A Network Approach to Social Impact Theory: Preventing Delinquent Behaviors

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*Significance*

The transition from adolescence into adulthood can be a difficult one due to mental health issues and environmental influences. Adolescence is when individuals are most at threat to risky health behaviors (Resnick et al, 1997) such as experimentation for use of legal and illegal drugs (Henry, Thornberry, Huizinga, 2009; Rumbaugh et al, 2007), unsafe sexual practices and unsafe risk-taking behaviors due to delusions of invulnerability (Steinberg, 2007). These are just a subset of delinquent and problem behaviors that may be elicited by youth (Arthur et al, 2002; Broidy et al, 2003). Other behaviors that have a high risk of being elicited during adolescence include violence and aggressive tendencies (Resnick et al, 1997; Reiss & Roth, 1993). There are many factors that contribute to the likelihood of being vulnerable to these attitudes and risky habits.

Those that have a higher likelihood of generating these risky behaviors are referred to as *at-risk adolescents*. Although at-risk status varies on definition, it generally includes demographic features, home and community factors, and individual skill deficits which can negatively contribute to an individual’s ability to thrive academically, socially, emotionally, and physically (Mcdaniel & Yarbrough, 2016). These behaviors can often escalate into more serious behavior and subsequent consequences such as incarceration (Mcdaniel & Yarbrough, 2016). Given these considerations and outcomes, preventive efforts are needed to reduce levels of emotional stress and minimize behavioral difficulties amongst at risk youth.

Adolescence serves as an important timepoint to intervene and prevent delinquent behaviors. In fact, past research indicates that a strong predictor of adulthood criminal outcomes is childhood delinquency (Makarios, Cullen & Piquero, 2017). The importance of intervening at this critical timepoint during an individual’s life cannot be emphasized enough. Furthermore, serving as the last transition point into adulthood, the adolescent transitioning period is an efficient way to promote better health behaviors as they are more likely to live in a controlled environment with adult influences.

*Past approaches*

Many strategies exist for intervention among at-risk adolescents. Interventions often include providing the adolescents with a positively influential adult individual that may serve as a mentor. According to past research building strong connections with nonparental adults can be a key resource in helping adolescents transition into adulthood (Erdem et al., 2016). These connections are of importance to at-risk adolescents. Programs that provide these services have been shown to produce small effects in adolescent outcomes such as cannabis drug use and delinquent behaviors (Weiler et al, 2015). Programs such as these often focus on creating the relationship aspect of a positive dyadic relationship between the mentor and mentee. One popular model is Rhodes Model of Youth Mentorship as a strategy to reduce delinquent and behavior problems among adolescent (Rhodes, 2005; Rhodes et al, 2006). In short, this model explains that the social processes associated with a non-parental mentor leads to improved social and cognitive development and creates better adult outcomes in youth and adolescent individuals.

Another past approach often times used to understand delinquency in adolescence are biological indicators. For example, past research has shown that earlier pubertal development serves as an indicator of delinquency in youth in both males and females (Caspi et al, 1993; Cota-Robles, Neiss, & Rowe, 2002; Haynie, 2003). From a neurobiological perspective, it has been shown that adolescent delinquency is heavily associated with factors of brain development (Sowell et al, 2010). On the contrary, there are reports to indicate that these differences in brain chemistry are more associated with lack of exposure to adult behaviors and thus leads to lack of development of the ‘adult brain’ (Romer, 2010).

A popular social approach to understanding adolescent delinquency and problem behaviors is looking into an adolescent’s peers and social circle. Previous research has found that having deviant peers results in deviant behaviors within an individual (Dishion et al, 1996; Dishion & Tipsord, 2011). This highly social approach creates the understanding that adolescent behavior is more than a product of themselves, but the peer environment that they are surrounded by. The problem is understanding how exactly this social process is happening. In other words, does the saying, “Birds of the same feather flock together” or “Birds of another kind become alike over time” work more appropriately to understand why deviant peers begin to form bonds with each other? Unfortunately, it is still unclear and much more research is needed to understand this aspect in terms of adolescents and delinquent behavior. This approach utilizes social network theory, which incorporates the dynamic processes of the group to further understand to help understand influences. The social network theory approach is unique in the sense that it can help to explain behaviors of an individual and the behaviors of the group itself.

The research on at-risk adolescents, risky behavior, and delinquency is broad with many different explanations. These different theories help to identify the complexity of the issue and help to emphasize the point that more research is needed to have a better understanding of the true parameters that influence adolescent delinquency and risky behaviors.

*New framework*

Therefore, this paper proposes to extent on theories associated with risky behaviors that adolescents elicit through a social psychological perspective. Of utmost interest is the social impact theory as proposed by Latané (1981). This theory has long been researched in the field of social psychology as an understanding of how having a feeling of acceptance with elicited behaviors.

Latané’s (1981) social impact theory is defined by three principles:

1. *Social Forces:* A person is impacted by the strength, immediacy and the number of people affecting him or her.
2. *The Psychosocial Law:* The impact of these forces decreases as the size of the group increases.
3. *The Multiplication vs Division of Impact:* That the amount of impact elicited towards individuals can be reduced if there are more individuals being targeted as well.

The social impact theory has been utilized in a large amount of settings. However, it’s role in the understanding of how it may impact adolescent delinquent behaviors serves as a new approach that this paper hopes to study.

Social impact theory is especially important in the world of an adolescent individuals. Even more important when considering adolescents that are at-risk for delinquent behaviors as they transition into adulthood. The social impact theory works especially well in understanding how human beings both internalize and externalize aggression. Research performed by DeWall et al. (2010) has shown a clear link between feelings of exclusion and aggression through the social impact theory. Therefore - thinking of adolescent individuals that express aggressive and delinquent behavior - could the social impact model explain why? Perhaps the feeling of rejection and from peers is a major cause of antisocial tendencies and delinquent behaviors. If we can influence the group dynamics associated with adolescent groups, then we can intervene.

Therefore, the purpose of this proposal is to understand the effect of the social impact theory on the positive development from adolescence to adulthood. Former research focuses on biological aspects of adolescent delinquency and family processes that contribute. Both of which are undoubtable risk factors in the formation of delinquent behaviors and attitudes.

Based on the three principles of the social impact theory, the new framework from the can be an extension of social network theory. By combining these aspects from each theory, we can predict how group size and relationship strength contribute to delinquent adolescent behaviors.

*Hypotheses*

From these combination of theories, new research questions arise. For example, what sort of peer group can lead to more desirable outcomes for youth? Can a small peer group help to create positive impacts on a delinquent adolescent, or would a larger group? Lastly, how effective is a positive peer group on an adolescent?

Based on these research questions, we can devise a set of hypotheses driven by the framework of the social impact theory and social network theory:

* *Hypothesis 1*: Based on *principle 1* of social impact theory, the strength of positive relationships formed in a group will facilitate a more positive impact on youth of higher risk for delinquency.
* *Hypothesis 2:* Using *principle 2* of social impact theory as a predictor, the size of the peer group on the influence of a delinquent adolescent will begin to lose influential effects as the group size grows.
* *Hypothesis 3:* Lastly, understanding the assumptions made in *principle 3* of social impact theory, having more peers with higher amounts of delinquency will retard the effects a peer groups has on preventing delinquent behaviors.

The following hypotheses are directly influence by the three principles of the social impact theory. They additionally help to understand how the social impact theory is impacted by the social dynamics of the group that eventually lead to influencing individual outcome behavior.

*Proposed methods*

For this study, an after-school intervention will be created to help improve adolescent outcomes. Participants will meet once a week throughout the school semester (15 weeks) and will be aged 11-18 years of age. The purpose of this intervention will be to create activities promoting behaviors that will help facilitate behaviors to help create a more positive transition into adulthood. Furthermore, this program will have a group-based approach to activities and creating friendship bonds and a positive environment for adolescents to express themselves. The intervention will be run by a series of trained counselors and youth coordinators that are experts in leading group-related activities and can facilitate working groups among an adolescent population.

In this group-based approach, adolescent teams will be formed, and they will be expected to work cooperatively to accomplish tasks. Each team in this study will help to serves as the indicators to help answer our hypotheses. For this research study, teams will be formed artificially as to ensure that adolescents of differing risk profiles will be formed. Risk profiles will be formed by a series of factors including: family income, school performance, past delinquent behaviors, family structure (i.e. single parent household) and many other factors that are known to contribute to patterns of delinquency. Teams will be formed in such a way that adolescents of varying risk profiles are present within the group. Risk profiles will be quantified into quantiles and it will be ensured that at-least one adolescent high on risk is paired with 3 other individuals that are low on risk. Additionally, the researchers will have control over the team sizes. It will be important that program staff and adolescent participants are blinded to the organization of this team formation process.

Measures will be taken prior to the start of the program (measure 1), directly after the start of the program (measure 2), and 6 months after the program (Measure 3). To understand the effect of the how the social impact theory is working, measures of friendship bonds, belongingness to the team, school behaviors, school attendance, criminal arrests, measures of delinquent behaviors such as substance use will be take at all time points. These measures help to understand what the influence of the group is on each other. Thus understanding the impacts the combination of high-risk and low-risk individuals have on each other in terms of social impact theory.

By artificially forming adolescent groups, the researchers are directly able to influence how the dynamics work – thus able to approach our hypotheses. The group formations will help to understand how much hypothesis 1-3 hold true in relation to social impact theory’s influence on positive outcomes. For example, a comparison of the number of high-risk youth in comparison to number low-risk youth in a group and the impact of outcomes helps to understand hypothesis 1 and hypothesis 3. A group with more low-risk adolescents is expected to have better outcomes than a group with more high-risk youth. This is, because of social impact theory, the higher-risk youth will be more influence by the low-risk youth behaviors. Next, referring to hypothesis 3, if there are more high-risk youth in a group, then social comparison theory emphasizes that those high-risk youth will be more resilient, and the effects of the lower-risk youth will be less effective. Lastly, a comparison of group size can be assessed. It is expected that there will be a non-linear response curve as the group size increases. The effects of the groups influence on the outcome on the high-risk individuals will decrease as the groups size increases. A goal will be to identify the practical group size that results in the largest benefit to the higher risk individuals.

This research project has the benefit of understanding group dynamics and incorporating a popular theory in social psychology. Additionally, it builds upon it by supporting a vulnerable population. Implications can help to create better team formation of adolescent groups and help to improve the outcomes in young adulthood. Furthermore, because of the group aspect of the program, a community can serve a larger number of the at-risk population at once and improve future outcomes.

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