

**Effective municipal and community  
alcohol prevention strategies  
across the world**

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STAP (Stichting Alcoholpreventie)

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## Colofon

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## **Abstract**

The development and implementation of community (or municipal) alcohol policies is becoming a vital part of the local political agenda. Anno 2008, a number of initiatives are undertaken within the field of development and implementation of community alcohol policies. The European project Building Capacity (2006-2009) is aimed at sharing and exchanging knowledge about the development and implementation of effective alcohol prevention strategies across regions and municipalities. This literature review is part of the Building Capacity project and is aimed at describing a number of effective initiatives in the field of municipal alcohol prevention on the hand of a theoretical framework as suggested by Holder (1998). Alongside the description of these Best Practices, several opportunities and pitfalls within the process will be explained. In this manner, this literature review will become a starting point for developing a European model for evidence based regional and municipal alcohol prevention strategies.

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# 1. Introduction

The consumption of alcohol in Europe is currently a hot topic. The EU is the heaviest drinking region of the world, and alcohol is the third highest risk factor of ill-health in the EU (ahead of overweight and behind only tobacco and high blood pressure) (Anderson & Baumberg, 2006). The recent published Communication describes the EU strategy to support Member States in reducing alcohol related harm (European Commission, 2006). Besides the attention for alcohol related problems on European level, national policies are struggling with these kinds of problems within their societies for years. Recently, Crombie and colleagues (2007) showed the diversity in alcohol policies between 12 developed countries: the policy organization, goals and targets, strategic approaches and areas for intervention are heterogeneous between these countries. Despite these efforts, there are concerns that policies on alcohol are inadequate. In many places, the interests of the alcohol industry have effectively exercised a veto over policies, making sure that the main emphasis is on ineffective strategies such as education (Room, Babor & Rehm, 2005). Nowadays, municipals (or communities) becoming more and more aware of and responsible for developing effective alcohol policies.

## 1.1 Municipal (or community) alcohol policy

Drinking is not only a personal choice, but also a matter of custom and social behavior. Moreover, alcohol problems are not simply results of actions of definable high risk individuals; rather they are accumulative result of structures and interactions of complex, social, cultural and economic factors within the community system. In addition, a community can be viewed as a set or sets of persons engaged in shared socio-cultural-politico-economic processes, which interact to such an extent that prevention efforts, to be effective, must be directed towards system-wide structures and processes (Holder, 1998). Traditional prevention efforts were mainly focused at educational programs, explaining the harmful effects of alcohol consumption. However, as the environment of the drinkers influences the alcohol consumption, the complete environment should be affected by the alcohol policy. A municipality (or community) is the appropriated establishment to develop an alcohol policy for several reasons. Firstly, municipalities are obliged to develop a health policy. Secondly, due to the understanding and severity of negative alcohol consequences nowadays, there is a concrete demand for alcohol prevention. Moreover, local decision-makers are obviously best informed about local health problems and therefore they are the ones exerting control. Thirdly, municipal alcohol policies can work stimulating for the national policy makers. Fourthly, municipalities have the possibility to involve number of stakeholders in the development and implementation of effective alcohol policy. In order words, municipalities (and communities) have the opportunities to combine different disciplines with the evidence-based development and implementation of alcohol policy.

## **1.2 Aims of literature review**

The European project Building Capacity (2006-2009) is aimed at sharing and exchanging knowledge about the development and implementation of effective alcohol prevention strategies across regions and municipalities. This literature review is part of the Building Capacity project and is aimed at describing a number of effective initiatives in the field of municipal alcohol prevention on the hand of a theoretical framework as suggested by Holder (1998). Alongside the description of these Best Practices, several opportunities and pitfalls within the process will be explained. In this manner, this literature review will become a starting point for developing a European model for evidence based regional and municipal alcohol prevention strategies.

## **1.3 Structure of the literature review**

The second chapter of this paper will explain the underlying theoretical foundation of this review, namely the conceptual model of alcohol use and alcohol problems of Holder (1998). The third chapter will visualise the theory on the hand of Best Practices of municipal alcohol policies across the world. Effective municipal alcohol policies from practice will be clarified on the hand of the Subsystems of the theory of Holder (1998). The fourth chapter will discuss process principles of local alcohol policy. Opportunities and pitfalls from the described projects will be explained, so the lessons learned in other projects will become clear. Finally, the fifth chapter will discuss main conclusions and formulate recommendations for practice.

## 2. Theoretical framework

Alcohol problems within a society do not have one singular cause; rather they occur as a result of a number of interacting variables. A number of theories exist that clarify the impact of the environment on alcohol consumption of individuals. The integrated theory of drinking (Wagenaar & Perry, 1994) is used as theoretical foundation for various studies (Wagenaar, Murray, Wolfson, Forster & Finnegan, 1994; Foxcroft, Ireland, Lowe & Breen, 2002; Stafström, 2007). It emphasizes that alcohol consumption is a result of personal cognitions, and perceptions. These concepts are, in turn, influenced by several factors (e.g. availability of alcohol, social acceptability of alcohol and biological factors as genetic predisposition). The factors that determine alcohol consumption can be divided into five different levels: macro level, societal level, social interaction, micro level and the alcohol consumption level. By making this distinction, the influence of all ecological levels on alcohol consumption in a community becomes visible. Moreover, for a reduction of alcohol consumption in a community, an integral approach which focuses on several ecological levels simultaneously is needed.

The recent published theory of Reynolds (2003) is a simplified theory, describing the three essential posts of effective alcohol prevention. According to Reynolds, the principle of an effective alcohol prevention policy is the combination of public support and education, regulation and enforcement. The importance of enforcement is underlined by Anderson and Baumberg (2006). They found growing evidence for strategies that alter the drinking context in reducing harm done by alcohol (e.g. passing a minimum drinking age). However, the effectiveness of these strategies relies on adequate enforcement.

Brinckmayer and colleagues (2004) present a general model to guide alcohol, tobacco, and illicit drug prevention. This model identifies those variables that are theoretically salient and empirically connected across alcohol, tobacco and illicit drugs (ATOD). The environment is dynamic (which means that changes over time in one variable can affect another) and adaptive (which means that changes in one part of the system can stimulate adaptive responses in another). Identified variables of the environment influencing ATOD problems are enforcement, (community) norms, availability, promotion, individual factors and the alcohol (tobacco and other drug) use. This model confirms the commonality of environmental approaches to prevention across alcohol, tobacco, and illicit drugs.

The underlying theoretical foundation of this paper is the systems approach of Holder (1998). This approach is focused at changing the community structures that provide the context in which alcohol consumption occurs. By changing the community structures, other ecological levels will be influenced automatically. And this is the only way in which *long-term* reduction of alcohol related problems can be accomplished. According to Holder (1998), the community is a dynamic system. This community system can be divided into six interacting subsystems, which are natural groupings of factors and variables that research has shown to be important to an understanding of alcohol use and alcohol problems (see figure 1). Although this theory originates from a behavioral change theory, it will be used in accordance with policy development.

In other words, the subsystems of this model present several reasons why people consume alcohol and cause alcohol related problems instead of presenting an overview of factors that can be influenced by municipal alcohol policy. Moreover, not all subsystems can be influenced by the municipal alcohol policy! However, the basic principle behind this theory explains the necessity to develop an integral municipal alcohol policy, focusing at several subsystems simultaneously. The interventions within the subsystems are multiplied in their effectiveness when they are simultaneously and consistently coordinated at multiple levels in society (Cagney & Palmer, 2007). This chapter will describe the subsystems and their concepts one by one, by explaining the effectiveness of these concepts separately.

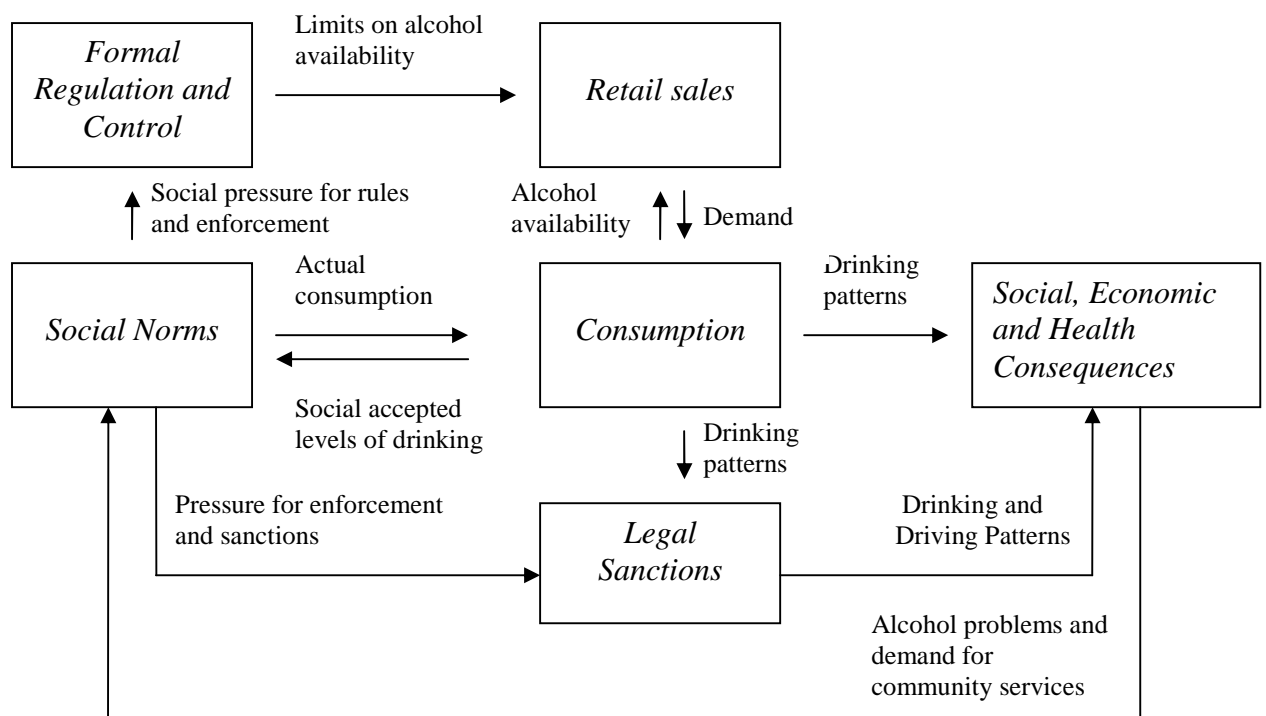


Figure 1 Conceptual model of alcohol use and alcohol problems (Holder, 1998)

## 2. 1 Consumption Subsystem

The central component of the community system is the consumption subsystem. Alcohol use within a community differs by age, gender, marital status, religious preference, and racial or ethnic heritage (Holder, 1998). Alcohol's meanings change as individuals go through different stages of life, and as societies' norm about alcohol change accordingly (Fillmore, Hartka, Johnstone, Leino, Motoyoshi & Temple, 1991). There is growing concern and evidence that alcohol has a devastating impact on the health status of children and adolescents. During adolescence, alcohol can lead to structural changes of the brains (De Bellis, et al., 2000) and high levels of alcohol can permanently impair brain development (Spear, 2002). Other research findings suggest that underage drinking, especially the pattern of heavy drinking that many minors engage in, is associated with numerous other negative consequences, including road trauma, violence, depression, suicide, disrupted relationships, high risk sexual activity, delinquent behaviour and educational failure (Belcher & Shinitzky, 1998; Graham, Ward, Munro, Snow & Ellis, 2006).

At the same time, binge-drinking in young people has increased across Europe in the past 10 years (Anderson & Baumberg, 2006). Therefore, a number of recent community projects are focused on a reduction of the alcohol consumption among adolescents (Wallin, 2004; Stafström, 2007). This literature review is focused on community projects that are aimed at reducing alcohol availability among adolescents (as part of the total population).

As can be seen in figure 1, other subsystems influence the consumption of alcohol in a municipal (or community) simultaneously. The interactions between the subsystems explain the difficulty (if not impossibility) to decrease the alcohol consumption within a community by an intervention targeted at one single subsystem (Holder, 1998).

## 2.2 Retail Sales Subsystem

The retail subsystem makes alcohol available for the public. A distinction can be made between formal (also called 'on-premise sales', e.g. restaurants) and informal (also called off-premise sales, e.g. private homes) alcohol retail (Holder, 1998).

The suppliers of alcohol strive for increasing alcohol demand through the Marketing Mix (Product, Price, Place, Promotion and Personnel). The availability of alcohol in this subsystem is limited by regulations concerning the sale of alcohol and enforcement (by the Formal Regulation and Control Subsystem).

### 2.3 Formal Regulation and Control Subsystem

Across cultures national governments call regulations and enforcement strategies into existence to control the retail outlets. These regulations are in turn affected by social pressure in the society (Holder, 1998). No policy can be effective unless it is accompanied by enforcement and by awareness on the part of the intended targets of both the policy and the enforcement efforts (Grube & Nygaard, 2001). According to Babor and colleagues (2003), effectiveness is strong for the regulation of physical and economic availability of alcohol. Physical availability of alcohol can be limited through different regulations including (Holder, 1998):

- (1) Types, numbers, densities and locations of retail outlets;  
Experience has shown that extreme restrictions on alcohol availability, such as the banning on all alcohol sales, can lower drinking and reduce alcohol problems (Babor, 2003). However, adverse side effects of this policy have been studied. Room and colleagues (2002) suggested that these side effects overbalance the good effects of the restrictions. Furthermore, Babor (2003) found that dramatic changes in the number of outlets can have a substantial influence on consumption and problem levels. But the overall effects of marginal changes where there are already a substantial number of outlets are much less clear. These findings suggest the potential value of regulation at the local level for the prevention of alcohol-related problems (Gruenewald, Millar & Roeper, 1996; Holder, et al., 2000).
- (2) The hours and days of the week retail sales are allowed;  
Babor (2003) found contradicting results and suggests that restrictions on hours of alcohol sales and service, if used strategically, have the potential to reduce drinking and alcohol-related problems.

In Brazil, a limitation of the hours of alcoholic beverages sales in bars had an effect on homicides and violence against women (Duailibi, Ponicki, Grube, Pinsky, Laranjeira & Raw, 2007). In 1999, the Brazilian city Diadema had one of the highest homicide rates in Brazil (103 per 100 000 in habitants), of which 65% were alcohol related. Furthermore, most bars remained open 24 hours. The mayor was concerned about this high number of murders, and police statistics showed that most murders and assaults on women occurred in or close to bars between 11 pm and 6 am. Therefore, a new law was introduced in 2002 that closed all bars at 11 pm. The rate of successfulness was determined by several interrelated factors. Public support for the new law was developed by an active strategy of media advocacy. Furthermore, alcohol retailers were informed about the implementation and tendency of the new law. And finally, as active enforcement is a key factor to success, Diadema implemented a program for active daily enforcement. Moreover, the penalties for violation of the law were adjudicated administratively, not criminally. The penalties were progressive in nature and clearly established in the law (e.g. the first violation resulted in a warning, the second one in a fine, the third one resulted in a fine in combination with temporary license suspension, and the fourth violation in a license revocation.) (Reynolds, Grube, Ponicki, Lacey, Lananjeira & Duailibi, 2004). The combination of described factors clarifies the decrease in (alcohol-related) murders in Diadema.

In the United Kingdom, the Licensing Act of 2003 paves the way for 24-hour opening of licensed premises. The theory behind this move by the government is that harmful drinking practices are the result of drinking against the clock just before bar closing times. However, international evidence suggests that extending trading hours may not only fail to reduce alcohol-related problems but might increase those (Plant & Plant, 2005).

Newton and colleagues (2007) found a significant increase in the number of overnight alcohol-related accident and emergency (A&E) attendances in London (after the implementation of the Act) with the number increasing by 15%. In addition, the proportion of A&E attendances classified as alcohol-related has increased from 2.9% to 8%. Finally, there were significant increases in alcohol-related attendances because of injury and assault.

In contrast, Babb (2007) suggests a decrease overall in the number of more serious violent crimes (by 6%) and less serious wounding offences (by 3%) in the year after the implementation of the Act. However, these decreases occurred in the evening before midnight, whereas there was a small but steady rise for violent crimes between 3am and 6 am. This may reflect the extended hours.

(3) The minimum age to purchase or drink alcohol;

There is strong evidence that increases in the minimum drinking age can have substantial effects in reducing adolescent drinking and involvement in alcohol-related crashes. Enforcement of underage sales and drinking laws is the key to this policy option (Grube & Nygaard, 2001; Yu, Varone & Shacket, 1997). Even moderate increases in enforcement can reduce sales to minors by as much as 35% to 40%, especially when combined with media and other community activities (Grube, 1997; Wagenaar, Murray & Toomey, 2000).

(4) Serving practices;

Responsible Beverage Service consists of implementation of a combination of outlet policies and training of servers. Accomplished studies show mixed results. According to Babor (2003), RBS training can reduce heavy alcohol consumption and high-risk drinking, if supported by actual changes in serving policies of licensed premises and reinforced by local policing enforcement.

Economic availability can be regulated via taxation on alcohol sales, alcohol price restrictions and controls, and restrictions on the promotion and advertising of alcohol (Holder, 1998). However, the regulation concerning economic availability is mostly regulated on national level, leaving limited possibilities to local municipalities. Therefore, this kind of alcohol availability will not be discussed in detail in this paper.

## 2.4 Social Norms Subsystem

Social norms represent the social dynamics that influence rates and patterns of alcohol consumption in the community. Existing social norms consists of three types of factors: (1) the general attitude towards the use of alcohol, (2) situation specific variables (e.g. drinking under a specific age) and (3) variations in drinking norms between subgroups of the community (e.g. differences in gender and age). In addition, number of variables can (positively or negatively) influence these factors of social norms. Alcohol consumption can be stimulated by previous levels of consumption and alcohol advertisement. Alcohol advertisement can influence the expectancies of the effects of alcohol and intentions to drink (Giesbrecht & Greenfield, 2003). Babor (2003) found that alcohol advertising predisposes minors to drinking well before the legal age of purchase. Marketing strategies such as alcohol sports sponsorships embed images and messages about alcohol into young people's everyday lives. Hurtz and colleagues (2007) found evidence of an association of adolescent drinking with weekly exposure to alcohol advertising in stores and with ownership of alcohol promotional items. Alongside these effects, alcohol advertisement may communicate a meta-message of society's approval (Postman, Nystrom, Strate & Weingartner, 1988), and may reduce the likelihood of other public policies being implemented (Caswell, 1995). Legislation restricting alcohol advertisement is recommended. However, in most countries in Europe, alcohol advertisement is controlled through self-regulation and self-regulation has shown to be fragile and largely ineffective (Babor, 2003). In contrast with these factors stimulating alcohol consumption, the norm can shift towards a reduction of alcohol consumption in case alcohol related problems (e.g. alcohol related injuries and accidents) become visible for the community (by the Social, Economic and Health Consequences Subsystem). This can be reached on the hand of media advocacy (Holder, 1998).

## 2.5 Legal Sanctions Subsystem

This Subsystem is called into existence as a reaction on alcohol use in specific contexts (e.g. drinking and driving). It reflects the community's use police powers to respond to and control alcohol-involved behaviours and events that are defined as illegal (Holder, 1998).

Rates of alcohol-related casualties have been reduced in many countries by a combination of counter-measures, such as the adoption in much of the world of "per-se laws" forbidding driving above a stated blood-alcohol concentration and the subsequent lowering of the accepted level (Babor, 2003). Enforcement and public awareness seem to be keys to the success of these programs (Grube & Nygaard, 2001).

## 2.6 Social, Economic, and Health Consequences Subsystem

Alcohol related morbidity and mortality can trigger social activity and, in addition, formal regulatory activity in order to decrease the alcohol related problems within a society. The main principle of this subsystem is that alcohol related problems are defined as being 'undesirable' by the community and that action is needed.

The social, economic and health consequences influence the social norm in turn (Holder, 1998).

In the Netherlands, the number of adolescents (aged 10-15) visiting the Emergency Room Departments with an alcohol poisoning is dramatically increased in 5 years. Anno 2005, the number of alcohol poisonings within this age category is the sextuple of the alcohol poisonings registered in 2000. Alcohol poisonings of young adults (aged 15-19) is increased by 160% within 5 years (Valkenberg, van der Lely & Brugmans, 2007). This startling news set the excessive alcohol consumption of adolescents on the national political agenda.

## 2.7 Safety versus harm reduction policy

Alcohol policy can be focused at creating safer environments for the drinkers and at harm reduction of the drinkers. An example of creating safer environments is the City Centre Safe scheme in Manchester, initiated in 1999 by Greater Manchester Police (Hughes & Bellis, 2003). Components of the intervention were a street drinking ban, provision of late night bus services and increased security taxi rank. Crime data show that implementation of City Centre Safe has contributed to continued reductions in violence in Manchester city centre (Greenacre & Brown, 2005). Despite the improvement of reduction in violence, the harm reduction of alcohol among individual adolescents is limited. Furthermore, although the Licensing Act 2003 (mentioned with the Formal Regulation and Control Subsystem) does not provide provisions for public health, it can be combined with projects promoting public health (Morleo, Harkins, Hughes, Hughes & Lightowlers, 2007).

Bellis and colleagues (2006) found evidence of effectiveness for the Licensing Act 2003 combined with the Alcohol Misuse Enforcement Campaigns. Nevertheless, the interventions should be seen only as part of a wider programme of action, which must also tackle the root causes of risky drinking and violence. Therefore, effective municipal alcohol policies described in this paper will be primarily focused at harm reduction of adolescents and young adults.

Overall, it can be concluded that developing an effective *long-term* alcohol policy within a community is neither simple nor obvious. According to Holder (1998), interventions focused at one subsystem fail in succeeding to develop structural system changes within the community. Therefore, effective community alcohol policies have to be targeted at a number of subsystems simultaneously.

### **3. Best Practices of community alcohol prevention projects**

In order to show the feasibility of the theoretical framework of Holder (1998), effective municipal alcohol policies will be described in this chapter. This chapter is aimed at describing several Best Practices in the field of municipal alcohol policy across the world.

For a time, local prevention strategies have been program-based, not policy-based. A program strategy generally refers to organized efforts to reduce alcohol problems by training or educating clients or the general public. Typically, no structural change is proposed by these programs and those outside the target group are not considered. Opposing this program-based strategy, municipal policy is focused at accomplishing structural changes (e.g. by legislation or enforcement) (Holder, 2002).

Municipal alcohol policies described in this paper met a number of inclusion criteria. Firstly, the policies had to be focused at accomplishing structural changes instead of consisting of single interventions. In order to reduce the alcohol related harm among adolescents (as part of the total population), the availability of alcohol in the entire society should be restricted. Secondly, the policies are undertaken with participation of stakeholders within the community. Therefore, local involved parties working in the alcohol prevention field should cooperate. Thirdly, the strength of effective municipal alcohol policy is intervening in several subsystems simultaneously. This means that the alcohol policies explained in this paper are focused at several subsystems at the same time. Finally, as this paper discusses Best Practices in the field of municipal alcohol policy, the mentioned initiatives should be evaluated on a scientific base (on the hand of a process and effect evaluation).

#### **3.1 The Trelleborg project**

The recent published Trelleborg Project in Sweden (Stafström, 2007) was developed to investigate the potential of a community intervention approach to reduce alcohol use in adolescence. Traditionally, Sweden had a restrictive alcohol policy. Alcoholic beverages deducting a certain percentage alcohol were sold merely in stores owned by the national government. However, as Sweden joined the European Union in 1995, the retail monopoly and the private import quotas were taken under fire. In the face of this debate, the Swedish government became aware that the traditional Swedish alcohol policy needed to be revised. Trelleborg was selected for a project because this city is a border with ferry traffic from and to Germany. At the time the intervention started, alcohol beverage prices were 75% lower in Germany than in Sweden. In order to reduce the alcohol consumption related harm in the municipality's population, the Trelleborg Project started in 1999 and ran for three years (Stafström, 2007).

Starting point of this project is the responsibility of the local authorities (e.g. the city council of Stockholm) for the implementation of this intervention. In this manner, the local authorities strived after structural changes of alcohol consumption among Swedish adolescents (instead of the implementation of single programs). The organization of this project was in hands of a steering committee which, in turn, hired a project coordinator whom was responsible for coordination of five 'action groups' (consisting of volunteers within the cite administration and among stakeholder organizations). The 'action groups' consisted of stakeholders of the community (e.g. police and city employees working with adolescents). Participation of stakeholders was guaranteed in this way.

The intervention strategy consisted in the design and implementation of a sustainable policy and program of action that targeted alcohol and illicit drugs in the municipality of Trelleborg. The objectives of the developed alcohol policy were: (1) focusing the alcohol and drug preventive strategies on children and adolescents, (2) decreasing heavy episodic drinking in Trelleborg, (3) delaying the onset age of alcohol consumption, (4) achieving changes in attitude toward alcohol and drinking behaviour in the adult population. The integrated theory of drinking behaviour (Wagenaar & Perry, 1994) is the theoretical foundation for this project. Briefly worded, this means that the intervention should not only focus on the individual, but also on the broader environment of the adolescents. The intervention had to lead to less availability of alcohol among adolescents, and that this would lead to a reduction in consumption. Parents and vendors of medium strength beer were seen as target group to achieve this change.

Greater awareness of problems associated with (excessive) alcohol consumption was another meant effect. In the end, seven components of the intervention were implemented: (1) adaptation of community policy and action plan on alcohol and drug management by the city council, (2) approval of a school action plan with the same goal by them as well, (3) inspections of grocery and convenience stores (where illegal alcohol could be sold) by police and city administrations, (4) introduction of a comprehensive and evidence based curriculum on alcohol and drugs in all primary and secondary schools, (5) another curriculum should be implemented for parents of 7<sup>th</sup> and 9<sup>th</sup> graders (however, only a pilot group succeeded before the end of the intervention), (6) a leaflet mailed to all parents of 7<sup>th</sup> graders containing information about alcohol, drug and education, (7) a publication of the alcohol and drug use of adolescents in the community in the local mass media (Stafström, 2007).

Outcome measure of the effectiveness of this intervention is the change in drinking patterns of 15 to 16 year-old population (Consumption Subsystem). Data was collected cross-sectional in three phases; one at baseline, two during the project, and one after the intervention completed. The results of the study show a decrease in harmful alcohol consumption in Trelleborg, which took place more rapidly and consistently as a result of the intervention in comparison with other regions in Sweden. Stafström (2007) found that three components of the project had more influence than the others, namely (1) the municipality's policy on alcohol and other drugs, (2) the inspection of grocery stores, (3) and feedback from the school surveys. These three components received media-attention, and this raised the public awareness and intervention advocacy. In addition, by involving community stakeholders in the project, the community awareness raised. The alcohol issue became a part of the local agenda. The demand for a community prevention strategy rose due to the insight of the Swedish government that existing alcohol reduction strategies were no longer suitable. The seven components of the project can be classified in the Subsystems of Holder (1998). This classification is visualised in figure 2.

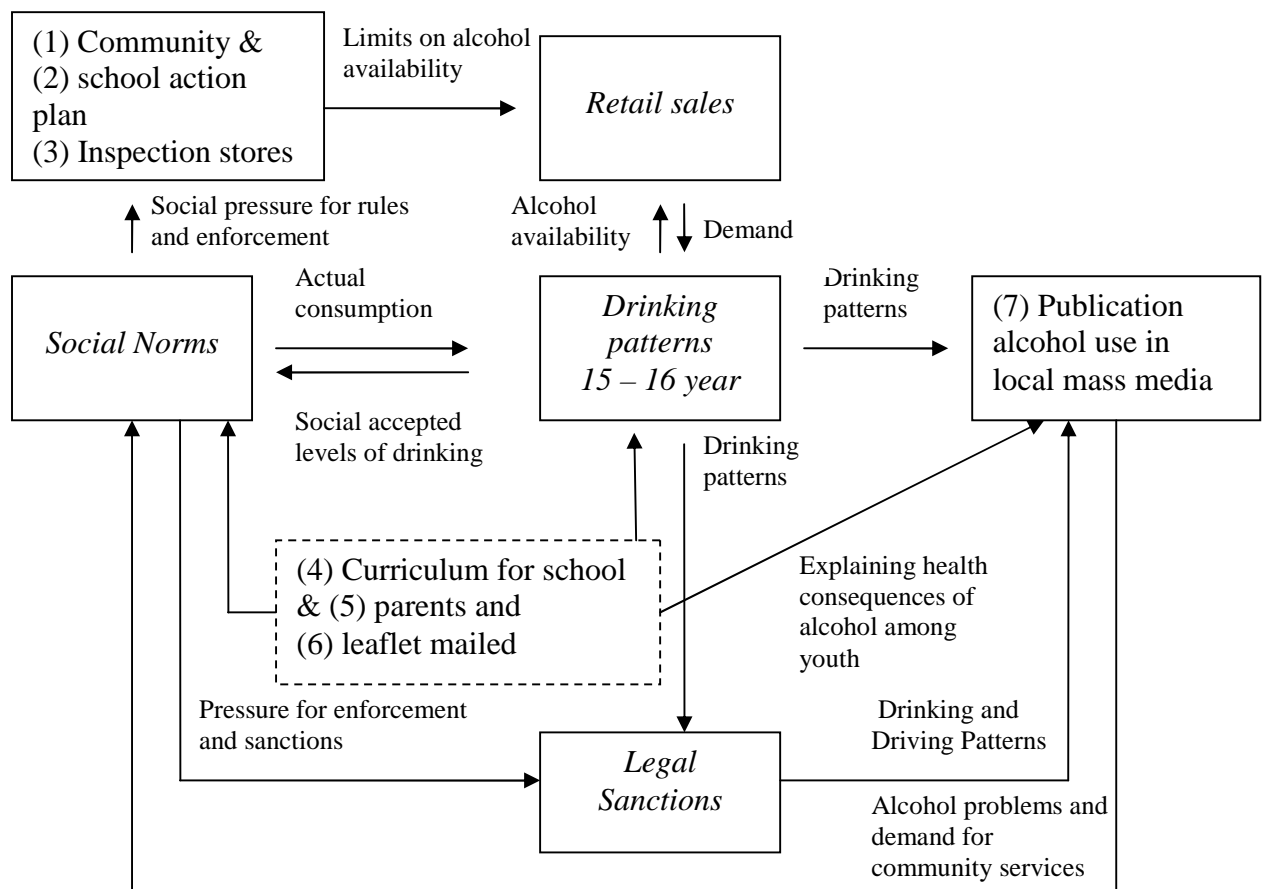


Figure 2 Modified theory of Holder (1998) for Trelleborg

The community and action plan on alcohol and drugs and the school action plan can be placed within the Formal Regulation and Control Subsystem. The third component of the intervention, the inspections of grocery and convenience stores, is a strategy of the Formal Regulation and Control Subsystem as well. The inspections of grocery and convenience stores where black market alcohol could potentially be sold restricted the physical availability by laws and in this manner the community enforced the laws.

In the end, several inspections, police reports and one conviction were registered during the project period. Besides the economic punishments, the community provided the retail outlets a strong signal that an illegal sale of alcohol was not longer accepted within the community. The fourth, fifth and sixth components of the intervention, namely the curriculum for primary and secondary schools, the curriculum for parents of the 7<sup>th</sup> through 9<sup>th</sup> graders, and the mailed leaflets to parents, directly influence the Social Norms Subsystem (e.g. by stating norms) and the Social, Economic and Health Consequences Subsystem (e.g. by describing the physical consequences of alcohol among adolescents). By publishing the alcohol use of adolescents in the local media, the problem became visible for the community. The Social, Economic and Health Consequences Subsystem became visible and influenced the Social Norms Subsystem in turn.

### **3.2 The Stockholm prevents Alcohol and Drug problems (STAD) project**

The STAD (Stockholm prevents Alcohol and Drug problems) project started, as a reaction on a review of alcohol and drug related problems, in Stockholm in 1995. Interestingly, STAD started in 1995 as a project, and is a section within the Center for Dependency Disorders in Stockholm since the year 2005 ([www.stad.org](http://www.stad.org)). Initially, the project was focused at three components, namely the health care, youth, and hospitality industry. The aim was to establish policy: policy of secondary prevention in health care, policy for youth alcohol and drug prevention, and policy for responsible beverage services. The underlying theoretical foundation is the Systems approach of Holder (1998). By focusing on health care, youth and hospital industry, both supply and demand of alcohol are addressed. Effects of the STAD project are maximized in this manner (Andréasson, 1999).

As described above, the focus of this paper lies on the prevention of harm reduction instead of the secondary prevention of alcohol related problems (e.g. brief interventions at hospitals). Therefore, the interventions aimed at the health care setting will briefly pass in review.

Research shows that if a physician raises the subject of alcohol and spends 5-10 minutes advising high consumers to cut down, this target group will on average reduce their consumption by 20-30 percent (Wilk, Jensen & Havighurst, 1997). However, the strategy used in the STAD project turned out to be ineffective (e.g. time-consuming and obstructive) (Andréasson, Hjalmarsson & Rehnman, 2000).

In 1996, a community action program was initiated in Stockholm targeting the hospitality industry (e.g. the licensed premises). A project coordinator was employed, and this person was responsible for inspiring and mobilizing important target groups in preventing problems related to alcohol consumption in licensed premises. An action group was formed, consisting of representatives of the county council, licensing board, police officers, county administration, the National Institute of Public Health, the organizations for restaurant owners, the union for restaurant employees and selected owners of popular nightclubs. The aim of the action group was to decrease the problems related to alcohol service at licensed premises. A first strategy used in order to achieve this aim, was to develop a Responsible Beverage Service, another one to state house policies and the last strategy was to encourage stricter enforcement of extant alcohol laws (Wallin, 2004).

To determine the impact of the interventions (e.g. RBS, enforcement and house policies) in practice, several evaluation studies were accomplished. In order to study overserving (e.g. serving alcohol to intoxicated patrons), a technique with pseudo patrons (e.g. actors) was used. The same technique was used for serving at underage persons. The results of the leading study was a statistically improvement in refusal rates of alcohol service over time (5% refused alcohol at baseline compared with 47% refusal at follow-up). Although the refusal rate of the group participating in the interventions was highest, differences with the control group (without interventions) were not significant. Serving at underage persons decreased after the intervention period as well.

However, again no statistical differences were found between the intervention and control group. Wallin (2004) suggests the possibility of spill-over effects, primarily of enforcement activities. The interventions did have a significant effect on reduction of crimes in the intervention area. The police-reported violence showed a reduction of 29% after the intervention took place.

As can be seen in figure 3, the components of this project can be classified into the theory of Holder (1998).

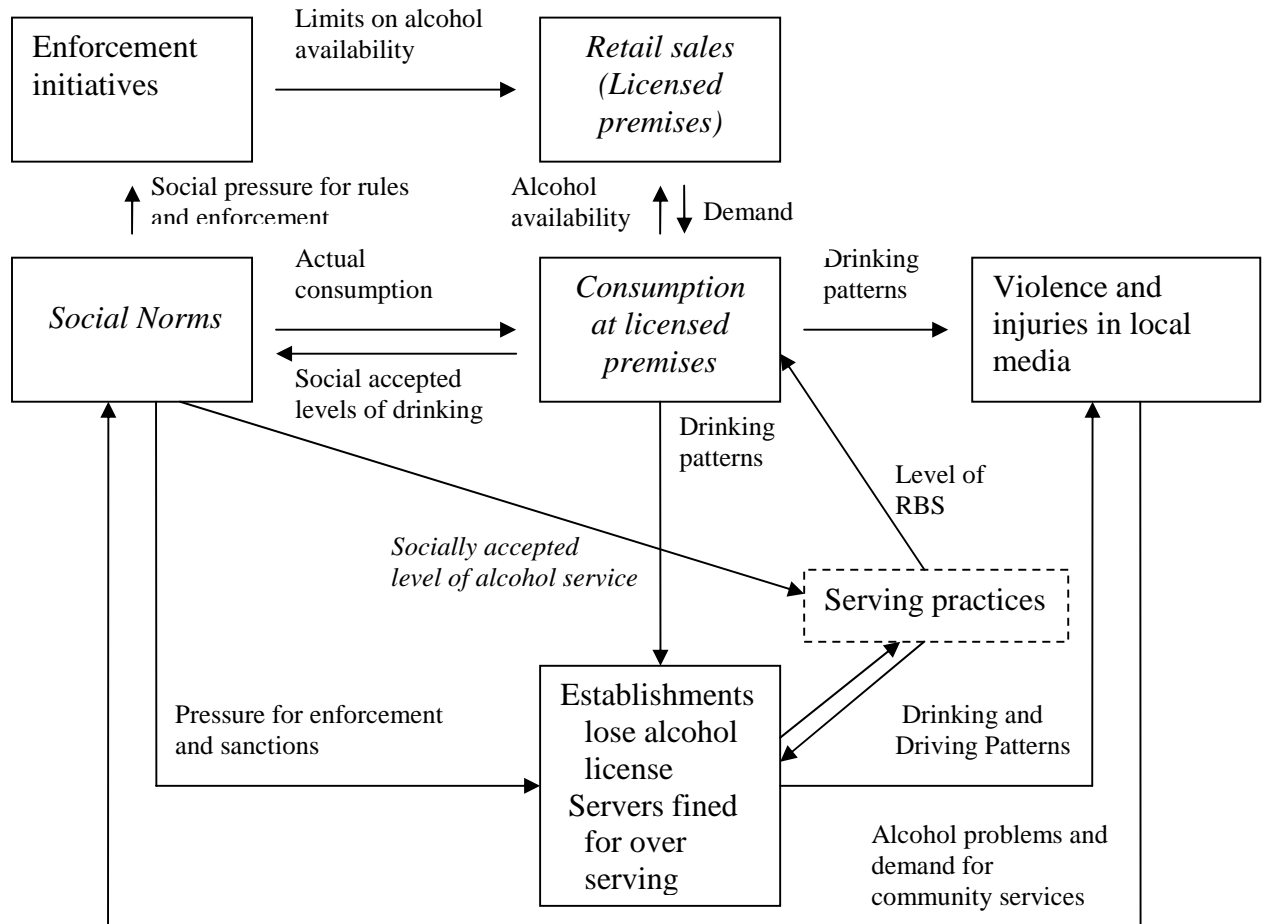


Figure 3 Modified theory of Holder (1998) for STAD (Wallin, 2004)

Starting point of this component of the STAD project were the Serving Practices for licensed premises. These serving practices influence the alcohol consumption at licensed premises, by preventing patrons of intoxication. As a reaction on the number of intoxicated patrons at licensed premises, several enforcement initiatives were undertaken (e.g. establishment lose alcohol license and servers fined of over serving at Legal Sanctions Subsystem). These legal sanctions influence the number of assaults at licensed premises. The public is made aware of alcohol related problems via media, and therefore the violence and injuries caused at licensed premises influence the Social Norms Subsystem.

### 3.3 The Auckland Regional Community Action Project (ARCAP) project

The Auckland Regional Community Action Project (ARCAP) is aimed at reducing alcohol-related harm among young people in the Auckland region in New Zealand. The project started in 2001. The development of this project was a reaction on the increase of youth drinking and alcohol related harm, the need to optimise the limited public health resources available in the region (through reorientation and collaboration of service providers), and the need to evaluate alcohol public health service activities.

Several factors contributed to the increase of youth drinking, namely lowering the purchase age from 20 to 18 year in December 1999, the introduction of beer sales in supermarkets and an increase in licensing hours to include sales on Sunday (Greenaway, Conway, Casswell, Huckle & Sweetsur, 2005).

The Regional Action Group (RAP) is comprised of the Auckland Regional Public Safety (ARPS; the regional public health provider), Alcohol Healthwatch (AHW; a NGO), Safe Waitakere Alcohol Project (SWAP; an alcohol harm reduction project) and Hapai Te Hauora Tapui (a Maori public health provider). The activities of this project group are funded by the Ministry of Health. The intention of the project was to strengthen cooperation between these (by Ministry of Health) funded agencies and to develop links with other stakeholders in the community. A project coordinator was initiated. However, within a project period of three years, the project had a project coordinator for merely eight months.

In 2001, delegates of above mentioned agencies were brought together to formulate a strategic approach to prevent alcohol related harm among youth. The RAP formulated specific objectives, which were: (1) reduction of social supply of alcohol to minors (e.g. adolescents below 18 years old), (2) reduction of supply by off-license premises to minors, (3) reduction of intoxication among under 25 years old in licensed premises, (4) and in public places, and (5) challenge existing social norms about alcohol use among young people (Huckle, Conway, Casswell & Pledger, 2005). In 2005, the RAP group had worked collaboratively on the first and third objective. The first objective was formulated as a reaction on the large increase in the number of alcohol licenses issues since restrictions were lifted on numbers of premises in 1990. Some premises had also extended their trading hours, resulting in some off-licenses with 24 hour licenses (Casswell & Bhatta, 2001). The intervention to reduce the accessibility of alcohol among youth focused on three aspects: (1) monitoring alcohol sales made without age identification from off-licenses, (2) utilizing data on alcohol sales for media advocacy and direct contact with alcohol retailers, and (3) working with key enforcement staff to encourage increased monitoring and enforcement of minimum purchase age legislation for off-licenses in Auckland. Insight into the alcohol sales to minors was gathered on the hand of mystery shopping (e.g. young people of the minimum purchase age attempting to buy alcohol without age identification). A media advocacy campaign was utilized by health promotion workers involved in this project to increase awareness of, and advocacy for, improved age verification practices. Prior to the media releases with results of the mystery shopping survey, key enforcement stakeholders were briefed. Letters were sent to licensees of premises surveyed. The letters also provided contact details for obtaining further information on improving age checking practices.

The RAP worked on the third objective to reduce the intoxicated persons under 25 years old in licensed premises. A regional exit breathalyser survey was conducted and it investigated the breath alcohol levels of people under the age of 25 years exiting on-license premises (e.g. nightclubs, taverns and rural hotels). A media launch was called into existence to communicate the results of this survey and to create advocacy for improved monitoring, enforcement and host responsibility practices for on-licenses. However, further action was not taken on this objective (Greenaway, et al., 2005). This limitation was caused by several hindering factors (which will be explained in detail in chapter 4).

The evaluation of the intervention aimed at the first objective used a case study design. Data were gathered with mystery shoppers before and after the intervention. A significant decrease was found in sales of alcohol made to young people without age identification. Before the intervention took place, 60% of visits resulted in a sale made without age identification. After the intervention took place, this percentage decreased to 46%. Media items were monitored before and after the intervention as well. The evaluation of this component indicated increased coverage of items advocating improved age checking for off-licenses after the intervention. Moreover, it placed the issue of easy access to alcohol by minors and the lack of effective age verification practices on both the political and community agendas. Finally, interviews with key enforcement staff took place. These interviews suggested that some enforcement staff in the region implemented increased enforcement strategies (e.g. controlled purchase operations and increased number of visits to off-licenses due to the intervention) (Huckle, et al., 2005).

As can be seen in figure 4, the evaluated components of the ARCAP can be placed within the theoretical framework of Holder (1998).

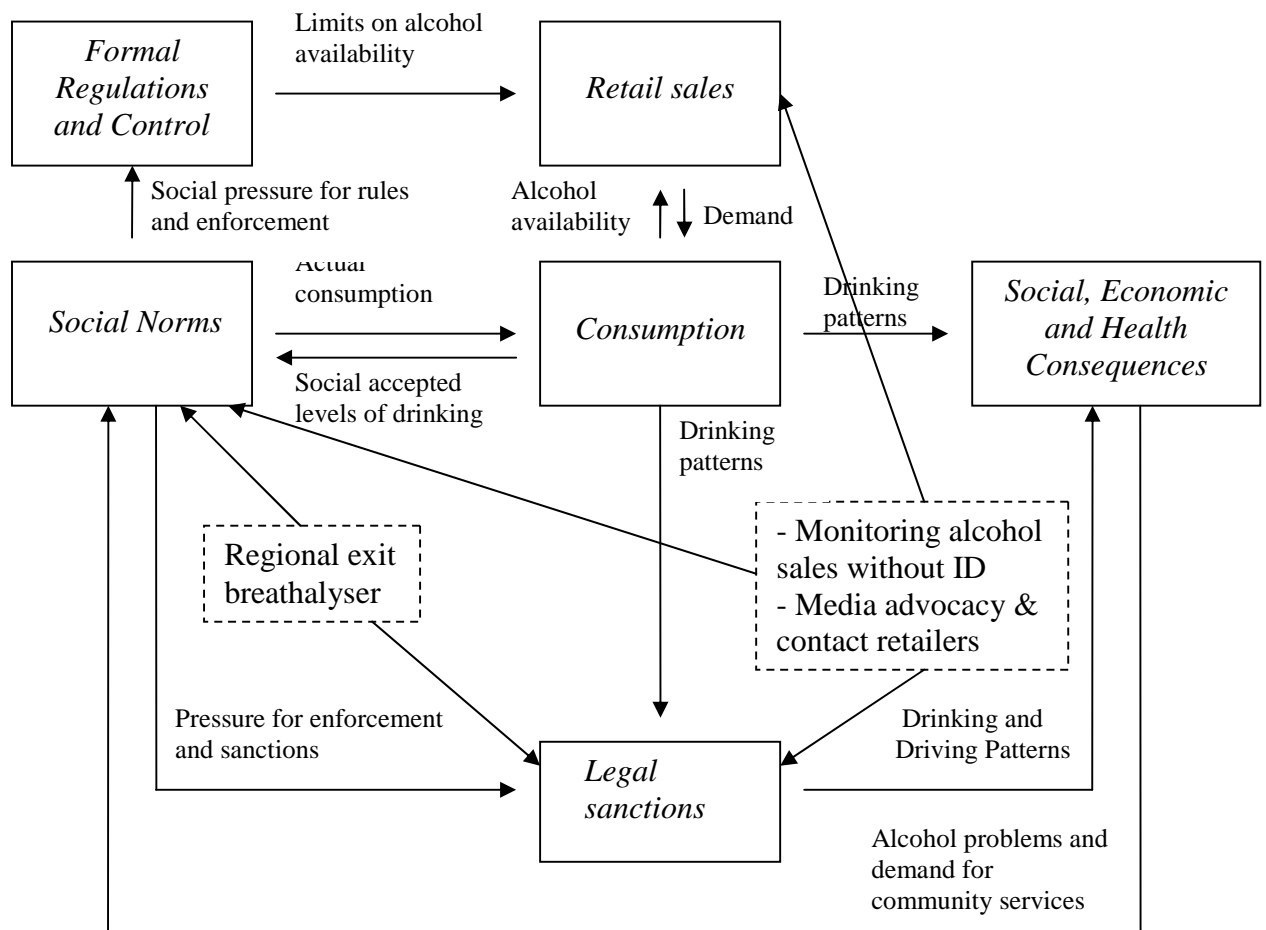


Figure 4 Modified theory of Holder (1998) for ARCAP

By monitoring the alcohol sales made without age identification and by communicating these findings toward the community via media advocacy, several subsystems are influenced simultaneously.

Firstly, the Social Norms Subsystem is influenced by visualizing that, although laws with minimum purchase ages are stated, alcohol can easily be sold by underage adolescents. Media advocacy utilizing the purchase surveys was also an important factor in helping mobilize a key Government minister to become proactive in advocating for effective age checking at off-licenses. Moreover, not only the region Auckland had benefit of the intervention, but also on national level, the problem became visible (Huckle, et al., 2005). By working with key enforcement staff, support was created within the enforcement sector to increase monitoring and enforcement of minimum purchase age legislation for off-licenses. In conclusion, by communicating the findings of the regional exit breathalyser, the breath alcohol levels became visible and existing Social Norms were challenged.

### 3.4 Community Trails Project

The five-year "Preventing Alcohol Trauma: A Community Trail" project was a comprehensive community project consisting of five components and run in (North and South) California and South Carolina from 1991 until 1996 (Holder et al., 1997). The project was aimed at reducing alcohol related injuries and deaths rather than alcohol consumption in itself and was focused at the entire population instead of on adolescents exclusively.

By implementing several (effective) intervention components simultaneously, the Community Trails Project studied whether this combination of strategies caused a statistically significant reduction in alcohol-involved traffic crashes, in underage sales of alcohol and in alcohol related injuries visiting Emergency Care Department. The five components were: (1) Community Mobilization Component to develop community organization and support, (2) Responsible Beverage Service Component to establish standards for servers and managers of on-premise alcohol outlets to reduce their risk of having intoxicated or underage customers in bars and restaurants, (3) Drinking and Driving Component to increase local Drink While Impaired enforcement efficiency and to increase the actual and perceived risk that drinking drivers would be detected, (4) Underage Drinking Component to reduce retail availability of alcohol to minors, and (5) Alcohol Access Component to use local zoning powers and other municipal controls of outlet number and density to reduce the availability of alcohol (Holder et al., 1997).

Community mobilization refers to organizing community members to support and implement policies to reduce alcohol-involved trauma. One aspect of mobilization is the formation of community coalitions. All three communities had formed coalitions. Each coalition contained representatives from the major institutional sectors. Although the practical implication and working manner differed between the three communities, the basic idea was the same. All three communities had a community coordinator, whom worked with the research team. Moreover, all three communities were free to seek and implement the best means and timing for implementing each component. The importance of media advocacy for this component was recognized. The media had focused on increasing public awareness and support and on key politicians to bring about policy change (Treno & Holder, 1997).

The Drinking and Driving Component consisted of a drink driving countermeasure. The idea was to increase the perception of the risk of being arrested as drink driver, and in this manner, to decrease the alcohol consumption among drivers.

Voas, Holder and Gruenewald (1997) found that the combination of increased media coverage and increased enforcement of drinking and driving took care of increased perceived risk of arrest. Moreover, compared with control communities, the three communities in the intervention group experienced a 10-percent reduction in night time injury crashes and a 6-percent reduction in crashes in which the police recorded that the driver had been drinking. Reports of driving after having been drinking to much alcohol declined 49 percent and self-reported driving while having been drinking more than the legal limit decreased 51 percent. Furthermore, a reduction of 43-percent of assault in injuries arriving at emergency care departments was found in the three communities and assault injuries that needed to be hospitalized declined by 2-percent.

The Underage Drinking Component existed of enforcement of underage sales laws, responsible beverage service (RBS) training and media advocacy. Increased underage sales enforcement activities were taken by the local police. Warning letters were mailed to all outlets informing them that routine enforcement of underage sales laws was being initiated. The letters were followed by a series of decoy operations in which the police had underage buyers attempt to purchase alcohol at selected outlets.

The RBS training consisted of a clerk training and a manager training. However, one marginal comment on RBS training is that this training could be followed on voluntary base. This led to self-selection of the hospitality industry. Grube (1997) argues it is likely that outlets that are more responsible are motivated to become voluntarily involved in this training, while additional efforts might be necessary to reach the remaining outlets. The purpose of the media advocacy campaign was to elicit community awareness of the increased enforcement among owners and managers of off-sale outlets. The project coordinator in the three communities (e.g. North and South California and South Carolina) took responsibility of media coverage of the enforcement activities (e.g. describing the decoy operations, detailing the number of outlets visited by the police, and indicating the number of outlets cited for selling to a minor). During the increased enforcement period, a total of 22 citations were issued during that period compared with only four during the previous year. In order to evaluate the effectiveness of this fourth component, purchase surveys were conducted with mystery shoppers. In practice this means that the buyers were all over the age of 21 years old, but who appeared to be younger.

By comparing pre- and post test successful purchase efforts, the combination of enforcement, RBS and media advocacy and other community activities did indeed lead to reductions in underage sales of alcohol (Holder, et al., 2000).

The Alcohol Access Component was focused on increasing the readiness of each community to utilize local regulatory powers to reduce the access of alcohol. However, changing policies is a long-term process and it was hypothesized that real changes in policy would be made after the Community Trail Project was accomplished. Despite these expectations, local regulations of alcohol retail and public sites for drinkers were changed in all three communities (Reynolds, Holder & Gruenewald, 1997).

As can be seen in figure 5, not all components can be placed within the theoretical model of Holder (1998). Community Mobilization, for example, is an underlying process of a community prevention project. Moreover, mobilization of the community is a requisite of such comprehensive projects.

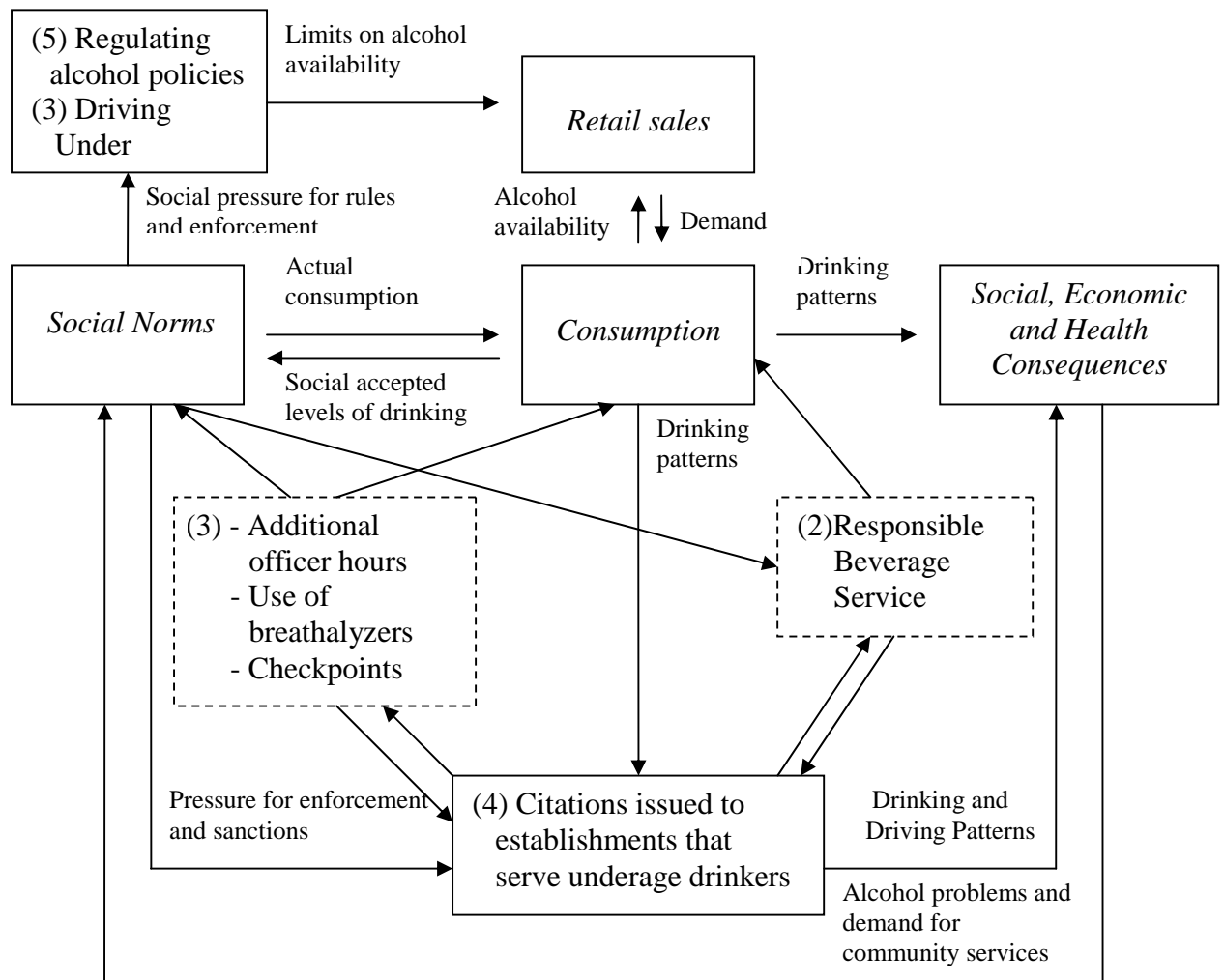


Figure 5 Modified theory of Holder (1998) for Community Trails Project

However, the Responsible Beverage Service influences the Consumption Subsystem directly (e.g. by restricting serving practices among intoxicated persons, or among underage drinkers), it is influenced by and influences the Legal Sanctions Subsystem (e.g. by establishments that are issued by citations for serving underage drinkers). The elements of the Drinking and Driving Components can be placed within the theoretical model. Intensified enforcement of driving under influence (DUI) was designed to deter potential drinking drivers by increasing their perception of the risk of being arrested leading to a reduction in the consumption of alcohol before driving (Voas, Holder & Gruenewald, 1997). The additional

officer hours, use of breathalyzers and increased number of checkpoints influence the Social Norms Subsystem (e.g. by initiating the norm that driving under influence is not accepted), Consumption Subsystem (e.g. by becoming aware of the increased enforcement of alcohol among drivers, one will reduce his or her alcohol consumption), and the Legal Sanction Subsystem (e.g. by arresting drivers under influence). The Alcohol Access Component contained the regulation of alcohol outlet density within the three participating communities. Therefore, these policies directly influence the Retail sales Subsystem.

## 4. Process principles

In theory, municipal (or community) alcohol prevention projects can be described perfectly. However, the implementation of these often well considered projects is a completely other story, not even talking about sustainability. Anno 2007, a number of initiatives in this field are implemented and evaluated (e.g. focused on process and effect) on a scientific base. In this manner, the experiences can be used to develop new alcohol prevention projects fluently. As the matter of fact, politicians are struggling with alcohol for years and the knowledge gained all over the world can be useful for all of them. Therefore, this chapter will explain the opportunities and pitfalls of the described projects in the previous chapter.

### 4.1 The Trelleborg Project

The process evaluation of Stafström (2007) provided insight in the process of the Trelleborg Project. Stafström formulates the reason for the process evaluation as follows:” (...) there is also an interest in understanding how the ongoing processes of social change and institutionalization shaped implementation.” Data was derived via several methods, namely unstructured interviews, focus groups and formative discussion seminars. In theory, bottom-up approaches tends to increase the institutionalization of the project. However, in practice the opposite often happens. The reason to start with the Trelleborg project was initiated by external pressures, rather than by internal discussions within the municipality. Local decision-making in municipalities is a rather bureaucratic way of working (not this is not only the case in Sweden). In this manner, an innovative working method was encouraged, resulting in the fact that the project positioned itself outside of the traditional government. Instead of mobilising the forces within the organization, the staff lost interest and considered the program implementation as a marginalized activity. Two crucial components of institutionalization and sustainability are consensus and ownership. And although the start of the project in Trelleborg was promising, due to conflicts a lack of ownership arose and this was devastating for the sustainability of the project (Stafström, 2007).

The conclusions of Stafström come up with several opportunities and pitfalls for municipal alcohol policies. One estimating component of the Trelleborg Project was the media attention given to the project and its progress. This raised awareness and intervention advocacy within the community. A logical starting point of a municipal alcohol prevention project could be a visualisation of the local alcohol related problems or the alcohol consumption patterns of adolescents within the municipality. As one can image, the entire community is needed to participate when local politicians and health prevention workers take the initiative to change social norms. In an environment that encourages or allows minors to drink alcohol, everyone should be involved and participating in changing that inviting environment (Imm, Chinman, Wandersman, Rosenbloom, Guckenburg & Leis, 2007). Another component had notable impact as well, namely the capacity building component. By involving community stakeholders, the community awareness raised and it set alcohol on the local agenda. The Trelleborg Project showed a couple of pitfalls as well. Ideally, the initiative to start a local alcohol prevention project should come from the community itself instead of external pressures (as it happened in Trelleborg).

Furthermore, the project group should fit within existing networks. Otherwise, the possibility exists that the project will not be continued after finishing up the project. However, already during the project period changes in staff will occur. Unfortunately, this problem is a matter of common knowledge. Furthermore, by mobilizing the community, local decision making is handed over towards a bunch of people. As a result of this, the decision making process is often time-consuming. On the opposite, the community will be empowered in this manner and will identify itself with the intervention (Stafström, 2007).

Finally, talking about sustainability, in Sweden a number of Swedish communities receive grants of the Ministry of Social affairs (2001 & 2005) to nominate alcohol and drugs coordinators for their municipalities. In this manner, alcohol prevention projects are continued in Sweden (although staff changes, the subject will receive attention continuously).

## **4.2 The Stockholm prevents Alcohol and Drug problems (STAD) project**

The STAD project was partly focused at the hospitality industry (by providing them Responsible Beverage Services). This study focused on a specific part of the suppliers of alcohol, and provides insight into the opportunities and pitfalls for specific target group. The results of early efficacy studies of RBS were mixed (Wallin, 2004). Saltz (1987) found that RBS reduced alcohol related problems, by refusing alcohol to intoxicated patrons. No effects of these serving practices were found by McKnight (1991). Besides these mixed results, Graham (2000) made a suggestion about another crucial component of RBS. According to Graham (2000), experiences of RBS programs indicate some positive results, especially when such programs are mandatory. Wallin (2004) agreed with the suggestion that RBS training alone did not produce the reductions in serving rates to intoxicated and underage patrons. Therefore, RBS is usable as a supportive strategy to reduce alcohol related problems at licensed premises, if combined with enforcement and house policies (and community mobilization) and thereby addressing factors at several Subsystems of Holder (1998) in parallel. Another opportunity of RBS is the possible supportive role of media advocacy in communicating the intervention towards the community and thereby increasing awareness and public support. Public support is important for the acceptance of an intervention within a community (Treno & Holder, 1997). Wallin (2004) found that the public did not support effective strategies (according to Babor, et al. 2003) like outlet density, reduced opening hours and increased alcohol taxes. By visualizing this aspect of alcohol prevention strategies, it becomes clear that the social norms, as an essential component of community mobilizing, needs to be changed in order to implement such effective strategies. The lack of public support can be explained as a pitfall of this community intervention that focused merely on the hospitality industry instead of on the complete community.

Wallin (2004) found that the community action program targeting the hospitality industry (e.g. the licensed premises) with serving practices sustained after a couple of years. In January 2000 a new municipal alcohol policy was formulated, strongly recommending licensed premises with late opening hours (01.00 AM or later) to train all servers in RBS, with the two-day training as norm (Wallin, 2004). Moreover, Wallin (2004) found a high degree of institutionalization. The action group linked several influential organizations and authorities and the frequent regular meetings facilitated mobilization. The responsibility for all members of the action group was clarified by a written agreement. In this manner, officials and politicians gave their support and legitimizations for members to participate in the intervention activities. The agreement ensured a permanent organization for RBS within Stockholm.

## **4.3 The Auckland Regional Community Action Project (ARCAP) project**

The process evaluation of the ARCAP project found several pitfalls, mainly about coordination and planning. Firstly, within a project period of three years, the project only had a dedicated coordinator for an eight month period. Furthermore, after a couple of years a lack of agreement about future coordination of the project arose among the RAP managers. Some managers want the coordinating role within their own organization. Moreover, there has been a high turnover in RAP managers and management meetings have not been held on a regular basis. Secondly, as explained in section 3.3, although many plans have been developed by RAP, many of these initiatives have not been implemented. There was a lack of support from RAP providers for a common planning template (Greenaway, et al., 2005). The dynamics of this project became increasingly difficult without formal coordination (p. 32 & 40 Greenaway et al., 2005). However, according to Greenaway and colleagues (2005), when a experienced alcohol health promotion project coordinator was employed, project cohesion and function improved but there were still unresolved issues for a number of RAP members with regard to the purpose and structure of the project and the required focus on the five objectives. The two aims of the project were to reorient the approach of the four alcohol health promotion providers towards more strategic and collaborative approaches, and to develop a collaborative plan of action based on agreed evidence-based objectives. According to Greenaway and colleagues (2005), there were inevitable tensions and resistance to the changes that his project strived to create. The organizational change of environmental rather than educational strategies was not supported by all involved organizations.

Not all the services were then or are even now convinced of the benefits of refocusing most of their efforts as a collaborative entity and also on the objectives identified. In the end, concerns about the scope of the project, the resources available to it and the 'extra work' involved in RAP activities has led to a lack of full engagement with the project. The pitfalls experienced within this project can be helpful for others, as the importance of a dedicated coordination role is essential for successful implementation and sustainability of a community action project.

#### **4.4 Community Trails Project**

Holder and colleagues (1997) clarified the role of science within a community prevention project. This study describes a couple of lessons learned from this project. Firstly, the scientists were afraid of overwhelming the community, but the opposite became the truth. The communities were capable, resourceful and powerful entities that were never at risk of being overwhelmed by scientists. Secondly, communities (if supported and given necessary technical assistance) were interested in and capable of implementing local alcohol policies. Thirdly, community organizing is not a scientific activity. This lesson explains the necessity of involving local politicians and other policy-makers in the process of development and implementation of a municipal alcohol policy. And finally, any community prevention project to reduce aggregate-level alcohol problems should be the joint responsibility of all in the partnership, both community and research participants.

Practically seen, large amounts of program funds were not available to the local communities from the project. All three communities had the resources to support a full time coordinator and a half time secretary. Furthermore, the local prevention staff developed a local (scientifically based) implementation plan from the five components and each community was free to implement the components in the order it chose and in response to community needs and situations. In this manner, communities themselves had decisive influence on the ongoing of the project. This research base also provided legitimacy and a focus for community efforts. Another opportunity of the project was that all project coordinators were derived from the local communities and were well connected with the local interest groups and familiar with their priorities. In this manner community mobilization could be triggered from someone inside the community itself. Finally, local media was not only used to influence the public opinion but it also provided local staff and project participants with a sense of efficacy and the potential for change.

Unfortunately pitfalls were present as well. In the Community Trails Project the recognition of the problematic nature of existing community coalitions was revealed. It happened that some organizations came to the table with their own agendas and objectives, instead of focusing at the objectives of the project.

In Community Trails Project, mobilization was seen as a means of supporting other strategies and not an end in itself (Treno & Holder, 1997). Based on experiences from the Community Trails project, Moore and Holder (2003) list a number of factors that they consider as essential to institutionalization: (1) community leadership to endorse and legitimize the prevention program, (2) use of local indigenous staff known to the leadership and knowledgeable about the community, (3) building local alcohol policies into existing organizational structures and connected to existing patterns and preferences for action, (4) use of media advocacy as a tool to bring about change but also to support local ownership of the program, (4) making use of local alliances, which recognizes that there are other health and safety problems with their own coalitions and advocacy groups; joint action may be more effective, (5) accommodating staff changes in key organizations, (6) seeking additional resources from local, regional and national resources, (7) working within local politics; support for the program may depend on factors such as an upcoming local election or the internal politics of a police department, (8) incorporating and recognizing local cultural values; recognize and manage possible tensions with the design of a scientifically based program.

## 5. Conclusion

In order to reduce alcohol problems within the entire community, local leadership is required in designing, implementing and supporting new alcohol policies (Holder, 2004). A number of initiatives are undertaken in the field of development and implementation of community (or municipality) alcohol policies. With regards to the content, long-term reduction of alcohol related problems within a community can be accomplished by changing community structures. The basic principle behind the theoretical foundation of Holder (1998) explains the necessity to develop an integral alcohol policy, focusing at several subsystems simultaneously. Four projects described in this paper were focused on several subsystems in parallel. The opportunities and pitfalls experienced within these projects can be used as lessons learned for developing community alcohol policies.

### 5.1 Opportunities and pitfalls

Ideally in theory, internal cues to action trigger the start of community alcohol prevention projects. In practice, this is not often the case. One essential component of developing a local, effective, long-term alcohol policy is community mobilization. Although definitions might be slightly different, the meaning is practically the same. According to Holder (2002), community mobilization typically consists of the following methods: (1) a full or part-time person serves as a community organizer, (2) the community organizer works with the local government, businesses, police and others to support prevention policies and strategies, (3) local committees are usually formed to develop or refine policies and support their implementation, (4) media advocacy, or the use of local news coverage of alcohol issues and public policy, is used a key strategy. The ARCAP project is a good example what happens if the coordination and linked community mobilization are not organized as Holder (2002) explains. In the end, the lack of a community organizer had led to a lack of agreement between involved parties about the content of the project. Stafström (2007) suggests that the capacity building component of the Trelleborg project was one of the components that was more successful than others. By involving several community stakeholders, community awareness about the alcohol problems raised. The alcohol issue thereby became a vital part of the local agenda, and the action group members diffused their new gained knowledge within their existing social and professional networks. In the Community Trails Project, community mobilization was seen as a means of supporting other strategies and not an end in itself (Treno & Holder, 1997). Moreover, they suggest that local indigenous staff should play the leading part in the development and implementation of community alcohol policies. Key leader support is necessary to enable changes (Holmila, 1997).

Another opportunity is to build the local alcohol policy within existing organizational structures. Unfortunately, Stafström, (2007) found that this did not happened within the Trelleborg project with all consequences.

Finally, as suggested by all discussed projects, make use of local media to increase awareness and public support for the development and implementation of an effective local alcohol policy. As suggested by Holder (2004), the most effective and inexpensive way to increase public support for strategies that reduce alcohol availability is to use local newspapers, radio and television, a strategy called media-advocacy. In other words, media advocacy refers to strategic use of media to create a shift in public opinion and mobilize the necessary resources and forces to support an issue, policy, or constituency (Wallack, Dorfman, Jernigan & Themba, 1993). However, raising awareness is in itself a very effective short-term intervention, but it needs constant boosting (Stafström, 2007).

## **5.2 In conclusion**

Developing and implementing an effective long-term alcohol policy within a community is neither simple nor obvious. It should be clear that, the contents and the process of the development and implementation of local alcohol policy are two other sides of the coin, which should be taken into account separately. Prevention within a local community takes time (Giesbrecht & Rankin, 2000). Once implemented, local policies often have a longer life than services that must be maintained and funded each year (Holder, 2004).

## References

- Anderson, P. & Baumberg, B. (2006). *Alcohol in Europe*. London: Institute of Alcohol Studies.
- Andréasson, S. (1999). Community based prevention of alcohol and drug problems: the STAD project. *Paper submitted to the European Symposium on Community Action to Prevent Alcohol Problems*.
- Andréasson, S., Hjalmarsson, K. & Rehnman, C. (2000). Implementation and dissemination of methods for prevention of alcohol problems in primary health care: a feasibility study. *Alcohol & Alcoholism*, 35, 5, 525-530.
- Babb, P. (2007). Violent Crime, disorder and criminal damage since the introduction of the Licensing Act 2003. London: Home Office.
- Babor, T. et.al (2003). *Alcohol: No Ordinary Commodity. Research and public policy*. New York: Oxford University Press Inc.
- Belcher, H. & Shinitzky, H. (1998). Substance abuse in children: prediction, protection and prevention. *Archives of Paediatric and Adolescent Medicine*, 152, 952-960.
- Bellis, M.A., Anderson, Z. & Hughes, K. (2006). Effects of the Alcohol Misuse Enforcement Campaigns and the Licensing Act 2003 on Violence. A preliminary assessment of Accident and Emergency attendances in Wirral. Liverpool: Centre for Public Health.
- Brinckmayer, J.D., Holder, H.D., Yacoubian, G.S. & Friend, K.B. (2004). A General Causal Model to Guide Alcohol, Tobacco, And Illicit Drug Prevention: Assessing the Research Evidence.
- Cagney, P. & Palmer, S. (2007). *The sale and supply of alcohol to under 18 year olds in New Zealand: A systematic overview of international and New Zealand literature*. New Zealand: Research New Zealand.
- Casswell, S. & Bhatta, K. (2001). *A Decade of Drinking : Ten-year Trends in Drinking Patterns in Auckland, New Zealand, 1990-1999*. Auckland: Alcohol and Public Health.
- Casswell, S. (1995). Public discourse on alcohol: Implications for public policy. In: Holder, H.D. & Edwards, G. (Eds.). *Alcohol and public policy: Evidence and issues*. Oxford: Oxford University Press.
- Crombie, I.K., Irvine, L., Elliott, L. & Wallace, H. (2007). How do public health policies tackle alcohol-related harm: A review of 12 developed countries. *Alcohol & Alcoholism*, 42 (5), 492-499.
- De Bellis, M.D., Clark, D.B., Beers, S.R., Soloff, P.H., Boring, A.M., Hall, J., Kersh, A. & Keshavan, M.S. (2000). Hippocampal Volume in Adolescent-Onset Alcohol Use Disorders, *American Journal of Psychiatry*, 157, 737-744.
- Duailibi, S., Ponicki, W., Grube, J., Pinsky, I., Laranjeira, R. & Raw, M. (2007). The Effect of Restricting Hours on Alcohol-Related Violence. *American Journal of Public Health*, 97, 12, 2276-2280.
- European Commission (2006). *Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions*. Brussels.
- Fillmore, K.M., Hartka, E., Johnstone, B.M., Leino, V., Motoyoshi, M. & Temple, M.T. (1991). Preliminary results from a meta-analysis of drinking behavior in multiple longitudinal studies, *Addiction*, 86, (10), 1203-1210.

- Foxcroft, D.R., Ireland, D., Lowe, G. & Breen, R. (2002). Primary prevention for alcohol misuse in young people. *Cochrane Database of Systematic Reviews* 2002, .
- Giesbrecht, N. & Greenfield, T.K. (2003). Preventing Alcohol-Related Problems in the US Trough Policy: Media Campaigns, Regulatory Approaches and Environmental Interventions. *The Journal of Primary Prevention*, 24 (1), 63-104.
- Giesbrecht, N. & Rankin, J. (2000). Reducing alcohol problems through community action research projects: contexts, strategies, implications, and challenges. *Substance Use & Misuse*, 35, 31-53.
- Graham, M.L. (2000). Preventive interventions for on-premise drinking: A promising but underresearched area of prevention. *Contemporary Drug Problems*, 27, 593-668.
- Graham, M.L., Ward, B., Munro, G., Snow, P. & Ellis, J.(2006). Rural parents, teenagers and alcohol: what are parents thinking? *Rural and Remote Health*, 6,1-14.
- Greenacre, S. & Brown, J. (2005). *Best bar none*. Unpublished summary report. Manchester: Greater Manchester Police.
- Greenaway, S., Conway, K., Casswell, S., Huckle, T. & Sweetsur, P. (2005). Auckland Regional Community Action Project on Alcohol Evaluation Report. Centre for Social and Health Outcomes Research and Evaluation & Te Ropu Whariki.
- Grube, J.W. (1997). Preventing sales of alcohol to minors: results from a community trail. *Addiction*, 95, 4, S537-549.
- Grube, J.W. & Nygaard, P. (2001). Adolescent drinking and alcohol policy. *Contemporary Drug Problems*, 28, 87-131.
- Gruenewald, P.J., Millar, A.B. & Roeper, P. (1996). Access to alcohol: geography and prevention for local communities. *Alcohol Health and Research World*, 20, 244-251.
- Holder, H. D., Saltz, R.F., Grube, J.W., Voas, R.B., Gruenewald, P.J. & Treno, A.J. (1997). A community prevention trail to reduce alcohol-involved accidental injury and death: overview. *Addiction*, 92, Supplement 2, S155-171.
- Holder, H.D., Saltz, R.F., Grube, J.W., Treno, A.J., Reynolds, R. I., Voas, R.B. & Gruenewald, P.J. (1997). Summing up: lessons from a comprehensive community prevention trail. *Addiction*, 92, Supplement 2, S293-301.
- Holder, H. (1998). *Alcohol and the Community. A Systems Approach to Prevention*. Cambridge: Cambridge University Press.
- Holder, H. D., Gruenewald, P.J., Ponicki, W.R. et al. (2000). Effect of community-based interventions on high-risk drinking and alcohol-related injuries. *Journal of the Medical Association*, 248, 2341-2347.
- Holder, H.D. (2002). Community Action in an International Perspective. Presented at conference "From Science to Action? – 100 Years Later – Alcohol Policies Revisited" Switzerland: Bern.
- Holder, H.D. (2004). Community Prevention of Young Adult Drinking and Associated Problems, *Alcohol Research and Health*
- Holmila, M. ed (1997). *Community Prevention of Alcohol Problems*. London: Macmillan.
- Huckle, T., Conway, K., Casswell, S. & Pledger, M. (2005). Evaluation of a regional community action intervention in New Zealand to improve age checks for young people purchasing alcohol. *Health Promotion International*, 20, 2, 147-155.

- Hughes, K. & Bellis, M.A. (2003). *Safer nightlife in the North West of England*. Liverpool: Centre for Public Health, Liverpool John Moores University.
- Hurtz, S.Q., Henriksen, L., Wang, Y., Feighery, E.C. & Fortmann, S.P. (2007). The relationship between exposure to alcohol advertising in stores, owning alcohol promotional items, and adolescent alcohol use. *Alcohol & Alcoholism*, 42 (2), 143-149.
- Imm, P., Chinman, M., Wandersman, A., Rosenbloom, D., Guckenburg, S & Leis, S. (2007). *Preventing Underage Drinking. Using Getting To Outcomes with the SAMHSA Strategic Prevention Framework to Achieve Results*. Rand Corporation.
- McKnight, A.J. (1991). Factors influencing the effectiveness of server-intervention education. *Journal of Studies on Alcohol*, 52, 389-397.
- Morleo, M., Harkins, C., Hughes, K., Hughes, S. & Lightowlers, C. (2007). The implementation and impact of the Licensing Act 2003 in Lancashire. Liverpool: Centre for Public Health.
- Moore, R.S. & Holder, H. D. (2003). Issues surrounding the institutionalization of local action programmes to prevent alcohol problems. Results from a community trial in the United States. *Nordic Studies on Alcohol and Drugs*, 20, English supplement, 41-55.
- Newton, A., Sarker, S.J., Pahal, G.S., Bergh, E. van den & Young, C. (2007). Impact of the new UK licensing law on emergency hospital attendances: a cohort study. *Emergency Medical Journal*, 24, 532-534.
- Plant, E.J. & Plant, M. (2005). A "leap in the dark?" Lessons for the United Kingdom from part extensions of bar opening hours. *International Journal of Drug Policy*, 16, 363-368.
- Postman, N., Nystrom, C., Strate, L. & Weingartner, C. (1988). *Myths, men, and beer: An analysis of beer commercials on broadcast television, 1987*. Washington DC: AAA Foundation for Traffic Safety.
- Reynolds, R.I., Holder, H.D. & Gruenewald, P.J. (1997). Community prevention and alcohol retail access. *Addiction*, 92, Supplement 2, S261-272.
- Reynolds, R.I. (2003). *Building Confidence in Our Communities*. London: London Drug Policy Forum.
- Reynolds, R.I. Grube, J. Ponicki, B., Lacey, J., Lananjeira, R. & Duailibi, S. (2004). *Prevention of Murders in Diadema, Brazil: The Influence of New Alcohol Policies*. A brief report prepared by The Pacific Institute for Research and Evaluation.
- Room, R., Jernigan, J., Carlini, Marlatt, B., et al., (2002). *Alcohol and developing societies: a public health approach*. Helsinki: Finnish Foundation for Alcohol Studies and Geneva.
- Room, R., Babor, T. & Rehm, J. (2005). Alcohol and public health. *The Lancet*, 365, 519-530.
- Saltz, R.F. (1987). The role of bars and restaurants in preventing alcohol-impaired driving: an evaluation of server intervention. *Evaluation & Health Professions*, 10, 5-27.
- Spear, L. (2002). Adolescent brain and the college drinker: Biological basis of propensity to use and misuse alcohol. *Journal of Studies On Alcohol, supplement 14*, 71-81.
- Stafström, M. (2007). *Preventing Adolescent Alcohol Use. Processes and Outcomes of a Community-Based Intervention in Trelleborg*. Lund: Media Tryck.
- Treno, A.J. & Holder, H.D. (1997). Community mobilization: evaluation of an environmental approach to local action. *Addiction*, 92, Supplement 2, S173-187.

- Valkenberg, H., van der Lely, N. & Brugmans, M. (2007). Alcohol en jongeren: een ongelukkige combinatie. *Medisch Contact*, 33/34.
- Voas, R.B., Holder, H.D. & Gruenewald, P.J. (1997). The effect of drinking and driving interventions on alcohol-involved traffic crashes within a comprehensive community trail. *Addiction*, 92, Supplement 2, S221-236.
- Wagenaar, A.C., Murray, D.M., Wolfson, M., Forster, J.L. & Finnegan, J.R. (1994). Communities Mobilizing for Change on Alcohol: design of a randomized clinical trial. *Journal of community Psychology, Special issue*, 79-101.
- Wagenaar, A.C. & Perry, C.L. (1994). Community strategies for the reduction of youth drinking: theory and application. *Journal of Research on Adolescence*, 4, 319-345.
- Wagenaar, A.C., Murray, D.M. & Toomey, T.L. (2000). Communities for Mobilizing Change on Alcohol (CMCA): effects of a randomized trail on arrest and traffic crashes. *Addiction*, 95, 209-217.
- Wallack, L., Dorfman, L., Jernigan, D. & Themba, M. (1993). *Advocacy and public health. Power for Prevention*. United States: Sage Publications Inc.
- Wallin, E. (2004). *Responsible Beverage Service. Effects of a Community Action Project*. Stockholm: ReproPrint AB.
- Wilk, A.I., Jensen, N.M. & Havighurst, T.C. (1997). Meta-analysis of randomized control trials addressign brief interventions in heavy alcohol drinkers. *Journal of General Internal Medicine*, 12, 274-283.
- Yu, J., Varone, R. & Shacket, R.W. (1997). *Fifteen-year review of drinking age laws: Preliminary findings of the 1996 New York State Youth Alcohol Survey*. New York: Office of Alcoholism and Substance Abuse.