A Systematic Examination of Terrorist Use of the Internet

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Abstract
The design of the Internet has made it an especially useful tool to terrorist groups. Using the Internet, terrorist groups have been especially successful in recruiting new members and exciting them into action. Previous works have provided comprehensive accounts of ways that terrorists use the Internet. This article expands on the understanding of this phenomenon by framing the previous works in a systematic model of terrorist’s use of the Internet through social learning theory. The article also offers counterterrorist strategies in accordance with the components of social learning.

Keywords: Internet; Terrorist; social learning theory; Differential Association;

Introduction
The creation and increased use of the Internet has changed our society in a number of ways. Individuals are able to quickly and easily do things from their own home that they could not do in the past. The Internet makes it possible to shop online, access millions of information databases, communicate more efficiently with friends and family, and meet new people—all from one’s computer. This new ability to perform everyday activities, however, has led to vast speculation as to the possible consequences...
that might arise from our dependence on this new medium for information and communication.

While it was speculated that the changes in communication brought about by the Internet would weaken social bonds, evidence has shown that the opposite is actually true. The Internet has increased communication, reduced the time it takes to share information, and has allowed individuals to find support from others who share their beliefs and experiences (Kraut, et al., 1998). Individuals who possess identities that make them different from the majority have especially benefited from the Internet, as the Internet has allowed them to find groups to whom they can identify. This has provided them with a valuable place for support and companionship.

While many face-to-face interactions are initiated due to demographic characteristics (gender, race, ethnicity, and attractiveness), the Internet can bring individuals together based on their personal interests and values. The result is a relationship that begins development at a less superficial level. This is especially beneficial for individuals whose ideas, experiences, and beliefs are not main stream and that often incite negative judgments from the majority. The Internet allows them to seek out others more easily with the same beliefs and views. Furthermore, the Internet can offer these individuals a source of support and allow them to connect with each other, giving them an outlet where they can become part of a sympathetic group. Unfortunately, however, these advantages also have come with negative consequences. The Internet has become an important tool for illegitimate users, such as pedophiles and terrorists, allowing them to benefit from this innovative form of communication. Given the importance of terrorism intelligence in the current age, terrorists’ use of the Internet poses an especially serious concern.

The current literature offers a profuse array of works describing the ways that extremists use the Internet (e.g., Conway, 2006; Crilley, 2001; Gerstenfeld, Grant, & Chiang, 2003; Hoffman, 2006; Hosenball, Hirsh, Soloway, & Flynn, 2002; Kohlmann, 2006; Lachow, & Richardson, 2007; Rosenau, 2005; Thomas, 2002; Thomas, 2003; Weimann, 2004a; 2004b; 2006; Whine, 1999; Zanini & Edwards, 2005). These descriptive accounts explain that the Internet is a terrorist’s tool, providing a safe place for terrorist to engage in recruitment, training, and spreading propaganda. Past research, however, has failed to systematically define the issue of terrorists’ use of the Internet. By framing this issue in a systematic model, the issue can be examined more closely and provide insight into appropriate responses that can work to alleviate the problem. The purpose of this article is, therefore, to provide a systematic model of terrorist Internet use by addressing this issue in relation to Aker’s (1985; 1998) social learning theory and considering research findings on the effects of the Internet upon stigmatized individuals.

Systematic Model of Terrorist’s Use of the Internet

Weimann (2004b) found that by 2000 practically all terrorist groups had established a presence on the Internet and had developed their own websites. The unique design of the Internet has made it especially conducive to the needs of these groups. The Internet takes very little skill to use, has few regulations, provides a worldwide audience to
whom information can be sent quickly at a low cost, and allows for anonymity of the user (Lachow & Richardson, 2007; Weimann, 2004b; Whine 1999). These design elements allow terrorists to engage in their activities with minimal risks (Weimann, 2004b; Whine, 1999). Given these conveniences, terrorists have been found to utilize the Internet for such important activities as recruitment, training and planning, and the distribution of their propaganda.

Table 1: Terrorists’ Groups Use of the Internet from Initial Recruitment to Final Terrorists’ Action

<table>
<thead>
<tr>
<th>Individual feels isolation and frustration with society</th>
<th>Takes solace in Internet and finds websites of others with anti-government views. Differential associations are created.</th>
<th>Intrigued by sensational stories and pictures, youths access web sites more frequently</th>
</tr>
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<tbody>
<tr>
<td>Begins to accept definitions resulting in increased identification with the group</td>
<td>Group continuously presented as righteous and enemy as evil Action is glorified and wants to be glorified Definitions favorable to terrorist activity are increased.</td>
<td>Definitions are reinforced and decision is made to take action in order to be glorified and to be righteous, building self esteem</td>
</tr>
<tr>
<td>Imitation begins with training on the Internet which leads to feelings of preparedness</td>
<td>Takes action and commits act to reap benefits of action.</td>
<td>Uses Internet to spread propaganda and take credit for attack</td>
</tr>
</tbody>
</table>

Several researchers suggest that the effects of the Internet depend on the social context in which it is used (Bargh, 2002; McKenna & Bargh, 1998; Spears, Postmes, Lea, & Wolbert, 2002). Therefore, it is important to examine the social context of terrorists’ uses of the Internet in order to fully understand the impact that Internet communication will have on their activities. Table 1 provides a diagram of terrorists’ uses of the Internet and of the events that lead to terrorist actions. As discussed below, the steps outlined in the table were derived from past research conducted regarding the effects of the Internet on stigmatized groups and from the application of social learning theory.

Social Learning Theory

Social learning theory, as proposed by Ronald Akers (1985; 1998) asserts that individuals learn deviant behavior from significant groups. Based on Sutherland’s (1947)
differential association theory, social learning asserts that learning deviant behavior is acquired through the same process as any other type of learning. According to Akers (1998), learning specifically operates through the four main concepts of differential association, definitions, differential reinforcement, and imitation.

Differential associations refer to individuals with whom a person associates, and who supply definitions both favorable and unfavorable to deviant behavior. The impact that differential associations have on any individual varies in accord with the priority given to them by the individual, the frequency the individual is exposed to them, and the intensity of the relationship (Akers, 1998). Therefore, groups who are close to an individual, that have frequent contact with the individual, and that have been involved with the individual for a long period of time will have a greater impact on that individual. Definitions, the second concept of social learning theory, are closely tied to differential associations as definitions are acquired through differential associations. They refer to the meanings that individuals assign to given behaviors and situations (whether they are right or wrong). These assignments are typically associated with individuals’ attitudes and beliefs (Akers, 1998).

Differential reinforcement refers to the perceived consequences of an individual’s behavior. In other words, individuals will engage in behaviors which they believe will result in rewards and will not engage in behaviors they believe will bring about punishments. The last component, imitation, deals with watching what other people do and copying that action. In relation to this component, whether behavior is imitated will depend on the person being observed, the behavior being conducted, and the consequences stemming from the action (Akers, 1998).

It is through these four mechanisms that deviant behavior is learned. Differential association with others who supply definitions favorable to deviant behavior can lead an individual to classify those definitions as acceptable. Once the definitions favorable to the deviant behavior outweigh those that are unfavorable, the individual is free to engage in the deviant behavior. Differential reinforcement can then work to increase the likelihood of initial and continued engagement in the deviant behavior, if the individual perceives the consequences of the behavior as positive. Lastly, imitation allows the individual to copy behavior and learn the necessary mechanism to engage in the deviant behavior. This theoretical perspective has been found to apply to a wide variety of deviant behaviors (for a full discussion see Akers, 1998 or Akers & Sellers, 1994) and can offer great insight into the process that transforms terrorist sympathizers into action.

Differential Associations and Terrorist Use of the Internet

The Internet has become an important tool in the recruitment of new members and sympathizers (Coll & Glasser, 2005; Crilley, 2001; Thomas 2003). Terrorist groups are no longer bonded by geographical boundaries; instead, through the Internet they are able to reach individuals in any location and recruit members from these locations. Once these relationships are established, the terrorist group becomes an important differential association for individuals, allowing them to be recruited as members.

While the same differential association can be developed in the physical world, it seems that the Internet has been able to more effectively build these relationships. In order to understand the full capacity of the Internet’s power to recruit terrorist members and form these associations, it is important to examine prior research showing the effects of the Internet on stigmatized groups. Although the ultimate message is vastly different
across different stigmatized groups, it is reasonable to assume that feelings of isolation, loneliness, and disconnectedness felt by members of other groups is similar to the feelings experienced by the youths who are enticed into terrorist groups through the Internet. Therefore, it may be assumed that Internet communication will change terrorist’s operations in many of the same ways it has changed the activities of other groups and their members.

**Group Membership**

European youths are being recruited in their own countries to support terrorism. For instance, Peter Cherif (a French citizen), much to his family’s surprise, was recruited by Al-Qaeda over the Internet while living in France (Powell et al., 2005). Individuals like Peter Cherif who are second generation Islamic youths living in other countries are especially susceptible to terrorist’s recruitment over the Internet. These youths are unfamiliar with their country of origin and at the same time feel very different from others in their new country. Thus, they are unable to identify with either their new country or the country from which their parents came. This feeling of not belonging is often confounded by economic hardships. Many are unemployed and feel that they are discriminated against because they do not have the appearances of citizens in their current country of residence. Therefore, they lack the relationships and differential associations that are present in the lives of other youths their age. Instead of having to deal with their feelings of isolation alone, however, they can turn to the Internet to find a support system with other individuals sharing their same beliefs and frustrations (Powell et al., 2005). This offers a group whom they can associate.

As mentioned earlier, the power of differential associations to affect individuals depends on duration, priority, and frequency (Akers, 1998). Given the natural flexibility of the Internet, it is accessible to individuals at all times. Therefore, there is no limit on the frequency to which an isolated youth can access these web pages and associate with other members. Although they were unable to find solace and camaraderie in their physical environment, they find a virtual community available to them at all times where they are accepted and become a member. Due to the natural tendency to want to belong to a group and the boosting effect that finding support from others has on one’s self-esteem (Deaux, 1996; Either & Deaux, 1994), these youths are especially enticed by the existence and availability of other youths feeling the same things.

Because of the lack of prior attachment to other groups and early and consistent feelings of isolation, it is possible that the terrorist group is the first differential association that these youths experience. Therefore, while this relationship is not created until adolescents, because of the lack of earlier associations, this association achieves higher priority quicker than what would be expected for better associated youths. Research by McKenna and Bargh (1998) suggests that the influence of virtual communities is especially influential for certain groups. When studying marginalized groups with concealable identities, their research found that individuals with stigmatized sexual identities and stigmatized ideological beliefs were more likely to “come out” to their friends and family in real life if they were part of online support groups. Their finding suggests that support garnered over the Internet affects their actual physical activities, causing them to act in

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5 Concealed marginalized identities were defined by Frable (1993) as those who are able to hide their marginalized identities and keep them a secret from larger society.
their real lives quicker. This suggests that the differential associations developed over the
Internet may be especially strong and influential for stigmatized groups. This is likely due
to the higher priority given to this association, as it is possibly the first association to
whom members are able to fully express themselves and to the high frequency allowed by
websites that are constantly assessable.

As discussed earlier, youths recruited over the Internet often experience feelings of
isolation and a lack of belonging. These are many of the same feelings experienced by
those with stigmatized sexual identities. Therefore, given the research findings showing
that support garnered over the Internet quickens these groups to act out in the physical
world, it is likely that the Internet will have similar influence on youths finding support
from terrorist groups. Hence, their physical activities will be affected and they will be
more likely to act out in the real world. Therefore, given the power of the Internet to
elicit action from individuals, it is reasonable to predict that terrorist’s members who are
recruited and groomed through the Internet will be more willing to resort to violent
action quicker than terrorists of the past.

Given the powerful influence of these associations, it should not be surprising that
terrorists are beginning to recruit in countries that are not characterized as likely places for
terrorists’ ideas. Once these youths begin to share their beliefs and frustrations and
participate more in discussions, their association to the group intensifies. Their increased
identification with the group further internalizes their identity as members of the terrorist
group. It is at this point that youths will start to accept definitions favorable to terrorism
and incorporate them into their belief system.

Definitions and Terrorist Use of the Internet

Due to the lack of Internet regulation, terrorists’ groups are able to present their
image in a positive light, making themselves seem attractive to potential recruits. This
allows them to convert “fence sitters” into supporters (Thomas, 2003). In spite of the vast
geographical distances between individuals, members can be easily linked to each other.
This also can give the illusion that the effort is larger than it is in reality, making the
organization appear more legitimate. This further gives the appearance that the groups’
deviant beliefs are not extreme but are widely held.

Tsfati and Weimann (2002) also found that terrorist groups take great effort in
justifying the group’s use of violence. They found that several groups justified their
actions by arguing that violence was the last option after all other avenues had been
exhausted. Tsfati and Weimann further noted that the enemy often was shown engaging
in violence against the terrorists group. The terrorist group, on the other hand, is
depicted as the victim, seeking a peaceful resolution. By depicting the group as the victim
and the enemy as the violent perpetrator, recruitment can be increased because it seems
that violence by the terrorists group is necessary and the only option to fight the injustice
inflicted upon the group by the enemy. In addition to justifying violence and depicting
the target as an enemy, terrorists’ web pages work to sensationalize the violent acts that are
committed. The groups show well designed websites that contain digital content which
can be especially appealing to computer savvy, video playing, media consuming youths
(Zanini & Edwards, 2005). This can also make violent activities appear less real and more
like a video game. This can dehumanize the targets of the attack and make the
justification of violence easier.
Shaping their beliefs in a milder and righteous manner can make it easier for youths to accept definitions favorable to terrorist activities. When violent terrorist acts are presented as self-defense and the victim is depicted as evil and artificial, the use of violence can be more easily justified as they are less likely to incite strong contradictions to the youth’s existing belief system. This more easily allows the youths to incorporate definitions favorable to violent terrorist activities.

**Differential Reinforcement and Terrorist Use of the Internet**

Engaging in terrorist activities is differentially reinforced on the Internet by emphasizing the positive consequences the group believes will come from carrying out terrorist actions. Websites often glorify suicide bombers and other group members who took action against the enemy (Tsfati & Weimann, 2002). For youths, whose identity to the group is being strengthened, this gives the impression that any negative consequences of their actions will be greatly outweighed by the vast positive consequences to be derived. For example, a member who is convinced to engage in suicide bombing will suffer the negative consequence of death but this consequence is greatly minimized by the rewards they will be granted in the afterlife.

In addition to the promise of reward in the afterlife, youths who engage in actual activities may be rewarded with a boost of self-esteem and a greater feeling of belonging. Researchers have found that participation in activities related to identification with one’s group increases the amount of self-esteem garnered from being a member of that particular group (Deauz, 1996; Ethier & Deaux, 1994). For example, Ethier and Deaux (1994) conducted a study of Hispanic college students and found that actively participating in Hispanic cultural groups and activities led to an increase in self-esteem and an increase in their identification with their group.

**Imitation and Terrorist Use of the Internet**

While direct imitation of terrorist activities is less likely over the Internet, it appears that terrorist websites do offer instructions for their recruits as a way to teach recruits the techniques and skills necessary to carry out activities (Gips, 2005). Several examples of this are noted in the literature. Groups use the Internet to post information on a website which any member (or potential member) can utilize. Forest (2006) found an Al Qaeda website encouraging supporters to attack the Alaska pipeline. It also provided a great deal of information (e.g., maps) about the pipelines. In addition, several online books on bomb making and suicide bombings were available for viewing online (Forest, 2006). Other sites provided instructions on kidnapping hostages and on the treatment of those hostages (Faye, 2004). With such mechanisms in place, the need for physical training and imitation is reduced.

**Enticing Supporters into Action**

By incorporating research on terrorist’s use of the Internet, research on the impact of the Internet on stigmatized groups, and the logic of social learning theory, a deeper level of understanding is developed as to the process by which the Internet is used to solicit membership in terrorist groups and encourage participation in terrorist’s activities. Youth frustrated with their positions in society turn to the Internet to find differential associations that can offer companionship and belonging. This differential association offers them a sensational message that is illustrated with even more sensational media.
images (Gips, 2005). These images can serve as entertainment and encourage them to spend more time accessing these websites, which are available no matter the time or day. This availability can increase the importance of the group in the youth’s life and result in greater acceptance of definitions favorable to terrorist’s activities.

After becoming a member of the group and accepting the definitions favorable to group activities, differential reinforcement becomes an important component for eliciting action in the physical world. Not only are positive consequences of engaging in operations emphasized but engagement also offers certain immediate benefits. The more time youths spend consuming the terrorists message, the more committed they become to the issue online; thus, increasing their desire to make terrorists’ activities part of their “real” life. In fact, the actual act may be the only way to really feel like they “belong” and may act as a tool to increase self-esteem. In addition, with many viewers and “members” on the Internet it might be more difficult to feel as if one really truly belongs and is truly committed to the cause. Therefore, it may take this physical act to feel special, unique, different, and fully committed. Once the decision is made to engage in an activity, numerous websites are available to train the youth and offer a source of imitation.

**Application of policy**

Terrorist groups have taken full advantage of the opportunities that the Internet provides. Given the increased use of the Internet by terrorist organizations to elicit new recruits to support and act on behalf of their organization, it is essential that counterterrorist efforts consider the unique influence the Internet has on terrorist efforts. Furthermore, the great successes terrorist groups have accomplished by using the Internet should be copied by antiterrorists’ strategies. In accordance with this, the Internet should be considered as a social learning tool to be used by the government to counter terrorists’ accomplishments.

Given the importance of differential associations and definitions reflected in the current research on terrorist’s Internet recruiting operations, counter terrorists’ efforts should place a significant amount of focus on offering equally as powerful alternatives. Counter strategies must be in place that can provide differential associations to youths. These associations should offer some of the same things that the terrorist organizations offer, such as companionship and belonging. In order to properly do this, the individuals offering support must understand the circumstances and feelings that these “potential recruits” are experiencing. It is further important that these groups be accessible over the Internet and offer sensational and entertaining websites to attract youths. This will increase their frequency of visiting the websites, thereby increasing the priority and durance of the association.

While it is important that this group offer antiterrorism definitions, the group should not be overly aggressive in attempts to push their agenda. The main focus should be on supporting the group’s members, helping them work through their frustrations, and provide them an emotional outlet, while at the same time distributing information that can allow them to formulate a balanced opinion. Offering this type of alternative support group with an antiterrorism viewpoint could reduce the likelihood that these youths will begin or continue engagement in extremist activity.

Rosenau (2005) argues that anger and ignorance toward Muslims has contributed to the festering hatred of the United States and has given the appearance that United
States citizens hate Muslims. While information should be presented to contradict the beliefs and views that the terrorists are advocating, the United States needs to send the message that traditional Muslim beliefs are accepted and respected. As suggested by Rosenau, (2005), the United States should point to these traditional beliefs to illustrate inconsistencies between them and extreme Al-Qaeda beliefs. Further education should also be provided on basic United States ideology. Up to this point, however, the United State’s efforts to educate Muslims on United States ideology has been weak and ineffective (Lachow, & Richardson, 2007; Rosenau, 2005). By also focusing on more universal values and goals (e.g., basic human rights) and by not pushing democracy, countries combating terrorism can more readily garner support. Successfully introducing even a small amount of doubt in the minds of groomed recruits may be enough to prevent them from accepting definitions favorable to terrorist activity into their belief system.

To counter terrorist groups’ abilities to differentially reinforce the positive value of engaging in their activities, antiterrorist efforts should publicize the negative consequences associated with these activities. Youths should be made aware of the harm and suffering that has been produced by these terrorist acts. Specifically, incidences when Muslims have been victimized by terrorists should be publicized and victims’ stories should be shared.

Because of the free flow and accessibility of information allowable on the Internet, it is unlikely that counterterrorist actions will be able to stop websites from posting materials for training and imitation (see discussions in Nemes, 2002; Talbot, 2005). Instead of trying to remove all of these websites, counter efforts should concentrate on the monitoring of these websites. By remaining aware of the content on these websites, counter efforts can encrypt terrorists’ messages and infiltrate the planning strategies conducted online.

Conclusion

This paper first examined how each of the four mechanisms of social learning theory is used by terrorist groups on the Internet. These methods were then examined to determine how they might be used for better purposes by antiterrorism groups. The first concept of different associations offers support and identity to a group of youths who suffer from feelings of isolation, disconnectedness, and loneliness. After establishing identity with a terrorism group, an individual begins to adopt the group’s definitions which are favorable to terrorist action. At the same time, differential reinforcement is given through messages being displayed to the individual that focus on positive consequences that will come from engaging in terrorist activities. Once the decision to take action is made, websites contain the necessary information needed for the new recruit to imitate terrorist behavior.

These same concepts also can be used on the Internet by antiterrorism groups. First, it is especially important that alternative groups which oppose terrorist ideology are available to these youths seeking belonging companionship. These differential associations should be capable of offering support and identification, giving youths the same sense of belonging that youths would receive from terrorist groups. Once youths are associated with these alternative groups, the groups should communicate definitions unfavorable to terrorist ideology and activity, pointing out contradictions in the beliefs set forth in terrorist ideology. Communications also can be established differentially reinforce the negative consequences of terrorist activities, such as the suffering of innocent Muslims.
The ability of terrorist groups to utilize the Internet to more effectively perform their operations is astounding. By taking full advantage of the unique benefits the Internet provides, terrorist groups have been able to more effectively carry out their goals with less risk of apprehension. While evidence of more effective recruitment has been shown, it still remains largely unknown as to the extent that terrorist groups will grow in strength, numbers, and effectiveness due to their uses of the Internet. Up to this point, research on terrorists’ use of the Internet has been largely descriptive. There has been little attempt to apply theoretical understanding or other research regarding Internet effects to the issue. By combing these fields of knowledge, a deeper understanding of the consequences that may arise from terrorists’ use of the Internet can be developed. This information can then be applied to further develop more effective counter terrorist strategies.

References