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**Examining individual differences as predictors of reinforcement and  
punishment behaviors within romantic couples dealing with substance  
use: An application of Inconsistent Nurturing as Control Theory**

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**by**

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## **Dedication**

This project is dedicated to my mother, my father, and my brother, each of whom has proven to be an inspiration in faith, education, and athletics. They have brought more happiness into my life than they will ever know. My love for them is unconditional and I remain eternally grateful for their presence in my life.

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## **Abstract**

### **Examining individual differences as predictors of reinforcement and punishment behaviors within romantic couples dealing with substance use: An application of Inconsistent Nurturing as Control Theory**

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The University of Texas at Austin, 2013

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Managing a romantic partner's substance misuse can be challenging, especially in cases where attempts to show support end up worsening the negative behavior. Understanding what may predict one's actions towards a partner who smokes or drinks can help to alleviate some of the difficulty associated with these interactions. Therefore, this study was designed to examine how issues of undesirable substance use are managed within college students' romantic relationships. More specifically, the study applied Inconsistent Nurturing as Control Theory (Le Poire, 1995) to assess the extent to which communication competence, relational uncertainty, perceived network helpfulness, and perceived network hindrance predict the reinforcement and/or punishment of a partner's smoking or drinking. Results from cross-sectional survey data ( $N = 270$ ) revealed that a significant, negative relationship existed between perceived network helpfulness and punishment and that there were significant, positive relationships between: perceived

network hindrance and punishment, relational uncertainty and reinforcement, and relational uncertainty and punishment. However, there was no evidence indicating that communication competence was correlated with either reinforcement or punishment. Additional findings revealed that individuals reporting on their partners' drinking, as opposed to their partners' smoking, were more likely to reinforce the behavior. Men reported on using more reinforcement behaviors than women did and individuals who were in on-again/off-again relationships reported using more punishment than did those in relationships that have not renewed. In addition to examining the communicative behaviors used to address substance misuse, the current study also furthered the development of a scale created for the purposes of quantitatively measuring the constructs of reinforcement and punishment. Implications for studying predictors of reinforcement and punishment strategies are discussed, as is the importance of targeting young adult substance use.

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## **Chapter 1: Introduction**

Communication about health issues within romantic relationships can be met with many obstacles, especially when the two individuals are presented with a need to convey their true intentions while also displaying support for one another. Individuals are often faced with tension resulting from wanting to confront their partners' problematic behaviors while simultaneously wishing to express compassion and understanding. Addressing a partner's substance use can be challenging and finding the right means to go about doing so is not always easy. Furthermore, there are likely to be individual differences and relational factors acting upon the individual that can function as barriers to effective communication. Conversations about these topics can be particularly daunting for individuals in new relationships because these unions have often not had the chance to develop solid foundations of trust and stability. The main objective of this project was to understand how college students' communication about smoking and drinking might be explained by some individual- and relational-level circumstances.

## **Chapter 2: The Prevalence of Young Adult Substance Use**

Communicating about smoking and drinking is a reality that many young adult couples have to deal with given that over twenty million people reported drinking and driving last year and approximately thirty-five percent of young adults reported using cigarettes (National Institute on Drug Abuse, 2011). In addition to the third of college students surveyed nationwide who have reported that they use tobacco products (Schorr, 2011), many young adults are not aware of the risks associated with smoking because of their beliefs that occasional smoking is not detrimental to one's health (Murphy-Hoefer, Alder, & Higbee, 2004). Furthermore, many individuals rationalize smoking one or two cigarettes occasionally as "social smoking" and believe it to be an activity that carries few health risks (Bellum, 2012). Even these intermittent smoking patterns, which characterize collegiate smokers, are associated with negative health outcomes (Caldeira et al., 2012).

Such a lack in awareness of severity and susceptibility contributes to the fact that 10 percent of surveyed college students had their first cigarette after high school and 11 percent of surveyed college students began smoking daily after high school (Naquin & Gilbert, 1996). Starting life as a college student can be a tumultuous time in one's life and given that stressful events are found to be triggers for smoking (Krueger & Chang, 2007; Pomerleau & Pomerleau, 2007; Wills, 1986), it is not entirely surprising that some individuals start engaging in these behaviors during their college years. These findings when taken at face-value are already troubling, but they also allude to psychological ramifications as well. College students who smoke have higher levels of perceived stress when compared to college students who do not smoke (Naquin & Gilbert, 1996) and on

average, smokers tend to feel less balanced and experience depressed feelings (Wittman, Paulus, & Roenneberg, 2010). Given that smoking behaviors can impose their own burdens upon individuals, it is likely that attempts to discuss these issues are often marked by uncertainty. Therefore, examining the variables that predict reinforcement and punishment of smoking can help alleviate some of the hesitancy associated with communicating about this undesirable behavior.

Although the above findings indicate that college life can at times prompt smoking behaviors, there is even greater evidence illustrating that collegiate environments serve as prominent backgrounds for problematic drinking (Harvard School of Public Health, 2008; National Institute on Alcohol Abuse and Alcoholism-NIAAA, 2005). Colleges with high rates of students engaging in heavy drinking behaviors tend to have few policies in place targeting alcohol use, have a weak enforcement of rules, and are surrounded by multiple liquor stores (Harvard School of Public Health, 2005). Furthermore, there are elements inherent within campus life that make it more likely that college students will drink excessively than will their non-college peers; these include residential halls and Greek life, large chunks of unstructured time, exposure to individuals who are of age to buy alcohol for minors, and large amounts of alcohol marketing directed at college students (NIAAA, 2005). It is because of factors such as these that many college students view alcohol as a prevalent and normative part of the social culture (Chung, Lee, & Selker, 2006).

The significance of these findings carries much weight because the scope of this issue extends well beyond the promotion of party cultures. The NIAAA (2012) reported that there are over 1,800 unintentional, alcohol-related deaths of individuals between 18

and 24 years of age. There are close to 600,000 students who sustain alcohol-related injuries, 700,000 students who are physically assaulted by intoxicated individuals, and 97,000 students who are victims of date rape or sexual assault (NIAAA, 2012). Alcohol abuse is also tied to unsafe sex practices, declines in academic performance, drunk driving, suicide attempts, and vandalism (NIAAA, 2012). These statistics convey a need to study how interactions about drinking are dealt with among college students. Even the conversations revolving around these issues that take place at the most micro level (one-on-one) can be very powerful in terms of inhibiting or encouraging dangerous substance use behaviors. The NIAAA (2012) explains that social-norm approaches, which seek to fix misperceptions of peer alcohol consumption, are most effective when applied at the individual level because they provide customized feedback. This suggests that it is crucial to learn more about the nature of communication about substance misuse that occurs within people's personal relationships. Therefore, research in this area should target the motivations and reasons behind an individual's decision to either support or discourage a conversational partner's drinking.

### ***Communicating about Substance Use***

Another important reason for studying how college students communicate about substance use is that many of the individuals within this population may be desensitized to the consequences of excessive drinking and may not regard it as a potentially problematic issue. This can lead to serious breakdowns in communication among relational partners, especially if one individual perceives the drinking to be destructive or undesirable while the other individual views heavy drinking as an acceptable social ritual. Although the consequences of drinking can be quite damaging at an individual level, they

can also be very toxic for one's relationships. Women with alcohol problems were found to have low relational efficacy and hold the belief that alcohol consumption would not have harmful effects on intimacy, whereas women without alcohol problems were more likely to believe that alcohol consumption would negatively affect intimacy and communication with their partners (Kelly, Halford, & Young, 2002). Women are also more likely than men to drink because of relationship problems and feelings of disconnect (Levitt & Cooper, 2010). Alcohol consumption can be especially problematic for relationships when couples do not drink together or consume the same amounts (Derrick et al., 2010; Levitt & Cooper, 2010). Considering that young adults struggling with alcohol abuse can be less likely to commit to marriage and parenthood (NIAAA, 2006), it is beneficial to look at how they communicate about substance use while they are still within this age range (as the current study does). Verbal and nonverbal communication patterns between couples in which one partner misuses alcohol have been shown to be significantly more negative than the communication exchanges between couples in which neither partner drinks (Frankenstein, Hay, & Nathan, 1985; Kelly et al., 2002; Liepman et al., 1989). Even if a couple does manage to bring up the topic of an individual's substance use, these conversations are still susceptible to destructive communication behaviors. Therefore, the current study sets out to shed light on these tensions by looking at some of the individual differences that may influence the directions these conversations take.

If such discrepancies in perceptions exist between romantic partners, it can be very difficult for the functional individual (the partner not engaging in the undesirable behavior) to go about addressing the situation, especially if he/she is worried about

embarrassing or insulting the other individual. There are many ways individuals can go about dealing with behaviors they deem to be undesirable and while some of them may be effective in curtailing the behaviors, some can be toxic for the relationships. Functional individuals have reported on using indirect strategies in their attempts to manage their afflicted partners' habits, which can include withholding sex, manipulating money, and the hiding the keys from partners who are about to make an alcohol or cigarette run (Le Poire, 1995). After considering this, it becomes evident that research in this area may be beneficial if it can encourage college students who smoke or drink to find support for themselves or for their peers who are struggling with substance use. Confronting these issues head-on can be difficult, especially for young adults who are forming new relationships and may already be facing barriers to direct and honest communication (Felson, 1980).

The above review of young adults and substance use illustrates that research is needed to explain communication within couples where undesirable smoking or drinking occurs. Focusing these efforts on college students is a helpful step in this direction considering that they live in an environment that tolerates heavy drinking and are more likely than non-college students to binge drink (NIAAA, 2012). Such findings are vital for the current study because they provide support for studying such potentially harmful behaviors within the context of collegiate relationships. Individuals within this age group need to possess effective communicative tools so that they can engage in helpful discussions about problematic behaviors with their peers. The literature reveals, though, that such conversations between romantic partners, and as a result their actions towards one another, are often riddled with inconsistency (Le Poire, 1992, 1995; Le Poire,



Erlandson, & Hallet, 1998; Duggan, Dailey, & Le Poire, 2008). Furthermore, inconsistent patterns of behavior tend to lead to a worsening of the behavior that one had initially set out to extinguish (Le Poire, 1992, 1995; Skinner, 1953). Therefore, the current study aims to look at the variables that may potentially predict how an individual attempts to manage a partner's undesirable behavior.

### **Chapter 3: Rationale and Focus of the Current Study**

The present study is framed by Inconsistent Nurturing as Control (INC) Theory, a communication-based perspective that links communication in relationships to patterns of substance use (Le Poire 1992, 1995). This project also represents an effort to apply INC in an innovative way. Most of the work applying INC Theory up until this point has shed light on the *outcomes* that reinforcing and punishing problematic behaviors can have; however, there has been very little work done looking at the *predictors* of enacting reinforcement and punishment strategies. In order to understand fully the ramifications of inconsistency within close relationships, there needs to be an awareness of what predisposes an individual's reaction to his/her partner's negative behavior. The current study seeks to fill this gap in the literature by exploring how perceived network involvement, communication competence, and relational uncertainty may influence an individual to either reinforce or punish his/her partner's smoking or drinking. Placing the attention on what is at the heart of these inconsistent reactions will be beneficial for understanding the means by which an individual can help to stop his/her partner's problematic behaviors. There is a need to find a resolution for this problem of inconsistency. The current study was intended to contribute to the obtainment of such a resolution by examining some of the factors that may potentially predict the sending of inconsistent messages. Furthermore, Mischel (1973) makes a strong argument for studying individual differences whenever a researcher is looking at behavior because it is the situational variables and differences in personalities that determine how an individual chooses to act. His argument also suggests that one cannot fully recognize the implications of a particular behavior without first identifying the predisposition of an

individual. It is because of Mischel's (1973) reasoning that it becomes especially imperative to recognize the roles that individual differences play in cases where the stability and trajectory of a romantic relationship may be threatened. If an individual has a better awareness of the factors that influence his/her actions towards a partner dealing with a potentially problematic issue, then that individual may be more effective at not only curbing the undesirable behavior, but at preserving the harmony of the relationship.

Considering that each person has unique sets of experiences and interpersonal skills, it is no surprise that conversations between partners about sensitive subjects (i.e. substance use) are likely to be met with resistance. Even if both partners have labeled the behavior as undesirable, the two may still disagree about the role that it plays within the relationship, how it should be handled, who is responsible for managing it and its consequences, etc. Mischel (1973) explains, "due to differences in skill and prior learning, individual differences may arise in interpersonal problem solving, empathy, and role taking" (p. 312). Problem solving and empathic abilities are necessary when trying to preserve a relationship with an individual who engages in an undesirable behavior. The functional individual has to demonstrate both compassion and an awareness of the situation. Role taking is also an important element for couples communicating about substance misuse, primarily because the functional individual often has to assume the position of caregiver. These three components of personality offered by Mischel serve as an example of how individual differences can impact the outcome of an interaction.

The current study seeks to create an awareness of the role that individual differences play in an individual's efforts to manage a partner's smoking or drinking. The study also hopes to generate some thought about how certain characteristics make a

person more prone to falling within a cycle of inconsistent behaviors. Approaching the tenets of INC Theory from a perspective centered on individual differences not only helps paint the bigger picture looking at the characteristics that may potentially predispose one to engage in a cycle of inconsistency when interacting with one's romantic partner; it also contributes to a greater awareness of the *communicative* components at work within the theory. INC Theory may be founded on communication principles, but its focus still lies with behavior. Therefore, looking at these predictor variables allows for a better grasping of the communicative mechanisms at work. This is particularly true when looking at the variables of communication competence and perceived network involvement.

## **Chapter 4: Overview of Inconsistent Nurturing as Control Theory**

In order to identify the communicative behaviors that take place between relational partners who are dealing with problematic issues, Le Poire (1992, 1995) crafted the tenets of Inconsistent Nurturing as Control Theory. Rooted in social exchange and learning theories (described in more detail in the subsequent sections), INC Theory seeks to understand how it is that individuals in romantic relationships unknowingly encourage their partners' negative behaviors. Furthermore, it is through an individual's attempts to control and manage such negative behaviors that the problem becomes intensified. Although these two aspects of *unknowing encouragement* and *attempts to control* seem contradictory, INC Theory explains that they happen simultaneously. An individual may work at controlling or managing a partner's problematic behavior, but at the same time, be unaware of the fact that he/she is engaging in actions that actually promote that behavior. For instance, showing signs of care and nurturing towards a partner with a problematic behavior may seem to be beneficial; however, doing so can lead to a worsening of the problematic behavior. Original work with the theory is centered on cases of alcohol abuse within marriages (Le Poire, 1992, 1995; Le Poire et al., 1998), and uses the terminology of "functional partner" or "codependent" (the individual in the relationship who does not engage in substance abuse), and "afflicted partner" or "dependent" (the individual struggling with substance use).

### ***The Paradoxes of INC Theory***

Le Poire (1992) explained the dynamics at work within these codependent-dependent relationships by introducing three paradoxes, which also provide the groundwork for future explications of INC Theory. The first is constructed around the

premise that functional individuals often assume that they are both responsible for and capable of controlling their partners' negative behaviors. However, in most cases, these individuals actually possess no control at all and enact behaviors that produce outcomes opposite to those that they had hoped to achieve. Along these same lines, there is the assumption in such relationships that the afflicted individual is in some or another "out of control," when the reality is that he/she is often the one in control because it is the afflicted individual's behavior that "limits the behavioral options of the codependent" (Le Poire, 1992, p. 1467). Thus, paradox one of INC Theory is comprised of this issue of who actually has control in the relationship. The functional individual should have control, but does not because his/her behaviors are primarily *reactions* to the afflicted individual.

The second paradox of INC Theory is formed on the premise that the functional individual's two main responsibilities are caretaking and controlling (Le Poire, 1992). It is because of this that the functional individual often has to sacrifice his/her needs, especially in times of elevated substance use or heightened levels of emotion. Such willingness to sacrifice earns the functional individual "credit" that can be used in later interactions. The afflicted individual then feels a need to reciprocate such sentiments and tries to distance him/herself from the problematic issue. Therefore, the functional individual reassumes a position of control as the afflicted individual works at his/her efforts to reform. This back-and-forth can last for a long period of time, particularly when the two partners fail to discuss the role that control plays within their relationship (Le Poire, 1992). Thus, it becomes evident that without consideration for the

communicative processes at hand, couples in these situations become lost in a never-ending battle for control.

The final paradox of INC Theory has to do with ending the problematic behavior and is the one most relevant to the current study because it provides the lens for viewing reinforcement and punishment. Le Poire (1992) proposes that this paradox is composed of the functional individual's desire to keep the relationship going along with his/her attempts to curb the partner's substance abuse. For instance, the functional individual may verbally express support for the afflicted partner, but use nonverbal messages that convey distance such as decreased eye contact, lack of touch and smiling, and leaning back (Burgoon et al., 1984). Once the afflicted individual's behavior becomes more problematic, the functional individual may use more direct forms of punishment such as avoiding and criticizing the partner. However, after such efforts are made to curb the negative behavior and are met with failure, the functional individual realizes that his/her strategies for stopping the substance use are not effective and resorts to nurturing the afflicted individual during episodes of substance misuse. Thus, a cycle of punishment and reinforcement ensues. Le Poire (1992) explains that this occurs because in many cases, once the functional individual relinquishes his/her role of "caregiver," the relationship is prone to termination. Therefore, in order to avoid this outcome, the functional individual will go back to taking care of the afflicted partner during times of substance abuse. In other words, putting an end to the substance use may also bring an end to the relationship.

### *The Phases of INC Theory*

Now that the paradoxes have been laid out, it becomes important to understand that the role that “labeling” plays. The moment of labeling happens in a relationship when some significant event occurs that makes the functional individual realize that his/her partner’s behavior has become problematic, or is at least viewed as being undesirable (Le Poire, Hallett, & Erlandson, 2000). There are three prominent periods centered around this concept of labeling and by examining how each of them fits together, researchers can gain more insight into how and why the problematic behavior prompts certain reactions from the functional individual. Le Poire and her colleagues (2000) break down the three stages accordingly: the prelabel phase which is marked by the functional partner’s nurturing, or *reinforcing*, of the afflicted partner’s undesirable behavior; the postlabel phase which is characterized by the functional partner’s attempt to control the undesirable behavior through use of *punishment*; and the postfrustration period which is defined by a mixture of reinforcement and punishment. This last period results from the functional individual’s frustration with the fact that nothing he/she has done has been successful in curtailing the substance use or other problematic behavior. Thus, the individual gets caught in a web of having to cycle back and forth between reinforcement and punishment. This mixture of behaviors also stems from a feeling of helplessness experienced by the individual who may not know how to react to the partner.

The postfrustration period has also yielded the most research from INC Theory scholars (Duggan, 2007; Duggan, Dailey, & Le Poire, 2008; Le Poire, 1995; Le Poire, Erlandson, & Hallett, 1998; Le Poire, et al., 2000) because it is the nature of the



inconsistency that makes it so difficult for an afflicted individual to recover (Duggan & Le Poire, 2006). Additionally, it is this postfrustration period that generates one of the central questions of the current study: *If we are in relationships and are faced with behaviors that we do not like, why is it so hard for us to put an end to those behaviors?* Although the majority of work applying INC Theory has focused on issues of substance use within relationships, other research has utilized the theory when studying a variety of undesirable behaviors such as eating disorders (Prescott & Le Poire, 2002), sexual addiction (Wright, 2008), and depression (Duggan, 2007; Duggan & Le Poire, 2006; Duggan, Le Poire, and Addis, 2006). The most recent application of INC Theory (Glowacki, 2012) found that college students reported using more direct than indirect communicative strategies and enacted more reinforcement than punishment behaviors when interacting with their partners who smoked or drank at an undesirable level. Thus, the current study seeks to extend these findings in order to examine further how individuals go about managing their partners' undesirable behaviors. Additional work on this subject will hopefully shed more light on why it is that individuals end up enacting inconsistent patterns of behavior.

### ***Managing an Undesirable Behavior***

Although the terms “reinforcement” and “punishment” have specific connotations when studied from the context of INC Theory, the principles behind them are prevalent among other conceptual frameworks addressing inconsistent behavioral patterns. Understanding that these terms have their origins in Social Exchange and Learning Theories is important when considering the overarching ideas behind them, but for the purposes of the current study, it is also necessary to look at the more micro level ways in

which these concepts are applied, specifically in regards to the role an individual plays in a partner's battle with substance use. In addition to Skinner's (1953, 1974) elaborations on intermittent reinforcement suggest that an individual has the potential to do more harm than good to his/her partner who is struggling with a problematic behavior, Walitzer and Dermen (2004) found that there was a reduction in heavy drinking and longer periods of abstinence among males when their spouses were involved in the quitting process. Mermelstein and her colleagues (1983) also found that individuals were more successful with abstaining from smoking when their partners were actively involved and, more specifically, when their partners enacted less punishing behaviors. Adolescents are also prone to engage in prolonged substance use when encountering intermittent reinforcement from their peers (Akers, et al., 1979), which also alludes to the significant (and potentially dangerous) role that social interactions can play in one's decision to abstain or not. Social interactions centered on drinking alcohol have been shown to reinforce solitary drinking behaviors and contribute to alcoholism (Keehn, 1970). Family environments have also been shown to worsen problematic eating and drinking behaviors, especially for those with high levels of reward and punishment sensitivity (Loxton & Dawe, 2006). Given these findings that reveal that involvement from members of one's social network can be both helpful and destructive, it becomes imperative to investigate further why it is that functional individuals are motivated to either reinforce or punish their partners' negative behaviors.

Previous work with INC Theory has focused primarily on issues of substance abuse and serious health matters within married couples, but the current study applies INC Theory to a new context by extending Glowacki's (2012) work. This project is

concerned with substance use (rather than abuse) among college students in romantic relationships and feels justified in doing so after reviewing Le Poire's (1995) explanation that future work with the theory should expand its framework in order to encompass "all relationships which include nurturer-controllers and individuals exhibiting *undesirable behavior*" (p. 61). This expansion of INC Theory will be a helpful one because it applies the tenets towards examining the behaviors romantic partners turn to when dealing with situations in which "problematic" instances of smoking and drinking are of a less intense nature.

From an INC Theory perspective, the pinnacle of the reinforcement/punishment tension is reached when both the afflicted individual and functional individual embody strong feelings of obligation to their partners and to the relationship. The functional individual feels the need to show immediacy and altruistic behaviors towards the afflicted partner, which not only ends up reinforcing the substance use, but also leads the afflicted individual to feel an even stronger sense of commitment to his/her partner (Le Poire, 1992). The functional partner enacts this type rewarding communication with the hopes of expressing "affiliation and approach, [whereas] the opposites of these behaviors indicate avoidance and may be used as punishing control strategies" (Le Poire, 1992, p. 1470). Furthermore, reinforcements and punishments tend to be more behavior-oriented because they function as control mechanisms (Le Poire, 1995). These descriptions are of particular value to the current study because they place the focus on outcomes and in doing so, suggest the need to investigate the predecessors of these outcomes. The tenets of INC Theory thoroughly explain the circumstances and consequences associated with intermittent cycles of reinforcement and punishment, but they leave room for exploration

into what it is that is prompting these reactions. There is no doubt that enacting a mixture of affiliation, approach, avoidance, and control can be detrimental for both an individual's and relationship's well-being, but there needs to be additional insight into what is propelling this cocktail of emotions. Given this, the current study aims to look at whether the variables of perceived helpfulness, perceived hindrance, communication competence, and relational uncertainty predict the enactment of more reinforcement behaviors or punishment behaviors.

## **Chapter 5: Origins of Inconsistent Nurturing as Control Theory**

### *Social Exchange Theory*

Addressing the inconsistencies among human behavior has been a prominent theme within the field of psychology, but with the help of INC and related theories, communication scholars have been able to approach inconsistency and uncertainty from a perspective that is unique to their field. As Le Poire (1992) points out, the inspiration for INC Theory stems from Social Exchange Theory and Social Learning Theory. Thibaut and Kelley (1959) laid the groundwork for Social Exchange Theory after examining the dynamics of interpersonal relationships within the context of group behaviors. They found that people not only act interdependently within their relationships, but that individuals are constantly assessing the rewards and costs that they believe to be yielded by a particular relationship. Social Exchange Theory also proposes that individuals in relationships compare their outcomes and levels of satisfaction with those of their partners as a way of making sure that there is some degree of relational stability that is maintained. Additionally, the quality of alternatives plays a significant role in this theory because an individual is more likely to leave a dyad if he/she perceives better alternatives to exist outside of that relationship. Thibaut and Kelley's (1959) application of an economic model to the study of interpersonal relationships placed the focus on interdependence and reciprocity between two units. Comparison levels, transactions, payoffs, utilities, and reinforcements are all variables influencing reciprocity and it is through interdependence with their partners that individuals can work towards achieving favorable relational outcomes.

Although Social Exchange Theory has undergone scrutiny for applying an economic model to issues of social psychology (Emerson, 1976; Heath, 1976; Zafirovski, 2005), it continues to be employed today in fields such as communication studies and sociology because of the insight it provides into the motivations individuals have for either maintaining or terminating a relationship. Furthermore, the tenets of Social Exchange Theory played important roles in the formation of INC Theory because the individual in possession of the most rewards (the functional individual) within a relationship is regarded as the more powerful one (Thibaut & Kelley, 1959). Caretaking behavior (expressions of intimacy and closeness) is regarded as a sign of relational power because the individual exhibiting these types of behaviors is able to elicit certain reactions from the partner, especially if that partner is in need of nurturing (Beattie, 1987). Le Poire (1992) concluded that individuals in relationships in which one partner misuses drugs or alcohol experience increased dependence because the afflicted individual relies upon the functional individual for caretaking and conversely, the functional individual operates with a sense of responsibility for helping the afflicted partner. Thus, neither partner is capable of terminating the relationship and in many cases, the afflicted individual is the one with the most control because it is his/her addiction that determines what behaviors the functional individual uses.

Finally, Social Exchange Theory posits that both reinforcements and punishments are to be regarded as resources possessed by the individual with the most power because it is this person who has the ability to choose when to deploy them (Emerson, 1976). Although INC Theory highlights the struggles that can occur when relational partners are faced with a problematic issue, it is Social Exchange Theory that provides the reasoning

behind why neither individual in such a situation may choose to leave. Assessments of relational rewards and costs can serve as better predictors of whether individuals choose to stay in a relationship than assessments of undesirable behaviors do. Even in situations in which problematic behaviors are occurring, individuals will still perceive the existence of rewards and in some cases, will evaluate the rewards as carrying more weight than the problematic behavior.

Both INC Theory and Social Exchange Theory allude to the paradox associated with control among couples who are dealing with problematic issues. In a sense, there is a contradiction that results when one considers that the functional individual may bring more rewards to the relationship, but is still likely to act in ways that are dictated by the partner's undesirable behavior. For instance, the functional individual may bring financial stability to the relationship, but may have to use those monetary resources to help find treatment for the partner, to cover up negative consequences stemming from the problematic behavior, etc. Without the Social Exchange perspective, it would be much more difficult to understand why a functional individual would choose to remain in a relationship with a partner whose behavior is regarded as problematic. The truth is that people do, in fact, remain in relationships even when problematic behaviors are occurring (Dunn, 2004) and interact with each other in potentially toxic relational environments. It is because of this that there needs to be a greater understanding of the nature of these relationships, especially in terms of how partners negotiate the existence of these problematic behaviors.

### ***Social Learning Theory***

Although Social Exchange Theory provides an explanation for why individuals may decide to stay in a relationship even when it is wrestling with such issues as substance use, Social Learning Theory provides the basis for understanding inconsistency and the power that it can have within relationships. This theory is formed around the concept of operant conditioning, which proposes that individuals can be trained to react in certain ways depending on the extent to which their behaviors are reinforced (Skinner, 1953). Continuous, or scheduled, reinforcement has more influence on individuals than does one instance of reinforcement. There are two types of interval scheduled reinforcement: a fixed interval schedule occurs when rewards are presented at the set times and a variable interval schedule is when a behavior is rewarded after an average number of responses has been reached. However, when the distribution of rewards becomes varied so that the respondent can no longer predict when reinforcement will be given, the individual's behavior becomes more enduring because he/she will continue to enact that behavior until it is finally met with a reward (Skinner, 1953, 1974). Thus, the implications of this are that inconsistent distribution of rewards can strongly shape an individual's behavior.

In the case of INC Theory, the functional individuals serve as operant conditioners (often unknowingly) by handing out a mixture of reinforcements and punishments to their partners in their attempts to control a particular behavior (Le Poire, 1992; Skinner, 1953). According to Social Learning Theory, it is this very blend of reactions that causes a behavior to be strengthened because the individual has learned that the behavior will be reinforced at one point, even if such reinforcement does not occur at



every instance (Skinner, 1974). More importantly, a behavior is enacted more when it is met with intermittent reinforcement than when it is met with continuous reinforcement (Burgoon, Burgoon, Miller, & Sunnafrank, 1981) and that inconsistent reinforcement can also lead to heightened feelings of helplessness from the afflicted individual (Le Poire, 1992).

When applied to other forms of deviant behavior, the tenets of Social Learning Theory have revealed that differential reinforcement was one of the strongest contributors to adolescent marijuana and alcohol use (Akers, et al., 1979) and that criminal activity was intensified when there is a lack of effective law enforcement, signs of approval from one's social group, and a feeling of being better off after having engaged in the criminal activity than having acted as a law-abiding citizen (Burgess & Akers, 1966). Additionally, there is evidence to suggest that an individual's romantic partners and friends provide the most reinforcement to the individual's behavior (deviant or conforming; Akers, et al., 1979). Not only do these findings illustrate the valuable role that a theory addressing inconsistent nurturing can play when evaluating the causes of prolonged engagement in negative behaviors, but they also point to a more poignant issue which is that in many cases, it is not just the afflicted individual who is responsible for such deviant actions. However, although the functional partner (and social network) can affect the undesirable behavior, the functional partner should also not be blamed for the behavior (Le Poire, 1992). In addition to enacting intermittent reinforcement, the "caregiver" in a relationship may choose to engage in a cycle of intermittent punishment, which is also thought to strengthen the problematic behavior and increase the afflicted individual's feelings of helplessness (Le Poire, 1992). Placing the attention on what is at

the heart of these inconsistent reactions will be beneficial for understanding the means by which an individual can help to stop his/her partner's problematic behaviors. Therefore, it is beneficial to review the literature on constructs that ought to relate to intermittent punishment: perceived network involvement, perceived communication competence, and relational uncertainty.

## **Chapter 6: Perceived Network Helpfulness and Perceived Network**

### **Hindrance**

Perceived network involvement (PNI) is a variable of particular interest for this study because it adds another layer to understanding the motivations an individual might have for acting towards his/her romantic partner in a certain way. The principles behind perceptions of helpfulness and hindrance help explain the roles that external parties play within a romantic dyad and are of particular value for the current study because findings have revealed that social networks can heavily influence the interactions and behavioral patterns between romantic couples (Felmlee, 2001; Simmel, 1955). Attempts to either reinforce or punish a partner's substance use are not made solely from the functional individual; but rather, are affected (unknowingly or knowingly) by the perceptions of support that one believes to exist for a given relationship. Furthermore, while there has been a lot of work done examining the effects of social support on substance use, particularly in terms of how peers and relational partners can both deter and encourage substance use (Falkin & Strauss, 2003; Lifrak, McKay, Rostain, Alterman, & O'Brien, 1997; Newcomb & Bentler, 1988; Piko, 2000; Segrin & Domschke, 2011; Wills & Vaughan, 1989), little work has been done looking at the impact that high levels of PNI can have on romantic couples dealing with these problematic issues. Therefore, there is a need to take a closer look at the *nature* of the "support" that is given by one's social network.

Given the importance of the influence of social networks, communication scholars Knobloch and Donovan-Kicken (2006) sought to examine specifically how interference (good or bad) from family members and friends influenced an individual's

thoughts about his/her current romantic relationship. They were one of the first to set PNI apart from social support and were also the first to develop an instrument for measuring this construct and derived the term “perceived network involvement” from their observations that much of the social network literature fails to acknowledge how individuals handle perceptions of discouragement and disapproval from their support systems. Thus, Knobloch and Donovan-Kicken (2006) explained that PNI functions as “an umbrella term to encompass people’s evaluations of both helpfulness and hindrance from network members” (p. 285). The nature of this concept is especially relevant to the current study, which targets the helpfulness and hindrances involved with communicating support for a partner who struggles with smoking or drinking. However, while perceived helpfulness and perceived hindrance are both components of PNI, they operate quite differently from one another. Knobloch and Donovan-Kicken (2006) differentiated between the two with their explanation that perceived helpfulness is characterized “as perceptions of network members’ behaviors that *support* romantic relationships,” (p. 286) whereas perceived hindrance refers to the “perceptions of network members’ behaviors that *impede* romantic relationships” (p. 286). The current study seeks to examine these two concepts as potential predictors of reinforcement and punishment because an individual’s actions towards his/her partner do not exist within a vacuum, but are influenced by the messages of encouragement and/or discouragement that are conveyed by one’s social network.

Just as perceptions of social networks can be interpreted as being either helpful or hindering, interpretations of a partner’s reactions to one’s smoking or drinking can be interpreted as being either accepting (reinforcing) or punishing. Therefore, it is beneficial

to consider the potential relationship that exists between these two dimensions of PNI and reinforcement and punishment. Work with these two dimensions has revealed that perceptions of helpfulness from one's social network lead to greater perceptions of trust of those network members (Arora & Gustafson, 2009) and are marked by cooperative participation in situations where a partner is trying to quit smoking (Mermelstein, Lichtenstein, & McIntyre, 1983), but these perceptions also tend to decrease over time (Arora et al., 2006). Findings on perceived hindrance have revealed that such perceptions stem from active moments of conflict (Finch et al., 1999), have influenced individuals to return to smoking (Collins, Emont, & Zywiak, 1990) and have led to decreases in productivity among organizations (Sparrowe et al., 2001). Therefore, there is evidence to suggest that perceived network support can be both beneficial and detrimental to an individual.

Because the majority of the literature addressing network influence is derived primarily from research on social support, not much attention has been devoted to examining perceived network helpfulness and perceived network hindrance as separate, but *related*, variables. Therefore, applying Knobloch and Donovan-Kicken's (2006) work with PNI to a new context adds to the understanding of these variables. These researchers found that relational uncertainty had a negative association with perceived helpfulness, but was not positively associated with perceived hindrance. The implications of this conclusion are quite helpful for the current study because they point to the potentially significant roles that involved network members can play when an individual is trying to decide how he/she should act towards a partner whose behavior is undesirable. If an individual deems a partner's drinking or smoking to be undesirable

and seeks to put an end to it, he/she may feel more inclined to do so through punishing behaviors if he/she perceives to have a lot of support from his/her network. Possessing knowledge that one has “back-up” in this kind of situation is likely to make one more inclined to take direct action (through punishment) rather than be overcome by uncertainty and revert to avoidance or passivity (reinforcement).

Because PNI has its roots in relational uncertainty (Knobloch & Donovan-Kicken, 2006), studying perceptions of helpfulness and hindrance corresponds well with INC Theory’s handling of inconsistency. This has to do with the fact that neither helpfulness/hindrance nor reinforcement/punishment is always representative of *opposing* behaviors. Helpfulness can co-occur with hindrance, just as reinforcement can co-occur with punishment. For purposes of the current study, looking at PNI can provide useful insight into understanding some of the reasoning behind why an individual might choose one set of behavioral strategies over another when dealing with a partner’s smoking or drinking. In one of the earliest studies focusing specifically on social network support, Felmlee (2001) sought to bring attention to the negative influences that social networks can have on romantic relationships. As she points out in her study on social approval and relationship stability, much of the literature presented only one side of social support systems by highlighting their benefits over their drawbacks.

In addition to examining the influence of social *networks* rather than social *support* per se, Felmlee (2001) also emphasized the importance of perceptions. Her finding that *perceptions* of social approval are more influential on relational stability than are having attractive alternatives, partner closeness, and *actual* social approval is of particular value to the current study. Additional findings have revealed that the nature of

the support from social networks also makes a difference in terms of maintaining relational stability and satisfaction. For instance, women were found to be more satisfied with their social networks when their closest parent and best friend expressed support for their romantic relationships (Bryan, Fitzpatrick, Crawford, & Fischer, 2001) and that parents tended to offer more support for their children's romantic relationships when they perceived their children to be more fully committed to their partners (Leslie, Huston, & Johnson, 1986).

Understanding the roles that perceptions of helpfulness and hindrance play within a romantic relationship is not only helpful when looking at the state of a relationship, but also when looking at the communication that takes place between two relational partners dealing with a specific issue. In terms of substance use within romantic couples, while partner facilitation has been shown to be the most important factor in smoking cessation (Coppotelli & Orleans, 1985) there is also evidence suggesting that the *quality* of expressed support matters (Duggan et al., 2006; Falkin & Strauss, 2003; Le Poire et al., 2006; Piko, 2000). Feedback about a romantic relationship is constantly exchanged between the two partners and whether this happens explicitly or implicitly, it suggests that the influence of one's social network can infiltrate daily conversations between romantic partners. Even after controlling for alternatives and partner closeness, perceptions of approval from one's social network were the best predictor of relational stability (Felmlee, 2001). In addition to influencing the roles that romantic partners assume within their relationships (Felmlee, 2001), social networks also affect the degrees of closeness and separation that married couples feel when interacting with one another (Bott, 1957). Furthermore, social networks help couples find their place within larger

social systems (Felmlee, 2001). Given this, it is important to look at how exchanges centered on a partner's behavior are impacted by perceptions of network involvement. Thus, the current study sets out to add to the existing social network support literature by understanding how perceptions of support (good or bad) lead one to act in certain ways towards a romantic partner's undesirable behavior.

The above review of perceived network involvement suggests that further work with this variable needs to be done before one can propose a relationship between helpfulness, hindrance, reinforcement, and punishment. Although there is evidence suggesting that members of social networks both reinforce (Falkin & Strauss, 2003) and punish (Coppotelli & Orleans, 1985) an afflicted individual's substance use, examining PNI as a combination of both perceived helpfulness and perceived hindrance (Knobloch & Donovan-Kicken, 2006) is a relatively new concept. PNI addresses the degree to which an individual believes his/her romantic relationship is supported or discouraged and by applying this variable to a new context, the current study seeks to understand further how these dimensions of helpfulness and hindrance influence one's decision to reinforce and/or punish. Given this, the following inquiries are posed:

*RQ1a:* To what extent is perceived network *helpfulness* predictive of the punishment and/or reinforcement of a partner's undesirable behavior?

*RQ1b:* To what extent is perceived network *hindrance* predictive of the punishment and/or reinforcement of a partner's undesirable behavior?



## Chapter 7: Communication Competence

As stated previously, smoking and drinking behaviors can be detrimental for the well-being of a romantic relationship, and one of the most effective ways to combat these harmful effects is by engaging in conversations aimed at correcting erroneous perceptions about substance use among peers (NIAAA, 2012). This suggests a need for more work to be done looking at how competence levels related specifically to communication abilities (or lack thereof) impact the conversations that partners have about substance use. Understanding the role that communication competence plays within a romantic relationship is not only helpful when looking at what the two individuals bring to the dyad, but also when looking at the interactions that takes place between two relational partners dealing with a specific issue. Because the current study is concerned with the communication that takes place between couples, it is necessary to consider the consequences that one's communicative abilities can have on a romantic partner. More specifically, it is beneficial to assess the outcomes that can occur as a result of a partner's communication competence. One may present himself/herself as a skilled communicator in front of large crowds, in daily interpersonal exchanges, etc.; however, there are complex dynamics at work within romantic relationships that can challenge the degree of communication competency that an individual believes he/she possesses.

Communication competence is traditionally defined as one's ability to communicate in knowledgeable and skilled ways that are directed towards addressing the circumstances of a particular context (Spitzberg, 1983). Communication competence is marked by a distinction between one's *ability* to perform and one's *actual* performance (McCroskey, 1982) and has been broken down into four elements: an utterance must be

possible, an utterance must be feasible, an utterance must be appropriate, and an utterance must be performed (Hymes, 1972). McCroskey (1982) makes a clear and necessary distinction between communication competence and communication skill in his explanation that while both communication competence and communication skill affect one's performance behaviors, skill in this sense have to do with a person's "ability to perform appropriate communicative behavior in a given situation" (Larson, Backlund, Redmond, & Barbour, 1978, p. 16); whereas competence refers to "the ability of an individual to demonstrate knowledge of the appropriate communicative behavior in a given situation" (Larson et al., 1978, p. 16). McCroskey (1982) encompasses Larson et al.'s (1978) definitions into his own work because McCroskey repeatedly highlights the importance of thinking about communication competence as a form of knowledge that one has to actively apply when engaging in social interactions. A person may be regarded as a skilled communicator because he/she has an extensive vocabulary, speaks clearly, knows when to say certain things, etc., but in order to be regarded as a competent communicator, one has to take those skills and know when to *apply* them and be aware of how they can be most effectively executed.

A similar, yet important distinction is made by Habermas (1970) who proposes that communicative competence requires more than a mastery of linguistics; an individual must also be able to process, make sense of, and apply semantic universals. McCroskey (1982) rejects past definitions of communication competence that associated competence with performance (Allen & Brown, 1976; Wiemann, 1977), because he cautions that equating the two would mean that one's performance has to be observed in order for that individual to be judged as a competent or incompetent communicator.

McCroskey (1982) believed that one did not need to be watched or observed in order for that individual to be ranked as a competent communicator because one's own perceptions can serve as the best indicators of competence levels. McCroskey's (1982) explanations, combined with the definitions that Larson (1978) and his colleagues provide, are not only the definitions that are most utilized today, but they are also the most relevant to the goals of the current study. Furthermore, this rendition of communication competence contains the origins for the McCroskey and McCroskey (1988) Self-Perceived Communication Competence Scale (SPCC), the measure used in the current study.

Although this initial review of communication competence provides some justification for its inclusion in the current study, it is necessary to look further at the various ways in which the literature addresses this variable. Competence studied within a medical education realm has shown that communication competence revolves around elements of directness (McGee & Cegala, 1998) and perspective taking (Lobchuk, 2006). A review of the communication competence measures used in the medical field has found that there needs to be improvements made to the communication tools that practitioners use when talking to patients about family issues (Schirmer, et al., 2005) and that patients can increase their communication competence in health interactions by knowing how to improve their information-seeking and information-recalling skills (McGee & Cegala, 1998). Evaluating communication competence within the context of conflict management has revealed that an individual is rated as being more communicatively competent when he/she displays more sensitivity towards the partner's goals (Lahey & Canary, 2002). Furthermore, individuals who expressed anger through the use of integrative-assertive strategies, as opposed to nonassertive-denial strategies were judged

to be more communicatively competent by their partners (Guerrero, 1994). In a similar study, Canary and Spitzberg (2006) also found that individuals were seen as being more communicatively competent when they used more integrative strategies when dealing with conflict, and were ranked lower in communication competence when they used more avoidant strategies.

The implications of these findings are helpful for the current study's line of inquiry because what these results on conflict and competence show is that individuals rank their partners as being more communicatively competent when the partners demonstrate an awareness of their goals and when they use more direct and assertive means for expressing their discontent. The latter part of this is particularly useful if one links punishment (from an INC Theory perspective) with assertive behaviors because it suggests that those who use more punishment will have more communication competence. This reasoning stems from the notion that the punishment strategies of INC Theory involve confronting the partner and expressing one's frustration about the undesirable behavior. Furthermore, the above findings (Canary & Spitzberg, 2006; Guerrero, 1994) demonstrate that passivity and avoidance, two characteristics inherent within INC Theory's concept of reinforcement, are associated with low communication competence in times of conflict. These conclusions serve as helpful tools that can be applied to the current study's investigation of romantic partners' communication about undesirable behaviors because it is these conversations that have the potential to become dominated by conflict.

Although the literature suggests that *individual* levels of communication competence can suffer when certain traits or environmental circumstances are present

(Blood, Blood, Tellis, & Gabel, 2003; Chesebro et al., 1992; McCroskey & McCroskey, 1988), it also proposes that *relational* competence can become impaired as well. Spitzberg and Cupach (1984) explain that relational competence is derived from the concept of “other orientation.” This approach to communication competence “implies that a person is considered competent to the extent that the other communicators present are attended to appropriately” (p. 69). This perspective is not only relevant to the current study because it shifts the emphasis on communication competence from an individual level to a dyadic level, it also implies that in order for one to be deemed communicatively competent within a particular relationship, he/she has to construct messages that keep the needs or circumstances of the partner in mind. If one fails to address effectively the undesirable behavior (smoking or drinking), then he/she will have failed in properly orienting him/herself towards the partner. The reason why this is so important to consider from an INC Theory perspective is that any factor affecting one’s individual level of communication competence trickles down into that person’s ability to orient him/herself towards the other. Thus, a series of inconsistent messages are produced that can lead to a worsening of the undesirable behavior.

There is an even greater need to study communication competence levels among a young adult population after considering Vangelisti and Daly’s (1989) findings that estimate 15 to 20% of individuals between the ages of 21 and 25 cannot engage in effective verbal communication. This issue is likely to be compounded by the fact that conversations about smoking and drinking within romantic relationships are already difficult to engage in and that failure to employ the appropriate communicative means can lead to a worsening of the substance use. Therefore, while the current study’s work

with communication competence seeks to generate findings about the relationship between individual differences, reinforcement behaviors, and punishment behaviors; it also aims to narrow the focus from *general* competence and substance use to *communication* competence and substance use. This is important because much of the literature addressing substance use behaviors and how they are managed within relationships deals primarily with the influences that social competence and personal competence have on adolescent and young adult substance use (Botvin, 1983; Donnellan, Larsen-Rife, & Conger, 2005; Dumas, Prinz, Smith, & Laughlin, 1999; Griffin, Epstein, Botvin, & Spoth, 2001; Jackson, Henriksen, Dickinson, & Levine, 1997). Directing the attention towards communicative abilities also insinuates that an individual can work towards acquiring skills that aid him/her in interactions about sensitive subjects.

Perceived communication competence is perhaps one of the most important predictors to study when looking at reinforcement and punishment because it aims to find the communicative components at work within these behavioral patterns. Examining this variable within the context of INC Theory also provides some initial insight into the relationship between an individual's own beliefs about his/her communicative capabilities and that individual's actual communicative behaviors. Given this, the current study measures perceptions of one's *own* level of communication competence rather than measure how another individual would rate the competence. By comparing these ratings with reinforcement and punishment behaviors, the researcher hopes to obtain some insight into how an individual's ability to communicate may lead him/her to manage the partner's undesirable behavior in a certain way.

The literature on perceived communication competency reveals that this variable exerts significant influence on individuals attempting to wade their way through conversations about risk behaviors (Koesten & Anderson, 2004). Furthermore, higher ratings of communication competence tend to be associated with more (Canary & Spitzberg, 2006; Guerrero, 1994; McGee & Cegala, 1998) directness and confrontation of problems, while lower scores are associated with avoidance and passivity. After reviewing these conclusions, it seems that those who perceive themselves to be more communicatively competent are more likely confront their partners' undesirable behaviors head-on, even if this means having to enact punishing strategies. The functional individual may feel more in control of the messages he/she is sending to the afflicted individual and may even feel more at ease about having to deal with such sensitive subjects as substance use. Therefore, the following is proposed:

*H1:* Higher ratings of one's own perceived communication competence will be correlated with more punishment and less reinforcement of a partner's undesirable behavior.

## Chapter 8: Relational Uncertainty

Examining perceived network involvement sheds light on the type of support a respondent believes to exist *outside* of the relationship, examining communication competence illustrates how the respondent feels about his/her *own* abilities, and examining relational uncertainty provides a frame through which one can view how a respondent feels about the *relationship*. It is this last component that allows a romantic relationship to become regarded as an entity because it elicits specific reactions and behaviors from those within it. This perspective is relevant for the goals of the current study because respondents will be reporting on behaviors that have already been labeled as “undesirable” by one or both of the romantic partners. Thus, it is very likely that these reporting individuals have already engaged in some thought about the current statuses and future directions of their relationships as well as how they will be affected by their partners’ undesirable behaviors. Given this, studying relational uncertainty as a predictor of reinforcement and punishment is of particular value because it paints a better picture of the respondent’s feelings about the relationship.

In order to measure accurately the influence that relational uncertainty has on reinforcement and punishment behaviors, one must consider that this type of uncertainty differs from that which is at the center of Uncertainty Reduction Theory (URT). Uncertainty from a URT perspective refers to the exchange that takes place when two people first meet. This initial interaction elicits certain responses from the two individuals as they make attempts to reduce their feelings of uncertainty about one another and about the potential relationship that may result (Berger & Bradac, 1982; Berger & Calabrese, 1975). Although URT lays the groundwork for the current study’s



handling of uncertainty, Knobloch and Solomon (1999) distinguish *relational* uncertainty as a separate (but related) variable that seeks to get at the sources of self, partner, and relationship uncertainties. They also explain that relational uncertainty is derived from the relational turbulence model, which is centered on the premise that turbulence between romantic partners occurs when the two individuals move from casual dating to a more committed stage (Knobloch & Solomon, 1999; Solomon & Knobloch, 2004). Solomon and Knobloch (2004) explain that it is this transitional stage that produces the “umbrella construct” of relational uncertainty, which encompasses three sources of ambiguity: self uncertainty, partner uncertainty, and relationship uncertainty. When these three forces combine, they create an overarching feeling of relational uncertainty, which the researchers define as, “the degree of confidence people have in their perceptions of involvement within interpersonal relationships” (Solomon & Knobloch, 2004, p. 797).

Studying relational uncertainty as a predictor of reinforcement and punishment will not only provide interesting insight into the influences acting upon individuals as they attempt to make sense of undesirable behaviors within their relationships, it will also push this variable in a new direction. The literature on relational uncertainty has addressed how romantic partners appraise relational irritations (Solomon & Knobloch, 2004) and how they communicate about relational irritations (Theiss & Solomon, 2006), but beyond this, little work has been done examining the relationships between relational uncertainty and substance use.

Some research on relational uncertainty would indicate that greater uncertainty would be associated with a greater likelihood of confronting problematic issues. For example, Theiss and Solomon’s (2006) concluded that when people are uncertain about

their level of involvement within a relationship, they are more likely to confront problematic issues. In INC Theory terms, this would mean that more relational uncertainty leads to the use of more direct communication strategies can be, suggesting that individuals are likely to punish their partners' behaviors when there are higher levels of uncertainty. Emmers and Canary (1996) also found that relational partners tend to want to confront problematic behaviors head-on when there are high amounts of uncertainty. These researchers speculate that negative issues stimulate elevated uncertainty within a relationship and it is because of this that individuals are motivated to employ direct responses in their attempts to preserve the relationship. Thus, when these conclusions are interpreted from an INC Theory perspective, they suggest that an individual experiencing a lot of relational uncertainty would be more willing to punish a partner's smoking or drinking because he/she would believe that this would be the best strategy for ending the behavior and for preventing the relationship's termination.

Alternatively, some other empirical findings suggest that greater uncertainty may have a chilling effect such that partners avoid difficult conversations (Afifi & Burgoon, 1998; Afifi & Reichert, 1996; Knobloch & Solomon, 2005). For instance, Knobloch and Carpenter-Theune (2004) and Afifi and Burgoon (1998) concluded that couples with higher levels of relational uncertainty feel more uncomfortable discussing sensitive issues that could threaten the stability of the relationship. If these conclusions are interpreted from an INC Theory perspective, they suggest that an individual experiencing high levels of relational uncertainty would be less likely to address the partner's undesirable smoking or drinking because he/she would be worried that it would cause discord within the relationship, and may even reinforce the behavior to create the impression that he/she is

not troubled by it. Knobloch and Solomon's (2005) study paints a similar picture; they found that relational uncertainty prevents individuals from accurately interpreting relational talk, prevents individuals from effectively noticing relational cues, causes them to view their partners' behaviors more negatively, and makes it more difficult for individuals to relate to their partners. In the same vein, Knobloch and Delaney (2012) found that depressed individuals had a difficult time dealing with the contradictory messages from their partners because they often exacerbated the feelings of helplessness experienced by both partners and thus, avoided addressing such messages. It is these results that suggest a need for further examination of why it is so difficult for romantic couples to engage in discussions about sensitive issues and what some of the reasoning might be behind the exchange of such ambiguous messages. Given all of these findings, it is also plausible to assume that more relational uncertainty leads to more hesitancy (reinforcement) when attempting to address a partner's undesirable behavior.

In sum, previous work addressing relational uncertainty suggests that there is a divide in the literature. It can be inferred from Theiss and Solomon's (2006) findings that people are more likely to use more punishing behaviors when they are experiencing greater amounts of relational uncertainty. However, other findings indicate that more relational uncertainty is correlated with more reinforcement behaviors because individuals experiencing high uncertainty have a harder time bringing up sensitive issues with their partners (Afifi & Burgoon, 1998; Knobloch & Carpenter-Theune, 2004). An individual who feels very uncertain about the status of his/her relationship may wish to confront a potentially problematic behavior as soon as it presents its self with the hopes that by doing so, he/she will be able to obtain some answers about the direction in which

the relationship is headed. Contrary to this thinking though, is the notion that individuals who experience a lot of uncertainty about their relationships may not know how to best go about controlling their partners' behaviors because high levels of uncertainty may lead to an inability to punish unwanted actions. Furthermore, uncertainty about the relationship is likely to contribute to even deeper levels of uncertainty about how to act around one's partner, which can prevent the functional individual from successfully putting an end to the smoking or drinking. Thus, further investigation on this subject needs to be done so that a better picture of the influence that relational uncertainty has on the enactment of reinforcement and punishment can emerge. The conflicting possibilities indicated by the existing literature suggest that it is appropriate to pose the following research question:

*RQ2:* To what extent is relational uncertainty predictive of the punishment and/or reinforcement of a partner's undesirable behavior?

In order to address the above inquiries that seek to examine the extent to which the variables of perceived communication competence, perceived network helpfulness, perceived network hindrance, and relational uncertainty are predictive of reinforcement and punishment use, the subsequent section will discuss the methodological process needed to investigate these relationships.

## Chapter 9: Method

### *Procedures*

Participants were recruited through the use of a convenience sampling method. An online flier was posted on a university website and was sent to communication course instructors so that interested students could participate and receive extra credit for doing so. In order to be eligible for participation in the study, the individual had to be currently in a romantic relationship, or had been in a past romantic relationship, with a partner who smokes or drinks. It was also necessary that the participant, or both the participant and his or her partner, had labeled those smoking and drinking behaviors as “undesirable.”

Online flyers that were distributed to undergraduate communication classes and posted on the Communication Studies Department’s website were used to recruit participants. The flyers included the purposes of the study, the researcher’s contact information, and the link to the survey. Individuals received extra credit for their participation in the study and were assured privacy and confidentiality of their responses through IRB approval.

An online survey composed of 59 Likert-type items and 12 sliding scale items asked respondents about the behaviors they use when trying to manage their partners’ smoking or drinking, their perceptions of how communicatively competent they believe themselves to be, how certain or uncertain they feel about the status of their relationships, and how they think those close to them feel about their relationships. Because the survey was administered online, respondents completed it at the locations of their choosing. Participants reported on either their partners’ smoking or their partners’ drinking and due to the concern that participants could potentially report on the drinking of underage

partners, the survey did not ask for the ages of the partners. Instead, the survey asked respondents to list the age differences that exist between them and their current (or former) partners. By posing the question in this way, some information about age could still be gathered, but in a way that would not jeopardize the partners' privacy.

### ***Participants***

Participants were undergraduate students ( $N = 270$ ) from a large, public university in the south. Two hundred and seventy-three respondents had originally participated in the survey, but three participants were removed from the final data set because they had completed fewer than half of the questionnaire items. In the study sample, there were 54 (20%) males and 216 (80%) females. The age of this sample ranged from 18 to 52 ( $M = 20.94$ ,  $SD = 3.48$ ). Participants' self-reported ethnicities included 57% Caucasian, 18% Hispanic, 13% Asian, 9% African American, and 3% indicating "other." Respondents were asked to indicate the duration of the relationship (number of months together) on which they were reporting ( $M = 19.22$  months,  $SD = 26.36$ ,  $Mdn = 12$ ). Participants could choose to report on their partners' smoking or their partners' drinking. One hundred and fifty-five (58%) participants reported on their partners' drinking and 114 (42%) participants reported on their partners' smoking (one respondent did not indicate "smoking" or "drinking").

### ***Measures***

*Reinforcement and punishment.* The items measuring reinforcement and punishment were taken from a previous study (Glowacki, 2012) and had originally been adapted from the qualitative findings of Le Poire (1995) and Duggan and Le Poire (2006). The former of these two qualitative studies examined the control strategies that

individuals use in their attempts to manage their partners' undesirable behaviors, while the latter of these studies applied INC Theory to study couples in which one partner was depressed. The researchers in both studies interviewed couples dealing with problematic behaviors within their relationships and presented the responses as strategies that either punished or reinforced the problematic behaviors. Glowacki (2012) used these listed strategies in her study examining how college students communicate about smoking and drinking, but had developed them into quantitative items so that they could be utilized in a questionnaire.

In the current study, participants were asked to think about their partners' smoking or drinking and to consider why they viewed it as undesirable. They were then presented with items addressing how they attempt to manage the undesirable behavior. Respondents were to choose one answer ranging from one ("Strongly Disagree") to five ("Strongly Agree"). Sample items of the reinforcement measure include: "I try to act normal around my partner" and "I deny that there are problems." Sample items of the punishment measure include: "I call my partner names" and "I confront my partner." Please see Appendix A for the complete instrument. The nine Likert-type items addressing punishment behaviors (Cronbach's  $\alpha = .79$ ) were the same items used in the Glowacki (2012) study, but the 12 Likert-type items asking about reinforcement behaviors (Cronbach's  $\alpha = .73$ ) were adjusted slightly from Glowacki's (2012) INC Theory study in order to improve the scale's reliability. An inter-item reliability analysis was conducted on the 12 reinforcement items and revealed that the item "I will retrieve my partner from a situation in which I am not present if he/she is smoking/drinking and wants to leave" lowered the reliability coefficient slightly. When this item was removed,

the scale's reliability increased from .73 to .74. The researcher speculates that this item may not be as relevant for the current study's population because it assumes that respondents have methods of transportation that they can use for the retrieval of their partners and because many of the respondents are college students who presumably live on campus, it is likely that the majority of them do not own vehicles. This item may also be more applicable to drinking than to smoking. After reliability scores for each of the measures had been obtained, the 11 items measuring reinforcement were averaged together to create the "Reinforcement" variable, (*maximum* = 3.91, *minimum* = 1.00, *M* = 2.53, *SD* = .59). Following this, the nine items measuring punishment were averaged together to create the "Punishment" variable, (*maximum* = 4.56, *minimum* = 1.00, *M* = 2.55, *SD* = .70).

*Communication competence.* Respondents were asked to rate how communicatively competent they believed themselves to be using the 12-item measure developed by McCroskey and McCroskey (1988). Participants were presented with a variety of communication scenarios and were asked to consider where they would place themselves on a scale of zero to 100. A "0" indicated "completely incompetent" and a "100" indicated "completely competent." A sliding scale was provided for the respondents' answers and sample items of this measure include: "Talk with a stranger," "Present a talk to a group of friends," and "Talk in a small group of acquaintances" (Cronbach's  $\alpha = .93$ ) Please see Appendix B for the complete instrument. The 12 items measuring perceived communication competence were averaged together to create the "Competence" variable, (*maximum* = 100.00, *minimum* = 11.67, *M* = 72.64, *SD* = 17.39).



The decision to use a self-report measure for this variable stems from the reasoning that when examining how an individual tries to manage a situation in which he/she is faced with a relatively uncomfortable or sensitive issue, self-report measures of communication competence can provide better insight into the nature of the communicating individual. The literature distinguishes between communication competence measured by outside parties and communication competence measured by self-report (McCroskey, 1982; McCroskey & McCroskey, 1988; Sallinen-Kuparinen, McCroskey, & Richmond, 1991; Spitzberg & Cupach, 1984; Spitzberg, 1983). Findings stemming from this have also revealed that self-perceptions of communication competence are correlated with sociability and self-esteem (Richmond, McCroskey, & McCroskey, 1989), as well as with emotional stability (Bakx, Van der Sanden, Croon & Vermetten, 2006). Furthermore, McCroskey and McCroskey (1988) assert that, “many of the most important decisions people make concerning communication are made on the basis of self-perceived competence rather than actual competence” (p. 110). The decisions that people make are based on their own perceptions of how competent they are. Given this, these researchers posit that it is more beneficial to study what a person *believes* his/her competence to be rather than what it actually is. This view serves as the guiding principle behind the current study’s utilization of a self-report measure of communication competence primarily because respondents will be reporting on their own attempts to manage their partners’ undesirable behaviors. Because one of the goals of the current study is to understand the predictors and motivations behind one’s use of reinforcement and punishment strategies, examining the perceptions that individuals hold of themselves as communicators provides a more accurate means for reaching this goal.

*Relational uncertainty.* In the next section of the questionnaire, respondents were asked to think about the current state of their relationships and the future directions of these relationships. Due to the nature of the measure, only respondents who were in a relationship at the time of the study were able to complete this part of the survey; 65 participants did not complete the scale. Although it is helpful to acknowledge the model from which relational uncertainty originates, it should be noted that for the purposes of this study, relational uncertainty was studied apart from the relational turbulence model because its goals revolve around understanding how single predictors (i.e. relational uncertainty), not models, can be applied to the tenets of INC Theory. Furthermore, other researchers (Emmers & Canary, 1996; Knobloch & Carpenter-Theune, 2004; Knobloch & Delaney, 2012; Knobloch & Solomon, 2005) have found significant relationships between relational uncertainty and a range of variables even when measuring it apart from the relational turbulence model.

The current study utilized the measure created by Knobloch and Solomon (1999), which was designed specifically for capturing the sources and content of relational uncertainty. This scale was composed of 16 Likert-type items (Cronbach's  $\alpha = .95$ ). Response choices ranged from one ("Mostly Uncertain") to six ("Completely Certain") and sample questions include: "How certain are you about the current status of the relationship?" "How certain are you about the definition of this relationship," and "How certain are you about whether or not this relationship will end soon?" Please see Appendix C for the complete instrument. All 16 items were recoded so that the higher values reflected greater uncertainty. The 16 items measuring relational uncertainty were

averaged together to create the “Relational Uncertainty” variable, (*maximum* = 6.00, *minimum* = 1.00, *M* = 2.59, *SD* = 1.07).

*Perceived network helpfulness and perceived network hindrance.* In the final section of the questionnaire, respondents were asked to think about the perceptions and opinions that those close to them had of their romantic relationships. The 22 Likert-type items measuring perceived network involvement were developed by Knobloch and Donovan-Kicken (2006) who examined PNI through a lens of relational uncertainty and turbulence after identifying that high levels of these within a romantic relationship lead an individual to perceive his/her network as more hindering and less helpful. This measure asked respondents to choose one answer from a scale of one (“Strongly Disagree”) to six (“Strongly Agree”). The first five items of this scale measure perceived network helpfulness (Cronbach’s  $\alpha = .96$ ) and the remaining 17 items measure perceived network hindrance (Cronbach’s  $\alpha = .94$ ). Sample items for perceived helpfulness include: “My family members, friends, and people close to me support my romantic relationship” and “My family members, friends, and people close to me are pleased about my romantic relationship.” Sample items for perceived hindrance include: “My family members, friends, and people close to me criticize my romantic relationship,” and “My family members, friends, and people close to me say that I spend too much time with this person.” Please see Appendices D and E for the complete instruments. The five items measuring perceived helpfulness were averaged together to create the “Helpfulness” variable, (*maximum* = 6.00, *minimum* = 1.00, *M* = 3.69, *SD* = 1.37). Following this, the 17 items measuring perceived hindrance were first averaged together to create the “Hindrance” variable, (*maximum* = 5.06, *minimum* = 1.00, *M* = 2.46, *SD* = .95).

It should be noted that the entirety of Knobloch and Donovan-Kicken's (2006) original perceived network involvement measure was not used in the current study. The original measure first asks respondents to list up to six people who are important to them and whose opinions matter to them the most. Respondents are then asked to list the people with whom they have discussed the romantic relationship. It is from this point that participants continue on to respond to the 22 Likert-type items. However, the first 10 items of this section originally began with "This person," but in the present study the wording was changed in the current study to match the subsequent 12 items: "My family members, friends, and people close to me..." The researcher felt justified in making these adaptations to the measure because she did not feel that it was necessary to have respondents list specific names and then fill out the remaining part of the questionnaire for every person listed. The researcher discussed this with one of the scale's creators and the two concluded that the adapted measure would still yield valid results because one of the original intentions behind the creation of this scale was to assess how the state of a romantic relationship influences people's appraisals of the behavior produced by their social networks (Knobloch & Donovan-Kicken, 2006). Additionally, Knobloch and Donovan-Kicken (2006) wanted to quantify *how* an individual's perceptions of network support help and hinder the progression of a romantic relationship. Thus, they constructed a measure that captured *how much* network members help and hurt romantic relationships. Although the current study is concerned with perceptions of helpfulness and hindrance, its goals are not directed at capturing the amount of involvement that respondents perceive from different network, but are aimed at understanding the roles

that overall perceived helpfulness and perceived hindrance play in predicting one's attempts at reinforcing and/or punishing a partner's smoking or drinking.

*Demographic and relationship characteristics.* Eighty percent ( $n = 216$ ) of the partners were males and 20% ( $n = 54$ ) of the partners were females. The age differences between the respondents and their partners ranged from zero months to 120 months and the reported ethnicities of the partners included 63% Caucasian, 17% Hispanic, 9% Asian, 9% African American, 1% Pacific Islander, and 1% indicating "other." Although it ended up being the case that all respondents reported on heterosexual relationships, homosexual individuals were not excluded from the study. Finally, respondents were asked to report on whether or not the relationship had been an on-again/off-again one. These are defined as relationships that have broken up and renewed at least once (Dailey et al., 2009). One hundred and fourteen (43%) participants said that the relationship was an on-again/off-again one. Please see Appendix F for the complete list of demographic items.

## Chapter 10: Results

### *Perceived Network Involvement*

As an initial step, bivariate correlations were conducted to establish if any relationships existed among the variables (please see Table 1). In order to provide more specific information about the relationships between the independent and dependent variables, a series of linear regressions were conducted; those analyses are detailed in the following sections.

Table 1

#### *Correlations between Predictor Variables and Outcome Variables*

	Uncertainty	Helpfulness	Hindrance	Competence	Reinforcement	Punishment
Uncertainty	_____	-.38**	.39**	-.19**	.27**	.23**
Helpfulness		_____	-.66**	.07	.09	-.19**
Hindrance			_____	-.12	.06	.36**
Competence				_____	-.12	-.05
Reinforcement					_____	-.20**
Punishment						_____

Note. \*\*Significant at the  $p < .01$  level.

The first research question addressed whether perceived network helpfulness (*RQ1a*) and perceived network hindrance (*RQ1b*) were significant predictors of punishment and/or reinforcement or a partner's undesirable behavior. A linear regression analysis conducted between perceived helpfulness and punishment indicated that helpfulness significantly predicted punishment such that perceptions of greater network

helpfulness were related to less punishment of a partner's undesirable behavior ( $b = -.10$ ,  $\beta = -.19$ ,  $t = -3.22$ ,  $p < .001$ ). Perceived helpfulness explained a significant proportion of variance in punishment scores,  $R^2 = .04$ ,  $F(1, 264) = 10.34$ ,  $p < .001$ . A linear regression analysis conducted between perceived helpfulness and reinforcement indicated that helpfulness did not significantly predict reinforcement of a partner's undesirable behavior ( $b = .04$ ,  $\beta = .09$ ,  $t = 1.44$ ,  $p = .15$ ). Perceived helpfulness did not explain a significant proportion of variance in reinforcement scores,  $R^2 = .01$ ,  $F(1, 264) = 2.07$ ,  $p = .15$ . Therefore, in response to part one of the first research question, there was evidence to suggest that perceived helpfulness was a significant predictor of punishment, but not of reinforcement.

A linear regression analysis conducted between perceived hindrance and punishment revealed that higher perceptions of network hindrance were related to more punishment of a partner's undesirable behavior ( $b = .26$ ,  $\beta = .36$ ,  $t = 6.26$ ,  $p < .001$ ). Perceived hindrance also explained a significant proportion of variance in punishment scores,  $R^2 = .13$ ,  $F(1, 264) = 39.22$ ,  $p < .001$ . A linear regression analysis conducted between perceived hindrance and reinforcement indicated that hindrance did not significantly predict reinforcement of a partner's undesirable behavior ( $b = .04$ ,  $\beta = .06$ ,  $t = 1.03$ ,  $p = .31$ ). Perceived hindrance did not explain a significant proportion of variance in reinforcement scores,  $R^2 = .00$ ,  $F(1, 264) = 1.05$ ,  $p = .31$ . Therefore, in response to part two of the first research question, there was evidence to suggest that perceived hindrance was a significant predictor of punishment, but not of reinforcement.

### ***Perceived Communication Competence***

Hypothesis one predicted that higher ratings of perceived communication competence would be correlated with more punishment and less reinforcement. Bivariate correlations revealed that there was little evidence to suggest a correlation between perceived communication competence and reinforcement ( $r = -.12, p = .06$ ). There was also no evidence to suggest a significant correlation between perceived communication competence and punishment ( $r = -.05, p = .40$ ). Given the results of these tests, the study's hypothesis was not supported. No subsequent analyses between competence and reinforcement or competence and punishment were conducted.

### ***Relational Uncertainty***

A series of linear regression analyses were conducted to assess the extent to which relational uncertainty was predictive of reinforcement and punishment (*RQ2*). Relational uncertainty significantly predicted reinforcement such that more relational uncertainty was related to more reinforcement of a partner's undesirable behavior, ( $b = .15, \beta = .27, t = 4.10, p < .001$ ). Relational uncertainty explained a significant proportion of variance in reinforcement scores,  $R^2 = .08, F(1, 207) = 16.75, p < .01$ . Additionally, relational uncertainty significantly predicted punishment such that more relational uncertainty was related to more punishment of a partner's undesirable behavior ( $b = .15, \beta = .23, t = 3.41, p < .001$ ). Relational uncertainty explained a significant proportion of variance in punishment scores,  $R^2 = .05, F(1, 207) = 11.60, p < .01$ .

### ***Predicting Punishment***

Because perceived helpfulness, perceived hindrance, and relational uncertainty were all significant predictors of punishment, a linear regression analysis was conducted



to determine which variables were significant predictors of punishment in the presence of the others. All three predictors were entered in a single block. The findings revealed that perceived hindrance explained a significant proportion of variance in punishment scores,  $R^2 = .16$ ,  $F(3, 203) = 12.46$ ,  $p < .001$ , adjusted  $R^2 = .14$ . This model revealed that hindrance was the only significant predictor of punishment in the presence of other variables, ( $b = .29$ ,  $\beta = .39$ ,  $t = 4.46$ ,  $p < .001$ ). Relational uncertainty did not remain as a significant predictor of punishment, ( $b = .07$ ,  $\beta = .11$ ,  $t = 1.49$ ,  $p = .14$ ). Perceived helpfulness did not remain as a significant predictor either, ( $b = .04$ ,  $\beta = .05$ ,  $t = .89$ ,  $p = .37$ ). Please see Table 2.

Table 2

*Linear Regression Analyses Predicting Punishment*

Predictors	<i>B</i>	$\beta$	<i>t</i> -value	<i>p</i> -value
Constant	1.46		4.53	<.001
Uncertainty	.07	.11	1.49	.14
Helpfulness	.04	.08	.89	.37
Hindrance	.29	.39	4.46	<.001

***Follow-up Analyses***

*Relationship duration.* The demographic characteristics and relationship features reported by participants were used in follow-up analyses to explore whether there were any meaningful associations between the main study variables and relationship duration,

on-again/off-again cycling, type of substance use, and sex of participant. In a post-hoc analysis, bivariate correlations were conducted to test whether relationship duration (in months) was correlated with the outcome variables. There was some speculation that more time together would be correlated with more punishment due to partners feeling more comfortable with directly addressing one another's negative behaviors than would partners who had been together for a short amount of time. However, no evidence was found to suggest that relationship duration was correlated with reinforcement ( $r = -.11, p = .07$ ) or punishment ( $r = -.01, p = .86$ ).

*Type of undesirable behavior.* An independent samples t-test was conducted to assess whether there were differences between individuals who reported on smoking and individuals who reported on drinking (dummy coded as "1" and "0" respectively). The motivation for conducting these analyses stems from the above review of literature indicating that drinking behaviors are fairly tolerated, and often encouraged, among college students. Thus, it seemed likely that partner drinking would be more reinforced than would partner smoking. Although no purposive sampling was employed to recruit similar numbers of participants who reported on smoking or drinking, the breakdown of the final sample was such that it was possible to compare these two groups. There was no evidence to suggest significant differences in punishment use between the smoking group ( $M = 2.55, SD = .69$ ) and the drinking group ( $M = 2.55, SD = .71$ ),  $t(267) = -.01, p = .99$ , but individuals who reported on their partners' drinking used more reinforcement ( $M = 2.65, SD = .58$ ) than did individuals who reported on their partners' smoking ( $M = 2.37, SD = .57$ ),  $t(267) = -3.86, p < .001$ .

In order to follow-up on these findings, a hierarchical regression analysis was conducted to determine if relational uncertainty remained a significant predictor of reinforcement after controlling for type of undesirable behavior. Undesirable behavior was entered in step one and relational uncertainty was entered in step two. Relational uncertainty remained as a significant predictor of reinforcement, ( $b = .14$ ,  $\beta = .26$ ,  $t = 3.88$ ,  $p < .001$ ). Type of undesirable behavior also remained as a significant predictor of reinforcement, ( $b = -.26$ ,  $\beta = -.22$ ,  $t = -3.30$ ,  $p < .001$ ). Relational uncertainty explained a significant proportion of variance in reinforcement scores,  $R^2 = .12$ ,  $F(2, 205) = 14.04$ ,  $p < .001$ , adjusted  $R^2 = .11$ ,  $\Delta R^2 = .07$ . Type of undesirable behavior also explained a significant proportion of variance in reinforcement scores,  $R^2 = .06$ ,  $F(1, 206) = 12.19$ ,  $p < .001$ , adjusted  $R^2 = .05$ ,  $\Delta R^2 = .06$ . Therefore, the findings revealed that type of undesirable behavior does matter in terms of predicting reinforcement. Please see Table 3, which displays the unstandardized regression coefficients (B), standard errors (SE B), standardized regression coefficients ( $\beta$ ) for each variable, and the  $R$ -squared and  $R$ -squared change statistics for the full model.

Table 3

*Regression of Reinforcement onto Type of Undesirable Behavior*

		B	SE B	$\beta$	$R^2$	$\Delta R^2$
Step 1	Undesirable Behavior	-.29**	.08	-.24**	.06	.06**
Step 2	Undesirable Behavior	-.26**	.08	-.22**		
	Uncertainty	.14**	.04	.26**	.12	.07**

Note. \*\*Significant at the  $p < .01$  level.

*On-again/off-again status.* An independent samples t-test was conducted between those who had reported that their relationships *were* on-again/off-again and those who had reported that their relationships *were not* on-again/off-again. There was no evidence to suggest that significant differences in reinforcement use existed between the on-again/off-again group ( $M = 2.56, SD = .63$ ) and the non-on-again/off-again group ( $M = 2.51, SD = .56$ ),  $t(263) = .72, p = .48$ . However, a statistically significant difference existed for punishment use such that the on-again/off-again group reported using more punishment ( $M = 2.68, SD = .68$ ) than did the non-on-again/off-again group ( $M = 2.46, SD = .69$ ),  $t(263) = 2.54, p < .01$ . Given the statistically significant relationship that existed between punishment and on/off again status, a two-block hierarchal regression was conducted to determine if hindrance was still a significant predictor of punishment after controlling for on/off status. On/off status was entered in the first block and hindrance was entered in the second block. The findings from this model revealed that hindrance was still a significant predictor of punishment after controlling for on/off status, ( $b = .26, \beta = .36, t = 6.18, p < .001$ ), and that on/off status was no longer significant. Thus, after factoring in on/off status, perceived hindrance still explained a significant proportion of variance in punishment scores,  $R^2 = .15, F(2, 262) = 22.78, p < .001$ , adjusted  $R^2 = .14, \Delta R^2 = .12$ . Please see Table 4.

Table 4

*Regression of Perceived Hindrance after Controlling for On/Off Status*

		B	SE B	$\beta$	$R^2$	$\Delta R^2$
Step 1	On/Off Status	.22	.09	.16	.02	.02
Step 2	On/Off Status	.12	.08	.09		
	Hindrance	.26***	.04	.36***	.15	.12***

Note. \*\*\*Significant at the  $p < .001$  level.

A second two-block hierarchal regression was then conducted to determine if helpfulness was still a significant predictor of punishment after controlling for on/off status. On/off status was entered in the first block and helpfulness was entered in the second block. The findings from this model revealed that helpfulness was still a significant predictor of punishment after controlling for on/off status, ( $b = -.09$ ,  $\beta = -.19$ ,  $t = -2.96$ ,  $p < .003$ ). Thus, even after factoring in on/off status, perceived helpfulness still explained a significant proportion of variance in punishment scores,  $R^2 = .06$ ,  $F(2, 262) = 7.71$ ,  $p < .001$ , adjusted  $R^2 = .05$ ,  $\Delta R^2 = .03$ . Please see Table 5.

Table 5

*Regression of Perceived Helpfulness after Controlling for On/Off Status*

		B	SE B	$\beta$	$R^2$	$\Delta R^2$
Step 1	On/Off Status	.22	.09	.16	.02	.02*
Step 2	On/Off Status	.15	.09	.11		
	Helpfulness	-.09**	.03	-.19**	.06	.03**

Note. \*Significant at the  $p < .05$  level. \*\*Significant at the  $p < .01$  level.

A third two-block hierarchal regression was then conducted to determine if relational uncertainty was still a significant predictor of punishment after controlling for on/off status. On/off status was entered in the first block and relational uncertainty was entered in the second block. The findings from this model revealed that relational uncertainty was still a significant predictor of punishment after controlling for on/off status, ( $b = .14$ ,  $\beta = .22$ ,  $t = 3.15$ ,  $p < .002$ ). Thus, even after factoring in on/off status, relational uncertainty still explained a significant proportion of variance in punishment scores,  $R^2 = .06$ ,  $F(2, 203) = 6.97$ ,  $p < .001$ , adjusted  $R^2 = .06$ ,  $\Delta R^2 = .05$ . Please see Table 6.

Table 6

*Regression of Relational Uncertainty after Controlling for On/Off Status*

		B	SE B	$\beta$	$R^2$	$\Delta R^2$
Step 1						
	On/Off Status	.20	.10	.14	.02	.02
Step 2						
	On/Off Status	.16	.10	.11		
	Uncertainty	.14**	.05	.22**	.06	.05**

Note. \*\*Significant at the  $p < .01$  level.

A final two-block hierarchal regression was then conducted to determine which variables would remain as significant predictors of punishment after controlling for on/off status. On/off status was entered in the first block and relational uncertainty, helpfulness, and hindrance were entered in the second block. The findings from this model revealed that hindrance was the only significant predictor of punishment after

controlling for on/off status, ( $b = .29$ ,  $\beta = .39$ ,  $t = 4.54$ ,  $p < .001$ ). Thus, after factoring in on/off status, relational uncertainty, and perceived helpfulness, perceived hindrance still explained a significant proportion of variance in punishment scores,  $R^2 = .17$ ,  $F(4, 201) = 10.37$ ,  $p < .001$ , adjusted  $R^2 = .16$ ,  $\Delta R^2 = .15$ . This pattern is similar to what was observed without controlling for on-again/off-again status. Please see Table 7.

Table 7

*Regression of Predictor Variables after Controlling for On/Off Status*

		B	SE B	$\beta$	$R^2$	$\Delta R^2$
Step 1						
	On/Off Status	.20	.10	.14	.02	.02
Step 2						
	On/Off Status	.09	.10	.06		
	Uncertainty	.06	.05	.09		
	Helpfulness	.03	.05	.06		
	Hindrance	.29***	.07	.39***	.17	.15***

Note. \*\*\*Significant at the  $p < .001$  level.

*Sex differences.* In order to see if sex differences existed for reinforcement and punishment use, an independent samples t-test was conducted between males and females (dummy coded as “1” and “0” respectively.) The results produced revealed that no significant difference in punishment use existed between men ( $M = 2.44$ ,  $SD = .65$ ) and women ( $M = 2.58$ ,  $SD = .71$ ),  $t(268) = -1.29$ ,  $p > .20$ . However, the results from this test did reveal significant differences in reinforcement use between men ( $M = 2.81$ ,  $SD = .58$ ) and women ( $M = 2.47$ ,  $SD = .57$ ),  $t(268) = 3.91$ ,  $p < .001$ . In order to follow-up on these findings, a hierarchal regression was conducted to control for sex and to determine if both

relational uncertainty and sex remained as significant predictors of reinforcement when assessed together. Relational uncertainty remained as a significant predictor of reinforcement, ( $b = .14$ ,  $\beta = .26$ ,  $t = 3.88$ ,  $p < .001$ ). Sex remained a significant predictor of reinforcement, ( $b = .27$ ,  $\beta = .19$ ,  $t = 2.85$ ,  $p < .005$ ). Relational uncertainty explained a significant proportion of variance in reinforcement scores,  $R^2 = .11$ ,  $F(2, 206) = 12.72$ ,  $p < .001$ , adjusted  $R^2 = .10$ ,  $\Delta R^2 = .07$ . Therefore, the findings revealed that sex does add unique variance to the prediction of reinforcement. Please see Table 8.

Table 8

*Regression of Reinforcement onto Sex*

		B	SE B	$\beta$	$R^2$	$\Delta R^2$
Step 1						
	Sex	.30**	.10	.21**	.05	.05**
Step 2						
	Sex	.27**	.10	.19**		
	Uncertainty	.14***	.04	.26***	.11	.07***

Note. \*\*Significant at the  $p < .01$  level. \*\*\*Significant at the  $p < .001$  level.



## **Chapter 11: Discussion**

The following section will discuss the implications of the previous findings, especially in terms of how they relate back to the theoretical rationale behind the study. The focus of these speculations will be on how the variables of perceived network helpfulness, perceived network hindrance, and relational uncertainty function as potential predictors of punishment use; as well as how relational uncertainty, type of undesirable behavior (smoking or drinking), and sex (male or female) function as potential predictors of reinforcement use. Implications for the communication of support and control within romantic relationships through the enactment of reinforcing and punishing strategies will be addressed, as will the benefits of implementing a quantitative scale to be used for the measurement of INC Theory's constructs. Finally, the subsequent section will discuss the current study's limitations and directions for future research in this area.

### ***Perceived Network Helpfulness as a Predictor of Punishment***

The findings of this study reveal that as perceptions of network helpfulness increase, punishment decreases. They also reveal that as perceptions of network hindrance increase, punishment increases. These results allow for a few tentative conclusions to be drawn. One stems from the observation that an individual may be more reluctant to punish his/her romantic partner if that individual believes his/her social network to be supportive of the romantic relationship. If members of the social network are on board with the way things are going, then the individual may not deem it wise to confront or criticize the romantic partner given that such reactions could put the relationship in jeopardy. If family and friends are trying to help the relationship succeed, they may actually advise the functional partner not to be so hard on the partner, to be

more understanding of the partner's circumstances, etc. Additionally, if members of the social network have positive feelings about the partner, the functional individual may also feel more positively about the partner and thus, may be more hesitant about punishing the partner. Conversely, the functional individual may attempt to create a favorable image of the partner when describing him/her to family and friends by leaving out the issue of substance use, making this the reason behind why the individual may use less punishment. However, because there is no evidence to suggest that a relationship exists between perceived helpfulness and reinforcement, one can infer that members of one's social network may encourage punishment of it in small doses.

The relationship between perceived network helpfulness and punishment in the current study also alludes to the degree of influence that members of one's social network can have on an individual. Even if an individual believes that enacting these punishing behaviors may be the best thing for the partner and for the relationship, he/she may still feel somewhat pressured into appeasing his/her friends or family. Social network members may be so supportive of that romantic relationship that an individual may be hesitant to do anything that would jeopardize it, even if that means staying in the relationship solely for the sake of appeasing those close to him/her. This is supported by the reasoning that individuals stay in relationships not only because of feelings of personal commitment, but also because they have structural and moral obligations that keep them committed to those unions (Johnson, Caughlin, & Huston, 1999). If an individual perceives an abundance of helpfulness from his/her social network, he/she may feel even more pressure to make the relationship work in order to avoid disappointing family members and friends. Thus, even if the partner's smoking or drinking occurs at an

undesirable level, the functional individual may be reluctant to punish it too aggressively since this could lead to future arguments between the two partners as well as between the functional individual and his/her friends and family.

Given the correlational nature of the data, the influence that punishment has on perceived network helpfulness should also be considered. An individual punishing a partner may project whatever negative feelings that result from doing so onto family members and friends. The functional individual may then perceive his/her social network as being less helpful and less supportive, especially if he/she allows for the hostility, unresponsiveness, frustration, etc. that he/she experiences from the partner to infiltrate into relationships with family members and friends. Along these same lines, enacting less punishment towards a partner may allow for an individual to perceive his/her network as being more helpful because he/she may have more positive views of the partner that then carry over to the views he/she has of family members and friends. This individual may also feel that he/she has a good handle on the partner's substance use (even if this is not necessarily the case) and thus, may see the social network as supportive.

### ***Perceived Network Hindrance as a Predictor of Punishment***

Similar to the findings on perceived network helpfulness, there is no evidence to suggest a significant relationship between perceived network hindrance and reinforcement, but there is evidence indicating that a positive relationship between perceived hindrance and punishment exists. Furthermore, even after on-again/off-again status was controlled for, perceived hindrance remained as the best predictor of punishment among the variables. These findings allude to the notion that an individual

may be less willing to put up with an undesirable behavior if he/she is aware that his/her social network already thinks poorly of the relationship. Thus, instead of taking the time to work on effective strategies for coping with the behavior and communicating with the partner about it, the functional individual may succumb to the pressure he/she feels from network members who wish to see the relationship end. Punishing the smoking or drinking may be seen as the best option because it can lead to the end of the relationship, in which case the social network may be happy; or it can lead to the extinction of the undesirable behavior and preservation of the relationship. Additionally, an individual may feel more pressure to take action against a partner's smoking or drinking if he/she feels as though his/her social network is scrutinizing and interfering with the relationship. Knobloch and Donovan-Kicken (2006) also describe a blending of emotions that can take place when one is uncertain about how to handle a troubling relational situation. If an individual feels as though his/her continued attempts to punish an undesirable behavior remain ineffective, the frustration that results may "carry over" into his/her perceptions of friends and family members; thereby causing the individual to view members of his/her social network as more intrusive and discouraging than they actually are.

The data in the current study indicating that a relationship exists between perceived network hindrance and punishment suggests that family members and friends may have a fairly significant amount of power over an individual and over the trajectory of the individual's romantic relationship. Until this point, most of the thinking behind the consequences of perceived network hindrance has been focused entirely on the functional individual, but it is also necessary to consider the ramifications that the current findings can have for the afflicted individual. The afflicted individual is not only likely to be

frustrated with the amount of punishing behaviors enacted by the partner, but may feel a sense of helplessness as well if he/she believes that the partner's actions are primarily influenced by family members and friends, leaving the afflicted individual with no real say about what is going on within the relationship. Furthermore, the afflicted individual's substance use may worsen if he/she also perceives that the partner's social network is discouraging of the relationship. Groh and his colleagues (2010) observed that support from friends predicted less consumption of alcohol, suggesting that a partner's hindering social network can make it even more difficult for the afflicted individual to get the substance use under control. Due and his colleagues (1999) found that the influence of one's social network loses prominence as one ages and that individuals experience less relational strain as they get older, indicating that social networks play greater roles in the lives of younger individuals. The implications of this are relevant for the current study's population because the majority of these individuals are young adults who are likely faced with a lot of relational strain and thus, are more inclined to value and depend on their social networks for support. If an individual is aware that his/her partner's family members and friends are not supportive of the relationship, he/she may have an even more difficult time with getting the substance use under control.

The evidence suggesting that helpfulness and hindrance are both significantly correlated with punishment, but are not significantly correlated with reinforcement reveals that reinforcement and punishment are not necessarily opposites. This is an interesting finding and touches on a point that was first brought up in an earlier section of this paper. Thinking about reinforcement and punishment as behavioral patterns that can

occur simultaneously indicates that it may be even more difficult for an individual to break away from this cycle of inconsistency because the behaviors may be connected so seamlessly that the individual may not even be aware of the differences that exist between both. Parallel to this, is the notion that an individual can perceive his/her social network as being both helpful and hindering. However, because the current study illustrates that perceptions of network hindrance are predictive of punishment, one should be aware that even in cases where social networks seem to be supportive of an individual's romantic relationship, any sign of disapproval or negativity towards that relationship has the potential to influence one's decision to punish a partner. Even if family members and friends are overtly supportive of the relationship, they may be sending subtle signs suggesting that the partner be punished for his/her smoking or drinking. Regardless of how an individual feels about his/her partner, it can be very difficult to ignore completely the opinions held by the members of one's social network.

The lack of evidence suggesting that perceived network helpfulness and perceived network hindrance are correlated with reinforcement also suggests that enacting these strategies may make it such that family members and friends never even know that the smoking or drinking is occurring. The functional individual may act as though everything is fine in order to avoid alerting family members and friends to the potentially problematic behavior and may talk about the partner in ways that do not reveal that he/she engages in an undesirable behavior. This in and of itself can be regarded as another means by which the functional individual reinforces the undesirable behavior and may perhaps be represented as an item on a future version of the reinforcement scale (i.e. "I try to avoid mentioning my partner's smoking/drinking when talking with my family

members and friends”). Alternatively, if the functional individual is *unknowingly* reinforcing the undesirable behavior, his/her perceptions of family members and friends may remain fairly neutral. He/she may perceive members of the social network to be neither helpful nor hindering because there may be a lack of awareness of the strain that the smoking or drinking has on the relationship.

### ***Perceived Communication Competence***

Although there was no evidence to suggest that significant relationships exist between communication competence and reinforcement or communication competence and punishment, the study’s data still produced some interesting conclusions. One of them is that overall, respondents ranked themselves as being fairly competent communicators. The mean score of 72.64 is relatively high considering that the scale ranges from zero to 100. This indicates that respondents may feel pretty comfortable when trying to manage their interactions with their partners who smoke or drink and thus, may not engage in cycles of inconsistent reinforcement and punishment. A potential explanation for this mean score may have to do with the nature of the respondent pool. In addition to being college-educated individuals, respondents were recruited from communication classes and therefore, may already possess above-average levels of communicative skills. One may infer from this that the individuals in this study are more capable of managing their partners’ smoking and drinking because of their abilities to communicate effectively. They may be more successful in their attempts to address their partners’ undesirable behaviors and thus, may not fall victim to perpetuating cycles of inconsistency. Even if these individuals are not *actually* effective at managing their partners’ negative behaviors, if they *perceive* themselves to be more skilled

communicators, then they are still more likely to believe that they are able to successfully control potentially problematic issues that arise in their relationships.

While looking at the respondent pool may provide some insight into why there is no evidence to suggest that significant relationships exist between perceived communication competence, reinforcement, and punishment, it is also necessary to examine the potential impact that the study's measure had on the results. The McCroskey and McCroskey (1988) scale is centered on *perceptions* of communication competence, but it does not contain items addressing communication within romantic relationships per se. The scale asks respondents to rate how competent they believe themselves to be while they are conversing with friends, acquaintances, and strangers, but it does not ask them to think about their communicative experiences with their relational partners. Furthermore, the items do not ask respondents to think about the *outcomes* of these experiences, which may be a reason why it did not lead to significant correlations between communication competence and the outcome variables of reinforcement and punishment. However, it should be noted that the researcher chose to utilize this measure because very few scales within the field are composed of items capturing perceived communication competence. The McCroskey and McCroskey (1988) SPCC Scale is widely used in studies concerned with self-report measures of communication competence (Blood et al., 2001; Chesebro et al., 1992; Richmond et al., 1989). Rubin and Martin (1994) also developed a self-report measure of communication competence, but again, the items in this measure do not address communication between romantic partners and is primarily concerned with asking about interactions between friends and strangers. Additionally, like the SPCC Scale (McCroskey & McCroskey, 1988) the



Rubin and Martin (1994) measure does not ask about how successful an individual perceives him/herself to be when trying to obtain a specific outcome (i.e. managing a partner's undesirable behavior).

### ***Relational Uncertainty as a Predictor of Reinforcement and Punishment***

The results revealed that relational uncertainty had a significant, positive relationship with reinforcement and had a significant, positive relationship with punishment. These findings suggest that as relational uncertainty increases, both reinforcement and punishment use increase (and vice versa). This conclusion seems to be in line with the body of literature reviewing relational uncertainty covered previously because it indicates that a divide remains between the finding that individuals with high relational uncertainty have a hard time confronting problematic issues in their relationships (Afifi & Burgoon, 1998; Knobloch & Carpenter-Theune, 2004) and the finding that individuals prefer to address directly problematic issues when they experience high relational uncertainty (Theiss & Solomon, 2006). What the current study's findings do suggest is that individuals experiencing relational uncertainty may be very unsure about how to manage a partner's smoking and drinking. In addition to this, individuals who are uncertain about the status and direction of a relationship may be so nervous about bringing up such sensitive topics that they choose to stay away from completely any discussion that would incite conflict. As Knobloch and Solomon (2005) point out, the presence of relational uncertainty can cloud one's judgment because it prevents an individual from noticing and processing important relational cues. Furthermore, these researchers found that relational uncertainty prevents people from accurately interpreting relational talk. An individual may be so uncertain about his/her

feelings towards the relationship that he/she may not even be aware that he/she is reinforcing and thus, the use of reinforcement strategies (unknowingly) continues to increase.

Alternatively, it is important to consider that the average length of the relationships reported on was 19.22 months, suggesting that many of the couples in the current study were within stages of moderate intimacy, the period during which romantic partners experience the most doubt about involvement within the relationship (Solomon & Knobloch, 2004). Even though partners may feel committed to one another by this point, they are still likely to have feelings of uncertainty about where the relationship is headed, especially if they are thinking about graduating from college and moving in different directions. According to Theiss and Solomon's (2006) findings, high uncertainty at this stage leads to a desire to confront problematic issues; making it more likely that these individuals would enact punishment as their uncertainty continues to grow. Furthermore, if an individual is already experiencing feelings of uncertainty about the relationship, then he/she may feel as though it is important to put an end to potentially problematic behaviors before they become out of control and cause greater ambiguity about the relationship's trajectory. If relational uncertainty leads to breakdowns in communication (Knobloch & Solomon, 2005), then it seems that greater feelings of this sentiment may lead one to engage in some of the behaviors associated with punishment: distancing, criticizing, etc. However, given the significant, positive relationships that existed for both relational uncertainty and reinforcement and relational uncertainty and punishment, one needs to acknowledge that reinforcement strategies and punishment strategies are not opposite sets of behaviors. Although these two types of reactions may

be different in nature, they can be enacted simultaneously, especially if an individual has very little awareness of the direction in which a relationship is headed.

### ***Why Punishment is “Easier” to Predict***

Based on the evidence generated by the current study, there are three variables that are significantly correlated with punishment and only one variable significantly correlated with reinforcement. This may have to do with the nature of punishment. Respondents may be better able to recall and report on punishing behaviors more so than reinforcing behaviors because they encompass more active attempts to manage a partner’s smoking or drinking. Some of the behaviors associated with reinforcement are somewhat passive (i.e. brushing aside the issue and taking the partner to social events) to the extent that an individual may not even be aware that his/her actions towards the partner are potentially triggering a worsening of the undesirable behavior. In other words, respondents may be more aware of when they have tried to punish the undesirable behavior and be less aware of when they have reinforced it. Furthermore, social desirability may have also played a role such that a respondent may not have felt completely comfortable acknowledging that he/she encourages the partner’s smoking or drinking. The literature on social desirability supports this speculation because it suggests that the accuracy of self-reported alcohol use tends to be threatened by social impression management biases (Davis, Thake, & Vilhena, 2010).

### ***Nature of the Relationship***

Post-hoc analyses revealed evidence to suggest that such relational factors as duration and on-again/off-again status were correlated with predictor and outcome variables. Relationship duration was significantly correlated with perceived network

helpfulness such that more time together was related to more perceptions of helpfulness from members of social networks. This makes sense if one considers that a couple is more likely to stay together if the individuals believe that their friends and family members support the relationship. This can work in the opposite direction as well; friends and family members may try to show more support for the relationship as the relationship continues to grow. Along a similar line, the study produced evidence suggesting that as relationship duration increases, perceptions of hindrance from social networks decreases. The same reasoning provided previously can be used to explain why this is so; individuals who have been in their relationships for a long time may perceive (either through accurate interpretation or wishful thinking) that their friends and family members would not want to see the relationship fail or get in the way of the relationship's development. Additionally, even if friends and family members are not happy with the individual's romantic relationship, they may not find it worth their time and efforts to interfere after realizing that the relationship continues to become more serious.

The current study contains evidence suggesting that individuals in on-again/off-again relationships are more likely to punish their partners' smoking or drinking than are individuals in non-on-again/off-again relationships. Dailey and her colleagues' (2009) work on the nature of on-off relationships is useful for understanding why this finding was produced. They concluded that individuals in on-off relationships are more likely to report negative issues than are individuals who have not been in on-off relationships. Furthermore, they found that a higher number of relationship renewals is correlated with more negatives and less positives. Given this, it seems that individuals reporting on on-off relationships are more likely to use and recall the enactment of punishing behaviors

because these behaviors are primarily negative in nature (yelling, name-calling, threatening to end the relationship, etc.). Further investigation into the relationships between on-off relationships, reinforcement, and punishment could produce some interesting findings about how inconsistent attempts to control a partner's substance use may influence the couple's decision to break up and get back together. On the other hand, there may be some factor inherent within on-off couples that causes them to fall into a cycle of reinforcement and punishment, causing them to have to go back and forth between managing both the relationship's existence and the substance use.

### ***Variables Affecting Reinforcement***

Findings from the current study provide evidence suggesting that men use more reinforcement behaviors than women do. This is consistent with Duggan's (2007) finding that men contributed to their partners' depressive behaviors after attempts to help had failed and is also consistent with Umberson's (1992) finding that women are more likely to try to control the health practices of others than men are. Additionally, the findings from the hierarchical regression illustrating that sex matters for reinforcement use, but not for punishment use suggest that overall, punishment strategies are either easier to enact than reinforcement strategies such that both sexes rely on these in their attempts to manage the smoking or drinking; or that punishment strategies are more difficult to enact such that both sexes try to avoid using them.

Another important post-hoc finding to consider is that respondents reporting on their partners' drinking also used more reinforcement than did respondents reporting on their partners' smoking. The fact that *type* of undesirable behavior (smoking or drinking) matters for reinforcement use, but not for punishment use suggests that overall,

individuals either punish smoking and drinking equally or they do not know how to enact punishment effectively and thus, try to avoid utilizing any type of behavior that might make the partner look bad. The latter of these two speculations seems to be the more plausible one when considering that undesirable drinking was associated with more reinforcement than was undesirable smoking. This may have to do with the fact that, as described in a previous section, drinking behaviors tend to be not only tolerated, but encouraged on college campuses. Individuals may think that it is more acceptable for their partners to drink than it is for them to smoke and, in addition to being more accepting of the drinking, may also promote it through such reinforcing behaviors as going to parties with the partner at which there is alcohol and supplying the partner with alcohol. These conclusions illustrate that while only one of the study's predictor variables (relational uncertainty) was significantly correlated with reinforcement, other factors such as sex and type of undesirable behavior can shed light on why an individual may use reinforcing actions.

### ***Contribution of Quantitative INC Theory Measure***

One of the contributions that this project set out to make has to do with the development of a quantitative scale that can be used to measure reinforcement and punishment behaviors. The measure that was used in the current study was adapted from Glowacki's (2012) work with INC Theory and had been adjusted in order to achieve a better reliability score for reinforcement. The original measure was composed of nine items asking about reinforcement behaviors ( $\alpha = .67$ ), and nine items asking about punishment behaviors ( $\alpha = .79$ ). These items were originally adapted from the findings of Le Poire (1995) and Duggan and Le Poire (2006), sample items include: "I try to act

normal around my partner,” “I confront my partner,” “I deny that there are problems,” and “I call my partner names.” The current study utilized the same nine items measuring punishment as well as the same nine items measuring reinforcement, but added an additional three items to the reinforcement component so as to increase reliability. The three items that were added are: “I try to have friends around my partner who smoke/drink so that he/she does not feel as bad about doing it,” “I sometimes lie to my partner about my true feelings regarding the smoking/drinking so he/she does not feel judged,” and “I end up helping my partner out with his/her responsibilities when he/she puts them aside in order to smoke/drink.” As stated in a preceding section, an inter-item reliability analysis revealed that it would be beneficial to remove one of the initial items from this scale. Once this had been done, the final reliability for the reinforcement measure was Cronbach’s  $\alpha = .74$ . Improving the reliability of this scale was an important goal of the study because past work with INC Theory has only utilized qualitative measures. This study sought to develop the scale put into place by Glowacki (2012) with the intent to construct an effective, quantitative measure that can be used for better examining reinforcement and punishment behaviors. Having this scale proved to be very useful for studying the predictors of reinforcement and punishment and it is the researcher’s hope that future work be done with this scale, especially so that it can be applied to understanding *outcomes* of reinforcement and punishment use. It would be beneficial to examine whether individuals believe that their reinforcement and/or punishment strategies are effective at curbing their partners’ smoking and drinking and having a quantitative measure in place would allow for a more efficient investigation of this. The researcher plans to continue work on the reinforcement and punishment scales

so as to incorporate the suggestion proposed by Duggan and her colleagues (2006) that more statistical work with these sets of behaviors be conducted through a cluster analysis in order to gain more insight into the mechanics of each strategy.

### ***The Dark Side of Support and Control***

Expressing support for a partner dealing with substance use issues can be a very complex process given that attempts to communicate understanding are not always conveyed effectively. Even when an individual has the best intentions in mind and truly wishes to help a partner deal with a potentially damaging behavior, he/she may end up doing more harm than good to the partner. INC Theory emphasizes the notion that in many situations, relational partners simply do not know how to communicate about issues that are bothering them. These barriers to communication become amplified when romantic partners must cope with a behavior that is threatening the well-being of an individual and the stability of the relationship. In cases such as this, the afflicted individual relies on the functional individual for help, which can end up leading to increases in the feelings of negativity experienced by the afflicted individual (Duggan, 2007). However, there is a dark side to administering support because extinction of the negative behavior may also lead to the extinction of the relationship. Furthermore, the functional individual may not know how to operate when removed from the role of nurturer (Le Poire, 1992). In other words, the undesirable behavior may in some cases serve as the glue that holds the relationship together; a factor that makes it even more difficult for the afflicted individual to cope. The functional individual may not even be aware of the inconsistent messages he/she is sending to the partner because these can be very subtle nonverbal cues such as a smile indicating reinforcement and a closed, tend



body position indicating punishment (Duggan et al., 2008). Individuals faced with potentially problematic issues such as substance use also need to be aware of the tension that exists between wanting to treat their partners as “normal” and having to recognize that the substance use could reach a harmful level.

Interpretations of providing “support” can also vary among individuals. Findings have revealed that individuals feel as though they are showing support for their partners by drinking with them and forming “drinking partnerships” which are centered on reciprocal drinking patterns (Leadley, Clark, & Caetano, 2000; Le Poire, 1995; Le Poire et al., 1998). In cases such as these, the functional individual’s attempt to help the partner feel as though he/she is not alone leads to an intensifying of the negative behavior. It would be beneficial to study further these destructive forms of support, particularly within collegiate populations because students living in environments that are tolerant of drinking may feel as though engaging in the behavior with a partner is the best way to show understanding. Examining the literature on social control in relationships also sheds light on this issue because it suggests that when members of one’s social network attempt to influence and regulate an individual’s health practices, health-enhancing behaviors (as opposed to health-worsening behaviors) occurred when the social control tactics were direct and positive (Lewis & Butterfield, 2007). However, more attempts at social control from social network members also led to greater feelings of distress within the individual (Lewis & Rook, 1999). Furthermore, while attempts at social control may lead to a decrease in undesirable smoking and drinking behaviors, the afflicted individual needs to perceive a real threat of punishment in order for the functional individual’s efforts to be effective in the long-run (Ross, 1984). This can put a

lot of strain on the functional individual because he/she may feel uncomfortable about having to threaten punishment constantly of the partner, especially if the relationship is in the early stages of development. While direct attempts to control one's partner may have some benefit in terms of curbing the undesirable behavior, greater feelings of unease may result among both of the individuals, which may ultimately lead to the termination of the relationship.

Approaching issues of support and control from an INC Theory context allows for a better comprehension of why communication consistency within relationships is so important. Punishing behaviors seem to be especially salient for couples trying to manage negative behaviors. In addition to the current study's findings that suggest punishment use is related to such factors as perceived network involvement and relational uncertainty, Le Poire et al. (2000) concluded that drug users and alcoholics were less prone to relapsing when their partners consistently enacted punishing strategies. While this series of behaviors may be effective at curbing a partner's substance use, it is important to consider that punishing a partner struggling with these issues can have emotional consequences. The functional individual may feel guilty and ashamed of his/her behavior towards the partner. Therefore, future work in this area could focus on asking individuals how they felt after punishing the partner. These investigations could address such questions as: How did you feel after criticizing, yelling at, distancing yourself from, etc. the partner? Did you feel these strategies were effective at curbing the substance use? If so, do you think the outcomes are worth having to go through the process in which you engaged? Showing signs of control can be very helpful for a partner struggling with substance use, but if an individual does not know how to

effectively manage these undesirable behaviors, he/she could end up causing more harm to the partner.

Given that there is evidence to suggest a significant relationship between perceived hindrance and punishment, it is important that individuals are aware of the ways in which members from their social networks influence how they act towards their partners. Individuals with high perceptions of network hindrance may want to show support for their partners, but feel pressure from discouraging friends and family members to end the relationship. Therefore, these attempts to demonstrate support for the partner may be stifled due to network interference. Future research in this area should investigate how these interactions play out and what (if any) negative messages are transmitted from the social network to the functional individual to the partner. Perhaps there are situations in which the functional individual feels caught between wanting to please his friends and family members while also wanting to help his/her partner deal with the negative behavior. A more in-depth analysis of how hindering social network members influence an individual's decision to reinforce and/or punish a partner can shed light on how individuals manage this tension.

### ***Limitations and Future Directions***

A potential limitation of the study has to do with the demographics of the participants, particularly in regards to sex. Twenty percent of the respondents were males and 80% of the respondents were females. While this discrepancy reduces generalizability of the results, it is not of primary concern for the overall conclusions of the study because examining sex differences was not a main goal. In regards to the format of the study, a cross-sectional survey was used which may serve as a potential

limitation given that INC Theory address communication patterns over time. Respondents may have experienced some difficulty with accurately remembering the behaviors they used in response to their partners' smoking and drinking. However, the researcher felt validated in using a cross-sectional survey because the main objective of the study was not to assess the communication patterns that occurred over time, but to capture any potential predictors of reinforcement and punishment. Additionally, the current study was centered on four predictor variables, three of which had significant relationships with punishment and one of which had a significant relationship with reinforcement. Therefore, future studies with INC Theory may want to incorporate a broader range of predictors that encompass both relational variables and individual differences. Family history of smoking and drinking is one such variable to consider because it may heavily influence how an individual treats a partner exhibiting signs of substance misuse. It should also be noted that even though the scales used for reinforcement and punishment are reliable, original work with INC Theory utilized coded interviews and conversational analysis (Duggan et al., 2006; Duggan et al., 2008; Le Poire et al., 1998; Le Poire et al., 2000). Survey items were adapted from the existing literature's findings (Le Poire, 1995; Duggan & Le Poire, 2006), but there are still potential concerns that may arise anytime measures are adjusted and developed into a new formant (i.e. survey items).

Looking at outcomes and effectiveness of reinforcement and punishment can be a rewarding route to pursue. Examining how (if at all) these behavioral strategies curb smoking and drinking may help individuals better manage these interactions with their partners and lead to greater feelings of satisfaction with their relationships. Examining

predictor variables of reinforcement and punishment is helpful for laying the groundwork of understanding how romantic partners negotiate conversations about sensitive topics, but looking at the outcomes would advance the INC Theory literature a few steps further. However, before moving in this direction, it would be beneficial to add new items to the current reinforcement and punishment scales. These items could address how the functional individual manages his/her impression when having to discuss the undesirable behavior with the partner (I go along with it because I want my partner to think I'm cool with it, I don't want my partner to think I'm uptight or judgmental, etc.), and how the functional individual wishes to be viewed in the eyes of the partner (I don't want my partner to get upset with me if I say anything, I'm worried my partner will lose interest in me, etc.). These items could contribute to an increased reliability of the reinforcement scale, which could also aid in making the outcome variable of reinforcement be better correlated with predictor variables.

The punishment measure could be expanded upon to include items that address hindrance because the current study found hindrance to be the best predictor of punishment ("I tell my partner that my family and friends don't approve of the behavior," "I tell my partner my family and friends are pressuring me to end the relationship if he/she doesn't stop smoking/drinking," etc.). Future work with this variable may want to utilize a qualitative study asking participants how they believe their families and friends hinder and discourage their relationships and how they feel this trickles down into their romantic relationships (e.g., "How do these perceptions of hindering lead you to act towards/treat your partner, especially when you are talking about the undesirable behavior?"). Work with this theory would also benefit to look at how its tenets play out

in different relational contexts such as parent-child, peer, and sibling relationships. Parents especially need to be aware of how they are communicating support or discouragement of their children's substance use, especially because these reactions to undesirable behaviors can happen unknowingly.

This study set out to approach INC Theory from a new perspective by treating reinforcement and punishment as outcome variables. Looking at the predictors of these lays new groundwork for better understanding the factors that help these inconsistent patterns of behavior take shape. Examining the communication about smoking and drinking that takes place between college students is also beneficial because these individuals tend to live very close to one another and have ample opportunities to partake in social events that at times revolve around substance use. Dealing with substance use issues can put a lot of strain on a romantic relationship and finding the right means for effectively communicating support for a partner can be a challenge. As INC Theory points out, it is not always easy for a couple to terminate a negative behavior that is plaguing the relationship. However, understanding the roles that factors such as relational uncertainty and perceptions of network involvement play within one's attempts to manage an undesirable behavior can allow for the utilization of more effective communicative strategies by romantic partners wishing to maintain stable and healthy relationships.

When considering the current study's main findings, it is important to address the theoretical rationale behind this project because it touches upon a crucial aspect of providing support within a health context, which is that of prevention versus reaction. Examining how couples communicate about substance use that is not yet at a very

problematic stage can aid in the prevention of these smoking and drinking behaviors from becoming destructive. Most of the original work with INC Theory has looked at more severe cases of substance misuse; however, less severe forms should not be neglected because turning the attention from conversations as *reactions* to a partner's smoking or drinking to conversations as ways to *prevent* the smoking or drinking from worsening can help curb the behavior before it reaches a harmful level. Considering that young adults struggling with alcohol abuse can be less likely to commit to parenthood and marriage (NIAAA, 2006) at later points in their lives, it is imperative that individuals feel confident in their abilities to manage conversations addressing these issues within their close relationships so that they can prevent the substance use behaviors from worsening and feel encouraged to seek help when necessary.

## Appendix A

### Reinforcement and Punishment Measure (Glowacki, 2012; 2013)

*Please take a moment to think about your partner's substance use and why you two view it as undesirable. Also think about the behaviors you enacted towards your partner whenever issues about the substance use would arise. Please choose one answer choice for each item based on how much you agree or disagree with each statement.*

- 1 = Strongly Disagree
- 2 = Somewhat Disagree
- 3 = Neither Agree nor Disagree
- 4 = Somewhat Agree
- 5 = Strongly Agree

#### *Reinforcement Items*

1. I acted in more pleasant ways towards my partner after I labeled the smoking/drinking as undesirable
2. I brush aside the issue of my partner's smoking/drinking whenever it comes up in conversation
3. I avoid talking about anything that might make my partner feel bad about his/her smoking/drinking
4. I deny that there are problems associated with my partner's smoking/drinking
5. I offer to help with anything that would make my partner feel better when he/she is smoking/drinking
6. I will retrieve my partner from a situation in which I am not present if he/she is smoking/drinking and wants to leave **\*\***(Item was dropped in final version of scale)
7. I try to comfort my partner if he/she feels sick from smoking/drinking
8. I tell my partner about parties or social events at which I know there will be smoking/drinking going on
9. I tell my partner not to worry about his/her smoking/drinking because "everybody does it"
10. I try to have friends around my partner who smoke/drink so that he/she does not feel as bad about doing it
11. I sometimes lie to my partner about my true feelings regarding the smoking/drinking so he/she does not feel judged
12. I end up helping my partner out with his/her responsibilities when he/she puts them aside in order to smoke/drink

#### *Punishment Items*

1. I acted in more hostile ways towards my partner after I labeled the smoking/drinking as undesirable
2. I call my partner names because of his/her smoking/drinking
3. I yell at my partner because of his/her smoking/drinking
4. I attempt to create physical distance between my partner and I when I know he/she is about to smoke/drink



5. If I am upset about my partner's recent smoking/drinking behaviors, I will do activities separate from my partner that we would normally do together
6. I become unresponsive towards my partner if I know he/she is smoking/drinking
7. I tell my partner his/her friends are losing respect for him/her because of the smoking/drinking
8. My partner's smoking/drinking leads me to want to try to make my partner jealous
9. I tell my partner I will end the relationship if he/she does not stop smoking/drinking

## Appendix B

Perceived Communication Competence Measure (McCroskey & McCroskey, 1988)

*Below are 12 situations in which you might need to communicate. People's abilities to communicate vary a lot and sometimes the same person is more competent to communicate in one situation than in another. Please indicate how competent you are when communicating in each of the situations described below. Provide a number in the blank space from 0-100 indicating your estimate of your competence. 0=completely incompetent and 100=completely competent.*

- \_\_\_\_ 1. Present a talk to a group of strangers
- \_\_\_\_ 2. Talk with an acquaintance.
- \_\_\_\_ 3. Talk in a large meeting of friends
- \_\_\_\_ 4. Talk in a small group of strangers
- \_\_\_\_ 5. Talk with a friend
- \_\_\_\_ 6. Talk in a large meeting of acquaintances.
- \_\_\_\_ 7. Talk with a stranger.
- \_\_\_\_ 8. Present a talk to a group of friends.
- \_\_\_\_ 9. Talk in a small group of acquaintances.
- \_\_\_\_ 10. Talk in a large meeting of strangers.
- \_\_\_\_ 11. Talk in a small group of friends.
- \_\_\_\_ 12. Present a talk to a group of acquaintances.

## Appendix C

### Relational Uncertainty Measure (Knobloch & Solomon, 1999)

*All relationships go through periods of change and uncertainty. Please take a moment to think about the current state of your relationship and the future direction (if applicable) towards which your relationship is headed. If the relationship you are reporting on is still ongoing and has not ended, please choose the answer choice that best captures your feelings of uncertainty/certainty towards the relationship. If your relationship is not currently ongoing, please move on to the next section.*

- 1 = Completely or almost completely uncertain
- 2 = Mostly uncertain
- 3 = Slightly more uncertain than certain
- 4 = Slightly more certain than uncertain
- 5 = Mostly certain
- 6 = Completely or almost completely certain

How certain are you about...

1. What you can or cannot say to each other in this relationship?
2. The boundaries for appropriate and/or inappropriate behavior in this relationship?
3. The norms for the relationship?
4. How you can or cannot behave around your partner?
5. Whether or not you and your partner feel the same way about each other?
6. How you and your partner view this relationship?
7. Whether or not your partner likes you as much as you like him or her?
8. The current status of the relationship?
9. The definition of this relationship?
10. How you and your partner would describe this relationship?
11. The state of the relationship at this time?
12. Whether or not this is a romantic or platonic relationship?
13. Whether or not you and your partner will stay together?
14. The future of the relationship?
15. Whether or not this relationship will end soon?
16. Where this relationship is going?

## Appendix D

Perceived Network Helpfulness Measure (Knobloch & Donovan-Kicken, 2006)

*Please take a moment to think about how you talk about your relationship (current or past) with those close to you. Also think about the perceptions and opinions that those close to you have of this relationship. **Please choose one answer choice for each item based on how much you agree or disagree with each statement.***

1 = Strongly Disagree

2

3

4

5

6 = Strongly Agree

My family members, friends, and people close to me...

1. ...approve of my romantic relationship
2. ...praise my romantic relationship
3. ...support my romantic relationship
4. ...help my romantic relationship to succeed
5. ...are pleased about my romantic relationship

## Appendix E

Perceived Network Hindrance Measure (Knobloch & Donovan-Kicken, 2006)

*Please take a moment to think about how you talk about your relationship (current or past) with those close to you. Also think about the perceptions and opinions that those close to you have of this relationship. **Please choose one answer choice for each item based on how much you agree or disagree with each statement.***

1 = Strongly Disagree

2

3

4

5

6 = Strongly Agree

My family members, friends, and people close to me...

1. ...get in the way of my romantic relationship
2. ...disrupt my efforts to pursue my romantic relationship
3. ...interfere with my romantic relationship
4. ...criticize my romantic relationship
5. ...discourage me from developing my romantic relationship
6. ...criticize this person
7. ...treat this person badly
8. ...tell me that I deserve better than this person
9. ...tell me that I can find a better relationship than this one
10. ...question if this relationship is moving too fast
11. ...say that I spend too much time with this person
12. ...remind me that I am missing out on spending time with other people
13. ...gossip about my relationship with this person
14. ...get quiet if I mention this relationship
15. ...get quiet if I mention this person
16. ...change the subject when I mention this person
17. ...leave when this person is around

## Appendix F

### Demographic Items

*Please note that in order to proceed, you must meet the following criteria: You are currently in a romantic relationship, or had been in a past romantic relationship, with a partner who smokes or drinks. It is also necessary that you, or both you and your partner, have deemed these smoking or drinking behaviors to be “undesirable.”*

What is your sex?

-Male

-Female

What is your partner’s sex?

-Male

-Female

What is your age?

How much of an age difference is/was there between you and your partner?

What is your race?

-White/Caucasian

-African American

-Hispanic

-Asian

-Native American

-Pacific Islander

-Other

What is your partner’s race?

-White/Caucasian

-African American

-Hispanic

-Asian

-Native American

-Pacific Islander

-Other

Which undesirable behavior (your partner’s smoking or your partner’s drinking) will you be reporting on?

-Smoking

-Drinking

How long (in months) is/was the romantic relationship you are reporting on?

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