 Communities That Care, Core Elements and Context: Research of Implementation in Two Countries

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Abstract

This paper describes the degree to which implementation of the Communities That Care (CTC)
prevention operating system was reached in 22 communities in 2 countries: the US (12 communities)
and the Netherlands (10 communities). Core elements of CTC and results from two implementation
measures conducted in both countries are reported here. Similarities and differences of the
implementation process are discussed.

Keywords

implementation; prevention; community intervention; international

Introduction

During the last two decades much progress has been made in identifying effective programs
and policies for prevention of adolescent alcohol and drug use, violence and delinquency, as
well as other problem behaviors (Elliott, 1997; Sherman et al., 1997; Substance Abuse and
Mental Health Services Administration, 2002). Despite these advances, less is known about
the implementation of these programs when they are conducted in different social contexts and
used by different people and organizations.
Due to differing social or cultural contexts, programs may be delivered without full coverage of the program content or without trained program leaders. Major and minor changes to programs’ core content and methods of delivery should be documented when programs are researched, developed, and replicated (Pentz, 2004). Some studies have examined the adaptation of preventive programs and policies that have been imported to other countries (Ferrer-Wreder et al., 2004). The study of cross-national implementation of preventive programs is necessary to identify whether or not differences in national policies, cultures, and contexts lead to major changes during implementation, and to describe the types of adaptations that may occur. Cultural differences are often used as justification for changes in programs, but making such changes could undermine the effectiveness of programs. Thus, it is important to identify the core elements of a program before implementation in different countries, as well as to identify changes in implementation across countries. This article compares the cross-national implementation process of Communities That Care, a community-based strategic prevention operating system, in two countries, the United States (US) and Netherlands (NL).

**Communities That Care**

The Communities That Care (CTC) operating system is a community-based strategic approach to reducing youth involvement in problem behaviors (Hawkins et al., 2002), theoretically guided by the social development model (Catalano & Hawkins, 1996; Hawkins & Weis, 1985). The basis of this strategic, community-specific process is a public health approach to prevention designed to increase communication, collaboration, and ownership among community members and service providers (Hawkins et al., 2002; 2001). In 1988, the Social Development Research Group (SDRG) at the University of Washington began to apply prevention science findings regarding risk and protective factors and effective interventions to the organization of strategic community prevention services systems. Training materials were developed to communicate this framework for strategic prevention services planning to community leaders and prevention providers, and an intervention strategy was designed to mobilize communities to adopt this framework. An early version of the Communities That Care (CTC) strategy was field tested in 25 communities in Washington State. Community coalitions were trained to use a risk- and protection-focused approach to plan and implement strategic prevention programs targeting prioritized risk and protective factors (Harachi Manger et al., 1992). The CTC strategy was revised and field tested in 36 sites in the state of Oregon. This test showed that, using CTC, risk- and protection-focused prevention could be implemented and maintained by communities over an extended period of time. Twenty-one (60%) of the communities implemented risk-focused prevention programs within one year after receiving training in the planning process, though they had received no funding for implementation (Harachi et al., 1996).

The CTC process involves five specific phases conducted by community boards (for a full description of the CTC process, see Hawkins and Catalano, 2002; Quinby et al., 2008). Each community board is appointed by key community leaders (e.g., police chiefs, school superintendents, and mayors in the US; and directors and board members of institutions, and city council members in the NL). In Phase 1, key leaders are mobilized to assess their communities’ readiness to adopt the CTC approach to prevention. In Phase 2, they form a prevention board whose members receive a series of training sessions describing the public health model, prevention science, and the advantages of using a data-driven decision-making process to guide prevention activities. During Phase 3, the community boards use community-specific epidemiological data to assess levels of risk and protection and conduct a resource assessment of prevention programs already occurring in the community. They then assess the epidemiology of problem behaviors in their community, identify the prevalence of risk and protective factors in the community that influence the likelihood of these outcomes, and prioritize which risk and protective factors should be addressed and which outcomes are of

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most concern. The community board then selects empirically supported prevention programs to address the prioritized risk factors and outcomes during Phase 4. During Phase 5, the board supports the implementation of these programs, evaluates their effectiveness in the community, and revises their plans as necessary.

Communities That Care provides communities with well-designed curriculum materials, trainings, and technical assistance to implement the community change model at the local level. Communities That Care has been widely disseminated in areas around the US, e.g., Pennsylvania (Greenberg et al., 2005), Kansas, and New York. It is also disseminated internationally, in Australia, Canada, Britain (Crow et al., 2004), and in the Netherlands (Steketee et al., 2006; Van Dijk et al., 2004). However, little is known about the comparability of the community implementation process across countries. This paper compares the implementation of the Communities That Care Prevention Strategy in the United States and the Netherlands. The objective of this international study is to compare the implementation of CTC between the two countries and identify core elements and to compare the similarities and differences between the local community boards in the two countries.

Core elements of Communities That Care

We expected that several contextual factors would impact the delivery of CTC in the US and the NL. First, coalition board members in the US are typically community volunteers. In the NL, coalition boards are more likely to be made up of human service professionals who participated on the CTC coalitions as part of their jobs. This is, in part, due to the strong history of professional service delivery corporations in the NL compared to the US. Additionally, the NL has a state-oriented focus, where citizens depend on the state to intervene and address social problems, whereas in the US there is a long history of community mobilization and activation to address social problems (Waltzer, 1997). Second, the US has a wider distribution of income ranges than the NL, even in the small and medium-sized communities involved in this study (Keating & Hertzman, 1999). Some evidence suggests that implementation of CTC is more difficult in high-poverty communities (Feinberg et al., 2007). Finally, the US has a focus on preventive strategies, programs, and policies, whereas the NL has more of a focus on universal approaches to health care and promotion (Ince et al., 2004).

Prior to conducting the comparative study, we defined the core elements of CTC. This was critical because of cultural differences between these two countries, and also because working with communities within a country means working with many different parties with varied perspectives and responsibilities. Communities That Care is intended to be locally tailored, however, certain key elements are required to ensure the communities’ effectiveness. The following four common core elements were identified as essential for successful implementation of CTC.

1. Mobilizing stakeholders in the community process—The CTC boards are intended to comprise diverse representation from the community, both in demographic characteristics and in representing key sectors of the community, including elected officials, parents, law enforcement, school personnel, public health officials, faith organizations, social services agencies, the business community, young people, and other stakeholders. Trainings for board members are intended to provide specially developed tools and important scientific concepts of prevention that are transferred to communities. This strategic, community-specific process is designed to increase ongoing communication, collaboration, and local ownership among community members and service providers involved in the CTC process (Hawkins et al., 2002; Hawkins et al., 2001) and lead to coordinated, data-driven decision making on the part of all stakeholders involved with the development of young people in the community. It is intended that stakeholders stay engaged throughout the process, through ongoing coalition
meetings, program decision making, monitoring of programs, and refining of community action plans.

2. Using epidemiological data—A key element of the CTC process is the use of epidemiological data in the decision-making process. CTC trainings assist community boards to collect and interpret risk and protective factor data for adolescent problem behaviours (e.g., substance abuse, dropout, delinquency). The CTC Youth Survey, a standardized tool to assess risk and protection (Arthur et al., 2002), is administered to youth in schools (approximately at ages 12, 14, 16, and 18 years). The school survey measures student self-reports of demographic characteristics, youth outcomes on various problem behaviors, and prevalence of risk and protective factors (30 factors altogether divided between family, school, peer group, and community domains). Additionally, archival data (e.g., school drop-out rates, teenage pregnancy statistics, arrest records, etc.) is used in conjunction with the CTC Youth Survey data to assist in interpreting data and to provide data not available from the CTC Survey. Profiles of community risk and protection are used by communities to prioritize targets for intervention programming and to use as a reference point for the future evaluations.

3. Using tested and effective programs—The third core element of CTC in both countries is the use of programs that have been evaluated and have been shown to reduce risk, increase protection, and reduce problem behaviours. After communities have prioritized their risk and protective factors, boards identify tested and effective programs to address the needs in their community. Communities select programs from a menu of tested programs from the CTC Prevention Strategies Guide (Hawkins & Catalano, 2002) or Veelbelovend en Effectief (Ince et al., 2004) that target communities, schools, families, or children. The programs (56 in the US, 31 in the NL) on the CTC menu include parent training programs, schoolwide interventions, social skills curricula, mentoring programs, after-school activities, and community-based multicomponent interventions appropriate for children aged 0–18 and their families, and which target different risk and protective factors. Once the boards have chosen the new programs, board members learn in a CTC training session to write a prevention action plan that sets clear, measurable goals regarding anticipated outcomes and clearly articulates how the selected evidence-based programs or policies would be implemented, including where, when, and how their implementation will support the health and social development of children and adolescents.

4. Ongoing evaluation of results and revision of the community plan—CTC is intended as an ongoing process. Every second year, communities in both countries have been administering the CTC Youth Survey and updating other community assessment data. Based on a review of these data and community-level changes in risk, protection, and youth outcomes, CTC boards revise their action plans as needed. They also monitor implementation progress and use this data to refine prevention program implementation when necessary.

Methods
Sample

Once we defined these core elements, we had a basis for comparing the implementation process of communities in the two countries. The implementation data came from two datasets. The US data come from a group-randomized trial (Community Youth Development Study, conducted by the Social Development Research Group (SDRG) at the University of Washington) in which 24 small- to medium-size communities from seven states were recruited to participate. Inclusion in the study required a letter consenting to participation in required research activities from the superintendent of schools, the mayor or town manager, depending on local government structure, and the head of the law enforcement agency serving the
community. In fall 2002, the communities were randomly assigned either as intervention communities (n=12), implementing the CTC operating system, or control communities (n=12), conducting prevention services as usual. This RCT study aims to evaluate the effectiveness of CTC in reducing levels of risk, increasing levels of protection, and reducing levels of substance use, delinquency, and other adolescent problem behaviors in communities. The study also assesses the degree to which the use of tested, effective programs in communities predicts changes in community-wide levels and trajectories of risk, protection, drug use, and related behavior outcomes (for more detail regarding the Community Youth Development Study (CYDS) intervention design and evaluation, see Hawkins, 2006; Quinby et al., 2008). Implementation data from the 12 CTC intervention communities only are reported here. These communities are located in seven states in the US from Maine to Oregon and range in population size from about 1,500 to 40,000. Median annual income ranged from about $32,000 to $44,000.

The Dutch data were collected from 10 cities which implemented CTC during 2000–2006. With a grant from the Dutch government, 3 of the 10 cities started in 2000 with the implementation of the prevention system. Since 2004, their prevention work has been financed by their municipalities. The other seven communities have initiated implementation of CTC at different times between 2004–2006. Two communities were financed by the national government, the other five by their respective Dutch province. Implementation of CTC in the NL was conducted by NIJ, the evaluation of the implementation process was conducted by Verway-Jonker Institute between 2004–2006 (Steketee et al., 2006).

The 10 Dutch cities are spread out over the country, although most cities are in the West Netherlands. Unlike the American communities, the Dutch CTC communities are mostly part of a bigger city, neighborhood, or independent borough. The areas are generally more populated and urban than the US communities. In general, the Dutch CTC communities are in areas with a higher percentage of youth, immigrants, and a higher prevalence of social problems than other Dutch communities. Communities in the Netherlands are not part of a controlled trial. Consequently, data on these communities are not collected in a streamlined manner but have been persistently collected over the years. The Dutch CTC communities are located in five provinces in the NL and range in population from about 18,000 to 32,000. Median annual income ranges from about $24,000 to $29,000.

In order to implement CTC in the US, certified CTC trainers provided the intervention communities with six standardized training workshops that teach community members to use the CTC operating system. Phone and email consultation was also available. Communities in the NL were exposed to five CTC trainings. In the US, an additional training was added to teach communities how to monitor implementation of tested and effective programs. Staff from the Social Development Research Group at the University of Washington provided additional technical assistance through weekly phone calls, written emails and reports, and site visits two to three times per year to each intervention community. Intervention communities were also provided with funding for a full-time local coordinator to oversee CTC activities and were given $75,000 annually to support implementation of prevention programs selected by the community through the CTC process. In the NL, CTC staff were trained and certified through an agreement with the US distribution company of CTC. Communities That Care staff delivered training to community boards and provided technical assistance, mostly by direct contact and general meetings. Each CTC community in the Netherlands has a full-time local coordinator. Communities in the Netherlands did not receive annual financial support for program implementation.

This study has the advantage of measuring CTC implementation using common measures across the two countries: the milestones and benchmarks and the CTC board interview. Both
the milestones and benchmarks and the board survey were adopted in the NL from reliable US measures with slight alterations for cultural contexts.

**Measures**

**Milestones and Benchmarks**—The CTC curriculum outlines the steps and procedures, called “milestones” and “benchmarks,” that are to be achieved during the five phases of CTC system implementation. The milestones are goals to be met by communities, and the benchmarks are the actions that community members take or conditions that must be present to achieve those goals. To illustrate, during Phase 3, the community should accomplish the milestone “identify priority risk and protective factors.” One benchmark in this process is “decide who will be involved in the prioritization process.” The CTC trainings provide community members with structured work sessions and skills needed to accomplish most of the milestones and benchmarks, though considerable work must be done outside the training sessions to complete the milestones and benchmarks. In both countries, community coordinators were expected to work with key leaders and CTC board members to achieve these milestones and benchmarks during their implementation of CTC.

The milestones and benchmarks allow measurement of the completion of the core elements of CTC system implementation and allow us to examine to what extent communities in both countries were able to implement the CTC system as designed. In order to assess implementation progress, benchmarks and milestones were rated by local coordinators, the intervention staff, and trainers, and averaged across all raters to calculate the community score for each milestone and benchmark in both countries during 2005/2006. Benchmarks were rated as being either “achieved” or “not achieved” and milestones were rated on a 4-point scale from “none of the milestone met” to “milestone completely met.” In addition, project staff in the US and the NL rated the degree of challenge presented by each benchmark on a 4-point scale from “not at all challenging” to “very challenging” and identified the challenges faced. Applying these tools, we assessed similarities and differences in the experiences of communities seeking to use the CTC process in the US and the NL. Comparison of these measures addressed the degree to which the CTC system is generalizable across these two cultural and national contexts.

**Community Board Interview**—The board interview, conducted in both countries, examines eight dimensions of board effectiveness. Seven scales common to instruments in both countries allow assessment of the strength of the community boards and include: community readiness, knowledge of CTC (Feinberg et al., 2004a), participation (Arthur et al., 2002), influence of CTC (Pentz, 2001), impact of CTC, barriers to CTC implementation, and board turnover, cohesion, efficiency, and conflict (Feinberg et al., 2004a; 2004b; 2005). Table 1 provides a summary of the scales, sample items, and reliability coefficients for each country. Up to 10 coalition board members from each community in both countries were contacted and asked to respond to the board interview. In the US, 113 board members from 12 CDYS communities completed the interview. Ninety-five percent completed the board interview, with an average of nine participants from each community (range: 8 – 10). In the Netherlands, all board members from nine CTC communities (one board stopped at this point) were asked to complete the board interview. Fifty-five board members (63%) completed the interview, with an average of six members per city (range: 4 – 9). Data from both countries were collected in spring 2006 after 3 years of CTC implementation in the US and different periods of implementation in the NL.
Results

Milestones and Benchmarks

Data from the ratings of the milestones and benchmarks in the US suggests high implementation of CTC in the CYDS communities. The data from the NL show similar, but somewhat lower levels of implementation than the US for the first three phases, and evidence of high implementation of CTC in the 10 communities. However, Phase 4, and especially Phase 5, indicate low CTC implementation in the NL. Due to the staggered implementation of CTC in the NL, not all the communities were in the same phase. These communities were, as mentioned, not part of an experimental study, and the heterogeneity within the Dutch communities was greater. At the time of this research, 5 of 10 communities were in Phase 4 or 5.

Both countries were able to recruit and engage key stakeholders in supporting the CTC process. Additionally, both communities in both countries were able to establish viable community planning boards. Both countries were using epidemiological data to develop prevention plans. Data from Phase 3 indicates that both the NL and US communities were able to use student survey data and community risk and protective profiles to prioritize which risk factors to focus their efforts on. Table 3 identifies the range of risk factors identified by both US and NL boards.

Challenges and barriers in the implementation process of CTC

There was a greater degree of challenge or barriers to implementation in the NL than in the US, with a mean overall challenge rate of 2.08 across all 5 implementation phases in the NL, and 1.22 in the US. Several common challenges were identified in both countries. These included the adoption and implementation of tested, effective programs. Frequently, community members were concerned about adopting new programs and wanted to use familiar programs, even if they did not have data supporting the effectiveness of those programs. In both countries there is need for a more comprehensive menu of tested and effective programs, but even more so in the Netherlands. Additionally, recruitment, retention, and activation of key leaders was challenging in both countries. While overall challenge rates were similar and some common challenges were faced, the two countries also had different challenges identified by raters.

Examples of specific challenges identified by raters in the US communities during Phase 1 included developing clear definitions for CTC board roles and members’ levels of authority. The CTC trainings do not provide technology for boards to effectively collaborate with other community development initiatives and prevention organizations. Consequently, communities spend considerable time and effort addressing these issues and clarifying the board’s role and procedures in the process of formalizing work with other efforts and organizations.

During Phase 5, raters in the US identified the boards as being challenged by reaching some targeted populations with chosen programs, policies, or practices. For example, the successful recruitment of a high percentage of parents into parenting programs was a challenge identified by raters. CTC communities have tried a wide range of approaches to recruitment into parenting programs. Neither CTC or any of the tested effective parenting programs provide a technology or mechanism for the successful recruitment of a high percentage of parents into parenting programs. None of the communities met the saturation goal of reaching at least 20% of the target population per year. Another challenge faced during Phase 5 was recruiting and training new key leaders and board members. Because CTC is an ongoing effort, it is important to routinely recruit and train new board members and to continuously ensure members represent all critical stakeholders in the current effort and community. This has required communities to...
offer formal annual and periodic Key Leader Orientations for new board members. No major challenges were identified in Phases 2 – 4.

In the Netherlands, an example of a specific challenge identified by milestone and benchmark raters faced by communities during Phase 1 involves defining the geographic region covered by CTC. While communities in the US were typically towns, cities, or a collection of towns, and all neighbourhoods were included in this process, in the NL the CTC area was typically a neighbourhood of a larger city which made clarifying the CTC community boundaries challenging. Raters identified difficulties in communication to the broader community and key leaders during Phase 2, as well as difficulty in involving schools in organizing and committing to cooperate with conducting the student survey, and getting the right people to be involved with the process. In addition, board members found it difficult to explain the CTC framework and process. During Phase 3, board members were challenged by conducting a comprehensive resource assessment (documenting what is going on in the community, which programs are used, and how many people are participating). Finally, during Phase 4 the boards found it challenging to develop a comprehensive plan of programs to target prioritized risk factors. This is due, in part, to the paucity of tested, effective programs in the Netherlands. Additionally, community boards had a more difficult time focusing on the concept of protective factors, hence and they sometimes slipped from the agenda. Consequently, the effort remains problem focused rather than health promotion focused. The challenge for Phase 5 is to use the outcomes of the ongoing evaluation of the prevention plan to inform the next iteration of the plan. In the US, communities received an additional training on the implementation of tested programs, called Community Plan Implementation Training, to facilitate this process. Communities in the Netherlands are now receiving this training.

Community Board Interview

A comparison of key elements of board functioning as reported by board members in both countries shows that, on a number of dimensions, CTC boards in the US are functioning significantly better than those in the NL. US boards had higher levels of knowledge of CTC, greater community readiness and support for CTC, more participation by community members, lower membership turnover, and greater skills in conflict resolution. Yet the two countries reported comparable levels of influence and impact of CTC in their communities (see Figure 1). The observed differences in board functioning may be due to the makeup of the board membership.

Based on data from the board interviews, several factors may have had a negative influence on the implementation of CTC in the NL compared to the US. First, there is broader representation and participation of the community on CTC boards in the US than in the NL. Generally, in the NL the people involved represent local institutes which work with children. This may, in part, explain why board member turnover is higher in the NL; as people change their positions, they leave the board and new professionals join. Consequently, participation from students, business leaders, and volunteers is lacking on the Dutch CTC Boards. Second, the translation of the materials into Dutch delayed full implementation of the material in a timely manner. Consequently, those communities that started the process earlier (the three which started in 2000) were at a disadvantage awaiting translation of the CTC materials. Third, because the members of the Dutch prevention team are from an institution or organization, they have their own agendas: to get their own programs realized and financed within CTC. So the members are sometimes more focused on the benefit and goal of their own organization than on the CTC goal. However, CTC provides organizations an opportunity to work together and set the same goals. This is the first time most of these organizations and institutions have worked together in this kind of board setting. It is a new experience, requiring coalition members to learn to speak a common language and define terms and common issues.
Discussion

The data presented here provide evidence that communities in both countries can mobilize, organize, assess needs, and develop a community action plan which specifies tested and effective preventive interventions to address priority community risks and protective factors. Overall, it is noteworthy to see that the ratings of milestones and benchmarks for the first three phases are similar in the US and the NL. The results between the two countries suggests more cooperation between workers in the field, more understanding of the problems, and more use of risk and protective factor data than before the CTC process began. Even though the context is different, many of the results and challenges are similar. This suggests that the CTC system has been implemented in both countries to advance collaboration across prevention organizations, to use data on risk and protective factors, and to choose tested programs. Though the cultural contexts of implementation are different, and the board processes vary between the two countries: 21 of the 22 communities were able to: a) mobilize key stakeholders, b) use epidemiological data, and c) implement tested effective programs. Communities in the NL were less likely to complete ongoing prevention plans.

Providing the CTC milestones and benchmarks as a monitoring tool to assess progress over time helps communities advance their prevention efforts and ensure installation of the CTC system. Important elements contributing to the implementation of CTC include high-quality training delivered by certified trainers, the hiring and retention of skilful coordinators who are locally selected and community based, and a high-quality technical assistance and monitoring system (Greenberg et al., 2005; Mitchell et al., 2002). Research has demonstrated that programs and policies which are implemented with a high level of fidelity show significant positive results (Botvin et al., 1995). The risk of local and national adaptation of the operating system is protected by strong measures (e.g., milestones and benchmarks, community board interview) of implementation fidelity. Using these strong measures, we are better able to understand which content is followed completely and which is delivered as it was meant to be. However, community contexts vary and frameworks must have the flexibility to address local needs, otherwise these contexts can lead to adaptation of the original preventive strategy. Adaptation of programs can have a negative impact on the outcomes of effective programs and policies. Communities That Care provides a rational and flexible framework for communities to use a data-driven process to address local needs within their local context.

Different challenges also arose during implementation due to cultural differences. For example, the lack of a menu of Tested Effective Programs (TEPs) in the NL severely curtailed the full implementation of CTC and was a detriment to the strong implementation of Phases 4 and 5. Whereas overall implementation was stronger in the US, nonetheless, CTC communities in the NL appear to be working together more in a targeted fashion to address risk and protection than they were before. As noted earlier, the CTC process in the NL has increased the demand for tested programs. One outcome of the process in the NL is the creation of an infrastructure to support the national databank of TEPs and support for communities implementing programs to build in stronger evaluations so that they can be added to the TEP list. Unfortunately, initially, there was a very limited menu of effective programs. Currently, there are 31 effective and promising programs available in the Netherlands and more research is being conducted to expand the list of tested effective programs. One of the future foci of work in the NL is to broaden the use of effective programs.

Despite the common measures used in this study, there are several noteworthy limitations. First, the data collection strategies, though using the same or similar measures, varied between the two countries. In the US, there were tightly controlled data collection strategies as part of a group-randomized trial. In the NL, data collection strategies were ongoing and were used as part of a national evaluation of CTC. In the future, multinational experimental studies should
be set up similarly and use common measures. Second, the 12 US communities began CTC implementation at about the same time, whereas communities in the NL had greater variation in the length of time that they had been implementing CTC. Thus, 5 of the 10 communities had not made it to Phase 5.

The results of the present comparative study indicate that the first three core elements of CTC: mobilization of stakeholders, use of epidemiological data, and use of tested and effective programs, are in place in both countries. In the NL, current research is underway to support communities in fully implementing the fourth element (CTC as an ongoing process) as well. But we can conclude that CTC offers a process that can help communities implement science-based prevention. Additionally, this cross-national exchange has provided a rare opportunity to compare across countries the implementation of effective preventive programs, practices, and policies. Cross-national work on the implementation of effective programs is still in its infancy.

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Figure 1.
Board Functioning in the USA and the Netherlands

*=<.05
<table>
<thead>
<tr>
<th>Scale</th>
<th>Sample Item</th>
<th># of Items</th>
<th>Alpha US</th>
<th>Alpha NL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Readiness</td>
<td>Community groups and agencies know how to work together and cooperate to get things done.</td>
<td>3</td>
<td>.69</td>
<td>.78</td>
</tr>
<tr>
<td>Knowledge of CTC</td>
<td>Which factor would you say is more important for preventing adolescent problem behaviors? Self esteem, bonding to adults</td>
<td>5</td>
<td>N/A Index</td>
<td>N/A Index</td>
</tr>
<tr>
<td>Participation in CTC Board</td>
<td>How involved would you say the following people are in the CTC process in your community? Elected community leaders</td>
<td>14</td>
<td>.74</td>
<td>.72</td>
</tr>
<tr>
<td>Board Cohesion</td>
<td>Everyone is involved in discussion, not just a few.</td>
<td>6</td>
<td>.76</td>
<td>.82</td>
</tr>
<tr>
<td>Board Efficiency</td>
<td>Board members work very hard.</td>
<td>6</td>
<td>.85</td>
<td>.88</td>
</tr>
<tr>
<td>Influence of CTC</td>
<td>Thinking specifically about reducing risk for adolescent drug use, how much influence do you think CTC has had on the following groups: Law enforcement</td>
<td>7</td>
<td>.82</td>
<td>.83</td>
</tr>
<tr>
<td>Impact of CTC</td>
<td>As a result of your CTC Board, please tell me how each of the following areas have changed: The quality of local services and programs.</td>
<td>4</td>
<td>.73</td>
<td>.80</td>
</tr>
<tr>
<td>Barriers to Implementation</td>
<td>How much of a problem were community divisions among racial, ethnic, or other groups?</td>
<td>11</td>
<td>.78</td>
<td>.84</td>
</tr>
<tr>
<td>Effective Board—conflict</td>
<td>This board has a hard time resolving conflicts.</td>
<td>2</td>
<td>r=.64</td>
<td>r=.37</td>
</tr>
<tr>
<td>Board Turnover</td>
<td>Has the CTC board membership been stable or have you had a high rate of membership turnover? Would you say you've had a…</td>
<td>1</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
## Table 2
Results of the CTC Milestones and Benchmarks Completed in the US and the NL through June 2006

<table>
<thead>
<tr>
<th>Phase</th>
<th>USA Average Implementation Score (1=high implementation)</th>
<th>NL Average Implementation Score (1=high implementation)</th>
<th>USA Average Challenge Score (1=high challenge)</th>
<th>NL Average Challenge Score (1=high challenge)</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>1.28 (0.18)</td>
<td>1.54 (0.26)</td>
<td>3.16 (0.55)</td>
<td>2.25 (0.37)</td>
</tr>
<tr>
<td>Two</td>
<td>1.20 (0.22)</td>
<td>1.56 (0.27)</td>
<td>3.31 (0.65)</td>
<td>2.16 (0.36)</td>
</tr>
<tr>
<td>Three</td>
<td>1.06 (0.11)</td>
<td>1.55 (0.47)</td>
<td>3.71 (0.44)</td>
<td>2.37 (0.51)</td>
</tr>
<tr>
<td>Four</td>
<td>1.13 (0.12)</td>
<td>2.37 (1.06)</td>
<td>3.24 (0.55)</td>
<td>2.22 (0.76)</td>
</tr>
<tr>
<td>Five</td>
<td>1.41 (0.24)</td>
<td>3.36 (0.70)</td>
<td>2.88 (0.56)</td>
<td>2.26 (0.61)</td>
</tr>
</tbody>
</table>
### Table 3
Phase 3: Prioritized Risk Factors in US and NL

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>USA</th>
<th>NL</th>
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</thead>
<tbody>
<tr>
<td>Community</td>
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<td></td>
</tr>
<tr>
<td>Laws &amp; norms favourable to drugs/ problem behaviour</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Low attachment to neighbourhood</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Extreme economic deprivation</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>School</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low commitment to school</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>Academic failure</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor family management</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Family conflict</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Parental attitudes favourable to problem behaviour</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Individual/Peer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friends’ antisocial behaviours</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>Favourable attitudes towards the problem behaviour</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Rebelliousness</td>
<td>3</td>
<td>0</td>
</tr>
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</table>