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Assessment of the state of knowledge: Connections between research on the social psychology of the Internet and violent extremism

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ASSESSMENT OF THE STATE OF KNOWLEDGE: CONNECTIONS BETWEEN RESEARCH ON THE SOCIAL PSYCHOLOGY OF THE INTERNET AND VIOLENT EXTREMISM

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EXECUTIVE SUMMARY

Currently, a gap in the literature exists on the link between radicalization processes and the social psychology of the Internet. While radicalization processes are increasingly becoming subject to empirical studies, only a subset of these studies have taken into account online dynamics, and even fewer have approached this issue from a social psychological perspective. However, the literature on radicalization to violent extremism clearly establishes the central role of social psychology. It also suggests that the Internet is increasingly salient for understanding processes of radicalization. It follows then, that understanding radicalization processes requires an explanation of how the Internet may influence beliefs and behaviours; that is, of the social psychology of the Internet.

This report outlines the link between the social psychology of the Internet and violent extremism. It is divided into two parts. The first part, provides a review of the literature on the social psychology of the Internet, including its potential applications to the understanding of violent extremism. This section examines both the individual and collective dimensions involved when individuals reach out and interact online with like-minded virtual peers, and their effects on individual and collective behaviours. Concepts defined in the literature review are then applied to analyze fifteen case studies of individuals whose involvement in violent extremist acts has been confirmed, and where the Internet played a role, small or large, in their radicalization trajectory. These fifteen cases aim to achieve maximum variance in regard to the role the Internet played in radicalization processes across individuals. All cases are from open sources, all are relevant to Canada although some cases selected include individuals active in (or coming from) other countries. The aim is to provide a clear assessment of the aspects of the literature from the research field of the social psychology of the Internet that has been shown most relevant to violent extremism.

The second part of the report builds off the literature review and case study analysis, looking at programs that aim to counter violent extremism online. This section can be broken down into two sub-sections. First a review of the literature on countering violent extremism online is



conducted, outlining different approaches to designing counter-narrative programs. Second, six programs that aim to counter violent extremism are presented. These programs are not intended to be representative or exhaustive. Rather, the aim is to offer a scan of the breadth of available online programs, with a focus on Western-based programs that appear to contain many of the elements associated with “best practices” as outlined in the literature review. Lastly, these programs are assessed in light of the literature, identifying similarities and differences across their application.

The social psychology of the Internet and violent extremism

Findings from our case study analysis of violent extremists illustrated that many of the socio-psychological processes present in the literature were also at play in the fifteen case studies.

Across the fifteen case studies, the extent to which the Internet played a role in the radicalization process ranges, with the most extreme case involving a former student who attributes her extensive viewing of radical sermons as directly connected to her radicalization. For others, the Internet served as a venue for first exposure to radical material, or as a means to obtain radical material that reinforced already held radical beliefs. Despite the disparity in the degree to which the Internet can be said to have facilitated radicalization processes, all cases represent individuals who were extensively involved in using online venues to facilitate or support their move towards terrorist activities. The individuals selected represent a range of ideological motivations, including jihadism inspired ($n=11$), right-wing ($n=3$), and anti-establishment ($n=1$).

Results from the case study analysis demonstrated consistencies with literature, the broadest finding being that the Internet is in itself only one variable among dozens that are associated with individual trajectories towards violent extremism. Focusing on violent extremism and the Internet, our results highlight the different ways in which the Internet could play a role in radicalization trajectories. While our purposive sample precludes us from generalizing this to the wider population of violent extremists, we found that the role of the Internet could be classified into one of three trajectories:

1. “Pure online radicals” where the Internet not only played a central role in the initial expo-

sure of individuals to radical views, but also in the gradual adoption of belief systems that legitimize violent actions. This trajectory is characterized by the central role of the Internet throughout the radicalization process towards violence;

2. “The Internet as a *reinforcer* of radicalization”. This trajectory consisted of cases where the Internet serves to reinforce offline radicalization processes; and
3. “The Internet as an *initial trigger* of radicalization”. This trajectory involved cases where individuals are first exposed to radical discourses and interpretations through the Internet, but where these digital spaces are slowly complemented by interactions with similar others in the real world. In this trajectory, the Internet serves as an entry point for radicalization, but it is reinforced and developed through offline interactions.

Our findings also support literature that suggests violent radicals experience events or possess conditions that make them pre-disposed to radicalizing environments. While pre-conditions for radicalization across the violent extremist cases were diverse, ranging from political grievances to psychological fragility, all the cases within our sample had experienced, prior to their radicalization, a pre-disposing event or trait that made them at greater risk for radicalization. However, consistent with the literature, this was not a sufficient factor to explain the radicalization process, rather serving as an explanatory indicator of why these individuals may have been more vulnerable, or willing than others to be drawn into radicalizing environments.

Further, initial exposure to radical material followed one of two pathways, individuals were either exposed to extremist ideas actively/passively through their social milieu, or they came across extremist material autonomously in online contexts. This exposure to online material also reinforced findings in the literature on the social psychology of the Internet and social identification. Across case studies, individuals used the Internet to explore their identity, such as accessing religious questions—e.g. what it means to be a Muslim—and identifying with a larger group.

However, sustained exposure to online radical material was experienced differently across the fifteen individuals. For some, continued exposure was attributed to the benefits derived from the Internet. This included *cognitive* incentives, such as receiving knowledge about extremist per-



spectives, as well as *social* incentives, which included interacting with like-minded peers. However, for only a few was this sustained exposure key to developing perceptions of the acceptance of violence as a legitimate means. Specifically, public sources, indicated two accounts where material found on the Internet led to the acceptance of violence: Choudhry and Khan. These individuals found that the Internet convinced them that “violence was the answer” and an “Islamic duty”, respectively.

Lastly, the Internet played a prominent role in the re-structuring of personal networks. For instance, spending an increased amount of time online, individuals started to filter individuals from their social circle; removing themselves from more moderate individuals, with online resources providing support to marginalized views that could not be found offline (Braithwaite et al., 1999; Wright, 2000; Wright and Bell, 2003). This was illustrated in the case of Couture-Rouleau who tried unsuccessfully to convert his friends to Islam. Similarly, Andre Poulin’s offline social milieu did not appeal to him or include people who held extremist beliefs. This possibly led both to the Internet, where they were able to build online relationships with like-minded extremists. Their trajectory supports the body of literature that suggests the Internet can be an important tool for developing quality relationships. This is also exemplified by cases, in which initial relationships formed online led to offline interactions, such as the case of Ahmad who met with two of the individuals he had originally encountered online, and Hammami who travelled to Somalia with a key contact he had originally met online. Further, this finding may assist in explaining why many individuals who experience pre-disposing factors (e.g. traumas) do not actually experience trajectories toward radicalization. Rather it is these pre-disposing factors in combination with situational inducements, such as the re-structuring of their personal networks, a finding consistent with our research and the literature (e.g. Sageman, 2004).

Countering violent extremism online

The six countering violent extremism (CVE) programs presented in this report provided a range of venues through which organizations have attempted to counter radicalization processes. All programs have an online component; however, they vary in the extent to whether

they are delivered in online or offline contexts. Across the six programs, the majority targeted jihadist-motivated extremists ($n=3$), while two targeted all types of violent extremism, and one focused only on white supremacist motivated extremists. The programs also differed in terms of how they attempted to counter violent extremism. Most programs aimed to provide counter-narratives, offering evidence-based arguments to counter extremist voices ($n=4$), while others focused on educating youth on appropriate Internet behaviour ($n=1$), or educating and providing recommendations to policymakers on violent extremism ($n=1$). All programs were implemented in Western contexts, including Canada, Australia, and the United States.

A lack of consensus with regard to the causes of radicalization greatly complicates efforts to counter violent extremism. Despite, the appearance of a general agreement in the literature that radicalization “is a complex and highly individualized process, often shaped by a poorly understood interaction of structural and personal factors” (Vidino, 2010, 3), this was not reflected in the six online CVE programs outlined in this report. While almost all of the programs targeted a group or an ideology, none made any mention of social processes or socioeconomic, political, or cultural drivers. Further, very few of the CVE programs were firmly grounded in the “causes” of radicalization to violent extremism. That is, there would appear to be a substantial gap between what is known about the factors that are purported to animate the radicalization process and the factors that CVE interventions attempt to address. While this report does not attempt to evaluate these CVE programs, given their incomplete theoretical underpinnings, it would be difficult for these programs to meet their desired aims.

Of importance given the purpose of this report, the CVE programs reviewed generally lacked the means by which to distinguish the role of the Internet in the radicalization process for the violent extremists they targeted. Whether the Internet plays a central role in the radicalization process, acts as a trigger to violent ideas, or reinforces already held extremist beliefs may be an important factor when creating programs, especially programs targeting individuals online. For instance, counter-narratives may be more effective for individuals who are initially using the Internet to seek out new information. In contrast, individuals who are using the Internet to reinforce already held violent extremist beliefs may be more resistant to counter-narratives. It



may even have a negative impact for them, assisting in forming out-group beliefs. Much more research is needed on CVE programs to understand their impact on the variety of individuals for which they are targeted.

Lastly, findings from the CVE programs also emphasize the need for 1) counter-narrative programs to be guided by theory; and 2) development of systematic evaluations of these programs. The first point extends from the above discussion that CVE programs should be built on strong theoretical foundations. This is particularly important for a phenomenon for which there are relatively few empirical studies on either radicalization or counter-radicalization processes, and where this process has been described as a “poorly understood interaction of structural and personal factors” (Vidino, 2010, 3). Theory can guide the most effective measures, rather than using measures that are argued to be intuitive, which is particularly important in a misunderstood process. This leads to the second point, evaluation of programs. Given the poorly understood nature of CVE programs, we encourage systematic evaluation of the effectiveness of such programs. This is particularly important in light of allegations that these programs may even be counter-productive.¹

Concluding thoughts

Our analysis demonstrates that processes of radicalization towards violence are neither sudden nor abrupt. Rather, individual trajectories towards violence are almost always gradual, and the result of the convergence in time and space of a multitude of factors. Pathways towards radicalization appear as much the result of several identified pre-conditions as the product of relational and developmental configurations that may occur online and/or offline. This finding illustrates the need to pay close attention to the multiplicity of causal factors involved in such processes as well as the ways they interact together (Ducol 2015a). Indeed, our analysis indicates that the Internet is in itself only one variable among dozens that are associated with individual trajectories towards violent extremism.

¹ For instance, see Edelman, A. State department’s ‘embarrassing’ ‘Think Again Turn Away’ Twitter campaign could actually legitimize terrorists: expert. *New York Daily News*, September 16, 2014.. Retrieved from <http://www.nydailynews.com/news/politics/state-department-embarrassing-turn-twitter-campaign-legitimizes-terrorists-expert-article-1.1941990> (Accessed June 15, 2015); Katz, R. The state department’s Twitter war with ISIS is embarrassing. *Time*, September 26, 2014. Retrieved from <http://time.com/3387065/isis-twitter-war-state-department/> (Accessed June 15, 2015).



The detailed analysis of fifteen violent extremist case studies has led to three main findings on the role of the Internet on the radicalization trajectory. First, as mentioned above, given the variety of roles taken by the Internet in our case studies, it would be wrong to think of the Internet as a monocausal and homogeneous factor that impacts individual trajectories towards clandestine political violence in the same way. Second, the social and psychological effects of the Internet can neither be considered linear nor constant. While the Internet might play an important role at the beginning of the radicalization trajectory, it does not necessarily play a continuous or cumulative role throughout the trajectory. Third, the Internet should not be perceived as a monolithic pathway to radicalization, but rather as multi-dimensional, reflecting the various practices that lead people to expose themselves and use the Internet along the radicalization trajectory.

Our report suggests that the Internet is rarely a driver of the radicalization process, but we also believe that current research designs are ill-suited to properly assess the role played by the Internet in the trajectories of violent extremists. One key development in that regard would be to embrace a network approach that would systematically collect all social interactions (online and offline) for individuals in the same way, at the same time. Understanding an individual's interactions online may only be accurately interpreted within the context of their offline interactions, and vice versa. The Internet comes into play at various times for different individuals. It may reinforce existing ideas and play that role even after face-to-face social interactions with fellow extremists living close by have occurred. If social influence is the important driver of radicalization that some scholars believe it to be, there is no reason not to adopt the most suitable set of methods to study it, and no reason not to include online interactions on the same grounds as any other interactions occurring in one's life. This report hopes to have served as a further step towards understanding this evolving landscape, and how these online contexts may influence radicalization processes.



INTRODUCTION

In light of recent terrorism events and trends, it appears quite clear that the online component to violent extremism requires careful re-examination of theoretical and empirical frameworks typically used to study radicalization trajectories. Exchanges that can now occur virtually between wannabe extremists, violent extremists, and the larger pool of individuals susceptible to be attracted by violent narratives has added a new factor to the equation. The ubiquity of online extremist narratives means that efforts should be devoted to understanding the effect they can have on individuals, and the role they play (or lack thereof) in the process leading individuals to radicalize, and eventually commit acts of violence (Bouchard & Levey, 2015). Are face-to-face interactions needed for individuals to truly radicalize, or to go from radical views to acts of violence? Alternatively, are exchanges in online discussion forums creating sufficient conditions to sway individuals from moderates into radicals, or even violent extremists?

Not often recognized in the extant research on the role of the Internet in radicalization are the opportunities to use it to reverse the process of radicalization, and potentially counter violent extremist narratives. If the Internet is a powerful medium to first expose, and then facilitate the radicalization process of many individuals, such power to reach young populations can be used for pro-social purposes (Neumann, 2013b; Bouchard & Thomas, 2015). While many counter-narrative programs exist, their effectiveness as a dissuasive or preventative tool has yet to be assessed.

This report outlines the link between the social psychology of the Internet and violent extremism, and is divided into two parts. The first part provides a review of the literature on the social psychology of the Internet, including its potential applications to the understanding of violent extremism related phenomena. This section examines both the individual and collective dimensions involved when individuals reach out and interact online with like-minded virtual peers and their effects on individual and collective behaviours. As part of this section, concepts defined in the literature review are then applied to analyze fifteen case studies of individuals whose involvement in violent extremist acts has been confirmed, and where the Internet played

a role, small or large, in their radicalization trajectory. All case studies are from open sources, all are relevant to Canada although some cases selected include individuals active in (or coming from) other countries. The aim of this first section is to provide a clear assessment of the aspects of the literature from the research field of the social psychology of the Internet that has been shown most relevant to violent extremism. Relevance is assessed from the research reviewed, but also from the case studies examined. The choice to focus on reviewing work on the social psychology of the Internet, as opposed to the rest of the relevant themes associated with pathways to radicalization, is a reflection of the important gap in knowledge we found in that regard.

The second part of the project identifies, and reviews six programs that aim to counter violent extremism online. After outlining literature on countering violent extremism online, six programs that aim to counter violent extremism online are identified and examined. These programs are outlined not only in light of the literature on violent extremism, but are also placed in context using the findings from the case studies and the literature on the social psychology of the Internet and violent extremism. Specifically, this section aims to outline key features of these counter-narrative programs and how they have been implemented across contexts. Below we start by reviewing our approach to find, review, and assess the various materials used in all sections of this report.

APPROACH AND METHODOLOGY

The strategy of this project is two-fold. First, a review of the literature on the social psychology of the Internet is conducted, with a special emphasis on research that might be of interest in the examination of violent extremism phenomena. Second, a list of case studies that illustrate the role that the Internet can play in radicalization trajectories leading to violent extremism is created. The case studies will be analyzed through a coding grid created specifically for the purpose of this study (details below). Complementing this is a review of programs that aim to counter violent extremism on the Internet.



Literature review

Beginning with a review of the literature, this step will examine extant research in three complementary areas, from the general to the specific:

- a) Radicalization to violent extremism
- b) The social psychology of the Internet and violent extremism
- c) Countering violent extremism online

The objective of the review is to assess the state of knowledge in these three areas. We will not draw solely from studies presenting empirical findings, or solely from studies published in scholarly journals. The review will cast a wide net in order to capture conceptual essays, policy analyses, and empirical studies. It will include books and book chapters, scientific articles, government, and think tank reports on these issues. In reviewing the literature on countering violent extremism online, each specific program or intervention encountered will be noted and extracted in order to create as comprehensive a list as possible.

Literature was acquired through two main strategies. First, a keyword search using relevant citation indexing databases was conducted. To capture the wide range of literature that examines the social psychology of the Internet, the keyword search was conducted in a series of steps, using logical combinations of different keywords. To start, a broad search of all relevant literature was conducted using logical combinations and variations of the following words: social psychology, the Internet, cyber, online, World Wide Web, discussion forums, identity, beliefs, cognition, social identification, in-group, out-group, group dynamics, interactions, anonymity, de-humanization, violence, extremism, radicalization, narratives, terrorism, counter, counter-terrorism, de-radicalization, counter-narratives. Variations on all of these words were also used with the aid of asterisks (e.g. *extrem**).

The use of two citation index databases allowed for the capture of the widest range of scholarly studies and reports: 1) the comprehensive *Web of Science* citation database; and 2) the Canadian-specific *Canadian Research Index*. In order to capture government and think tank reports on



these issues, keyword searches were also conducted using 3) *Google Scholar*; and 4) *Google*.

The keyword search was complemented with a systematic examination of CVs of well-known and recognized scholars involved in research on the social psychology of the Internet as well as scholars who have been researching cyber-dimensions of clandestine political violence, terrorism, and extremism. For scholars involved in research on the social psychology of the Internet, our list included: Yair Amichai-Hamburger (IDC Herzliya), Azy Barak (U Haifa), John A. Bargh (Yale U), Adam Joinson (U West of England), Grainne Kirwan (Dun Laoghaire Institute of Art, Design and Technology), Martin Lea (U Manchester), Eun-Ju Lee (Chung-Ang U), Katelyn McKenna (IDC Herzliya), Gustavo S. Mesch (U Haifa), Tom Postmes (U Groningen), Ulf-Dietrich Reips (U Deusto), Russell Spears (U Groningen), Patricia Wallace (Johns Hopkins U), Joseph B. Walther (Nanyang Technological U), and Barry Wellman (U Toronto).

For scholars involved in research on the cyber-dimensions of clandestine political violence, terrorism, and extremism, our list included: Cristina Archetti (U Salford), Akil Awan (Royal Holloway), Lorraine Bowman-Grieve (Waterford Institute of Technology), Maura Conway (Dublin City U), Hsinchun Chen (Arizona U), John Horgan (UMass Lowell), Clark McCauley (Bryn Mawr College), Peter Neumann (King's College London), Marc Sageman (Foreign Policy Research Institute), Alex Schmid (Terrorism Research Initiative), Andrew Silke (U East London), Manuel Torres Soriano (U Seville), and Gabriel Weimann (U Haifa). The list of studies obtained through these two strategies is also complemented with the extensive literature team members already have on these topics.

Case study analysis

The first section of the report also included the analysis of specific case studies of individuals whose involvement in violent extremism has been confirmed from open sources, and whose trajectory to violence includes a role for the Internet, be it small or large. The selection of case studies is a central component of any case study analysis. However, case study analysis that focuses on small numbers of cases—i.e. *small-n research*—presents distinct methodological challenges in terms of case selection. In situations where the volume of potential cases available for investiga-



tion is relatively small, as is often the case in research designs that involve individual trajectories towards violent extremism, random sampling cannot be considered the most reliable case selection method. While large-n research allows for randomized selection, in the context of small-n research, with few cases at hand, purposive and non-random case selection appears to be more suitable for case selection.

There are a multitude of strategies for choosing cases from a non-random and purposive perspective, ranging from “most-similar”, “most-dissimilar”, “deviant”, “extreme”, “typical”, or “diverse” case selection procedures. Each of these case selection procedures rest implicitly on the analysis of a larger population of potential cases. Therefore, any case selection procedure intends to identify within a population of potential cases, which cases might be most appropriate to achieve the desired goals of the research. Theoretical, pragmatic, and logistical considerations always affect the selection of cases, leading to a fine balance between empirical leverage and methodological constraints.

A sample of fifteen case studies where the Internet played a role in the trajectory towards violent extremism were selected by applying the “diverse” case selection procedure (described below).

The overall purpose of the research relies on paying close attention to the richness and contextual dimensions of the link between the social psychology of the Internet and violent extremism, while accounting for variation between each case. Accordingly, the “diverse” case selection procedure, which aims to achieve maximum variance across relevant dimensions (here, the role played by the Internet in individuals’ radicalization processes) appears to be the best suited approach. The “diverse” case selection procedure has both advantages and disadvantages. On one hand, encompassing a full range of variation among our case studies allows for better representation of the sample. The case studies selected are representative in a minimal sense because they are distributed across a spectrum of a population’s characteristics. On the other hand, the “diverse” case selection method makes it difficult to locate cases across the spectrum of the larger population of potential cases and thus requires an additional effort of contextualization.



The selection of cases applying a “diverse” procedure is based on several considerations.

First and foremost, a practical consideration:

- Fifteen cases studies were selected where the team was confident to have enough detailed information on the trajectory of individuals available from open sources (detailed media articles, books, scientific articles, government/think tank reports, and court data). The cases were chosen because of the wealth of data available in light of the main elements in the coding grid (outlined in the following sub-section).

Second, theoretical and empirical considerations:

- Case studies have been selected by the team to ensure variation in the extent to which the Internet played a role in individuals’ pathways and trajectories. At first glance, some case studies appeared to correspond to pathways where the Internet played a central role in radicalization processes, while occupying a more peripheral role for other cases.
- Case studies have been selected to ensure geographic and cross-country diversity with case studies selected from within Canada, but also outside Canada that can inform the Canadian context. The selection of Canadian and non-Canadian cases allows us to control for a variety of social, political, and cultural contexts.
- Case studies have been selected in order to encompass the various environmental configurations surrounding individuals’ radicalization. Thus, the selected cases aim to cover both the collective components of radicalization as well as solitary or individual dimensions.
- Finally, case studies have been selected to make sure that the sample embraces the diversity of extremist causes and motivations (e.g. al-Qaeda (AQ) inspired, local grievances, white supremacist/far-right forms of extremism, etc.).

An additional advantage of the “diverse” case selection procedure is that it allows for the inclusion of some “extreme” or “deviant” cases, such as the one of Justin Bourque. On June 4, 2014, Bourque shot five RCMP officers in Moncton, New Brunswick, killing three and seriously injuring two. At the time, Bourque was allegedly suffering from sleep deprivation and was depressed,



leading to debates on whether Bourque's actions should be classified as terrorism, or as mass murder. His blurry motivations might push in favour of disregarding this particular case study. However, the inclusion of Bourque as a case provides for a better understanding if, regarding the psychology of the Internet and violent extremism, such a strict distinction between "typical" and "deviant" case studies helps our understanding of violent radicalization.

The table in Appendix A introduces the fifteen case studies selected. It also provides the main features that justify the inclusion of the cases for the study.

Coding grid: A synthesis of perspectives on the social psychology of the Internet and violent extremism

In addition to illustrating how some of the concepts covered in the review section apply to concrete cases, the case study analysis is used to create a classification of the role of the Internet in violent extremist trajectories. To achieve this, a coding grid modelled off the main findings of the literature review was created for the purpose of this study (see Appendix B for the full coding grid). Using this grid, each case study is systematically analyzed to extract specific information about the individuals, and the dynamics involved in the radicalization process. The role of the Internet is also viewed through the larger social context surrounding the radicalization process.

The coding scheme is based on the synthesis and evaluation of the literature on the psychology of the Internet and the role of cyberspace in radicalization processes. Consequently, the coding grid is derived from key themes and central concepts identified in both of these fields and their respective literature. Building the coding grid from the literature review allows for the testing of some of the assertions, theoretical assumptions, and empirical findings discussed in these fields in light of the selected cases studies. It allows for a partial assessment of how, and to what extent, this body of knowledge can be used to advance the understanding of individual and collective trajectories towards violent extremism and terrorism.

The coding scheme therefore tries to account for the social psychological elements of the radicalization process through which individuals become involved into violent extremism. From this perspective, the primary issue is how does social psychological resolution and progres-

sion play out online? Or, more specifically, what is the role of the Internet in the radicalization process? The questions that comprise the coding scheme thus aim to evaluate how and to what extent the Internet might facilitate radicalization, from originating conditions through to the willingness to commit terrorist acts. Accounting for this, the coding grid (Figure 1) has a longitudinal dimension (from pre-exposure (green) to action (red), or top to bottom, respectively), and follows a diachronic offline/online approach (the role of the Internet may evolve and change over time in unexpected ways, and in this regard the grid aims to preserve this flexibility).

The coding grid might be best thought of as a qualitative roadmap. In the broadest sense, the coding grid systematically directs the search for information. It tells us “what we are looking for”. Though the entire set of questions will be applied to every case study, not every case study will contain information relevant to every question on the coding grid. Rather, the grid allows us to meaningfully organize the material that is extracted from the case studies. Organized according to themes, the data is used to inductively create categories that are relevant to these themes. The questions look at various components of radicalization, ranging from identity and individual online beliefs formation mechanisms to in-group formation processes and online dynamics, as well as radical sociability through the Web. This qualitative coding strategy assists in creating a classification scheme that summarizes the various patterns emerging from the transposition of key concepts identified in the literature to the case studies.

Nevertheless, the coding strategy confronts certain limitations, particularly because of the type of material available to reconstruct the case studies. Indeed, in the absence of direct access to the individuals studied, it is difficult to grasp their inner psychological states as well as many cognitive dimensions of their trajectories. Coding on psychological states *a posteriori*, from indirect data and secondary sources leaves the door open to a series of methodological biases. Our results will highlight what can, and cannot be extracted from open sources in regard to some of the psychological processes occurring in radicalization trajectories that include online components.

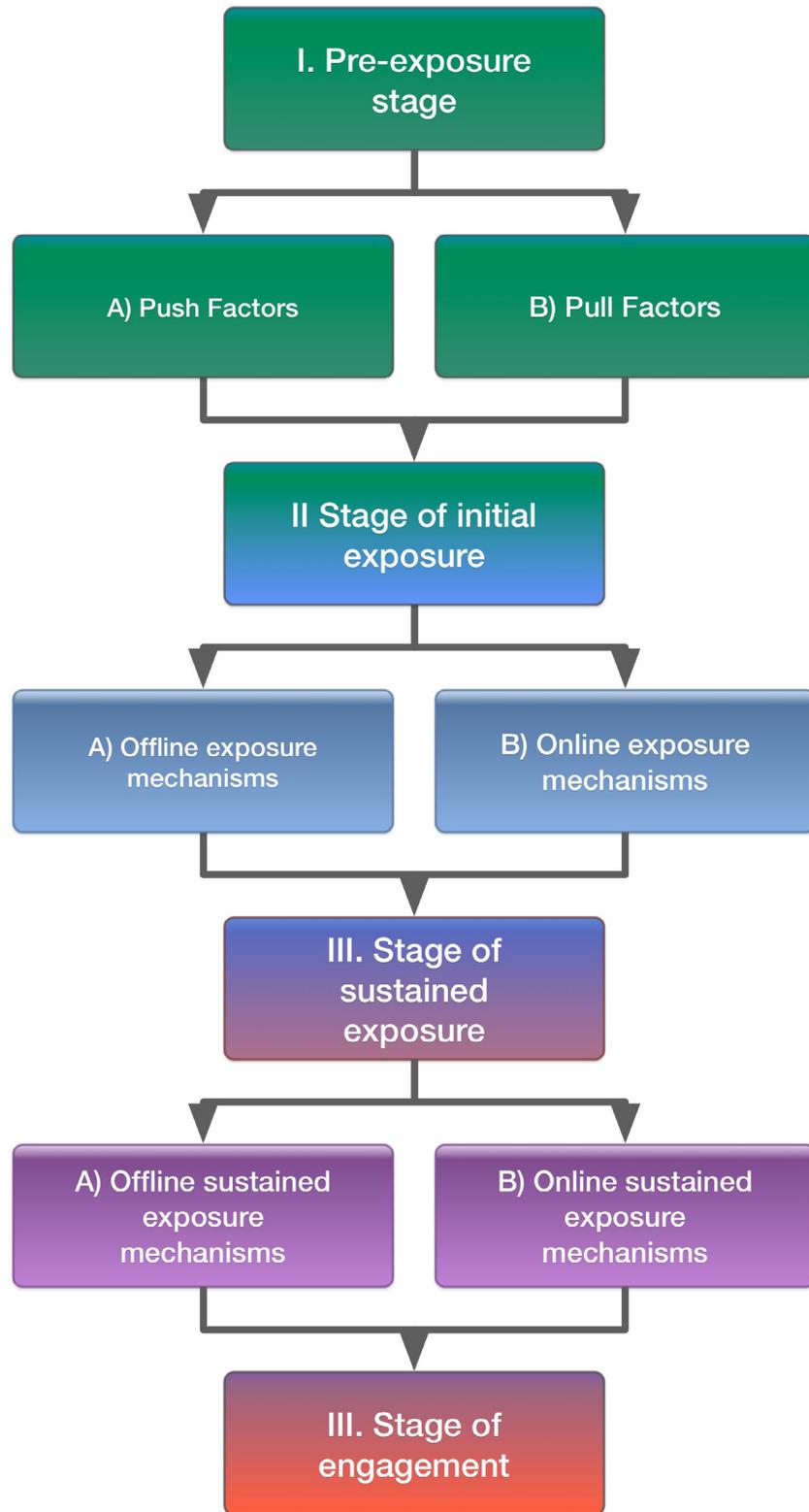


Programs countering violent extremism online

The second section of the report builds off the literature review and case study analysis, looking at how the Internet has been used as a tool to counter violent extremism. This section can be broken down into two parts. First a review of the literature on countering violent extremism online (described above), outlines different approaches to designing counter-narrative programs, identifying key components and methods. Second, looking across this literature, key elements identified are applied to six programs that aim to counter violent extremism.

The programs are selected based on four main criteria. The first consideration is practical, requiring programs that have detailed information on their objectives, their target population, and how their objectives are implemented. Second, consistent with the research objectives, all programs had to have an online component. Third, Canadian-based programs were favoured, to the extent that they appeared to contain many of the elements associated with “best practices” for countering violent extremism, based on consistencies with the radicalization literature. Lastly, we attempted to capture a range of programs to reflect the diversity of approaches currently being implemented to counter violent extremism.

FIGURE 1. CODING GRID: LONGITUDINAL ANALYSIS OF RADICALIZATION TRAJECTORIES (ONLINE AND OFFLINE)





PART 1. THE SOCIAL PSYCHOLOGY OF THE INTERNET AND VIOLENT EXTREMISM

This section presents the results for the first part of the report focusing on the link between the social psychology of the Internet and violent extremism. After introducing a review of the literature on radicalization processes, extremist pathways, and the role played (or lack of) by the Internet in such phenomena, fifteen case studies are explored. Applying the coding grid, key findings and themes in the radicalization process across individual cases are identified and discussed.

Literature review

This review is divided into two sub-sections, going from a broad overview of the state of knowledge on violent extremism to the specific role of the Internet in the radicalization process. The first of these sections presents an overview of the state of knowledge on radicalization to violent extremism. More specifically, this section aims to lay the foundation for understanding radicalization from a social psychological perspective. It identifies themes, such as triggering mechanisms, identity issues, and the role of social networks, that firmly ground radicalization in social psychology. Simply put, radicalization has to be thought of as both a developmental and a contextual process. The manner in which people receive, interpret, and understand information (including, for example, extremist propaganda), as well as their subsequent behaviours, are all strongly influenced by their particular social milieus and the situational configurations in which they are embedded (Ducol, 2015a). The section concludes by examining the role of the Internet in the radicalization process. Again, the emphasis is on how online radicalization may be understood through the lens of identity issues and social networks.

The second section of the literature review explores in much greater detail the link between radicalization and the social psychological elements of the Internet. It offers explanations for how the Internet may influence beliefs and behaviours, and how online radicalization may result from a variety of psychological dynamics studied in this literature. It focuses on three themes that are important for understanding the role of the Internet in the violent radicalization process: 1) individual cognition and social identification processes in cyberspace, 2) online interpersonal



relationships, and 3) online group dynamics.

The report is focused primarily on reviewing the literature on the social psychology of the Internet. Yet, as shall be seen in our analysis of the case studies, this literature does not cover, in and of itself, the full array of risk factors associated with pathways to radicalization. The literature review is biased in favor of environmental and social conditions because that is where the major gap in our understanding of radicalization can be found. Filling this gap is especially important given our focus on the role of the Internet in pathways to radicalization. The literature on the social psychology of the Internet explicitly integrates the impact of online interactions on individuals' beliefs, identity, and behaviour. The missing link is in transposing this knowledge to terrorism studies. To be sure, there is substantial literature on the individual psychology of radicalization, just as there is a literature on risk factors and "root causes" of terrorism. The work on the social psychology of the Internet that does exist is fragmented and underdeveloped when it comes to its application to violent extremism. The literature review is intended to provide a more systematic and comprehensive treatment of the subject.

A. Radicalization to violent extremism

Broadly speaking, radicalization is the process by which individuals come to adopt radical or extremist views and ideas (Jensen, 2006). Radicalization might be understood as the mental component of the process that leads to extremism. It has been described as the process by which individuals "are introduced to an overtly ideological message and belief system that encourages movement from moderate, mainstream beliefs toward extreme views" (Smith, 2009, 1). In and of itself, radicalism is not necessarily problematic (Kühle & Lindekilde, 2010, 23). Radicalization is an issue, however, when it involves individuals gradually *adopting* views that favour, condone, or legitimize political violence as a legitimate avenue for action. Put another way, the concern here is with violent radicalization, whereby radical ideas develop into "a willingness to directly support or engage in violent acts" (Dalgaard-Nielsen, 2010, 798). It is important to note that violent radicalization is not limited to the perpetration of violence. Terrorist and extremist groups rely on a base of radicalized supporters, many of whom may never actually commit acts of vio-



lence, but who are nonetheless willing to support the use of violence for advancing their agenda.

Much of the research conducted since 9/11 has attempted to explain the process by which some individuals come to accept violence as a legitimate means of political expression. The term radicalization was increasingly used by European policymakers following terrorist attacks in Madrid (2004) and London (2005) (Kundnani, 2012), but it reflects a long tradition of trying to understand why and how some come to embrace violent extremism. These themes are examined in detail below.

Despite several areas of disagreement in academia and beyond regarding the exact meaning of the concept of “radicalization” (Sedgwick, 2010), there is one aspect of radicalization on which there appears to be a consensus: radicalization is a process (Neumann, 2013, 874). Theorizing about radicalization invariably begins with the premise that radicalization to violence is not an “all of a sudden” phenomenon; it does not happen overnight. Theories clearly differ in terms of variables and mechanics, but there is widespread agreement that radicalization is the culmination of a series of steps or stages. For example, in their review of homegrown extremism, King and Taylor (2011) identify five models of radicalization: Borum (2003); Wiktorowicz (2004); Moghaddam (2005); Silber and Bhatt (2007); and Sageman (2008). There are notable discrepancies between the various approaches, and their details vary, but the models “converge on the assumption that radicalization is a transformation based on social-psychological processes” (King & Taylor, 2011, 609).

1. Precursors and triggering mechanisms

An implicit notion of radicalization being a process is the idea that the journey to extremist violence must begin somewhere. A number of dynamics have been implicated as “triggering mechanisms”, feelings or events that mark the beginning of the path to radicalization. The first of these factors is centered on notions of relative deprivation. The idea that political violence results from poverty or economic deprivation, particularly that which is perceived to be unjust, has long formed the foundation of what might be referred to as the “root cause” perspective on terrorism. The role of relative deprivation is highlighted in several prominent theories of radicalization. In



Borum's pathway model (2003), negative comparison of economic circumstances stimulates the need to attribute blame, ultimately leading to the stereotyping and dehumanizing characteristics of radicalization. Similarly, Moghaddam's staircase to terrorism (2005) begins with the adverse interpretation of material conditions. But while Borum's model is premised more on individual-level evaluations of deprivation, Moghaddam suggests that intragroup comparisons are more salient. That is, movement up the staircase may occur when an individual perceives his or her group as being deprived in relation to other groups. In light of the fact that the overwhelming majority of people who experience relative deprivation do not become radicalized, and that many jihadists are not drawn from the ranks of the underclass, it has been argued that individual-level relative deprivation is insufficient to motivate individuals toward mobilization. Rather, only relative deprivation based on group identification is capable of eliciting the emotional response requisite for violence (King & Taylor, 2011; King, 2012).

A second set of factors in radicalization are grievances. As with deprivation, grievances can be personal or group-based. With regard to the former, McCauley and Moskaleiko (2008) note, for example, that suicide terrorists have often been victimized and are motivated by the desire for revenge. However, McCauley and Moskaleiko (2008, 419) also maintain that, from a social-psychological perspective, personal grievance is "unlikely to account for group sacrifice unless the personal is framed and interpreted as representative of group grievance". Again, grievances framed in relation to groups appear to be most relevant. A sense of injustice can be a powerful motivator toward joining extremist groups (Schmid, 2013). Ethnic nationalist violence, for example, ranging from the ETA in Spain to the Karen National Liberation Army in Myanmar and Tamil Tigers in Sri Lanka, is typically rooted in the unaddressed political grievances of minority groups. For jihadists, grievances are based on the subjugation of Muslims (Gartensstein-Ross & Grossman, 2009). The plight of the Palestinians, the presence of US military forces in Saudi Arabia, US support for Israel, and the war in Iraq are commonly cited examples. Broadly speaking, the Western world, and the US in particular, is complicit in blocking once-dominant Islam from returning to its past glory.

In addition to relative deprivation and grievance, personal crisis is regularly invoked as a



central factor in radicalization. For Wiktorowicz (2004), the process of “joining the cause” begins with a “cognitive opening”. A cognitive opening may be conceived of as a triggering event, which “shakes certainty in previously accepted beliefs and renders an individual more receptive to the possibility of alternative views and perspectives” (Wiktorowicz, 2004, 7). Cognitive openings are often produced by crises, which may be personal (e.g. dissolution of a relationship), economic (e.g. loss of job), or based on the types of political grievances noted above. In response to the crisis, individuals may engage in “religious seeking”. Similarly, the initial stage of the NYPD’s radicalization model is “self-identification”, when individuals turn to Islam in an attempt to manage a personal crisis (Silber and Bhatt, 2007). During this religious exploration, individuals may be exposed to a spectrum of doctrines, including radical interpretations of Islam.

2. Identity issues

Writing about the particular experiences of Muslims in Europe, several theorists have argued that radicalization is not simply a reaction to economic deprivation or political grievances, but rather, that it arises out of the search for identity and community. Many young individuals living in the Western world struggle with issues of identity, with the search for meaning. These difficulties may be particularly acute for second and third generation Muslims who do not feel a sense of attachment to their parents’ home countries and who perceive that they are living in societies from which they are excluded (Dalgaard-Nielsen, 2010). In advocating the violent defence of Islam, radical Islam provides both a purpose and an outlet for frustration. As well, it allows for individuals to rationalize their situations as resulting not from any fault of their own, but owing to a Western culture that is hostile to Muslims (Kepel, 2004; Khosrokhavar, 2005). Finally, it connects these individuals with an alternative community, one that values the individuals’ new identities.

In a similar vein, Slooman and Tillie (2006) suggest that some individuals choose to belong to a radical group because it provides them with stability and respect, while others are seeking the kinship and acceptance of a community. These observations are offered in the context of radical Islam, but the attraction of “the group” has long been understood. None of this is to say that

marginalization and discrimination are irrelevant to radicalization, only that their effects may be indirect, mediated by social mechanisms.

3. *Social networks*

In response to conditioning circumstances or triggering events, some individuals will move farther down the road to radicalization. One of the most perplexing questions in the study of violent extremism is “why some and not others”? In many cases, the resolution to this dilemma may lie with “who one knows”. From this perspective, the most important elements in radicalization are social bonds and personal networks. That is, individuals are radicalized as a result of interactions with significant others, such as friends, relatives, or charismatic leaders. Radical ideas are transmitted through these social networks. Violent radicalization subsequently occurs within small groups, wherein indoctrination gradually changes one’s ideology (Dalgaard-Nielsen, 2010; Nash and Bouchard, 2015). Prior to being socialized into a radical group, individuals go through what Wiktorowicz (2004) refers to as “frame alignment”, whereby the arguments espoused by the group come to “make sense” to the seeker. More generally, frame alignment involves an emerging convergence between the interests of the individual and the organization.

Another prominent proponent of the importance of social networks and small groups is Sageman (2008). In contrast to Wiktorowicz, Sageman found no evidence of formal “top down” radicalization. Sageman, for example, found no indication of radicalization efforts on the part of the larger international jihadi network. Rather Sageman outlines a “bottom up” process; a sense of moral outrage initiates a trajectory that leads to mobilization through social networks. Sageman refers to a “bunch of guys,” a group of self-radicalized individuals that takes ideological inspiration from, but has little or no formal connection to, al-Qaeda or other global terrorist groups (see also Bakker, 2006). Still, despite the differences in these approaches, both emphasize that radicalization is, to at least some extent, contingent on “who you know”.



4. *The Internet*

There seems to be little doubt that the Internet is increasingly implicated in the radicalization process. With regard to the West, it has been argued that radicalization is predominantly taking place online. There are many examples of individuals who have radicalized with the help of the Internet (Neumann, 2013b). Jenkins (2011) remarks that many of the terrorists studied since 9/11 began their journeys on the Internet. This is hardly surprising, given the ubiquitous nature of the Internet in relation to Western lives, particularly the lives of young people.

There are a wide variety of perspectives on how online radicalization works. At the most basic level, the issue concerns the effects of exposure to particular forms of content. The Internet is a vast repository of information. In relation to radicalization, the Internet allows extremist groups to disseminate their messages and ideologies (Davies et al., 2015). This radical content has the potential to inspire radicalization. On one hand, they may produce a sort of “awakening” within individuals who are becoming aware of issues for the first time. Muslims in the West may be introduced to events in areas such as Iraq, Syria, Chechnya, and Palestine. On extremist sites, these events will be framed as atrocities to be avenged. On the other hand, for those who are already leaning toward extremist viewpoints, such content may serve to harden opinions. The power of these messages may be amplified by graphic video images. Sageman (2008), for example, maintains that shocking videos may trigger a “sense of moral outrage” (Jasper, 1997) that could mobilize people to violence.

From a social psychological perspective, it is important to consider the context of exposure to and the context of reception to extremist content and discourses. It is highly unlikely that mere exposure, in and of itself, is enough to promote radicalization and set individuals down the path to violence. Instead, responses to extremist content are conditioned by the environment within which they are received. Neumann (2013b, 435) contends that:

“no single item of extremist propaganda is guaranteed to transform people into terrorists. Rather, in most cases, online radicalization results from individuals being immersed in extremist content for extended periods of time, the amplified effects of graphic images and video, and the resulting emotional desensitization” .

The themes of immersion and amplification are reflected in the characterization of online forums as “echo chambers”, places largely devoid of dissent, where moderating influences are drowned out by more extreme voices (Gerraerts, 2012). Out of these insular environments emerges a powerful “groupthink” marked by violence. Attitudes supportive of violence may also be fostered by the form of the Internet, particularly what has been referred to as Web 2.0, with its emphasis on interactivity, graphic images, and video content. It has been suggested that extended exposure to and immersion in extremist content amplifies its effects (Neumann, 2013b). The resulting desensitization to violence, or “online disinhibition” (Suler, 2004), further polarizes groups and may increase the likelihood of violent actions.

More generally, the primary role for the Internet in radicalization processes is the extent to which it facilitates social networks, ultimately culminating in virtual communities (Ducol, 2012). Bowman-Grieve (2009, 990) argues that these communities are real social spaces that are important because “they encourage the construction of political and ideological discourses supporting and justifying the use of terrorism and political violence”. Utilizing the example of Stormfront, a radical right-wing forum, Bowman-Grieve (2009) demonstrates how forums can provide validation for personal grievances, which in turn may result in individuals deepening their involvement with the extremist cause. Virtual communities such as Stormfront are key social arenas for the formation of the types of interpersonal bonds that are central to radicalization processes.

Owing at least in part to social media, the Internet has fundamentally altered the manner in which individuals participate in social movements. Halverson and Way (2012, 140) maintain that the Internet functions as a “contact point”, a “social nexus that facilitates the formation of relationships among previously unrelated entities”. Drawing on the case of Colleen LaRose (a.k.a. JihadJane), Halverson and Way (2012) illustrate how social media enables isolated and marginalized individuals to experiment with and construct new identities as members of communities that value the individual. These new identities, and the concomitant acceptance, become a source of self-respect, dignity, and personal meaning. Extremist movements function online by offering individuals a connection and an opportunity to espouse their ideas in a supportive environment. In fact, one of the greatest challenges of the Internet is the manner in which it brings together



people with anti-social interests and provides “easy access to ideological structures that provide some semblance of order, a renewed sense of self, and greater meaning to troubled realities” (Halverson and Way, 2012, 148). In this way, the Internet has become the locus for gathering and coordinating marginalized individuals.

In its most extreme form, this socializing aspect of the Internet can even be extended to include so-called “lone wolves”. Weimann (2012) maintains that lone-wolf terrorists are not really alone. Despite the appearance of solitude, there is usually evidence of social ties linking them to others. Many of these lone-wolves have been radicalized via online platforms. Pantucci (2011, 34) comments that “many of the [lone-wolves] demonstrate some level of social alienation – within this context, the community provided by the Internet can act as a replacement social environment that they are unable to locate in the real world around them” . Simply put, radicalization is a social phenomena, and lone-wolves are not exempted.

There is, moreover, a potentially darker aspect to social networks and virtual communities. In contrast to the implied vision of individuals connecting with a like-minded community, it is also possible that there is a level of coercion involved. It is worth remembering that many of those individuals that extremist groups would like to radicalize and recruit are highly vulnerable. Extremist groups are primarily targeting individuals who are young, disillusioned, alienated, isolated, and marginalized (Seib and Janbek, 2011; Decker and Pyrooz, 2015). These groups can use the Internet to manipulate grievances and lure individuals with promises of friendship, acceptance, and a sense of purpose. Sageman (2008) holds that one of the most problematic aspects of the Internet is the degree to which individuals can be influenced by other participants on extremist forums. These milieus can do more than merely reinforce and solidify perspectives. Sageman indicates that individuals can have their minds changed through their participation in these forums.



B. The social psychology of the Internet and violent extremism

The literature on radicalization to violent extremism clearly establishes the central role of social psychology. It also suggests that the Internet is increasingly salient for understanding processes of radicalization. It follows then, that understanding radicalization processes requires an explanation of how the Internet may influence beliefs and behaviours; that is, of the social psychology of the Internet. While the online radicalization process has generated research interest more recently, studies on the social psychology of the Internet have been more extensive and given rise to a flourishing field of study (Wallace, 1999; Gackenbach, 2007; Joinson et al., 2007; Barak, 2008; Attrill, 2015). This section presents three key areas of research on the social psychology of the Internet that are relevant for understanding the role of the Internet in violent radicalization processes: individual cognition and social identification processes in cyberspace, online interpersonal relationships, and finally the psychological consequences of group dynamics through computer-mediated communication (CMC).

1. Individual cognition and social identification processes in cyberspace

Understanding how individuals construct their beliefs about the social world and how they engage in the process of identity formation and social identification helps explain how individuals make sense and act upon the world “out there”. With the rise of online environments, psychologists have been interested in understanding how the Internet can function as a prime venue for identity formation and social identification processes (McKenna and Seidman, 2005; Amichai-Hamburger and Hayat, 2013), and how these online social spaces might produce new patterns of behaviours. Researchers have sought to explain how computer-mediated communication (CMC) can transform identity perception and self-categorization mechanisms at the individual-level, and how these mechanisms can, in turn, impact identity self-construction (Spears, Lea and Postmes, 2007).



i. Identity formation and social identification in the Internet era

Identity formation and social identification have a major influence on a broad spectrum of psychological dynamics and individual behaviours. According to Erikson's (1968) theory of identity developmental stages, identity formation is both an individual cognitive process and a social process, carried out among and in negotiation with other individuals (e.g. family, peers, teachers, colleagues, etc.). This conception, like many others (Goffman, 1959; Buckingham, 2007), emphasizes the notion of identity as an interactive process, "identity is something we do, rather than simply something we are" (Buckingham, 2007, 8). Individual identity is dynamic, self-reflective, and evolutive, rather than something that "just is". It is developed and sustained through interactions in the social world. The argument that identity is produced through interactions with others is important because it implies that individuals' identities can change over time, with major consequences for people's beliefs and behaviours.

Social identification is the process by which individuals define themselves in terms of social categories and group belongings (Deaux, 1996). Social identity can impact behaviour and the way one chooses to interact with others. Tajfel and Turner (1979) have emphasized the need to understand identity formation from a collective perspective. Their Social Identity Theory (SIT) proposes that collective groups and entities (e.g. social class, family, peer group, etc.) to which people belong are important sources of identity formation. Groups give people a sense of social identity and a sense of where they belong in the social world. They propose that social identity is derived from three psychological processes that assess others as "us" or "them" (i.e. *in-group* vs. *out-group*): categorization, social identification, and social comparison. These processes have both participative and interactionist dimensions that have been extensively explored across a variety of domains, including collective movements and political mobilisation (Stryker, Owens and White, 2000; Klandermans, 2002; Stürmer and Simon, 2004; Van Zomeren, Postmes and Spears, 2008).

Research has also demonstrated that social identification has important motivational consequences. Social identification can lead to actions that correspond with this identity, such as vol-



unteering for an organization, participating in social protest, or engaging in criminal activities, such as terrorism. Unsurprisingly, people who identify more strongly with a particular group or collective identity are assumed to be more likely to carry out actions that are supportive of that group (Huddy, 2013; Hogg and Terry, 2014). In terrorism studies, these dimensions are important because they converge with studies that have highlighted the importance of identity as a motivational factor for involvement into terrorism and violent radicalization processes (Arena and Arrigo, 2005; Moghaddam, 2005; Schwartz, Dunkel and Waterman, 2009; Pisciò, 2012).

ii. Social identification: Social identity model of de-individuation effects (SIDE) theory and beyond

In recent years, social identification theories have expanded into interdisciplinary areas, including the Internet. Often based on Social Identity Theory (SIT) (Tajfel and Turner, 1979; Hornsey, 2008), scientists have explored how social identification might evolve over time through online exposure and CMC-interactions (McKenna, 2007). Accordingly, theoretical models that had been traditionally developed in the field of psychology have been tested to determine their application to online behaviours. Many publications have shown that social identification unfolds online in much the same way as face-to-face settings (Krantz, Ballard and Scher, 1997). In both online and offline venues, participation or involvement in identity-relevant groups (e.g. social groups that are perceived to be relevant from an individual's point of view in terms of self-identification) has been identified as a key mechanism in social identification processes (Deaux et al., 1999). At the same time, authors have also demonstrated that the Internet provides new opportunities to participate in identity-relevant groups that might unfold into new forms of identification online (McKenna and Bargh, 1998). Far from individualizing identification processes, the Internet seems to enable new ways for individuals to "socialize" online and to construct or reconstruct their identity.

A major computer-mediated communication theory exploring identification processes online is the Social Identity model of Deindividuation Effects (SIDE) model (Spears et al., 2002). The SIDE model aims to explain why social identities might be even more powerful in new media environments such as the Internet. Rooted in Social Identity Theory (SIT), SIDE borrows the argu-



ment that group membership identification is the main source of individuals' identities (Spears, Lea, and Postmes, 2007, 254). The SIDE model states that the sense of anonymity provided by the Internet strongly influences how individuals experience online interactions and identification processes. Anonymity has often been identified as one of the most prevalent features of the Internet (Amichai-Hamburger, 2005, 2). According to the SIDE model, the lack of individuating cues in cyberspace renders individuals more susceptible to group influence and identification (Postmes, Spears, and Lea, 1998; Spears et al., 2001; Tanis and Postmes, 2003). SIDE argues that people experience a sense of "de-individuation" by interacting online with others that they do not see, and often do not even know. Thus, suspending their personal identity and creating an attentional shift towards a collective identity. The SIDE model states that CMC, under certain circumstances, obscures interpersonal differences that interfere with identification processes, and thus heightens group salience, further encouraging individuals' identification through a sense of collective identity (Lea and Spears, 1991; Spears and Lea, 1992; Reicher, Spears, and Postmes, 1995). Researchers have affirmed that de-individuation that occurs online might explain a wide range of online anti-social phenomena, including a willingness to illegally download software (Hinduja, 2008), flaming behaviours (Lea et al., 1992; Lee, 2005; Joinson, 2007, 79), and group polarization (Lee, 2007).

For SIDE advocates, and in contrast to the classical "de-individuation theory" (Zimbardo, 1969; Diener, 1980), online anonymity does not necessarily entail the loss of self-awareness. In fact, the opposite may be true. Online anonymity highlights one's identity as a group member, as opposed to an idiosyncratic individual, thereby making group-oriented perceptions and norms more salient (Postmes, Spears and Lea, 1998; Postmes et al., 2001). In sum, SIDE has replaced the idea that online anonymity de-individuates people by putting less social constraints on them with the idea that online anonymity enhances the salience of a collective identity and the subsequent social identification with a shared collective identity (Lea et al., 2001). As observed by Postmes (2007, 179), "Far from losing impact and relevance, [identities established through cyberspace] may gain prominence and support online".

By exploring how online environments may affect identity and processes of identification, the SIDE model has several implications for terrorism and radicalization phenomena particular-



ly for their cyber-facets (Guadagno et al., 2010). This model can assist in explaining why online anonymity might foster (under certain circumstances) de-individuation, resulting in individuals becoming more self-aware about certain aspects of their identity and perceiving their attachment to a particular collective entity or social group more saliently.

iii. Identity salience and group polarization: From identification to opinion polarization

Refining their model, SIDE theorists have suggested that high group membership identification in anonymous online environments might amplify individuals' attraction toward an in-group identification, while increasing negative views toward an out-group. Described as "group polarization", this socio-psychological process is not limited to the Internet. It refers to the idea that following frequent interactions within closed groups, individuals tend to endorse more extreme positions in directions already favoured by the group (Isenberg, 1986; Hogg, Turner, and Davidson, 1990).

In the field of psychology, group polarization is often discussed in relation to the concept of identity salience. According to psychologists, as social identities become more salient in the course of social interactions, individuals tend to adopt the norms, beliefs, and behaviours of fellow in-group members. Identity salience is predominantly associated with the perception of others (Korostelina, 2006) and stereotyping mechanisms that play an important role in group polarization and negative feelings towards out-groups. Individuals who have higher levels of identity salience express a readiness to defend the perceived values and norms of their group of membership.

How can CMC impact group polarization? Consistent with the SIDE model, psychologists have argued that online anonymity and de-individuation might foster group identification and opinion polarization (Spears et al., 2011; Guadagno et al., 2010, 35). These studies illustrate how online socialization might influence individuals' personal and collective identity. They can also help explain how this might trigger perceived threats to one's own social identity, and how the growing sense that one's collective and personal identity are threatened may sometimes lead to the belief that violent actions may be required to protect it (Harris et al., 2014). This research may



help us understand how social identification through the Internet might lead some individuals to feel more threatened than others about their sense of collective identity, endorsing a salient identity that may favour the adoption of polarized worldviews. For example, the variable impact of narrative framing in the context of international conflicts through the Internet (Adarves-Yorno et al., 2013) could inform our understanding of how social identification phenomena occurs online and how identity salience might encourage, under certain circumstances, polarization of individuals' beliefs and opinions.

iv. Beliefs formation and attitudes towards violence

Linked to identity salience and group polarization are the issues of beliefs formation and attitudes towards violence. These issues refer to the question of how individuals construct their beliefs through cyberspace, including extreme political beliefs (Wojcieszak, 2010) and the belief that violence might be a legitimate avenue of action. Studies investigating the psychological impact of the Internet on attitudes towards violence remains relatively scarce (Pauwels and Schils, 2014). However, it does appear that positive attitudes towards a behaviour are important precursors of that behaviour. Understanding how the Internet or online content might promote positive attitudes towards violence is therefore crucial.

Recent studies have demonstrated the importance of exploring the psychological impact of selective exposure in beliefs formation. These studies have highlighted the importance of looking at how individuals select extremist peers in the real and virtual worlds, and therefore selectively expose themselves to extremist content online (Pauwels and Schils, 2014). Understanding how individuals select peers in real and virtual worlds is important to understand not only to identify how the determinants of selective exposure of online extremist content may vary from one individual to another, but also what are the contextual and situation effects of such selective exposure on people undergoing a radicalization process. In order to understand what role the Internet has on beliefs formation, it appears crucial to understand the psychological dimensions of selective online exposure (i.e. the selection of online information that matches personal beliefs).

Several studies have explored the role that selective exposure might play in shaping individ-



ual beliefs and attitudes (Garrett, 2009; Knobloch-Westerwick et al., 2014) and, more specifically, how selective online exposure might create cognitive bias as well as promote opinion polarization (Stroud, 2010). Selective exposure can diminish the diversity of messages to which one is exposed to and, in consequence, enhance polarization and extremism (Sunstein, 2001). Selective exposure might lead individuals to be locked-in to “filter bubbles” (Pariser, 2011), in which the glut of information provided by the Internet makes it easy to avoid information that challenges one’s beliefs. This phenomenon creates an unintentional and relatively invisible isolation from new cognitive experiences (McKenna et al., 2006; Pariser, 2011) that might otherwise challenge the formation of certain beliefs, including extremist beliefs.

v. Expressing a “true self” and social identification in the context of stigmatized identities

As the Internet offers an easy way to discover and interact with others under conditions of relative anonymity, online settings foster the expression of self-aspects that might otherwise be barred in offline settings (McKenna, 2008, 233). Some authors have argued that new media provides alternative social spaces within which people can adopt whatever identity they choose, and create new and multiple identities inconceivable in offline worlds (Slater, 2002). Others have argued that the Internet allows those with stigmatized identities—sexual, social, cultural or political—to identify with others who might share this same identity (McKenna and Bargh, 1998; 2002).

In a series of studies, McKenna and Bargh (1998; 2002) argued that cyberspace allows some people to display their stigmatized social identities and bond with others who share the same social stigma. The anonymity of the Internet may make individuals more willing to reveal their “true selves” online (Bargh, Fitzsimons and McKenna, 2003; McKenna and Seidman, 2005; McKenna, 2007). The authors found that people who identified with stigmatized groups were more likely to be involved in newsgroups with similar others, and also considered their belonging to these groups as more important to their identity, as compared to individuals who identified with non-stigmatized groups.

Participation in online stigmatized group contexts is not without consequences from the



point of view of identification processes. Researchers have found that people with stigmatized identities and concealed social identities (e.g. individuals with fringe ideological beliefs) are more responsive to feedback they receive online from other group members than individuals that participate in non-marginalized and non-stigmatized online group contexts (McKenna and Bargh, 1998; Sassenberg, 2002). One implication of this finding is that people with stigmatized identities who are exposed to online stigmatized groups may increase their connectedness and strengthen their identification with the stigmatized-identity group. As stated by McKenna (2007, 219), "Because these relationships encompass and help to define important aspects of self, they are likely to be brought into one's everyday, non-Internet life, and they are likely to survive such a transposition, becoming durable additions to one's existing social circle". Active participation in online stigmatized groups induces positive feedback for individuals who feel marginalized, possibly reinforcing psychological mechanisms of self-acceptance and providing justifications for endorsing beliefs and norms associated with this marginalized identity.

Again, this work sheds light on how individuals who perceive stigma in their offline identity might turn to the Internet to find spaces to express their "true selves". In regard to radicalization, the Internet provides an opportunity for individuals with stigmatized identities, due to the adoption of marginal opinions and beliefs, to find online communities of similarly marginalized individuals (see for example, Bowman-Grieve, 2009). These online interactions may open the door to positive feedback processes, reinforcing the endorsement of beliefs and norms associated with the marginalized identity.

2. The social psychology of online interpersonal relationships

How does the Internet impact the likelihood of certain interpersonal relationships? With whom do relationships form? And how do individuals manage relationships built through cyberspace? An important branch of psychology on the Internet has focused on the impact of online venues on interpersonal communication and the formation of social ties. Academics are attempting to understand how interpersonal relationships that originate online might migrate offline and vice-versa (Baker, 2008, 163).



Two conflicting visions have prevailed in scholarly debates over the Internet's ability to produce new forms of sociability and interpersonal ties. On one side is the view that the Internet is an impersonal and hostile space for relationship building (Berry, 1993; Stoll, 1995). From this perspective, online environments are viewed as lacking in many respects, including physical proximity, frequent interaction, or explicit information about the broader social context and other users (Lea and Spears, 1995). These elements are assumed to reduce people's ability to socialize and create stable relationships online. On the other side are authors who argue that special qualities of online environments, such as anonymity and the possibility of self-disclosure, liberate interpersonal relations from the constraints of physical locality and create new opportunities for interpersonal relationships and tie formation (McKenna, Green and Gleason, 2002).

Studies on the quality of online social relationships are divided in their conclusions on the strength of social ties on the Internet. While some have highlighted the weaknesses of online environments in supporting social ties, others have emphasized how the Internet can improve interactions for specific social groups (Haythornthwaite, 2005). For instance, individuals suffering from social anxiety, low self-esteem, and lack of sociability have been demonstrated to engage in more frequent Internet use (Whitty and Carr, 2006). The anonymity of online spaces allows individuals to feel safer to initiate contacts with others, which would otherwise not be done in face-to-face venues (Whitty and Carr, 2006). For many, the Internet has become another location to meet and socialize, before migrating to other settings, including those that are offline (Wellman and Gulia, 1998; Hampton and Wellman, 2002; Mesch and Levanon, 2003). Recent studies that have looked at how adolescents make new friends have shown that online settings are becoming increasingly important for interpersonal communication and relationship formation (Gross, Juvonen and Gable, 2002; Wolak, Mitchell and Finkelhor, 2003; Mesch and Talmud, 2006).

It is therefore important to understand why, how, and under which circumstances people might turn to the Internet to form relationships. In the field of psychology, relationship formation has primarily been explained from two perspectives: social needs and social compensation. Some psychologists have argued that individuals form relationships to meet compelling social needs, including intimacy and self-validation (Buhrmester, 1996; Wolak et al., 2003), while oth-



ers have argued that individuals form relationships to compensate for social anxiety and low social competence (Valkenburg and Peter, 2009, 4). From this perspective, and consistent with the above paragraph, individuals who feel more socially isolated may have a greater need to develop online acquaintances. Further, individuals with low self-esteem and loneliness have a higher likelihood of friendship formation online (Amichai-Hamburger and Ben Artzi, 2003). For instance, scholars have demonstrated that the likelihood of friendship formation online is higher for adolescents who report low self-esteem and lack social closeness to face-to-face friends (Mesch, 2001). As individuals have needs for bonding, the use of the Internet for communication purposes provides a new venue to meet others and create close relationships.

i. Social Information Processing (SIP) theory: Communicating and developing interpersonal relationships

Social Information Processing (SIP) theory is considered one of the first major theories in the field of psychology on computer-mediated communication (Ellerman, 2007, 31). SIP aims to explain how people get to know each other online, without nonverbal cues, and how they develop and manage relationships over time in online environments. Researchers adopting this approach have tried to capture how the Internet can effect impression and relational communication. Overall, SIP argues that online interpersonal relationships may require more time to develop than traditional face-to-face relationships. It postulates that online relationships grow only to the extent that parties first gain information about each other and use that information to form interpersonal impressions of who they are. Once established, online personal relationships however can demonstrate the same relational dimensions and qualities as face-to-face relationships. Reconsidering the Web as a tool for discovering and interacting with others, SIP advocates have found that in some circumstances, people might experience more intimacy and connection with others online than in face-to-face venues (Walther, 1996). SIP has opened a new avenue for research about interpersonal patterns of interactions online. Increasingly, scholars are exploring how interpersonal relationships form, progress, and are structured over the Internet by looking at patterns of interaction and personal cognitive preferences.



ii. Finding similar others: Online acquaintances and homophily in cyberspace

Understanding how individuals create social ties through cyberspace, connecting with individuals advocating terrorism and clandestine violent actions, is crucial for understanding the mechanisms of radicalization processes. Among the wide array of phenomena that have been investigated by scholars, homophily has attracted a great deal of attention. Originally proposed by Lazarsfeld and Merton (1954), homophily refers to the idea that individuals who share similarities are more likely to associate with one another than are individuals who are dissimilar. Colloquially, the principle of homophily suggests that “similarity breeds connections” (McPherson, Smith-Lovin and Cook 2001, 415).

In offline contexts, extensive research has investigated how homophily in age, gender, ethnicity, education, occupation, and personal values influence the formation of network ties in communities, small organizations, and networks of friends (McPherson et al., 2001). Psychologists have found that actual and perceived similarity between individuals in terms of demographics, attitudes, values, and attractiveness correlate positively with social interaction and potential tie formation (Kossinets and Watts, 2009; Brechwald and Prinstein, 2011). As the Internet has become a new space for social interactions, researchers have started to investigate the extent to which homophily characterizes social ties online. Do ties form online in the same way as in the real-world? Given the differences between offline and online environments, do the same factors that govern the construction of new ties in offline contexts also govern the construction of new ties on the Internet? In other words, does homophily exist in online spaces?

At first glance, homophily might not be particularly relevant for online contexts, as people lack access to the physical and socio-demographic cues on which potential interpersonal relationships may be based. However, lack of access to these cues does not mean that homophily is nonexistent in online contexts. Instead, the mechanisms that structure homophily appear to be different in cyberspace, and are based on other factors than traditional characteristics in offline settings. In particular, the interests of individuals, a dimension that was often neglected in offline settings due to the emphasis on physical and socio-demographics factors (Bisgin, Agarwal and



Xu, 2010, 533), have been described as one of the strongest factors for evaluating homophily in online settings. Consistent with this argument, recent studies have demonstrated that friendship and interests are strongly interlinked, that sharing even a few common interests makes the chances of friendship significantly more likely online (Lauw et al., 2010). Indeed, individuals who have specialized or unusual interests may find it difficult to find groups with similar interests in their everyday environments, and the Internet provides an alternative venue to find others with these same interests (McKenna et al., 2002, 11). The technical structure of the Internet itself allows individuals to easily find others who share specialized and non-common interests (McKenna et al., 2002).

It is worth noting that online venues might vary in how they provide favourable conditions for homophily among users. For example, social media platforms are explicitly network-oriented and tend to emphasize common interests and similarities among users. Therefore, online homophily seems to be reinforced by the emergence of social network platforms such as *Facebook* and *Twitter*, where people are encouraged to “follow” other users on the basis of similar disclosed interests (Fisher, 2010). Research on new social media has demonstrated that users can generally only entertain a small number of stable relationships online (100-200), which is suggestive of a certain process of homophily (Gonçalves, Perry and Vespignani 2010). Once again, research that is interested in these areas are only starting to emerge, but might be very helpful for assessing the role of the Internet in radicalization leading to violence.

In regard to individuals with extremist or politically marginal beliefs, one can hypothesize that online environments provide spaces that can encourage clustering among individuals who share these deviant and/or marginal personal interests. Sunstein (2001) has argued that the Internet tends to bring like-minded people together and to make them more like-minded than they previously were. Sageman (2008) has also posited that the Internet exerts a homogenizing effect on norms and values. While compelling theoretically, future research should empirically examine the role of homophily in radicalization processes.



3. The social psychology of online group dynamics

Cyberspace has altered the frontiers of human interactions. It is therefore not surprising that online environments have also changed the spectrum and nature of group dynamics (Smith, 1999). This includes psychological processes that occur within a specific group (i.e., *in-group* dynamics) and between social groups (i.e., *intergroup* dynamics). Although online groups have many characteristics in common with physical groups in the real world, digital settings have unique qualities and characteristics (McKenna, Green and Gleason, 2002; McKenna and Seidman, 2005) that make them more effective in facilitating contact, interaction and attachment between anonymous individuals. The Internet is uniquely suited to group formation, insofar as it allows for the creation of a secure environment by cutting geographical distances and creating a shared sense of emotional and intimate proximity akin to face-to-face contact that might otherwise not be possible to achieve. As a growing number of individuals are interacting with others and participating in various collective online settings, social psychologists have been increasingly eager to understand how online group dynamics might differ from those found in more traditional offline venues, and whether there are dynamics and psychological patterns that are specific to online environments.

i. Online interactions and motivations for group affiliation

What motivates people to interact with others and affiliate with groups that are active online is a complex issue. Recent years have seen a burgeoning of interest in online groups and their dynamics of formation (McKenna and Green, 2007). In online environments, people tend to seek out or be drawn to similar others who share their own interests. The lack of “real-world” counterparts can therefore be seen as a reason for why individuals tend to interact with others online and might join online communities. Online groups, including discussion forums and interactive platforms, where people share similar interests, have experienced similar traumatic events, feel lonely or politically/culturally/ideologically misunderstood, provide them with opportunities to engage with similar others that would otherwise be less easily found in the real world (McKenna and Green, 2007, 144).



In turn, the perceived similarity of others in online settings seems to be a prerequisite for the development of a sense of virtual community, what some authors have referred to as a Sense of Virtual Community (SOVC) (Ellonen et al., 2007). According to several studies, the perceived similarity among users combined with the specificities of CMC makes online environments unique in terms of creating a sense of universality and communality that fosters attachment formation among individuals (Ellonen et al., 2007). The enjoyment of interacting online with like-minded individuals can explain why some individuals tend, under certain circumstances, to develop an attachment for online communities and their members.

Additionally, online communities provide support that is not likely to be found offline (Braithwaite et al., 1999; Wright, 2000; Wright and Bell, 2003). Cybercommunities provide safe environments for identity management where members come together to understand, negotiate and, at times, reject a marginalised identity that might be ascribed to them in their offline environments. Because members of online communities can safely and freely share their views with each other, collective online settings provide unique environments for the development of what scholars have labelled “deviant subcultures” (Holt, 2010).

ii. Deviance and deviant communities online

For several reasons, the Internet provides a favourable space for the emergence of deviant or marginal communities online. First, secrecy and anonymity have been identified as key components that favour a wide range of deviant online communities. Several authors have examined how online group dynamics and peer influence in cyberspace might encourage the development of antisocial, deviant, and risky behaviours (Maratea and Kavanaugh, 2012). Research has examined the role of online communities and cyber-groups in supporting deviant identities and behaviours across a variety of contexts, including pro-anorexia (Dias, 2003; Smith et al., 2013), self-injury (Whitlock et al., 2006; Alder and Alder, 2008; Haberstroh and Moyer, 2012) and child pornography (Corriveau 2010; Holt et al., 2010). Second, offline stigmatization has been found to underlie formation and joining of deviant virtual communities. For example, in their study of the right-wing extremist forum StormFront, De Koster and Houtman (2008, 1165) conclude that “the



lack of freedom of expression experienced offline [by individuals] is a reason for their membership of Stormfront” . By providing a sense of online support, interactions among similar deviants through cyberspace may normalize deviant behaviours and further encourage deviant norm-based attitudes and beliefs.

iii. Online peer influence mechanisms and in-group influence

Because of their unique characteristics (e.g., anonymity, lack of physicality, etc.), online spaces provide collective settings that are prone to certain collective dynamics, including a series of peer influence mechanisms and in-group based influence processes. Recent research findings have suggested that “anonymous CMC leads to more agreement (i.e., similar attitudes of group members) when social identity is salient” (Sassenberg and Jonas 2007, 279). Researchers have found evidence that anonymity favours in-group norm-based influence (Postmes et al., 2001; Lea et al., 2001; Spears et al., 2001); that is, other in-group members’ attitudes, beliefs and discourses serve as standard norms for individuals’ validity judgment (Postmes et al., 2000). Scholars have demonstrated that “group members in anonymous CMC adhere more strongly to the norm of an interacting group by means of their communication content and their attitudes, independent of whether they personally know about the norm before the discussion or not” (Sassenber and Jonas, 2007, 276). Labelled “norm-based influence”, this type of social influence describes the normative process according to which individuals’ opinions and arguments are seen as more valid if they are in line with group norms (Sassenberg et al., 2005). Accordingly, under certain circumstances, the anonymity of online settings can influence intragroup conformity and uniformity. As mentioned by Sassenberg and Jonas (2007, 279), “The extent of norm-based influence in CMC and the impact of anonymity on this type of influence not only depends on the existence of a group norm, but also on the type of the group” . Indeed, norm-based influence in CMC seems to be attached to the fact that people tend to feel part of a common group and share a similar identity. Accordingly, “for members of common identity groups norms are very important because they are part of the self-image and therefore norm-based influence is very likely to occur” (Sassenber and Jonas, 2007, 278). Distinguishing between two dimensions of group identification,



self-definition—the degree to which individuals perceive the in-group as homogeneous, and self-investment—the extent to which individuals are satisfied with their belonging to the group, scholars have demonstrated that online interaction among individuals has a stronger influence on self-investment than on self-definition (Jans et al., 2015, 204). Understanding the spread of social influence via social networking sites has several implications, including understanding the role of interactive online settings in fostering norm-based influence that might validate radical and normative beliefs justifying the use of violence or terrorist actions.

iv. From online groups to network development

Online groups not only enable people to maintain and reinforce existing ties, but also to create new ties and join new online communities that would otherwise not have been available to them in the real world. Participation in Internet social groups provides individuals with opportunities to widen their own social networks as well as to integrate new online relationships and identities into their offline daily lives. Scholars have hypothesized that online and offline identities are in fact mutually reinforcing, collectively informing and shaping individuals' identities and social networks. Overall, studies about the collective dimensions of interaction online remain very limited. As mentioned by Howard and Magee (2013, 2059), "Little empirical evidence has been discovered about online groups, as many publications only outline propositions about online groups". Moreover, owing to the fact that the empirical research that does exist has been conducted on limited samples (e.g., university students, users of particular social media platforms, etc.), its generalizability remains uncertain.

Closing thoughts

The psychology of the Internet, or cyber-psychology, remains an emerging field of research. Despite an increasing body of literature that explores how online technologies influence human behaviour, there remains a large number of unknowns about how humans interact in online settings and the psychological mechanisms involved in interactions across online and offline social settings. This literature only provides a small foundation for elucidating and understanding the



role of the Internet in violent radicalization processes. Future research avenues should be developed in order to identify specific psychological mechanisms that might be particularly illustrative in how online technologies and settings influence individuals' trajectories towards violent radicalization.

Case studies

This section presents the fifteen individuals analyzed for which the Internet is assumed to have played a role in their trajectory towards violent extremism. The extent to which the Internet played a role in the radicalization process across individuals ranges, with the most extreme case involving a former student who attributes her extensive viewing of radical sermons as directly connected to her radicalization. For others the Internet served as a venue for first exposure to radical material, or as a means to obtain radical material that reinforced already held radical beliefs. Despite the disparity in the degree to which the Internet can be said to have facilitated radicalization processes, all cases represent individuals who were extensively involved in using online venues to facilitate or support their move towards terrorist activities. The individuals selected represent a range of ideological motivations, including jihadism inspired ($n=11$), right-wing ($n=3$), and anti-establishment ($n=1$). This section provides a brief description of each individual and their link to online radicalization.

i. Fahim Ahmad (Jihadism/AQ inspired)

From 2005 to 2006 Fahim Ahmad was one of the ringleaders of a terrorist organization, the "Toronto 18", which plotted to detonate explosives at government and media facilities in Ottawa and Toronto to protest Canada's involvement in Afghanistan. Ahmad was an active participant on online forums, sharing his extremist views with other like-minded individuals. Through these online venues, he forged contacts with fellow extremists in both the UK and the US leading to an eventual in-person meeting in Toronto in March 2005. Ahmad was arrested in June 2006 for terrorism charges and sentenced to 16 years in prison.



ii. Justin Bourque (Anti-establishment)

On June 4, 2014, Justin Bourque, a 24-year old from Moncton, New Brunswick, shot five officers from the RCMP, killing three and severely injuring two. Leading up to the attacks Bourque's Facebook account was filled with images and occasional posts about the right to bear arms. News agencies also reported that his social media sites contained anti-police posts as well. Bourque was apparently suffering from sleep deprivation and felt depressed about his life in the days before he committed the shootings, leaving open the debate about classifying his actions as terrorism or mass murder. Bourque was sentenced on October 31, 2014 to life in jail with no possibility of release for 75 years.

iii. Anders Behring Breivik (Right-wing)

On July 22, 2011, Anders Behring Breivik detonated a series of bombs downtown Oslo, killing eight people before moving to Utøya island, where he killed an additional 69 people in a mass shooting during a Workers' Youth League (AUF) camp. The case of this Norwegian far-right extremist offers unique insights into online activities. Not only did Breivik compile his 1,516 page manifesto based exclusively on Internet sources, but he was also an active discussant on a number of mainstream and extremist Internet forums, and a highly dedicated online gaming enthusiast. On August 24, 2012, Breivik was sentenced to 21 years in prison.

iv. Gianluca Casseri (Right-wing)

On December 13, 2011, Gianluca Casseri killed two street vendors of Senegalese descent and wounded three others before killing himself in the Italian city of Florence. Casseri was said to be a member of a far-right/neo-fascist Italian extremist group, Casa Pound. Even though Casa Pound has reportedly distanced itself from the Florence gunman, it has been alleged that he had written for its online magazine and taken part in meetings organised by the group in several locations around the country. Known as the Italian Anders Breivik, Casseri presents an interesting case study, implying both online presence on extremist far-right websites and physical acquaintances with the neo-fascist group Casa Pound.



v. Roshonara Choudhry (Jihadism/AQ inspired)

On May 14, 2010, Roshonara Choudhry, a second generation UK citizen with Bangladeshi heritage, stabbed British Labour MP Steven Timms twice in the abdomen to protest his endorsement of the coalition invasion of Iraq. Choudhry has openly admitted to the Internet as facilitating her radicalization process. Police investigations were unable to identify any contact with extremist groups or jihadists online; however, during an interview with police she disclosed that the Internet was how she radicalized over a six month time frame. Specifically, she attributes her radicalization to the viewing of online lectures of Anwar al-Awlaki, a Yemeni based extremist cleric for al-Qaeda in the Arabian Peninsula. From November 2009 up until the month of the attack, she viewed over 100 hours of his sermons. On April 29, 2010 she withdrew from her course at King's College London, discontinued any association with her friends, and made an appointment to meet directly with MP Steven Timms at the time of which she stabbed him. On November 4, 2010, Choudhry received a life sentence for the attack.

vi. Damian Clairmont (Jihadism/AQ inspired)

Damian Clairmont has been identified as a young Canadian-born Muslim convert who left Calgary for Syria in November 2012. Damian Clairmont was reportedly fighting with Jabhat al-Nusra under the nickname of "Abu Talha al-Canadi", an al-Qaeda affiliated rebel group in Syria. He was killed at the beginning of 2014 by Free Syrian Army (FSA) forces during rebel infighting. Damian Clairmont represents an interesting case study that illustrates one current and important profile of extremism: a youth going to jihadi groups abroad. It is crucial to understand the role played by the Internet regarding these trends.

vii. Martin Couture-Rouleau (Jihadism/ISIS inspired)

On October 21, 2014, Martin Couture-Rouleau, aged 25, drove his vehicle into two Canadian soldiers, killing one and seriously injuring the other. The lead up to this attack appears to extend back two years when Couture-Rouleau was struggling with his business and turned to discussion forums online. In this online community he participated in debates and began to distance



himself socially, both from his friends and family. Despite attempts from both the RCMP and an Imam at a local mosque to dissuade Couture-Rouleau from violent acts he continued down this path. His debates also extended to his personal Facebook page, where he posted pictures of the Islamic State (ISIS), isolating himself from some of his more moderate friends. Couture-Rouleau was killed by police the same day of the attack, after fleeing the scene and threatening officers with a knife.

viii. Omar Hammami (Jihadism/AQ inspired)

Omar Hammami was an al-Qaeda inspired extremist who travelled from the United States to Somalia to join al-Shabaab. The Internet played a key role in his trajectory towards violent extremism, providing him not only with skills and contacts but also making him an attractive recruit. Hammami sought out radical content online and used the Internet to gain technical weapon and military skills. Further, the Internet served as a venue for him to forge contacts with like minded extremists, creating ties with influential Salafi scholars that allowed him to make the transition into al-Shabaab. However, while Hammami made the successful transition to al-Shabaab, it also signalled his demise, with members of the group murdering him in 2013 due to a rift with one of the leaders.

ix. Saïd Khalid (Jihadism/AQ inspired)

While charged as part of the Toronto 18 terrorist conspiracy in 2006, Saïd Khalid's path to radicalization began prior to joining the group. Originally meeting the leader of the attacks in high school, he did not join the Toronto 18 until after having developed violent radical beliefs through online venues. Khalid describes his path to radicalization as inspired by lectures delivered by Anwar al-Awlaki, in which he connected with the leader and developed a sense of responsibility to address the global grievances of Muslims. Through this forum and his prior connection with one of the Toronto 18's leaders he joined the group, attending a training camp and assisting with the acquisition and storage of explosive materials. Khalid pled guilty to terrorist charges and was sentenced on September 3, 2009 to 14 years in prison.



x. Aabid Khan (Jihadism/AQ inspired)

Aabid Khan, also affiliated with the Toronto 18, is notable among these case studies for never having prepared an attack, but rather for serving as an online mentor and facilitator for others looking to conduct attacks. Feeling disenfranchised from his local community in the United Kingdom and having acquired specialized computer knowledge he hacked websites deemed “un-Islamic”. From this he graduated into distributing ideological material that focused on violent jihad, becoming one of the administrators at At-Tibyan Publications. Khan used these discussion forums to look for recruits, promote jihadism, and obtain financing for terrorist attacks. Khan has been cited as having one of the largest stores of terrorism material ever prosecuted. In August 2008 he was convicted of possessing material likely to be used in a terrorist attack and sentenced to 12 years in prison.

xi. Saïd Namouh (Jihadism/AQ inspired)

Originally from Morocco, the Canadian resident Saïd Namouh, aged 37, was arrested August 2007 for his involvement in a plot to bomb targets in Germany and Australia. Namouh’s involvement primarily stemmed from his online role with the Global Islamic Media Front, an alleged communication tool of al-Qaeda. The extent to which the Internet played a role in Namouh’s radicalization is unknown, however he was cited to be an active participant, with police investigations revealing thousands of pages of his transcribed posts on forums. His involvement also extended beyond discussion forums, creating and distributing terrorist material online, including instructions on how to construct bombs, and preparing ransom demands on behalf of the Army of Islam. Namouh was convicted in 2010 and handed a life sentence.

xii. Wade Micheal Page (Right-wing)

On August 5, 2012, gunman Wade Michael Page opened fire against worshippers at a Sikh Temple in Wisconsin, killing six. A neo-nazi, Page was a member of a white supremacist heavy metal band. While there is no evidence that he was radicalized on the Internet, he frequently used it to promote his activities and neo-nazi acts. A self-described member of the skinhead group, “Ham-



merskins Nation” he was also active on various online forums. According to an intelligence firm that monitors online extremist activity (the SITE Monitoring Service), he was an active contributor, posting approximately 250 messages on a single extremist site from March 2010 to 2011. The day after the attack, Page shot himself during a gunfight with the police.

xiii. Andre Poulin (Jihadism/ISIS inspired)

Andre Poulin has been identified as a young Canadian-born Muslim convert who left Timmins in Ontario for Syria in late 2012. Poulin had a criminal record for uttering death threats, theft, harassment and carrying a weapon before converting to Islam and embracing radical beliefs. Known under the name Abu Muslim, Andre Poulin left Canada in 2012 and was reportedly fighting with ISIS when he was killed in the battlefield in the summer 2014. ISIS later issued a recruitment video using the image and words of Andre Poulin. This recruitment video for ISIS is notable, as it represents a case of a Canadian individual that has been successful in recruiting several men from Canada using an online platform.

xiv. Arid Uka (Jihadism/AQ inspired)

On March 2, 2011, Arid Uka murdered two US airmen and severely wounded two others at the Frankfurt Airport. This incident is considered to be the first successful assassination in Germany by an individual with an Islamist background. According to investigations, the motivation for the shooting came from a video on YouTube which showed US soldiers raping Iraqi Muslim women. Uka was convinced that the video was genuine, but it was revealed that the video was a clip taken from *Redacted* an American movie based on the Mahmudiyah massacre. On the Internet, Uka posted on several Islamist forums, later claiming that through the content and discussions in these forums, he came to believe that Muslims were in a global war with the United States. Via the internet, Uka managed to establish contact with Sheik Abdellatif of the so-called *Da'wa* group, who preached in two mosques in Frankfurt. These two Salafi mosques have been considered as a meeting-point for radical Islamists. On February 10, 2012, Uka was sentenced to life in prison.



xv. Michael Zehaf-Bibeau (Jihadism/ISIS inspired)

On October 22, 2014, Michael Zehaf-Bibeau, aged 32, shot and killed a Corporal downtown Ottawa before storming Parliament with his gun. Shortly after entering the Parliament building Zehaf-Bibeau was shot and killed by an armed Member of Parliament and his security team. A history of drug addiction and petty crimes, there is evidence that Zehaf-Bibeau had become radicalized over time through contacts at a Vancouver mosque and was prompted to attack on October 22 due to an online twitter message. Two years before the attack, Zehaf-Bibeau had been worshipping at a mosque where he made contact with Al-Kanadi, a man currently charged with terrorism for joining armed Islamists in Syria. Further, there appears to be a link with his attacks and online messages. Prior to the attack, Zehaf-Bibeau had been reading Al-Kanadi's twitter posts that urged for attacks to be committed against Canada.

Assessment of the case studies

The analysis of the fifteen case studies of violent extremism has allowed us to draw preliminary conclusions regarding the role of the Internet in radicalization processes leading to violence. Consistent with the main conclusions developed in the literature (Dalgaard-Nielsen, 2010a; Nasser-Eddine et al., 2011; PISOIÙ, 2012; Neumann, 2013a), our analysis demonstrates that processes of radicalization towards violence are neither sudden nor abrupt. Rather, individual trajectories towards violence are almost always gradual, and the result of the convergence in time and space of a multitude of factors. Pathways towards radicalization appear as much the result of several identified pre-conditions as the product of relational and developmental configurations that may occur online and/or offline. This finding illustrates the need to pay close attention to the multiplicity of causal factors involved in such processes as well as the ways they interact together (Ducol 2015a). Indeed, our analysis indicates that the Internet is in itself only one variable among dozens that are associated with individual trajectories towards violent extremism.

While the Internet is almost never in itself a sufficient nor a necessary causal factor of violent extremism, the Internet can be understood as an intervening causal factor (for some violent extremists) that needs to be considered as operating at various points along a trajectory (at the



start, at the end), and in different ways (a source of information, a medium for exchanging ideas, a space for strengthening one's personal beliefs, etc.) (Von Behr et al., 2013; Ducol, 2015b). Therefore, it is extremely difficult to draw a general assessment of the role that the Internet might have in radicalization processes leading to violent extremism. Rather, it seems more fruitful to approach this issue holistically, taking into account the wide spectrum of psychological processes and dynamics impacted by the Internet from one trajectory to another.

The detailed analysis of fifteen violent extremist case studies has led to three main findings on the role of the Internet on the radicalization trajectory. First, as mentioned above, given the variety of roles taken by the Internet in our case studies, it would be wrong to think of the Internet as a monocausal and homogeneous factor that impacts individual trajectories towards clandestine political violence in the same way. Second, the social and psychological effects of the Internet can neither be considered linear nor constant. While the Internet might play an important role at the beginning of the radicalization trajectory, it does not necessarily play a continuous or cumulative role throughout the trajectory. Third, the Internet should not be perceived as a monolithic pathway to radicalization, but rather as multi-dimensional, reflecting the various practices that lead people to expose themselves and use the Internet along the radicalization trajectory.

Pathways to violent extremism: Three "ideal" trajectories

Despite the diversity with which the Internet impacts individuals' radicalization towards violent extremism, three ideal trajectories can be drawn from the case studies. As seen in Figure 2, the first ideal-type consists of trajectories where the Internet not only plays a central role in the initial exposure of individuals to ideological and political radical universes of socialization, but also in the gradual adoption of belief systems that legitimize the moral conviction to carry out violent actions. This trajectory is characterized by the central role of the Internet throughout the radicalization process towards violence. Digital environments are central to the initial discovery of a radical discourse, and to the process by which individuals gradually retreat into their own extremist beliefs to the point of becoming convinced of the necessity to take violent action. This trajectory characterizes four of the fifteen core case studies: Roshonora Choudhry, Saïd Namouh,



Arid Uka, and in some ways Anders Breivik.

A second ideal-type trajectory comprises cases where the Internet serves to reinforce offline radicalization processes. In this kind of trajectory individuals who were first exposed to and adopted radical mindsets through radicalizing actors and environments in the real world subsequently used the Internet as an additional resource to acquire information on religious concepts or ideological interpretations that have been provided to them through offline encounters. In this trajectory, the Internet can be understood as a virtual “safe haven” for individuals whose radicalization process started in the real world, but was then fulfilled and sustained by material and cognitive resources found online. The Internet acts as a tool to confirm and strengthen polarized beliefs about the world, often in parallel to offline involvement with radical milieus and networks. Case studies such as Fahim Ahmad, Omar Hammami, Wade Michael Page, and in some ways Justin Bourque fall into this last category.

A third ideal-type trajectory involves cases where individuals are first exposed to radical discourses and interpretations through the Internet, but where these digital spaces are slowly complemented by interactions with similar others in the real world. In this trajectory, the Internet serves as an entry point for radicalization, but it is reinforced and developed through offline interactions. This trajectory may be particularly observed in two of the case studies, those of Saïd Khalid and Aabid Khan.

Several of our case studies, including Giancula Casseri, Damian Clairmont, Martin Couture-Rouleau, Andre Poulin, and Michael Zehaf-Bibeau, appear to be more difficult to classify into one particular ideal-type trajectory in reason of the lack of clear and available public information about the role of the Internet for these individual pathways. It was difficult to assess whether the Internet could be understood as an entry point, as an echo chamber, or both for these cases. Despite this fact, we decided nevertheless to include them in the results section because they demonstrate in some ways similar dynamics that could be of interest compared to other case studies already included in our corpus.

**FIGURE 2. TYPOLOGY: THE ROLE OF THE INTERNET ACROSS RADICALIZATION TRAJECTORIES**

		ENTRY	
		Online	Offline
THROUGHOUT	Online	<p>Trajectory 1 Pure online radicals (<i>n</i>=4)</p>	<p>Trajectory 2 The Internet as a <i>reinforcer</i> of radicalization (<i>n</i>=4)</p>
	Offline	<p>Trajectory 3 The Internet as an <i>initial trigger</i> for radicalization (<i>n</i>=2)</p>	No online component

Note. Five cases could not be classified because too little information on the role of the Internet was available.

These ideal-type trajectories serve to qualitatively describe our sample. They are to be understood as ideal-type categories that outline some of the mechanisms through which the Internet may influence individuals' trajectories toward violent extremism. Accordingly, these three categories should not be thought as statistically representative categories in terms of their respective weight—i.e. the number of cases for each category doesn't reflect the importance of the category per se—nor are they necessarily mutually exclusive. Rather, they should be thought of as analytical categories that enable us to capture common aspects between individual trajectories and pathways, allowing us to compare and evaluate them in context.

In the following four sub-sections, we discuss in greater detail the role of the Internet at different stages of radicalization trajectories, using the fifteen case studies in our corpus. In the first sub-section, we explore the role of pre-existing background conditions that seem to enable or facilitate the initial exposure to online and offline extremist and radicalizing environments. Then, we discuss the mechanisms that lead individuals to initially expose themselves or to be exposed to online environments promoting extremism and political violence. In the next sub-section, we explore how the Internet can either encourage or sustain radicalization processes and mechanisms that might be involved in causing individuals to further engage with radicalizing environ-



ments online in a sustained manner and how increased online engagement creates supporting conditions that can foster radicalization. The final sub-section intends to assess how the Internet may provide inspirational and operational knowledge to already radicalized individuals wishing to move towards violent action.

1. Enabling and motivating: Pre-conditions for initial exposure to online and offline extremist environments

The majority of individuals analyzed for this report were identified as possessing multiple factors that may have made them more pre-disposed to initiate contact, or be exposed to environments where extremist ideas or beliefs exist and are promoted. These pre-conditions should not be considered as direct causes of individuals' exposure to radicalizing environments; but rather as enabling and motivating factors that make individuals more vulnerable or attracted to social environments where radical discourses and actors are present and active. Across the fifteen core cases studies, it is possible to distinguish two main types of pre-conditions that orient initial contact with online and offline radicalizing environments: i) biographical pre-conditions; and ii) cognitive pre-conditions.

i. Biographical pre-conditions

Biographical pre-conditions refer to a set of dimensions, specific to a person's life history, that make him/her more susceptible and available to be drawn to extremist social environments and networks, or more willing to initiate contact with extremists. These pre-conditions may make some individuals more likely to initially be exposed to online and offline social environments that might then support their recruitment into extremism. Consistent with several findings developed in Social Movement Theory (SMT), Doug McAdam's (1988, 35) has defined this propensity as the *biographical roots of activism*:

"If people's actions grow out of some confluence of history and biography, it is essential to understand the biographical side of the equation. [...] The point is historical forces are never felt equally by everyone in society. Rather, some combination of biographical factors render some people more susceptible to the force of history than others".



A first category of biographical pre-conditions evident across the case studies may be labelled *biographical disruptions*, referring to life events and biographical conditions that have an impact on individuals and make them more vulnerable and available to outside influences (Ducol, 2015, 161-177). These biographical disruptions are extremely diverse in their form and nature, but also in how they may impact each individual. Whether it is the death of a relative, a romantic breakup, a poor professional situation, a traumatic personal experience or more diffuse daily life-related issues, several of these biographical dimensions are reflected in our case studies as pre-conditions that impact individuals' initial exposure to online or offline extremist environments. While these biographical events or conditions might appear very minor or peripheral from an outsider's perspective, they can have a destabilizing effect on individuals, making them more susceptible and more available than others to exposure to external influences, be it on the Internet or in the "real world".

An example of the impact of such biographical disruptions is the death of Wade Michael Page's mother. This event appears to have had a very destabilising effect on his life. As stated by his own step-mother, Laurie Page "he took it very hard".² Following his mother's death, Page maintained separation from his father, and moved between his grandmother's and aunt's homes until graduating high school.³ Page then moved to Texas to live with his father and step-mother and started to work small jobs, until finally joining the US army. There he met people who introduced him to the neo-nazi subculture.⁴ Saïd Khalid also experienced a similar traumatic event, with his mother dying suddenly while he was in high school. According to Khalid, even if this event didn't make him turn to religion, it led to him spending more time with a group of young Pakistanis,⁵ which ultimately piqued his interest in learning more about Islam and an extremist ideology. In a different but comparable perspective, Justin Bourque was rejected twice from joining the Canadian military, first at the age of 16 and then at 18, as he did not have a high school diploma. During his trial, Bourque reported that he found this rejection quite upsetting at first,

2 Conway, M. R. The radicalisation of Wade Michael Page. King's College London: Department of War Studies. (2014). Retrieved from https://www.academia.edu/11352047/The_radicalisation_of_Wade_Michael_Page (Accessed March 31, 2015).

3 Ibid.

4 Ibid..

5 Thomson, J., and M. Ahluwalia. Toronto 18 bomb plotter Saad Khalid tells his story. *CBC News*. April 16, 2012. Retrieved from <http://www.cbc.ca/news2/interactives/homegrown-terrorist/> (Accessed March 31, 2015).



but said he got over it.⁶ At the age of 15, an older friend taught Bourque how to shoot and introduced him to CM-SKS type 56 rifles which he compared to the famous AK-47. Starting from that point, Justin Bourque became very obsessed with guns. Without falling into overinterpretation, these two episodes of rejection from the Canadian army may have left Bourque with an inability to cultivate his passion for guns via the military and may have created the type of disruption/frustration that later fuelled his capacity for violence. Despite being relatively common all of these biographical disruptions can have lasting effects on individuals' life histories, leaving them potentially more vulnerable than others to external influences that may lead them towards radicalization.

A second category of biographical pre-conditions noted in several of the case studies corresponds to situations, real or perceived, of *social isolation* and *marginalization*. These situations, whether they be voluntary or imposed, make some individuals more likely than others to expose themselves to radicalizing environments, including online radical milieus. Indeed, in several case studies, social isolation appeared to be a strong factor explaining why individuals might engage with unknown outsiders both online and offline. As mentioned in the literature review, the Internet represents a unique avenue for people who might feel isolated because of a marginalized social, cultural, or ideological identity or simply because of their personal interests. Accordingly, social isolation in the real world may be seen as a strong pre-condition for some to look for online counterparts with whom they share similar interests, for breaking their personal isolation.

The role of social marginalization in facilitating transitions into extremism may be observed in the case studies of Saïd Namouh, Justin Bourque, Anders Breivik, Damian Clairmont, Aabid Khan, and Arid Uka. Arriving in Canada in 2003 after marrying a much older woman from Quebec, Saïd Namouh's marriage did not last long and he got divorced in 2006. During his trial, Saïd Namouh testified that he only had a few friends in Canada and didn't have any family in the country; the divorce exposed his relative social isolation. Namouh expressed a growing feeling of boredom in several statements posted through online forums, illustrating his loneliness. Going online became, for Namouh, a way to feel less socially isolated and to find the friends that were

⁶ R v Bourque, 2014 NBQB 237 (CanLII) — 2014-10-31.



missing from his life.⁷ Similarly, although Bourque had a few friends in his neighborhood from the time he was 11 to 15, he spent much of his free time as a child playing video games. After this period, he became a loner, spending all his free time playing video games or building plastic military models.⁸ This self-seclusion resulted in a growing obsession with guns and related matters. Similarly, Breivik's progressive social isolation is comparable to Bourque's. In 2006, Breivik moved back to his mother's apartment and took a year off only to play computer games, demonstrating clear self-segregation. At that point, Breivik slowly began to isolate himself and showed little interest in social relations, becoming increasingly obsessed with his project to write a book.⁹

Representing non-voluntary social isolation appears to be the cases of Damian Clairmont, Aabid Khan and Arid Uka. Testimony from Damian Clairmont's family stated that Clairmont was bullied in school, alienating him from his peers.¹⁰ Clairmont appeared to be directly suffering from bipolar disorder,¹¹ which likely contributed to his alienation and bullying. This condition may have made him more vulnerable than others to external and potentially extremist influences around him as he searched for happiness and belonging. According to several publicly available documents, Aabid Khan also became marginalized due to his intense religious beliefs.¹² Like Clairmont, but for other reasons, Khan had persistent difficulties fitting in and failed to secure steady employment. Khan complained several times about his employment issues in Bradford, saying that he was always getting fired. In a similar vein, Arid Uka, despite being considered a good high school student, left school before his university-entrance diploma and was therefore unable to secure a stable job. He became a social service worker for elderly Muslims before eventually finding a precarious job at the post office at the Frankfurt airport.¹³ Working as a temporary employee without any future prospects, Uka didn't seem to have many friends, po-

7 R. v Namouh. 2010 QCCQ 943 (CanLII) – 2010-02-17

8 R v Bourque.

9 Ravndal, J. A. A post-trial profile of Anders Behring Breivik. *CTC sentinel*, (2012). 5(10), 16-20.

10 De Graaf, M. Canadian mother whose son was killed fighting for ISIS warns how easy it is for jihadis to get their hooks into Westerners online. *Mail Online*. (February 22, 2015). Retrieved from <http://www.dailymail.co.uk/news/article-2962100/We-parents-want-place-blame-s-mistake-Canadian-mother-son-killed-fighting-ISIS-warns-easy-jihadis-hooks-Westerners-online.html> (Accessed June 1, 2015).

11 Arsenaull, A. Damian Clairmont killed fighting with al-Qaeda-linked rebels in Syria. *CBC News*. (January 15, 2014). Retrieved from <http://www.cbc.ca/news/world/damian-clairmont-killed-fighting-with-al-qaeda-linked-rebels-in-syria-1.2497513> (Accessed June 1, 2015).

12 Kohlman, E. Anatomy of a homegrown modern cell: Aabid Khan et al. (Operation Praline). *Nefa Foundation*, (2008). 1.

13 Mekhennet, S. Frankfurt attack mystifies suspect's family. *The New York Times*. (March 9, 2011). Retrieved from <http://www.nytimes.com/2011/03/09/world/europe/09frankfurt.html> (Accessed June 1, 2015).



tentially making him even more vulnerable to external and radicalizing influences that he might have encountered both offline and online. Months before his shooting, Uka broke ties to his few remaining friends, completely retreating on his own.

All of these biographical elements are as personal as they are common and widely found across society, but should be interpreted as pre-conditions that may indirectly contribute to making individuals more available than others to engaging in unconventional environments and marginalized social spheres as well as exposing themselves to radical milieus, whether through online channels or offline networks. In parallel to the biographical pre-conditions mentioned thus far, the case studies analyzed in this report also demonstrate the existence of a series of cognitive pre-conditions that can also explain why some individuals may appear psychologically more susceptible to be attracted by radical environments, actors, and discourses.

ii. Cognitive pre-conditions

Cognitive pre-conditions refer to a set of mental conditions that facilitate, enable or direct individuals towards environments and social spaces — including online milieus — where they may be more likely to encounter radical actors and discourses (Ducol, 2015b, 177-189). These cognitive pre-conditions are somewhat consistent with what Quintan Wiktorowicz (2004) refers to as “cognitive openings”. Like biographical pre-conditions, cognitive pre-conditions are extremely diverse in both their nature and impact across individual trajectories. As noticed by Ziad Munson (2008, 56-57) in his study of the making of pro-life activists in the United States:

“Commitment to a social movement requires changes in an individual’s understanding of the world and his or her place in it. It requires a rethinking of the relationship between beliefs and action. It necessitates that a person change his or her daily or weekly habits for something other than job, family or recreation. Such changes are difficult and therefore resisted by most people, most of the time. At turning points, however, individuals are already making adjustments. [...] It introduces individuals to new social relationships and new ways of doing things. It also frees people from old emotional attachments and social pressures that previously helped to maintain the status quo in their lives. These moments, important turning points in an individual’s life, make potential activists cognitively and emotionally available”.

We discuss in the paragraphs below a set of cognitive pre-conditions that appear to be the most



common across case studies and that make some individuals more cognitively impressionable than others to be drawn towards radicalization.

One of the most apparent and recurring cognitive pre-conditions across the case studies is either a chronic or a lasting state of psychological fragility. Psychological fragility should not be confused with the presence of clinical psychological disorders. Indeed, without necessarily being reflective of diagnosable mental disorders, multiple case studies illustrate the presence of elements underlying an important psychological fragility from the individual's perspective, including the existence of tenuous self-esteem or personality traits that demonstrate cognitive vulnerability. For instance, while Arid Uka was described in his trial psychiatric report as possessing "no clinical personality disorders", he was nonetheless considered to have an "immature and timid personality with low self-esteem".¹⁴ Despite the fact that Uka did not suffer from any clinical psychological disorders, his personality indicated cognitive vulnerability that could have made him more impressionable than others to potential radicalizing influences. Cases of psychological fragility can also be seen across the cases of Anders Breivik, Martin Couture-Rouleau, Saïd Namouh, Gianluca Casseri, Wade Michael Page, Justin Bourque, and Michael Zehaf-Bibeau.

Anders Breivik's life story also demonstrates prior signs of psychological fragility that could be interpreted as having contributed to his pathway towards radicalization. Several of Breivik's friends believed that this psychological fragility could be the main reason why Breivik began to isolate himself and show little interest in social relations, replacing these interactions with his project to write a book criticizing Islam and socialism.¹⁵ Without being the direct cause of his radicalization, fragility can be interpreted as an enabling condition that led Breivik to isolate himself from the outside world and push him to spend more time online.¹⁶ In a similar vein, Martin Couture-Rouleau appeared to be suffering from depression, starting to withdraw from social interactions and obsessively turn to the Internet for answers. A friend of his said he believed depression led Couture-Rouleau to self-isolate himself: "It was weird. He was normal one day and

¹⁴ Schaible, I., and M. Gerhart. Schüchtern oder eiskalt? Attentäter bleibt rätselhaft; Flugplatz-Schütze Arid Uka muss lebenslang hinter Gitter. *Trierischer Volksfreund*. (February 11, 2012).

¹⁵ Ravndal, J. A. A post-trial profile of Anders Behring Breivik. *CTC sentinel*, (2012). 5(3), 6-9; Ravndal, A post-trial profile. *CTC sentinel*, 5(10), 16-20.

¹⁶ *Ibid.*



then changed the next".¹⁷ Various forms of similar psychological vulnerabilities appear in several other case studies in our corpus. For example, two months before being arrested for terrorism, Saïd Namouh broke into his ex-girlfriend's house by forcing open a chained side door, and cut his right arm with a knife, all because he was upset by his girlfriend's rejection. Italian neo-fascist killer Gianluca Casseri was also described by his prior girlfriends as being introverted, secretive and depressive,¹⁸ various personality traits that could have made him more vulnerable to be either attracted or drawn to extremist milieus. Here again, it would be incorrect to draw a direct causal link between these cognitive pre-conditions and radicalization phenomena. Nonetheless, almost all the cases studied in this report demonstrate the prevalence of cognitive pre-conditions that might have, at some point, facilitated, enabled, or even favoured individuals' exposure to radical environments and actors.

The case of Wade Michael Page is particularly illustrative of the fact that fragile psychological pre-conditions might constitute a starting point for the involvement of individuals in radicalizing settings. Page had drinking issues during his adolescence, and his problem worsened significantly in later years. Page was also discharged from the military for refusing alcohol counselling after he was caught intoxicated on duty.¹⁹ Characterized by family members and close friends as a loner since childhood, Wade Michael Page was also described by one of his close friends in a way consistent with this interpretation: "He was always the vulnerable type of person [...] painfully shy and super sensitive".²⁰ Page exhibited several signs of depression, which were most serious in 1997 when he allegedly attempted to commit suicide after breaking up with a girlfriend. Page reportedly took breakups unusually hard, and had difficulty maintaining relationships even on a non-romantic level. Similarly, several indications demonstrate that Zehaf-Bibeau may have suffered from a mood disorder similar to bipolar disorder.²¹ Being a

17 Bacchi, U. Canada: ISIS 'lone wolf' killer Martin Couture Rouleau mows down soldiers with car. *International Business Times*. (October 12, 2014). Retrieved from <http://www.ibtimes.co.uk/canada-isis-lone-wolf-killer-martin-couture-rouleau-mows-down-soldiers-car-1471023> (Accessed June 1, 2015).

18 Langer A. A big leap in right-wing currents': Italy killings underscore European extremism problem. *The Spiegel Online*. (December 15, 2011). Retrieved from <http://www.spiegel.de/international/europe/a-big-leap-in-right-wing-currents-italy-killings-underscore-european-extremism-problem-a-803938.html> (Accessed June 1, 2015).

19 Conway.

20 Kissinger, M. Friend of Sikh Temple shooter feared what he might do. *Journal Sentinel*. (August 9, 2012). Retrieved from <http://www.jsonline.com/news/milwaukee/friend-of-page-feared-what-he-might-do-426edmg-165668826.html> (Accessed June 1, 2015).

21 How Michael Zehaf-Bibeau went from petty criminal to the face of homegrown terrorism. *National Post*. (November 7, 2014). Retrieved from <http://news.nationalpost.com/news/canada/how-michael-zehaf-bibeau-went-from-petty-criminal-to-the-face-of-homegrown-ter>



frequent drug user and petty criminal, Zehaf-Bibeau clearly showed signs of cognitive vulnerability, and was described by a former acquaintance as “mentally unstable”.²²

In many cases, these psychological vulnerabilities can be linked to traumatic events or seen as the direct result of biographical pre-conditions such as the ones exposed in the previous section. Psychological vulnerabilities may indeed be linked and inseparable to biographical pre-conditions that range from single life events to more social ones.

A growing and intense interest in religion may be another important cognitive pre-condition found across the cases analyzed for this report. Here again, the appeal to religion cannot be interpreted in terms of direct causality in the understanding of radicalization. Rather, it should be considered an indirect one. Similar to Wiktorowicz’s (2005) notion of “religious seeking”, the key factor is that individuals who start to demonstrate a growing interest in religion may be seen as cognitively more available and willing than others to expose themselves to actors and environments that are able to enlighten them or at least to provide them with answers to their existential, religious and moral issues. Indeed, religious seeking mental states should be understood as a cognitive pre-condition in which “individual searches for satisfactory system of religious meaning to interpret and resolve his [existential] discontent” (Wiktorowicz, 2005, 21). In that sense, a sudden and intense interest for religious matters can be interpreted as a cognitive pre-condition that makes some individuals more willing than others to reach out, either online or offline, to unknown external actors who might be seen as cognitive resources able to answer their spiritual questions and fill existential cracks.

In turn, these encounters may accidentally expose them to radical actors and discourses. In this sense, the development of an intense personal focus on religious matters does not in itself constitute an explanatory factor for understanding radicalization, rather it points to a cognitive pre-condition that leaves individuals more willing to reach outside their existing social networks, potentially exposing them to and initiating interactions with radical individuals. In several of the case studies, the development of an intense and growing interest in religious matters explains

[rorism](#) (Accessed June 1, 2015).

22 Friscolanti, M. Uncovering a killer: Addict, drifter, walking contradiction. *MacLeans*. (October 30, 2014). Retrieved from <http://www.macleans.ca/news/canada/michael-zehaf-bibeau-addict-drifter-walking-contradiction/> (Accessed June 1, 2015).



why some individuals are cognitively more available than others to be attracted by discourses, actors or environments that may provide them with answers. For example, Fahim Ahmad, a leading figure of the Toronto 18, clearly demonstrated a cognitive state of religious seeking prior to entering a radicalization cycle. As he did not appear to find answers to the religious questions he was asking himself in his close entourage, Ahmad began to turn to others:

“I always wished that my parents would be home more often [...] My parents were never around to have any sort of conversation with, so I went to the only place I knew to get answers, the local mosque. I felt like the only place I could feel at peace and get any sort of positive attention was at the mosque...I would vent and say foolish things to get attention. The void of having a mentor was filled by religious elders whom I would take from without questioning. And the void of having friends, by another set of friends who were only names on a computer screen”.²³

In a similar vein, the increasing appeal to religion appears to have led Arid Uka to look for social spaces or personalities outside his family who could provide him with insights about existential, moral, identity, and religious interrogations. Indeed, when he was sixteen years-old, Arid Uka became increasingly interested in Islam. According to Uka:

“Other than play computer games, I never did much. I started looking into Islam. My family doesn’t know much about Islam and I thought I would become a better Muslim. [...] I read a lot. I can’t remember what ... I took everything at face value. And the more I read the more I thought it was the truth”.²⁴

In the case of Uka, his sudden interest in religion may be considered a cognitive pre-condition that made him more open to reaching out to social environments and individual actors that could help him meet his existential thirst.

An interest in religion that led to a corresponding change in social ties is also consistent with the cases of Saïd Khalid, Roshonara Choudhry, Martin Couture-Rouleau, Andre Poulin, and Omar Hammami. Khalid came to Canada with his family from Pakistan in the mid-1990s. In his teenage years, he began to develop a growing interest in Islam. Court documents describe Khalid as having “strong affiliative needs and strong religious convictions”.²⁵ Khalid also pointed to this

23 O’Toole, M. Leader lived in a ‘fantasy’. *Regina Leader Post*. (September 29, 2010).

24 Balmer, E. Islamist says ‘sorry’ for killing US airmen. *Agence France Presse*. (August 31, 2011). Retrieved from <http://www.rawstory.com/2011/08/islamist-says-sorry-for-killing-us-airmen/> (Accessed June 1, 2015).

25 R. v. Khalid, 2009 CanLII 44274.



period as when he had a “little bit of a falling out” with his former friends. Feeling a growing sense of admiration and respect for a group of young Pakistanis he was increasingly interacting with, Khalid decided that he “should become a better Muslim”.²⁶ As time went on, religion became a bigger part of Khalid’s life and he looked to learn more about Islam, both online and offline. Similarly, Roshonara Choudhry described herself as “always been quite religious”.²⁷ In light of her trajectory, it appears that her intense religiosity is at least partly responsible for her looking online for more resources and her discovery of Anwar al-Awlaki’s videos. In contrast, Martin Couture-Rouleau turned to a new religion following the failure of his power-washing cleaning business, turning to Internet “jihad-porn” as one friend referred to it.²⁸ In the case of Andre Poulin, it seems that his attraction to a radical agenda began while he was converting to Islam, living with an Islamic family in an effort to learn the religion. It was at this time that he would question his host family’s faith as not being strong enough, believing that he knew the faith better.²⁹ Similarly, Hammami was always quite religious converting to Islam in eighth grade. However, his family’s views were much more moderate than his, in some ways causing him to seek out others who shared his same extreme views.³⁰

A final cognitive pre-condition found across several cases is the development of identity issues and strong grievances. This is seen in the cases of Saïd Khalid, Aabid Khan, and Fahim Ahmad. In public declarations, Saïd Khalid insisted that he didn’t hate Canada or Canadians at the time, but that he slowly became very upset by Canadian foreign policy in Afghanistan. Aabid Khan’s journey also began at the age of twelve, upset by what he saw as the suffering of fellow Muslims in Chechnya. During his trial, Aabid Khan mentioned that he became so concerned about the suffering of fellow Muslims that he started to regularly access Internet news bulletins about them and “felt upset and angry with the onslaught against innocent women and children

26 Thomson and Ahluwalia. .

27 Dodd, V. Roshonara Choudry: Police interview extracts. *The Guardian*. (November 3, 2010).

28 Bruemmer, R. From typical teen to jihadist: How Martin Couture-Rouleau became radicalized after converting to Islam. *National Post*. (November 9, 2014). Retrieved from <http://news.nationalpost.com/news/canada/from-typical-teen-to-jihadist-how-martin-couture-rouleau-became-radicalized-after-converting-to-islam> (Accessed June 1, 2015).

29 Aubé, B. Crown recalls curious case of Andre Poulin. *Timmins Press*. (January 17, 2014). Retrieved from <http://www.timminspress.com/2014/01/17/crown-recalls-curious-case-of-andre-poulin> (Accessed June 1, 2015).

30 Hammami, O. The story of an American Jihadi: Part One. May 2012, Retrieved from www.scribd.com/doc/93732117/The-Story-of-an-American-Jihaadi (Accessed March 2, 2015).

in countries such as Russia”.³¹ Similarly, albeit at a later point, after 9/11 Fahim Ahmad began to obsess with conspiracy theories, and developed a growing sense that Muslims in Canada were treated unfairly by governments. Ahmad recalled feeling at that time “This is Americans killing Muslims”.³² Reminiscent of the findings from McCauley and Moskaleiko (2008), these accounts illustrate that a sense of collective identity, and feelings of aggression or injustice were fertile cognitive pre-conditions in some case studies.

None of the biographical and cognitive pre-conditions discussed above can be considered root causes of radicalization per se, but nevertheless constitute enabling and facilitating pre-conditions that help explain why and how some individuals are more vulnerable, available, or willing than others to encounter and be drawn into radicalizing environments online and offline. The next section explores the mechanisms through which individuals in the case studies interacted with the Internet and how the Internet impacted in return their respective radicalization processes.

2. Initial exposure to radicalizing environments: Relational and autonomous exposure in the age of the Internet

Acknowledging the fact that some individuals are biographically and/or cognitively more disposed than others to encounter and to expose themselves – or to be exposed – to radicalizing discourses, actors and milieus are not sufficient to explain radicalization processes. Indeed, there is a need to explore further the set of mechanisms that come into play in the initial process of individuals coming to be exposed to discourses, actors and environments that may trigger and sustain radicalization. This section is dedicated to exploring determinants that relate to the initial exposure of individuals to radicalizing environments and the way the Internet might have a role to play in it. Drawing from observations made across the fifteen cases studies, initial exposure to radicalizing environments might be classified along two main analytical mechanisms: i) relational exposure; and ii) autonomous exposure, both of which may transpire online and offline.

³¹ Black, M. Extremists had library of terror. *Bradford Telegraph*. (June 10, 2008). Retrieved from <http://www.thetelegraphandargus.co.uk/news/2329848.display/> (Accessed June 1, 2015).

³² Freeze, C. Extremism offered ‘glamorous’ escape. *The Globe and Mail*. (September 25, 2014).



i. Relational exposure: When relationships and accidental encounters create exposure to radicalizing settings

Relational exposure refers to the discovery and/or initial exposure of individuals to “radicalizing environments” through relational mechanisms. This reflects Sageman’s (2004) suggestion that one of the most common channels through which people come to initiate contact with radical environments and violent extremist actors is through relational ties and interpersonal relationships. It also echoes several findings in the literature that have demonstrated the recurrent centrality of social networks in radicalization processes (Sageman, 2004; Magourirk, Atran, and Sageman, 2008; Helfstein, 2012; Bouchard and Nash, 2015).

For a large number of cases analyzed in this report, initial exposure to radicalizing environments, whether online or offline, appeared to occur almost naturally. For example, Wade Michael Page was exposed to, and began to engage in the skinhead subculture when he first joined the US army and was sent to Fort Bragg, a notorious white supremacist stronghold.³³ The National Alliance (NA), one of the most significant US neo-Nazi groups, has actively recruited in the military base of Fort Bragg. According to Page, his skinhead journey began when he entered the military and met extremists who first exposed him to Aryan propaganda, both offline and online.³⁴ Page’s trajectory clearly demonstrates how direct interpersonal encounters can trigger the initial exposure to radical environments without necessarily being actively sought by the individual himself. Page told Pete Simi, an academic working on neo-nazis and white supremacist movement in the US, that: “his stint in the US Army, which lasted from 1992 to 1998, contributed to his beliefs, both because he met at least two fellow troops who were white supremacists and because the Army struck him as anti-white”.³⁵

Relational exposure can be either passive or active. However, they should not be understood as mutually exclusive categories. Wade Michael Page’s relational exposure to the skinhead subculture appears to have been mainly passive, the result of his accidental encounter with two white supremacists in the army. In a similar fashion, Hammami’s initial exposure can be traced

³³ Conway.

³⁴ Roger, A. Grad student’s interview with Wade Michael Page reveals his twisted worldview. *Business Insider*. (August 13, 2012). Retrieved from <http://www.businessinsider.com/pete-simis-interview-with-wade-michael-page-2012-8> (Accessed June 1, 2015).

³⁵ Ibid.



back to when his father discovered that Hammani was secretly attending a Christian church with his mother.³⁶ In frustration, he introduced Hammami to a Shaykh in Daphne, Alabama (where they were living) in order to make him learn more about Islam.³⁷ This passive encounter with a charismatic figure compelled Hammami to change his dress and prayer habits, and his thoughts about the global persecution of Muslims. Although this episode should not be over-interpreted as an initial step in Hammami's radicalization, it is through this relational process that he was first exposed to a new religious discourse, sparking the starting point of his trajectory.

For several cases in our corpus, relational exposure can be understood as a more active phenomenon, the result of individuals actively engaging with other individuals for a wide variety of reasons. In few cases, individual motives might orient this kind of active relational exposure. Motives for why individuals might want to get involved in "radicalizing environments" are diverse and idiosyncratic, but might be traced to existential and social life questioning matters. From this perspective, individuals in search of existential answers or a collective bond may actively engage with charismatic or knowledgeable individuals. For instance, the beginning of Fahim Ahmad's trajectory into jihadism had less to do with religion per se, than his urge to escape a "mundane marriage". Ahmad stated that religion and the mosque became a way to escape his daily life, where he was lonely, unemployed, had a wife on welfare, and had to support two children.³⁸ The pressure of fatherhood, financial strain and his wife's post-partum depression pushed him to spend less and less time at home. According to Ahmad, the mosque "was an escape" and religion became an important refuge where he found support.³⁹ All these cases illustrate how relational ties, whether they are offline or online, can represent a starting point for individuals being exposed to radicalizing milieus and actors that might trigger their entry in radicalization.

36 Nash, B., and M. Bouchard. Travel broadens the network: Turning points in the network trajectory of an American Jihadi. In M. Bouchard (Ed.), *Radical and connected: Social network, terrorism and counter-terrorism*. New York: Routledge, 2015.

37 Ibid.

38 Lorrigo, P. Toronto 18 ringleader who plotted to behead politicians denied parole. *The Canadian Press*. (September 24, 2014). Retrieved from <http://www.ctvnews.ca/canada/ringleader-of-toronto-18-terror-plot-denied-parole-1.2021698> (Accessed June 1, 2015).

39 Duchaine, G., V. Larouche, and D. Renaud. Martin Couture-Rouleau radicalisé par un criminel montrealais? *La Presse*. (January 21, 2015). Retrieved from <http://www.lapresse.ca/actualites/dossiers/attentat-a-st-jean-sur-richelieu/201501/20/01-4837034-martin-couture-rouleau-radicalise-par-un-criminel-montrealais.php> (Accessed June 14, 2015).



ii. Autonomous exposure and the Internet: Looking for and finding answers

Individuals may also be exposed to “radicalizing settings” online through what may be termed an “autonomous exposure” process. In many case studies, individuals stated that they themselves initiated their exposure to “radicalizing environments” both online and offline. However, this was particularly relevant for online cases, which appears to be one of the easiest venues to autonomously expose oneself to radicalizing actors, discourses, and environments. This is observed in the cases of Andre Poulin, Damian Clairmont, Michael Zehaf-Bibeau, Saïd Khalid, Roshonara Choudhry, Arid Uka, Aabid Khan, Fahim Ahmad, Saïd Namouh, and Anders Breivik.

In the case of Andre Poulin, it seems that his initial exposure to a radical universe began not long after his converting to Islam. Even if available information is not totally clear, Poulin appeared to have gone online to speak with individuals on the Internet, which may have been the main instigator in his conversion to a narrow-minded view of Islam.⁴⁰ According to several testimonies, Poulin began at this point to actively seek information about Islam on the Internet and from there met several people and discourses that pushed him towards the adoption of even more extremist views about Islam.⁴¹ While working at Value Village in 2008 [at age 19], Poulin met Cécile Gagnon, a mother who had already converted to Islam a few years prior. She was in a relationship with a Pakistani immigrant who was the manager of a gas station. Tassawar (Cécile Gagnon’s husband) would often have other Muslim immigrants from the area come to his house for meals and to pray together.⁴² However, there is no evidence that these individuals held extremist views. In fact, Cécile Gagnon stated that Poulin often had trouble understanding Islam and asked a lot of questions about the faith. Gagnon stated that Poulin studied religion on the Internet. Tassawar stated that while living with him, Poulin began to increasingly hold extremist ideas that he obtained over the Internet and that he did not agree with Tassawar’s more (offline) pacifist views.⁴³ Overall, these elements demonstrate a recurring tendency of Poulin to self-expose himself to social environments where he might be able to find answers about religion and faith, including the Internet that later appeared to be the main channel for his radicalization.

⁴⁰ Ibid.

⁴¹ Ibid.

⁴² Ibid.

⁴³ Ibid.



While difficult to confirm using only open sources, Damian Clairmont's mother also believes that her son had met a girl online who led him along his path to radicalization; however, this is unconfirmed as when CSIS agents retrieved Clairmont's computer they found it had been scrubbed clean.⁴⁴ Similarly, very little knowledge is provided regarding Couture-Rouleau's presence on the Internet. However, Zehaf-Bibeau was a frequenter of jihadi websites and Twitter feeds, indicating that he would have had contact with actors of an extremist agenda.⁴⁵ While we cannot know whether his initial exposure offline was accidental or not, it is possible that through his online interactions with jihadi websites and Twitter that his initial offline exposure was intended.

Saïd Khalid's trajectory illustrates another example of autonomous exposure to online "radicalizing settings" through his viewing of online videos by the extremist preacher Anwar al-Awlaki. During his first term at university, Khalid discovered a series of online lectures by the American born al-Qaeda cleric, Anwar al-Awlaki, discussing jihad and the legitimacy of violent action.⁴⁶ Khalid's exposure to al-Awlaki's online lectures was autonomous and allegedly accidental. Nevertheless, it is quite difficult to identify how such autonomous exposure actually happened and what Khalid was looking for when he first came across al-Awlaki's videos online. According to Khalid himself, he came across al-Awlaki's lectures on jihad and was hooked by the discourse of the preacher, which had a strong impact on his personal beliefs and worldview.⁴⁷

The motives and reasons that might explain why individuals are initially drawn and self-expose themselves to online "radicalizing environments" also needs to be explored. Often, it is the indirect result of individuals seeking information. In many cases, individuals describe their initial, autonomous exposure to radical environments as the direct result of searching for information on religion, international events, or political matters. For instance, when asked why and how she became interested in Anwar al-Awlaki's lectures, Roshonara Choudhry responded to

44 Bell, S. 'It's between me and God': How a Calgary high school dropout joined Syria's civil war. *National Post*. (July 12, 2013). Retrieved from <http://news.nationalpost.com/news/its-between-me-and-god-how-a-calgary-high-school-dropout-joined-syrias-civil-war> (Accessed June 1, 2015).

45 How Michael Zehaf-Bibeau went from petty criminal to the face of homegrown terrorism. *National Post*. (November 7, 2014). Retrieved from <http://news.nationalpost.com/news/canada/how-michael-zehaf-bibeau-went-from-petty-criminal-to-the-face-of-homegrown-terrorism> (Accessed June 1, 2015).

46 Davison J., and J. Thomson. Homegrown terrorist: Toronto 18 bomb plotter Saad Khalid recalls his radicalization. *CBC News*. (2014). Retrieved from <http://www.cbc.ca/news/canada/homegrown-terrorist-toronto-18-bomb-plotter-saad-khalid-recalls-his-radicalization-1.2532671> (Accessed June 16, 2015).

47 Thomson and Ahluwalia.



the police that “I became interested in Anwar al-Awlaki’s lectures because he explains things really comprehensively and in an interesting way so I thought I could learn a lot from him and I was also surprised at how little I knew about my religion so that motivated me to learn more”.⁴⁸ Choudhry stated that she discovered al-Awlaki “from my own research, but everybody listens to him and likes him anyway”.⁴⁹ Her initial exposure appears to be the result of online searches for information, which is demonstrated in her interview with the UK police:

“On the Internet [...] if you go on YouTube there’s a lot of his videos there and if you do a search they just come up [...] I wasn’t searching for him, I just came across him [...] I used to watch videos that people used to put up about like how they became Muslim. [...] I thought [...] their life stories were interesting [...] And as you watch videos that like a whole other list of related videos comes up and I was just looking through those and I came across it”.⁵⁰

Similarly, Arid Uka first self-exposed himself to extremist content when he was searching online for information about Islam. Uka turned to the Internet for information about Islam and world events as the direct result of discomfort or inability to find such support in his family and close entourage. According to Uka: “I thought I would become a better Muslim [...] I read a lot. I can’t remember what [...] I took everything at face value. And the more I read the more I thought it was the truth”.⁵¹ At a young age, Khan used his computer knowledge to search for anything on the Internet that touched on jihad and mujahideen. At this time, it meant he came across “news clippings from Chechnya, certain websites such as Azzam Publications, websites such as Qoqaz, news clippings, and various Islamic books, and items on warfare... pyrotechnics”.⁵² In contrast, Fahim Ahmad also begun his radical trajectory through the Internet to seek advice on being a good Muslim. At home and “feeling alone”, Ahmad states that he turned to Islamic websites for direction and advice. Similarly, Namouh also used the Internet to seek out knowledge on Islam.⁵³

While these cases represent autonomous exposure to radicalizing environments prior to holding radical beliefs; other cases suggest that autonomous exposure can also occur after the individual developed radical beliefs offline. For example, it is difficult to assess whether Breivik

48 Dodd, Interview extracts. *The Guardian*.

49 Ibid.

50 Ibid.

51 Balmer, *Agence France Presse*.

52 Kohlman..

53 R. v Namouh.



had any prior attraction or sympathy towards an extremist agenda before going online. However, Breivik's early online posts indicate that he already held critical views of Islam and socialism, and that he had held these views long before the emergence of the so-called "counter-jihad" websites and blogs. In 2002, Breivik had already expressed his irrational fear of Muslims and Islam in the Norwegian Progress Party's Youth's (FpU) online discussion forums. In his comments he describes Islam as a culture that breeds terrorism, discriminates against women, and violates basic human rights. Breivik's posts on the FpU forum demonstrate that by around 2002 to 2003 he had already developed a strong skepticism towards socialism and its role in what he perceived as a deliberate Islamization of the West. If Breivik's claims that he only started reading counter-jihad Fjordman's essays - a counterjihadi blogger who has extensively shared his far-right views online - back in 2008 while writing his manifesto are accurate, it is not impossible to believe that Breivik, socially isolated, was able to spend long hours online on websites that could feed what he was looking for.

3. Sustained exposure to online radicalizing environments

Beyond the question of how individuals first become exposed to online environments that may trigger radicalization, it is necessary to examine 1) the reasons that cause them to engage with these environments in a sustained and enduring manner; and 2) how increased engagement with online radicalizing settings creates supporting conditions for individuals to become radicalized. Once again, the Internet should not be seen nor understood as a monolithic factor acting in isolation, but rather as a complementary factor to offline interactions. In this section, we focus on the multiple mechanisms by which the Internet strengthens radicalization dynamics for individuals who are already engaged in this process. Specifically this sub-section will look at i) incentives that can explain why some individuals might spend increasing amounts of time exposing themselves to online radicalizing environments; ii) dynamics of group attachment and collective in-group identification processes; iii) the manner by which the Internet can promote new cognitive understandings of the world that are highly polarized and promote the acceptance of violence as a legitimate avenue; and iv) how social isolation combined with radicalizing settings on the Internet can be seen as a crucial configuration for radicalization.



i. Finding answers and similar others: Individual incentives and sustained exposure to online radicalizing environments.

Two major incentives may explain why certain individuals intensify their exposure to online radicalizing environments, and why this in turn increases the likelihood of actors being pulled into radicalizing processes. First, the more that individuals will be able to find what they look for online, including cognitive and relational resources and answers to their existential questions, the more that they will see the Internet as an important source of information. In other words, the more that individuals are able to fulfill their cognitive needs through online resources, the more that they will go back to look for new websites and content that are considered credible sources of information. Second, the more that individuals with marginalized ideas, opinions, or beliefs are able to find similar others that support their discourse and views online, the more that they may be willing to spend time looking for similar individuals online. This perspective suggests that social psychological phenomena like online homophily as previously described in our literature review deserves significant attention.

As previously mentioned, the Internet can, in certain trajectories, act as an alternative social space towards which individuals may turn to obtain answers or information about topics and matters of interests—religion, identity, politics, etc.—that they would otherwise not find in their close environment. In the absence of individual actors—parents, relatives, friends, etc.—or social relationships from which they can get the answers they are looking for, the Internet becomes an important source of information and a lens through which they can perceive and make sense of the world. In many cases, it seems that the Internet’s ability to fulfill individuals’ interrogations, existential issues, or simply their personal curiosities is somehow correlated to the fact that they will spend more and more time online. In return, the growing exposure of individuals to online spaces, including what may appear as “radicalizing environments”, might in fact reinforce the blind trust that these individuals put in discourses and actors with whom they come to interact with online.

This was the case for Aabid Khan who after initially orienting himself to the Internet, re-



searching information about the war in Chechnya, gradually became fascinated by the “Chechen jihad” and information circulating about it on the Internet. As mentioned, during his trial, Khan stated that when he was only 12 years old, he became an avid fan of anything he could find on the Internet relating to jihad and the mujahedeen.⁵⁴ He felt upset and angry at what he saw as “the onslaught against innocent women and children by countries such as Russia” and became fascinated by Muslim fighters opposing the Russians in Chechnya. Khan would read news bulletins and watch the many videos available online on this issue.⁵⁵ In the case of Khan, it is possible to see how this initial exposure led to a sustained online attraction. The more attractive he found the information online surrounding the jihad in Chechnya, the more he intensified his exposure to websites that justified a jihadist worldview. In a similar way, Fahim Ahmad first turned to his computer for religious seeking purposes, searching for advice on being a good Muslim. Becoming more and more willing to seek advice online and “feeling alone” in his real life, Ahmad says he turned to Islamic websites for direction, increasingly relying on what he found online.⁵⁶ He first visited *ClearGuidance.com*, an Islamic website and forum that became a destination for thousands of teenagers between 2001 and 2004. This website contained a range of questions regarding how religion should be properly practiced, from “questions with minor consequence—should US Muslims say the pledge of allegiance in public schools?—to those with potentially serious consequences—is it permissible to attack innocent civilians in the name of Allah?”⁵⁷ Having found answers to several of his questions on websites like *ClearGuidance.com*, Ahmad appeared to be more willing than ever to turn to the Internet as a venue for guidance and cognitive gratification.

While in some cases the Internet responds to the cognitive need of individuals, in other cases digital environments allow people to make sense of already existing grievances through the discovery of interpretative frames. Indeed, the Internet represents a space where individuals may discover new discourses and interpretative frameworks of the world that can relate to their

54 Kohlman, 2.

55 Kohlman, 10.

56 O’Toole, *Regina Leader Post*.

57 El Akkad, O. and G. MacArthur. A grand existence among Muslims online. *The Globe and Mail*. (August 19, 2006.). Retrieved from <http://www.theglobeandmail.com/news/national/a-grand-existence-among-muslims-on-line/article18171241/?page=all> (Accessed June 1, 2015).



personal feelings of injustice or marginalization. In other words, the Internet can act as a space where individuals encounter speeches and frames that echo their own feelings of victimization, whether they are individual or collective-based, real or fantasized. This alignment between collective action frames and individuals' feeling of victimization might further encourage spending more time online, looking for information and resources that confirm their sense of victimization. For instance, after the 9/11 attacks when Ahmad developed a growing sense that Muslims in Canada (and in the West) were treated unfairly by governments,⁵⁸ with this sense of grievance only building up after the invasions of Iraq and Afghanistan.⁵⁹ Ahmad later discovered online content that helped him make sense and interpret his grievances through a mobilization frame—the jihadi one. He soon came to read every al-Qaeda inspired piece of propaganda he could find online that echoed his own personal feelings that Muslims were being unfairly treated by the West. Ahmad's case provides a model example of the idea that online exposure to jihadi content that echoes personal grievances can act as a cognitive compass to make sense of the social world and their role in it. Similarly, Roshonara Choudhry explained that her online searches were largely determined by her interests and grievances. Choudhry watched "YouTube videos about the resistance in Afghanistan and Iraq"⁶⁰ and consulted a "website called *Revolutionmuslim*"⁶¹ a forum known for hosting several discussions on jihadism. At the time, she believed that:

"As Muslims we're all brothers and sisters and we should all look out for each other and we shouldn't sit back and do nothing while others suffer. We shouldn't allow the people who oppress us to get away with it and to think that they can do whatever they want to us and we're just gonna lie down and take it".⁶²

Choudhry appeared to spend significantly more time on these websites so that she could locate discourses and cognitive elements that would help her make sense of her grievances towards events in Afghanistan and Iraq.

In other cases, the Internet represents an avenue for individuals already engaged in, or just

58 Freeze, C. Extremism offered 'glamorous' escape. *The Globe and Mail*. (September 25, 2014).

59 Freeze.

60 Dodd, Interview extracts. *The Guardian*.

61Ibid.

62 Dodd, V. Roshonara Choudhry: I wanted to die...I wanted to be a martyr. *The Guardian*. (November 4, 2010). Retrieved from <http://www.theguardian.com/uk/2010/nov/04/stephen-timms-attack-roshonara-choudhry> (Accessed June 1, 2015).



entering a radicalization trajectory to make contact with similar others with whom they can freely share ideas, interests, and motivations. In other words, the Internet acts as a space for anonymous interpersonal contact, allowing individuals to find similar others that would otherwise be difficult to access and meet in the real world, either because of geographical distance or because such people cannot express their beliefs and ideas in public. It is interesting to note that several of our case studies demonstrate trajectories where individuals first met similar others online and then, due to these contacts, began to spend more and more time online.

After meeting similar others online, Saïd Namouh appeared to spend more time online, becoming an active member of a forum related to the *Global Islamic Media Front* (GIMF). Among Internet jihadi circles, the GIMF has been well-known as one of the oldest and most far-reaching jihadi online platforms. Namouh became one of the most active participants in *Khidemat*, a discussion forum site linked to GIMF.⁶³ Writing under the pseudonym “Ashraf”, Namouh submitted 1,075 postings to the discussion forum, showing a clear process of spending more and more time online with fellow jihadi sympathizers.⁶⁴ In online posts, Namouh indicated that he was well aware of the fact that his work for the GIMF might one day put him in prison. Nevertheless, he promised to other members of GIMF that nothing would “stop his dedication to serving jihad and the mujahedeen”, even after hearing that two other GIMF members had been arrested in Austria.⁶⁵ Through the GIMF, Namouh communicated with Mohammed Mahmoud, the alleged leader of the group’s German branch who was arrested in Austria in 2008 and several other jihadi sympathizers around the world.

For many individuals, the opportunity to meet online similar others with whom they can discuss common topics of interest and shared opinions leads them to find these online encounters even more attractive. For instance, Fahim Ahmad appeared to be drawn to jihadi forums and radical Islamist websites after meeting like-minded youth online who one-upped each other by being more religiously devout. Ahmad found similar others online with whom he could share

63 Myles, B. Terrorisme - Saïd Namouh était un agent actif du GIMF, selon une experte. *Le Devoir*. (February 18, 2009). Retrieved from <http://www.ledevoir.com/societe/justice/234486/terrorisme-said-namouh-etait-un-agent-actif-du-gimf-selon-une-experte> (Accessed June 1, 2015).

64 R. c. Namouh. 2010 QCCQ 943 (CanLII) — 2010-02-17

65 Ibid.



his views about being a “true Muslim” and the fact that he should mobilize to defend his own identity. Ahmad even met his wife online demonstrating how online interactions with similar others represented a growing part of his personal and even intimate life.⁶⁶ Spending more and more time interacting with similar others online, Ahmad is even believed to have participated in an English-language password-protected forum frequented by several other terror suspects in Canada and abroad.

Interacting with similar others online can lead individuals to spend more time on the Internet due to the personal gratification they derive from such interactions. In comparison to what they might live or experience in the real world, online interactions with anonymous others can provide individuals with important cognitive and biographical incentives that might reinforce patterns of online exposure. Starting in 1997, Aabid Khan’s level of online activity increased when he began to:

“Use newsgroups and discussion forums to join with people in discussing these issues...jihad and contemporary issues surrounding the Muslims in various countries. The interest was with regard to the groups that were there protecting Muslims and preventing the harm of the people that were fighting against them”.⁶⁷

The ability of Khan to discuss and share with others his views about the need to defend Muslims around the world cannot be downplayed in understanding why he decided to spend more time online. Using a variety of pseudonyms—including “Umar al-khattab”, “Abu Umar”, or “Ocean Blue”—Khan became an important figure online, active among an underground network of English-speaking jihad supporters primarily based in Europe, Canada, and the United States.⁶⁸ All these young individuals — most of whom had never met each other in person — evolved into a very close circle who shared common views and attraction to computers and global mujahedeen movements. Khan’s close online circle included “20-year old Toronto, Canada-resident Fahim Ahmad; Ahmad’s teenage sister-in-law Saima; 18-year old Atlanta, Georgia-resident Ehsanul Sadequee (a.k.a. “Aboo Khubayb al-Muwahhid”), and Houston, Texas web developer Sarfaraz

⁶⁶ Freeze.

⁶⁷ Kohlman, 2.

⁶⁸ Ibid.



Jamal (a.k.a. “Sas Jamal”).⁶⁹ In the case of Khan, it is interesting to note that discussions among these individuals took place over a variety of channels, including e-mail, Internet Relay Chat, Paltalk, and user-populated web discussion forums.

ii. The Internet as a channel for fostering collective identification and in-group attachment

Whether the Internet becomes the main avenue for deriving knowledge and understanding of the social world or not, digital environments can lead some to strengthen their self-identification or attachment to a collective identity or cause. The Internet provides a space where individuals can develop, under certain circumstances and dynamics, an extreme sense of identification with a collective cause, be it the defence of a perceived common Muslim identity—the *Ummah*—or a white Christian one. Due to speeches, content, or people encountered online, individuals may slowly, but radically, change their views about their own identity, along with the roles and responsibilities it puts on them. For example, Saïd Khalid explained that it was his encounter with al-Awlaki’s videos that made him change his views about his responsibility as a Muslim to act upon a series of perceived injustices:

“Here was someone I respected and he was connecting global grievances that Muslims share with what your responsibility is in terms of these issues. [...] I was left with the understanding that it was religiously incumbent on me to assist in defending Muslims whose land had been invaded”.⁷⁰

Changing his views about his own Muslim identity and what it meant for him, Khalid came to believe that he had an obligation to actively oppose Canadian foreign policy, which he perceived as a direct attack against fellow Muslims. Khalid came to see the best solution was to act in Canada: “My rationale was that if I were to go over to Afghanistan to fight, I would be just one more person, while in Canada I could make a bigger difference. I would be more useful to the ‘cause’ this way. I couldn’t step away now”.⁷¹

The long-term exposure of individuals to certain types of information, actors, and online spaces may lead them to develop a new set of beliefs and understanding of the world that encourages identification with an “in-group”, that is, a social group or collective membership to

⁶⁹ Ibid, 4.

⁷⁰ Thomson and Ahluwalia.

⁷¹ Thomson and Ahluwalia.



which a person psychologically identifies as being part of. In sum, the Internet can be understood as an additional social space where cognitively vulnerable, or simply cognitively available people might come to gradually and strongly self-identify with a particular in-group, resulting in several consequences for their views and understanding of the world.

In several of our case studies, including Roshonara Choudhry, Saïd Namouh, and Arid Uka, the Internet can be seen as facilitating a turning point for individuals' self-identification and development of new religious and/or ideological interpretative frameworks about the world. For example, Roshonara Choudhry says that it is following the discovery of videos of Anwar al-Awlaki on the Internet that she gradually came to believe that jihad was an individual obligation linked to her religious identity. Interviewed by detectives several hours after her attack on MP Stephen Timms, Choudhry mentioned that when the Iraq war started "I was just against in general like everyone else but not strong feelings",⁷² and that it was only "after like listening to the lectures [of Anwar al-Awlaki], I realised my obligation but I didn't wanna like fight myself and just thought other people should fight, like men, but then I found out that even women are supposed to fight as well so I thought I should join in".⁷³ From a similar perspective, Saïd Namouh explained in court documents that his view about "American soldiers changed in 2006" and that the war in Iraq constituted an aggression against a Muslim population.⁷⁴ It is however difficult to assess if Namouh's changes in views can be directly traced from his continuous and sustained exposure to online content promoting such interpretative framework, or if it was a more holistic process involving other influences offline. Questioned during his trial about which websites he had been browsing during this period, Saïd Namouh stated that [translation] "prison made [him] forget those sites".⁷⁵

Combined with social isolation, sustained online exposure can be a powerful tool for self-identification. For instance, in the beginning of 2010, Arid Uka also started to withdraw from his old school and friends, dedicating more time to be alone and explore religion and Islam relat-

⁷² Dodd, Interview extracts. *The Guardian*.

⁷³ Ibid.

⁷⁴ R. c. Namouh. 2010 QCCQ 943 (CanLII) — 2010-02-17

⁷⁵ Ibid.



ed matters through the Internet.⁷⁶ On Uka's computers and iPod, investigators found hundreds of jihadist files including presentations of Anwar al-Awlaki and a German translation of the book *The Defense of Muslim Countries* written by Abdullah Azzam,⁷⁷ both ideologues who have strongly urged Muslims around the world to self-identify with a global Islamic identity that needs to be defended from outsider threats.

Self-identification dynamics are also very present for case studies linked to white supremacist, neo-fascist or far-right motives such as those of Wade Michael Page, Anders Breivik and Gianluca Casseri. Although, it is difficult to assess the role of the Internet in such processes, it is quite clear that online environments may have played a role in fostering collective identification and in-group attachment in similar ways to the cases described above. While for Wade Michael Page, self-identification with the US supremacist movement appears to have occurred primarily offline, through direct encounters with key individuals already involved in this cause, his online journey can be seen as having played a complementary role in pushing his self-identification with the White Power movement. In conversations with the academic Pete Simi during a field interview, as Page saw it "whites were punished while blacks got coddled. [...] The deck was stacked against whites in the military".⁷⁸ Page realized that all of society was structured that way and decided to become involved in the supremacist movement.⁷⁹ During his time in the army, Page acquired tattoos, and talked about a coming racial holy war. He called other races "dirt people" and frequently called a blonde-haired, blue-eyed colleague a "race traitor" for dating Latin women.⁸⁰ In 2001, approximately two to three years after joining the White Power movement, Page moved to Southern California, where he began living with a number of skinheads.⁸¹ Page's deep involvement into the white power music scene gave him a lot of purpose in terms of how he could be involved and how he could contribute to the larger white supremacist movement.⁸² In parallel, Page spent a large amount of time online, sometimes using the name "Jack

⁷⁶ Schaible and Gerhart, *Trierischer Volksfreund*.

⁷⁷ Schmidt, W. (2012, February 11). Höchststrafe für Attentäter. *Taz - die tageszeitung*.

⁷⁸ Roger, A. Wade Michael Page became a radical racist in the US Army. *Business Insider*. (August 10, 2012). Retrieved from <http://www.businessinsider.com/heres-what-made-wade-michael-page-racist-2012-8> (Accessed June 1, 2015).

⁷⁹ Ibid.

⁸⁰ Ibid.

⁸¹ Conway.

⁸² Goodman, A. Academic who knew Sikh shooter Wade Michael Page says Neo-Nazi soldiers, musicians shaped his hatred. *Democracy Now*. (August 9, 2012). Retrieved from http://www.democracynow.org/2012/8/9/academic_who_knew_sikh_shooter_wade (Accessed



Boot” and was quite vocal about his beliefs on *Facebook* and on *Stormfront*, an extreme right-wing forum.⁸³ According to the SITE Monitoring Service, Page had an extensive presence on *Hammer-skin* and other white nationalist Web sites, including the *Stormfront* forum, favouring the names of his bands as user names, and “frequently included white supremacist symbolism in his postings”.⁸⁴

For Gianluca Casseri, like for Wade Michael Page, self-identification appeared to have occurred primarily offline, through direct encounters, and seemed to be complemented by online sustained interactions happening through *Facebook* and Italian fascist websites close to the Casa Pound movement.⁸⁵ Indeed, Casseri appeared to have a long history of supporting a neo-fascist agenda. This was evidenced in his own personal novels as well as his writings for Casa Pound, the social center of fascist inspiration founded in Rome in 2003.⁸⁶ Aside from his writings, Casseri was also an active member with Casa Pound, having visited their offices on several occasions⁸⁷. The involvement of Gianluca Casseri in the fascist Italian movement Casa Pound demonstrates his self-identification with a collective in-group, the white European identity/neo-fascist movement who perceived mass immigration as a threat. Possibly serving as a means to understand the path that led him to become radicalized to the point of shooting two African street vendors in the streets of Firenze before shooting himself dead.

Finally, in the case of Anders Behring Breivik, exposure to counter-jihad blogs may certainly have strengthened his radical thinking and self-identification with a fantasized European identity seen as threatened by Islam, mass immigration, and multicultural politics.⁸⁸ Several experts have argued that the so-called counter-jihad movement played a crucial role in Breivik’s violent

June 1, 2015).

83 Shane, L. and M. McCloskey. Sikh temple shooter was Army veteran, white supremacist. *Stars and Stripes*. (August 6, 2012). Retrieved from <http://www.stripes.com/news/us/sikh-temple-shooter-was-army-veteran-white-supremacist-1.184975> (Accessed June 1, 2015).

84 Goode, E. and S. F. Kovaleski. Wisconsin killer fed and was fueled by hate-driven music. *The New York Times*. (August 9, 2012). Retrieved from http://www.nytimes.com/2012/08/07/us/army-veteran-identified-as-suspect-in-wisconsin-shooting.html?_r=0 (Accessed June 1, 2015).

85 Longo, G. L’ipotesi choc: la strage di Firenze ordinata on line. *La Stampa*. (December 16, 2011). Retrieved from <http://www.lastampa.it/2011/12/16/italia/cronache/l-ipotesi-choc-la-stragedi-firenze-ordinata-on-line-DdITIFX7MjbSaemiFYofhP/pagina.html> (Accessed June 1, 2015).

86 Sedgwick M. Gianluca Casseri a traditionalist, but the explanation lies elsewhere. *Blog Traditionalists*. (December 14, 2011) Retrieved from <http://traditionalistblog.blogspot.ca/2011/12/gianluca-casseri-traditionalist-but.html> (Accessed June 1, 2015).

87 Langer, *The Spiegel Online*.

88 Ravndal, J. A. Anders Behring Breivik’s use of the Internet and social media. *Journal Exit-Deutschland. Zeitschrift für Deradikalisierung und demokratische Kultur*, (2013). 2, 172-185.

radicalization.⁸⁹ While it is difficult to assess once again the extent to which the Internet can be acknowledged as the main factor or only one factor among others, it seems clear that the Internet helped Breivik's self-identification with the whole counter-jihad movement.

iii. The Internet as a channel for fostering polarized worldviews and the acceptance of violence

Whether being fostered by offline encounters, online explorations, or both, dynamics of extreme social identification can provoke two things. The first is an increasingly polarized view that leads individuals to become increasingly uncompromising and convinced that the social world is divided between members of the in-group (to which they belong), and members of the "out-group" (who are often seen as active threats to the in-group). The second is the creation of beliefs that violence or engagement into clandestine extremist movements are both an inevitable and necessary remedy to counter the threats that seem to target the in-group and the collective identity to which a person self-identifies.

Several cases in our corpus demonstrate such dynamics of cognitive polarization through the exposure of online narratives depicting existential threats on a collective identity as requiring the use of violence and extreme means of action. For example, Aabid Khan developed through his online consultation of various websites, including jihadi-oriented ones, a strong attachment to the al-Qaeda narrative "depicting Muslim fighters around the world, glorifying roadside bombs, suicide bombers, killing American and British soldiers in Iraq, and showing the beheading of hostages".⁹⁰ For Khan, it became increasingly clear that his fellow Muslims were under attack from the West and strongly identified with the jihadi narrative he had seen online, urging him to take action to end this situation. In a similar way, Saïd Khalid spent a large amount of time watching al-Awlaki's videos and became convinced that "violence was the answer"⁹¹ to what he also saw as an attack of the West against his fellow Muslims brothers.

It is always difficult to assess how the Internet might influence individuals' cognitive frames

⁸⁹ Archer, T. Countering the counter-jihad. *RUSI Monitor*, (August, 2008); Fekete, L. Breivik, the conspiracy theory and the Oslo massacre. *Institute of Race Relations*, Briefing Paper No. 5, (September 1, 2011).; Strømme, Ø. *Det mørke nettet: Om høyreekstremisme, kontra jihadisme og terror i Europa*. Oslo: Cappelen Damm, 2011).

⁹⁰ Howe, M. Terror cyber grooming leader jailed for 12 years. *Associated Press*. (October 10, 2008).

⁹¹ Thomson and Ahluwalia.



that are highly polarized and Manichean. However, as mentioned in the literature review, it remains unclear how online group dynamics and interactions that occur online can further promote such polarized worldviews. Accordingly, more efforts should be put in exploring how these group dynamics and their offline counterparts might foster individuals' polarized beliefs and worldviews of the social world. Such dynamics might lead individuals to a cognitive lock-in process where violent action and its justifications become increasingly seen not only as legitimate, but the only "true" way to go.

In many case studies in our corpus, violence is viewed by individuals as a necessary solution, in some cases a duty, because they have come to believe the justifications displayed by the ideologues they have read either online or offline. Roshonara Choudhry had no previous history of violence before the attack on Timms. However, she justified her action as "revenge" for his parliamentary vote supporting the Iraq war. Asked by the police about how she would justify her act, Choudhry stated "I think I've fulfilled my obligation, my Islamic duty to stand up for the people of Iraq and to punish someone who wanted to make war with them".⁹² Choudhry's ideological change started to appear in late 2009 as she became increasingly convinced by the radical discourse and ideology of al-Awlaki and started to see violent action as a moral obligation that needed to be carried out, given her self-identification with a global Muslim identity.

Unfortunately, the presence of polarized worldviews are not always visible to outside observers. Perhaps the most striking aspect of Anders Breivik's online communications between 2002 and 2011 is that "most of his political statements do not come across as more extreme than mainstream far-right thinking. He never openly discussed the use of violence as a legitimate means to further political aims".⁹³ This conclusion does not mean that Breivik did not radicalize significantly throughout this period, because he clearly did. However, he appears to have kept his darkest thoughts to himself, or at least, did not publish them online before executing the attacks.⁹⁴ Once again, the Internet should be understood as an additional space where individuals might be exposed to content and frames legitimizing the use of violence, but not necessarily

⁹² Dodd, Interview extracts. *The Guardian*.

⁹³ Ravndal, *Journal Exit-Deutschland*, 2, 172-185

⁹⁴ *Ibid*.



as the tool that will *in fine* convince them to use it. In most case studies analyzed for this report, the context is critical for explaining the role of Internet in the increasing individual's belief and worldviews polarization.

iv. When social isolation makes the Internet the main source of influence for radicalization

In a number of cases, the Internet appears to have played a critical role in an individual's confinement to their already polarized beliefs and convictions. Several of our case studies illustrate that the growing social isolation of individuals happens in parallel with their slow withdrawal to the online sphere. In these individual trajectories, the Internet acts as a place where individuals come to reinforce their intellectual and cognitive fantasies. Having adopted polarized worldviews and being exposed to online content, discourses, and actors that only confirm their already existing thoughts, individuals self-intoxicate themselves cognitively about the urgent necessity to take (violent) action.

Reflecting this, Breivik's transition to violence was not attributed to online violent games in isolation, but rather the playing of these games coupled with isolation from others. As noticed by Rvandal:

"It may not have been the violent contents of computer games per se that influenced Breivik's disposition to engage in mass murder. Many kids play violent games, yet very few become violent. However, one may assume that the amount of time spent playing online games while being isolated from friends and relatives may have influenced Breivik's ability to grasp the ramifications of his massive violence".⁹⁵

Similarly, as Justin Bourque withdrew from social interactions, he grew increasingly fixated with a fantasy about faraway wars and the right to bear arms. He talked to his few friends "about the looming apocalypse and his desire to live off the grid".⁹⁶ Months before the attack, Bourque spoke to his close friend about:

"How much he hated the government and the authorities because of the different rules that were made – gun regulation. He talked about foreign workers coming to work in Canada while some Canadians have no jobs. He was convinced that the police were intimidating and screwing every-

⁹⁵ Ibid, 177.

⁹⁶ McMahon, T., M. Friscolanti, and M. Patriquin. The untold story of Justin Bourque. *MacLeans*. (June 15, 2014). Retrieved from <http://www.macleans.ca/news/canada/untold-story-justin-bourque/> (Accessed June 1, 2015).



one in Moncton by working for the politicians. He repeated a few times how he hated the authorities, the government and the police for working for the politicians".⁹⁷

Bourque's father reported that his son was fascinated with guns, heavy metal music, video games with soldiers, and bitter against authority and bureaucracy.⁹⁸ In both the cases of Breivik and Bourque, the combined effects of social isolation and a constant process of self-interaction through online channels may have pushed them further into their polarized beliefs by putting them in a situation where divergent or contradictory opinions were no longer available to them. This process can lead individuals to a form of cognitive confinement where they are alone with their increasingly polarized beliefs that soon become constantly confirmed by the discourses and the contents they consume online.

Consistent with this line of argument, a lack of distance from the consumption of information found directly on the Internet appears to be another phenomenon of interest. Indeed, many of our case studies seem to illuminate how the Internet can be a breeding ground for confinement in a fanciful understanding of the world that no longer involves any critical distance vis-à-vis information, speeches or remarks met online. As recognizable in the words of Arid Uka "I read a lot. I can't remember what...I took everything at face value. And the more I read the more I thought it was the truth".⁹⁹ Similarly, Fahim Ahmad mentioned during his parole hearing that he realized after being arrested that "the whole jihadi thing, it's more a fantasy you build in your mind than the reality",¹⁰⁰ acknowledging that his important consumption of jihadi materials online might have reinforced an already existing pattern of radicalization.

Self-confinement of individuals into a set of simplistic, but increasingly radical beliefs can take place offline or online, but it very often occurs jointly, as demonstrated in many of the case studies analyzed for this report. In some cases, the Internet will have a more prominent place than offline relationships, while in others cases offline interactions with other extremists have a key role over online interactions in the process of radicalization.

⁹⁷ R v Bourque.

⁹⁸ Ibid.

⁹⁹ Balmer, *Agence France Presse*.

¹⁰⁰ Bell, S. Parole denied; Toronto 18 ringleader Fahim Ahmad expresses remorse for his actions and rejection of jihad, but board can't get past 'troubling' risk factors. *The National Post*. (September 25, 2014). Retrieved from <http://news.nationalpost.com/news/canada/toronto-18-ringleader-fahim-ahmad-too-dangerous-to-release-from-prison-parole-board-rules> (Accessed June 1, 2015).



4. *The Internet as a knowledge bank for preparing violent action*

Finally, beyond simply acting as a potential source of influence in the radicalization process, the Internet may provide inspirational and operational knowledge to already radicalized individuals wishing to move towards violent action. In other words, the Internet is equally important as a socializing space, but also as a learning space from which individuals might draw inspiration for perpetrating violent actions or acquiring strategic as well as practical knowledge that can be directly applied in the pursuit of their objectives.

First and foremost, the Internet provides radicalized individuals with an “inspirational catalogue” that can push some from a radical mindset to becoming actively engaged in violent action and help them to decide how and according to which scenario to carry on such project. In terms of planning for example, the Internet allegedly helped Roshonara Choudhry choose her target and the way she could perpetrate violent action against MP Timms. Indeed, Choudhry was allegedly influenced in her decision by the blog built by Bilal Zaheer Ahmad, a 23-year old British man from Wolverhampton who was reportedly identifying on his website MPs who voted for the Iraq war. In Ahmad’s blog, he also provided direct links to online websites selling knives. At the end of April 2010, Choudhry had bought two knives specifically for the purpose of murdering Timms.¹⁰¹

Similarly, the Internet can represent in some cases a vast resource for operational knowledge where individuals may come to acquire, if not operational, at least practical knowledge ranging from the handling of handguns to the manufacturing of homemade explosives, from the identification of potential targets to more general information necessary for the conduct of a particular terrorist action. For instance, Breivik claimed in court that he acquired more than 600 bomb-making manuals online, with recipes involving more than 100 different types of explosives. He also used the Internet to study al-Qaeda attacks as well as al-Qaeda in the Arabian Peninsula’s *Inspire* magazine to obtain knowledge of the types of explosives and techniques to use.¹⁰² Breivik also gathered a large amount of information online about chemical, biological, radiological, and

101 Dodd, V. Profile: Roshonara Choudhry. *The Guardian*. (November 2, 2010). Retrieved from <http://www.theguardian.com/uk/2010/nov/02/profile-roshonara-choudhry-stephen-timms> (Accessed June 1, 2015).

102 Ravndal, *Journal Exit-Deutschland*, 2, 173



nuclear (CBRN) weapons. However, the quality of this material could be considered poorer in comparison to the information that he had compiled on fertilizer bomb production.¹⁰³ In several occasions, Aabid Khan joined online discussion forums to “swap views” about the “tactics and strategies” employed by different groups of Muslim fighters, “what weapons they used, the individuals involved, their profiles, things like that”.¹⁰⁴ According to Kohlmann:

“On the interactive newsgroups and discussion forums, Khan discovered a wealth of information about “military matters... the tactics of the groups, and how they went about defending these various areas, what strategies they used, what weapons they used, the individuals involved, profiles, things like this”.¹⁰⁵

Khan demonstrated a disturbing fascination for the fabrication of improvised explosive devices, collecting dozens of digital manuals and recipes. His hard drive at the time of his arrest contained an entire file folder which appears to “be exclusively for the purpose of accumulating technical information regarding the home production of firearms, explosives, and other makeshift terrorist weapons”.¹⁰⁶ Khan and his co-conspirators also exchanged documents entitled “How to Make Napalm,” “Improvised Homebuilt Recoilless Rocket Launchers” and “The Mujahedeen Poisons Handbook” among others”.¹⁰⁷

Second, the Internet might encourage individuals to connect to like-minded people in order to plan and carry out violent actions that they would otherwise not be able to accomplish alone. If coordination with others is a necessary step for individuals in transitioning towards violent action as demonstrated in the cases of lone actors in our corpus such as Justin Bourque, Anders Breivik or Roshonara Choudhry, some individuals might find on the Internet potential partners for their terrorist enterprise. This is particularly exemplified in the cases of Fahim Ahmad, Omar Hammami, and Aabid Khan. In these cases, the Internet is a tool for networking and potentially contacting similarly minded individuals that might be ready to engage in violent activity.

Nevertheless, the idea that the Internet represents a favoured channel for networking among

103 Ibid.

104 Anger led to interest in jihad, terrorism trial is told. *Yorkshire Post*. (July 17, 2008). Retrieved from <http://www.yorkshirepost.co.uk/news/main-topics/local-stories/anger-led-to-interest-in-jihad-terrorism-trial-is-told-1-2509008> (Accessed June 1, 2015).

105 Kohlman.

106 Kohlman.

107 Freeze, C. Man tied to Canada convicted on terror charges. *The Globe and Mail*. (August 19, 2008).



radicalized individuals should be nuanced. For the vast majority of our cases studies, the Internet doesn't appear as the main channel for radicalized individuals to reach co-conspirators. According to police investigation, Choudhry had no known connection to any Islamist groups in the UK or abroad, and there was no evidence that she had intended to contact other extremists online.¹⁰⁸ Asked why she didn't try to reach out to others, Choudhry stated that "Nobody would understand. And anyway I didn't wanna tell anyone because I know that if anybody else knew, they'd get in trouble 'cos then they would be like implicated in whatever I do, so I kept it a secret".¹⁰⁹

In the case of Fahim Ahmad, the Internet served not only as a tool to reinforce and share existing extremist views, but also to forge contacts with like-minded others. In particular, he forged contacts with fellow extremists in both the UK and the US leading to an eventual in-person meeting with two individuals from Atlanta convicted of plotting to bomb targets in Washington, D.C., in Toronto in March, 2005. Through these online contacts, particularly with Aabid Khan, he was also able to facilitate the travel of a member of the Toronto 18 to Pakistan for militant training. Similarly, the Internet also served as a tool for Omar Hammami to make eventual 'real world' ties that facilitated his travel to Somalia. While searching online [unclear exactly what for], he came across an individual who shared similar extreme views. Reaching out, Hammami provided this individual with his phone number and they eventually met in person. This relationship would prove to be critical for his trajectory, serving as an individual with which he would travel to Somalia and join al-Shabaab with.¹¹⁰

In contrast, in the case of Aabid Khan, far from using the Internet for outreach to partners, he allegedly found his co-offenders in his close entourage including "Sultan Mohammed a family relative from the same village in Pakistan who lived on the same street in Bradford".¹¹¹ Khan also indicated that he had been introduced to Hammaad Munchi by Sultan Mohammed in January 2005 while at the central mosque in Dewsbury. Khan had been a regular visitor for many years at the Dewsbury mosque. Khan found in Sultan Mohammed and Hammaad Munchi fellow indi-

¹⁰⁸ Ibid.

¹⁰⁹ Ibid.

¹¹⁰ Hammami, *An American Jihaadi*.

¹¹¹ Howe, *Associated Press*.



viduals who “had a general interest that many Muslim youngsters have...religion”.¹¹²

These cases demonstrate how the Internet can be used as a tool to both acquire operational knowledge, but also to build the necessary social capital to help plot and organize attacks. However, across the fifteen case studies it was rare for an individual to rely exclusively on the Internet to acquire the necessary tactical knowledge or social ties to plot an attack, with the above-mentioned exceptions of Anders Breivik, Roshonara Choudhry and Aabid Khan. However, as was seen in the case of Fahim Ahmad, he supplemented tactical knowledge found online with the technical expertise of other group members, including former members of the military,¹¹³ holding training camps, and building out an organization from social ties he had formed in high school. Similarly, while Hammami made a key contact through an online environment, there were multiple other individuals in his trajectory, including his family network, where he was able to enter Somalia under the pretenses of visiting his wife’s grandmother. These individuals and others all played major roles in his training and entry into al-Shabaab.

¹¹² Kohlman.

¹¹³ However, one of these alleged members was working as an informant for CSIS/RCMP.



PART 2. COUNTERING VIOLENT EXTREMISM ONLINE

As the importance of online milieus in the process of radicalization to violent extremism becomes more clearly understood, efforts have turned to considering how the Internet might be utilized to address the problem of radicalization. This second section of the report reviews the small but growing literature related to “countering violent extremism” (CVE), with a particular emphasis on CVE online. It will also provide examples of six CVE programs, which will serve as case studies to highlight key aspects of CVE initiatives. Finally, existing CVE programs will be examined in relation to the social psychological concepts introduced in Part 1. One of the key findings of this section of the report is that CVE programs, as they are currently conceptualized, have tended to overlook critical elements of social psychology. This, in turn, may have significant implications for the overall utility of these programs.

Literature review

Countering violent extremism is a broad umbrella phrase that covers a wide array of possible approaches to dealing with radicalization to extremist violence. To keep this literature review on point, several key distinctions must be made. First, CVE efforts may take place offline, online, or involve some combination of the two. In keeping with the focus of this report, this review is primarily aimed at CVE initiatives that include at least some online component.

Second, online CVE programs are routinely divided into *positive* and *negative* measures. In general terms, positive CVE strategies are those that “seek to challenge extremist narratives and propaganda by producing counter-content,” while negative strategies are designed to “block, filter, take-down or censor extremist content” (Hussain and Saltman, 2014, 10). Western governments have tended to be more concerned with negative measures, technological “solutions” aimed at restricting the supply of extremist content on the Internet (for discussion of the full range of negative measures, see Stevens and Neumann, 2009). In the Canadian context, the recently proposed *Anti-Terrorism Act, 2015* includes provisions intended to “remove terrorist propaganda from the Internet.” However, the potential effectiveness of such measures is subject



to a number of practical (Briggs and Feve, 2013) and political (Hussain and Saltman, 2014) limitations. There is simply too much content on the Internet to try to sift through it all; it is too difficult and expensive to block, filter, or censor content; and even if it were possible, there are issues surrounding what properly constitutes “extremist content” that have thus far remained resistant to resolution. As Briggs and Feve (2013, 5) note, “only a tiny fraction of extremist content is actually illegal” .

While governments continue to mine for efficacious negative measures, attention has increasingly turned to trying more positive CVE means. For example, Stevens and Neumann (2009, 31) have proposed a number of alternatives. They recommend empowering online communities by creating Internet user’s panels that would be charged with “raising awareness of reporting mechanisms for unacceptable content; monitoring companies complaints procedures; highlighting best and worst practices; facilitating partnerships between Internet companies and non-governmental organizations; and serving as an ombudsman of last resort”. They further suggest reducing the appeal of extremist content by increasing media literacy through schools and other stakeholders. Finally, Stevens and Neumann (2009) support the establishment of a funding agency, independent of the government, that could support the promotion of positive messages. Projects would be funded through small grants, and projects evaluated as having positive effects would be eligible to apply for more funding.

Related to this last point, attention has increasingly turned to counter-messaging as a central response to violent extremism. In contrast to more negative and reactive orientations, counter-messaging is a more proactive approach, one that “focuses on reducing the demand for such content by undermining its appeal through offering credible alternatives” (Briggs and Feve, 2013, 5). Counter-messaging activities exist along a spectrum (Briggs and Feve, 2013). One type of counter-messaging involves *government strategic communications*, which essentially involve “getting the message out”. The goal of strategic communications is for the government to raise awareness of what it is doing and to forge positive relationships with key constituencies. Counter-messaging may also take the form of *alternative narratives*, positive stories about “social values, tolerance, openness, freedom and democracy” (Briggs and Feve, 2013, 5). Schmid (2014)



maintains that alternative narratives should be able to bridge the “us” versus “them” divide that is fostered by extremists and bring together people from all sides. They should focus more on “what we are for” and less on “what we are against”. Whereas strategic communications is the purview of government, alternative narratives may be issued both government and civil society activists and groups. Finally, counter-messaging may be realized through *counter-narratives*. This approach has become central to CVE, and is the focus of the remainder of this literature review.

A narrative has been described as a “simple unifying, easily-expressed story or explanation that organises people’s experience and provides a framework for understanding events” (Kilcullen, as cited by Schmid, 2014, 3). These interpretations, deeply rooted in culture, can in turn encourage specific types of personal action (Corman, 2012). Narratives are powerful because they hold the pieces of the story and “ring true” for members of the target audience (Goodall, 2010). Schmid (2014, 5) maintains that one of the keys to understanding the ascendance of al-Qaeda’s ideology is understanding the extent to which it functions as a single narrative. “[It is] a unifying framework of explanations that provides its followers with an emotionally satisfying portrayal of the world in which they live and their role in it, offering them a sense of identity and giving meaning to their lives”. Extremist violence, then, is supported by convincing narratives that justify violence.

To the extent that narratives form the foundation of the appeal of extremism, and if counter-narratives are to serve as an vital element in CVE strategies, it is important to understand what constitutes a strong narrative. Schmid (2014, 29) has identified the following as the ingredients of an effective narrative:

1. It has to articulate a clear, realistic and compelling mission purpose without getting entangled in sub-goals and details, but keeping the focus on long-term, overarching goals that have to be related to cultural norms and values as well as interests;
2. It has to have legitimacy in that it matches cultural and public norms and values and is seen by relevant publics as justified;
3. It has to hold the prospect of success and provide a feeling of progress towards its goals;



4. The narrative has to be presented in a consistent manner in order to be effective and withstand the attacks of counter-narratives that might cost it public support; and
5. The narrative must fit within an overall communication plan that reflects major themes of our own identity.

Counter-narratives represent attempts to directly or indirectly challenge violent extremist messages (Briggs and Feve, 2013). These programs can function both online and offline, and many initiatives utilize both platforms. This approach is premised on trying to win the ‘battle of ideas’. Counter-narratives highlight what is wrong with extremist ideologies, challenge assumptions, expose fallacies, and dismantle associated conspiracy theories (Schmid, 2014). It involves creating and promoting narratives that stand in opposition to those presented by extremists and is intended to undermine extremist ideologies and compete for the ‘hearts and minds’ of potential recruits (Aldrich, 2014; Berger and Strathearn, 2013). The idea behind counter-narratives is relatively straightforward, but its application in practice is much more complicated. Much of the literature on counter-narratives is currently centered on understanding how best to construct effective counter-narrative programs.

Figure 3 combines the work of USAID (2009), Briggs and Feve (2013), and Stevens and Neumann (2009) to outline the process required for building counter-narrative programs. As illustrated in Figure 3, the process of CVE development begins generally with the specification of a variety of contextual factors. First, identify the violent extremist organization or ideology that is to be the target of the intervention. Second, identify the individuals who are being targeted, or who are most likely to be targeted. This involves determining which individuals are most vulnerable to being influenced by the extremist narrative and are thereby more at risk of recruitment and/or radicalization. Third, determine the social processes used for radicalization. Social processes refer to the nature and mechanics of the radicalization process, and addresses questions such as: Are individuals being recruited?; At what venues is recruitment occurring?; and What is the role of peer groups and social networks? Finally, establish which types of drivers—political, socioeconomic, cultural or a combination thereof—are pushing and/or pulling individuals toward violent radicalization. Of note, the contextual approach presented by USAID (2009)



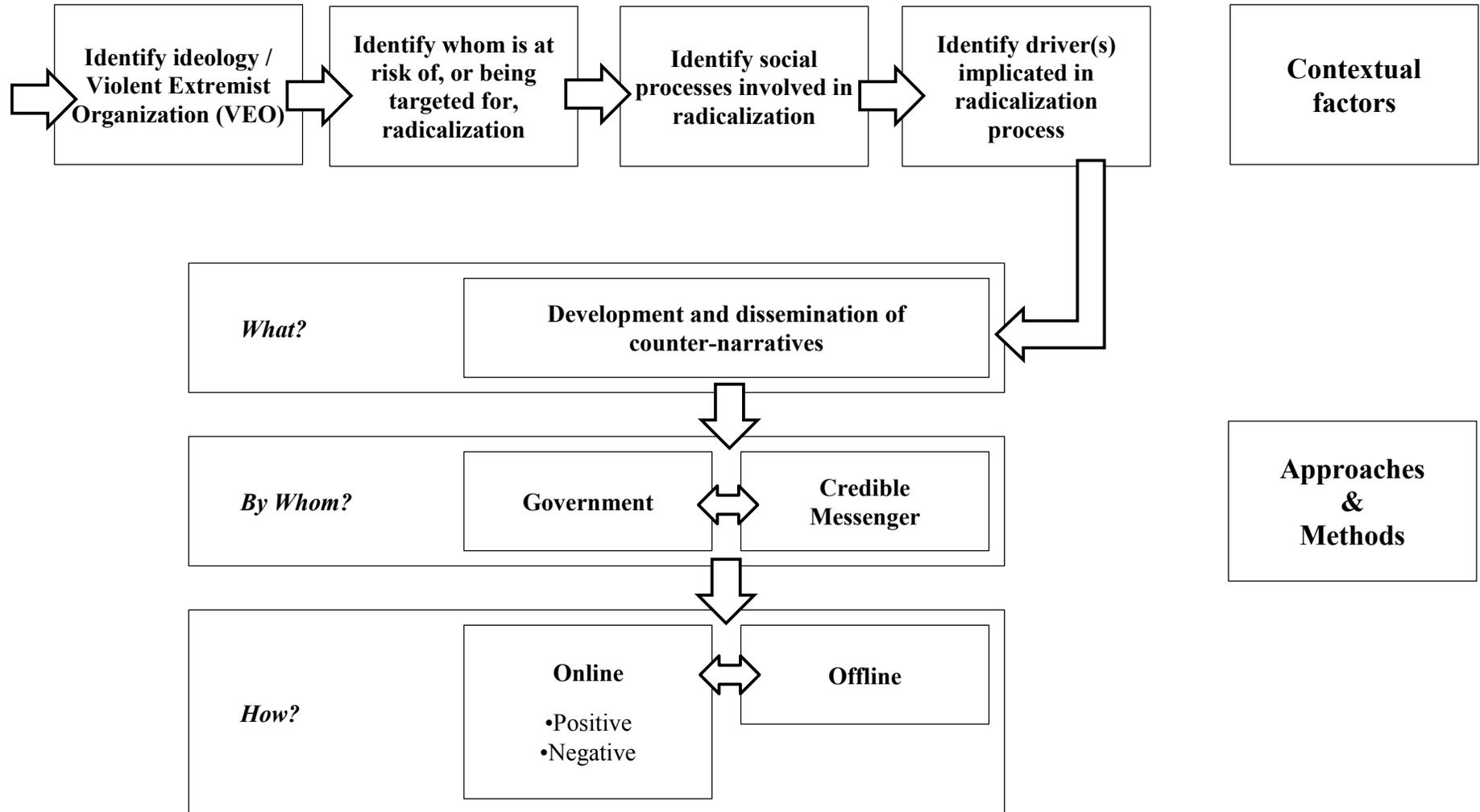
assumes that the radicalization process rests largely on the active efforts of extremist groups and ideologues. This perspective is not without critics, as other researchers have argued for a more “bottom up” approach that emphasizes individual initiative (Sageman, 2008; Hoffman, 2008). Nonetheless, this framework is broadly useful for identifying and understanding those factors that provide context and “set the stage” for the acceptance of extremist narratives and radicalization to extremist violence.

After the contextual factors have been assessed, the next step in the process is to determine what approach will be used. As noted earlier, there are a wide variety of possible CVE approaches from which to choose. In keeping with the themes established in this report, the focus here is on counter-narratives. Regardless of the specific approach, all CVE initiatives must determine who will develop and deliver the program. This issue is particularly notable for counter-narrative programs. More precisely, the question is “what should be the role of government” in relation to counter-narratives? Briggs and Feve (2013, ii) suggest that “governments must tread with caution in the area of counter-messaging [...] their efforts can be ineffective or even counter-productive when they act as the messenger, due to their credibility gap with target audiences, which often gets in the way of what they have to say”. This is not to say that there is no role for government. As noted above, governments can fruitfully engage in both strategic communications and alternative narratives. But much of the counter-narrative work increasingly relies on the identification of credible messengers, especially former violent extremists and survivors of extremist violence. These messengers have unique insights, and their experiences carry weight. Their messages are perceived as having greater authenticity. Credible messengers would also include scholars or persons that hold expertise in the information that is being countered. Using the Islamic State (IS) as an example, a credible messenger could be a religious scholar who can relay the proper interpretations of Islamic religious texts.

The final consideration in Figure 3 is the “how” of the program; that is, how is the program to be delivered. As noted earlier, CVE efforts, including counter-narratives, can be delivered online, offline, or via a hybrid approach. Together, these considerations provide a method to systematically outline key elements of CVE efforts across initiatives.



FIGURE 3. COUNTER-NARRATIVE VIOLENT EXTREMISM PROGRAMS





Programs countering violent extremism online

This section presents six programs that aim to counter online violent extremism. All programs have an online component; however, they vary in the extent to whether they are delivered in online or offline contexts. Across the six programs, the majority targeted jihadist-motivated extremists ($n=3$), while two targeted all types of violent extremism, and one focused only on white supremacist motivated extremists. The programs also differed in terms of how they attempted to counter violent extremism. Most programs aimed to provide counter-narratives, offering evidence-based arguments to counter extremist voices ($n=4$), while others focused on educating youth on appropriate Internet behaviour ($n=1$), or educating and providing recommendations to policymakers on violent extremism ($n=1$). All programs were implemented in Western contexts, including Canada, Australia, and the United States. This section first provides a description of each program and then looks at commonalities across these programs in light of the literature on radicalization and countering violent extremism.

1. Youth online and at risk: Radicalization facilitated by the Internet

Youth online and at risk: Radicalization facilitated by the Internet is a program delivered as a report produced by the RCMP (<http://www.rcmp-grc.gc.ca/nsi-ecsn/rad/rad-eng.htm>). It is a four-step program targeting parents, caregivers, and teachers of youth who are active online (RCMP-GRC, 2011). This first step encourages two-way conversation between an adult and youth concerning online content appropriateness and expectations of behavior when content is found to be inappropriate. The second step is to leverage existing programs. This step involves developing ways to keep youth safe from Internet threats. Some examples that are stated in the report are software controls, monitoring download activity, keeping the computer in an open space/community area, developing “what if” scenarios, and consulting website reviews. The third step, encourages guardians to reach out to youth, emphasizing the importance of genuine connections between adult caregivers and youth at risk of radicalization. The fourth step is reporting material of concern. This highlights the importance of avoiding inappropriate content as well as reporting this content when it is found.



2. Campaign Against Violent Extremism

The *Campaign Against Violent Extremism* (CAVE) is a project jointly created by the BC Muslim Association and the RCMP (The BC Muslim Association, 2015). The program is premised on the notion that the misunderstanding of Islam and improper interpretation of religious Islamic texts are key drivers in today's conflicts. In response, the principal goal of this program is to increase the awareness and knowledge of "mainstream" Islam, offer correct interpretations of Islamic texts, and counter those voices that are offering radical interpretations of Islamic religious doctrine. CAVE delivered three community forums in Surrey and Burnaby, BC, in 2014. Advertised with the tagline "Dare to be Informed", these forums are designed as community educational experiences, as opportunities for members of the public to ask questions and raise their concerns. (The BC Muslim Association, 2015). According to Mufti Assim Rashid, the objectives of CAVE are to deal with the radicalization of youth, to create a preventive campaign to educate Muslims and non-Muslims, and to tackle how non-Muslims feel about Muslims. One of these forums has been made available on YouTube (<https://www.youtube.com/watch?v=zgwCXsoWzOQ>).

3. Against Violent Extremism

Against Violent Extremism (AVE) was originally launched at the 2011 Summit Against Violent Extremism in Dublin. It is a unique private sector partnership between the Institute for Strategic Dialogue (ISD), Google Ideas, the Gen Next Foundation and rehabstudio and is currently being managed by ISD in London. AVE is a global network of former extremists and survivors of extremism that leverages the lessons, experiences and networks of individuals who have dealt first-hand with extremism. Its official aims are "to prevent the recruitment of 'at risk' youth and encouraging the disengagement of those already involved". AVE uses technology to connect, exchange, and disseminate information and perspectives on violent extremism. The network does not focus on any particular extremist narrative or ideology; instead, it is dedicated to countering all types of violent extremism (from far right and far left to AQ-linked and inspired and gangs).

AVE is a private sector venture with no government assistance. Members—subject to approval from management—join this network from all over the globe to interact and converse

with former extremists and each other to combat extremist narratives. AVE is designed to be inclusive. Members have the option of adding their own counter-narrative project to the wide array already available. Through its various media platforms, members can stay in touch, share ideas, collaborate, find investment and partners, and project their messages to wider audiences.

Platforms

Website: <http://www.againstviolentextremism.org>

Facebook: <https://www.facebook.com/againstviolentextremism>

YouTube: <https://www.youtube.com/user/AgainstVE>

Twitter: https://twitter.com/ave_org

Google Plus: <https://plus.google.com/115486297935528434575/posts>

4. EXIT White Power

EXIT White Power is one of several initiatives offered by All Together Now, a national, independent, not-for-profit organization dedicated to erasing racism in Australia. All Together Now seeks to achieve its vision of an Australia that embraces cultural diversity and is free from racism by promoting the prevention of racism through aiming to create innovative, evidence-based and effective social marketing that is positive, provocative, and courageous. Its work targets the behaviour of the 40 percent of adult Australians who are ambivalent about cultural diversity by engaging the 50 percent of adult Australians who are already positive about diversity and encourage them to speak to their ambivalent friends, colleagues and family members. All Together Now's strategic plan is to facilitate a national conversation about racism that will lead to: improved racial literacy among Australians; increased confidence among Australians to speak up when they witness racism; change in behaviour of the 40 percent of Australians who are ambivalent about cultural diversity; and a greater understanding of the types of activities that effectively reduce racism in the Australian context (<http://alltogethernow.org.au>).

As part of All Together Now's overall program, *EXIT White Power* (EWP) was launched in October 2012. Utilizing a website (<http://exitwhitepower.com>), Facebook discussion page (<https://www.facebook.com/wptalksau>) and Twitter (<https://twitter.com/exitwhitepower>), the goal of



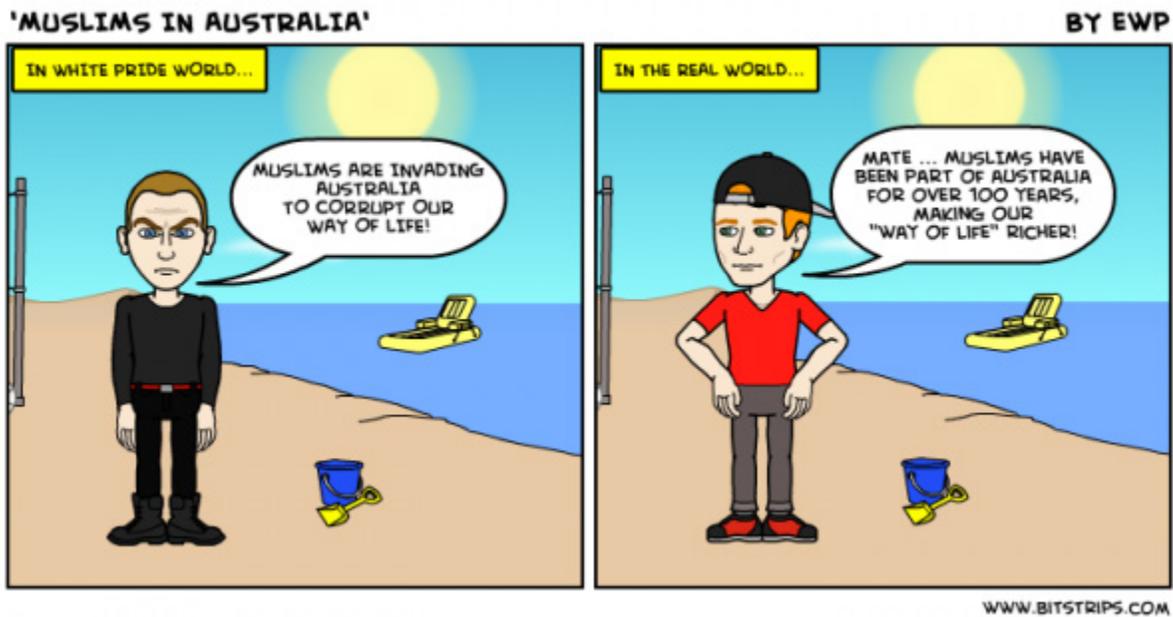
EWP is to challenge recruitment efforts of white extremist organizations to prevent more young people from becoming involved in white nationalism and white supremacy. By monitoring the content of white supremacist discussions online and responding by writing and publishing evidence-based counter-arguments that debunk myths and conspiracy theories, EWP seeks to build resilience to white nationalism by planting a seed of doubt among young men at risk of being involved. EWP has found that writing counter-arguments and ridiculing the narratives, ideology and conspiracy theories of white supremacists can help to dissuade young people from becoming involved. It also concludes that Trojan advertising coupled with Search Engine Optimisation (SEO) and discussion on white supremacy forums have thus far been the most successful tactics for attracting attention to evidence-based counter-arguments.

EWP notes that individuals who are at risk of radicalisation may become more entrenched if counter-narrative activities are not combined with an opportunity for young people to have two-way conversation with the experts. To this end, EWP has focused on creating a resource for front-line workers so that they are better equipped to have this conversation with at risk young people. The publication, *Responding to White Supremacy: A Guide for Frontline Workers*, is available for download on the EWP website. It is intended for use by all frontline workers, including youth workers, social workers, counsellors, psychologists, teachers and police, and includes information on:

- The white supremacist movement in Australia;
- Why people get involved in white supremacy and who is most at risk;
- How white supremacy groups operate;
- The radicalisation process and how to recognise it; and
- Assisting someone involved/at risk of involvement in white supremacy group.

The website has several other notable features. There is an *Information for Community Workers* section that, in addition to the frontline workers guide, includes additional sources of information on how “you and your community can respond to individuals at risk of involvement in white supremacy”. There is also a section on *How to Spot a White Nationalist* that highlights

the symbols, words and numbers associated with white nationalism. EWP notes that “by being confident that you have identified their association with white nationalism, you will be able to confront the person directly about their involvement”. A section titled *I Need Help* offers directions on how one can leave, or help a friend escape from, a white power group. This section also encourages people that have information about a threat of violence from a white nationalist to report it to the local police station or to the National Security Hotline. Finally, the website has archived entries related to *Conspiracy Theories, Identity, and Problems in Society*, as well as a forum.



5. Think Again, Turn Away

The *Think Again, Turn Away* campaign was developed and launched by the USA State Department in December 2013 (Katz, 2014). According to its Facebook page, *Think Again, Turn Away's* “... mission is to expose the facts about terrorists and their propaganda. Don’t be misled by those who break up families and destroy their true heritage”. This program utilizes a broad spectrum of social media platforms in attempts to dispute and undermine extremist information in various ways. One way in which they do this is by engaging extremists in debates (Katz, 2014). More controversially, extremist narratives are also challenged through the posting of satirical mock recruitment videos. One video featured the phrases such as, “Travel is inexpensive because you won’t need a return ticket”, “useful new skills such as blowing up mosques and crucifying and



executing Muslims” (Hansen, 2014). The debut video released by the campaign featured graphic images of the Islamic State (IS) committing atrocities, including beheadings. By highlighting the brutality of IS, the video was intended to dissuade potential jihadists from joining IS.

Think Again, Turn Away is available in English, Arabic, Urdu, and Somali.

Platforms

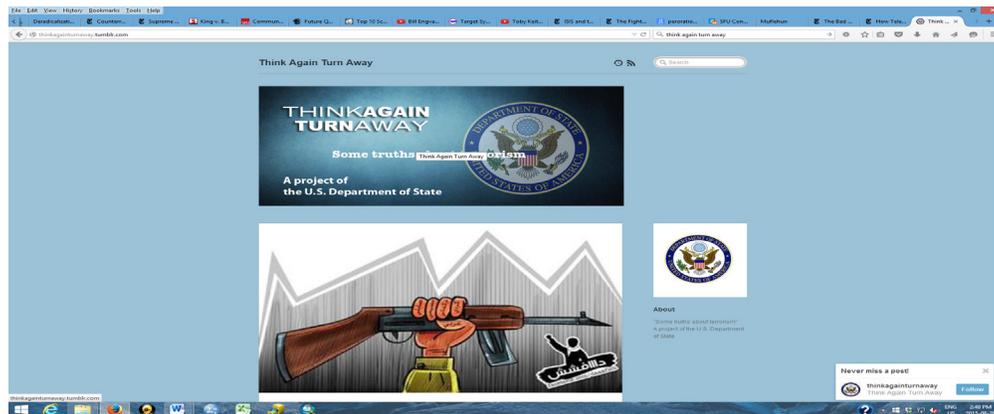
Facebook: <https://www.facebook.com/ThinkAgainTurnAway>

YouTube: <https://www.youtube.com/user/ThinkAgainTurnAway>

Twitter: https://twitter.com/thinkagain_dos

Tumblr: <http://thinkagainturnaway.tumblr.com/>

Ask.fm: <http://ask.fm/ThinkAgainTurnAway>



6. Muflehun

Muflehun is an independent think tank that specializes in preventing radicalization and countering violent extremism. Its initial focus is to first, understand the nature of the threat of violent extremism, and second, develop effective, innovative, and research-driven preventative programs within a religious paradigm. Initiated by the Muslim American community, Muflehun believes that preventing radicalization, violent extremism and other threats from taking root is the first step for ensuring a safe civic society. The word *Muflehun* is based in Quranic verse (Q3:104) and means “those who will be successful”.

Let there be a group (community) from amongst you that invites towards good, enjoins what is right (reasonable & just), and forbids what is wrong; and they will be the successful ones (muflehun).

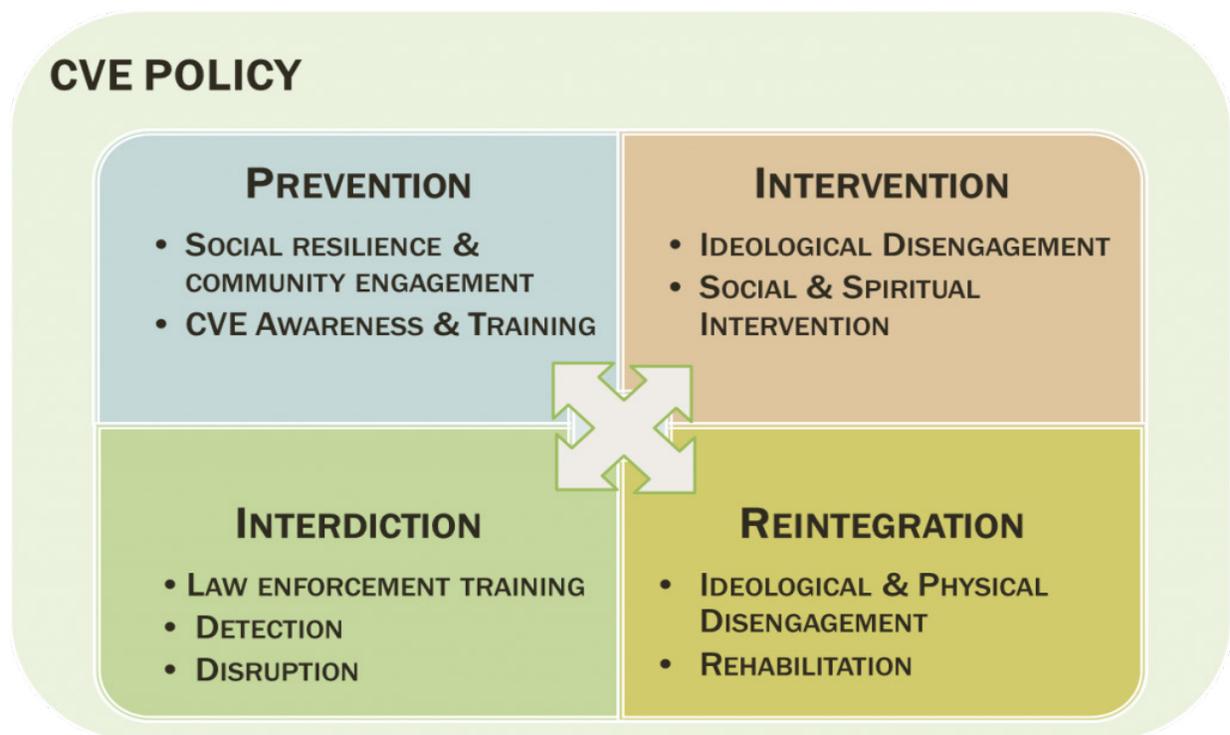
Muflehun's stated vision is to help establish a community that promotes good work and justice, while

peacefully working against wrongs and injustice. Its mission is to conduct independent research and provide recommendations to policymakers and the American Muslim community, as well as develop programs that directly and indirectly use faith-based values to:

- Promote the continued integration of the community within the larger society;
- Enable civic engagement through awareness and promotion of available resources; and
- Facilitate the fulfillment of social responsibilities by utilization and expansion of service channels.

Muflehun is a non-profit organization. Financed by contributions from individuals, foundations, and corporations, it is an independent and strictly non-partisan organization. It does not have any government funding; rather, it relies entirely on support from private sources. Muflehun purports to offer programs in several countries covering the Countering Violent Extremism landscape (although there are no specific programs listed on its website). Muflehun’s CVE Programming Landscape is presented in Figure 4. Muflehun primarily engages through its website, <http://muflehun.org/>, which includes information on CVE News, CVE-related events, and a blog.

FIGURE 4. MUFLEHUN’S CVE PROGRAMMING LANDSCAPE





Summary

The list of CVE programs reviewed here is not intended to be representative or exhaustive. Rather, the aim is to offer a scan of the breadth of available online programs. But even this modest sampling provides some important insights into how we should be thinking about these programs. First, CVE interventions pay scant attention to contextual factors. The programs were usually specific about the target ideology or violent extremist group of interest (see Table 1), but showed little interest in the types of social processes and push/pull factors that often contribute to the process of radicalization. This narrowness of approach has potentially negative implications for the effectiveness of CVE efforts.

In keeping with the philosophical priorities that underlie CVE, the programs here are predominantly centered around the presentation of information. At the same time, there are notable differences in the manner in which the information is conveyed. These distinctions can be considered along two close related dimensions: one regarding the level of “activity”, the other reflected in the degree of “online-ness.” For example, both of the Canadian initiatives, *Youth Online and at Risk* and *Campaign Against Violent Extremism (CAVE)*, might be characterized as being relatively passive in their online approaches. The former purely involves the provision of information, while that latter really takes place offline. In both cases, the Internet is more peripheral to radicalization efforts. In contrast, *AVE* and *Think Again, Turn Away* are much more actively engaged in online milieus. Both are examples of the trend of initiatives utilizing the widest possible range of social media platforms.

Another important variation in programs relates to those charged with delivering the messages. Credible messengers are critical to several of the programs. The BC Muslim Association, particularly Mufti Aasim Rashid, is essential to the CAVE program. Muflehun similarly is rooted in the American Muslim community. AVE is an example of the need to incorporate the voices and experiences of survivors of extremist violence and former violent extremists. Other programs, such as *Youth Online and as Risk* and EWP, are closely tied to important stakeholders such as teachers and social workers. Only one program, *Think Again, Turn Away*, is run solely by the



government. It appears that many programs are cognizant of, and have taken steps to address, the “credibility gap” that is perceived to hamper government efforts.

Perhaps not coincidentally, the *Think Again, Turn Away* initiative has been the most controversial of the programs, and has been the most negatively received. This campaign is widely criticized by experts and the media as legitimizing terrorists, giving them a platform to further spread their propaganda (Katz, 2014; Edelman, 2014). In response to the video showing IS barbarism referenced earlier, Kohlmann (cited by Gearan, 2014) argues that “The problem with this video is the same problem that seems to happen over and over again with these type of initiatives. They don’t seem to have a clear picture of what audience they are trying to reach, or how to influence them”. Kohlmann further adds that “most of the Westerners trying to join IS are actually enthused by videos of executions and suicide bombings, not deterred by them”.



TABLE 1. SUMMARY OF CVE PROGRAMS

	CONTEXTUAL FACTORS				BY WHOM?			HOW?		
	IDENTIFY IDEOLOGY/ VEO	IDENTIFY AT RISK / TARGETED	IDENTIFY SOCIAL PROCESSES	IDENTIFY DRIVER(S)	GOVT.	CREDIBLE MSSNGR.	BOTH	ONLINE	OFFLINE	BOTH
Youth Online and at Risk		✓					✓			✓
Campaign Against Violent Extremism (CAVE)	✓						✓			✓
Against Violent Extremism (AVE)	✓	✓				✓		✓		
EXIT White Power (EWP)	✓					✓		✓		
Think Again, Turn Away	✓				✓			✓		
Muflehun	✓					✓		✓		



DISCUSSION

The study was designed to provide an assessment of the literature on the social psychology of the Internet with the aim to identify concepts and research which may be most relevant to violent extremism. It also aimed at testing some of these concepts against a set of case studies of known violent extremists for which the Internet was at least mentioned as present at some point, in some form, in the public accounts of their life histories. Finally, we intended to examine the application of research on the social psychology of the Internet in existing programs to counter violent extremism. Below, we begin by providing a general assessment of the prospects for using the literature on the social psychology of the Internet in future research endeavours, focusing on the current limitations of that literature to inform current debates in the field. We then summarize the main results derived from our case study analysis and counter-narratives program, and conclude with recommendations for future research.

The benefits and challenges in using the literature on the social psychology of the Internet

Currently, a gap in the literature exists on the link between radicalization processes and the social psychology of the Internet. While radicalization processes are increasingly becoming subject to empirical studies, only a subset of these studies have taken into account online dynamics, and even fewer have approached this issue from a social psychological perspective. Despite this missing link, the extensive literature on the social psychology of the Internet provides a foundation for examining radicalization processes online. The strength of this literature in assessing radicalization processes lies in the overlap between concepts used in both radicalization and the social psychology of the Internet. While typically not concerned with radicalization processes per se, concepts from this literature such as social identification processes, online interpersonal relationships, and the impact of online communication on group dynamics, have also been identified as key factors in the radicalization literature. Focusing on how identity forms and evolves in online contexts, researchers on the social psychology of the Internet have studied how selective exposure to content that reinforces pre-existing beliefs, while limiting consumption of alternate perspectives can influence identity (McKenna and Seidman, 2005; Amichai-Hamburger and



Hayat, 2013). This concept of adopting insular, cohesive, reinforced beliefs is a key feature of the radicalization process (e.g. Sageman, 2004; Wiktorowicz, 2004). Specifically, online interpersonal relationships has been a key concern of violent extremists' use of the Internet. With relatively few radicals (by definition) existing in the population as a whole, the Internet provides a means to link otherwise unconnected individuals. The literature on social interactions provides further understanding for how and whether online relationships will migrate offline. Third, the literature on the impact of computer-mediated communication on group-dynamics is directly applicable to terrorist organizations. Group dynamics, including in-group belief formations and collective identity has been viewed as a key factor to understanding radicalization processes (Kepel, 2004; Khosrokhavar, 2005).

However, despite the overlap in concepts there remain several challenges in transferring the knowledge discussed in the literature review to understanding the role of the Internet in radicalization leading to violence. First, the speed of technological advancements in the digital environment raises the issue of time-limited validity of research findings. As the Internet is a rapidly-evolving and ever-transforming milieu, individuals are experiencing new ways to interact online and new manners to experience online environments quicker than ever before. Social media represents a non-negligible part of Internet users' practices, with the majority of work done in cyber-psychology only starting to explore how these new digital venues affect individual behaviours and human interactions. Scholars are facing the unsolvable challenge of doing research in a rapidly changing landscape. As observed by Power and Kirwan (2013, 233), "In some cases, academic literature finds it difficult to keep up with online developments and changes [...] The relatively slow process of academic publishing struggles to keep up with the speed of technological advancement evident in this research area". This observation leads us to emphasize the ephemeral nature of the literature due to the dynamic nature of the object of study itself.

Second, many of the research designs utilized to explore the psychological impacts of digital environments are highly context-specific: online dating, political debates, etc. Looking at very specific digital platforms and spaces—a specific website, online service, or social media platform, and selective samples—students, users of a particular online service, etc., suggests that these



studies and their conclusions bear several limitations in how they may be transferred and applied to the understanding of phenomena like violent radicalization leading and involvement in terrorism-related activities.

As our report has shown, there is no denying the contribution of cyber-psychology to our understanding of the radicalization process, especially as it relates to the role of the Internet. Yet, this literature only provides a small foundation for elucidating and understanding the role of the Internet in violent radicalization processes. It remains subject to several limitations and future research avenues should be developed in order to identify specific psychological mechanisms that might be particularly illustrative in how online technologies and settings influence individuals' trajectories towards violent radicalization.

The role of the Internet across the 15 case studies

The real test for the utility of these concepts would be to directly access the individuals and examine in detail their decision-making at different points in their lives, their motivations, and predispositions for their behaviours. Those were unavailable to us. Yet, the open source material we did gather was nonetheless useful to illustrate many of the socio-psychological processes that were at play in the fifteen case studies we examined in detail. Indeed, our results from the case study analysis demonstrated consistencies with the literature, the broadest finding being that the Internet is in itself only one variable among dozens that are associated with individual trajectories towards violent extremism.

Focusing on violent extremism and the Internet, our study added another element to the literature; highlighting the different ways in which the Internet could play a role in radicalization trajectories. While our purposive sample precludes us from generalizing to the wider population of violent extremists, we found that the role of the Internet could be classified into one of three trajectories: 1) the Internet as a key factor in individuals adopting violent extremist beliefs; 2) the Internet as first exposing individuals to violent extremist ideas, but not directly leading to the adoption of violent extremist beliefs; and 3) the Internet as reinforcing already adopted offline violent extremist beliefs. However, despite finding three classifications for the role of the Inter-



net, within each one there were important variations in the radicalization process across the cases considered.

Our findings also support literature that suggests violent radicals experience events or possess conditions that make them pre-disposed to radicalizing environments. While pre-conditions for radicalization across the violent extremist cases were diverse, ranging from political grievances to psychological fragility, all the cases within our sample had experienced, prior to their radicalization, a pre-disposing event or trait that made them at greater risk for radicalization. However, consistent with the literature, this was not a sufficient factor to explain the radicalization process, rather serving as an explanatory indicator of why these individuals may have been more vulnerable, or willing than others to be drawn into radicalizing environments.

Second, initial exposure to radical material followed one of two pathways, individuals were either exposed to extremist ideas actively/passively through their social milieu, or they came across extremist material autonomously in online contexts. This exposure to online material also reinforced findings in the literature on the social psychology of the Internet and social identification. Across case studies, individuals used the Internet to explore their identity, such as accessing religious questions (e.g. what it means to be a Muslim) and identifying with a larger group.

However, sustained exposure to online radical material was experienced differently across the fifteen individuals. For some, continued exposure was attributed to the benefits derived from the Internet. This included *cognitive* incentives, such as receiving knowledge about extremist perspectives, as well as *social* incentives, which included interacting with like-minded peers. However, for only a few was this sustained exposure key to developing perceptions of the acceptance of violence as a legitimate means. Specifically, public sources, indicated two accounts where material found on the Internet led to the acceptance of violence: Choudhry and Khan. These individuals found that the Internet convinced them that “violence was the answer” and an “Islamic duty”, respectively.

Lastly, the Internet played a prominent role in the re-structuring of networks. For instance, spending an increased amount of time online, individuals started to filter individuals from their



social circle; removing themselves from more moderate individuals, with online resources providing support to marginalized views that could not be found offline (Braithwaite et al., 1999; Wright, 2000; Wright and Bell, 2003). This was illustrated in the case of Couture-Rouleau who tried unsuccessfully to convert his friends to Islam. Similarly, Andre Poulin's offline social milieu did not appeal to him or include people who held extremist beliefs. This possibly led both to the Internet, where they were able to build online relationships with like-minded extremists. Their trajectory supports the body of literature that suggests the Internet can be an important tool for developing quality relationships. This is also exemplified by cases, in which initial relationships formed online led to offline interactions, such as the case of Ahmad who met with two of the individuals he met online, and Hammami who travelled to Somalia with a key contact he had originally met online. Further, this finding may assist in explaining why many individuals who experience pre-disposing factors (e.g. traumas) do not actually experience trajectories toward radicalization. Rather it is these pre-disposing factors in combination with situational inducements, such as the re-structuring of their personal networks, a finding consistent with our research and the literature (e.g. Sageman, 2004).

Given that our case study analysis samples on the dependent variable, only taking cases where the Internet played a role in the violent extremist trajectory, we cannot state the extent to which the Internet plays a role in radicalization processes across those who become radicalized. Rather, our analysis demonstrates that the Internet did play a role at some point in the radicalization process among our sample. However, whether these individuals would have continued down the same radical path without online resources is unknown.

CVE programs: Lessons learned

The six CVE programs presented in this report provided a range of venues through which organizations have attempted to counter radicalization processes. The programs reviewed tended to focus on providing counter-narratives, that is, alternative sources of knowledge regarding political, ideological, and religious material found online.

Of importance given the purpose of this report, the CVE programs reviewed generally



lacked the means by which to distinguish the role of the Internet in the radicalization process for the violent extremists they targeted. Whether the Internet plays a central role in the radicalization process, acts as a trigger to violent ideas, or reinforces already held extremist beliefs may be an important factor when creating programs, especially programs targeting individuals online. For instance, counter-narratives may be more effective for individuals who are initially using the Internet to seek out new information, such as trajectory 1 (pure online radicals) and trajectory 3 (the Internet as an initial trigger for radicalization) individuals from our classification above (Figure 2). In contrast, individuals who are using the Internet to reinforce already held violent extremist beliefs (trajectory 2) may be more resistant to counter-narratives. It may even have a negative impact for them, assisting in forming out-group beliefs. Much more research is needed on CVE programs to understand their impact on the variety of individuals for which they are targeted.

Although CVE efforts in relation to radicalization constitute a relatively new field of study, attention has increasingly turned to the question of evaluation: what works? And how do we know? Assessing the utility and effectiveness of CVE programs is inherently difficult (Vidino, 2010). First, the lack of a clear definition of CVE makes it hard to evaluate the CVE agenda as whole (McCants and Watts, 2012). Second, the “success” of any program is most likely to be a matter of degree. To put it in more concrete terms, Vidino (2010, 10) poses the following question: “If, for example, one hundred individuals go through a deradicalization program and only a handful of them revert to terrorism, how is the program to be assessed?” Third, appraising the outcome of CVE programs is particularly challenging because it involves trying to measure a non-outcome; that is, one has to demonstrate that (some proportion) of subjects *did not* engage in violent extremism because of exposure to, or participation in, a specific program or intervention (Aldrich, 2014). While it may not be impossible to prove a negative, it is nonetheless very problematic.

In addition to the problems highlighted above, it is reasonable to ask whether there is any utility in evaluating CVE initiatives as they are currently being conceptualized. Before we try to determine if programs are effective, however that may be defined, it is important to ascertain



whether these programs have been built on solid theoretical foundations. Any policy prescription should, at a minimum, explicitly take into account the putative causes of the phenomenon of interest: CVE programs should be firmly grounded in the “causes” of radicalization to violent extremism. Based on the programs reviewed above, there would appear to be a substantial gap between what is known about the factors that are purported to animate the radicalization process and the factors that CVE interventions attempt to address.

Understanding the radicalization process is greatly complicated by a lack of consensus with regard to the causes of radicalization. In the absence of solid empirical evidence, pet theories and speculation abound. However, there seems to be an emerging consensus that a wide range of interrelated factors are implicated. “It seems that radicalization is a complex and highly individualized process, often shaped by a poorly understood interaction of structural and personal factors” (Vidino, 2010, 3). This characterization, emphasizing complexity and interaction, is at odds with the comparatively narrow focus of online CVE strategies. While almost all of the programs targeted a group or an ideology, none made any mention of social processes or socioeconomic, political, or cultural drivers. Given their incomplete theoretical underpinnings, it would be difficult for these programs to meet their desired aims.

Individuals are drawn into violent extremism for a host of reasons, many of which are unrelated to ideology. For example, Venhaus (2010, 1) offers a typology of potential extremists comprised of four categories of “seekers”, individuals with unfulfilled needs that may turn to violent extremism as a means of defining themselves: “*Revenge seekers* need an outlet for their frustration, *status seekers* need recognition, *identity seekers* need a group to join, and *thrill seekers* need adventure”. Two of these groups, status and identity seekers, are especially relevant in light of the perspectives advanced in this report. CVE programs are not geared toward these individuals. More broadly, it is concerning that none of the programs reviewed here attempted to incorporate elements of social psychology. If individuals are motivated not by ideology but by needs rooted in identity, belonging, recognition and respect, refuting erroneous ideological interpretations, correcting historical inaccuracies, and unravelling conspiracy theories would be insufficient to divert them from the path of violent radicalization. Problematic ideologies provide a convenient



focal point for intervention, but ameliorating them cannot offset or replace the social bonds that are being forged, both offline and online. Generally speaking, voluntarily abandoning one's perceived social support network would be perceived as being irrational. This calculus is not necessarily altered by the fact that the context is violent extremism. This realization presents a thorny but nonetheless crucial dilemma: CVE programs cannot merely be oriented toward preventing, arresting or reversing the process of radicalization to extremist violence. They must also grapple with an equally compelling consideration: with what are the perceived "benefits" of radicalization to be replaced?

CVE policy implications

Currently CVE approaches have been classified based on their target audience and approaches used. While these centre on recruitment methods by groups, we would also encourage tailoring programs according to the specific methods through which violent extremists, or individuals at-risk of violent extremism used the Internet—differentiating between those who use it as a key resource to develop and shape radical beliefs, from those for which the Internet is a trigger or reinforcer of radical beliefs. Targeting individuals who are using the Internet as a "reinforcer" versus those who use it as solely an initial trigger of radical beliefs—may require an entirely different approach.

Further, most of the programs presented are implicitly or explicitly directed toward jihadist violence. One endeavour, *EXIT White Power* (EWP), focuses on white nationalist and white supremacist extremism, while *Against Violent Extremism* (AVE) takes a much more expansive view and attempts to address violent extremism in all of its various guises. The (over)emphasis on Muslim radicalization has been noted by CVE critics. For example, Berger (2011) has commented that "(i)f the first step in making Muslims feel less alienated is to single them out for remedial social engineering, then we have a problem before we even start". This singling out seems especially misguided in light of the fact that, in the US, violent right-wing extremists have proved to be a much more lethal threat. "Since Sept. 11, 2001, nearly twice as many people have been killed by white supremacists, antigovernment fanatics and other non-Muslim extremists than by rad-



ical Muslims...” (Shane, 2015). Right-wing violence continues to be a concern in Canada as well (Perry and Scrivens, 2015). Against this backdrop, Western governments would be well served to adopt a broader stance on radicalization programs.

Our findings from the case study analysis also emphasized the role of the Internet in serving as a cognitive resource to learn about religion. This information-seeking often led many of our case studies to come across extremist perspectives that shaped their radical beliefs. As such, the Internet may also serve as a tool to prevent these processes by providing alternative resources for these individuals searching for religious, political, and ideological guidance. While the programs mentioned in the report aimed to provide counter-narratives and messaging, we would recommend furthering these efforts by providing credible information resources online for individuals to access. This may enable such individuals to discover more nuanced and less Manichaen discourses online.

However, recognizing that alternative cognitive resources, while valuable, will likely never completely overshadow radical perspectives, we would also recommend developing school programs that address digital literacy. These programs could foster critical thinking regarding ideological content available online. This point is particularly critical, given several cases, including Arid Uka who stated “I read a lot. I can’t remember what...I took everything at face value. And the more I read the more I thought it was the truth”.¹¹⁴ Such programs may also address cult and conspiracy content available online, which offer similar resources.

Lastly, findings from the CVE programs also emphasize the need for 1) counter-narrative programs to be guided by theory; and 2) development of systematic evaluations of these programs. The first point extends from the above discussion that CVE programs should be built on strong theoretical foundations. This is particularly important for a phenomenon for which there are relatively few empirical studies on either radicalization or counter-radicalization processes, and where this process has been described as a “poorly understood interaction of structural and personal factors” (Vidino, 2010, 3). Theory can guide one towards the most effective measures, rather than using measures that are argued to be intuitive, which is particularly important in a

114 Balmer, *Agence France Presse*.



misunderstood process. This leads to the second point, evaluation of programs. Given the poorly understood nature of counter violent extremism programs, we encourage systematic evaluation of the effectiveness of these programs. This is particularly important in light of allegations that these programs may even be counter-productive. For instance, this has been illustrated in the case of the US Government's effort to counter IS messages through their Twitter Account, *Think Again, Turn Away*, which has been publicly critiqued for not only being ineffective, but also providing a platform for terrorist groups to legitimize their organization, with individual members engaging in direct, open debates with government actors.¹¹⁵

Future research

One of the challenges of social science research is to simultaneously take into account multiple intervening factors to explain uncertain outcomes. Determining which individuals subjected to certain conditions will radicalize and eventually resort to violence is one of these hard-to-explain phenomena. The findings in this report are all suggestive explanations of the radicalization process. However, they do emphasize appreciation of both online and offline factors in this process, with online milieus serving as an extension of the real-world. The next logical step within the literature would be to move from suggestive to causal explanations. We propose three ways forward.

First, it is clear that the field urgently needs to move beyond the small-N, case study research designs to more ambitious, large sample longitudinal designs where the characteristics of violent extremists and their trajectories are systematically coded and analyzed. There are reasons why these types of research endeavours are so rare in the first place. Violent extremism or political violence is not as common as violent crime; and opportunities for creating cohort studies of violent extremists (or "at-risk violent extremists") of the kind driven by life-course criminologists are next to impossible. And even when datasets containing the systematic coding of life stories of violent extremists materialize, the individuals who populate these databases are necessarily

¹¹⁵ For instance, see Edelman, A. State department's 'embarrassing' 'Think Again Turn Away' Twitter campaign could actually legitimize terrorists: expert. *New York Daily News*. (September 16, 2014). Retrieved from <http://www.nydailynews.com/news/politics/state-department-embarrassing-turn-twitter-campaign-legitimizes-terrorists-expert-article-1.1941990> (Accessed June 15, 2015); Katz, R. The state department's Twitter war with ISIS is embarrassing. *Time*. (September 26, 2014). Retrieved from <http://time.com/3387065/isis-twitter-war-state-department/> (Accessed June 15, 2015).



made of convenient, heterogeneous samples where enough open source information is available. Yet, projects like START's PIRUS database (Profiles of Individual Radicalization in the United States) are showing that the systematic data collection of the life trajectories of individual extremists is possible, and could lead to new insights (Jensen et al., 2015).

A more specific way forward suggested is a method that takes into account the fact that most studies of violent extremists will be stuck with small samples, but still carries the theoretical ambitions of larger-N studies. Yet, even with small samples, it remains a challenge for scholars to organize the diversity of causal factors that may be at play across their samples. One research method, Qualitative Comparative Analysis (QCA) (Ragin, 1987; 1994), may be well suited to address these limitations. Grounded in both qualitative and quantitative techniques, QCA is designed to generate generalizability and to minimize causal complexity among all possible combinations of case attributes (Ragin, 2000; Drass and Ragin, 1992). It explicitly recognizes that multiple causes can lead to a similar outcome, and that context is usually a key mediating factor to explain differential pathways. QCA is well-designed for trying to make sense of conditional causality including necessary/non-necessary and sufficient/insufficient explanatory factors.

Qualitative comparative analysis should be used more widely in terrorism studies. It is well suited for small-N/medium-N samples and cross-comparison. QCA has been widely used in political science and more recently in criminology (for exceptions, see Miethe et al., 2008; Mieczkowski and Beauregard, 2010). We believe that it could create more robust causal explanations and descriptions of the multiple paths to violent extremism. Although the time frame necessary to conduct the current study did not allow the adoption of this method, it would be ideally suited to assess the "multiple" roles of the Internet in the radicalization trajectories described in this report.

The Internet is rarely a driver of the radicalization process, but we also believe that current research designs are ill-suited to properly assess the role played by the Internet in the trajectories of violent extremists. One key development in that regard would be to embrace a network approach that would systematically collect all social interactions for individuals in the same way,



at the same time. By all social interactions we mean the interactions that occur online and offline, under the same umbrella. Understanding an individual's interactions online may only be accurately interpreted within the context of their offline interactions, and vice versa. If social influence is the important driver of radicalization that some scholars believe it to be, there is no reason not to adopt the most suitable set of methods to study it, and no reason not to include online interactions on the same grounds as any other interactions occurring in one's life.

CONCLUSION

The rapid and burgeoning developments surrounding the Internet raise several challenges for scholars as well as public authorities in the understanding how it will impact extremism and radicalization phenomena leading to violence in the future. In this regard, it is clear that the Internet of 2015 is no longer the one of 1995. The emergence of social media has dramatically altered not only the way individuals experience the world out there, but also the way they engage with others. More than ever before in history, events happening thousands of kilometers away are directly and instantly accessible to billions of other individuals for the better and for the worse. In parallel, the possibilities for extremist and violent militant groups for outreach to individuals through these online channels are also becoming increasingly sophisticated, reaching individuals whose profiles appear to be even more and more diversified. This is unlikely to change. The exposure offered to terrorist groups like IS on Twitter is unparalleled in the history of terrorist communications.

It could be argued that the role of the Internet in trajectories of radicalization has been over-stated, especially given the importance of geography in assessing the profiles of recent known violent extremists. After all, if so many violent extremists and foreign fighters come from the same small towns in Canada and beyond, what does it say about the importance of the Internet in their trajectories of radicalization? This report contains at least elements helpful to answer these types of questions. First, the Internet rarely has the main role in trajectories of radicalization, nor does it necessarily provide the first exposure to radical ideas for potential terrorists. The Internet comes into play at various times for different individuals. It may reinforce existing ideas



and play that role even after face-to-face social interactions with fellow extremists living close by have occurred. It also has been shown to increase in importance as individuals get deeper in their trajectories toward violence—even if co-conspirators live in the same communities. Second, when assessing whether it can be a major causal factor on pathways to violence, we found that the Internet appears to have the greatest impact on lone-wolf terrorists like Choudhry and Breivik. Still, given the ubiquity of the Internet in young people’s lives, it should come as no surprise that even groups motivated by local grievances have members and supporters relying on the Internet for information seeking and communication purposes. We don’t expect this to change.



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Appendix A. Case studies

1. Case studies within Canada (n=9)

	MOTIVATIONS	ONLINE COMPONENTS	ENVIRONMENTAL CONFIGURATIONS
Canada			
Fahim Ahmad	<i>Jihadism/AQ inspired</i>	<ul style="list-style-type: none"> • Active participant on online forums • Consulting and collecting online extremist material • Distributing extremist material online • Seeking contacts online 	Collective dimension
Justin Bourque	<i>Right-wing</i>	<ul style="list-style-type: none"> • Extremist speech online 	Individual dimension
Damian Clairmont	<i>Jihadism/AQ inspired</i>	<ul style="list-style-type: none"> • Consulting online extremist material 	Collective dimension
Martin Couture-Rouleau	Jihadism/IS inspired	<ul style="list-style-type: none"> • Consulting online extremist material • Extremist speech online • Seeking contacts online 	Individual dimension
Aabid Khan	<i>Jihadism/AQ inspired</i>	<ul style="list-style-type: none"> • Active participant in online forums • Consulting and collecting online extremist material • Extremist speech online • Seeking contacts online 	Collective dimension
Saïd Khalid	<i>Jihadism/AQ inspired</i>	<ul style="list-style-type: none"> • Active participant on online forums • Consulting and collecting online extremist material • Seeking contacts online 	Collective dimension
Saïd Namouh	<i>Jihadism/AQ inspired</i>	<ul style="list-style-type: none"> • Active participant in online forums • Consulting and collecting online extremist material • Distributing extremist material online 	Individual dimension
Andre Poulin	<i>Jihadism/ISIS inspired</i>	<ul style="list-style-type: none"> • Consulting online extremist material • Distributing extremist material online 	Individual dimension
Michael Zehaf-Bibeau	<i>Jihadism/ISIS inspired</i>	<ul style="list-style-type: none"> • Consulting online extremist material 	Individual dimension



2. Case studies outside of Canada (n=6)

	MOTIVATIONS	ONLINE COMPONENTS	ENVIRONMENTAL CONFIGURATIONS
Outside Canada			
Anders Breivik	<i>Right-wing</i>	<ul style="list-style-type: none"> • Consulting and collecting online extremist material • Distributing extremist material online • Seeking contacts online 	Individual dimension
Gianluca Casseri	<i>Right-wing</i>	<ul style="list-style-type: none"> • Consulting online extremist material • Distributing extremist material online 	Individual dimension
Roshonara Choudhry	<i>Jihadism/AQ inspired</i>	<ul style="list-style-type: none"> • Consulting online extremist material 	Individual dimension
Omar Hammami	<i>Jihadism/AQ inspired</i>	<ul style="list-style-type: none"> • Consulting online extremist material • Seeking contacts online 	Collective dimension
Wade Michael Page	<i>Right-wing</i>	<ul style="list-style-type: none"> • Consulting online extremist material • Extremist speech online 	Individual dimension
Arid Uka	<i>Jihadism/AQ inspired</i>	<ul style="list-style-type: none"> • Consulting online extremist material • seeking contacts online 	Collective dimension



Appendix B. Case study coding grid

I. Pre-exposure stage

Key investigation: Are there any push factors that made the individual turn towards environments supporting extremist/radical agendas, online and/or offline?

MECHANISMS AT WORK	QUESTION(S) TO EVALUATE THEIR PRESENCE
Push factors (Prior to initial exposure)	<p>Are there any biographical dimension(s) in the individual's life that made him/her more vulnerable to turn to extremist/radical environments?</p> <p>Did the individual turn to extremist/radical environments in response to a triggering event in his life? (i.e. personal loss, unemployment, imprisonment, etc.)</p> <p>Did the individual turn to extremist/radical environments in response to social marginalization (perceived or real)?</p> <p>Are there any cognitive dimension(s) that made the individual more vulnerable to turn to extremist/radical environments?</p> <p>Did the individual turn to extremist/radical environments in response to a perceived feeling of cultural/identity victimization (personally or collectively)?</p>
<p><i>Key investigation: Are there any pull factors that made the individual turn towards an environment supporting extremist/radical agendas, online and/or offline?</i></p>	
Pull factors (Prior to initial exposure)	<p>Did the individual express any kind of prior attraction/sympathy towards an extremist/radical agenda?</p> <p>Did the individual turn to an extremist/radical environment after a triggering event (i.e. international, political, religious event) that happened outside of his/her personal life?</p> <p>Did the individual appear to have a risk-seeking personality?</p>



II. Stage of initial exposure to radical/extremist environments (online and/or offline)

Key investigation: How was the individual first exposed to an environment supporting radical/extremist agendas, online and/or offline?

MECHANISMS AT WORK	QUESTION(S) TO EVALUATE THEIR PRESENCE	ONLINE/OFFLINE DIMENSIONS	
Autonomous exposure	Did the individual initially come across actors, groups or environments supporting an extremism agenda, when he/she was alone?	Online	Offline
	Was this initial autonomous exposure accidental? (i.e. the individual was not actively looking to be exposed to extremist/radical actors, discourses, or environments)	Online	Offline
	Was this initial autonomous exposure initiated by the individual him/herself? (i.e. the individual seeking out and trying to reach like-minded individuals on purpose?)	Online	Offline
Relational exposure	Did the individual initially come across actors, groups or environments supporting an extremist/radical agenda through interpersonal ties?	Online	Offline
	Was this initial relational exposure accidental? (i.e. the individual was not directly looking to be exposed to such actors, discourses or environments through his personal ties and relationships)	Online	Offline
	Was this initial relational exposure initiated by somebody other than the individual?	Online	Offline



III. Stage of sustained exposure to radical/extremist environments (online and/or offline)

Key investigation: How did offline and online interactions facilitate the radicalization process (the transformation of individuals' beliefs, in-group identification, polarization thinking)?

MECHANISMS AT WORK	QUESTION(S) TO EVALUATE THEIR PRESENCE	ONLINE/OFFLINE DIMENSIONS	
		Online	Offline
Identity and beliefs formation	Is there any evidence of identity and beliefs questioning through interactions with peers?	Online	Offline
	Is there any evidence of adopting a new worldview?	Online	Offline
In-group identification and interaction	Did the individual come to adopt extremist/ radical worldviews and to identify himself with a collective identity – an in-group?	Online	Offline
	Is there any evidence of a process of in-group attachment and de-individuation happening?	Online	Offline
	Is there any evidence of the person reaching out to and networking with extremist groups or personalities?	Online	Offline
	Is there any evidence of the person creating ties with other extremists?	Online	Offline
	Is there any evidence of membership to extremist groups or communities?	Online	Offline
Polarization and extremist thinking	Is there any evidence of adopting a polarized or extremist worldview/ideology? This would include blaming and/or dehumanizing an out-group.	Online	Offline
	Is there any evidence of justifying violence?	Online	Offline

IV. Stage of engagement into violence

Key investigation: Did the Internet play an active role in helping the individual engage in violence and/or terrorist activities?

MECHANISMS AT WORK	QUESTION(S) TO EVALUATE THEIR PRESENCE
Strategic and tactical skills learning	Was planning done online? How central was the Internet to planning? Did the Internet play a role in learning operational skills (e.g. bomb-making)?
Operational skills learning	What role did the Internet play in planning? (e.g. Information gathering, target selection, surveillance, cyberattack) How central was the Internet in helping the individual coordinate him/herself with others leading up to/in the attack?