Lyubomirsky (2012) suggests that “well-being decreases substantially after such adverse life events as unemployment, disability, divorce, and widowhood, and does not completely recover… and that strong negative events can throw people permanently ‘off kilter,’ exerting a durable negative influence on them such that they remain at a lower baseline than before” (p. 670).
In addition, Sheldon and Lyubomirsky (2012) have tested moderating variables in a model they have labeled the Hedonic Adaptation Prevention (HAP) model. In their view, both appreciation and variety in change-related experiences can delay the process of HA and a return to lower levels of SWB. Another interesting finding comes from Nelson and Meyvis (2008), who found in six studies that interruptions can undermine and disrupt the process of HA. Their findings strongly suggest that interruptions disturb HA and lead to intensification of both positive and negative experience: pleasant experiences are made more pleasurable and unpleasant experiences are made more irritating through breaks in the experience.

The implication of these data is that despite the general underlying effect of HA, happiness can be both substantially decreased because of significant negative life events, and increased, through the practice of intentional positive activity. The viability of increasing well-being is summarized in a recent journal article by Lyubomirsky and Layous (2013). According to their positive-activity model it is the specific features of activities, persons, and person-activity fit that act to moderate the effect of positive activities on well-being. In addition, their model proposes that the mediating variables accounting for changes in well-being over time are positive emotions, positive thoughts, positive behaviors, and need satisfaction; a comprehensive inventory that neatly encompasses the three broad categories of need/goal satisfaction theories, process/activity theories, and genetic/personality predisposition theories.

Conclusions about Happiness

Current research strongly suggests that the level of happiness an individual experiences depend upon a convergence of both cognitive and affective evaluations of one’s life, and is determined by a variety of factors which can be roughly grouped into three general categories: genetic and biological set point, life circumstances, and intentional activity. Although personality traits such as levels of neuroticism and extraversion are assumed to be relatively stable (Costa & McCrae, 1980), it still remains unclear to what degree traits presumed to be stable are purely biologically determined and are not subject to change. Consider optimism as a prime example of this lack of clarity. While optimism appears closely related to the depression facet of the
personality trait of neuroticism (negatively correlated), it is also considered a cognitive explanatory style that can be learned (Seligman, 1990). Which raises the question that if depression (as learned helplessness) is a form of environmental influence and not a fixed genetic trait, does that hold true also for other facets of neuroticism such as anxiety and impulsivity? The answer to this question is related to the view that psychological traits have strong genetic components, but are not necessarily entirely stable over the lifespan.

With respect to life circumstances, the literature now suggests that although external circumstances exert some influence on happiness, it is proportionally much less influential than the genetic set point or activities an individual pursue. Lyubomirsky (2008) has pegged it at about only 10% has a determinant of happiness. Research conducted and reviewed by Diener and associates (as cited in Boehm and Lyubomirsky, 2009) suggests that demographic factors related to life circumstances such as marriage, age, sex, culture, life events and income explain relatively little of the variance in happiness levels of individuals.

Income has long been studied as a demographic correlate of subjective well-being. Although income has been correlated to subjective well-being both on a within-nation and between-nation basis, the consensus about to what degree income is correlated to well-being is rapidly eroding. Early economic research by Easterlin (1974) gave rise to an assumption popularly labeled the Easterlin Paradox, which stated that beyond a level of basic needs being met, a nation’s overall average well-being is not correlated to income levels. However, Sacks, Stevenson and Wolfer's (2012) analysis of data from the Gallup World Poll reassesses the Easterlin Paradox, finding clear and convincing evidence that there is no satiation point for a nation’s wealth, and there is an unequivocal link between GDP per capita and SWB across countries. Regarding individual income levels, Diener et al., (2009) state that beyond a certain level, changes in personal income do not appear to influence an individual’s SWB significantly. In earlier research, Diener Horowitz and Edmonds (1985) found that multi-millionaire Americans are only negligibly happier than average Americans.
However, what an individual does with one’s income falls under the category of intentional activity, an area highlighted in previous discussion that holds significant potential for increasing personal happiness (Lyubomirsky & Layous, 2013). Several recent studies confirm the view that money can buy happiness; so long as it is well-spent. West, Reed and Gildengorin (1998) found that when controlling for known correlates of depressive status, higher income was associated with lower depressive symptomology in older adults. More recently, Caprariello and Reis (2013) note that spending money on experiences, rather than on material possessions, makes people happier if the experiences are shared with others. This adds to the growing body of evidence that indicates that spending money on others, rather than oneself leads to higher levels of happiness (Aknin et al, 2013).

Happiness is indeed a fuzzy concept—fraught with nuance, jangle about terminology, overlapping constructs and notions about what happiness entails. Yet if we can agree on anything—it is that no matter how ill-defined happiness is, as humans we desire more of it. We value and seek lives that are pleasant, engaged and meaningful. As humans, we prize the many correlates of happiness: more marital satisfaction, greater quality of our social lives, better job performance and higher incomes, greater physical health, longevity, and success (Diener, 2012; Rath & Harter, 2010). We recognize the many benefits and rewards that happiness bestows upon us, and as students of psychology, we also recognize our responsibility and intentionality toward happiness. We must also accept the complex interrelationship between correlational variables related to happiness. Many variables related to happiness appear to be bi-directional and bi-reciprocal in nature, and defy any clear attributions to causality. Lyubomirsky, King, and Diener (2005) state this position succinctly in their title page as they examine the juxtaposition of correlational evidence in the relationship between success and happiness and ponder: Does Happiness Lead to Success? This may well be the seminal question in our scientific inquiry regarding well-being: does happiness lead to success, or does success lead to happiness? The answer appears to be—yes!
References


Instructions to Authors

Counseling and Wellness
A Professional Counseling Journal

Counseling and Wellness: A Professional Counseling Journal is a refereed publication that is published annually by the Beta Alpha Chapter of Chi Sigma Iota at Northern Arizona University. The purpose of C & W is to provide a forum for counselors-in-training and professional counselors to share information that relates to professional counseling in general and issues and counseling approaches that focus on wellness and personal adjustment.

The manuscripts submitted by authors should focus on one or more of the following topics: (a) general issues in professional counseling, (b) wellness approaches in counseling, and (c) personal adjustment themes in counseling. The format of manuscripts can emphasize the presentation of effective professional counseling practices, the discussion of professional counseling issues, or the articulation of research findings in professional counseling.

The submitted manuscripts should not exceed 18 double spaced pages and be prepared according to the Publication Manual of the American Psychological Association (6th ed.). All manuscripts should include an abstract that does not exceed 250 words.

The review process is masked so the first page of the manuscript should not include information about the authors or their affiliations. The authors should make every effort to assure that the manuscript does not contain clues to the authors’ identity. A separate cover letter should include all identifying information about authors that is only used for administrative control.

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