Influences on Social Identity Formation:
Youth engagement, social media, personal interactions

Literature review

November 2017

The Students Commission
Centre of Excellence for Youth Engagement

La commission des étudiants
Le centre d'excellence pour l'engagement des jeunes

Table of contents

Introduction 3

Methodology 5

Limitations 6

1) Social identity development in adolescence: Online and offline 8

Identity development in adolescence 8

Differentiation (The Personal Self) and Assimilation (The Relational Self) 8

Social Identity Formation 10

Belonging 12

Fractured Belonging Online 13

Identity Formation Online 14

Online and Offline Engagement: Similarities, differences, connections 15

Online and offline identity formation are interrelated 16

Online identity is identity of choice 17

Online community offers a much larger scope of possible interactions to contribute to identity 18

Online and offline engagement work together to develop the relational self: 18

Peers influence adolescent's identity formation online and offline 19

Online engagement can strengthen belonging and collective identity 20

SNS use is related to offline political/activist group membership 20

Gender differences online 21

Pathways for social identity development online 22

What are the characteristics of youth who are most likely to rely on social media to establish their social identity? 23

2) Social identity development and radicalization 26

Definition(s) of radicalization 26

Pathways between social identity and radicalization 32

Similarities and differences between violent and nonviolent radical engagement 33

Focus outward and diversity of perspectives 34

Prosocial norms 34

3) Influences on "radical" social identity formation 35

Initiators of engagement in radicalization processes 36

4) Interventions 38

1) Primary Prevention: Effective youth engagement programs and practices associated with adaptive social identity formation 38

2. Secondary Prevention: Effective youth engagement programs and practices to build resilience against violent influences 43

3. Tertiary prevention: Effective youth engagement programs and practices for disengagement and deradicalization 48

5) Policy, practice and research gaps and future directions 53

Summary of program design findings 53

Gaps, questions, future directions 56

Appendix I: An Expanded Look at Belonging 57

References 61

Introduction

This review provides representative summary of the literature pertaining to social identity formation in adolescence and early adulthood, both off-line and on-line. It identifies interventions that are successful for adaptive social identity development as well as those preventing and/or interrupting violent behaviours that arise from maladaptive social identity development.

We hope to advance research on the social psychology of the internet as a place for social identity and community formation and the relationship between online and offline social dynamics. Specifically, we wish to better understand implications for youth resilience vis-a-vis violent extremist influences and implications for youth mobilization in volunteering and positive engagement by examining social science approaches.

The Internet is a newer and rapidly changing context of young people's engagement, interconnected with and indivisible from offline engagement (Holloway & Valentine, 2003). Youth engagement on and offline is associated with belonging and social identity development. Youth engagement has been defined by the Centre of Excellence for Youth Engagement as meaningful and sustained participation in an activity with a focus outside of the self (Pancer, Rose-Krasnor, & Loiselle, 2002).

This focus outside of the self is important for program design; it is a distinguishing feature between positive engagement in non-violent ideological groups and engagement in violent ones (Angie et al., 2011). More specifically, when young people are focused on their broader environments and connecting with a diversity of perspectives and experiences, they are more resilient to violent extremist influences.

Another key feature that has emerged in the literature review is the importance of prosocial norms. As young people connect with others, both peers and adults, sharing prosocial values and behaviors also serves as a protective factor (Bruner, Boardley & Côté, 2014; Catalano et al., 2002; Eccles & Gootman, 2002; Khanna et al., 2014; Lawford et al., 2012; Ma, 2012).

.

Engagement has three dimensions that correspond to outcomes: (1) a *cognitive/learning component*, including knowledge about the activity; (2) a *behavioural component*, comprising actions related to participation (e.g., attendance at group meetings, playing a sport); and (3) an *affective component*, including the emotional or subjective responses to an activity (e.g., excitement, frustration, meaningfulness). These are also known as the Head (cognitive), Heart (affective), and Feet (behavioural) of engagement (Rose-Krasnor, 2009).

Similarly, social identity theory has implications for the head, heart and feet of engagement in a group. Accepting or taking on a social identity has implications for:

- Head (cognitive): how a young person views themselves and others
- Heart (affective): how they feel about the emotional value and significance of membership to a group
- Feet (behavioral): how they act within the group and toward members of other groups

Engagement is a critical process of interaction, with people, with contexts, and with interests. For three critical factors in youth thriving (autonomy, relatedness and competence), the literature highlights the constant interplay between individuals and context and posits that the quality of these interactions is related to positive outcomes. For adolescents to thrive, they must be adaptive, act in ways that support their own healthy functioning, and have positive interactions with their world (Lerner et al., 2011). This focus on engagement as a critical process is supported in the literature review by Eccles and Gootman (2002), which asserts that "it is the experience of the adolescent in-setting — the *processes* of interaction — that is critical to development" (p. 88). This focus on processes of interaction is also critical for understanding the influences on young people's social identity formation.

Where possible, this literature review applies the CEYE youth engagement framework as a lens to understand the influences on young people's social identity formation processes. The framework includes initiating and sustaining factors (the reasons why youth join or stay in a group), qualities and characteristics of the activity, and outcomes. The framework also operates at three levels of analysis: individual, social and system/community.

Methodology

This literature review followed a five-stage approach:

1) Creation of a keyword list
2) Collection of literature
3) Extraction of initial data
4) Identification of interventions
5) Analysis and write-up

1) Creation of keyword list

A keyword list was generated by the project team, which includes young people and staff from the Students Commission, RCMP partners, academic partners (Drs. John Freeman, Linda Rose-Krasnor, Heather Ramey, and Heather Lawford). Due to the complexity of the topic, several areas of the literature have been searched and brought together. The following table lists the keywords used in the search in combination; multiple terms were necessary to narrow the scope:

Adolescen*, youth, at-risk, emerging adult
Social identity development, identity, liminality, hybrid*
Social activism, civic engagement, volunteer*, rites of passage, positive youth development
Social media, Social Networking Sites (SNS), digital, virtual
Online and offline
Subculture, cultural identity, counter-cultur*
Recruitment
Belonging, affiliation, membership, inclusion
Political ideology, religious ideology
Fundamentalism, extremism, radicalization, radical, terrorism, violen*
Racism, discrimination, poverty
Prevention, intervention, program
Resilience, protective factor
Deradicalization, counternarrative, disengagement, countering youth extremism
Canada
White supremacy, DAESH, 4chan, Alt-right, Men's Rights Activists, redit
Idle No More, Black Lives Matter, Apathy is Boring, Native Youth Sexual Health Network, feminism, anarchism, environmentalism, antifa

2) Collection of literature

Searches were conducted for content published in scientific journals and content published in other sources (e.g., reports, websites). Our search included database searches (ERIC, PsycINFO, PubMed, Google Scholar, and university database search engines). Studies were included if they aligned with the keywords developed in Stage 1. Searches related to online engagement were limited to the past 5 years due to the rapid changes in the digital world. All searches included keywords from the first category in the table above (e.g., youth, adolescent) to ensure that the literature

focused on young people. However, in circumstances where the information was relevant, studies that were focused on adults were also included (particularly in the field focusing on violent extremism). Weekly meetings and shared files solidified our team's collective understanding of the relevant topics. During the phase of searching for programs and interventions, a second cycle of targeted searches was necessary to locate specific programs recommended by the team. Overall, our search resulted in a total of 314 research studies and reports that were downloaded full-text.

3) Extraction of initial data
We created tables of extracted data organized in six columns: i) Full source; ii) Key findings; iii) Type of study; iv) Keywords; v) Age of participants (if applicable); vi) whether the content is Canadian.

4) Identification of interventions
Interventions have been collected in a separate table organized in six columns: i) Full source, ii) Organization, iii) Name of program, iv) Program description, v) Target population, vi) Age of participants.

In order to assess their strength (as applicable), additional columns have been filled out: vii) Sample size, viii) Statistics and/or effect size, ix) Methodology, x) Clarity, xi) Generalizability, xii) Limitations, xiii) Conclusions/findings. However, due to the limited information about each intervention, these standards of evidence have not been used to exclude or assess interventions.

5) Analysis and write-up
Analysis was conducted during the writing of this report.

Limitations

There are four main limitations in the literature. The first is that there are limited empirical studies examining youth engagement in radical groups (non-violent and violent). This is unsurprising given the difficulties of identifying or inviting radicalized youth into a study. Most of the empirical studies about radicalization, limited as they are, are focused on adults, while the rest are theoretical in nature.

The second limitation is the extensive and disproportionate focus on Muslim youth, which reflects an Islamophobic bias. As the Southern Poverty Law Center describes, hate crimes are increasing, with over 900 active hate groups operating in the United States, and a large increase in white supremacist hate crimes since the last election (Southern Poverty Law Center, 2017). In Canada, police reported hate crimes against Muslims has also increased, with a 61% jump in 2015 (StatsCan, 2017). However, the media, as well as funding for research, has disproportionately focused on the threat from violent extremists associated with Islam. This bias is also seen in the theoretical articles that conflate new and complex transcultural, transnational identities as evidence of vulnerability to radicalization, thereby profiling migrants to Canada as suspect (Lynch, 2013).

The third limitation in the literature is the lack of studies evaluating impacts of youth programs. Of those few studies, very few have in-depth description of their approach or curriculum. As a result, programs with strong evaluations in the academic literature are often very general, while programs with detailed descriptions and practices found in the organizational literature are rarely evaluated rigorously.

The fourth limitation is the lack of Canadian-specific studies. Where possible, studies from the Canadian context have been included. However, much of the relevant literature is American or European. Consequently, generalizability is limited. Furthermore, in terms of intervention design and addressing initiating factors that motivate young people, the importance of the context has been underlined in the literature as critical to success (Khanna et al., 2014).

1) Social identity development in adolescence: Online and offline

Identity development in adolescence

Identity development is a primary goal of all adolescents (Erickson, 1968; Adamson & Lyxell, 1996). Lifelong identity trajectories are embedded in the personality, orientation of values, psychosocial, societal, relational, and ideological developments forged in adolescence. (Meeus, Iedema, Helsen, & Vollebergh, 1999; McLean, Yoder, Syed, Greenhoot, 2014). Identity development is a fluid and dynamic process that is constructed through internal and external processes, pressures, and motivators (Crocetti, 2017). Identity formation is most fragile in the compromise between fostering distinguishing qualities about oneself and seeking social validation and affirmation regarding these core attributes and beliefs about oneself (Brewer, 1991). In order to piece together a whole picture of identity development, it is important to examine the following three things: 1 the need to assimilate and differentiate 2) the personal and relational self and 3)commitment and exploration as identity formative processes.

Differentiation (The Personal Self) and Assimilation (The Relational Self)

Differentiation and assimilation drive social interactions and guide identity development (Brewer, 1991). On one hand, humans have a deep desire to create an individualized boundary between themselves and other people, claiming and shaping commitments to define their personal self, which is called differentiation (Brewer & Gardner, 1996). The sense of identity that emerges from differentiation is an individualized personal self. On the other hand, humans have a desperate need to belong to another and to other groups, and seek out relationships with individuals and membership with groups to find belonging and inclusion, referred to as assimilation. (Beaumeister and Leary, 1995; Brewer & Gardner, 1996). Steps made to assimilate into relationships or groups contribute to the creation of the relational self, another aspect of the identity. There is evidence now about individual variability in temperamental preferences for social contact, with some individuals showing relatively high "preference for solitude."

The Personal Self

Within the internal processes of identity development, a primary way that individuals will differentiate themselves, and effectively piece together a sense of self across a wide scope of life domains, is through commitment and exploration (Crocetti, 2017; Crocetti et al., 2008; Meeus et al., 2010). Strong commitments and self-appointed unique characteristics and beliefs that distinguish one's self from other people is referred to as *personal self* (Brewer and Gardner, 1996). To illustrate an adolescent may ascribe, or commit, to a particular political or religious ideology during their critical identity developmental window. Or, an adolescent may voice personal preference over particular roles they wish to take on, such as orienting oneself to a career path or a redefined role in the family. A critical aspect to commitments, as they pertain to identity development, is that the individual comes to realize that their 'buffet' of commitments give them a uniqueness.

Inevitably, the increase of decisions made about one's self increases one's uniqueness.

Outside of choice of commitments, the degree to which one ascribes to a commitment, one's confidence about their commitment, and the willingness that one actively pursues alternative commitments are additional avenues of differentiation (Crocetti, 2017). By mid- to late adolescence, many adolescents will be confident in their core commitments and will not be searching for alternatives to their commitments. In a study of Italian high school students aged 14-20 years (n=392), adolescents with an achieved identity were more involved in volunteer activities, reported higher civic efficacy, and stronger aspirations to make community contributions than their diffused counterparts (Crocetti, Jahromi, & Meeus, 2012). A little less than a third of adolescents struggle to establish core commitments and/or have not taken steps to thoroughly think through these (Meeus, Van de Schoot, Kijzers, & Branje, 2012). Youth with less salient commitments are positively correlated with depressive symptoms and delinquency behaviors (Meeus et al., 2012). Changes and additions to core commitments continue into emerging adulthood, reaching well into mid-20s and later.

The Relational Self

The personal self component of identity development does not occur in a vacuum. Rather, individuals are surrounded by inescapable social networks that provide a forum of expression, validation, and the shaping of the relational self. When considering the complexity of an individual's social networks, it is helpful use dartboard as a metaphor (extrapolated form Brewer (1991) figure of individual and social identities). The red bullseye in the dead center represents the individual. The widening segmented rings that surround the bullseye are the many social contexts that the individual is knowingly, or sometimes unknowingly, connected to. Several developmental psychologists' social theoretical frameworks could slot nicely into this metaphor. Specifically, Bronfenbrenner's' (1977) ecological model of development suggests that individuals develop and grow in layers of social networks, from intimate relationships, such as families, to distant social influences such as national political pressures. In this way, one's development only exists in a social context (Sameroff, 2010).

These various social networks create the backdrop for a second dimension of identity, the relational self (Brewer and Gardner, 1996). The relational self is woven together through two types of relationships, interpersonal and collective. The interpersonal side of the relational self emerges from important relationships and feelings of connectedness. In the dartboard metaphor, interpersonal connections would stem from intimate circles that border or are very near to the bullseye. Looser commitments and affiliations to social groups are on the periphery of the dartboard and influence an individual's collective aspect of the relational self (Brewer & Gardner, 1996). Interpersonal and collective relationships not only influence the personal self and the internal processes of identity development, these relationships provide a forum of identity expression.

Dynamic Shaping of Identity

Understanding how the relational self and the personal self influence one another, compete, and ultimately blend together to create a whole picture of an individual is a messy endeavor. According to Erickson's theory on development, skills, abilities, and commitments are explored through social interactions to help an adolescent understand who they are (Reid & Boyer, 2013). Contentment or discontentment with one's identity is contingent upon the integration of personal and relational identities (Brewer, 1991). Identity satisfaction is a balance found at moments in time when distinction from others and perceived acceptance from others come together. The mechanisms that govern the dance of push and pull between dissimilation and assimilation help us understand identity motivation, creation, and action.

Social Identity Formation

Social identity takes that dance of dissimilation and assimilation to a social or group level. It involves a depersonalized sense of self, "a shift towards the perception of self as an interchangeable exemplar of some social category and away from the perception of self as a unique person" (Turner, Hogg, Oakes, Reicer, & Wetherell, 1987, p. 50—Brewer & Gardner, 1996). The following figure describes a continuum of behavior that ranges between individual-level (perceiving the self as a unique person) and group-level (perceiving the self as an exemplar of a specific social category).

Figure: Tajfel's continuum of behavior (in Hennigan & Spanovic, 2012)

Individual-level behavior	**Group-level behavior**
Personally responsible	Personally anonymous (not responsible)
Further personal goals	Further group goals

On the group-level end of the spectrum, individuals avoid feeling personally responsible for their actions; they depersonalize themselves as well as individuals in the outgroup. Group-level expectations or norms outweigh individual's behavior preferences or norms. This social identity perspective aligns with evidence about how youth who were previously not violent at the interpersonal level may be influenced to commit violent acts when group-level identity is more salient (e.g., joining a gang,).These behaviors recede when the group-level influence is gone (e.g., after exiting a gang, Hennigan & Spanovic, 2012; Onorato & Turner, 2004).

Adolescence may be a time of particularly significant shifts in social identity due to the transitions young people are navigating in that period of their lives. In much of the research about social identity formation, adolescents have been assumed to be similar to adults, with consistent processes in adolescence continuing into adulthood. However, in a study focused on adolescence, Teichman and colleagues (Teichman, Bar-Tal & Abdolrazeq, 2007 in Tanti et al., 2011) found that youth navigating pre-pubescence and the transition to puberty in pre and early

adolescence displayed greater ethnic ingroup bias than youth in their mid and late-adolescence. In an experimental study, Tanti and colleagues (2011) found that social identity effects were relatively strong in early- and late-adolescents, particularly when peer identity (rather than gender identity) was salient. These findings coincide with young people's transitions into new educational social contexts. These transitions may be key moments where positive youth engagement and resilience against violent extremist influences are needed. A program design approach that focuses on youth transitions is supported by current youth engagement literature (e.g., Khanna et al., 2014).

Social identity refers to "us" versus "them" categorizations including all the attributes that come to the fore when the perceiver compares their group (as a collective) to the psychologically relevant outgroup (Onorato & Turner, 2004). Self-categorization is at the heart of identity development and choosing which identity to present. There is a tension between the needs that promote individuation and differentiation from others and those that promote assimilation and group formation (Brewer & Gardner, 1996).

Consequently, social identity theory has implications for the head, heart and feet of engagement in a group. Accepting or taking on a social identity has implications for:

- Head (cognitive): how a young person views themselves and others
- Heart (affective): how they feel about the emotional value and significance of membership to a group
- Feet (behavioral): how they act within the group and toward members of other groups

The extent to which we identify with the group predicts the extent to which we follow the group-level expectations and norms (Hennigan & Spanovic, 2012).

A young person's different identities may not be aligned or may be fragmented and disconnected (Amiot et al., 2015). Alternatively, if the inter-identity fit is strong, youth may put into practice a group's philosophy to guide their life in general in all contexts. In this case, the social identity is self-defining, and provides a young person with meaning in their life (Turner-Zwinkels, Postmes, Van Zomeren, 2015). When they identify strongly with a group, youth are then also more likely to self-stereotype or in other words, to think of themselves as having the characteristics that define the in-group (Brewer & Gardner, 1996; Onorato & Turner, 2004).

Interestingly, as social identities become more complex, that is, as young people belong to more groups, there may be important benefits to that diversity of experience and relationships. In a study with young people between the ages of 12-14 years (N=97), high social identity complexity was related to positive inter-group attitudes, cross-sectionally (in grade seven) and longitudinally (in grade eight) (Knifsend & Juvonen, 2013). This finding has implications for program design: breadth of groups and bringing together young people and perspectives from across various social identities may be an effective approach. Diversity as an important

program design element parallels research from the youth engagement field (e.g., Khanna et al., 2014).

Social identities are assimilated when 1) they make a young person feel good about themselves and contribute to their self-esteem, 2) they reduce uncertainty about who you are and who you are not by providing a prototype and norms for group members, and 3) they fulfill a need to fit in, belong socially and stand out in a unique way (Hennigan & Spanovic, 2012).

The next section will focus on belonging as an important motivator in social identity formation processes and an initiating factor for young people to engage in online and offline relationships and collectives.

Belonging

The exploration of personal distinctiveness and commitments is couched in the search to connect, relate, and belong to others. Belonging is a universal and motivational need for individuals to pursue, form, and maintain a threshold of interpersonal relationships (Beaumister & Leary, 1995). There are four relational attributes that contribute to belonging. In order for a relationship to render feelings of belonging, the relationship must be predictable, positive, persistent, and caring. People will feel a sense of belonging when they form relationships that involve frequent and positive interactions with others. Relationships that satisfy belonging are perceived as stable, at least in the context of the foreseeable future. Finally, belonging contains a reciprocal perceived concern of care for the other in the relationship (Beaumister & Leary, 1995).

Ultimately, one realizes that they belong to others when one feels valued, respected, engaged, and a "fit" with another (Mahar, Cobigo, & Stuart, 2013). Several processes foster an intrapersonal perception of belonging, such as reflecting on people's reactions to one's words and actions(Shrauger & Schoeneman, 1979; Jaret, Reitzes, & Shapkina, 2005). Making social comparisons to other's abilities, opinions, social worth, and other qualities contribute to feelings of belonging (Festinger, 1954). Finally, observing and actively reflecting on one's own actions, emotions, attitudes, and interactions with others also contributes to perceived belonging (Bem, 1972).

A young person's ability to choose the relationships they ground themselves in and belong to is critical (Mahar et al., 2013). Although belonging is an organic and naturally binding process, belonging is a voluntary process (Baumeister and Leary, 1995, Mahar et al., 2013). The potential for relational failure and having options is key(Mahar et al., 2013). This aspect of belonging is intricately tied to one's sense of autonomy or agency. Agency, or having the voice and ability to control one's interactions and experience, is a critical factor for young people to thrive (Khanna et al., 2014) and is cited as an essential need to for all humans (Bandura, 2001). However, young people's choices may be constrained; relationship maintenance and commitment may in some ways restrict or influence overt choice.

Fractured Belonging Online

The world is changing. Satiation of belonging needs has changed at a fundamental level; the number of relationships that comprise one's sense of belonging has multiplied exponentially (Robards & Bennett, 2011). Belonging is becoming increasingly globalized. The initial framework cited frequent, caring, and positive encounters as the soil that fostered belonging relationships (Baumeister & Leary, 1995). Although these relationships remain key contributors to one's sense of belonging,, more recent conceptualizations of belonging describe an individuals' sense of belonging as a complicated web of relationships spanning pluralistic networks (Robards & Bennett, 2011). Consequently, individuals have exceedingly more control of their sense of belonging. Who to include in their 'belonging puzzle', identifying exactly who they desire to assimilate with, and what voices have a say in the shaping of their identity are just a few ways that belonging is becoming more autonomous (Robards & Bennett, 2011).

There are several factors that explain the fracturing of belonging and an increase in belonging autonomy. Culture is an important starting point. The rapid increase in subcultures has created a massive range of subgroups to identity with (Robards & Bennett, 2011). Cultural pluralism and segmenting renders more control to the individual in selecting exactly who makes up their tapestry of belonging. Subcultural splintering increases the potentiality of belonging to include more cultural, group, and individual differences.

Social networking sites (SNS) are a key mechanism for this change (Robards & Bennett, 2011). They provide accessible platforms for subcultures and groups through pages, forums, networks, blogs, and user propagated newsfeeds. Additionally, millions, and even billions, of individual users around the world create a digital belonging marketplace (Constine, 2017). As technology and digital networks become increasingly prevalent, the search to find meaningful connection is becoming an "increasingly vast" and multi-faceted feat (Robards & Bennett, 2011, p. 314). More than splintering belonging, SNS are the conduit in which individuals exercise and increase control of who they integrate into their belonging tapestry.

SNS are shaping the belonging process to be more dynamic, fluid, and active (Robards & Bennett, 2011). Belonging is cognitively shaped and developed by those who fulfill belonging needs through a digital outlet. Neo-tribalism is one etiological term assigned to the digital influence on belonging (Robards & Bennett, 2011). Neo-tribalism describes the reliance on a number of fragile, temporary relationships to patchwork together a sense of belonging, as well as a sense of self (Maffesoli, 1996). As the composition of belonging becomes more complicated, the stability and reliability of one's sense of belonging is questioned. SNS open an endless world of belonging possibilities to the user's fingertips.

As the fabric of belonging changes, so does the identity shaping process. SNS have moved the goal posts of the identity-shaping landscape. In addition to face-to-face,

'offline' relationships contributing to the relational self-image, 'online' connections and relationships also shape the sense of self. Identity formation processes become increasingly more complicated and messy; SNS widens the bandwidth for relationship and assimilation at the cost of a well-established personal self. Robards and Bennett (2011) argue that an increase in digital reliance, especially adolescent reliance, on satisfying belonging will require a balanced sense of personal self. As described earlier, identity development is a dance between two balancing forces, dissimilation and assimilation. With the advent of SNS, it appears that relational self is tipping the scales.

The widening scope and growth of digital social networks are attracting more users (Lehdonvirta & Rasanen, 2011). Compared to other age demographics, youth are among the largest consumers and active participants within SNS (York, 2017; Statistica, 2017). Facebook, Instagram, YouTube, Twitter, messaging apps, and blogs are attract billions to plug in, share, and connect (York, 2017; Statistica, 2017). More and more, technology-mediated interactions are becoming an integral part of youth lifestyles (Lehdonvirta & Rasanen, 2011). The salient impact of SNS on youth's sense of belonging and identity shaping processes will be explored in this section of the literature review.

Identity Formation Online

Youth utilize SNS for many reasons. Social digital platforms create online space for youth to construct a sense of belonging. Connections made online enhance feelings of belongingness (Shapiro & Margolin, 2014). SNS are associated with the possibility for a greater sense of belonging as well (Shapiro & Margolin, 2014). In a recent study regarding identity formation, adolescents were asked to rank various components in their life that helped them understand their social identity. Strikingly, family and online communities carried almost equal weight in helping adolescents shape their social identity (Lehdonvirta & Rasanen, 2011). Now that SNS are on mobile platforms, they are 'finger-tip' accessible and permeating more aspects of youth lives, allowing for constant feelings of connectedness to others. Youth using mobile SNS results in more frequent SNS use and thus greater feelings of belonging (Quinn & Oldmeadow, 2013).

During adolescence, the need to belong is largely satisfied through relationships with peers (Košir, Horvat, Aram, Jurinec, & Tement, 2016). Peer interactions are especially important for belonging and identity formation because individuals typically spend more time interacting with peers when they are in their adolescence (Davis, 2012). One of the fundamental reasons individuals use Facebook, the most used SNS to date, is to create a sense of belonging (Statistica, 2017; Nadkarni & Hofmann, 2012). With SNS, relations between peers are rapidly expanding while also becoming increasingly intertwined (Davis, 2012). In a recent study, 32 adolescents were interviewed about their reasons for using SNS. Participants reported that communication with friends was a primary motivator for using online

social media (Davis, 2012). Sense of belonging is one of the ways that adolescents use traditional offline friend groups to help form identity, but this can also be found in online settings due to the reflection of offline interaction into the online world (Davis, 2012).

Having the ability to try on various identities in online spaces gives the youth of the modern world new opportunity for identity exploration and formation. Adolescents thrive with relationships they build with peers to make sense of themselves (Davis, 2012). Identity shaping and construction emerge out of these relationships. As discussed previously, the sense of belonging is a mediating force in identity formation processes. SNS provide new conditions for social identity formation to occur (Ridout et al., 2012). The online world is used to communicate and present themself to others (Shapiro & Margolin, 2014). SNS encourages the exploration of roles, commitments, and characteristics with feedback about their identity and exploration (Neira & Barber, 2014). To this end, online identity experimentation leads to discoveries and the defining of the personal self (Leung, 2011).

Online and Offline Engagement: Similarities, differences, connections

SNS have not monopolized the source of belonging and identity development. Youth use both online and offline interactions throughout the process of identity formation and discovery of belonging. What life, situational, and relational variables influence the interplay between online and offline contexts is a driving question of this literature review. Part of the answer for choosing between offline and online depends on which "self" is most apt for a relationship or a situation. Depending on the situation, individuals choose an identity that better allows them to adapt to the social aspects of that environment (Zhao, Gasmuck & Martin, 2008). When adolescents are feeling insecure in their offline world, online identity experimentation becomes more gratifying (Leung, 2011). Experimenting with identity and belonging in the online world allows for adolescents to arrange their relationships and identity roles in online spaces to how they want them (Leung, 2011).

Aside from appropriate situational contexts, the choice between online and offline engagement is conditional upon relationship needs. Often for youth with lower levels of offline support, online identity becomes much more rewarding (Leung, 2011). Considering the importance of identity formation for youth, it is clear why seeking online support is attractive if there is no offline support. Emotional support, friendship, social comparison, categorization and other processes that are typical in offline groups are often found in studies of online groups (Lehdonvirta & Rasanen, 2011). Youth ages 9-14 who feel lonely and ages 15-19 who have minimal social supports are more drawn to online social media use (Leung, 2011). Online communities become important in the formation of identity for youth with low offline support. Social desirability is a driver; SNS give youth the tools and platform to create a digital identity representation of who they want to be offline in an online space (Ridout, Campbell & Ellis, 2012).

In addition to forming new relationships, online engagement is used to strengthen existing relationships. Those who build relationships offline also tend to do so online (Ledbetter, Mazer, DeGroot, Meyer, Mao & Swafford, 2011). Adolescents use online SNS platforms as a way to enrich offline relationships (Reich, Subrahmanyam, & Espinoza, 2012). Online communication can equal or exceed the nature of real life connection (Ledbetter et al., 2011). Adolescent participation in online platforms results in the increased involvement in friendship networks (Davis, 2012). Additionally, connections made online can deepen identity while enhancing feelings of belongingness (Shapiro & Margolin, 2014).

Online identity formation and belonging networks are often intertwined with offline relationships and identity processes. In this situation, the lack of offline identity formation support encourages the use of online interactions to develop the identity (Leung, 2011). SNS provide users with an opportunity in the online space to try on multiple identities and construct one that appeals most to the self (Leung, 2011). This is something that youth are not able to do easily in the offline world within one community or friend group. Even if identity is an extension of the offline self, online networks elicit youth with the ability to highlight, add, or subtract certain features of their identity (Weinstein, 2014).

Within online social contexts, SNS users are often portraying a "hoped-for self," or a "socially desirable" self in their online identity (Zhao, Gasmuck, & Martin, 2008; Ridout, Campbell, & Ellis, 2012). Online environments are conducive to identity "cherry picking", because SNS remove physical barriers of representation and give users privacy, and even anonymity to construct whatever version of themselves they wish to portray (Zhao, Gasmuck & Martin, 2008). Identity experimentation is far more limited in "nonymous", offline, face-to-face contexts (Zhao, Gasmuck & Martin, 2008). This could be due to the way that online identity is produced in a more private space (Leung, 2011). Adolescents spend a lot of time posting in online platforms parts of their personal life related to their ideal identity (Leung, 2011). With this, youth, particularly early adolescents, are enabled to decide and even censor who they want to be online (Weinstein, 2014).

The following section summarizes the current literature about the similarities, differences and interconnections between young people's identity development and engagement online and offline.

Online and offline identity formation are interrelated

Adolescents use both online and offline interactions throughout the process of identity formation. Online identity formation is often intertwined with offline identity formation.

- When adolescents are feeling insecure in their offline world, online identity experimentation becomes more gratifying (Leung, 2011). In this situation,

the lack of offline identity formation support encourages the use of online interactions for identity development.

- Emotional support, friendship, social comparison, categorization and other processes that are typically found in offline groups are often found in studies of online groups (Lehdonvirta & Rasanen, 2011). Thus, these online communities become important in the formation of identity for adolescents with low offline support.
- Those who build relationships offline also tend to do so online (Ledbetter, Mazer, DeGroot, Meyer, Mao & Swafford, 2011). Adolescents use online as a way to enrich offline relationships (Reich, Subrahmanyam, & Espinoza, 2012). Online engagement becomes a tool for adolescents to support pre-existing relationships.
- Young people experience their online and offline social worlds as "mutually constituted" (Holloway & Valentine, 2003) and often consider them as one. Combining the two may be important for social inclusion

Online identity is identity of choice

In contrast to the offline world, online identity is one that can be chosen and shifted more readily

- Adolescents use the online world as a way to communicate and present oneself to others (Shapiro & Margolin, 2014). With this, teens can decide who they want to be online (Weinstein, 2014).
- Access to the internet has provided new social conditions for identity formation (Ridout et al., 2012). Considering that identity formation is at least a partially public process, when it occurs in a face-to-face context it is more constrained (Zhao, Gasmuck & Martin, 2008). Zhao, Gasmuck & Martin (2008). Ridout, Campbell & Ellis (2012) found that people are often portraying a "hoped-for self" or a "socially desirable" self in their online identity.
- Depending on the characteristics of an environment, individuals choose an identity that better allows them to adapt to the social aspects of that environment (Zhao, Gasmuck & Martin, 2008). Having the ability to try on various identities in online spaces gives youth new opportunity for identity exploration.
- Experimenting with identity in the online world allows for adolescents to arrange their relationships and identities in online spaces how they want them (Leung, 2011). There is opportunity in the online space to try on multiple identities and construct one that appeals most to the self (Leung, 2011). This is something that youth are not able to do as easily or rapidly in the offline world.
- Adolescents spend a lot of time posting in online platforms parts of their personal life related to their ideal identity (Leung, 2011). Even if identity is an extension of the offline self, youth still choose to highlight only certain

features of their identity (Weinstein, 2014). This could be due to the way that online identity is produced in a more private space (Leung, 2011).

- Identity experimentation online provides room for the possible self (Leung, 2011). People now create what they want to be offline in an online space to become socially desirable (Ridout, Campbell & Ellis, 2012). In a study done about online social identity construction among youth (n=158) in university, students portrayed alcohol as part of their identity, which was considered to be socially desirable. The alcohol-identity predicted problematic behavior (Ridout et al., 2012). Socially desirable portrayals create biased echo chambers that can potentially polarize social groups (McCauley & Moskalenko, 2008).

Online community offers a much larger scope of possible interactions to contribute to identity

- Computer-mediated interactions are now an integral part of young people's lifestyles (Lehdonvirta & Rasanen, 2011).
- Online interactions cause adolescents circles of friendship to grow (Davis, 2012).
- Connections online are now used as a way of processing important parts of adolescence, specifically identity formation (Lehdonvirta & Rasanen, 2011).
- Digital media has allowed for a small number of social contexts for identity formation to expand to a larger scope through online networks, online games and social networking sites (Lehdonvirta & Rasanen, 2011).
- Online communication can equal or exceed the nature of real life connection (Ledbetter et al., 2011).
- Youth will use online as a way to receive feedback about their identity and explore identities (Neira & Barber, 2014).

Online and offline engagement work together to develop the relational self:

- Young people use online contexts to strengthen offline relationships (Reich et al., 2012)
- Both boys and girls use online self-disclosure to rehearse offline self-disclosure skills (especially boys in early adolescence who struggle with difficulty disclosing offline) (Valkenburd et al., 2010)
- Motives for using Facebook and activity patterns are associated directly with social adjustment,moderated by motive of relationship maintenance (Yang & Brown, 2013).
- For older adolescents, higher SNS use is associated with higher social competence. For younger adolescents, higher SNS use is associated with increased internalizing problems and diminished competencies in academics and activities (Tsitsika et al., 2013).

- Social comparison and feedback seeking are associated with depressive symptoms moderated by gender and popularity; females and low-popularity are more strongly associated with depression (Nesi & Prinstein, 2015).
- Online social support for LGBTQA youth did not reduce odds of victimization whereas offline support did (Ybarra et al., 2015).
- Online spaces offer opportunities for building new relationships, particularly for young people who are socially isolated in offline spaces (e.g., youth with chronic illnesses). These can be deep and enduring relationships (Third & Richardson, 2010).
- Adolescents seek sense of self through relationship with others and will sometimes use SNSs to find these connections (Shapiro & Margolin, 2014).
- Adolescents are more likely to compare themselves socially to others (Shapiro & Margolin, 2014).
- Those who spent more hours per week on Facebook generally believed that the people they see online are happier than they are (Shapiro & Margolin, 2014). Social comparison positively related to Facebook use intensity, which is also related to frequency of having negative feelings from social comparison (Lee, 2014).

Peers influence adolescent's identity formation online and offline

- Peer interactions are important because during the developmental stage of adolescence there is much more time spent with peers (Davis, 2012). Self-disclosure and sense of belonging are two clear ways that adolescents use traditional offline friend groups to help form identity, but these can also be found in online settings (Davis, 2012).
- Digital media is used to connect with already existing friends (Davis, 2012). In an interview-style study of 32 adolescents, participants reported that communication with friends was the motivator for using online social media (Davis, 2012).
- Online communication often reflects offline peer processes (Davis, 2012).
- Online communication with friends plays a positive role in sense of identity (Davis, 2013).
- Lack of support from peers offline can motivate adolescents to seek support online (Leung, 2011).
- Adolescents with lower levels of offline support feel more rewarded through online identity experimentation (Leung, 2011). In a study that asked adolescents to rank what groups they use for social identify with the most, respondents rated family and online communities almost equal (Lehdonvirta & Rasanen, 2011). Peer groups are still an extremely important part of identity formation (Lehdonvirta & Rasanen, 2011).
- Exposure to risky online content posted by peers directly impacts risk behaviors (e.g., alcohol and tobacco use, Huang et al., 2014).
- Online culture normalizes problematic identities and predicts problematic use (e.g., alcohol-identity and binge drinking, Ridout et al., 2012).

- Exposure to friends' online pictures of drinking is associated with risk behaviors. Interestingly, youth without drinking friends were more likely to be influenced by exposure to online drinking pictures (Huang et al., 2014).

Online engagement can strengthen belonging and collective identity

- Belonging and acceptance from an online community with common identity (e.g., sexually and gender diverse youth, different abilities, chronic illness) is associated with a sense of belonging to a broader community (Harris, 2004; Hillier & Harrison, 2007; Third & Richardson, 2010).
- Sense of ownership enhances sense of empowerment and accomplishment, which reinforces belonging and attachment to community (Third & Richardson, 2010). Belonging online is associated with improved self-esteem (Valkenburg, Peter & Schouten, 2006).
- Facebook is often used primarily to create a sense of belonging and for self-presentation and is also associated with the possibility for a greater sense of belonging (Nadkarni & Hofmann, 2012).
- Engagement online can reinforce ethnic identity (Shapiro & Margolin, 2014).
- Regardless of age, young people with high collective self-esteem and group identity were more likely to use social networking sites for peer communication and social identity gratifications. Those reporting negative collective self-esteem were more likely to use SNS for social compensation (Barker, 2012).

SNS use is related to offline political/activist group membership

- Social media use has direct effects on offline political participation and indirect effects on offline and online political participation mediated via political expression. Social media use for social interaction has an indirect effect on political engagement. In other words, even relational use of social media may set youth on a pathway to political expression (de Zuniga, Molyneux, & Zheng, 2014).
- Political SNS use strongly impacts traditional political participation (Bode et al., 2013).
- Relationships between Facebook and political/civic participation are complex. Having a Facebook account has negative consequences on both offline and online forms of political and civic participation (Theocharis & Lowe, 2016). Facebook use associated significantly with offline protest activity of youth in Chile, which was mediated by using Facebook for news and socializing rather than self-expression. Political ideologies did not moderate this association (Valenzuela, Arriagada, & Scherman, 2012).
- Online and offline activisms are not independent: they do not constrain one another, rather they combine in a hybrid activism (Milosevic-Dordevic & Zezelj, 2017).
- People who are active online in civic engagement tend to also be active offline (Milosevic-Dordevic & Zezelj., 2017). Enhancing civic activism of

young people via online media has the potential to make youth more attentive to social problems (Milosevic-Dordevic & Zezelj, 2017).

- Social media accounts for a significant amount of variance in the relationship between discussion networks and offline civic engagement. In other words, use of social media explains why people who participate in political discussion with friends or family are more likely to engage in offline civic activities such as voting, political protest, political campaigning, neighborhood meetings (Madondo, 2015).
- Influences on youth civic activism (e.g., classroom activities, democratic peer norms) are indirect, and work through online and offline news media, as well as discussion of political ideas outside these contexts. News consumption and political expression online play a key role in this dynamic (Lee, Shah, & McLeod, 2012).
- Indigenous and non-Indigenous young people in Canada engaged in Idle No More usedsocial media to generate global momentum for the movement showing greater awareness of Indigenous issues (Tupper, 2014).

Gender differences online

- Male adolescents reported having a greater sense of belongingness online but not for females (Shapiro & Margolin, 2014).
- More females than males reported having SNS in a study done in Australia (Neira & Barber, 2014).
- According to Reich, Subrahmanyam, & Espinoza, males are using SNSs less than females (2012).
- Female adolescents report a more negative body image association after viewing those with beautiful pictures on Facebook (Shapiro & Margolin, 2014).
- Social comparison and feedback-seeking online is associated with depressive symptoms. Females and youth with low popularity had a stronger association (Nesi & Prinstein, 2015).
- Females are more involved in cyberbullying, while males are more likely to reference violence (Pujazon-Zazik & Park, 2010). Girls and women are disproportionately targeted for online harassment and violence (The UN Broadband Commission for Digital Development, 2015).

Overall, the literature about social media benefits include facilitating supportive relationships, identity formation and promoting a sense of belonging and self-esteem. A strong sense of community and belonging fostered by social media can promote young people's resilience, such that they can adapt to change and stressful events. These benefits are dependent on media literacy, including skills to critically understand, analyse and create media content. Internet and media literacy, such as an applied understanding of how to produce and manage distribution of online content, is important for informed decision-making regarding one's own and other's privacy, identity, and engagement (Collin et al., n.d.).

Pathways for social identity development online

Young people's engagement online can lead to adaptive or maladaptive social identity development. The following sections summarize the adaptive and maladaptive pathways for social identity development online.

Adaptive pathways:

- In a review of studies (2003-2013), the majority reported mixed or no effects of online social technologies on adolescent wellbeing. Those that did report benefits cited: increased self-esteem, perceived social support, increased social capital, safe identity experimentation and increased opportunity for self-disclosure (Best, Manktelow & Taylor, 2014).
- Online communities are more socio-demographically inclusive source of identification than traditional offline hobby groups (Lehdonvirta & Rasanen & Rasanen, 2011).
- Online places provide safe space for marginalized youth, for example LGBTQ youth to explore sexuality and gender (Lucero, 2017).
- Digital world provides belonging and continuity for globally mobile youth (Hannaford, 2016) and opportunities for transnational identity development through hybrid textual practices online (McGinnis, Goodstein-Stolzenberg, & Saliani, 2007).
- The digital world also provides a sense of belonging, resources and networking opportunities for political participation. It assists with overcoming internalization of systemic challenges and understanding root causes. For example, for LGBTQ+ youth understanding heteronormative society as the problem (Hanckel & Morris, 2014); or girls and young women using blogging communities to participate in feminist political activism (Keller, 2012).
- Young immigrants are using social media to reconfigure community organizing and reenergize democracy. Youth activists use digital media for self-representation: for example, promote positive public representations of being undocumented as alternatives to the widespread representations of "illegal immigrant. " Digital media is also used for mobilization and organizing for political issues: for example building support and boosting visibility in situations where their mobility is limited due to their immigration status and finances (Seif, 2011).
- Using social network analysis, a study of Dutch-Moroccan youth found four network types online using different strategies for connectivity that enable different possibilities for identification and building resilience (Prinsen, de Haan & Leander, 2015):
    - 1) Fragmented networks and using opportunities to build bridges online
    - 2) Large, ethnically homogeneous networks and seeking support online with their 'own' community

- 3) Dense, family-centred networks and keeping in touch with transnational family online
- 4) Small, mainly offline networks, with restraints towards life offline

Maladaptive pathways

- The online environment can be used to isolate, influence thoughts and behaviours; it allows for distributed networks of power, use of consistent discourse to maintain power, and shifting the norm to the extreme (Torok, 2013).
- Online culture normalizes problematic identities (Ridout et al., 2012).
- Anonymity online (e.g., blog posts) is associated with more aggression (Zimmerman & Ybarra, 2016).
- Pro-anorexia sites use four strategies: co-constructing identity, self-loathing, advising, and group encouragement. They build stronger ties to combat offline stigma (Haas et al., 2010).
- Peers online behaviors are influential (e.g., online pictures of drinking, Huang et al., 2014).
- In a review of studies, harmful effects of online social technologies on adolescents were rare. These include social isolation and cyber-bullying (Best, Manktelow & Taylor, 2014). There is some evidence that online and in-person violence targeting youth are related. However, the direction of the relationship, and risks and protective factors for the intersection of online and offline violence have yet to be identified (Patton et al., 2014).
- Online exposure to hate material has a strong relationship with being targeted online. Victim suitability (discussing private matters online, participating in hate online) and confronting hate also increase the likelihood of being targeted (Costello et al., 2016).

What are the characteristics of youth who are most likely to rely on social media to establish their social identity?

Characteristics of youth who use SNS for social identity formation
Individual level characteristics:

- Lonely youth are more frequently online and disclose more (Bonetti et al., 2010), particularly youth 9-14 (Leung, 2011).
- Extraverts report higher usage and engagement with FB (Gosling et al., 2011).
- Youth who are looking for resources to explore identities e.g., LGBTQ (Craig & McInroy, 2013).
- Online places provide safe space for LGBTQ youth to explore sexuality and gender (Lucero, 2017).

Social-level characteristics:

- Youth with low social support, particularly 15-19 year olds prefer online interactions (Leung, 2011).
- LGBT youth more likely than non-LGBT to have online friends who are better than offline at providing emotional support (Ybarra et al., 2015).
- Digital world provides belonging and continuity for globally mobile youth (Hannaford, 2016).
- Youth without drinking friends were more likely to be influenced by exposure to online pictures (Huang et al., 2014).

System level

- Youth who are influenced by systemic forces and factors such as broad, structural, political, social and economic processes (e.g., apartheid) leading to local circumstances (e.g., discrimination, displacement, dispossession of land). For example, young people in refugee camps in Palestine and minority Palestinian Arabs in Israel use new digital media to create personal and social narratives. Youth are using social media and other online media production to "disrupt the notion of whole and bounded cultures by engaging in dynamic conversations within and across Palestinian cultural traditions as well as the wider world." (Asthana & Havandjian,2016, p.1).

Social networking online and radicalization

With the proliferation of communication online, ideological groups can share their values and beliefs broadly. However, the increased presence of ideological groups online has not resulted in a corresponding increase in membership (Angie et al., 2011). In terms of radicalization to violence, there is no strong evidence in the literature that young people are recruited for terror activity via the Internet (Lennings, Ammon, Brummert & Lennings, 2010; Stevens & Neumann, 2009). Rather, young people may be intentionally looking for extremist materials or may unintentionally stumble upon them. In recent examples of radicalization, young people were drawn to media in three ways: 1) Accidental exposure while exploring, 2) Curiosity about information about ideology which may be associated with violent groups, and 3) Looking for a social community with which they can identify (Von Knop, 2007 in Quayle & Taylor, 2011). Those who are intentionally searching are more likely to be radicalized and be associated with political violence (Pauwels & Schils, 2016). However, self-radicalization is exceedingly rare (Stevens & Neumann, 2009).

Ideal types of recruitment (Pauwels et al., 2014)

<table>
<tr><td></td><td colspan="2">Active</td><td></td></tr>
<tr><td rowspan="2">Intentional</td><td>Deliberate recruitment: individual searches intentionally and makes a deliberate choice to join</td><td>Social recruitment: individual searching for social inclusion, meaning or activism. Gradually becomes part of the group without deliberately choosing it and is often unaware of what exactly the group stands for.</td><td rowspan="2">Unintentional</td></tr>
<tr><td>Peer group recruitment: individual is recruited by a 3rd party but is aware of and agrees with what the group stands for.</td><td>Classic recruitment: Unsuspecting individual recruited by a 3rd party and unaware of being recruited or nature of the group</td></tr>
<tr><td></td><td colspan="2">Passive</td><td></td></tr>
</table>

Dangers of radicalization are somewhat mitigated by digital literacy as well as the technical designs of social networking sites (Livingstone & Brake, 2010). Internet behaviours that increase young people's exposure to motivated offenders (e.g., providing personal information) increase the likelihood of victimization (Marcum et al., 2011). However, offline interactions are much more strongly associated with extremism and political violence; the impact of extremism in social media is mediated by the offline world (Pauwels & Schils, 2016). Initial recruitment tends to be face-to-face, offline and initiated by trusted friends, family or other associates (Perry & Scrivens, 2016).

Although it is not clear that Social Networking Sites or other online spaces are effective at recruitment, they are effective at supporting ongoing radicalization processes. Online communities act as an echo chamber for pre-established groups (Stevens & Neumann, 2009). In a study of Canadian right-wing extremists, online forums, music and other materials provide online support for extremists, reinforce and mirror their views, and provide social opportunities with like-minded people (Bowman-Grieve, 2013; Perry & Scrivens, 2016). Furthermore, online sites help to organize and incite violence through online calls for violence (Perry & Scrivens, 2016).

2) Social identity development and radicalization

Definition(s) of radicalization

There are many definitions of radicalization in the academic and organizational literature (see table below). Generally, they all describe radicalization as a gradually escalating process (psychological, social), with growing readiness for action.

Definitions differ or add specificity based on the following:

- Relationship to violence: some differentiate between non-violent and violent radicalization (leading to terrorist/violent acts)
- Intent: sweeping changes to society, challenges legitimacy of status quo
- Relationship to democracy: some definitions describe radicalization as undermining democracy, some as popular revolution
- Focus: political, social issues and/or religious
- In-group commitment, intergroup conflict
- Hyper-awareness of critical issues

For the purposes of this literature review, the nuances that distinguish between violent and non-violent radicalization are important. Therefore, the working definition of radicalization for this project is a psycho-social process of developing ideologies and beliefs that fundamentally challenge the status quo. These beliefs may or may not lead to action. For our purposes, we will examine and compare two types of engagement: 1) Radical engagement associated with a spectrum of non-violent beliefs and acts (i.e., acts that do not harm living beings or incite violence against others[1]) including extreme actions not sanctioned by the dominant legal system; and 2) Radical engagement associated with violence (i.e., beliefs and acts that harm others and/or incite violence against others) including extremist violence and violent terrorism.

Source	Definition
Dr. Randy Borum (Borum, 2011a)	"Process of developing extremist ideologies and beliefs Action pathways: process of engaging in terrorism or violent extremist actions"
Neuman (2010, in Borum 2011a pp. 12), drawing from Palgrave Macmillan Dictionary of Political	Extremism can be used to refer to political ideologies that oppose a society's core values and principles. In the context of liberal democracies, this could be applied to an ideology that advocates racial or

[1] Destruction of property or harm to a corporation or institution is considered non-violent by this definition.

Thought	religious supremacy and/or opposes the core principles of democracy and universal human rights. Also describes the methods through which political actors attempt to realise their aims, "show disregard for the life, liberty, and human rights of others"
Veldhuis & Staun (2009)	Definitions of radicalization have two focii 1) violent radicalization: emphasis on active pursuit or acceptance of violence to attain goal 2)broader sense of radicalization: active pursuit or acceptance of far-reaching changes in society (may or may not be a danger to democracy or use violence)
Dutch Security Service (AIVD), (2005 in Borum, 2011a, pp. 12)	"growing readiness to pursue and/or support— if necessary by undemocratic means— far-reaching changes in society that conflict with, or post a threat to, the democratic order"
Danish Intelligence Service (PET, 2009 in Borum 2011a, p. 12)	Focus on violent radicalization "a process by which a person to an increasing extent accepts the use of undemocratic or violent means, including terrorism, in an attempt to reach a specific political/ideological objective"
U.K. Home Office (2011) CONTEST counterterrorism strategy, in Borum 2011a, p. 13)	"the process by which people come to support terrorism and violent extremism and, in some cases, then to join terrorist groups."
McCauley and Moskalenko (2008, p. 416)	Focus more on mechanisms and group dynamics "Increasing extremity of beliefs, feelings, and behaviours in directions that increasingly justify intergroup violence and demand sacrifice in defense of the ingroup"
Wilner and Dubouloz (2010, p. 38)	Transformative learning "radicalization is a personal process in which individuals adopt extreme political, social, and/or religious ideals and aspirations, and where the attainment of particular goals justifies the use of indiscriminate violence. It is both a mental and emotional process that prepares and motivates an individual to pursue violent behavior."
Stevens and Neuman (2009, p. 10)	Report on "online radicalization" "most of the definitions currently in circulation describe radicalization as the process (or processes) whereby individuals or groups come to approve of and (ultimately) participate in the use of violence for political aims. Some authors refer to 'violent

	radicalisation' in order to emphasize the violent outcome and distinguish the process from non-violent forms of 'radical' thinking."
Crosset and Spitaletta (in Borum 2011a, p. 13)	Psychological and sociological concepts in radicalization "process by which an individual, group, or mass of people undergo a transformation from participating in the political process via legal means to the use or support of violence for political purposes (radicalism)."
RCMP (2016)	"Process by which individuals are introduced to an overtly ideological message and belief system that encourages movement from moderate, mainstream beliefs toward extreme views"
1. Neumann & Rogers (2008) 2. Horgan J (2009, p. 186) (in Bhui, Dinos & Jones, 2012)	"Social and psychological process of increasing commitment to extremist political or religious ideology"
Hunter & Heinke, 2011 (FBI)	"The process by which individuals come to believe their engagement in or facilitation of nonstate violence to achieve social and political change is necessary and justified."
German law enforcement (Hunter & Heinke, 2011)	"Turning of individuals or groups to an extremist mind-set and course of action and the growing readiness to facilitate or engage in nondemocratic methods up to the execution of violence to achieve their goals."
Canadian Security Intelligence Service (2017)	Process whereby individuals move from holding moderate, mainstream beliefs towards adopting extremist political or religious ideologies. Individuals who become radicalized may support or become involved in violent extremism. Activities can range from attack planning against Canadian targets, sending money or resources to support violent extremist groups, and/or influencing others (particularly youth) towards adopting radical ideologies.
The Expert Group on Violent Radicalisation established by the European Commission in 2006 (Schmid, 2013)	Socialization to extremism which manifests itself in terrorism

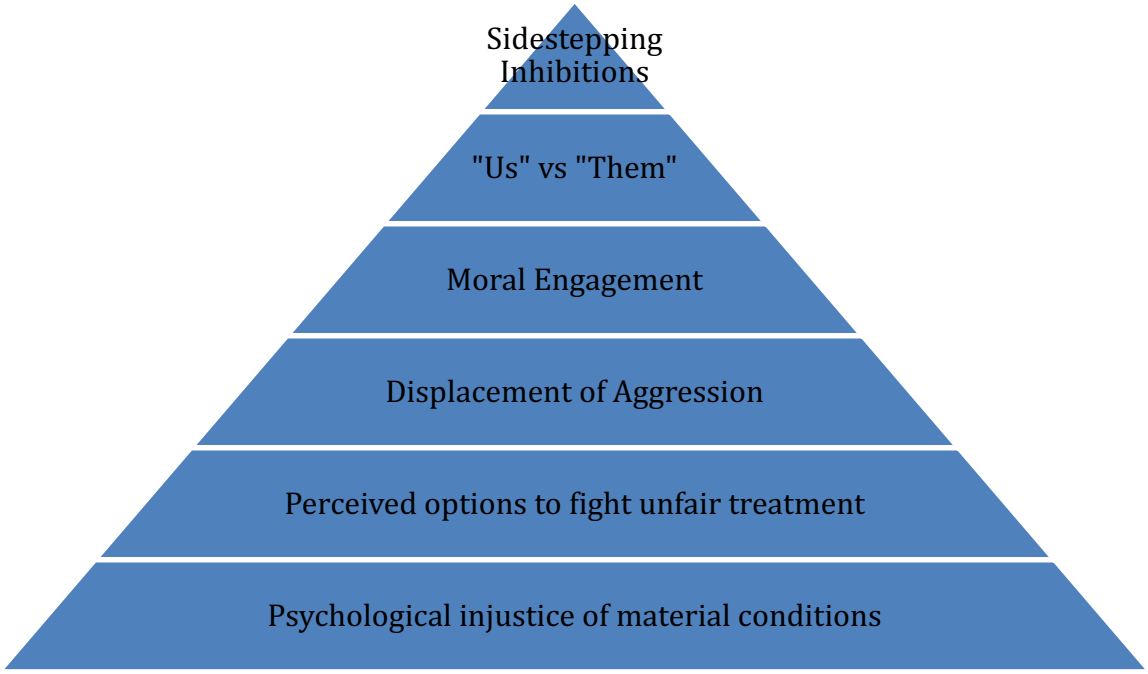
Della Porta & LaFree (2012)	Used and/or quoted seven definitions: • emerged in the 70s to stress the interactive (social movement/state) and processual (gradual escalation) dynamics in the formation of violent, often clandestine groups • radicalization may be understood as a process leading towards the increased use of political violence[...]; • radicalization is understood as an escalation process leading to violence; • many researchers conceptualize radicalization as a process characterized by increased commitment to • radicalization may more profitably be analysed as a process of interaction between violent groups and their environment, or an effect of interactions between mutually hostile actors; • functionally, political radicalization is increased preparation for and commitment to inter-group conflict. • descriptively, radicalization means change in beliefs, feelings, and behaviours in directions that increasingly justify intergroup violence and demand sacrifice in defense of the group;
Oxford English Dictionary (https://en.oxforddictionaries.com/definition/radicalization)	"The action or process of causing someone to adopt radical positions on political or social issues."
Githens-Mazer (2012)	Many meanings in the literature: • forms of populism related to revolutionary opportunity • a revolutionary act in response to declining power • "ultra" form/intensification of existing political orientations and behaviours often typified by a shift from peaceful activity to (ever more) violent 'extremism' • process by which political moderates become militant or increasingly support extremists and their positions, as well as related sense of reaction to catalyst occasionally described as recruitment • an individual sense of becoming hyper-aware

	of critical issues resulting in a "radical irrationality" and a subsequent willingness to violently act on this awareness.
The European Commission's Expert Group on Violent Radicalisation, 2008 (in Dzhekova et al., 2016)	Radicalism as advocacy of, and commitment to, sweeping change and restructuring of political and social institutions has historically been associated with left and right-wing political parties- at times even with centrist and liberal ideologies- and involves the wish to do away with traditional and procedural restrictions which support the status quo. As an ideology, radicalism challenges the legitimacy of established norms and policies but it does not, in itself, lead to violence.
Bartlett, Birdwell, and King (in Dzhekova et al., 2016)	Non-violent radicalization: • process by which individuals come to hold radical views in relation to the status quo but do not undertake, or directly aid or abet terrorist activity referred to as radicals Violent radicalization: • process by which individuals come to undertake terrorist activity, or directly aid or abet terrorism.
Dalgaard-Nielson (2010)	In terms of broader relationship to radicalism: • a radical is understood as a person harboring a deep-felt desire for fundamental socio-political changes and radicalization is understood as a growing readiness to pursue and support far-reaching changes in society that conflict with, or post a direct threat to the existing order […] violent radicalization [is] a process in which radical ideas are accompanied by the development of a willingness to directly support or engage in violent acts
Neumann (2013)	At basic level: "process whereby people become extremists."
Mandel (in Dzhekova et al., 2016)	Relationship between radicalization and extremism: radicalization is to extremism as velocity is to position. That is, radicalization is a (positive) change in the degree of extremism expressed by an individual or group
European Commission's Expert Group on Violent Radicalization (2008 in Dzhekova et al., 2016)	Difference between radicalization and extremism: • radicalization is understood as the process of "socialization to extremism which manifests itself in terrorism," where extremism (and terrorism in particular) implies the "active

	subversion of democratic values and the rule of law"
Prevent Strategy of the UK Government (in Dzhekova et al., 2016)	• radicalization: process by which a person comes to support terrorism and forms of extremism leading to terrorism • extremism: vocal or active opposition to fundamental British values, including democracy, the rule of law, individual liberty and mutual respect and tolerance of different faiths and beliefs • violent extremism: endorsement of violence to achieve extreme ends.
General Intelligence and Security Service (AIVD) of the Netherlands, 2004 (in Dzhekova et al., 2016)	Active pursuit of and/or support to far-reaching changes in society which may constitute a danger to (the continued existence of) the democratic legal order (aim), which may involve the use of undemocratic methods (means) that may harm the functioning of the democratic legal order (effect)
Norwegian government in its *Action Plan against Radicalisation and Violent Extremism*, Norwegian Ministry of Justice and Public Security, 2014 (in Dzhekova et al., 2016)	Radicalization: process whereby which a person increasingly accepts the use of violence to achieve political, ideological or religious goals. Radicalization that results in violent extremism: cognitive development toward a steadily more unilateral perception of reality, where there is no room for alternative perspectives; thereafter, a further development where the perception of reality is experienced so acutely and seriously that violent actions appear necessary and just. Violent extremism: activities of persons and groups that are willing to use violence in order to achieve their political, ideological or religious goals.
US Department of Homeland Security (in Dzhekova et al., 2016)	Process of adopting an extremist belief system, including the willingness to use, support, or facilitate violence, as a method to effect social change.
Swedish Security Service (Säpo, 2009) (in Dzhekova et al., 2016)	" A process that leads to ideological or religious activism to introduce radical change to society." " A process that leads to an individual or group using, promoting, or advocating violence for political aims.

Models of radicalization

There are several models of radicalization. Moghaddam's Staircase model of radicalization (see figure below, Moghaddam, 2005) has been useful to understand the root causes (at the bottom of the pyramid) and the progression of a process towards the top of the pyramid. Interestingly, many of these steps may characterize both violent and non-violent radicalization processes. These stages also indicate potential intervention moments that may lead a young person down different and more adaptive pathways.



Pathways between social identity and radicalization

There are two reasons why social identity formation is critical for explaining social movements: 1) Social identities make group behavior possible (i.e., shared understanding of who "we" are) and 2) When a social identity is salient, members of the group's behaviors are aligned with group norms (Thomas et al., 2010). It is no surprise then that ideological groups use social identity formation as a process to initiate and sustain engagement. Ideological groups also provide opportunities for self-expression in line with the group (e.g., symbols and styles online and offline), justification for behavior, and encouragement for accepting ideological leadership (Moghaddam, 2004; Mumford et al., 2008). Youth in ideological groups experience simultaneous development of their collective and personal identities, which are both shaped by membership in a group where social identity involves an emotional attachment to the group and a clear understanding of social status in relation to other groups. Ideological groups foster development of personal and collective

identities (differentiation and assimilation) through feelings of belonging, family, community, and opportunities for identification with the group (Angie et al., 2011).

Young people through social interaction construct and negotiate a sense of "who we are" and "what we do.", This interactional identity formation influences prosocial and discriminatory social action. In an experimental study to understand why groups favor radical or extreme solutions (i.e., breaking the law, but non-violent) over more moderate or conventional political pathways, Thomas and colleagues (2014) found that social interaction can lead to both extreme and moderate pathways. However, radicalization is based on the perception that extreme action is legitimate. The study found that priming participants to accept the legitimacy of more extreme (non-violent) measures combined with social interaction (i.e., small group discussion), created conditions for support for extreme action (Thomas et al., 2014).

Similarities and differences between violent and nonviolent radical engagement

Thomas and colleagues (2010) argue that similar processes underlie the formation of identities that are seen either as prosocial or hostile. In a comparative study of terrorists, non-violent radicals, and young Muslims, identity issues were salient in all three groups. In other words, identity is not a sufficient explanation for radicalization on its own (Bartlett & Miller, 2012). However, there are some important characteristics that distinguish between prosocial and hostile groups. One of the key differences is that in a prosocial socio-political group, the focus is on socio-political action for social change rather than developing a hostile view of an out-group (Thomas et al., 2010).

Furthermore, while using similar processes as nonviolent ideological groups, violent ideological groups condone violence or are linked to violent acts. They tend to be aligned with extremist ideology that justifies the violence. This ideology promotes psychological processes that may contribute to a group's susceptibility to violence (Mumford et al., 2008). These are social categorization practices that emphasize ethnic out-grouping, dehumanization of out-group members, and feelings of group superiority through promoting a sense of ideological and moral righteousness.

A study by Angie and colleagues examined 29 websites with 50 threads from three ideological classifications: 1) violent ideological (mostly White supremacist or hate groups), 2) nonviolent ideological, and 3) nonviolent nonideological groups.[2] Social identity formation was significantly and positively correlated with dehumanization

[2] This study did not explicitly focus solely on young people. However, the findings were considered relevant for understanding the differences between violent and nonviolent ideological groups therefore they were included in the review.

(r=.66), moral superiority (r=.69), and ethnic out-grouping (r=.55). Acceptance of ideological leadership shows a small, but negative correlation with dehumanization (r=-.07) and social identity formation (r=-.10) and a large positive correlation with discussion of Western government policy (r=.56), diverging from more extreme processes. Violent ideological groups had higher levels of discussing religious content, dehumanization, social identity formation, moral superiority, self-expression opportunities, moral engagement and ethnic out-grouping than did either nonviolent ideological or nonviolent non-ideological groups (Angie et al., 2011).

Focus outward and diversity of perspectives

Key qualities and characteristics of positive youth engagement include a "focus beyond the self" (Pancer et al., 2002; Rose-Krasnor, 2009) and a diversity of experiences and perspectives (Khanna et al., 2014). These are also characteristics that distinguish nonviolent ideological groups from violent ideological groups. Nonviolent ideological groups are focused outward beyond the group and engage in more open, less extreme discussions about policy and discussions on current events. Violent ideological groups discuss only issues relevant to the group ideology, are isolated from current events, and attend less to external or mainstream information. In fact, violent ideological groups were less likely than (nonviolent) nonideological groups to discuss Western government policy and current events (Angie et al., 2011).

Prosocial norms

As described earlier, when a social identity is salient, members of the group's behaviors are aligned with group norms (Thomas et al., 2010). As a key quality of youth engagement settings, prosocial norms can serve as a protective factor against antisocial and violent behaviors (Eccles & Gootman, 2002; Hawkins & Weis, 1985; Ma, 2012; Turner et al., 2014). For example, in a longitudinal study, an increase in school identification over time was significantly related to a decreased rate of both bullying perpetration and peer victimization over time. Identifying with their school was a strong predictor of change in peer victimizing. This provides support for extending the social identity framework to a sense of belonging or psychological connection to the school and its members, or to a program and its members (Turner et al., 2014).

Violent extremist groups use online communication to help shift the norm to the extreme (Torok, 2013). As described earlier, priming participants to accept the legitimacy of more extreme measures combined with influential small group discussion, creates social norms conducive to supporting extreme action (Thomas et al., 2014).

Violent ideological groups are strongly defined by their ethnic group and tend to label out-group members negatively and blame them for current conditions. They also use more group-relevant symbols online, which may be a useful indicator for a group's proneness to violence. Violent ideological groups also tend to focus on

religious discussions and cite moral justifications for the goals of their group. These latter processes may be similar to nonviolent groups, but the level of extremity on these constructs may be a useful indicator for violence (Angie et al., 2011).

3) Influences on "radical" social identity formation

Based on the most comprehensive review of empirical research on radicalization at the time, there was no evidence of a "youth vulnerability profile." Identity crisis was found to be a poor predictor. Due to Islamophobic bias, the literature has focused disproportionately on Muslim youth, entangling terrorism, radicalization and extremism with notions of identity, integration, segregation and multiculturalism. However, new transcultural identities, generational change and other negotiations of complex cultural spaces are a feature of young people's lived experiences rather than evidence of a process of radicalization (Lynch, 2013). Despite the lack of vulnerability profile among youth, factors that allow some level of prediction of risk of individual radicalization may include: membership in a social network containing radicalized members, being in a period of transition, chance social selection, and having a moral vulnerability or non-adherence to a conventional moral framework (Bouhana & Wikstrom, 2011 in Lynch, 2013).

Studies of specific radicalized groups suggest determinants of susceptibility. For example, perceived injustice, perceived group threat, relative deprivation and strong group identification were determinants of susceptibility for adopting radical right-wing attitudes and behaviours in Dutch youth. Perceived in-group supremacy was associated with endorsement of right-wing motivated violence (Doosje et al., 2012). In addition, personal uncertainty predicts violent attitudes towards out-groups, reinforces identification with radical groups and strengthens behavioral intentions such as extremist actions (Doosje et al., 2013; Hogg et al., 2010). In an experimental study, participants with high self-uncertainty identified significantly more strongly with groups perceived as high in entitativity, or pureness of the group (Hogg et al., 2005). Other similar research has shown that when grievances are shared between people, stronger bonds form (McCauley & Moskalenko, 2008).

Interestingly, profiles of people with greater levels of sympathies to violent ideology and terrorist acts tend to undermine stereotypes of radicalized individuals. Bhui and colleagues found that sympathizers were more likely to be under 20 years of age, students, born in the west (study was focused in the UK), speak English at home, and have an income over £75,000 per year. There was no correlation found between radicalization and poor mental health, negative life events, or socio-political beliefs (Bhui, Warfa, & Jones, 2014). These results are consistent with the finding that in many Western attacks by Islamist groups, the perpetrators were radicalized Westerners and citizens of the attacked countries (Wilner and Dubouloz, 2011). Other archival studies have supported the link between radicalization and higher education. A study conducted by Denoeux and Carter, funded by the United States Agency for International Development in 2009, examined archival records of known terrorists involved in five

recent attacks on Western society. Of the 79 terrorists examined, 54 possessed at least some university education; this is 68% of the sample. This is especially telling when compared with the general American population, of which only 54% possess a university education (Denoeux & Carter, 2009).

Initiators of engagement in radicalization processes

The literature describes initiators to radicalization in terms of push and pull factors. A push factor is any perceived grievance or factor that alienates an individual from mainstream ideology. A pull factor is the perceived incentive or reward that draws an individual towards extremist viewpoints. Push and pull factors work together: the individual is made to feel alienated from society and simultaneously presented with a rewarding alternative (Borum, 2011). The following are push and pull factors for radicalization identified in the literature (Schils & Verhage, 2017). However, it is important to note that risk factors are not sufficient to explain individual radicalization.

Individual:
Push factors (propensity):

- Personal history: Childhood trauma (Simi, Sporer & Bubolz, 2016), personal victimization (McCauley & Moskalenko, 2008)
- Personality traits: impulsivity, sensation seeking and high risk behaviour (Simi et al., 2016), personal uncertainty (identity: Doosje et al., 2013)
- Emotions: frustration, hate, anger, fear
- Social psychological mechanisms: perceived injustice, group threat, insecurity (Doosje et al., 2013; 2012; Ghosh et al., 2017)

Pull factors:

- Ideological recognition

Social
Push factors:

- Social mechanisms: lack of social integration, inclusion, belonging, purpose, identity

Pull factors:

- Significant others (e.g., friends, family) involved in radicalized groups (McCauley & Moskalenko, 2008)
- Social mechanisms: Group polarization (e.g., echo chamber) (McCauley & Moskalenko, 2008)

System
Push factors

- Contextual factors: broad, structural, political, social and economic processes (e.g., segregation) leading to local circumstances (e.g., discrimination,

unemployment) and therefore distrust, dissatisfaction, and perceived marginalization

Pull factors

- Attractiveness of violent extremist group claims: address issues and fulfill social and psychological needs. Violent extremist groups offer 1) an answer to existential life questions to respond to need for meaning and significance, 2) political activist response to injustice to address experienced injustice, and 3) a sense of home and belonging to respond to a need for social inclusion
- Catalysts: trigger events and violence
- Globalization: global reach of terrorist organizations (Ghosh et al., 2017; Stibli, 2010)

It is interesting that ideology-related push and pull factors are not always salient. Post-hoc justification of membership is typically based on ideology; however, most initiations are rooted in a more social breeding ground (i.e., meeting like-minded individuals and then go through process of radicalization together). In the majority of cases, ideological framework is adopted after recruitment (Doosje et al., 2013; 2012).

Some gender differences in push and pull factors suggests that young men and young women may be targeted differently online. For example, between 2014 and 2016, ISIS published *Dabiq*, an online propaganda magazine targeted specifically at recruiting western extremists. In each issue of *Dabiq*, a section was devoted to the "sisters" and emphasized the importance of the female role in the ISIS communities. This manipulation placed importance on the roles of women as the wives of martyrs and on the community aspect of sisterhood (Saltman & Smith, 2015).

4) Interventions

This section of the literature review will attempt to answer the question: What interventions have been tried to promote positive identity and make maladaptive identifications less likely?

Youth programs and interventions designed to prevent radicalization leading to violence fall into three categories based on the process being targeted:

1) Primary prevention (i.e., reduce risk of exposure): These interventions are upstream and provide youth with alternative and adaptive pathways to social identity formation including engagement in non-violent socio-political movements.
2) Secondary prevention (i.e., harm reduction): These interventions provide young people with the skills to critically analyze and resist influences of radicalized groups that are associated with violence.
3) Tertiary prevention (i.e., recover and rehabilitation): These downstream interventions target young people who are already influenced by or involved in a radicalized group associated with violence.

1) Primary Prevention: Effective youth engagement programs and practices associated with adaptive social identity formation

The following sections identify key practices and qualities that characterize positive engagement interventions.

Youth-led

Peer engagement and belonging is a key initiator and sustainer of youth engagement (Gordon & Taft, 2011; Kennelly, 2011). Gordon and Taft (2011) found similar themes from two ethnographic studies, one focused on how inequalities shape the politics of urban youth activism in the United States, and one focused on girls' participation in alter-globalization movements in North and South Americas. In young people's narratives about their experiences of youth-led activism, they describe the importance of peer political socialization. Youth activists construct their own spaces for political socialization and building each other's political knowledge and skills (Gordon & Taft, 2011).

Young activists in these studies viewed youth-led, peer-based political socialization as the solution to youth disengagement. They critiqued the idea that youth are apathetic and described the social factors and processes that disaffect different young people and promote forms of disengagement from formal, conventional political activities. For example, youth identified how white, middle-class youth were insulated from the immediate effects of social problems. Alternatively, youth living racial and ethnic isolation and poverty are deeply aware of social inequities, but are reluctant to expend energy towards social change due to cynicism and hopelessness. Youth activists suggest youth-led movements are a solution to

disengagement, and the influence of peer political socialization (rather than adult-led or adultist assumptions about what youth can do) is critical (Gordon & Taft, 2011).

In a study of a youth organizing initiative, Inland Congregations United for Change (ICUC), Christens & Dolan found that this model was effective at producing impacts at the individual, social, and community levels. At the social level, youth experienced greater relationships across social divides through multicultural and interfaith collaboration. Youth organizing initiatives are distinguished from other youth community engagement models by four characteristics (Christens & Dolan, 2011):

1) Power analysis: Centred on conditions faced by young people, the systemic nature of these conditions and the role of power in producing and maintaining these conditions (Watts & Guessous, 2006)
2) Empowerment: Youth learn strategies to mobilize their collective social power to make change (Checkoway & Richards-Schuster, 2006)
3) Social justice: Youth involved choose the issues in a collective decision-making process (Speer, 2008)
4) Youth leadership: Adults support youth, but youth lead in decision-making (Share & Stacks, 2006)

Meaning

In a thesis study, Eidoo (2012) examined how young Muslim activists in Toronto, Canada (n=18) between 16-29 years of age develop multiple and hybrid social identities, and how they mobilize these in their activism. Youth described their motivations for engaging in activism as challenging social exclusion and discrimination, and constructing inclusive, agentic social identities. For example, living in social housing in a neighborhood marked by concentrated poverty impacted young people's social identities and feelings of belonging beyond their neighborhoods. Youth were motivated to get involved in their social housing organization to challenge racist and classist thinking and better understand how to access and secure resources for their communities. One group of youth was motivated to act for social change after experiences of police brutality and criminalization of their communities. Another group of young women focused on creating safe cultural and political spaces for young Muslim women to develop their own critical social identity(ies) and challenge constructions of their social identity as silent, passive, subservient and victimized.

Youth-adult partnerships

Gordon & Taft (2011) found that young people in North America were critical of adult-initiated social movements. However, there were effective roles for young adults and adults who explicitly recognize ageism as a legitimate oppression in youth-led movements: for example accessing resources that young people could not, and/or running interference with other adults. The relationship with adults differed across different young people. Youth who were marginalized (e.g., based on their socioeconomic, citizenship or racial minority status) were more likely to collaborate intergenerationally and work with adults to access resources they could not.

Similarly, in a case study of the My Voice Counts! Campaign, a youth-focused organization integrated two critical mechanisms to build youth-adult partnership: 1) dedicated staff and youth interns supported each young person with ongoing communication and meetings, and 2) adults leveraged their networks and resources to support young people's work. These connections were invaluable for the success of young people's action (Share & Stacks, 2006).

Recently, Ramey, Rose-Krasnor & Lawford (2017) found participation in youth-adult partnerships was positively related to a rational, reflective, and information-seeking style of identity formation (Berzonsky, 1989). Youth-adult partnerships are believed to promote positive identity by offering youth opportunities to explore different roles, share meaningful decision-making with adults, learn skills, and increase their sense of self-effectance.

Prosocial norms and task cohesion

Non-violent ideological groups are less likely to behave antisocially to the out-group. In a study of youth sport participants (N=329, mean age=15.88 years), Bruner and colleagues (2014) found that social identity plays a salient role in regulating prosocial and antisocial behavior in youth sport. In-group affect (i.e., positive feelings associated with the group) has a positive effect on young people's prosocial behavior towards their teammates. Interestingly, stronger connection to the team (in-group ties) was not significantly associated with more frequent antisocial behavior towards opponents, which may in part be a function of existing team social norms. Furthermore, task cohesion (degree to which members of a group work together towards a shared goal) was found to mediate effects of social identity. In other words, as task cohesion increased, youth were more likely to behave prosocially toward their teammates and less likely to behave antisocially towards their teammates and opponents (Bruner, Boardley & Côté, 2014). Prosocial norms are considered key components of youth well-being in foundational positive youth development literature (e.g., Catalano et al., 2002; Eccles & Gootman, 2002; Khanna et al., 2014; Lawford et al., 2012; Ma, 2012).

Efficacy and opportunities for skill building

Nonprofit activist youth groups are intensive training grounds for developing political consciousness and engaging them in political processes, leading to future activism in early adulthood. These "programs" are characterized by: in-depth learning about issues affecting their communities and the different government offices/leaders roles in addressing issues; critical analysis of social problems and how to address them through political processes; and educational activities focused on promoting a critical understanding of social inequalities through a political lens (e.g., learning about "isms" and roots of problems). These experiences provide youth with different types of roadmaps for how to take collective action on political issues in the future.They also connected their grassroots campaigns to broad contemporary social movement efforts (Christens & Dolan, 2011; Terriquez, 2015). Meta-analyses of youth programs have shown that programs that empower and foster skill-building typically offer multiple sessions per week, provide

individualized feedback, and involve developmentally appropriate tasks (Morgan et al., 2013). The evidence supporting inclusion of appropriately challenging tasks is very strong. Mastering incrementally more challenging tasks build confidence and competence (International Youth Foundation, 2010; Wilson & Lipsey, 2000). A focus on efficacy and skill building are integral to positive youth development programs (Eccles & Gootman, Khanna et al., 2014; Lawford et al, 2012).

Selected primary prevention intervention examples: promoting engagement (e.g., civic engagement, social activism)				
Program	**Program description**	**Target population**	**Framework**	**Evaluation/findings**
Youth Empowerment Strategies (YES!) (Wilson et al., 2007)	Weekly 90-minute meetings after school, with high school and graduate school co-facilitators. Co-facilitators were trained in participatory education techniques, youth development, group facilitation and management, and conducting social action projects with youth. Sequential curriculum over the first 25 sessions included: 1) Group formation (team building, establishing group norms, learning cooperative skills); 2) photography (assignments on light, balance, perspective, rule of thirds), looking at others' photos to interpret; 3) Photovoice (taking photos of issues and assets, SHOWeD freewrites, critical dialogue and reflection with others); 4) Community organizing strategies (identifying priority topics, democratic decision making about social action project topic and method, strategies for action planning, recruiting allies); 5) Engaging in social action; 6) Engaging the community in social action	Youth 9-12 years living in high risk, low income communities. Included 122 youth in the study, majority were Latin (53.3%)		Photovoice approach provides youth with opportunities to engage with social environment, do critical analysis and take action in their communities. Photovoice method needs to be supported by curriculum. Group formation and teambuilding is essential for creating conditions for group efficacy, empowerment. Strong facilitation is critical. Sufficient duration (2-3 months) would be recommended for deeper social action.
Youth For EcoAction (Boys and Girls Club Winnipeg) (Fulford & Thompson, 2013)	Leadership program through environmental activities and urban agricultural projects.	Youth 9-18 from marginalized, low income families. Sample included 192 youth and 10 included in interviews		Low effect size. YEA had overall impacts on skill building, self-esteem, community building, food security and environmental awareness. Initiating factor: sense of community, belonging

2. Secondary Prevention: Effective youth engagement programs and practices to build resilience against violent influences

Empowerment and empathy

Results suggested that an intervention aimed at empowering individuals and strengthening empathy is successful at countering violent radicalization (Feddes et al., 2015; Ghosh, 2017; Pratchett et al., 2010). Designed for a wide range of young people, there were no correlations between relative deprivation or social disconnectedness with radical tendencies. Perspective taking was associated with more positive attitudes toward ideology-based violence (Feddes et al., 2015). In other studies (e.g., Bruneau & Saxe, 2012 in Feddes et al., 2015), "lower status" or oppressed participants' bias decreased in perspective giving (rather than perspective taking) condition (i.e., feeling heard about their living conditions).

In a meta-analysis of structured programs to reduce prejudice or promote positive intergroup attitudes among young people, interventions had low to moderate effects. Those that were based on direct contact experiences and social-cognitive training programs to build empathy and perspective taking showed the strongest effect sizes. Majority group benefited the most. When focused on reducing prejudice or promoting positive attitudes towards ethnic groups (as compared to out-groups with disabilities or senior citizens), the effect sizes were lower (Beelmann & Heinemann, 2014).

Literacy skills

Different types of skills and literacies were identified across various existing interventions as important for critically assessing online messages as well as producing media to express young people's identities:

- Critical media literacy skills (Begoray et al., 2014; for social activism, McArthur, 2016)
- Transcultural literacy (Kim, 2015)
- Multimedia production skills (Begoray et al., 2014; Keller, 2012)

One approach is called attitude inoculation, which provides youth with the ability to argue against increasingly demanding pressures to conform (Compton, Jackson, & Dimmock, 2016). The term comes from inoculation of viruses; if radicalization is a virus, then providing youth with examples of what radical propaganda looks like would likely help youth think more critically when they do come into contact with the propaganda in real life.

Youth-centred practices

Based on ten case studies of effective interventions to build resilience to extremism among young people, an investigation identified key ingredients (Bonnell et al., 2011):

1) Making a connection through good design and a youth-centred approach

    a. Enjoyable
    b. Clear learning objectives
    c. Concrete goals for youth, sense of ownership, sustained involvement
    d. Youth-centred and youth-led
    e. Produce something real together
2) Facilitating a safe space for dialogue and positive interaction
    a. Factors for safe space
    b. Youth-adult partnership
    c. Respect young people's pre-conceptions without judgment
    d. Access sufficient knowledge
    e. Admit gaps in facilitators' knowledge
    f. Accurately assess young people's knowledge levels
3) Equipping young people with appropriate capabilities
    a. Build resilience and positive sense of identity
    b. Use theoretical frameworks and interactive techniques
    c. Element that encourages youth to step outside of comfort zone (stretch element)
    d. Support to explore and celebrate personal identity
    e. Promote critical thinking skills
    f. Awareness that experiences other than their own exist
    g. Encourage youth to access a balanced range of information and appreciate an evidence-based approach

Ethnic identity

A strong cultural/ethnic identity has been found to be a protective factor for young people against the negative outcomes associated with discrimination (Benner & Kim, 2009; Ellis et al., 2010; Wong et al., 2003). In a two-year longitudinal analysis of African American youth during the transition from junior high to high school, Wong and colleagues found that adolescents who perceived high discrimination and had high connection to their ethnic group were doing as well in terms of their socioemotional adjustment as their counterparts who perceived little or no discrimination (Wong et al., 2003).

Diversity and intergroup connections

At the community level, social connections within and between communities are critical for community resilience to violent extremism. Programs and policies that support social connections between systems (i.e., communities, organizations, governing bodies) can support prevention efforts and increase and deepen social bonding to contribute to community resilience (Ellis & Abdi, 2017). Rather than solely a focus on alienation from dominant communities, which has historically ignored white supremacists in white-majority communities, this framing suggests that what makes one vulnerable to violent extremist pathways is the absence of bridging social capital (e.g., Doosje et al., 2013; Chermak & Gruenewald, 2015). In other words, resilient communities have strong connections to others who are different from themselves in important ways (Ellis & Abdi, 2017). This literature parallels the youth engagement literature, which suggests that diversity of people

(e.g., different perspectives, backgrounds, experiences) and integration between communities and systems (e.g., schools, families, governments) are important features of youth programs and settings (Eccles & Gootman, 2002; Lawford et al., 2012; Khanna et al., 2014).

Selected secondary prevention examples: e.g., resilience, critical media literacy				
Program	**Program description**	**Target population**	**Framework**	**Evaluation/findings**
ERASE-Stress-Pro-Social (ESPS): School-based intervention for reducing post-traumatic symptomology and intolerance during political violence (Berger, Gelkopf, Heineberg, & Zimbardo, 2016)	Homeroom teachers trained in program to cultivate: civic values and social and emotional skills. Relates to five social spheres: the peer group, the class, the school, the community, and the nation. The major topics addressed are sharing and participating, social involvement, conflict management, responsibility and accountability, giving, solidarity, showing respect, teamwork, security, and safety. Students have an hour and a half class per week. 16 sessions are outlined in the article.	Experimental study with 200 Jewish Israeli students (Grades 3-6) exposed to the 2008 Gaza War.	Youth who are exposed to political violence and experience personal threat might also develop prejudicial and exclusionist attitudes toward out-group members. Therefore, this program takes a 2-pronged approach: 1) Stress reduction interventions and 2) Strategies for reducing stereotyping and discriminatory tendencies toward the other.	The greater the reduction in PTSD, the greater the reduction in discriminatory attitudes. Greater reduction in discriminatory and stereotyping in the intervention group (β=-0.35, p=.001) as compared to a control group taking a conventional social skills course (β=-0.16, p=.05).
Don't be a Puppet (FBI)	Interactive website; quizzes, videos, short blurbs about violent extremism. Earn a certificate.	Gr. 11 reading level?	Critical thinking	N/A
Allies and Aliens: A mission in critical thinking (MediaSmarts)	Interactive online game to build critical media literacy and increase young people's skills to recognize bias, prejudice and hate propaganda on the Internet and in other media	Youth in Grades 7-8 (Canada)	Critical media literacy and familiarity with techniques of influence and persuasion including bias (e.g., headline, manipulation of statistics, word choice and tone) and propaganda techniques (e.g., symbols, nationalism, fear mongering). The focus is to encounter varying degrees of prejudice and discrimination as they visit Web	N/A SME interview recommended

			sites from other planets, first uncritically and then with guidance. The "mission" is a pretense to keep players from guessing the true objective right away.	
Visualizing Empathy (Project SOMEONE)	Art curriculum for youth using social media to engage youth in conversations about empathy through a series of missions requiring participants to create and share personal digital productions.			SME interview recommended
Beyond Bali (Aly, Taylor, & Karnovsky, 2014)	Education on social impacts of a violent extremist attack (Bali Bombings) to humanize victims and assess harmful impacts; Dilemma stories used to clarify, explore young people's values and compare and discuss them with peers: moral learning; Youth experience concrete examples (e.g., Bali Peace Park) of how societies can respond positively/productively to violent extremism to encourage them to think about ways they can resist violent extremism as an individual and collective.	15-16 year old students	Moral Disengagement Theory and Moral Development Theory Theoretical premises: 1) Radicalization more likely as youth adopt moral disengagement mechanisms and reconstruct violent extremism as morally just, dehumanize others, obscure personal agency, disregard the harms and consequences of violent extremism; 2) Education interventions can psychologically immunize youth against social influences promoting violent extremism by constructing violent extremism as morally unjust and inhumane, empathizing with victims of violent extremism, developing self-efficacy, and awareness of the harm and effects of violent extremism	

3. Tertiary prevention: Effective youth engagement programs and practices for disengagement and deradicalization

Tailored to individuals

Programs in this category target young people who are already influenced or part of a violent radicalized group. Programs that target youth identified as at-risk of involvement in gang violence or violent extremism are tailored to each individual (e.g., UK's Strategy to Reach, Empower, and Educate Teenagers; Calgary's Youth At Risk Development program).

Opportunities for alternative social identities and roles

Disengagement from a violent radicalized group is a long-term and complex process, shaped by push and pull factors, and may be reliant on physical (and virtual) separation (disengagement) from the radicalized group even before de-radicalization is complete (Horgan et al., 2017; Windisch et al., 2016). Based on a case study, Horgan and colleagues suggest that interventions support young people to successfully adopt a new social role and social identity, which may be an important protective factor to prevent re-engagement (Horgan et al., 2017).

Prosocial networks

In an analysis of three multi-site studies on gang disengagement, most participants had multiple factors to leave, push factors (e.g., adverse consequences of the gang lifestyle) to leave the gang exceeded pull factors (e.g., often external life circumstances or opportunities such as a job, birth of a child, etc.). Furthermore, the studies involved youth and adult samples and found that motivations for disengagement appear to increase in complexity with age (Roman, Decker, & Pyrooz, 2017; Carson, Peterson & Esbensen, 2015). Programs that integrate the pushes and pulls of gang disengagement in their theory of change included focused deterrence, job programs, and relationship-based interventions with street outreach, with a focus on therapy, family, and fatherhood. Programs that target young people disillusioned with their gang that offer sustained opportunities to engage in networks with prosocial adults were most successful (Carson & Vecchio 2015; Roman, Decker & Pyrooz, 2017). This finding parallels positive youth development research about the importance of prosocial norms and youth-adult relationships (e.g. Khanna et al., 2014).

Counternarratives

Another area of programs focuses on counternarratives and counselling to complete the process of deradicalization, which may supercede one's exit (Horgan et al., 2017). These involve components such as role models who can share their deradicalization journey (e.g., EXIT USA), direct exposure to outgroups, and alternative world views (e.g., EXIT-Germany).

Many of the interventions in this category have few statistics, in part because of the need to maintain anonymity and privacy. This added risk also makes it difficult for young people to join a program or recruit young people. In a study about who is best positioned to notice the early signs of youth considering violent extremism, Williams and colleagues found that friends may be more effective than others, including family, school counselors or clergy. Fear of repercussions kept young people from reaching out to relevant service providers. Fear of damaging relationships and personal identification with friends might reduce both willingness to intervene and ability to recognize the early signs (Williams, Horgan & Evans, 2016).

Selected tertiary prevention examples: e.g., exit strategies, downstream interventions				
Program	**Program description**	**Target population**	**Framework**	**Evaluation/evidence/findings**
Youth At Risk Development (YARD) (Calgary Police Dept) (City of Calgary, 2014)	Recruitment by referral	10-17 year olds at risk of gang involvement and criminal behaviour	Youth referred by various sources, program tailored to the individual with an individualized case plan. The case plan identifies young person's strengths and areas for improvement across developmental domains, targets specific goals, and introduces programs to support youth to achieve those goals.	Evaluated as successful, youth gang involvement decreased. Participants often cited male YARD team members as role models. SME interview recommended
Exit USA (Life After Hate)	Interventions, social media strategies, partnerships, content creation, run by former members of white supremacist groups who act as mentors.	Current and past members of far-right extremist groups (not just youth).	Similar to motivational interviewing techniques.	N/A Deemed most effective strategy by Institute for Strategic Dialogue

Impact EUROPE (http://www.impact.itti.com.pl) has developed a database of interventions to counter violent extremism. This database is a useful tool for informing the development of interventions in this current project. The following table illustrates the factors and characteristics described in the database.

Intervention Database: Impact EUROPE

Intervention type	**Options**	**Radicalization factor**	**Options**	**Evaluation characteristics**	**Options**
Group of focus	Individuals vulnerable to radicalization Radicalized individuals Offenders Prisoners Financers Friends & Family Communities Policymakers & journalists Social and healthcare workers Education sector and religious leaders Criminal Justice Other	**Motivation for violence (individual and social-level initiating factors)**	*Individual:* Personal history and grievances Interest in acquiring skills/training Desire to commit terrorist act Ideological reasoning *Social:* Social success Us-vs-them thinking Affinity to a group/individual	**Evaluation method**	Data mining Focus group Meta-analysis Observation Qualitative interviews Quantitative interviews Survey
Level of focus	Individual Group Network Multiple	**Group target traits**	Access to resources Active recruitment Dehumanization of the other Group's wider network	**Evaluation approach**	Case study Cross-sectional Cross-historical Experimental Longitudinal Meta-analysis

			Group identity Us-vs-them thinking Group role models		Quasi-experimental Realist evaluation Theory of Change Contribution analysis Policy scientific approach
Ideology	Religious Political Other	**Affecting social factors**	Inequality Law enforcement Polarization Poverty Segregation Stereotyping Violence	**Evidence source**	Family and friends Multiple Professional Intervention target
Intervention goal	Disengage Suppress Prevent Mitigate	**Affecting cultural factors**	Acceptance of violent behavior Cultural identity Culture of altruism Culture of sacrifice Guilt Religious interpretation Religious intolerance Shame	**Evaluation focus**	Economic Impact Mechanism Process
Evidence of effectiveness	Strong Medium Weak Non-significant			**Evaluator**	External Internal
				Evaluation quality	High Medium Low

5) Policy, practice and research gaps and future directions

Summary of program design findings

Overall, there are several key program components and qualities that have emerged in the literature review that have significant potential for future program development:

- Focus on transitions in young people's lives when social identity is disrupted or shifting (e.g., new school contexts, puberty, etc.)
- Provide opportunities to explore identity and encourage a diversity of social identities
- Foster belonging from the very beginning of the program
- Co-create and model positive social norms, build young people's prosocial networks
- Integrate a focus outside of the self (e.g., about current events)
- Intentional design to include diversity of perspectives, backgrounds and experiences
- Develop both intragroup and intergroup connections
- Youth leadership with adult partners
- Opportunities for skill building, particularly related to literacy (critical media literacy, transcultural literacy and multimedia production), empathy, analysis of power, and strategies for collective action
- Foster and support ethnic/cultural identity development
- Empower young people by supporting their efficacy and sociopolitical control

The following table summarizes the key initiating and sustaining factors for engagement online and offline in radicalized groups that may lead to adaptive or maladaptive social identities. Alignment across each of these areas of literature may be helpful to identify the key similarities, differences and leverage points to promote positive engagement and resist violent extremist influences.

Engagement model (ecological systems)	**Initiating factors for radicalization**	**Initiating and sustaining factors for positive engagement**	**Initiating and sustaining factors for online engagement**	**Identity formation**	**Resilience protective levels (Luthar, 2003 and Olsson et al., 2003 in Chen et al., 2012)**
Individual level	*Push factors* Personality traits: impulsivity, sensation seeking Emotions: frustration, hate, anger, fear Socio-psychological mechanisms: perceived injustice, group threat, insecurity *Pull factors* Ideological recognition Answer to existential life questions to respond to need for meaning and significance	Personal issues or causes, beliefs about the importance of (civic) engagement, self-oriented goals (Ballard, 2014)	Personal temperament: extraverts report higher engagement, lonely youth are more frequently online and disclose more Youth who are exploring identities, sexuality, gender	Personal identities	Individual level: Favorable temperaments (e.g., positive personality traits), academic propensities, language skills (verbal and nonverbal), affirmative responsiveness to others (sociability) Cultural/ethnic identity
Social level	*Push factors* Social mechanisms: lack of social integration, inclusion, belonging, purpose, identity	Peer-based political socialization (Gordon & Taft, 2011)	Youth with low social support (particularly 15-19 year olds) prefer online interactions LGBT youth have	Social Identities	Family level: Parental support, positive family attachments, one adult role model Social level: peer

	Pull factors Significant others (e.g., friends and family) involved in radicalized groups Sense of home and belonging to respond to need for social inclusion		online friends who are better than offline at providing emotional support		support
System level	*Push factors* Contextual factors: political, social and economic processes leading to local circumstances (e.g., discrimination, unemployment) *Pull factors* Political activist response to injustice to address experienced injustice Sense of home and belonging to respond to social exclusion		Digital world provides belonging and continuity for globally mobile youth	Cultural and religious identities	Environmental level: Favorable adaptation to school, socioeconomic status, neighborhood, ethnic background

Gaps, questions, future directions

As outlined earlier in the report, the limitations in the literature lead to bias and significant gaps. One of the theoretical gaps is a developmental perspective on social identity formation. For example, how do social identity formation processes change throughout adolescence? How do these processes differ from those of adults (who are the focus of the majority of the literature)? What are the key transitions in young people's lives that disrupt or shift social identities?

Another area that is poorly developed in the literature is a more critical perspective on how cultural and societal norms are shifting, and the kind of influence these shifts are having on the social identity formation of young people. For example, the literature rarely contextualizes young people's engagement within historical and current societal contexts of macro-spheres of power (e.g., white supremacy, heteropatriarchy, neo-colonialism and empire, class exploitation) that uphold and create a "breeding ground" for certain kinds of violence. In a context where white supremacists have been emboldened, and xenophobic policies and campaigns are increasing in Canada and abroad, the current climate is an important push-factor for engagement in various groups.

Although there are hints in the literature, there are no nuanced discussions or studies about how different types of radicalization (e.g., left-wing, right-wing, oppressor, oppressed) have different root causes and potentially require different interventions. This is an area that would benefit from further research.

Finally, the lack of literature focused on Canadian youth limits generalizability. The literature does indicate the importance of attending to the specific local contexts to tailor programs and interventions. What are the context-specific influences and what principles and program components can be applied in all contexts and which need to be tailored?

Appendix I: An Expanded Look at Belonging

At the heart of the dynamic process of identity creation is belonging. The exploration of personal distinctiveness and commitments is couched in the search to connect, relate, and belong to others. Belonging is a universal and motivational need for individuals to pursue, form, and maintain a threshold of interpersonal relationships (Beaumister & Leary, 1995). There are four relational attributes that contribute to belonging. In order for a relationship to render feelings of belonging, the relationship must be predictable, positive, persistent, and caring. People will feel a sense of belonging when they form relationships that involve frequent and positive interactions with others. Relationships that satisfy belonging are perceived as stable, at least in the context of the foreseeable future. Finally, belonging contains a reciprocal perceived concern of care for the other in the relationship (Beaumister & Leary, 1995).

An Irreducible Need

The sense of belonging is "an irreducible need of all people…[without it] we break. We fall apart" (Brown, 2012, p. 145). After satisfying physiological needs, such as food, water, and shelter, and needs for safety, belongingness is posited as the next prioritized human need (Maslow, 1968). When people are deprived of this core need, loneliness stemming from social isolation has negative effects on the body and even one's lifespan (Cacioppo & Cacioppo, 2014; Rohde, D'Ambrosio, Tang, & Rao, 2016) A lack of significance to others amounts to a heavy, shameful rejection; individuals will do almost anything to overcome perceived insignificance (Elliott, 2009). Absence of interpersonal significance and meaningful relationship leads one to devaluing one's self worth, even leading someone down a path of suicide ideation (Durkheim, 1897). This generalization needs to be countered, however, by the need to recognize individual differences and people who prefer solitude and limited sociability in healthy ways for themselves and society. For the purposes of designing interventions that address factors and conditions leading to radicalization exploring this tension/bias in society's and the literature's view of "loners" may be important. Humans rarely escape their insatiable need to be close to others (Bowlby, 1988) but interventions that support achievement and recognition of closeness in non-traditional and currently culturally non-supported ways may represent an advance in program design.

Perceived Belonging

How do individuals arrive at the conclusion of belonging? Experiencing belonging occurs when one feels valued, respected, engaged, and a "fit" with others (Mahar, Cobigo, & Stuart, 2013). Reflecting on people's reactions to one's words and actions fosters an intrapersonal perception of belonging(Shrauger & Schoeneman, 1979; Jaret, Reitzes, & Shapkina, 2005). Making social comparisons to other's abilities, opinions, social worth, and other qualities also increase belonging (Festinger, 1954). Finally, observing and actively reflecting on one's own actions, emotions, attitudes, and interactions with others also contributes to perceived belonging (Bem, 1972).

Belonging: An Autonomous Drive

Whether or not one is conscious of this need, people will seek out meaningful relationships to satisfy the need to belong. Belonging is referred to as a grounding relational need (Mahar et al., 2013). Relationships meeting the requirements for belonging provide a person with an anchoring relationship and space (Mahar et al., 2013). A boat anchor is a helpful metaphor for visualizing this feature of belonging. A person who has a strong sense of connection and belonging to core interpersonal relationships is less inhibited by 'winds of change' or 'buffeting life storms' by being anchored to interpersonal rocks. Conversely, one who does not have an anchored sense of belonging, or lacks key interpersonal relationships, will be much more susceptible to encountered challenges.

An individual's ability to choose the relationship they ground themselves in, and belong to, is critical (Mahar et al., 2013) Although belonging is an organic and naturally bindng process, belonging is a voluntary process (Baumeister and Leary, 1995, Mahar et al., 2013). The potential for relational failure and options is key in belonging (Mahar et al., 2013). This aspect of belonging is intricately tied to one's sense of autonomy or agency. Agency, or having the voice and ability to control one's interactions and experience is cited as a essential need to for all humans (Bandura, 2001). Despite the inherent and fundamental need of belongingness, people make relational choices of who they belong to, and how long the belonging relationship lasts.

To Whom We Belong

Beaumister and Leary (1995) posit that everyone derives sense of belonging from various relationships. They argue that everyone possesses a minimum relational threshold that is met through sustained significant relationships. For some individuals, a satisfied sense of belonging could come from two relationships. For others, sense of belonging is satisfied through six or ten relationships. In either case, belonging is derived from a select number of relationships. Individuals maintain a select number of interpersonal relationships to satisfy belonging needs. Recent belonging theorists challenge the interpersonal scope of belonging. Robards and Bennett (2011) suggest that belonging needs are being satiated through relationships beyond the interpersonal context.

The world is changing. Satiation of belonging needs has changed at a fundamental level. The number of relationships that comprise one's sense of belonging has multiplied exponentially (Robards & Bennett, 2011). The rich, deep, caring, and lasting qualities of 'home-grown' interpersonal relationships have splintered into many relationships. Throughout this fracturing, the scope of need has not changed. To use a visual example, what used to be a four-piece belonging puzzle is now perhaps a 5,000 piece belonging puzzle.

In this relational shift, several aspects of belonging are changing. For one, belonging is becoming increasingly globalized. The initial framework of belonging cited frequent, caring, and positive encounters as the soil that fosters belonging relationships (Baumeister & Leary, 1995). These relationships remain key

contributors to one's sense of belonging, however, more recent conceptualizations of belonging describe an individuals' sense of belonging as a complicated web of relationships spanning pluralistic networks (Robards & Bennett, 2011). Additionally, exposure to more relationships possibilities render individuals with exceedingly more control of their sense of belonging. Belonging is becoming more autonomous with choices such as: who to include in one's 'belonging puzzle', who to assimilate with, and what voices have a say in the shaping of identity (Robards & Bennett, 2011).

Evidence re: relatedness and behavioral/social outcomes

Although relatedness can manifest among youth in different forms (for a review, see Barber & Schluterman, 2008), there is a general consensus that having a strong sense of connection, to both other individuals and other systems, may be critical to positive youth development and positive outcomes. Factor analytic studies investigating variables that represent the latent construct "positive youth development" provide some support for the importance of connectedness among children and adolescents.

For example, Bowers and colleagues (2010) provided psychometric evidence suggesting that relatedness is an important indicator of positive youth development and is equally important for youth at different stages in development (e.g., early, middle, late adolescence). In this context, relatedness was defined as youth's reciprocal bonds with both people and institutions (Bowers et al., 2010). Those youth who report higher degrees of relatedness to both people (e.g., family) and institutions (e.g., school) tend to report higher scores on indices of thriving by the Search Institute[3] (Theokas et al., 2005). Relatedness is a significant predictor of both concurrent and prospective positive affect among youth and adolescents (Verroneau, Koestner, & Abela, 2005). Taken together, the research consistently provides strong evidence for the association between youth relatedness and positive outcomes across cognitive/learning, behavioral/social, and psychological/emotional domains.

In the behavioral/social domain, relatedness serves as a protective factor, preventing a range of adolescent problem behaviors. Problem behaviors are assessed in terms of severity or frequency of deviant or delinquent acts. Relationships with parents, peers, and teachers predict differential associations with problem behaviors.

Youth who feel a sense of belonging tend to be less antisocial, and exhibit better self-regulation and social responsibility (Grotevant, 1998). Attachment to parents may reduce the severity of adolescent boys' delinquency (Anderson, Holmes & Ostresh, 1999). However, there may not be as significant a decrease in frequency of problem

[3] The Search Institute proposes seven behavioural indicators of thriving: 1) school success, 2) leadership, 3) helping others, 4) maintenance of physical health, 5) delay of gratification, 6) valuing diversity, and 7) overcoming adversity (Scales, Benson, Leffert, & Blyth, 2000).

behaviours for boys as there is for girls. For example, in a study involving 911 7th to 12th graders (mean age = 15), attachment bond variables (particularly parent quality and adult bond) accounted for 22% of the variance of delinquency for females but only 8% for males (Huebner & Betts, 2002).

Higher peer attachment has been associated with higher rates of school misconduct (Damanet & Van Houtte, 2012). However, relationships with regulating peers (peers who report low deviant behaviours) are negatively associated with antisocial behavior. For example, youth with regulating peers may be least likely to behave antisocially (Barber & Olsen, 1997). Positive socialization with family and peers related so strongly to antisocial behavior as to neutralize the influence of neighborhood and school. Newman and colleagues (2007) explored three aspects of peer group membership in adolescence in relation to behavior problems in a sample of 733 ethnically and socioeconomically diverse adolescents aged 11-18. A positive sense of group belonging was connected to lower internalizing and externalizing behavior problems (one SD increase in peer group belonging = about a half SD decrease in behavioral problems).

Longitudinal studies have replicated the preventive effect on deviancy of school belonging (e.g., Dornbusch, Erickson, Laird & Wong, 2001) and teacher attachment (e.g., Freidenfelt Liljeberg, Eklund, Vafors Fritz, & af Klinteberg, 2011). Crosnoe and colleagues (2004) found that the odds ratio for the longitudinal association between teacher-student relationships and later disciplinary problems indicated that the odds of disciplinary problems decreased by 39% with every unit increase in teacher-student bonding for youth between Grades 7-11. This effect size exceeded all demographic factors (Crosnoe, Johnson, & Elder, 2004). Using multilevel analyses, Damanet and Van Houtte (2012) examined peer and teacher bonding and misconduct in a nationally representative sample of students between 15-20 years old in Finnish secondary schools (N=11,872). Students' individual bonding with teachers and school were negatively associated with school misconduct.

Although the literature tends to focus on parental and teacher relationships, there are a few studies that examine other adults in mentorship roles. Non-parental adult mentors are effective at supporting social skill-building only if their relationships with youth are deeply connected (i.e. duration, closeness, frequency of contact, and involvement). Outcomes for youth who are less-connected to their mentors do not differ from those for youth without mentors (Hurd & Sellars, 2013). Similarly, duration of relationship is important. Grossman and Rhodes' (2002) study examined Big Brothers Big Sisters programs involving urban adolescents (N=1138) between 10 – 16 years of age. Mentorship relationships that lasted less than 6 months were associated with adverse effects, such as increased alcohol use and decreased self-worth (Grossman & Rhodes, 2002). Further, different types of youth-adult relationship lead to different social outcomes. Individual or mentor-type relationships foster one-on-one social development, whereas collaborative forms of youth-adult leadership are conducive to communal group belonging (Mitra, 2004).

References

References (247)

Adamson, L., & Lyxell, B. (1996). Self-concept and questions of life: Identity development during late adolescence. *Journal of Adolescence*, *19*(6), 569-582.

Ahmad, H. (2017) Youth De-Radicalization: A Canadian Framework. *Journal of Deradicalization, 12*, 119-169.

Aldrich, D.P. (2012) First Steps Towards Hearts and Minds? USAID's Countering Violent Extremism Policies in Africa. PPRI Digital Library, Paper 8.

Aly, A., Taylor, E. & Karnovsky, S. (2014) Moral Disengagement and Building Resilience to Violent Extremism: An Education Intervention (2013). *Studies in Conflict & Terrorism*, 37, 369-385. DOI:10.1080/1057610X.2014.879379

Amiot, C. E., Sablonniere, R., Smith, L. G., & Smith, J. R. (2015). Capturing changes in social identities over time and how they become part of the self-concept. *Social and Personality Psychology Compass*, *9*(4), 171-187.

Anderson, B., Holmes, M., & Ostresh, E. (1999). Male and female delinquents' attachments and effects on severity of self-reported delinquency. *Criminal Justice and Behavior, 26*, 435-452.

Angie, A. D., Davis, J. L., Allen, M .T., Byrne, C. L., Ruar, G. A., Cunningham, C. B., Hoang, T. S., Bernard, D. R., Hughes, M. G., Connelly, S., O'Hair, H. D., & Mumford, M .D. (2011). Studying ideological groups online: Identification and assessment of risk factors for violence. *Journal of Applied Social Psychology, 41*, 627-657.

Aron, A., Aron, E. N., Tudor, M., & Nelson, G. (1991). Close relationships as including other in the self. *Journal of Personality and Social Psychology, 60,* 241–253.

Asthana, S. & Havandjian, N. (2016). *Palestinian youth media and the pedagogies of estrangement*. New York, NY: Palgrave Macmillan.

Azam, Z. & Fatima, S.B. (2017). Mishal: A Case Study of a Deradicalization and Emancipation Program in SWAT Valley, Pakistan. *Journal for Deradicalization, 11*, 1-29.

Ballard, P. J. (2014). What motivates youth civic involvement? *Journal of Adolescent Research, 29,* 439-463.

Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual review of psychology*, *52*(1), 1-26.

Barber, B. K., & Olsen, J. A. (1997). Socialization in context: Connection, regulation, and autonomy in the family, school, and neighborhood, and with peers. *Journal of Adolescent Research, 12*, 287-315.

Barber, B. K., & Schluterman, J. M. (2008). Connectedness in the lives of children and adolescents: A call for greater conceptual clarity. *Journal of Adolescent Health, 43*, 209-216.

Bartlett, J. & Miller, C. (2012). The edge of violence: Towards telling the difference between violent and non-violent radicalization. *Terrorism and Political Violence, 24*, 1-21. DOI: 10.1080/09546553.2011.594923

Barker, V. (2012) A Generational Comparison of Social Networking Site Use: The Influence of Age and Social Identity. *Aging and Human Development, 74*(2), 163-187. DOI: 10.2190/AG.74.2.d

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*(3), 497-529. doi:10.1037/0033-2909.117.3.497

Beelman, A. & Heinemann, K. S. (2014). Preventing prejudice and improving intergroup attitudes: A meta-analysis of child and adolescent training programs. *Journal of Applied Developmental Psychology, 35*, 10-24. DOI: 10.1016/j.appdev.2013.11.002

Begoray, D.L., Banister, E.M., Higgins, J.W., Wilmot, R. (2014). Online, tuned in, turned on: Multimedia approaches to fostering critical media health literacy for adolescents. *Asia-Pacific Journal of Health, Sport and Physical Education, 5*, 267-280. DOI: 10.1080/18377122.2014.940812

Bem, D. J. (1972). Self-perception theory. *Advances in experimental social psychology*, *6*, 1-62.

Benner, A. D., & Kim, S. Y. (2009). Experiences of discrimination among Chinese American adolescents and the consequences for socioemotional and academic development. *Development Psychology, 45,* 1682-1694. DOI: 10.1037/a0016119

Berg, M., Coman, E., & Schensul, J. J. (2009). Youth action research for prevention: A multi-level intervention designed to increase efficacy and empowerment among urban youth. *American Journal of Community Psychology, 43(*3), 345-359. doi:10.1007/s10464-009-9231-2

Berger, R., Gelkopf, M., Heineberg, Y. & Zimbardo, P. (2016). A School-Based Intervention for Reducing Posttraumatic Symptomatology and Intolerance During

Political Violence. *Journal of Educational Psychology*, 108(6), 761-771. http://dx.doi.org/10.1037/edu0000066

Berzonsky, M.D. (1989). Identity style: Conceptualization and measurement. *Journal of Adolescent Research, 4,* 268-282.

Best, Manktelow, & Taylor. (2014). Online communication, social media and adolescent wellbeing: A systematic narrative review. *Children and Youth Services Review, 41,* 27-36.

Bhui, K., Warfa, N., Jones, E. (2014) Is Violent Radicalisation Associated with Poverty, Migration, Poor Self-Reported Health and Common Mental Disorders? *PLoS ONE* 9(3), 1-10. https://doi.org/10.1371/journal.pone.0090718

Bhui, K., Everitt, B. & Jones, E. (2014). Might depression, psychosocial adversity, and limited social assets explain vulnerability to and resistance against violent radicalizaiton? *PLoS ONE, 9*(9). e105918. DOI: 10.1371/journal.pone.0105918

Bhui, K., Dinos, S., Jones, E. (2012). Psychological Process and Pathways to Radicalization. *Journal of Bioterr Biodef,* S5:003. doi:10.4172/2157-2526.S5-003.

Blomfield Neira, C. J., & Barber, B. L. (2014). Social networking site use: Linked to adolescents' social self-concept, self-esteem, and depressed mood. *Australian Journal of Psychology, 66*(1), 56-64. doi:10.1111/ajpy.12034

Bode, L., Vraga, E.K., Borah, P., Shah, D.V. (2013) A new space for political behaviour: political social networking and its democratic consequences. *Journal of Computer-Mediated Communication,* 19(3), 414-429.

Bonnell, J., Copestake, P., Kerr, D., Passy, R., Reed, C., Salter, R., Sarwar, S. and Sheikh, S. (2011). *Teaching Approaches That Help to Build Resilience to Extremism among Young People* (DFE Research Report 119). London: DFE.

Bonetti, L., Campbell, M.A., Gilmore, L.(2010) The Relationship of Loneliness and Social Anxiety with Children's and Adolescents' Online Communication. *Cyberpsychology, Behaviour, and Social Networking, 13(*3), 279-285. 10.1089/cyber.2009.0215

Borum, R. (2011a). Radicalization into violent extremism I: A review of social science theories. *Journal of Strategic Security, 4*(4), 7-36. DOI: 10.5038/1944-0472.4.4.1

Borum, R. (2011b). Radicalization into violent extremism II: a review of social science theories. *Journal of Strategic Security*, 4(4), 37-62. DOI: http://dx.doi.org/10.5038/1944-0472.4.4.2

Bouhana, N. & P-O. H. Wikström. 2011. *Al Qa'ida-Influenced Radicalisation: A Rapid Evidence Assessment Guided by Situational Action Theory*, Occasional Paper 97. London: Home Office.

Bowers, E. P., Li, Y., Kiely, M. K., Brittian, A., Lerner, J. V., & Lerner, R. M. (2010). The five Cs model of positive youth development: A longitudinal analysis of confirmatory factor structure and measurement invariance. *Journal of Youth and Adolescence, 39*, 720-735.

Bowlby, J. (1988). Attachment, communication, and the therapeutic process. *A secure base: Parent-child attachment and healthy human development*, 137-157.

Bowman-Grieve, L. (2013) A psychological perspective on virtual communities supporting terrorist and extremist ideologies as a tool for recruitment. *Security Informatics, 2*, 9-14.

Brewer, M. B. (1991). The social self: On being the same and different at the same time. *Personality and Social Psychology Bulletin, 17*(5), 475-482. doi:10.1177/0146167291175001

Brewer, M. B., & Gardner, W. (1996). Who is this 'we'? levels of collective identity and self representations. *Journal of Personality and Social Psychology, 71*(1), 83.

Briggs, R. & Feve, S. (2013) Review of Programs to Counter Narratives of Violent Extremism. Institute for Strategic Dialogue.

Broadbent, R., & Papadopoulos, T. (2010). Government, schools, young people and young people and communities in partnership. *Youth Studies Australia, 29*(3), 52-61.

Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, *32*(7), 513-31.

Brown, B. (2012). *Daring greatly: How the courage to be vulnerable transforms the way we live, love, parent, and lead*. Gotham.

Bruneau, E. G., & Saxe, R. (2012). The power of being heard: The benefits of 'perspective- giving' in the context of intergroup conflict. *Journal of Experimental Social Psychology. 48*, 845–866.

Bruner, M. W., Boardley, I. D. & Côté, J. (2013). Social identity and prosocial and antisocial behavior in youth sport. *Psychology of Sport and Exercise, 15*, 56-64. DOI: 10.1016/j.psychsport.2013.09.003

Cacioppo, J. T., & Cacioppo, S. (2014). Social relationships and health: The toxic effects of perceived social isolation. *Social and personality psychology compass*, *8*(2), 58-72.

Canadian Security Intelligence Service. (2017). Radicalization. Retrieved at: https://www.csis.gc.ca/ththrtnvrnmnt/trrrsm/rdclztn-en.php

Carson, D. C., Peterson, D. & Esbensen, F.-A. (2013). Youth gang desistance: An examination of the effect of different operational definitions of desistance on the motivations, methods and consequences associated with leaving the gang. *Criminal Justice Review, 38*, 510-534.

Carson, D. C., & Vecchio, J. M. (2015). Leaving the gang: A review and thoughts on future research. In S. H. Decker & D. C. Pyrooz (Eds.) *Handbook of Gangs,* pp 139-155. Hoboken, NJ: Wiley-Blackwell.

Catalano, R. Berglund, M., Ryan, M., Lonczak, H., & Hawkins, J. (2002). Positive youth development in the United States: Research findings on evaluations of positive youth development programs. *Prevention and Treatment, 5*, 1-111.

Checkoway, B. N. & Richards-Schuster, K. (2006). Youth participation for educational reform in low-income communities of color. In S. Ginwright, P. Noguera, & J. Cammarota (Eds.), *Beyond resistance!: Youth activism and community change* (pp. 319-332). New York, Routledge.

Chen, J., Lau, C., Tapanya, S. & Cameron, C. A. (2012). Identities as protective processes: Socio-ecological perspectives on youth resilience. *Journal of Youth Studies, 15*, 761-779. DOI:10.1080/13676261.2012.677815

Chermak, S. & Gruenewald, J. A. (2015). Laying a foundation for the criminological examination of right-wing, left-wing, and Al Qaeda-inspired extremism in the United States. *Terrorism and Political Violence, 27*, 133-159. DOI: 10.1080/09546553.2014.975646

Christens, B. D., & Dolan, T. (2011). Interweaving youth development, community development, and social change through youth organizing. *Youth & Society, 43*, 528-548. DOI: 10.1177/0044118X10383647

City of Calgary (2014). Evaluation of the Youth At Risk Development (YARD) program: Final report. Calgary: City of Calgary. Retrieved from : http://calgarypolicefoundation.com/wp-content/uploads/2014/07/YARD_2014-Final-Eval_ExecSum_11_03_2014_kp.pdf

Collin, P., Rahilly, K., Richardson, I., Third, A. (n.d.). *The benefits of social networking services.*

Compton, J., Jackson, B., Dimmock, J.A. (2016). Persuading others to avoid persuasion : inoculation theory and resistant health attitudes. *Frontiers in Psychology* 122 (7). DOI: 10.3389/fpsyg.2016.00122

Constine, J. (2017). Facebook now has 2 billion monthly users… and responsibility. *Viitattu*, *9*, 2017.

Costello, M., Hawdon, J., & Ratcliff, T. N. (2016). Confronting online extremism: The effect of self-help, collective efficacy, and guardianship on being a target for hate speech. *Social Science Computer Review*, 1-19. DOI: 10.1177/0894439316666272

Craig, S.L., McInroy, L. (2013) You can form a part of yourself online: the influence of new media on identity development and coming out for LGBTQ youth. *Journal of Gay & Lesbian Mental Health, 18*, 95-109. DOI: 10.1080/19359705.2013.777007

Crocetti, E. (2017). Identity formation in adolescence: The dynamic of forming and consolidating identity commitments. *Child Development Perspectives, 11*(2), 145-150. doi:10.1111/cdep.12226

Crocetti, E., Jahromi, P., & Meeus, W. (2012). Identity and civic engagement in adolescence. *Journal of Adolescence, 35*, 521-532.

Crocetti, E., Rubini, M., Luyckx, K., & Meeus, W. (2008). Identity formation in early and middle adolescents from various ethnic groups: From three dimensions to five statuses. *Journal of Youth and Adolescence*, *37*(8), 983-996.

Crosnoe, R., Johnson, M. K., & Elder, G. H. (2004). Intergenerational bonding in school: The behavioral and contextual correlates of student-teacher relationships. *Sociology of Education, 77*, 60-81.

Dalgaard-Nielsen, A. (2010). Violent radicalization in Europe: What we know and what we do not know. *Studies in Conflict and Terrorism, 33*, 797-814.

Damanet, J., & Van Houtte, M. (2012). School belonging and school misconduct: The differing role of teacher and peer attachment. *Journal of Youth and Adolescence, 41*, 499-514.

Dandurand, Y. (2015). Social inclusion programmes for youth and the prevention of violent extremism. In M. Lombardi, E. Ragab & V. Chin, Y. Dandurand, V. de Divitiis, & A. Burato (Eds.) *Countering Radicalisation and Violent Extremism Among Youth to Prevent Terrorism*. Washington, DC: IOS Press.

Davis, K. (2012). Friendship 2.0: Adolescents' experiences of belonging and self-disclosure online. *Journal of Adolescence, 35*(6), 1527.

Davis, K. (2013) Young peoples's digital lives: the impact of interpersonal relationships and digital media use on adolescents' sense of identity. *Computers in Human Behaviour, 29*, 2281-2293. DOI: 10.1016/j.chb.2013.05.022

de Zuniga, H. G., Molyneux, L., & Zheng, P. (2014). Social media, political expression, and political participation: Panel analysis of lagged and concurrent relationships. *Journal of Communication, 64*, 612-634.

Della Porta, D., & LaFree, G. (2012). Processes of radicalization and de-radicalization. *International Journal of Conflict and Violence, 6* (1), 4-10.

Denoeux, G., & Carter, L. (2009). Guide to the drivers of violent extremism (Rep.) United States Agency for International Development. DOI:http://pdf.usaid.gov/pdf_docs/Pnadt978.pdf

Doosje, B., van den Bos, K., Loseman, A., Feddes, A.R., Mann, L. (2012) "My In-group is Superior!": Susceptibility for Radical Right-wing Attitudes and Behaviours in Dutch Youth. *Negotiation and Conflict Management Research, 5*(3), 253-268. DOI: 10.1111/j.1750-4716.2012.00099.x

Doosje, B., Loseman, A., van den Bos, K. (2013) Deteriminants of Radicalization of Islamic Youth in the Netherlands: Personal Uncertainty, Perceived Injustice, and Perceived Group Threat. *Journal of Social Issues, 69*(3), 586-604. DOI: 10.1111/josi.12030

Dornbusch, S. M., Erickson, K. G., Laird, J., & Wong, C. A. (2001). The relation of family and school attachment to adolescent deviance in diverse groups and communities. *Journal of Adolescent Research, 16*, 396–422.

Durkheim, E. (1897). *Le suicide: étude de sociologie*. F. Alcan.

Dzhekova, R., Stoynova, N., Kojouharov, A., Mancheva, M., Anagnostou, D., & Tsenkov, E. (2016). Understanding radicalization: Review of literature. Sofia, Ukraine: Center for the Study of Democracy. Retrieved online: www.csd.bg/fileSrc.php?id=22778

Eidoo, S. (2012). *"When you witness an evil act, you should stop it with your hand." Citizenship learning and engagement of Muslim youth activists in Toronto, Canada.* PhD Thesis, Dept of Curriculum, Teaching and Learning, Ontario Institute for Studies in Education, University of Toronto.

Eccles, J .S., & Gootman, J. A. (2002). *Community programs to promote youth development.* Washington, DC: National Academies Press.

Elliott, G. (2009). *Family matters: The importance of mattering to family in adolescence*. Chichester, U.K; Malden, MA: Wiley-Blackwell.

Ellis, B. H., Abdi, S. (2017). Community resilience to violent extremism through genuine partnerships. *American Psychologist, 72*, 289-300. DOI: 10.1037/amp0000065

Ellis, B. H., MacDonald, H. Z., Klunk-Gillis, J., Lincoln, A., Strunin, L., & Cabral, H. J. (2010). Discrimination and mental health among Somali refugee adolescents: The role of acculturation and gender. *American Journal of Orthopsychiatry, 80*, 564-575. DOI: 10.1111/j .1939-0025.2010.01061.x

Erikson, E. (1968). *Youth: Identity and crisis*. New York, NY: WW.

Feddes, A.R., Mann, L., Doosje, B. (2015) Increasing self-esteem and empathy to prevent violent radicalization: A longitudinal quantitative evaluation of reilisience training focused on adolescents with a dual identity. *Journal of Applied Social Psychology, 45*(7), 400-411. DOI: 10.1111/jasp.12307

Ferguson, N. (2016) Disengaging from Terrorism: A Northern Irish Experience. Journal for Deradicalization, 6, 1-22.

Festinger, L. (1954). A theory of social comparison processes. *Human Relations, 7*(2), 117-140. doi:10.1177/001872675400700202

Freidenfelt Liljeberg, J., Eklund, J. M., Vafors Fritz, M., & af Klinteberg, B. (2011). Poor school bonding and delinquency over time: Bidirectional effects and sex differences. *Journal of Adolescence, 34*, 1–9.

Fulford, S. & Thompson, S. (2013). Youth community gardening programming as community development: The youth for EcoAction program in Winnipeg, Canada. *Canadian Journal of Nonprofit and Social Economy Research, 4*, 56-75.

Ghosh, R., Chan, W. Y. A., Manuel, A., & Dilimulati, M. (2017). Can education counter violent religious extremism? *Canadian Foreign Policy Journal, 23*, 117-133. DOI: 10.1080/11926422.2016.1165713

Githens-Mazer, J. (2012). The rhetoric and reality: radicalization and political discourse. *International Political Science Review*, 33(5), 556-567

Golan, G. D. (2016). *Countering violent extremism: A whole community approach to prevention and intervention.* PhD dissertation submitted to California State University. Retrieved at: https://search.proquest.com/openview/4915c6e7f10cb6650f9e335491ce2c3a/1?pq-origsite=gscholar&cbl=18750&diss=y

Gosling, S.D., Augustine, A.A., Vazire, S., Holtzman, N., Gaddis, S. (2011) Manifestations of Personality in Online Social Networks: Self-Reported Facebook-Related Behaviours and Observable Profile Information. *Cyberpsychology, Behavior, and Social Networking*, 14, 483-488. DOI: 10.1089/cyber.2010.0087

Gordon, H. R. & Taft, J. K. (2011). Rethinking youth political socialization: Teenage activists talk back. *Youth & Society, 43*, 1499-1527. DOI: 10.1177/0044118X10386087

Grossman, J. B., & Rhodes, J. E. (2002). The test of time: Predictors and effects of duration in youth mentoring relationships. *American Journal of Community Psychology, 30*, 199-219.

Grotevant, H.D. (1998). Adolescent development in family context. In S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 1097-1149). New York, NY: Springer.

Haas, S. M., Irr, M. E., Jennings, N. A., Wagner, L. M. (2010). Communicating thin: A grounded model of online negative enabling support groups in the pro-anorexia movement. *New Media & Society, 13*, 40-57.

Hanckel, B., Morris, A. (2014). Finding community and contesting heteronormativity: Queer young people's engagement in an Australian online community. *Journal of Youth Studies, 17*, 872-886. DOI: 10.1080/13676261.2013.878792

Hannaford, J. (2016). Digital worlds as sites of belonging for Third Culture Kids: A new literacies perspective. *Journal of Research in International Education, 15*, 253-265.

Harris, A. (2004). *Future Girl: Young women in the 21st Century*. New York: Routledge.

Hawkins, J. D., & Weis, J. G. (1985). The social development model: An integrated approach to delinquency prevention. *Journal of Primary Prevention, 6*, 73-97.

Hennigan, K. & Spanovic, M. (2012). Gang dynamics through the lens of social identity theory. In F.-A. Esbensen & C. L. Maxson (Eds.) *Youth Gangs in International Perspective: Results from the Eurogang Program of Research,* pp. 127-150. New York: Springer.

Hogg, M. A., Meehan, C., & Farquharson, J. (2010). The solace of radicalism: Self-uncertainty and group identification in the face of threat. *Journal of Experimental Social Psychology, 46*, 1061-1066. DOI: 10.1016/j.jesp.2010.05.005

Hogg, M.A., Sherman, D.K., Dierselhuis, J., Maitner, A.T., & Moffitt, G. (2005). Uncertainty, entitativity, and group identification. *Journal of Experimental Social Psychology*, 43(1), 135-142.DOI: http://dx.doi.org/10.1016/j.jesp.2005.12.008

Hillier, L. & Harrison, L. (2007). Building realities less limited than their own: Young

people practicing same sex attraction on the internet. *Sexualities: Studies in culture and society 10*(1):82-100.

Holloway, S. L., & Valentine, G. (2003). *Cyberkids: Children in the information age.* London: Routledge Falmer.

Horgan, J., Altier, M.B., Shortland, N. & Taylor, M. (2017). Walking away: the disengagement and de-radicalization of a violent right-wing extremist. *Behavioural Sciences of Terrorism and Political Aggression 9*(2), 63-77.

Horgan, J. (2009). *Walking away from terrorism: accounts of disengagement from radical and extremist movements*. New York: Routledge.

Huang, G. C., Unger, J. B., Soto, D., Fujimoto, K., Pentz, M. A., Jordan-Marsh, M. & Valente, T. W. (2014). Peer influences: The impact of online and offline friendship networks on adolescent smoking and alcohol use. *Journal of Adolescent Health*, 54, 508-514.

Huebner, A. J., & Betts, S. C. (2002). Exploring the utility of social control theory for youth development: Issues of attachment, involvement, and gender. *Youth Society, 34*, 123-147.

Hunter, R. & Heinke, D. (2011). Radicalization of Islamist terrorists in the Western world. FBI Law Enforcement Bulletin. Retrieved at: https://leb.fbi.gov/2011/september/perspective-radicalization-of-islamist-terrorists-in-the-western-world

Hurd, N. M., & Sellers, R. M. (2013). Black adolescents' relationships with natural mentors: Associations with academic engagement via social and emotional development. *Cultural Diversity and Ethnic Minority Psychology, 19*, 76-85.

International Youth Foundation. (2010). Youth Empowerment Program evaluation: Executive version. International Youth Foundation. Retrieved from: http://library.iyfnet.org/sites/default/files/library/MicrosoftYEP_Final_Report.pdf

Jaret, C., Reitzes, D. C., & Shapkina, N. (2005). Reflected appraisals and self-esteem. *Sociological Perspectives*, *48*(3), 403-419.

Keller, J.M. (2012). Virtual feminisms: Girls' blogging communities, feminist activism, and participatory politics. *Virtual Feminisms, Information, Communication & Society. 15*, 429-447. DOI: 10.1080/1369118X.2011.642890

Kennelly, J. (2011). *Becoming actors: Agency and youth activist subcultures. In: Citizen Youth.* Education, Politics, and Public Life. Palgrave Macmillan, New York. Pp. 111-131.

Khalil, J and Zeuthen, M. (2014). A Case Study of Counter Violent Extremism (CVE) Programming: Lessons from OTI's Kenya Transition Initiative. *Stability: International Journal of Security & Development, 3*(1): 31, pp. 1-12.

Khanna, N., MacCormack, J., Kutsyuruba, B., McCart, S., Freeman, J. (2014). *Youth Who Thrive: A review of critical factors and effective programs for 12-25 year olds.* Toronto, ON: YMCA GTA. Available online: http://www.youthwhothrive.ca/resources/Critical-Factors-for-Youth-Thriving-Report.pdf

Kim, G.M. (2015). Transcultural digital literacies: Cross-border connections and self-representations in an online forum. *Reading Research Quarterly, 51,* 199-219. DOI: 10.1002/rrq.131

Kim, Y., Russo, S., & Amnå, E. (2016). The longitudinal relation between online and offline political participation among youth at two different developmental stages. *New Media & Society,* 19(6), 899-917. doi:10.1177/1461444815624181

Kirshner, B. (2009). "Power in numbers": Youth organizing as a context for exploring civic identity. *Journal of Research on Adolescence, 19*(3), 414. doi:10.1111/j.1532-7795.2009.00601.x

Knifsend, C. A., & Juvonen, J. (2013). The role of social identity complexity in inter-group attitudes among young adolescents. *Social Development, 22*, 623-640. DOI: 10.1111/j.1467-9507.2012.00672.x

Košir, K., Horvat, M., Aram, U., Jurinec, N., & Tement, S. (2016). Does being on facebook make me (feel) accepted in the classroom? the relationships between early adolescents' facebook usage, classroom peer acceptance and self-concept. *Computers in Human Behavior, 62*, 375-384. doi:10.1016/j.chb.2016.04.013

Krueger, J. I. (2002). On the reduction of self-other asymmetries: Benefits, pitfalls, and other correlates of social projection. *Psychologica Belgica, 42*, 23–41.

Kuhn, M. H., & McPartland, T. S. (1954). An empirical investigation of self-attitudes. *American sociological review*, *19*(1), 68-76.

Lawford, H. L., Ramey, H. L., Rose-Krasnor, L., & Proctor, A. S. (2012). Predictors of adolescent successful development after an exchange: The importance of activity qualities and youth input. *Journal of Adolescence, 35*, 1381-1391.

Ledbetter, A. M., Mazer, J. P., DeGroot, J. M., Meyer, K. R., Mao, Y., & Swafford, B. (2011). Attitudes toward online social connection and self-disclosure as predictors of facebook communication and relational closeness. *Communication Research, 38*(1), 27-53. doi:10.1177/0093650210365537

Lee, S.Y. (2014) How do people compare themselves with others on social network site?: The case of Facebook. *Computers in Human Behaviour, 32*, 253-260. DOI: 10.1016/j.chb.2013.12.009

Lee, N-J., Shah, D. V., McLeod, J. M. (2012). Processes of political socialization: A communication mediation approach to youth civic engagement. *Communication Research, 40,* 669-697.

Lehdonvirta, V. & Rasanen P. (2011). How do young people identify with online and offline peer groups? A comparison between UK, Spain and Japan. *Journal of Youth Studies*, 14, 91-108.

Lennings, Amon, Brummert, & Lennings. (2010). Grooming for terror: The Internet and young people. *Psychiatry, Psychology and Law, 17*, 424-437.

Leung, L. (2011). Loneliness, social support and preference for online social interaction: The mediating effects of identity experimentation online among children and adolescents. Chinese *Journal of Communication,* 4, 381-399.

Lickel, B., Hamilton, D. L., Wieczorkowska, G., Lewis, A., Sherman, S. J., & Uhles, A. N. (2000). Varieties of groups and the perception of group entitativity. *Journal of personality and social psychology*, *78*(2), 223.

Livingstone, S. & Brake, D. R. (2010). On the rapid rise of social networking sites: New findings and policy implications. *Children & Society, 24*, 75-83. DOI: 10.1111/j.1099-0860.2009.00243.x

Livingstone S, Helsper E. (2010). Balancing opportunities and risks in teenagers' use of the Internet: the role of online skills and internet self-efficacy. *New Media & Society,12*(2):309e29

Lucero, L. (2017). Safe spaces in online places: Social media and LGBTQ youth. *Multicultural Education Review, 9*, 117-128.

Luthar, S.S., ed., 2003. *Resilience and vulnerability*. Cambridge, UK: Cambridge University Press.

Lynch, O (2013). British Muslim youth: Radicalisation, terrorism and the construction of the "other". *Critical Studies on Terrorism, 6,* 241-261. DOI: 10.1080/17539153.2013.788863

Ma, H. (2012). Moral competence as a positive youth development construct: A conceptual review. *Scientific World Journal, 1*, 1-8.

Macnair, L. & Frank, R. (2017). Voices Against Extremism: A Case Study of a Community-Based CVE Counter-Narrative Campaign. *Journal of Deradicalization, 10,* 147-174.

Madondo, K. (2015). *Online to offline civic engagement: The effects of social media on offline civic engagement.* Dissertation submitted to Virginia Polytechnic Institute & State University, Blacksburg, VA

Maffesoli M (1996) *The Time of the Tribes: The Decline of Individualism in Mass Society*, trans. Smith D. London: Sage.

Mahar, A. L., Cobigo, V., & Stuart, H. (2013). Conceptualizing belonging. *Disability and rehabilitation*, *35*(12), 1026-1032.

Marcum, C. D., Ricketts, M. L., Higgens, G. E. (2011). Assessing sex experiences of online victimization: An examination of adolescent online behaviours utilizing routine activity theory. *Deviant Behavior, 31*, 1-31.

Maslow, A. H. (1968). *Toward a psychology of being.* New York: Van Nostrand.

McArthur, S. A. (2016). Black girls and critical media literacy for social activism. *English Education, July*, 362-379.

McCauley, C., & Moskalenko, S. (2008). Mechanisms of political radicalization: pathways toward terrorism. *Terrorism and political violence, 20*(3), 415-433. DOI: 10.1080/09546550802073367

McGinnis, T., Goodstein-Stolzenberg, A., & Saliani, E. C. (2007). "indnpride": Online spaces of transnational youth as sites of creative and sophisticated literacy and identity work. *Linguistics and Education, 18*, 283-304.

McGuire, W. J., & McGuire, C. V. (1988). Content and process in the experience of self. *Advances in experimental social psychology*, *21*, 97-144.

McLean, K. C., Syed, M., Yoder, A., & Greenhoot, A. F. (2014). Identity integration: The importance of domain content in linking narrative and status approaches to emerging adult identity development. *Journal of Research on Adolescence*, *26*, 61-76.

Meeus, W., Iedema, J., Helsen, M., & Vollebergh, W. (1999). Patterns of adolescent identity development: Review of literature and longitudinal analysis. *Developmental review*, *19*(4), 419-461.

Meeus, W., Van De Schoot, R., Keijsers, L., Schwartz, S. J., & Branje, S. (2010). On the progression and stability of adolescent identity formation: A five-wave longitudinal study in early-to-middle and middle-to-late adolescence. *Child development*, *81*(5), 1565-1581.

Meeus, W., van de Schoot, R., Keijsers, L., & Branje, S. (2012). Identity statuses as developmental trajectories: A five-wave longitudinal study in early-to-middle and middle-to-late adolescents. *Journal of Youth and Adolescence*, *41*(8), 1008-1021.

Milošević-Đorđević, J. S., & Žeželj, I. L. (2017). Civic activism online: Making young people dormant or more active in real life? *Computers in Human Behavior, 70*, 113-118. doi:10.1016/j.chb.2016.12.070

Mitra, D. L. (2004). The significance of students: Can increasing "student voice" in schools lead to gains in youth development? *Teachers College Record, 106*, 651-688.

Moghaddam, F.M., 2005. The staircase to terrorism: a psychological exploration. *The American Psychologist, 60* (2), 161–169.

Moghaddam, F. M. (2004). Cultural preconditions for potential terrorist groups: Terrorism and societal change. In F. M. Moghaddam & A. J. Marsella (Eds.), *Understanding terrorism: Psychosocial roots, consequences, and interventions* (pp. 103-117. DOI: 10.1037/10621-005

Morgan, M., Barnett, L., Dylan, P., Okely, A., Scott, H., Cohen, K., & Lubans, D. (2013). Fundamental movement skill interventions in youth: A systematic review and meta-analysis. *Pediatrics, 132*, e1362-e1383.

Morsillo, J., & Prilleltensky, I. (2007). Social action with youth: Interventions, evaluation, and psychopolitical validity. *Journal of Community Psychology, 35*(6), 725-740. DOI:10.1002/jcop.20175

Mumford, M. D., Bedell-Avers, K. E., Hunter, S. T., Espejo, J., Eubanks, D., & Connelly, M. S. (2008). Violence in ideological and nonideological groups: A quantitative analysis of qualitative data. *Journal of Applied Social Psychology, 38*, 1521-1561.

Nadkarni, A., & Hofmann, S. G. (2012). Why do people use Facebook? *Personality and Individual Differences, 52*(3), 243-249. doi:10.1016/j.paid.2011.11.007

Neira, C. J. B. & Barber, B. L. (2014). Social networking site use: Linked to adolescents' social self-concept, self-esteem, and depressed mood. *Australian Journal of Psychology, 66*, 56-64.

Nesi, J., Prinstein, M.J. (2015). Using Social Media for Social Comparison and Feedback-Seeking: Gender and Popularity Moderate Associations with Depressive Symptoms. *Journal of Abnormal Child Psychology, 43,* 1427-1438. DOI: 10.1007/s10802-015-0020-0

Neumann, P. (2013). The trouble with radicalization. *International Affairs, 89,* 873-893.

Neumann, P. (2010). *Prisons and terrorism radicalisation and de-radicalisation in 15 countries.* A policy report published by the International Centre for the Study of Radicalisation and Political Violence (ICSR).

Neumann, P. & Rogers, B. (2008). *Recruitment for the Islamist militant movement in Europe*. Brussels: EC.

Newman, B. M., Lohman, B. J., & Newman, P. R. (2007). Peer group membership and a sense of belonging: Their relationship to adolescent behavior problems. *Adolescence, 42*, 241-263.

Olsson, C.A., et al. (2003). Adolescent resilience: a concept analysis. *Journal of adolescence, 26*,
1-11.

Onorato, R. S., & Turner, J. C. (2004). Fluidity in the self-concept: the shift from personal to social identity. *European Journal of Social Psychology*, *34*(3), 257-278.

Pancer, S. M., Rose-Krasnor, L., & Loiselle, L. D. (2002). Youth conferences as a context for engagement. *New Directions for Youth Development, 96*, 47-64.

Patton, D.U., Sung Hong, J., Ranney, M., Patel, S., Kelley, C., Eschmann, R., Washington, T. (2014). Social media as a vector for youth violence: a review of the literature. *Computers in Human Behaviour* 35, 548-553. DOI: 10.1016/j.chb.2014.02.043

Pauwels, L. & Schils, N. (2016). Differential online exposure to extremist content and political violence: Testing a relative strength of social learning and competing perspectives. *Terrorism and Political Violence, 28*, 1-29. DOI: 10.1080/09546553.2013.876414

Perry, B. & Scrivens, R. (2016). Uneasy alliances: A look at the right-wing extremist movement in Canada. *Studies in Conflict & Terrorism. 39*, 819-841. DOI: 10.1080/1057610X.2016.1139375

PET. (2009). *Radikalisering og terror.* Center for Terroranalyse (Denmark). Available at: http://www.pet.dk/upload/radikalisering_og_terror.pdf

Pratchett, L., et al., (2010). *Preventing support for violent extremism through community interventions: A review of the evidence.* Department for Communities and Local Government. Available from: www.communities.
gov.uk/documents/communities/pdf/1513881.pdf

Prinsen, F., de Haan, M., Leander, K. M. (2015). Networked identity: How immigrant youth employ online identity resources. *YOUNG, 23,* 19-38.

Pujazon-Zazik, M., Park, M.J. (2010). To Tweet, or Not to Tweet: Gender Differences and Potential Positive and Negative Health Outcomes of Adolescents' Social Internet Use. *American Journal of Men's Health* 4(1), 77-85. DOI: 10.1177/1557988309360819

Quayle, E. & Taylor, M. (2011). Social networking as a nexus for engagement and exploitation of young people. *Information Security Technical Report, 16,* 44-50.

Quinn, S., & Oldmeadow, J. A. (2013). Is the igeneration a 'we' generation? social networking use among 9- to 13-year-olds and belonging. *British Journal of Developmental Psychology, 31*(1), 136-142. doi:10.1111/bjdp.12007

RCMP. (2016). Awareness guide – radicalization to violence. Retrieved online: http://www.rcmp-grc.gc.ca/qc/pub/sn-ns/rad-eng.htm

Reich, S. M., Subrahmanyam, K., & Espinoza, G. (2012). Friending, Iming, and hanging out face-to-face: Overlap in adolescents' online and offline social networks. *Developmental Psychology,* 48, 356-368.

Reid, G. G., & Boyer, W. (2013). Social network sites and young adolescent identity development. *Childhood Education*, *89*(4), 243-253.

Ridout, B., Campbell, A., & Ellis, L. (2012). "Off your Face(book)": Alcohol in online social identity construction and its relation to problem drinking in university students. *Drug and Alcohol Review, 31*, 20-26.

Roccas, S., & Brewer, M. B. (2002). Social identity complexity. *Personality and Social Psychology Review*, *6*(2), 88-106.

Robards, B., & Bennett, A. (2011). MyTribe: Post-subcultural manifestations of belonging on social network sites. *Sociology*, *45*(2), 303-317.

Rohde, N., D'Ambrosio, C., Tang, K. K., & Rao, P. (2016). Estimating the mental health effects of social isolation. *Applied Research in Quality of Life*, *11*(3), 853-869.

Roman, C., Decker, S.H., & Pyrooz, D.C. (2017) Leveraging the Pushes and Pulls of Gang Disengagement to Improve Gang Intervention: Findings from Three Multi-Site Studies and a Review of Relevant Gang Programs. *Journal of Crime and Justice, 40*, 316-336.

Rose-Krasnor, L. (2009). Future directions in youth involvement research. *Social Development, 18*, 497-509.

Saltman, E. & Smith, M. (2015). Till martyrdom do us part: gender and the ISIS phenomenon (Rep.). Retrieved from the International Centre for the Study of Radicalisation Website: http://icsr.info/wp-

content/uploads/2015/06/Till_Martyrdom_Do_Us_Part_Gender_and_the_ISIS_Phenomenon.pdf

Sameroff, A. (2010). A unified theory of development: A dialectic integration of nature and nurture. *Child development*, *81*(1), 6-22.

Schils, N. & Verhage, A. (2017). Understanding how and why young people enter radical of violent extremist groups. *International Journal of Conflict and Violence, 11*, 1-17. doi: 10.4119/UNIBI/ijcv.473

Schmid, A. P. (2013). *Radicalisation, de-radicalisation, counter-radicalisation: A conceptual discussion and literature review.* The Hague: International Centre for Counter-Terrorism.

Seif, H. (2011). "Unapologetic and unafraid": Immigrant youth come out from the shadows. In C. A. Flanagan & B. D. Christens (Eds.), Youth civic development: Work at the cutting edge. *New Directions for Child and Adolescent Development, 134*, 59-75.

Shapiro, L. A., & Margolin, G. (2014). Growing up wired: Social networking sites and adolescent psychosocial development. *Clinical Child and Family Psychology Review, 17*(1), 1-18. doi:10.1007/s10567-013-0135-1

Share, R. A. & Stacks, J. S. (2007). Youth-adult partnership in community organizing: A case study of the My Voice Counts! Campaign. *Journal of Community Practice, 14*, 113-127.

Shrauger, J. S., & Schoeneman, T. J. (1979). Symbolic interactionist view of self-concept: Through the looking glass darkly. *Psychological bulletin*, *86*(3), 549.

Simi, P., Sporer, K. & Bubolz, B. F. (2016). Narratives of childhood adversity and adolescent misconduct as precursors to violent extremism: A life-course criminological approach. *Journal of Research in Crime and Delinquency, 53*, 536-563. DOI: 10.1177/0022427815627312

Southern Poverty Law Center. (2017). 100 days in Trump's America: White nationalists and their agenda infiltrate the mainstream. Retrieved online: https://www.splcenter.org/sites/default/files/com_trump_100_days_report_final_web.pdf

Speer, P. W. (2008). Altering patters of relationship and participation: Youth organizing as a setting-level intervention. In M. Shinn & H. Yoshikawa (Eds.), *Toward positive youth development: Transforming schools and community programs* (pp. 213-228). New York: Oxford University Press.

Statistica, (2017, February), U.S. social network reach by age group 2017. Retrieved November 28, 2017, from https://www.statista.com/statistics/305245/us-social-network-penetration-age-group/

Statistics Canada. (2017). Police-reported hate crime in Canada, 2015. Retrieved online: https://www.statcan.gc.ca/pub/85-002-x/2017001/article/14832-eng.htm

Stevens, T., & Neumann, P. R. (2009). Countering online radicalisation: a strategy for action (Rep.). Retrieved from the International Centre for the Study of Radicalisation Website: http://icsr.info/wp-content/uploads/2012/10/1236768491ICSROnlineRadicalisationReport.pdf

Stibli, F. (2010). Terrorism in the context of globalization. *Academic and Applied Research in Military Science,* 9, 1-7.

Swart, J. & Apsche, J. (2014) Family mode deactivation therapy (FMDT): a randomized controlled trial for adolescents with complex issues. *International Journal of Behavioural Consultation and Therapy*, 9(1), 14-22.

Tanti, C., Stukas, A. A., Halloran, M. J. & Foddy, M. (2011). Social identity change: Shifts in social identity during adolescence*. Journal of Adolescence, 34*, 555-567. DOI: 10.1016/j.adolescence.2010.05.012

Teichman, Y., Bar-Tal, D., & Abdolrazeq, Y. (2007). Intergroup biases in conflict: reexamination with Arab pre-adolescents and adolescents. *International Journal of Behavioral Development, 31*, 423–432.

Terriquez, V. (2015). Training young activists: Grassroots organizing and youths' civic and political trajectories*. Sociological Perspectives, 58*, 223-242. DOI: 10.1177/0731121414556473

The UN Broadband Commission for Digital Development. (2015). *Cyber-violence against women and girls: A world-wide wake-up call.* Accessed online Nov. 2017: http://www.unwomen.org/-/media/headquarters/attachments/sections/library/publications/2015/cyber_violence_gender%20report.pdf?vs=4259

Theocharis, Y. & Lowe, W. (2016). Does Facebook increase political participation? Evidence from a field experiment. *Information, communication & society, 19*, 1465-1485.

Theokas, C., Almerigi, J. B., Lerner, R. M., Dowling, E. M., Benson, P. L., Scales, P. C., & von Eye, A. (2005). Conceptualizing and modeling individual and ecological asset components of thriving in early adolescence. *Journal of Early Adolescence, 25*, 113-143.

Third, A. & Richardson, I. (2010). *Connecting, Supporting and Empowering Young People Living with Chronic Illness and Disability: The Livewire Online Community*. Report prepared for the Starlight Children‟s Foundation. Retrieved online: https://starlight.org.au/sites/all/tmp/files/200-programs/Livewire-Online-Community-Research-Project.pdf

Thomas, E. F., McGarty, C., & Louis, W. (2014). Social interaction and psychological pathways to political engagement and extremism. *European Journal of Social Psychology, 44,* 15-22. DOI: 10.1002/ejsp.1988

Thomas, E., Smith, L., McGarty, C., & Postmes, T. (2010). Nice and nasty: The formation of prosocial and hostile social movements. *Revue internationale de psychologie sociale, 23*, 17-55.

Thomas, Paul (2010). Failed and Friendless: The UK's 'Preventing Violent Extremism' Programme. *The British Journal of Politics and International Relations, 12*, 442-458.

Torok, R. (2013). Developing an explanatory model for the process of online radicalisation and terrorism. *Security Informatics, 2*, 6-16.

Tsitsika, A. K., Tzavela, E. C., Janikian, M., Olafsson, K., Iordache, A., Schoenmakers, T. M., Tzavara, C., & Richardson, C. (2014). Online social networking in adolescence: Patterns of use in six European countries and links with psychosocial functioning. *Journal of Adolescent Health, 55*, 141-147. DOI: 10.1016/j.jadohealth.2013.11.010

Tupper, J. (2014). Social media and the Idle No More movement: Citizenship, activism and dissent in Canada. *Journal of Social Science Education, 13*, 87-94.

Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory*. Basil Blackwell.

Turner, I., Reynolds, K. J., Lee, E., Subasic, E., & Bromhead, D. (2014). Well-being, school climate, and the social identity process: A latent growth model study of bullying perpetration and peer victimization. *School Psychology Quarterly* http://dx.doi.org/10.1037/spq0000074

Turner-Zwinkels, F. M., Postmes, T., & van Zomeren, M. (2015). Achieving harmony among different social identities within the self-concept: The consequences of internalising a group-based philosophy of life. *PloS one*, *10*(11), e0137879.

U.K. Home Office. (2011). CONTEST: The United Kingdom’s Strategy for Countering Terrorism. Available at: www.homeoffice.gov.uk/publications/counter-terrorism/counter-terrorism- strategy/strategy-contest?view=Binary

Valenzuela, S., Arriagada, A., Scherman, A. (2012). The Social Bedia Basis of Youth Protest Behaviour: The Case of Chile. *Journal of Communication 62*(2), 299-314.

Valkenburd, P.M., Sumter, S.R., Peter, J. (2010). Gender differences in online and offline self-disclosure in pre-adolescence and adolescence. *British Journal of Developmental Psychology 29*(2), 253-269

Valkenburg, P.M., Peter, J. (2011) Online Communication Among Adolescents: An Integrated Model of its Attraction, Opportunities, and Risks. *Journal of Adolescent Health, 48*, 121-127. DOI: 10.1016/j.jadohealth.2010.08.020

Valkenburg, P. M., Peter, J. & Schouten, A. P. (2006). Friend networking sites and their relationship to adolescents' well-being and social self-esteem. *CyberPsychology & Behavior, 9*, 584-590.

Velduis, T., & Staun, J. (2009). *Islamist radicalization: A root cause model.* The Hague: Netherlands Institute of International Relations Clingendael.

Verroneau, M.-H., Koestner, R. F. & Abela, J. R. Z. (2005). Intrinsic need satisfaction and well-being in children and adolescents: An application of the self-determination theory. *Journal of Social and Clinical Psychology, 24*, 280-292.

Watts, R. J. & Guessous, O. (2006). Sociopolitical development: The missing link in research and policy on adolescents. In S. Ginwright, P. Noguera, & J. Cammarota (Eds.), *Beyond resistance!: Youth activism and community change* (pp. 59-80). New York: Routledge.

Weinstein, E.C. (2014). The personal is political on social media: Online civic expression patterns and pathways among civically engaged youth. *International Journal of Communication, 8*, 210-233.

Williams, M. J., Horgan, J. G., & Evans, W. P. (2016). The critical role of friends in networks for countering violent extremism: Toward a theory of vicarious help-seeking. *Behavioural Sciences of Terrorism and Political Aggression, 8*, 45-65. DOI: 10.1080/19434472.2015.1101147

Williams, M. J. (2017). Prosocial behaviour following immortality priming: Experimental tests of factors with implications for CVE interventions. *Behavioural Sciences of Terrorism and Political Aggression, 9*, 153-190. DOI:10.1080/19434472.2016.1186718

Wilner, A.S., & Dubouloz, C.J. (2011). Transformative radicalization: applying learning theory to Islamist radicalization. *Studies in Conflict and Terrorism* 34(5). 418-438. DOI: http://dx.doi.org/10.1080/1057610X.2011.561472

Wilson, N., Dasho, S., Martin, A. C., Wallerstein, N., Wang, C. C., Minkler, M. (2007). Engaging young adolescents in social action through photovoice: The Youth Empowerment Strategies (YES!) Project. *Journal of Early Adolescence, 27,* 241-261.

Wilson, S. & Lipsey, M. (2000). Wilderness challenge programs for delinquent youth: A meta-analysis of outcome evaluations. *Evaluation and Program Planning, 23*, 1-12.

Windisch, S., Simi, P., Ligon, G. S., & McNeel, H. (2016). Disengagement from ideologically-based and violent organizations: A systemic review of the literature. *Journal for deradicalization, 9,* 1-38.

Wong, C. A., Eccles, J. S., & Sameroff, A. (2003). The influence of ethnic discrimination and ethnic identification on African American adolescents' school and socioemotional adjustment. *Journal of Personality, 71*, 1197-1232.

Wright, R., Alaggia, R., & Krygsman, A. (2014). Five-Year Follow-Up Study of the Qualitative Experiences of Youth in an Afterschool Arts Program in Low-Income Communities. *Journal Of Social Service Research, 40*(2), 137-146. doi:10.1080/01488376.2013.845130

Yang, C. & Brown, B. B. (2013). Motives for using Facebook, patterns of Facebook activities, and late adolescents' social adjustment to college. *Journal of Youth and Adolescence, 42*, 403-416. DOI: 10.1007/s10964-012-9836-x

Ybarra, M.L., Mitchell, K.J., Palmer, N.A., Reisner, S.L. (2015). Online social support as a buffer against online and offline peer and sexual victimization among U.S. LGBT and non-LGBT youth. *Child Abuse & Neglect, 39*, 123-136. DOI: 10.1016/j.chiabu.2014.08.006

York, A. (2017, July 19). Social Media Demographics to Inform a Better Segmentation Strategy. Retrieved November 28, 2017 from https://sproutsocial.com/insights/new-social-media-demongraphics/

Zeldin, S., Krauss, S. E., Collura, J., Lucchesi, M., & Sulaiman, A. H. (2014). Conceptualizing and measuring Youth–Adult partnership in community programs: A cross national study. *American Journal of Community Psychology, 54*(3), 337-347. doi:10.1007/s10464-014

Zhao, S., Grasmuck, S., & Martin, J. (2008). Identity construction on facebook: Digital empowerment in anchored relationships. *Computers in Human Behavior, 24*(5), 1816-1836. doi:10.1016/j.chb.2008.02.012

Additional articles reviewed but not cited (68)

Akesson, B. (2013). Suicide Terrorism as a Process of Meaning-Making and Identity-Formation Among Youth. Retrieved from: https://ssrn.com/abstract=2481279

Aarten, P.G., Mulder, E., & Pemberton, A. (2017) The Narrative of Victimization and Deradicalization: An Expert View. *Studies in Conflict and Terrorism*. DOI: 10.1080/1057610X.2017.1311111

Basit, A. (2016). The pattern of the school da'wa movement. *Ijtimaiyaa,* 1(1), 80-96.

Bjelopera, J. P. (2014). *Countering violent extremism in the United States*. Congressional
Research Service (CRS) Reports and Issue Briefs.

Bouzar, D. (2017). A novel motivation-based conceptual framework for disengagement and de radicalization programs. *Sociology and Anthropology,*5, 600-614. doi: 10.13189/sa.2017.050804

Canter, David V., Sarangi, Sudhanshu and Youngs, Donna E. (2012) Terrorists' Personal
Constructs and Their Roles: A Comparison of the three Islamic Terrorists. *Legal and Criminological Psychology.* ISSN 1355-3259

Dalgaard-Nielsen, A. (2013). Promoting Exit from Violent Extremism: Themes and Approaches. Studies in Conflict & Terrorism, 36, 99-115. DOI: 10.1080/1057610X.2013.747073

Eisenman, D., & Flavahan, L. (2017). Canaries in the coal mine: Interpersonal violence, gang
violence, violent extremism through a public health prevention lens. *International Review of Psychiatry,* 29(4), 341-349. doi: 10.1080/09540261.2017.1343527

Feddes, A. R., & Gallucci, M. (2015). A literature review on methodology used in evaluating
effects of preventive and de-radicalisation interventions. *Journal for Deradicalization, 5*(4), 1-27.

Feddes, A. R. (2015). Socio-psychological factors involved in measures of disengagement and
deradicalization and evaluation challenges in Western Europe.

Fenstermacher, L., Leventhal, T., & Canna, S. (2011). *Countering violent extremism: Scientific methods & strategies*. AIR FORCE RESEARCH LAB WRIGHT-PATTERSON AFB OH.

Greenberg, K. J. (2016). Counter-radicalization via the internet. *The ANNALS of the American Academy of Political and Social Science, 668*(1), 165-179. doi:10.1177/0002716216672635

Hamiel, D., Wolmer, L., Pardo-Aviv, L., Laor, N. (2017). Addressing the needs of preschool children in the context of disasters and terrorism: Clinical pictures and moderating factors. *Child and Family Disaster Psychiatry,* 19:38, 1-8. doi:10.1007/s11920-017-0793-7

Harrison, J. F. (2016). *A general social agent-based model of opinion dynamics with applications to STEM education and radicalization* (Doctoral dissertation, George Mason University).

Heinke, D. H., & Persson, M. (2016). Youth Specific Factors in Radicalization. *Defence Against Terrorism Review*, *8*.

Johnson, R., Ross, D., Matteson, R., Henry, S., & Link, M. (2015). A forensic psychological assessment of terrorist: An anti-terrorism approach for radicalized westerners. *Fischner College of Education: Faculty Articles.* 244.

Koehler, D. (2014). the radical online: Individual radicalization processes and the role of the internet. *Journal for Deradicalization, 1*(2014), 116-134.

La Palm, M. (2014). Concerning features of an apocalyptic cult in the Islamic State of Iraq and the Levant (ISIL). Foreign Policy Journal, 28.

Leuzinger-Bohleber, M. (2016). From free speech to IS - pathological regression of some traumatized adolescents from a migrant background in Germany: From free speech to IS. International Journal of Applied Psychoanalytic Studies, 13(3), 213-223. doi:10.1002/aps.1499

Lobato, D. (2015). A tale of two brothers: How siblings influence behavior and health. The Brown University Child and Adolescent Behavior Letter, 31(4), 1-7. doi:10.1002/cbl.30029

Macaluso, A. (2016). From countering to preventing radicalization through education: Limits and opportunities. *The Hague Institute for Global Justice.*

Markisen, E. (2016). Juvenile law and jihad: exploring anti-terror legislation and calling for
mandatory juvenile treatment of radicalized teens joining ISIS in Syria. *Wisconsin International Law Journal,* 34(2), 182-309.

McGilloway, A., Ghosh, P. & Bhui, K. (2015). A systematic review of pathways to and processes associated with radicalization and extremism amongst Muslims in Western societies. *International review of Psychiatry, 27*(1), 39-50

Morris, E. (2016). Children: extremism and online radicalization. *Journal of Children and Media,*
10(4), 508-514. doi 10.10180/17482798.2016.1234736

Pauline G. M. Aarten, E., & Pemberton, A. (2017): The Narrative of Victimization and Deradicalization: An Expert View, *Studies in Conflict & Terrorism*, doi: 10.1080/1057610X.2017.1311111

Patterson, B. (2015). Evolutionary emotional intelligence for social workers: Status and the psychology of group violence. *Journal for Deradicalization, 2*(2015), 119-137.

Pisoiu, D. (2015). Subcultural theory applied to jihadi and right-wing radicalization in Germany.
Terrorism and Political Violence, 27(1), 9-28.

Prentice, M., McGregor, I., & Hayes, J. (2015). Motivation for aggressive religious radicalization:
Goal regulation theory and a personality x threat x affordance hypothesis. *Frontiers in Psychology, 6*.

Robinson, L., Gardee, R., Chaudhry, F., & Collins, H. (2017). Muslim youth in Britain: Acculturation, radicalization, and implications for social work practice/training. *Journal of Religion & Spirituality in Social Work: Social Thought*, 36(1-2), 266. doi:10.1080/15426432.2017.1311244

Sarma, K. M. (2017). Risk assessment and the prevention of radicalization from nonviolence
into terrorism. *The American Psychologist*, 72(3), 278-288. doi:10.1037/amp0000121

Sikkens, E., San, M.V., Sieckelinck, S., Boeije, H., & Winter, M.D. (2017). Participant recruitment through social media: Lessons learned form a qualitative radicalization study using Facebook. *Field Methods,* 29(2), 130-139. doi:10.1177/1525822X16663146

Spalek, B. (2016). Radicalisation, de-radicalisation and counter-radicalisation in relation to families: key challenges for research, policy, and practice. *Security Journal, 29*(1), 39-52.

Sukarieh, M. & Tannock, S. (2015) The deradicalisation of education: terror, youth, and the assault on learning. *Institute of Race Relations, 57*(4), 22-38.

Thornton, A., & Bouhana, N. (2017). Preventing radicalization in the UK: Expanding the
knowledge-base on the channel programme. *Policing,* 1-14. doi: 10.1093/police/pax036

Theuri, N. (2017). Gender and contextual perspective in countering violent extremism. *Degree*
Project in Criminology, Malmo University Faculty of Health and Society, Department of Criminology, 1-38.

Vargas, J. M. (2017). *Understanding the Radicalization Process of US Homegrown Terrorists* (Doctoral dissertation, Walden University).

Vidino, L., & Hughes, S. (2015). Countering Violent Extremism in America. *The George*
Washington University: Center for Cyber & Homeland Security. https://cchs. gwu. edu/sites/cchs. gwu. edu/files/downloads/CVE% 20in% 20America, *20*.

Waldman, S., & Verga, S. (2016). Countering violent extremism on social media. *Defence*
Research and Development Canada.

Weenink, A. (2015). Behavioural problems and disorders among radicals in police files. *Perspectives on Terrorism,* 9(2), 17-33.

Weilnbock, H. (2013). The narrative principle: Good practice in anti0hate crime interventions, within the radicalization awareness network. In *Right Wing Extremism in Europe.*

Windisch, S., Simi, P., Ligon, G. S., & McNeel, H. (2016). Disengagement from ideologically-based and violent organizations: A systematic review of the literature. *Journal for Deradicalization*, (9), 1-28.

Young, H. F., Rooze, M., & Holsappel, J. (2014). Translating Conceptualizations Into
Practical Suggestions: What the Literature on Radicalization Can Offer to Practitioners. *Peace and Conflict: Journal of Peace Psychology*. Advance online publication.