



Empirical Articles

Risk Factors Reduction in Suicidal Youth Through Social Connectedness Opportunities Provided by Community Services

Redução de fatores de risco em jovens suicidas através de oportunidades de estabelecimento de laços sociais em serviços comunitários

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Abstract

Aim: This study examined the trajectory (life course) of youths, referred to community services following their suicidal behavior, in order to measure the extent to which these young people have taken this opportunity to modify connectedness with family, school, and workplace, and to change high-risk factors related to suicidal behaviors (mental health problems, delinquency, drug consumption).

Method: Fifteen youths (aged 16-19), who made one or more suicide attempts or had serious ideation in the previous 24 to 48 months, were referred to community services (Vallée-Jeunesse). They were interviewed using an intensive personal interview measures (Trajectory Instrument Measure, TIM) in order to document significant life events and adversities that occurred during different periods of their life. In addition, we administered the Structured Clinical Interview for DSM-IV Axis-I and Axis-II disorders (SCID-I and SCID-II) to identify past and current psychopathologies.

Results: Several important changes took place following their entry into the community services: a reduction in delinquency and substance abuse/dependence, and positive changes in occupational status and suicidal behaviors (ideation and suicide attempt).

Conclusion: Our findings can inform policies and strategies that support the prevention of suicidal behavior among young adults. Community services providers can play a role in the prevention of suicidal behaviors for the most vulnerable youths. These types of services could complement traditional suicide prevention strategies, which are mostly mental-health based.

Keywords: connectedness, suicide, prevention of suicidal behaviors, youth, community services, mental health

Resumo

Objetivo: Este estudo analisou a trajetória (curso de vida) de jovens encaminhados para serviços comunitários após comportamento suicida, a fim de verificar em que medida aproveitaram essa oportunidade para modificar a ligação à família, escola e local de trabalho, e mudar fatores de alto risco relacionados com comportamentos suicidas (problemas de saúde mental, delinquência, consumo de drogas).

Método: Quinze jovens (16-19 anos) que fizeram uma ou mais tentativas de suicídio ou manifestaram ideação suicida nos últimos 24 a 48 meses foram referenciados para serviços comunitários (Vallée-Jeunesse). Estes foram entrevistados através de entrevistas pessoais intensivas (Trajectory Instrument Measure, TIM), a fim de registrar eventos significativos e adversidades que ocorreram durante diferentes períodos de sua vida. Adicionalmente, foi utilizada a Entrevista Clínica Estruturada para perturbações do Eixo-I e Eixo-II do DSM-IV (SCID-I e SCID-II) para identificar psicopatologias passadas e atuais.

Resultados: Várias mudanças importantes ocorreram após a sua entrada nos serviços comunitários: uma redução na delinquência e abuso/dependência de substâncias, e mudanças positivas na situação ocupacional e comportamentos suicidas (ideação e tentativa de suicídio).

Conclusão: Os resultados podem fundamentar políticas e estratégias que apoiem a prevenção do comportamento suicida em jovens adultos. Os prestadores de serviços comunitários podem desempenhar um papel na prevenção de comportamentos suicidas para os jovens mais vulneráveis. Esses tipos de serviços poderão complementar estratégias tradicionais de prevenção do suicídio, que são principalmente baseadas em abordagens da saúde mental.

Palavras-Chave: laços sociais, suicídio, prevenção de comportamento suicida, jovens, serviços comunitários, saúde mental

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A group of studies on youth suicide indicate that positive interactions in social and environmental contexts, such as family, school, and workplace, are important factors against suicidal behaviors (Barber & Schluterman, 2008; Townsend & McWhirter, 2005). These positive interactions are captured by the term “connectedness”, a concept that was recently used in research on suicidal behavior (Ayyash-Abdo, 2002). In the United States, the Centers for Disease Control and Prevention (CDC) has adopted as its theme “Promoting individual, family, and community connectedness to prevent suicidal behavior” to define this area of prevention (CDC, 2009, p.3). The concept of connectedness originated in the ecological framework developed by Bronfenbrenner (1977) who emphasized the importance of reciprocal relationships between individual factors and contextual factors to advance our understanding of the “individual system” by taking the individual’s larger environmental context into account (Perkins & Hartless, 2002). This theory emphasized the role of interdependence and interconnection between individual systems in reaching a good adjustment and social adaptation. An ecological model suggests that suicidal behaviors are most likely to occur when youth are exposed to multiple risk factors at various levels of their social ecology: the individual, the family, and extrafamilial contexts (e.g., peer groups, schools, workplace, extra-curricular activities). This approach is particularly well-suited for examining adolescence, a period of increased autonomy when interactions outside the family appear as important sources of support and socialization. Thus, an emphasis on multilevel interactions and connectedness in various contexts may adequately reflect the complexity of adolescents’ experiential world.

The ecological model of suicidal behavior was tested by Borowsky, Ireland, and Resnick (2001) in a longitudinal study that used a large community sample of adolescents and their salient risks and protective factors. They found that the presence of only three protective factors, including connectedness (having good relationships) with family and school, can reduce the risk of suicidal behaviors by 70% to 85%. Other studies found similar results (Kaminski et al., 2010; Stone, Luo, Lippy, & McIntosh, 2015) where family and school connectedness are significantly and negatively related to suicidal behaviors. The role of connectedness for high-risk adolescents’ profiles has been the point of interest in some studies. For example, Czyz, Liu, and King (2012) examined perceived change in connectedness with family members, peers, and nonfamily adults during the period following psychiatric hospitalization of adolescents on trajectories of depressive symptoms, suicidal ideation, and suicide attempts. Their results showed that improvements in peer connectedness have a protective effect against suicide attempts. In a case-control study, Donald, Dower, Correa-Velez, and Jones (2006) found that connectedness with (confide in, trust in) people is negatively associated with medically serious suicidal behavior. These authors pointed to a trend for social connectedness to be more protective among those with high rather than low levels of depressive symptomatology. Similarly, Kidd et al. (2006) found that social connected-

ness has a compensatory effect (i.e., diminishes potential risk arising from another domain). Their results showed that school connectedness augments the effects of parental support for youths who have a history of suicide attempts and a limited amount of peer interaction and support.

It is worth noting that the most studied form of connectedness in the field of suicidal behavior is pertaining to one-on-one interaction and overlapping with the “well known” notion of social support. The notion refers to a social network’s provision of psychological (emotional) and material resources (instrumental or informational) intended to benefit an individual’s ability to cope with stress (Hirsch & Barton, 2011). In this view, connectedness has an influence over suicidal behavior because personal relationships (a form of connectedness) give some type of guidance, advice, empathy, care, or trust that act like a *stress buffer* and help to cope with current difficulties (Cohen, 2004). With some exceptions (Cero & Sifers, 2013; Yang, Burrola, & Bryan, 2010), the value of connectedness of individuals to groups or community organizations like the workplace or religious/spiritual organizations has been ignored in the literature on adolescent suicide. This latter form of connectedness – between a person and a group or institution – overlaps with the notion of social cohesion or social integration for which the mechanism of influence on suicidal behavior is different than the mechanism underlying social support. Basically, social integration refers to a state of embeddedness in social, organized activities that are related to age-salient developmental tasks (Masten et al., 2004; Masten & Curtis, 2000). These activities, such as work experiences and extra-curricular activities that can be provided by social environments constitute many opportunities for adolescents to develop a sense of competence and identification with one’s social role and identity (Cohen, 2004; Masten et al., 2004) that may moderate the risk of suicidal behavior. Despite the variation between the population studies and the different definitions of the concept of connectedness, the pattern of findings from the studies has been uniform, with connectedness inversely associated with a range of suicidal behaviors (Barber & Schluterman, 2008).

However, there are still many unknowns about how connectedness functions in preventing suicide (Kaminski et al., 2010). More data that examines connectedness in various contexts and environments is needed, especially for the most vulnerable adolescents (CDC, 2009; Cero & Sifers, 2013).

This paper presents a study that examines the life course of youth suicide attempter/serious ideators before and after they have received services from a community services provider (Vallée-Jeunesse). The objective is to examine whether and how they have modified their connectedness with family, school, and workplace, and have changed some high-risk factors (i.e., mental health, delinquency, drug consumption) related to their suicidal behaviors that occurred prior their entry into the services (ranging from 24 to 36 months before their entry).

Method

Participants

We recruited and interviewed 25 youths who received community services from Vallée-Jeunesse (VJ) between January 2013 and December 2013 and who agreed to participate (92% response rate). Written informed consent was obtained from the youths, and the University Research Ethics Board approved this study. VJ is a community organization located in the province of Quebec located in Canada Country. VJ’s interventions are directed at young people who are experiencing difficulty in social integration and are between the ages of 16 and 25. This organization provides psychosocial support services (counselling, referral to a medical setting if needed)

that help to mitigate behaviors that have the potential to compromise adaptive functioning (e.g., drug consumption). Psychosocial support gives youth more confidence in their own capacities, strengths and social abilities, and the concrete support provided to them helps them finding employment, accessing housing, or preparing a return to school. For this analysis, we have included only 15 (out of 25) young adults who had previous suicidal behavior (i.e., serious ideation or suicide attempt) in the course of adolescence. All of their suicidal behaviors (ideations and attempts) required medical follow-up, psychiatric hospitalization or crisis intervention from a specialized service. The youths were referred to the VJ community organization by other institutions (hospital, child protective system, or social services) that discharged the youths after a period of services, but it was felt that the youths had other needs that required attention. These referrals made by mental health and social workers may help their clients to link with programs that serve to increase social connectedness. A description of the sample is provided in Table 1.

Table 1

Sample Characteristics in Terms of Gender, Suicidal Behaviors and Childhood Background

Characteristics	<i>n</i>	<i>M ± SD</i>	%
Gender			
Female	7		47
Male	8		53
Number of suicidal behaviors (SB): Ideation and suicide attempt (SA) in life course			
Ideation only	5		33
One SA	5		33
Two or more SA	5		33
Age at SB (years)		15.2 ± 1.4	
Childhood background^a			
Abuse (physical or sexual) or neglect	8		53
Familial conflicts	4		27
Parental drug/alcohol abuse	9		60
Out-of-home care placement (child protective services system)	10		66

^aYouths have experienced many adverse situations in childhood period, so *n* will not add to 15.

Instruments

In the field of suicide and psychopathology, two types of data collection are predominantly used in order to document significant life events that may affect health and well-being: a "checklist" questionnaire where life events are predetermined and pre-established or a semi-structured interview called Intensive Personal Interview Measures (IPIM), such as the Life Events and Difficulties Schedule developed by Brown and Harris (1978). In both cases, the instruments are based on a retrospective perspective. Although, contrarily to the checklist measurement, the IPIM uses an investigator-based method that elicits more detailed descriptive information about significant events and difficulties in view of providing a more comprehensive assessment of the stressors. The evolution of life events assessments has involved increasing precision in identifying the most pathogenic stressors in relation to different outcomes (depression, suicidal behavior, etc.) and extending the method to other life stages such as childhood and adolescence. In this vein, research carried out by Séguin and her colleagues has used the IPIM protocol, the Trajectory Instrument Measure (TIM), to document the stressful events that occurred during different periods of life (childhood, adolescence, and adulthood) of their subjects and that are associated with suicidal behavior (Robert, Séguin, & O'Connor, 2013; Séguin,

Beauchamp, Robert, DiMambro, & Turecki, 2014; Séguin, et al., 2007; Séguin, Renaud, Lesage, Robert, & Turecki, 2011). The TIM interview protocol taken from two IPIM instruments: 1) the Childhood Experience of Care and Abuse instrument (CECA), that covers retrospectively a range of negative childhood experiences prior to the age of 17, during each household arrangement with different parent figures (Bifulco, Brown, & Harris, 1994) and 2) the ALPHI-Adult Life Phase Interview that covers retrospectively a larger number of stressors (or severe life events) experienced over the adult life course (Bifulco, Bernazzani, Moran, & Ball, 2000).

The TIM instrument measures 11 spheres or domains of life: 1) Family structure during life; 2) Early childhood and adolescent relations and events; 3) Relations and events in the affective sphere (affective life and couple life); 4) Events and episodes of personal difficulties (physical/mental illness, abuse); 5) Events associated with academic life (paths, stops, successes, failures, etc.); 6) Events associated with working life (unemployment, work stress, etc.); 7) Events associated with social life (presence/absence of social support, friends, peers); 8) Other events of adversity (financial, legal, death, etc.); 9) Negative experiences (significant disappointments, attempted suicide of a loved one, etc.); 10) Protective factors that have occurred during life; 11) Research and consultation of mental health services (type of treatment, etc.).

The IPIM interviewing method is a tool to construct a narrative (a story) of each event. Once an event is mentioned, the interviewer asks questions about objective circumstances surrounding the event. For example, to document the love life, the same questions will be asked of the respondent for each of the significant emotional relationships that he or she experienced during his/her life: How old were you? How long did this relationship last? What was the cause of the breakdown (if any)? During the relationship, did you experience any difficulties of relationship (tensions, infidelities, etc.)? How would you describe the relationship with your partner (the respondent is asked to provide anecdotes to support his perception)?

As currently done, once the interviews were completed, we drafted clinical case histories (vignettes) to summarize information related to the life spheres. The objective was to locate chronologically the events of adversity affecting each sphere in order to produce a life story (where several events can occur at the same time). Each vignette is a document ranging from 10 to 15 pages (varying according to the age and life event history of each participant). All interviews were recorded to ensure the accuracy of the information reported in the case histories. Moreover, the vignettes were reviewed by the researchers, first individually and afterwards in a group, to discuss each clinical case in order to reach a consistent and common view of the case history.

In addition to the TIM measuring instrument, we administered the Structured Clinical Interview for DSM-IV Axis-I and Axis-II disorders (SCID-I and SCID-II; First, Spitzer, & Gibbon, 1995; Spitzer, Williams, Gibbon, & First, 1992) for past and current psychopathology (.77 to .94 kappa value; Kaufman et al., 1997; Lobbstaël, Leurgans, & Arntz, 2011). The SCID protocol is well suited for longitudinal research.

The interview process represents on average two (sometimes three) different interviews of three hours each. The interviews were conducted by a graduate student in psychology who has received the clinical training required for the procurement of the measuring instruments used and who have previous research experience with these measuring instruments.

Analysis

Data from protocols such as "intensive personal interview measures" can be coded in specific variables and processed by statistical analyzes. For this study, given the small size of sample, we will only use qualitative information from the interviews that had been recorded in the vignettes. We will use the table only to synthesize the qualitative information and to provide an overall picture of the results.

With respect to our main objective, we compared their state of connectedness "before" and "after" entry into services in order to identify changes in connectedness with family, workplace and school. The "before" study period is the amount of time between suicidal behavior and entry into Vallée-Jeunesse (VJ) services, which ranges from 24 to 36 months. The "after" study period corresponds to the elapsed time between entry into services and the interview (ranging from 3 to 12 months). Participants were still involved in VJ programs at the moment of their interview.

Based on a literature review of the concept of connectedness (Townsend & McWhirter, 2005), we believe that two complementary and central aspects must be considered. The first aspect is the "observable" dimensions of connectedness that refer to a state of embeddedness or integration in the social milieu (e.g., having or not a job or contact with a parent), and the second aspect is the "subjective" psychological states – e.g., a sense of closeness to others and/or perceived benefits of integration into his or her social milieu (family, workplace, or school). This information was collected during the investigation of the spheres relating to the family, academic, social and professional life of the young people interviewed.

Results

Before their entry to the VJ services, one third of the youths had serious suicidal ideation, one third had one suicide attempt (SA) and the same proportion had multiple SA. We can see that the majority of the youths have been brought up in dysfunctional families where 60% had a parent with mental health problems (including substance dependence/abuse), 53% had been neglected or abused (physically or sexually) and 26% had experienced severe relational conflicts with their parents (without maltreatment). Not surprisingly, two thirds had been removed from their family home by the child protective services system to be placed in substitute care in the course of childhood or at the onset of adolescence.

During the interview only two participants (13%) reported having a stable and positive relationship with their parent and told us that they were able to confide in and to discuss personal things with them. A majority of the sample experienced severe victimization in childhood, and many have no more contact with their family. When that was not the case, the level of family connectedness was weak, and many youths had a conflictual relationship with their parent: "The less I see her [his mother], the better I feel", "I don't get along with my mother", or "I don't see my father anymore".

Table 2 reports the major changes among young people after their participation in programs offered by the community organization. For the period prior to receiving VJ services, three diagnoses, often appear concomitantly in a majority of the members of the sample group: 66% have a substances use disorder, 60% have a conduct disorder, and 53% have an attention-deficit disorder with hyperactivity (one has ADD without hyperactivity). At this point in time, only two youths manifested a personality disorder (borderline personality in cluster

Table 2

Clinical and Connectedness Characteristics Before and After Entry to VJ Services

Clinical and connectedness profile / variable observed	Before services ^a		After services ^b	
	<i>n</i>	%	<i>n</i>	%
Psychopathology^c				
Axis I				
Depressive disorder	1	6	4	27
Attention-deficit/hyperactivity disorder ^d	8	53	8	53
Conduct disorder	9	60	1	6
Substances (drug/alcohol) disorder	10	66	4	27
Axis II				
Cluster A	0	0	0	0
Cluster B	2	13	2	13
Cluster C	0	0	0	0
Suicidal behavior (Ideation and SA)				
Ideation	5	33	0	0
SA	10	67	0	0
Connectedness				
Family	2	13	2	13
Work	5	33	13	87
School	0	0	4	31

^aTime of entry to services after suicidal behavior (SA); 24.1 ± 14.8 months. ^bTime of interview after entry to services; 6.8 ± 7.4 months.

^cMany youth had > 1 diagnosis so *n* will not add to 15. ^dThe ADHD identified by the SCID in this research was previously confirmed by a psychiatrist.

B). All fifteen youths had dropped out of school at some point in their life before they received services from the VJ community organization. Some of them (33%) had gotten some work experience before receiving VJ services, but only one was still employed when he came into contact with VJ. At the time of interview, the sample of youths had been in contact with VJ community services since an average of 6.8 months (range from 3 to 12 months). This period is related to major changes in psychosocial adjustment. Since their entry into services, no youth reported suicidal ideation or suicide attempt. Many youths have modified their risky behaviors and their occupational situation. Substance disorder has diminished dramatically among the youth (66% to 27%), and the antisocial behaviors (or delinquency acts) have almost disappeared (60% to 6%). Conversely, attention-deficit/hyperactivity disorder, which afflicts 53% of the youth sample, is a relatively stable disorder over the life course, but around 50% of the youths who have this diagnosis take a regular medication to restrict the negative effects. However, compared to the antecedent period, the number of youths who have experienced a depressive episode has increased (1 to 4 youths) even though each of these four young people benefited from medical follow-up at the time of the interview. Many youths got a job and have maintained an occupation since their entry into VJ: the proportion of the youths who have work experience passed from 33% to 87%, and 31% have decided to return to school.

Our results show great improvements in work and school engagement for all the youths (except for two who were in a depression episode during the post-index period). When the youth told us how they felt with a new job or a return to school, above all they experienced a sense of pride and self-worth: "I was told so often that I was going to become a prostitute, that it saved me to know that I could have a real job". Another participant ex-

pressed the psychological benefit of working as simply as: “I am someone who needs to work to feel good”. Like any other youths in the general population, the participants pointed to many benefits that are related to their employment situation: “having a new social network”, “good relations with coworkers”, “earn money to be more independent”, and “the ability to plan for the future”. Those who returned to school see this move as a strategy to get into a better employment situation and to actualize their professional aspirations. The family situation did not change during this period. In fact, all participants have maintained a stable family connectedness for the two compared periods (before and after the VJ services). However, three youths have tried to draw closer to their parents after their entry into services and attempted to reintegrate themselves into their families, but these endeavors were in vain. Ultimately, the results show that several changes took place since they have received services: reduction of behavior and consumption problems, improved occupational status, and no more ideation or suicide attempt(s).

Discussion

As other studies (predominantly correlational) have shown, our results suggest that the experience of social connectedness may have positively influenced risk behaviors and suicidal behaviors. In their systematic literature review [Barber and Schluterman \(2008, p. 209\)](#) accurately point out the existence of uniformity, convergence and pattern in the results reported: “The patterns of findings has been uniform, with connectedness positively associated with positive indicators of health and negatively associated with negative indicators of health”. This convergence in the results reported by the correlational studies is not a coincidence. On the contrary, these results are constant and thus produce cumulative knowledge about the possible influence of connectedness and mental health indicators.

According to the Interpersonal Theory of Suicide developed by [Joiner et al. \(2002, 2009\)](#), “social isolation” is the most robust predictor of lethal suicide attempt across the lifespan. The social isolation concept, including loneliness, social withdrawal, and having few social supports, constitutes a facet of the higher order construct of social connectedness or social integration, which can be measured at multiple ecological levels ([Van Orden et al., 2010](#)). This theory proposes that social connectedness variables are associated with suicide because they are observable indicators that a fundamental human psychological need is unmet: the need to belong. Our data shows that the need for connectedness had often been thwarted in the life course of the youths. Despite the negative consequences that may have resulted from disconnection (family conflicts, suicidal behaviors, etc.), many participants who received services from the VJ organization have dealt successfully with normative tasks like getting a job, returning to school, and quitting drugs and delinquency. These turning points were facilitated through connections with community organizations that support them in taking their place in society. VJ services deal with a variety of concerns related to maladaptive youth by embracing a connectedness-oriented intervention related to their inner self (enhanced self-knowledge) and social connectedness with their environmental context in order to lead more productive and healthy lives. The VJ organization has devised programs and strategies that afford opportunities ranging from education, apprenticeships, and counselling, to create contexts that foster positive change. Many youths take advantage of connections with VJ and seem to have developed adaptive qualities to cope with current stress. These adaptive resources – including a sense of connection and related motivation to achieve embeddedness in a social milieu outside the family – seem to be particularly important as young people take on the challenges of the transition to adulthood. Empirical evidence suggests that all of these adaptive resources are implicated as predictors of future adaptation in developmental theory and

longitudinal studies on young people who were maladaptive at the outset of the transition (Clausen & Jones, 1998; Mahoney & Bergman, 2002; Masten & Curtis, 2000; Roisman, Masten, Coatsworth, & Tellegen, 2004; Sameroff, Peck, & Eccles, 2004; Schulenberg, Bryant, & O'Malley, 2004). Moreover, it is noteworthy that behavioral and occupational status changes in the life course of youth have the potential to divert them from the risk of suicide. Still, we do not know the exact sequence in the process of these internal-external changes observed among the youth, nor do we know the mechanisms that may explain all of the behavioral and situational changes that take place after the youth receive services. It was hypothesized that stronger connections with socialization institutions like school or workplace can increase a sense of belonging or provide a sense of personal value that, in turn, influences the motivation and the ability to cope adaptively with stress (CDC, 2009).

This study has three major limitations: 1) the sample cannot be generalized to a community sample. The findings can only be adequately applied only to the population represented here, i.e., youths who experienced a high burden of childhood adversity that has required one or more specialized intervention systems (e.g., the mental health system, child protective system); 2) the sample is small and is non-representative neither of the young adults who experience difficulties with social integration nor of those who have suicidal behaviors. In our study participants these two conditions are intertwined in their life journey, but in the general population of youth transitioning to adulthood few have to deal with such burdens. This limitation is also one of the strengths of the study, as the data represents a neglected population in research on connectedness. Because our results show the protective power of social connectedness against psychological maladjustment among the youth who are at very high-risk, we can hypothesize like Donald et al. (2006) that social connectedness may be more protective among those with high rather than low levels of symptomatology. Thus, the importance of the knowledge gained by our results overshadows this limitation. 3) Finally, the last limitation refers to the follow-up period, which ranged from three to twelve months. Although the period of observation is too brief to draw firm conclusions on the permanence of change related to risk factors, the longitudinal nature of the data may offer more extensive evidence of the positive impact of social connectedness than can transversal studies, which constitute the majority of the studies in this research field.

Ideally, prevention strategies should target risk factors that have been shown to be both causal and modifiable (Thompson, Eggert, & Herting, 2000). Research evidence has recently suggested that social connectedness may reduce the risk of suicidal behaviors, even for the most vulnerable and high-risks adolescents. According to the Interpersonal Theory of Suicide, social withdrawal produces a feeling of thwarted belongingness, which is a dynamic cognitive-affective state rather than a stable trait. Thus, this predictor can be modified by opportunities offered in the environment. The goal could not be simply to increase the number of social ties or connections among persons or groups, but to enhance the availability of and access to supportive connections. The solutions in this domain are not easy to implement, and we need to take advantage of expertise that lies outside the medical field. Many existing organizations, like the VJ community organization, afford social connectedness for the vulnerable adolescents and young adults. We believe that the cornerstone to this accompaniment is a process that fosters the youths' capacities to develop a more acute consciousness of the inner self (what I am and what I want) but is embedded in the social world (what I would do). Indeed, this kind of accompaniment integrates a sense of agency with a sense of connectedness. We believe that community services could complement traditional suicide prevention strategies that are mostly mental-health based (Gould, Greenberg, Velting, & Shaffer, 2003). While the studies on the effect of social connectedness on suicidal behaviors yield encouraging data, additional research is sorely needed to refine the evaluation of this type of intervention.

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Competing Interests

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References

- Ayyash-Abdo, H. (2002). Adolescent suicide: An ecological approach. *Psychology in the Schools, 39*(4), 459-475. doi:10.1002/pits.10042
- Barber, B. K., & Schluterman, J. M. (2008). Connectedness in the lives of children and adolescents: A call for greater conceptual clarity. *The Journal of Adolescent Health, 43*, 209-216. doi:10.1016/j.jadohealth.2008.01.012
- Bifulco, A., Bernazzani, O., Moran, P. M., & Ball, C. (2000). Lifetime stressors and recurrent depression: Preliminary findings of the Adult Life Phase Interview (ALPHI). *Social Psychiatry and Psychiatric Epidemiology, 35*, 264-275. doi:10.1007/s001270050238
- Bifulco, A., Brown, G. W., & Harris, T. O. (1994). Childhood experiences of care and abuse (CECA): A retrospective interview measure. *Journal of Child Psychology and Psychiatry, and Allied Disciplines, 35*, 1419-1435. doi:10.1111/j.1469-7610.1994.tb01284.x
- Borowsky, I. W., Ireland, M., & Resnick, M. D. (2001). Adolescent suicide attempts: Risks and protectors. *Pediatrics, 107*, 485-493. doi:10.1542/peds.107.3.485
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *The American Psychologist, 32*, 513-531. doi:10.1037/0003-066X.32.7.513
- Brown, G. W., & Harris, T. O. (1978) Social origins of depression: A study of psychiatric disorder in women. London, United Kingdom: Free Press.
- Centers for Disease Control and Prevention. (2009). *Strategic direction for the prevention of suicidal behavior: Promoting individual, family, and community connectedness to prevent suicidal behavior*. Atlanta, GA, USA: Department of Health and Human Services. Retrieved from www.cdc.gov/ViolencePrevention/pdf/Suicide_Strategic_Direction_Full_Version-a.pdf
- Cero, I., & Sifers, S. (2013). Moderating factors in the path from physical abuse to attempted suicide in adolescents: Application of the interpersonal-psychological theory of suicide. *Suicide & Life-Threatening Behavior, 43*(3), 296-304. doi:10.1111/sltb.12016
- Clausen, J. A., & Jones, C. J. (1998). Predicting personality stability across the life span: The role of competence and work and family commitments. *Journal of Adult Development, 5*(2), 73-83. doi:10.1023/A:1023038410560

- Cohen, S. (2004). Social relationships and health. *The American Psychologist*, *59*(8), 676-684.
doi:[10.1037/0003-066X.59.8.676](https://doi.org/10.1037/0003-066X.59.8.676)
- Czyz, E. K., Liu, Z., & King, C. A. (2012). Social connectedness and one-year trajectories among suicidal adolescents following psychiatric hospitalization. *Journal of Clinical Child and Adolescent Psychology*, *41*(2), 214-226.
doi:[10.1080/15374416.2012.651998](https://doi.org/10.1080/15374416.2012.651998)
- Donald, M., Dower, J., Correa-Velez, I., & Jones, M. (2006). Risk and protective factors for medically serious suicide attempts: A comparison of hospital-based with population based samples of young adults. *The Australian and New Zealand Journal of Psychiatry*, *40*, 87-96. doi:[10.1080/j.1440-1614.2006.01747.x](https://doi.org/10.1080/j.1440-1614.2006.01747.x)
- First, M. B., Spitzer, R. L., & Gibbon, M. (1995). The structured clinical interview for DSM-III-R personality disorders (SCID-II). Part I: Description. *Journal of Personality Disorders*, *9*, 2-16. doi:[10.1521/pedi.1995.9.2.83](https://doi.org/10.1521/pedi.1995.9.2.83)
- Gould, M. S., Greenberg, T., Velting, D. M., & Shaffer, D. (2003). Youth suicide risk and preventive interventions: A review of the past 10 years. *Journal of the American Academy of Child and Adolescent Psychiatry*, *42*(4), 386-405.
doi:[10.1097/01.CHI.0000046821.95464.CF](https://doi.org/10.1097/01.CHI.0000046821.95464.CF)
- Hirsch, J. K., & Barton, A. L. (2011). Positive social support, negative social exchanges, and suicidal behavior in college students. *Journal of American College Health*, *59*(5), 393-398. doi:[10.1080/07448481.2010.515635](https://doi.org/10.1080/07448481.2010.515635)
- Joiner, T. E., Lewinsohn, P. M., & Seeley, J. R. (2002). The core of loneliness: Lack of pleasurable engagement - more so than painful disconnection - predicts social impairment, depression onset, and recovery from depressive disorders among adolescents. *Journal of Personality Assessment*, *79*, 472-491. doi:[10.1207/S15327752JPA7903_05](https://doi.org/10.1207/S15327752JPA7903_05)
- Joiner, T. E., Van Orden, K. A., Witte, T. K., Selby, E. A., Ribeiro, J., Lewis, R., & Rudd, M. D. (2009). Main predictions of the interpersonal psychological theory of suicidal behavior: Empirical tests in two samples of young adults. *Journal of Abnormal Psychology*, *118*, 634-646. doi:[10.1037/a0016500](https://doi.org/10.1037/a0016500)
- Kaminski, J. W., Puddy, R. W., Hall, D. M., Cashman, S. Y., Crosby, A. E., & Ortega, L. A. G. (2010). The relative influence of different domains of social connectedness on self-directed violence in adolescence. *Journal of Youth and Adolescence*, *39*, 460-473. doi:[10.1007/s10964-009-9472-2](https://doi.org/10.1007/s10964-009-9472-2)
- Kaufman, J., Birmaher, B., Brent, D., Rao, U., Flynn, C., Moreci, P., . . . Ryan, N. (1997). Schedule for Affective Disorders and Schizophrenia for School-Age Children-Present and Lifetime Version (K-SADS-PL): Initial reliability and validity data. *Journal of the American Academy of Child and Adolescent Psychiatry*, *36*(7), 980-988.
doi:[10.1097/00004583-199707000-00021](https://doi.org/10.1097/00004583-199707000-00021)
- Kidd, S., Henrich, C. C., Brookmeyer, K. A., Davidson, L., King, R. A., & Shahar, G. (2006). The social context of adolescent suicide attempts: Interactive effects of parent, peer, and school social relations. *Suicide & Life-Threatening Behavior*, *36*(4), 386-395. doi:[10.1521/suli.2006.36.4.386](https://doi.org/10.1521/suli.2006.36.4.386)
- Lobbestael, J., Leurgans, M., & Arntz, A. (2011). Inter-rater reliability of the structured clinical interview for DSM-IV Axis I Disorders (SCID-I) and Axis II Disorders (SCID-II). *Clinical Psychology & Psychotherapy*, *18*, 75-79.
doi:[10.1002/cpp.693](https://doi.org/10.1002/cpp.693)
- Mahoney, J. L., & Bergman, L. R. (2002). Conceptual and methodological considerations in a developmental approach to the study of positive adaptation. *Applied Developmental Psychology*, *23*, 195-217. doi:[10.1016/S0193-3973\(02\)00104-1](https://doi.org/10.1016/S0193-3973(02)00104-1)

- Masten, A. S., Burt, K. B., Roisman, G. I., Obradovic, J., Long, J. D., & Tellegen, A. (2004). Resources and resilience in the transition to adulthood: Continuity and change. *Development and Psychopathology, 16*, 1071-1094. doi:10.1017/S0954579404040143
- Masten, A. S., & Curtis, W. J. (2000). Integrating competence and psychopathology: Pathways toward a comprehensive science of adaptation in development. *Development and Psychopathology, 12*, 529-550. doi:10.1017/S095457940000314X
- Moffitt, T. E., Caspi, A., Harrington, H., & Milne, B. J. (2002). Males on the life-course-persistent and adolescence-limited antisocial pathways: Follow-up at age 26 years. *Development and Psychopathology, 14*, 179-207. doi:10.1017/S0954579402001104
- Perkins, D. F., & Hartless, G. (2002). An ecological risk-factor examination of suicidal ideation and behavior of adolescents. *Journal of Adolescent Research, 17*, 3-26. doi:10.1177/0743558402171001
- Robert, M., Séguin, M., & O'Connor, K. (2013). Pathways to adulthood for foster care adolescents: Integrating the insights of developmental psychology and social work. *International Journal of Humanities and Social Science, 3*(7), 132-140.
- Roisman, G. I., Masten, A. S., Coatsworth, J. D., & Tellegen, A. (2004). Salient and emerging developmental tasks in the transition to adulthood. *Child Development, 75*, (1), 123-133. doi:10.1111/j.1467-8624.2004.00658.x
- Sameroff, A. J., Peck, S. C., & Eccles, J. S. (2004). Changing ecological determinants of conduct problems from early adolescence to early adulthood. *Development and Psychopathology, 16*, 873-896. doi:10.1017/S0954579404040052
- Schulenberg, J. E., Bryant, A. L., & O'Malley, P. M. (2004). Taking hold of some kind of life: How developmental tasks relate to trajectories of well-being during the transition to adulthood. *Development and Psychopathology, 16*, 1119-1140. doi:10.1017/S0954579404040167
- Séguin, M., Beauchamp, G., Robert, M., DiMambro, M., & Turecki, G. (2014). Developmental model of suicide trajectories. *The British Journal of Psychiatry, 205*, 120-126. doi:10.1192/bjp.bp.113.139949
- Séguin, M., Lesage, A., Turecki, G., Bouchard, M., Chawky, N., Tremblay, N., . . . Guy, A. (2007). Life trajectories and burden of adversity: Mapping the developmental profiles of suicide mortality. *Psychological Medicine, 37*, 1575-1583. doi:10.1017/S0033291707000955
- Séguin, M., Renaud, J., Lesage, A., Robert, M., & Turecki, G. (2011). Youth and young adult suicide: A study of life trajectory. *Journal of Psychiatric Research, 45*, 863-870. doi:10.1016/j.jpsychires.2011.05.005
- Spitzer, R. L., Williams, J. B., Gibbon, M., & First, M. B. (1992). The Structured Clinical Interview for DSM-III-R (SCID): I. History, rationale, and description. *Archives of General Psychiatry, 49*, 624-629. doi:10.1001/archpsyc.1992.01820080032005
- Stone, D. M., Luo, F., Lippy, C., & McIntosh, W. L. (2015). The role of social connectedness and sexual orientation in the prevention of youth suicide ideation and attempts among sexually active adolescents. *Suicide & Life-Threatening Behavior, 45*(4), 415-430. doi:10.1111/sltb.12139
- Thompson, E. A., Eggert, L. L., & Herting, J. R. (2000). Mediating effects of an indicated prevention program for reducing youth depression and suicide risk behaviors. *Suicide and Life-Threatening Behavior, 30*(3), 252-271. doi:10.1111/j.1943-278X.2000.tb00990.x

- Townsend, K. C., & McWhirter, B. T. (2005). Connectedness: A review of the literature with implications for counseling, assessment, and research. *Journal of Counseling and Development, 83*, 191-201. doi:[10.1002/j.1556-6678.2005.tb00596.x](https://doi.org/10.1002/j.1556-6678.2005.tb00596.x)
- Van Orden, K. A., Witte, T. K., Cukrowicz, K. C., Braithwaite, S. R., Selby, E. A., & Joiner, T. E. (2010). The interpersonal theory of suicide. *Psychological Review, 117*(2), 575-600. doi:[10.1037/a0018697](https://doi.org/10.1037/a0018697)
- Yang, R. K., Burrola, K. S., & Bryan, C. H. (2010). Suicide ideation among participants in an after-school program: A convenience sample. *Child and Youth Services, 31*, 3-13. doi:[10.1080/01459350903505546](https://doi.org/10.1080/01459350903505546)