2014

Evaluating the effectiveness of culturally relevant substance abuse prevention in Ukraine

Anne Gewin
University of Central Florida

EVALUATING THE EFFECTIVENESS OF CULTURALLY RELEVANT SUBSTANCE ABUSE PREVENTION IN UKRAINE

by

ANNE MARIE GEWIN
B.S.B.A. Samford University, 2007

A thesis submitted in partial fulfillment of the requirements
for the degree of Masters of Arts in Applied Learning and Instruction
in the College of Education and Human Performance
at the University of Central Florida
Orlando, Florida

Spring Term
2014

ABSTRACT

The International School Project (ISP) developed a culturally-relevant intervention entitled *The Future Begins Today* (FBT) to address the need for school-based substance abuse prevention in Ukraine. Using a quasi-experimental pretest-posttest with control group design, this study evaluated the effectiveness of this intervention in regards to impact on attitudes and refusal self-efficacy. The study hypothesized that exposure to the FBT intervention would significantly increase adolescents' perceived harm of substance use and perceived ability to refuse drug offers. Students from three schools in Drohobych (N = 173) participated in the study between September and December 2013, with seven classes (n = 124) enrolled in the FBT course and three classes (n = 49) in the control group. Both groups were tested in September and December.

ANOVA results suggested that between September and December, students in the FBT program statistically significantly increased their perceived harm of occasional substance use and perceived ability to refuse drug offers. There was no significant change in students' perceived harm of frequent use. Moreover, the extent to which FBT supplementary materials were incorporated also related positively with program outcomes. Qualitative data from follow-up written interviews supported these findings. Regression analyses showed that older students were less likely to perceive substance use as harmful. There were no significant relationships between program outcomes and gender, positive family influence, or negative peer influence. Relevance to the existing literature and recommendations for future research are discussed.

Dedicated to all of the teachers in Ukraine who make an eternal impact by equipping their students, developing future leaders, and shaping generations

ACKNOWLEDGMENTS

This research endeavor would not have been possible without the support of many individuals. First and foremost, I give glory to God Who has given me a passion for learning and an earnest desire to make a difference in society. I thank my dear parents and grandparents who provided moral and financial support for my academic pursuits. I thank my first statistics professor, Dr. Jennings Marshall, who instilled in my mind a thirst for knowledge and made statistics seem fun.

I would like to acknowledge my committee members for their direction with my thesis. To my advisor and chair, Associate Professor Bobby Hoffman, thank you for your guidance and support during my years of education in the Applied Learning and Instruction program. To Associate Professor Debbie Hahs-Vaughn, my sincere appreciation for your invaluable statistical guidance throughout this project. I would also like to thank Associate Professor Kay Allen, Associate Professor Ida Cook, and Professor Jay Corzine, for their time and support.

Also, I wish to express my deepest gratitude to the staff and volunteers of the International School Project who labor to impact the lives of teachers and students. Without these people I would not have begun this project in the first place.

To my Ukrainian colleagues – Oleg Kargin, Galina Kargina, Peter Sushko, Vira Petrechko and countless others - I wish to convey the upmost appreciation for their invaluable assistance and recommendations. To my interpreters and translators Olesia Sushko and Katya Kargina, thank you for being the voice of this project. And to all of the teachers and administrators of Drohobych who participated in this research study, thank you. This research truly would not have been accomplished without each and every one of you.

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LIST OF ACRONYMS/ABBREVIATIONS

ADAS	*Adolescent American Drug and Alcohol Survey*
ANCOVA	Analysis of covariance
ANOVA	Analysis of variance
CSI	Culturally sensitive intervention
DARE	*Drug Abuse Resistance Training,* a substance abuse intervention
DM-DB	*DreamMakers-DreamBreakers,* a culturally sensitive intervention
EM	Expectation maximization algorithm used to replace missing data
EMCDDA	European Monitoring Centre for Drugs and Drug Addiction
ESPAD	European School Survey Project on Alcohol and Other Drugs
FBT	*Future Begins Today,* a Ukrainian version of the DM-DB curriculum
GRT	Group randomized trial
HIV/AIDS	Human immunodeficiency virus infection / acquired immunodeficiency syndrome
IRB	Institutional Review Board
ISP	International School Project
kiR	*keepin' it R.E.A.L,* a culturally grounded substance abuse intervention
KMO	Kaiser-Meyer-Oikin, test of sampling adequacy
MCAR	Statistical test evaluating whether data are missing completely at random
MSA	Measure of sampling adequacy
NGOs	Non-governmental organizations
PN	*Project Northland,* a substance abuse intervention
QES	Quasi-experimental study

RCD	Randomized controlled design
SF	*Strengthening Families,* a substance abuse intervention
SPR	Society for Prevention Research
SPSS	*Software Package for Statistics and Simulation*, a statistical software program developed by IBM
STEP	*School-based Teenage Education Program,* HIV/AIDS and alcohol abuse intervention
UNICEF	United Nations Children's Fund
WHO	World Health Organization

CHAPTER ONE: INTRODUCTION

Adolescent substance abuse is a global issue (Botkin & Griffin, 2007; Kumpfer, Pinyuchon, Teixeira de Melo, & Whiteside, 2008). According to the 2008 European School Survey Project on Alcohol and Other Drugs (ESPAD), 63 % of adolescents ages 15-16 have smoked and 91 % have used alcohol (ESPAD, cited in Vaschenko, 2009). Injection drug use is the leading cause of HIV/AIDS, and Eastern Europe has one of the most rapidly increasing rates of the HIV virus in the world (Porath-Waller, Beasley, & Beirness, 2010).

Adolescent Substance Abuse Intervention in Ukraine

Adolescent substance abuse is of particular concern in the country of Ukraine. UNICEF reported that both alcohol consumption and drug availability had increased annually in Ukraine (Vaschenko, 2009). The collapse of the Soviet Union in 1991 led to tremendous economic and social upheaval, resulting in a decrease in law enforcement and increase in drug accessibility (Booth et al., 2008). At the same time, real health spending decreased by nearly 50% (Atlani, Caraël, Brunet, Frasca, & Chaika, 2000). These factors and many others contributed to a surge in substance abuse that reached epidemic proportions by 2008 (Booth et al., 2008).

Substance use permeates Ukrainian society. In fact, Ukraine has one of the highest smoking rates in the world (Hazemba, Siziya, Muula, & Rudatsikira, 2010). The age of initiation is young; according to a 1999 Kiev Global Youth Tobacco Survey, with 41% of 13-15 year old adolescents identifying themselves as current smokers (Hazemba et al., 2010). Alcohol abuse, a prime cause of premature death in former USSR countries, is quite common among teenagers (Pomerleau et al., 2008). And 76.11% of Ukrainian youth report past-year alcohol use (Linskiy et

al., 2012). Moreover, injection drug use is rapidly rising among teenagers in Eastern Europe and Ukraine, with many users as young as 13 years old (Kyrychenko et al., 2006).

These substance usage rates are quite alarming because of their impact on other health-related disorders. Ukraine has one of the fastest growing rates of the human immunodeficiency virus (HIV) in the world (Busza et al., 2011; Kyrychenko et al., 2006), and has the highest level of HIV in Europe (Busza et al., 2011; Kyrychenko et al., 2006). In 2007, 1.63% or 440,000 Ukrainians were HIV positive (Booth et al., 2008) and agencies such as the World Bank and the International HIV/AIDS Alliance in Ukraine predict that this number will double to 820,400 Ukrainian citizens by 2014, with 140 individuals dying each day (Booth et al., 2008). Researchers have primarily connected this rapid increase in HIV rates with increases in injection drug usage (Kyrychenko et al., 2006), because injection drug users account for 85% of HIV infections (Booth et al., 2008). Adolescents are disproportionately affected by this epidemic, with nearly one-third of cases being among those ages 15-24 (Booth et al., 2008).

Suicide, a leading cause of death among young people, (Kokkevi et al., 2012) is also affected by substance abuse. Ukraine ranks sixth in the world for suicide rates, with suicide deaths increasing from 20.5 per 100,000 people in 1990 to 24.6 per 100,000 people in 2002 (Bromet et al., 2007). Substance abuse, including heavy alcohol consumption, has been confirmed as a major contributor to suicide attempts (Bromet et al., 2007; Kokkevi et al., 2012). While more research is needed to analyze the connections between nicotine addiction, alcoholism, and suicide attempts (Bromet et al., 2007), obviously substance abuse plays a pivotal role in many unhealthy behaviors affecting Ukrainian youth.

Purpose of the Study

The Need for Prevention Research in Ukraine

In Ukraine, where HIV rates caused by illicit drug use reaches epidemic proportions, it is alarming to note that very little international research focuses on prevention education in this country (Kyrychenko, Kohler, & Sathiakumar, 2006). Only 22 % of Ukrainian adolescents have adequate knowledge about the transmission of HIV (Vaschenko, 2009). Granted, the Ukrainian Ministry of Education reported that students in grades 5-9 were required to engage in substance abuse interventions but such programs have not been consistently evaluated (EMCDDA, 2012). As one Ukrainian author noted, "Although the drug epidemic threatens the national security of Ukraine, it has not been consistently studied in the last several years. There is no state nationwide monitoring system of the situation" (Kononov, 2012, p. 4).

Several scholars offered possible explanations for such gaps. First, as of 2005 Ukraine lacked a public health information program, HIV prevention strategies, substance abuse intervention, school-based sex education, and strategies to address the HIV/AIDs situation (Booth et al., 2008). In 2010, the World Health Organization reported that there were no officially sponsored, school-based prevention programs designed to target substance use disorders (WHO, 2010). Also, many policy makers assumed that healthcare providers, not educators, would address problems such as substance abuse (Booth et al., 2008). Finally, inadequate funding was likely an issue. The primary sources of prevention programming in Ukraine came from international, non-governmental organizations (NGOs), (WHO, 2010).

The Role of the FBT Intervention in Addressing Such Needs

The International School Project (ISP) is one such international agency that sought to address the problem of substance abuse among Ukrainian youth. ISP designed a school-based

intervention targeting middle school youth with the intention of aiding in the prevention of substance abuse and negative social behaviors (ISP, 2013). In 2005, the Ukrainian Ministry of Education selected this intervention entitled *The Future Begins Today* (FBT) for implementation across the country. The FBT program was adapted from an original curriculum entitled *DreamMakers-DreamBreakers* (Forbes et al., 2005; ISP, 2013). Since 2005, ISP has trained over 18,000 Ukrainian public school teachers to use this curriculum (ISP, 2013). Numerous qualitative evaluations indicated widespread approval for the program (O. Kargin, & O. Benik, personal communication, 15 April 2010). However, ISP has yet to quantitatively evaluate the FBT intervention for program impact on student attitudes, knowledge, and behaviors.

The Need to Evaluate the FBT Intervention

Such evaluation of the FBT intervention is vital for several reasons. First, adolescent substance abuse interventions must be critically examined because there is still a degree of uncertainty regarding their effectiveness, not just in Ukraine, but globally (Cuijpers, 2003; Newton et al., 2012; Tobler et al., 2000). After several decades and scores of research studies, scholars agreed that substance abuse interventions often demonstrate positive effects on adolescent substance use, but many interventions reflect questionable strategies which generate less than stellar outcomes (Botvin, Griffin, Diaz, & Ifill-Williams, 2001; Faggiano et al., 2008). Second, prior international studies in the arena of school-based substance abuse interventions are scarce in Ukraine. Even though several Ukrainian pilot studies evaluated such interventions during the past ten years (EMCDDA, 2012), such research was not available for international audiences or consistently disseminated (Kononov, 2012). Finally, this study offers unique benefits to the field of prevention education because it investigates the effectiveness of a culturally sensitive intervention (CSI), or program that was specifically tailored to the unique

needs of the Ukrainian culture, in contrast to the implementation of a Western (i.e. American) intervention. Previous research noted the need for more studies in the realm of culturally sensitive prevention, especially international research (Kumpfer et al., 2008).

Purpose and Feasibility of this Study

The primary purpose of this study was to evaluate the effectiveness of the *Future Begins Today*, a CSI designed for use in Ukraine. The field is ripe for research in the realm of substance abuse intervention and quite feasible because scholars have begun to analyze similar topics. To date there are existing studies which analyze HIV prevention in the Ukrainian community (Booth et al., 2008) and these studies indirectly relate to substance abuse prevention because of the high influence of injection drug use upon HIV rates. The authors concluded that HIV interventions were quite feasible in community-based settings and that the interventions were effective at addressing HIV risk factors (Booth et al., 2008). Such research sets the stage for the evaluation of substance abuse interventions.

Research Questions and Hypotheses

Because of the dearth of evaluation research on substance abuse interventions in Ukraine, this study sought to answer the following research questions: First, does exposure to the *Future Begins Today* intervention significantly impact Ukrainian adolescents' attitudes concerning substance abuse, particularly their perceived harm of substance use and their perceived ability to refuse drug offers? Second, are there significant differences (i.e. in student attitudes concerning substance use) between students who participate in the FBT intervention and those who do not participate in any intervention? Finally, do program outcomes differ according to other factors such as student gender, influence of parents, and influence of peers?

Impact of the Future Begins Today (FBT) Intervention

Several hypotheses relate to the first research question concerning the influence of the FBT intervention on adolescent substance abuse attitudes. Previous research showed that high perceived harm of substance use was correlated with a decrease in actual usage among adolescents (Tragesser, Beauvais, Burnside, & Jumper, 2010) and therefore this was an appropriate construct for inclusion in the analysis. Also of interest, is the construct of perceived ability to refuse drug offers (Cupp et al., 2008). Thus, the following hypotheses applied to the first research question:

H 1: Exposure to the FBT intervention will significantly increase perceived harm of alcohol use among Ukrainian adolescents.

H 2: Exposure to the FBT intervention will significantly increase perceived harm of occasional drug use among Ukrainian adolescents.

H 3: Exposure to the FBT intervention will significantly increase perceived harm of frequent drug use among Ukrainian adolescents.

H 4: Exposure to the FBT intervention will significantly increase perceived ability to refuse drug offers among Ukrainian adolescents.

Comparison with a Control Group

In order to control for testing effects and other threats to validity, a control group (i.e., students) were considered in this study and the following hypothesis was used to test the second research question:

H5: At post-intervention, scores on all dependent variables will be higher among the FBT treatment group when compared with the non-treatment group.

Consideration of Other Contributing Factors

As with any other program evaluation, it is important to consider other factors which influence program outcomes beyond the intervention itself. In many cultures, gender differences have been observed regarding program effects, with one gender responding more favorably to the intervention than the other (e.g., Dixon et al., 2007, Flay et al., 2004). Because gender is a categorical variable, the following hypothesis was considered along with hypothesis Five.

H6**:** There will be a differential effect of program outcomes according to gender. The direction is not specified.

Moreover, family influence and peer influence have also been shown to significantly affect substance use patterns among adolescents. Primary Socialization theory predicted that high family pressure to avoid drugs and low peer pressure to use drugs are both correlated with reduced substance use (Tragresser et al., 2010). These assumptions are considered with the following hypotheses, although other variables were considered as well.

H7: Positive family influence (i.e. pressure to avoid drugs) will be positively correlated with favorable outcomes among dependent variables (e.g., higher perceived harm of substance use).

H8: Conversely, negative peer influence (i.e. pressure to use drugs) will be negatively correlated with favorable outcomes among dependent variables (e.g., higher perceived harm of substance use).

Selected Research Design

This project was designed as a quasi-experimental pretest-posttest with control group study. Historically, cultural adaptation trials involved a pretest-posttest study where changes in the intervention group were compared with changes in the control group (e.g., Hecht & Krieger,

2006; Hopson & Holleran-Steiker, 2010; Komro et al., 2006). In the context of substance abuse prevention in Ukraine, this study will analyze changes in student attitudes concerning the perceived harm of substance and changes in their perceived self-efficacy beliefs concerning their ability to refuse drug offers, as well as their overall opinions of the FBT intervention. Student surveys were distributed both to students enrolled in the FBT program and to students who were not enrolled in the FBT program. Teacher surveys verified the accuracy of student responses, and follow-up discussions were conducted posttest with a select group of participants.

Anticipated Benefits of this Study

This analysis will build upon the accumulating body of literature addressing culturally sensitive interventions (CSIs) which specifically target adolescent substance use (e.g., Hecht & Krieger, 2006). The results of this study will benefit NGOs such as the International School Project as they seek to provide relevant, effective interventions. The study should also contribute the prevention field by conducting research in a country that has identified adolescent substance abuse as a serious problem; a problem that remains relatively unaddressed.

CHAPTER TWO: LITERATURE REVIEW

The substance abuse prevention field is quite expansive and therefore this section synthesizes the constructs relevant to the current study. The chapter begins by clearly defining terms which are prominent in the field of prevention science, particularly those concerning the cultural adaptation of interventions. Such definitions include a brief explanation of the constructs used to quantify program effectiveness. Following, the review synthesizes the varying models of preventive interventions and their relative outcomes on adolescent substance use behaviors. Explanations for these differing results are discussed. The chapter continues by delineating notable characteristics of preventive interventions, as seen in prior literature. The review then describes in detail the effectiveness of culturally sensitive substance abuse interventions (CSIs) and offers examples of notable CSIs which have been internationally disseminated. This section concludes with a detailed description of the Future Begins Today (FBT) intervention and how this intervention follows the principles of effective prevention.

Key Definitions in the Field

In this review, dimensions of culture are explored because such constructs directly impact how researchers interpret the effectiveness of culturally sensitive interventions (CSIs). Next, types of preventive interventions are compared and contrasted. Research showed that certain categories of interventions demonstrate higher effect sizes when compared with others, and thus it is important to distinguish these categories before discussing program effectiveness. Finally, this section describes the constructs used to depict program success.

Culture

Previous research identified over one hundred recognized definitions of culture, making it a very difficult construct to measure (Castro et al., 2010; Unger et al., 2004). Nevertheless, many scholars in the prevention field agreed that the term *culture* refers to a group's transmitted knowledge, identity, observable symbols and behaviors, and shared attitudes and beliefs (Barrera et al., 2012), and this definition will be assumed throughout this research study.

Cultural Adaptation

In the context of substance abuse prevention, cultural adaptation usually referred to the process by which an existing intervention is altered in order to be more compatible with a different cultural group (Castro et al., 2010). Ideally, cultural adaptations preserve the foundational components of the program, but incorporate new cultural content and eliminate potentially offensive components (Barrera, Castro, & Holleran-Steiker, 2011). Often, the term *cultural adaptation* was distinguished from the term *cultural grounding,* a more aggressive approach that practically creates a new intervention whenever the program is brought to a new cultural group (Castro et al., 2010). Cultural tailoring was another term that is synonymous with cultural adaptation (Resnicow et al., 2000, p 272). Cultural adaptation, cultural grounding, and cultural tailoring all referred to the *process* of changing an intervention so that it is more culturally sensitive. For the purposes of this study, the more general term *cultural adaptation* will be implemented when discussing the process of changing a program.

Cultural Sensitivity

Resnicow and colleagues (2000) proposed the following definitions to describe *cultural sensitivity:* Cultural sensitivity concerns "the extent to which ethnic/cultural characteristics, experiences, norms, values, behavioral patterns, and beliefs of a target population as well as

relevant historical, environmental, and social forces are incorporated in the design, delivery, and evaluation of targeted health promotion materials and programs" (Resnicow et al., 2000, p. 272). This construct was sometimes distinguished from *cultural competence,* "the capacity of individuals to exercise interpersonal cultural sensitivity" (Resnicow et al., 2000, p. 272). Cultural competence described program deliverers such as teachers, whereas cultural sensitivity described the interventions. In this study, cultural sensitivity will be used because this study focuses on the intervention itself, rather than the person delivering the intervention.

Dimensions of culture. Cultural sensitivity was further categorized according to two dimensions: *surface structure* constructs and *deep structure* constructs (Resnicow, Braithwaite, Ahluwalia, & Baranowski, 1999). *Surface structure* variables are concerned with "the extent to which interventions meet target populations where they are; how well they *fit* within their culture, experience, and behavioral patterns" (Resnicow et al., 2000, p. 273). Examples of surface structure features include names of characters and language (Hecht & Krieger, 2006). *Deep structure* variables focus on the "cultural, social, psychological, environmental, and historical factors" that impact health-related behaviors differently among cultural groups (Resnicow et al., 2000, p. 273). Examples of deep structure variables include ethnicity, normative beliefs, and religiosity (Hecht & Krieger, 2006). Such constructs are important to consider because they vary considerably among various cultures. Moreover, prior research implied that interventions were more effective if they incorporated both surface and deep structure variables (Resnicow et al., 2000). This assumption warrants further investigation in the realm of substance abuse prevention, and international interventions in particular.

Substance Use and Abuse

Substance or drug *use* was often distinguished from substance or drug *abuse*. Some definitions were very specific. According to the American Psychiatric Association, *drug use* referred to "experimentation or low frequency, typically irregular, use of illicit drugs" whereas *drug abuse* concerns the "regular and/or compulsive use of illicit drugs" (APA, 2013, para. 1). Others defined the term drug abuse more broadly. Neinstein (2013) defined drug abuse as "any use of drugs that causes physical, psychological, economic, legal, or social harm to the individual user or to others affected by the drug users behavior" (Neinstein, 2013, para. 3). Because the degree of legality and the availability of drugs to minors differ according to national guidelines, this review will adopt the latter, more general definition.

Constructs Used to Describe Program Effectiveness

Numerous outcomes are analyzed in regards to the effectiveness of substance abuse interventions. Program receptivity refers to the marketability of the intervention and is important because unless the intervention is received by its audience, neither behavior nor attitudes will be affected (Springer et al., 2004; Chipungu et al., 2000). Acquisition of skills such as self-esteem or decision-making are also studied (Faggiano et al., 2008), particularly in the context of affective-education or peer-oriented interventions (Newton et al., 2012). Another outcome involves the impact of the intervention on risk and protective factors such as attitudes towards substance abuse (Hawkins et al., 1992). The ultimate outcome under scrutiny is actual substance usage; however, this measure is difficult to obtain for ethical reasons. A more common outcome is self-reported usage derived from questionnaires administered to adolescents in school or community settings (Kyrychenko et al., 2006). Because of the practical and ethical limitations of measuring actual substance usage, this study will analyze the more feasible variables of attitudes

towards substance abuse including perceived harm of substance use and perceived ability to refuse drug offers.

Categorization of Interventions

Universal versus targeted approaches. Inherently, *universal* programs are inclusive interventions, whereas *targeted* programs focus specifically on a given audience determined by factors such as gender, ethnicity, sports activities or settings (Norberg, Kezelman, & Lim-Howe, 2013). Usually *targeted* interventions cater to a group of students who are perceived as having higher risk of substance abuse, whereas universal interventions target all members regardless of their perceived risk for substance abuse (Norberg et al., 2013). This research study operates on the premise that the FBT intervention is a universal intervention which can be used with a diversity of audiences including both low-risk as well as high-risk adolescents.

Uni-modal programs versus multi-modal programs. *Uni-modal* interventions use a single venue for their intervention, such as a school, home setting, or a community center (Norberg et al., 2013, p. 4). In contrast, multi-model interventions use more than one of these settings, and have demonstrated favorable results (Norberg et al., 2013). This research project analyzes the FBT intervention which was originally designed with the classroom as its targeted modality. However, it is worth mentioning that in 2009, ISP in partnership with Ukrainian educators, expanded the program to include a parent-oriented component, thus expanding the FBT to multiple modalities. Prior research in the field indicated that multi-modal programs offer greater potential to influence youth behaviors than uni-modal interventions (Karki, Pietilä, Länsimies-Antikainen, Varjoranta, Pirskanen, & Laukkanen, 2012; Newton et al., 2012).

Summary

This synthesis of relevant definitions showed that many different constructs examine the role of culture in preventive interventions. Culture is a broad construct that encompasses knowledge, norms, and identity. Cultural adaptation refers to the process of modifying a program whereas cultural sensitivity is the adjective used to describe the program. Cultural sensitivity can be further divided into two dimensions: surface features of the intervention and deep features of the intervention.

Also, when conducting evaluations researchers must consider the type of intervention in question. Previous literature distinguished between universal and targeted programs, and uni-modal and multi-modal programs. Program outcomes of interventions were measured in many ways including program receptivity, level of skill development, positive change in attitudes, and change in substance use. The relative effectiveness of such models will be discussed in the following section.

Effectiveness of Substance Abuse Interventions

Extensive yet Conflicting Research Regarding Effectiveness

When evaluating a program such as the FBT intervention, researchers must consider prior rates of success or failure in similar interventions in order to accurately predict and measure program outcomes. In the last three decades, hundreds of studies have analyzed the effectiveness of school-based preventive education targeting adolescent substance abuse. Despite the expansiveness of the field, there is still considerable question in regards to the effectiveness of such interventions, with some studies indicating significant program effects and others demonstrating little impact (Botvin, et al., 2001; Faggiano et al., 2008; Tobler et al., 2000).

Among recent systematic literature reviews, there is agreement that substance abuse interventions offer great potential to significantly impact student knowledge and attitudes, and some interventions also reduce substance use, albeit for short periods of time (Cuijpers, 2002, p. 1010). But program effects differed according to the type of intervention being delivered. In previous literature, interventions were organized according to their emphasis or theoretical basis and four prominent models emerged: knowledge-based, affective-education, social influence, and comprehensive interventions.

Knowledge-based Interventions

Knowledge-centered or *information-dissemination* interventions concentrate on educating adolescents about the negative effects of substance abuse and often use scare tactics (Faggiano et al., 2008, Gottfredson & Wilson, 2003). Information-dissemination interventions increase knowledge about substance use, but deliver few other program results (Porath-Waller, et al., 2010). Such programs rarely reduced substance use, and in fact some studies discovered that information-dissemination interventions actually produced reverse effects (i.e. increased substance abuse), possibly because they aroused student curiosity about substance use (Newton et al., 2012). Other explanations for their limited outcomes were based on the tendency of knowledge-centered approaches to rely heavily on didactic, non-interactive teaching methods (Tobler et al., 2000). Such programs also failed to consider other factors besides knowledge, such as social and behavioral norms, that influenced adolescents to use substances (Moskowitz, 1989). While the FBT intervention conveys some information about substance use, it would hardly be considered a knowledge-based intervention because it de-emphasizes the dissemination of information in favor of more motivationally-oriented strategies (Forbes et al., 2005).

Affective-education Interventions

Affective-education interventions strive to build self-esteem and self-awareness (Faggiano et al., 2008; Gottfredson & Wilson, 2003). These interventions focus on decision-making skills, problem-solving, and communication skills (Newton, Conrod, Teesson, & Faggiano, 2012). Affective-education programs increased knowledge and also improved decision-making skills, but did not necessarily decrease substance use (Faggiano et al., 2008). As with information-based interventions, practitioners typically relied upon non-interactive delivery methods when presenting affective-education programs (Tobler et al., 2000; Tobler & Stratton, 1997). Also, affective-education programs emphasize interpersonal skills, which while valuable, are not exclusively connected with drug use behavior, and some students had difficulty transferring these skills to the drug use context (Botvin & Griffin, 2006).

Social Influence Approaches

The *social influence* method for prevention, developed in the 1980s, is based upon McGuire's social inoculation theory and Bandura's social learning theory. Such interventions assume that adolescents initiate substance use because they lack skills necessary to resist peer pressure (Newton et al., 2012). *Social influence* interventions usually contain three components: informative education, normative education, and drug resistance training. Informative education refers to the transfer of accurate information concerning drug use. Normative education is important because it corrects inaccurate *normative beliefs* concerning substance abuse. Adolescents often overestimate the normal levels of substance abuse among their peers and such assumptions contribute to substance use behavior. Program deliverers use drug resistance training sessions to equip students will real-life skills to refuse drug offers (Newton et al., 2012). Social influence programs, particularly interventions that incorporate resistance skills training,

have demonstrated significant reductions in actual drug usage (Gottfredson & Wilson, 2003; Newton et al., 2012). A notable exception is the program *Drug Abuse Resistance Training* , (DARE), which while highly publicized and internationally disseminated, generated negligible program effects (Newton et al., 2012). One possible explanation is the program's high reliance upon non-interactive delivery methods (Tobler & Stratton, 1997; White & Pitts, 1998) because among other studies, the social influence model was generally considered highly effective (Newton et al., 2012).

Comprehensive Interventions

Finally, the *comprehensive* interventions combine the components of the social influence intervention but add self-management training and social skills development (Newton et al., 2012). Comprehensive interventions incorporate Jessor and Jessor's problem behavior theory, (Jessor & Jessor, 1977) which assumes that substance abuse is socially affected by modeling and imitation behaviors. One of the most prominent examples of the comprehensive model is Botvin's *Life Skills Training* intervention which focuses on "personal and social risks that underpin lifestyle and health" (Newton et al., 2012, p. 551). In numerous meta-analyses, comprehensive interventions suggested the most promising program effect sizes on drug use reduction, compared with other programs (Newton et al., 2012). The success of the comprehensive interventions is dependent upon the program's reliance upon interactive delivery methods (Botvin & Griffin, 2006). Analyses also found that the effectiveness of both social influence and comprehensive interventions were enhanced when these programs added a community-oriented component such as family involvement, media messages, or school policy changes (Newton et al., 2012).

Previous research consistently asked why certain types of interventions were more successful than other strategies. These questions and several decades of program evaluation yielded an interesting collection of best practices which are discussed in the following section.

Characteristics of Effective Interventions

In recent studies, the prevention field offered strong consensus on the notable characteristics of successful preventive interventions addressing substance abuse. In an extensive overview, Newton (2012) presented several of these effective principles which are represented in Table 1, gleaned from numerous literature reviews and meta-analyses. Some of these principles - particularly those which are exemplified in the FBT intervention – are discussed in more detail.

Table 1

Effective principles of school-based prevention for substance abuse

Be evidence-based and theory driven.
Acknowledge and target risk factors for substance use and psychopathology.
Present developmentally appropriate information.
Be implemented prior to harmful patterns of use are established.
Be part of a comprehensive health education curriculum.
Adopt a social influence or comprehensive approach to prevention and:
Provide resistance skills training.
Incorporate normative education.
Make content of immediate relevance to students.
Make use of peer leadership, but keep teacher as the central role.
Address values, attitudes and behaviours of the individual and community.
Be sensitive to cultural characteristics of target audience.
Provide adequate initial coverage and continued follow-up in booster sessions.
Employ interactive teaching approaches.
Can be delivered within an overall framework of harm minimization.

Used by permission from Newton et al. (2012), see also Appendix N

The Importance of Theoretical Grounding

Scholars contended that preventive interventions should be based upon sound theory and tested prior to implementation and dissemination (Barrera, et al., 2011; Wilson & Miller, 2003). Such theoretical grounding was particularly necessary when adapting interventions to make them more culturally sensitive. Castro (2013) noted "it is of vital importance to have a clearly defined purpose for the adaptation vs. just picking cultural variables out of convenience or on a whim" (quoted in Lloyd et al., 2013). Unfortunately, many programs are adapted haphazardly and without sound rationale. There is a tendency for program developers to make superficial changes to an existing intervention rather than conducting substantial research to determine whether or not such changes are even necessary or appropriate. Rather, the more effective approach is to consider the local culture first, and then locate the intervention that is most suited to address the specific concerns of that population (Barrera et al., 2011).

Consideration of Risk and Protective Factors

Preventionists also agreed that one of the most effective strategies for preventing adolescent problem behaviors such as substance abuse was to promote protective factors and mitigate risk factors (Hawkins, Catalano, & Miller, 1992). Risk factors are "individual characteristics, variables or hazards that *increase* the likelihood of an individual developing a disorder, in comparison to the random general population" (p. 545) whereas protective influences are "factors that *reduce* the likelihood of developing problem behaviour, by mediating or moderating the effect of exposure to risk factors" (Newton et al., 2012, p. 545).

Risk and protective factors have been categorized according to whether they are *genetic,* or "predispositions to drug use," *individual* "characteristics within individuals and their interpersonal environments," or *environmental/contextual*, "broad societal and cultural factors"

(Newton et al., 2012, p. 546). Individual risk factors include beliefs and attitudes that are positive towards drug use, rebellious and risk-taking personality characteristics, and aggressive or problematic emotional and behavioral issues. Conversely, individual protective factors include negative attitudes and beliefs concerning drug use, compliant personality characteristics, and social and emotional competence (Newton et al., 2012). Environmental and contextual risk factors involve negative peer influence (e.g., peers who use drugs), school failure, and poor family monitoring or bonding. Social norms such as positive media portrayal of substance use or widespread availability of drugs also contribute to adolescent substance abuse. On the contrary, healthy peer relationships, success in school, strong parental supervision and bonding, and high involvement in religious or extracurricular activities, serve as protective environmental factors (Vester et al., 2012). Given these observations it seems prudent to structure substance abuse interventions so that they emphasize protective factors while minimizing risk factors.

Age Appropriateness

Interventions must be developmentally appropriate for the target audience. However, the ideal age of delivery is still uncertain, with recent research noting "inconclusive findings" (Norberg et al., 2013, p. 12). Theoretically, interventions should be delivered during early adolescence, prior to the prime age of initiation, which is 15-17, yet one synthesis observed that interventions targeted towards older youth demonstrated higher effectiveness than programs targeting adolescents under age 14 (Tibbits, Smith, Caldwell, & Flisher, 2011). Thus, the field is still divided over the most appropriate age, and this construct must be considered contextually.

Implementation Prior to Onset of Substance Use

Interventions are categorized according to their intent; whether they *prevent* problems such as substance abuse or whether they *treat* such issues (Castro et al., 2010). School-based

interventions often focus on the latter because they are ideal settings to influence young adolescents before they become users (Faggiano et al., 2008). This study analyzes the FBT intervention, which is a preventive school-based program.

Schools remain a primary mode of substance abuse prevention for many reasons. First, the onset of substance abuse typically occurs at 15-17 years of age, and thus preventive education is designed to be presented prior and during secondary school (Kyrychenko et al., 2006). Because approximately 80% of drug use initiations occur before adulthood, schools are systematic and efficient outlets to deliver prevention messages (Faggiano, Vigna-Taglianti, Versino, Zambon, Borraccino, & Lemma, 2008). School settings also present lower costs when compared with alternative settings and high access because of mandated education (Van Haut, Foley, McCormack, & Tardif, 2012; Newton et al., 2012). Finally, schools offer the potential for multiple doses of the intervention to be delivered in accordance with diverse development stages (Newton et al., 2012). These reasons contributed to the International School Project's decision to develop a school-based intervention.

Comprehensive Approach

Interventions must accomplish more than simply disseminating information to students about the dangers of substance abuse (Shin, 2001). Rather, they must address underlying assumptions and also infuse environmental factors such as family situation, school setting, and community norms. As indicated previously, knowledge-oriented interventions do improve knowledge of drug use, but they are not as effective as other forms of prevention, and can actually cause adverse reactions (Faggiano et al., 2008; Porath-Waller, et al., 2010; Newton et al., 2012).

More specifically, skills-oriented programs such as social influence or comprehensive interventions consistently display the most significant impact on adolescent knowledge, decision-making, response to peer pressure, and actual substance use, likely because they equip students in drug refusal skills (Faggiano et al., 2008). In the meta-analyses conducted by Faggiano et al. (2008), skills-based interventions yielded a statistically significant 20% reduction in marijuana use and 55% reduction in hard drugs use.

Relevant and Competent Program Delivery

The person delivering the intervention also played an important role. Students' perceptions of teacher competence dramatically affect their acceptance of the prevention program itself (Stephens et al., 2009). Indeed, teacher attitudes and competencies certainly contribute to program effectiveness. Researchers show that teachers were more likely to embrace the curriculum if they believed they were making a difference and these attitudes were often conveyed to students (Hanley et al., 2009). Teachers were also more likely to adhere to the program and exercise fidelity to the original intervention if they receive adequate training (Ennett et al., 2003). Such training was essential for promoting accurate knowledge among educators. And, intervention components must be credible and realistic in order to engage youth. Without the proper teacher competencies and accurate knowledge, such credibility and realism were not possible (Porath-Waller, et al., 2010).

Current research also suggests that programs involve other facilitators such as peer leaders, in addition to classroom teachers. Historically, teachers were the most common program facilitators of school-based interventions (Porath-Waller, et al., 2010). However, teacher-led programs were not necessarily the most effective (Porath-Waller, et al., 2010). Explanations for low program impact included inadequate training of facilitators, lack of motivation on the part of

the teachers, and a lack of perceived expertise among students with regards to their teachers' familiarity with substance use (Porath-Waller, et al., 2010). Indeed, programs that adopted other facilitators besides teachers showed promising program effects (Norberg et al., 2013). Thus, future research should continue to explore the incorporation of other facilitators or multiple facilitators, including peer leaders (Norberg et al., 2013).

Appropriate Coverage and Dosage

As Newton et al. (2012) observed, interventions must "provide adequate initial coverage and continued follow-up in booster sessions" (p. 553). However, the ideal dosage and program length is still debated (Norberg et al., 2013). While much historical research indicated that program length in months did not significantly alter program impact on substance use (Tobler & Stratton, 1997), more current studies proposed that programs with 15 or more sessions produced greater results (Porath-Waller, et al., 2010). Moreover, booster sessions appeared to influence larger and longer lasting intervention effects (Norberg et al., 2013). Porath-Waller, Beasley, and Beirness (2010) suggest that measuring program length using number of sessions was more conclusive than measuring program length by passage of time (e.g., number of months) (Porath-Waller, et al., 2010).

Interactive Delivery Methods

Other key indicators of program effectiveness were related to program delivery. Interactive teaching methodologies are much more successful than traditional didactic approaches (Botvin et al., 2001; Porath-Waller, et al., 2010; Soole, Mazerolle, & Rombouts 2008). In particular, skills-based interventions are notably interactive and yield greater results than non-interactive approaches such as knowledge-based interventions (Norberg et al., 2013). A notable review conducted in 1998 by Tobler and Stratton found effect sizes for interactive

programs averaged 0.20 in comparison with effect sizes of 0.02 for non-interactive programs (Tobler et al., 2000).

Cultural Sensitivity

Current research suggested that the impact of cultural sensitivity be examined in regards to substance abuse interventions (Resnicow et al., 2000). The cultural influence is worth considering because there are substantial differences in substance usage rates, risk factors, and predictors of use, according to cultural groups and countries (Resnicow et al., 2000). For example, the pathway from "gateway drugs" (i.e. the drugs most commonly used first among adolescents) towards heavier drugs differs among countries and age cohorts (Degenhardt et al., 2010, p. 56). Interventions designed for the United States may not be as successful in other countries that have different drug use patterns, conflicting educator perspectives on intervention delivery or different substance abuse rates (Norberg et al., 2013). However, culturally sensitive interventions (CSIs) are costly and time-intensive to develop and implement, and their relative effectiveness must be evaluated before they replace standardized programs which can be easily duplicated. As Castro et al. (2010) questioned, "Such adaptations might provide demonstrable gains in consumer participation and satisfaction, but are these gains sufficient to merit the effort and expense involved in designing a cultural adaptation of an EBI?" (p. 233). Such inquiries warrant further investigation on the role of cultural sensitivity in the success of substance abuse interventions.

Summary

Several principles underlined successful preventive education targeting adolescent substance abuse. Interventions must rely upon sound theory, incorporate risk and protective factors, focus on prevention at developmentally appropriate levels, adopt a comprehensive

approach, and provide relevant content. In addition, interventions should employ competent program facilitators, adapt program content so that it is culturally sensitive, and provide adequate dosage and utilize interactive teaching methods. Such strategies directly impacted culturally sensitive interventions (CSIs) and are examined in the following section.

Effectiveness of Culturally Sensitive Interventions (CSIs)

The table in Appendix A synthesizes existing studies which analyzed the effectiveness of culturally sensitive interventions (CSIs). Overall, results indicated that CSIs are promising strategies for reducing substance abuse, but the program outcomes were inconsistent, differing significantly among the various interventions.

Many CSIs produced higher recruitment and retention rates of participants when compared with standard interventions (Kumpfer, Magalhães, & Xie, 2012). CSIs with parent components produced notably significant results in regards to increasing parental involvement in youth issues and decreasing risk factors (e.g., aggression, poor social skills, criminal behavior) among youth (Kumpfer, Xie, & O'Driscoll, 2012). Interventions which intentionally taught culturally-specific resistance strategies yielded significant improvements in student-reported refusal self-efficacy (Cupp et al., 2008; Gosin et al., 2003b) and alcohol use intentions (Espada, Griffin, Pereira, Orgilés, & García-Fernández, 2012; Komro et al., 2006, Kumpfer et al., 2012b). Interventions which adapted deep structure cultural variables (e.g., cultural norms and values) demonstrated significant outcomes in self-reported alcohol, tobacco, or other drug usage and higher effect sizes on reduction of drug use than non-culturally specific programs (Hecht, Graham, & Elek, 2006; Springer et al., 2004).

However, some studies were less explicit regarding the extent of the cultural adaptation, and some of these studies produced disappointing outcomes regarding adolescent self-reported

substance use. At least ten of the studies listed revealed no effect on student substance use, although some studies showed significant effects on student attitudes and engagement (e.g., Abatemarco et al., 2004; Chhabra et al., 2010).

Explanations for Disappointing Outcomes in Some CSIs

Researchers offered several possible explanations for these disappointing outcomes and methodological issues were often at fault (Faggiano et al., 2008). As noted previously in this review, the constructs used to measure culturally-related constructs and effectiveness varied greatly across studies, making meta-analyses quite challenging to conduct with accuracy (Faggiano et al., 2008). Also, rigorous studies based upon randomization presented a research challenge because often student participants and their parents were unwilling to be randomly assigned into treatment or control groups (Coombes, Allen, & Foxcroft, 2012). Few studies actually isolated the cultural variables and so this complicated the ability to analyze the particular characteristics and influences of each variable (Resnicow et al., 2000). Such isolation might have been difficult due to the interdependency of many culturally-related variables. For example, one study noted the interaction between the constructs gender and levels of acculturation among adolescent immigrants in the United States. Among less-acculturated youth, researchers found larger program effects among boys but acculturation to U.S. norms on substance use decreased this gender gap, and females became more likely to respond to the program (Kulis et al., 2007). Because of these complicated interactions, most studies resort to comparing the culturally adapted intervention as a whole to a control group situation (Castro, Barrera, & Holleran-Steiker, 2011)

Indeed, many so-called control groups used in outcome evaluations were not true control groups (i.e., students who did not receive an intervention), but actually involved students that

were receiving other interventions (i.e. "prevention as usual"), (Komro et al., 2008, p. 615). Because it was unethical and impractical to request these schools to withhold prevention education, the measurement of program effectiveness was often diluted by the alternative programs being offered to the control groups (Komro et al., 2008).

Finally, unexceptional intervention outcomes were attributed to inappropriate cultural adaptation (Chhabra et al., 2010). Faggiano et al. (2008) noted that one major limitation to current studies is the exclusion of the "peer, family and social context" (p. 394) which is deeply connected to causation of adolescent substance abuse (Faggiano et al., 2008). It is insufficient to make minor surface changes such as translation, imagery, and name substitutions. Research suggested that programs should incorporate deep structure cultural themes as well as surface structure variables (Castro et al., 2010; Holleran-Steiker et al., 2008). For example, the deep construct of *gender* was not operationalized frequently in CSIs, but several articles suggested that it be considered in the future because of the diversity of outcomes based upon this construct. In some studies, males were more responsive to the intervention than females, while in other studies the reverse was true (e.g., Dixon et al., 2007, Flay et al., 2004, Marsiglia, Peña, Nieri, & Nagoshi, 2010; Tibbits et al., 2011; West et al., 2008). These studies suggested that certain culturally-related variables were not adequately adapted and should therefore be considered in future interventions.

Summary

This section provided an overview of CSIs and their program outcomes. Overall, CSIs demonstrated higher program effects when compared with standards interventions. However more research is warranted because program outcomes were measured inconsistently and often the findings were inconclusive or negligible. The following section will describe exemplars of

the prevention field and present how the FBT is an emerging exemplar in the international prevention arena.

Notable CSIs that Have Been Disseminated Internationally

Many CSIs were based upon sound theorectical foundations and produced stellar outcomes. The prevention field has recommended one such intervention as an "exemplar" (p. 232) of an evidence-based intervention that was culturally grounded: the *keepin' it REAL* (kiR) curriculum initiated by the Drug Resistance Strategies Project (Castro et al., 2010). This intervention was developed from 1995 to 2002 by a consortium of scholars in partnership with the Drug Resistance Strategies Project and has since been rigorously evaluated for multiple cultural audiences (e.g., Hecht & Krieger, 2006). Results indicated that the kiR intervention increased drug resistance skills, improved normative attitudes, contributed to lower rates of alcohol use, and created negative attitudes towards drug abuse (Kulis, Yabiku, Marsiglia, Nieri, & Crossman, 2007). Thus, this kiR intervention has been adapted and distributed both nationally and internationally, and is currently recognized as a model intervention by the Substance Abuse and Mental Health Services Administration (Castro et al., 2010). Factors contributing to the success of kiR include the program's extensive reliance upon cultural grounding; the modification of deep-level cultural constructs whereby the intervention is specifically tailored to the unique needs of each new cultural audience (Hecht & Krieger, 2006).

Another example of a widely-disseminated intervention is the *Strengthening Families* program. While this program is not strictly school-based, it is considered in this review because it is often offered in conjunction with teachers. The SF intervention has been adapted for over 22 different countries and attributes much of its effectiveness to the multi-modal strategy of incorporating family sessions alongside the adolescent classes (Kumpfer et al., 2012a).

Randomized controlled trials found that the SF intervention significantly reduced adolescent alcohol and drug abuse. Moreover, ten-year follow-up studies revealed a two- and three-fold reduction in mental health issues such as depression and personality disorders (Kumpfer et al., 2008). A notable characteristic of the SF intervention is the program's incorporation of the construct of family influence.

Characteristics of the Future Begins Today Intervention

The Future Begins Today intervention is another example of a program that was disseminated internationally. Even though the intervention has not been rigorously evaluated, program effects are promising because of the positive anecdotal feedback and the adherence of the intervention to the best practices of substance abuse prevention.

The FBT intervention was developed by the International School Project (ISP), a non-profit agency that presents character education and preventive interventions to K-12 educators internationally. ISP was created in 1991 with a request from the Ministry of Education in Russia, and continues to provide professional teacher development using curricula that are tailored to the special requests of education officials (ISP, 2013). In 2005, ISP developed a school-based intervention entitled *DreamMakers* for Russia that targeted youth behaviors including alcohol addiction, other drug abuse, and risky sexual behavior (ISP, 2013) This intervention has since been adapted and disseminated to eight countries including Ukraine where it was renamed *The Future Begins Today (FBT)* (Spitzmiller, 2007). The FBT program incorporated several principles which comprise effective prevention education.

The FBT program incorporates principles of effective prevention. First, the FBT intervention acknowledged the relevant risk and protective factors influencing adolescent substance use. In the context of preventive education in Ukraine, risk factors include early onset

of substance abuse (Hazemba et al., 2010; Kyrychenko et al., 2006), social acceptability of alcohol consumption (ESPAD, cited in Vaschenko, 2009), and high accessibility to drugs (Booth et al., 2008). Protective factors include a highly collectivistic culture that emphasizes the good of the family or larger community over selfish interests, strong emphasis on personal relationships, and high degree of religiosity (Besters-Dilger, 2009).

Also, the intervention takes advantage of the ease of access into schools, and stresses the importance of early prevention by offering the program to young adolescents. In Ukraine the onset of substance use is quite early and thus preventive education should be conducted in middle school (i.e. grades 6-8) or earlier (Hazemba et al., 2010; Kyrychenko et al., 2006). As noted earlier, school-based interventions are effective approaches to influence youth attitudes prior to the development of addictive habits (Faggiano et al., 2008). Indeed, the FBT intervention frequently emphasizes the dangers of experimental substance use, rather than merely discussing the consequences of regular use (Forbes et al., 2005).

The intervention heavily relies upon extensive training of teacher facilitators, who have been determined to be the ideal program facilitators. In Ukraine, teachers are very strategic program deliverers because of their relationships with students. Many Ukrainian students are assigned a homeroom teacher when they enter elementary school and this teacher advances through the grade levels with the cohort of students. It is quite common for one teacher to work with the same class of students from early elementary school through their graduation from high school, giving them anywhere from eight to eleven years with the same cohort of students (O. Sushko, 25 March 2010, personal communication).

Also, the FBT program utilizes a holistic approach to prevention and operates on the premise that there are several spheres that comprise an individual's life choices – intellectual,

emotional, social, and spiritual - and ultimately these spheres impact motivations and decisions, including drug use (Pokhrel, Masagutov, Kniazev, & Sussman, 2012). One might reasonably characterize the FBT program as a comprehensive intervention because the lessons incorporated social skills development, emphasized goal-setting, and addressed the underlying risk factors (Forbes et al., 2005). The FBT intervention went beyond disseminating information. Rather than using scare tactics to intimidate students, the program encourages students to live healthy lives and embrace their dreams. "Without direct moralizing, FBT shows how the goals can be reached and warns against hidden threats that can break those dreams. Lesson from the curriculum give teenagers a chance to get practical skills and knowledge that they will need to make important decisions in their life" (DMDB, 2005, para. 2). Students are trained in three important skills: learning to say "no" and resist peer pressure, set goals for themselves, and use interpersonal skills such as setting boundaries in relationships (DMDB, 2005).

The FBT intervention is very interactive by design, a universally accepted principle of effective prevention programming (Norberg et al., 2013). The curriculum incorporates exercises, role plays, and demonstrations in contrast to didactic teaching techniques. "Convincing lessons and vivid characters make lessons interesting and memorable. In the course of some of the lessons emotional motivation for many dangerous behaviors is discussed including peer pressure, infatuation, immediate gratification and influence of media" (DMDB, 2005, para. 5). Students are given a journal in which to record their thought processes and activities. The program also stresses the acquisition of skills necessary to avoid risky adolescent behaviors.

Finally, this intervention is inherently a culturally sensitive intervention (CSI) in that it is specifically adapted to every new country to which it is introduced. Table 2 depicts the

curriculum components that are usually targeted for modification (Everly, 2005). A notable example is the way in which the curriculum considers the cultural influence of family dynamics in Ukraine and how the intervention draws upon family resources in order to enhance effectiveness of application. A central component of the curriculum is the inclusion of "Grandmother Letters," essentially stories of three students and the conversations with their grandmothers. Babushkas – "grandmothers" in Eastern Europe – are historically the most respected members of society. Thus, the inclusion of such letters is very effective in both Russia and Ukraine. Moreover, each lesson in the curriculum contains a Parents Connection page which encourages students to discuss the lesson concepts at home (DMDB, 2005). Such components were so highly effective in the collectivistic Ukrainian culture that in 2008 Ukrainian educators requested a booster curriculum for use with parent-teacher meetings. The booster curriculum entitled *Shaping Your Child's Future* consists of nine lessons (ISP, 2013).

Because the FBT intervention adhered to the principles of successful substance abuse interventions, positive program outcomes are quite plausible. Moreover, the intervention was very well received by local educators, regional educational officials, and the Ukrainian Ministry of Education (O. Kargin, personal communication, March 25, 2013). Since a successful 2005 pilot launch of the program in Lutsk, Ukraine, the FBT intervention has been distributed to educators in all 24 oblasts, geographic regions, in Ukraine and 7,000 educators have attended special training seminars to equip them to use the FBT most effectively (ISP internal database, June 14, 2013). Many educators unofficially reported that they conducted evaluations of the curriculum with positive results, but these results were not released publically or made available for international use (Kargin & Gewin, 2010).

Thus, the International School Project wishes to conduct a formal program evaluation of the *Future Begins Today* curriculum in order to evaluate the intervention's strengths and weaknesses, identify its impact on student attitudes, and make future modifications for further program success.

Table 2

Cultural adaptation of the DM-DB curriculum for new countries

Cultural Variable	Examples and Application
Role of Grandmothers	A central theme is the "Grandmother Letters" but in other countries the grandmother may not be a central figure of respect and influence and should be replaced by another character.
Character names	In the Russian curriculum, character names were "Sasha", "Dima", and "Natasha.
Privacy of journals	Students are encouraged to keep private journals, but such privacy may not be appropriate in some cultures, particularly those that are more collectivistic.
Rites of passage	The 21st birthday is used as a coming of age milestone.
Setting life goals	Becoming a dancer is an example of a desirable career goal in Russia.
Names of alcoholic beverages and food	Vodka is common in Russia and Ukraine
Stories with references to country history	Lesson 13 uses specific references to Soviet history and culture such as the Great Patriotic War and May Day festival
Local culture and lifestyle examples	Living in a flat, factory town life, and a priest hearing confessions are depicted in some of the Russian and Ukrainian examples.
Nonverbal communication	One game instructs students to cross their legs for an activity, but this action is bad manners in some cultures
Country statistics	The lesson on smoking provides statistics for Russia

Summary of Literature Review

Prevention programs are usually described as universal or targeted, uni-modal or multi-modal. Interventions are further categorized according to their approaches to prevention. Social influence approaches and comprehensive interventions were more effective in affecting actual substance use behavior when compared with knowledge-based and affective-education programs. Successful interventions were theoretically grounded, considered risk and protective factors, were age-appropriate, implemented prior to substance use initiation, comprehensive, relevant, interactive, and culturally sensitive. Culturally sensitive interventions (CSI) are generally considered more effective than standardized programs, although more research is needed to confirm this proposition. Examples of CSIs include the *keepin' it REAL* program, *Strengthening Families* intervention, and the *Future Begins Today* intervention.

CHAPTER THREE: METHODS

This study measured the effectiveness of the FBT program in regards to program impact on three dependent interval variables: perceived harm of occasional drug use, perceived harm of frequent drug use, and perceived ability to refuse drug offers; where higher scores were desired outcomes. The study involved a quasi-experimental pretest-posttest with control group design.

Setting and Participants

Setting

Data was collected in the L'viv oblast of Western Ukraine, in schools located in the municipality of Drohobych, where the FBT intervention is currently in use. Drohobych is one of the nation's largest industrial centers with a population of approximately 80,000 (Kubijovyč, 1984) and a nationally renowned university (Kirilich, 2005). Research was conducted in three schools, two of which were in the city of Drohobych proper, and the other in Stevnych, a neighboring city in the Drohobych region.

In Ukraine, general education is comprised of three levels: elementary school which serves grades 1-4, basic school which serves grades 5-9, and high school which serves grades 10-11 (Kyrychenko et al., 2006). The Future Begins Today (FBT) intervention is currently most commonly used in basic school, but is also available to high school educators and school psychologists (DMDB, 2005)

The Deputy Department Head of Drohobych gave permission for the research to take place in public schools and a Ukrainian educator agreed to serve as the onsite interpreter and liaison with local principals and educators. This particular educator has a positive reputation and relationships with many teachers throughout the region.

Over 7,000 teachers have attended ISP conferences in Ukraine since 2005 (ISP internal database, June 14, 2013). Seven hundred of these educators have attended elective follow-up conferences where they were equipped to train other teachers in the use of the curriculum. Given their enthusiasm, it was quite feasible to recruit such teachers as expert consultants in the review and evaluation of the FBT intervention, provided that their school administrators gave approval.

In September 2013, the principal investigator spent a week in Western Ukraine in order to train the local educators in administering the surveys and collecting consent forms. The first two days involved meetings with the local school administrators, school psychologists, and liaison to ensure that permission was granted to conduct research. Also during this time, the researcher conducted training sessions with the teachers to ensure that they were adequately informed about the consent process, the surveys, timing of data collection, and the overall research protocol. The next three days were spent in school visits and observation of some teachers collecting the consent forms and distributing the pretest surveys. All surveys were administered in the regular classroom setting. The principal researcher then returned to the US with the sealed packets containing pretest surveys. Posttest survey packets along with written instructions were given to the teachers before departure and those results were scanned and electronically sent to the principal investigator upon completion in December 2013.

Participant Recruitment

Teachers were informed of the study during a meeting at one of the International School Project's conferences in Western Ukraine in March 2013 and given an informational sheet represented in Appendix B. At least eight teachers expressed interest in participating in the study and provided their contact information. Prior to the data collection in September 2013, email communication and Skype calls with the key liaison confirmed participation of teachers.

Teachers and their students were included based upon their use of the curriculum, age of the students with ages 10-15 preferred, and their willingness to participate in the study.

Selection into Treatment and Control Groups

Random assignment into treatment and control groups was not possible because the researcher had no control over which students received the intervention, and which ones did not. While it is true that the more rigorous studies randomly assigned classes into either control or intervention conditions (Abatemarco, West, Zec, Russo, Sosiak, & Mardesic, 2004; Komro et al., 2006; Komro et al., 2008; West, Abatemarco, Ohman-Strickland, Zec, Russo, & Milic, 2008), prevention research also acknowledged that in some cases random assignment is not feasible (Hopson & Holleran-Steiker, 2010).

Regarding the control group, it is important to note that cultural adaptation trials are typically designed to measure "whether the cultural adaptation is more effective than usual care, no intervention, or some other control condition" (Barrera et al., 2012, p. 5). While in most cases the control groups are actually prevention-as-usual control groups (Hecht & Krieger, 2006), in other situations the control groups are true no-treatment control groups, particularly when an alternative curriculum is not available, (Komro et al., 2006), or wait-list control groups (Espada, et al., 2012). In this study, a prevention-as-usual control group was not possible because there was no alternative curriculum in Western Ukraine, currently in use. Therefore the control group was a wait-list control group. Teachers were instructed not to expose control group students to the FBT intervention until after study completion.

Participant Characteristics

Sample at baseline. Eleven classes of students ($N = 238$) participated in the pretest data collection. Teachers were asked whether or not they intended to teach the FBT to their students

in the Fall 2013 semester. The teachers indicated that seven classes or 60.4% (n = 144) of the students planned to take the FBT course and were therefore considered to have self-selected into the treatment group. Four classes or 39.5% (n = 94) of the students did not plan to take the FBT course and were viewed as control group participants.

Sample at posttest. The posttest sample (N = 189), was lower than the pretest sample due to attrition (n = 65). One of the control group classes dropped out of the study for unspecified reasons, resulting in a total control group sample of n = 49. Seven classes (n = 124) participated in the FBT course. Only respondents who completed both pretest and posttest surveys were included in the final inferential analyses (N = 173).

Materials

The FBT Intervention

Program duration. The FBT program was designed for teachers to use throughout the academic year and a suggested schedule was one hour session every week for 33 weeks. Therefore, the intervention contained six units and 33 lessons. It is important to note that given the limited duration of this study, teacher participants were only required to teach the two units dealing with substance abuse (i.e., Units Two and Three) although the other units contained vital information (e.g., setting goals and dreams, developing life skills) which would have potentially enhanced program outcomes. Indeed, Unit One sets the tone for the course as it introduces the importance of setting life dreams: "The first unit helps each student create a vision for his or her future that will be compelling enough to make it worth avoiding the "dream-killers" of drugs, alcohol and premarital sexual activity" (Forbes et al., 2005, p. 6). Though not required, most of the teachers of the FBT treatment classes indicated that they also taught

Unit One. The teacher survey specifically asked teachers which units they covered, how often they taught the lessons, and which program elements they used.

Intended audience. The FBT intervention was intended for students ages 12-14 (Forbes et al., 2005). This was important to note because younger students ages 10-11 as well as older students ages 15-17 participated in this study, potentially affecting outcomes.

Program components. The FBT intervention contains several unique components which are reproduced in Table 3. Furthermore, the intervention adopts a "more than information" (pp. 7) approach to prevention education, noting that it does not use specific terminology or facts-based education when dealing with drug references, but rather addresses underlying motivations and uses stories and activities to influence these motivations (Forbes et al., 2005).

Table 3

Key components of the FBT intervention

1. **Individual Dream Development**. The first unit helps each student create a vision for his or her future that will be compelling enough to make it worth avoiding the "dream-killers" of drugs, alcohol and premarital sexual activity. Later in the curriculum students are given several chances to adjust and develop their individual dream statements. While information and warnings alone do not prevent teens from experimenting with harmful behaviors, young people who develop a higher purpose than just their own personal pleasure are more likely to withstand the pressures toward destructive behaviors.

2. **Mysterious Box Story**. Woven throughout the 33 lessons is a humorous, revealing and enchanting story of three young students, their teacher and a mysterious box containing improbable objects and a series of letters from their grandmothers. Many teens react and tend to reject direct moral instruction. These compelling stories allow students to identify with the characters and to form values in an indirect and non-confrontational environment.

3. **Active Student Involvement**. The curriculum employs a wide variety of active learning exercises, games, and activities. These engage students' attention, encourage focused participation and foster healthy life decisions.

4. **Multidimensional Issues Exploration**. The series includes units that are age-appropriate, delve into some of the physical, social, emotional and spiritual reasons that some adolescents are more vulnerable to drugs, alcohol or premarital sex.

5. **Personal Journal Commitments.** Each unit makes creative use of a "personal journal" to give the students several opportunities to make decisions concerning drugs, alcohol, and male-female relationships. The journals are also used to encourage future ongoing accountability.

Table reproduced with permission from Forbes et al. 2005, pp. 6-7.

Student Surveys

A translated version of *The Adolescent American Drug and Alcohol Survey (ADAS)* was administered to both FBT treatment classes and control classes, (Edwards, Beauvais, Oetting, 1999; Kulstad, Pallone, & Hennessy, 2010), and was replicated in Appendices C-D. In its

original form the ADAS survey contained 55 items in 27 scales which were intended to measure adolescent substance use, perceived harm of use, peer influence on use, and other risk and protective factors (Kulstad et al., 2010). Some items were dichotomous with "yes" and "no" responses while others contained Likert-scales ranging from "no harm" to "a lot of harm" (Oetting & Beauvais, 1990). Examples of these items are displayed in Table 4.

This instrument was selected because of its strengths which included high Cronbach's alpha reliabilities of scales ranging from .78 to .95 (Tragesser, Beauvais, Burnside, & Jumper-Thurman, 2010), concurrent validity when compared with the University of Michigan's national *Monitoring the Future* study (Kulstad et al., 2010), previous use in international settings (e.g., Nemeth et al., 1994; Oetting & Beauvais, 1990), prior reference in over 45 studies (Kulstad et al., 2010)**,** use in evaluation of prevention programs (Tragresser et al., 2010), and its availability in the public domain and permission for reproduction (P. Waters, personal communication, October 13, 2011).

There were however, a few cautions associated with using the ADAS survey for this study. First, researchers have cited the lack of explanation on the development of the ADAS, including the aforementioned reliability estimates (Pallone & Hennessy, 2010). Also, it seemed that the ADAS survey was most frequently intended to measure substance usage (e.g., Nemeth et al., 1994) and the political and ethical barriers necessitated the removal of those scales from the Ukrainian adapted survey (O. Sushko, personal communication, March 20, 2013). Finally, reviewers criticized the ADAS because validity data was not clearly specified in previous research (Pallone & Hennessy, 2010). Because of these cautions and also because several questions unique to the FBT curriculum were added to the posttest survey, the principal investigator decided to conduct factor analyses in order to assess the reliability of survey scales

and validity of the instrument. These methods are discussed in more detail in the Chapter 4 discussion on factor analyses.

Teacher Survey

The teacher survey was developed by the principal investigator primarily to evaluate the extent to which teachers implemented the FBT with fidelity. The survey, depicted in Appendix E, contained 18 items related to overall perception of the FBT program, components of the curriculum that were used, and level of training in the FBT program. Three of these subscales specifically referenced the extent to which FBT program components were utilized (i.e., items 6, 9, and 11). Questions 6 and 11 were Likert scales with three options ranging from "All units" or "Often" to "Not used at all" or "Never." The scale in question 9 contained dichotomous items asking "Have you taught lessons from the following units of the "Future Begins Today" curriculum?" where the answers were units One, Two, and so forth, but these responses were summated to form a scale variable from 1 to 6, depending how many units were taught.. No reliability or validity data were available for this survey both because of the limited number of teacher respondents (n = 7) and the limited purpose of the survey. Data from these three subscales were matched with the appropriate survey responses, as explained in the discussion on matching pretest and posttest responses.

Table 4

Composite variables

Variable	Survey Items	Type of Variable
Perceived Harm Occasional Drug Use	How much do you think people harm themselves if they. . . . . . Use alcohol 1 or 2x . . . Use marijuana 1-2x . . . Use cocaine 1-2x . . . "Sniff" inhalants 1-2x . . . Use meth 1-2x . . . Use tobacco occasionally . . . Drink alcohol occasionally	Outcome, composite variable created by combining items from one item from questions 6 and odd items from question 14 on student survey.
Perceived Harm Regular Drug Use	How much do you think people harm themselves if they. . . . . . Used alcohol regularly . . . Get drunk regularly . . . Use marijuana regularly . . . Use cocaine regularly . . . "Sniff" inhalants regularly . . . Use meth regularly . . . Use tobacco regularly . . . Drink alcohol regularly	Outcome, composite variable created by combining items from even items from question 6 and even items on question 14 of student survey.
Ability to Refuse	If one of your close friends asked you to use any of the following, how easy would it be for you to say no? . . . Alcohol . . . Cigarettes . . . Gateway drugs . . . Heavy drugs	Outcome, composite variable created by combining items from question 15 of student survey
FBT Supplementary Materials	How much do you use the following ISP program elements (in your classroom)? . . . Teaching students to dream . . . The active involvement of the students in the education process . . . Connection with parents . . . Personal student's journal	Predictor, composite variable created by combining items from question 11 on teacher survey

Variable	Survey Items	Type of Variable
Number Friends Who Use Drugs	How many of your friends do each of the following. . . . . . Use marijuana . . . Use cocaine . . . "Sniff" glue or gas, etc. . . . Use meth, speed, crack . . . Use narcotic painkillers	Predictor, composite variable created by combining items from question 12 on student survey
Parental Care	How much would your parents care if you. . . . . . Used tobacco . . . Drank some alcohol . . . Got drunk . . . Used gateway drugs (like marijuana)	Predictor, composite variable created by combining items from question 8 on student survey

Variables

As indicated in Table 4, the primary outcome variables included *perceived harm of occasional substance use*, *perceived harm of regular substance use*, and *perceived ability to refuse* drug offers. Such variables are typical of other empirical studies analyzing the effectiveness of substance abuse interventions. (e.g., Cervantes, et al., 2011; Schinke et al., 2000). In previous studies using the ADAS instrument, Tragesser et al. (2010) separated the items from question 14 into two different constructs: perceived harm of occasional drug use vs. perceived harm of regular drug use, and this practice is incorporated into this study. Furthermore, whereas this study originally planned to investigate differences in *perceived harm of alcohol use,* the items related to alcohol use factored with other types of drug use and therefore was not analyzed separately. Predictor variables include the dichotomous variable of *FBT* (i.e., treatment vs. control group), *gender*, *parental concern*, *age*, *number of friends who are users*, and *FBT supplementary materials*.

Qualitative Methods

The principal investigator originally intended to partner with teacher participants to conduct focus groups with some of the students after posttest data collection, by randomly selecting three to five classes from both the treatment and control groups will be randomly selected for participation. However, given the volatile political situation in early 2014, the teachers were preoccupied and unwilling to conduct focus groups. They did consent to administering the questionnaire represented in Table 5 with open-ended responses. Qualitative methods such as focus groups have been used extensively in prevention research because they collect input, "the voices of students and staff" (p. 116), which cannot be collected through quantitative methods (Hopson & Holleran-Steiker, 2008). Incorporating qualitative methods such as focus groups enabled program developers to learn how the FBT program is implemented in Ukrainian schools. Only questions 1-4 were used with control group students.

Table 5

Questions used for open-ended discussions

1. Are there any dangers with occasional alcohol use? If so, what?
2. Are there any dangers with frequent alcohol use? If so, what?
3. Are there any dangers with experimental drug use? If so, what?
4. What are the most effective approaches to avoiding abuse of substances such as alcohol, tobacco, and other drugs?
5. What did you like most about the *Future Begins Today* curriculum?
6. How might the curriculum be improved for other students?

Translation of Materials

All materials were translated from English into Ukrainian by two translators who currently work with the International School Project, one as a staff member and the other as a

volunteer. These translators were sought because of their experience with the curriculum, and their ability to determine cultural appropriateness of the questions. The translated documents were also analyzed for accuracy by an independent translator who was not affiliated with the International School Project. Such translation methods have been recommended for similar cross-cultural studies (Brislin, 1970). Verification of translation accuracy is reflected in Appendix H.

Procedures

Data Collection

Every participating teacher was given a large packet in September 2013. This packet contained a set of teacher instructions which are reproduced in Appendix F, and two large envelopes: Envelope A and Envelope B. Envelope A contained 20-30 copies of the pretest student surveys and consent forms. Envelope B contained 20-30 copies of the posttest student survey, the teacher survey, consent forms, and stickers with student numbers. If the teacher had more than one participating class, he or she was given multiple packets.

Informed Consent Process

In accordance with the Institutional Review Board (IRB) of the University of Central Florida and also the Deputy Department of Education in Drohobych, Ukraine, the following procedures were used in order to access student participants. Before conducting research, the principal investigator sought permission from the local school superintendents, psychologists, and principals, and this official permission letter is duplicated in Appendix I. IRB approval was received on August 23, 2013, as shown in Appendix O. A waiver of active consent was sought and obtained from the IRB, for many reasons. First, the consent form would have been the only document that would divulge student names and could have presented a breach of

confidentiality. Second, the Ukrainian contacts insisted that there was no need for active parental consent provided that the surveys are distributed during regular classroom hours and with the teacher directly involved (Drohobych teachers, March 2010, personal communication). Third, in a review of literature on adolescent health behavior research, Olds (2003) contended that the active consent process actually introduces an element of self-selection bias into the research design, and suggested that passive consent procedures would improve data validity and reliability. Such consent methods provided students with informational sheets which were then delivered to parents, informing the parents of the upcoming research study and giving them the opportunity to deny permission for their child to participate in the study (Olds, 2003; Tragesser, Beauvais, Swaim, Edwards, & Oetting, 2007).

Therefore, this study implemented passive consent procedures. A week prior to pretest data collection, the teachers distributed the consent forms to the students which were given to their parent or legal guardian. All consent documents and instructions were translated into Ukrainian and distributed by Ukrainian-speaking teachers. Teachers were instructed to stress the importance of voluntary participation in this survey.

A waiver of signed consent among teacher participants was sought and obtained from the IRB. However, the IRB insisted that teachers be given consent documentation outlining the nature of the research, recruitment process, and voluntary nature. Both teacher and parent consent documentation forms are represented in Appendix G.

Survey Administration

Based upon preference of the teacher participants (O. Susko, personal communication March 28, 2013) and in an effort to prevent undue pressure or the novelty effect on students of having an American researcher initiate classroom researchers, the survey administration was

conducted almost entirely by Ukrainian teachers, with minimal guidance from the principal investigator. On September 22, 2013, the principal investigator met with the eight teacher participants in order to acquaint them with data collection procedures and to distribute their packets. Teachers received one packet for every class they recruited. In the packet were two large envelopes with a unique class letter (e.g. A). One envelope was labeled "September" and contained pretest surveys, and the other envelope was labeled "December" and contained folded posttest surveys. The teacher packet also included teacher instructions, teacher passive consent forms, and student stickers. In half of the classes, the teacher participants asked the principal investigator to observe data collection and to speak briefly with the students about the project. The surveys were completed within a 30 minute time period, including five or ten minutes of instructions. Pretest and posttest surveys were then returned to the September and December large envelopes, respectively. On the outside of every large envelope, teachers indicated by checkbox whether or not that class was a FBT class or control class.

Matching Pretest and Posttest Student Responses

The issue of anonymity presented a significant challenge to accurately matching pretest and posttest responses. However, previous research (McGloin & Holcomb, 1996) demonstrated that such a challenge is not impossible to overcome. The following strategies were utilized during data collection. First, in order to match classes, every packet was assigned a unique identifying class letter (e.g., A, B), with the letter duplicated on every survey and form contained in the packet. Second, every student was also given a unique identifying number, depicted on two stickers. During administration of the pretest survey, every student was given a sheet with two stickers, a copy of the pretest survey, and a folded copy of the posttest survey in an unsealed envelope. Students were instructed to place one of their stickers on the front of the pretest survey

prior to its completion. Then, they were told to put the other sticker on the folded posttest survey inside the envelope. They sealed the envelope and sign their name across the seal. All of these sealed envelopes were placed back in the December envelope for use at posttest administration. These unique numbers allowed the principal investigator to match pretest and posttest class information without necessitating the inclusion of teacher and student names or school names directly on the survey forms.

Storage of Data

In order to preserve the integrity of the research data, the envelopes remained sealed until they were scanned into a non-editable electronic format which was dated and made available to the Committee as requested. This procedure helped to ensure that the survey results were not altered in any fashion as to skew the data. Original documents were then stored in a secure location.

Coding and Tabulation of Data

Because all surveys were completed manually on paper, the principal investigator was required to enter all survey responses electronically. She created an online data entry form using a marketing research website (SurveyMonkey, 2014). This format was chosen because of the website's functionality and ability to develop a form which was a mirror image of the hardcopy student survey, easy of data entry, and ability to download into SPSS or Microsoft Excel file formats. The data was transferred to SPSS for all statistical analyses.

Likert scale items were coded similar to their original format, with 1 typically representing "low perceived harm" or "low likelihood" and higher scores representing the opposite. The "don't know" responses were coded as 0 and treated as missing data in the SPSS software. When respondents left items blank, such blank responses were coded as missing. Also,

when respondents selected more than one answer for individual items, those invalid answers were coded as missing data, except in situations where the respondent clearly crossed out an answer and replaced their response with a different answer.

During the posttest data tabulation, the principal investigator discovered an unfortunate error that occurred in the editing and translation process. Questions 15-17 were duplicated on the Ukrainian version of the student posttest survey. While this duplication served as an unintentional internal reliability check, it also created complications when respondents selected different answers for the same question. When such discrepancies occurred, the answers were coded as missing.

Qualitative Methods

The open-ended questionnaires were designed to allow research participants the opportunity to express opinions and insights or expand upon the survey questions. Two classes, one treatment class and one control class participated. A Ukrainian volunteer collected these questionnaires and translated them into English. Participation was entirely voluntary and participants were instructed not to give their names orally or in written format, although students did indicate their gender. Seventeen students from one of the control classes and 16 students from the FBT treatment classes willingly participated in this portion of the study.

Ethical Considerations

There were no known physical risks associated with this survey. Participants may have experienced mild psychological discomfort if the questions seem too invasive or personal, although they were given the option of leaving the question blank. Also, the original ADAS survey was adapted in order to remove any questions which directly asked students about their personal substance use.

Moreover, there were no direct benefits to the student and teacher participants. No compensation of any kind was provided to the participants, with the exception of a standard interpreter fee for individuals who translated materials and acted as on-site interpreters. There were also no known monetary costs to the research participants. There was no penalty whatsoever for teacher or student participants who decided to withdraw from the study.

Extensive care was taken to ensure the privacy interests of student and teacher participants. In order to maintain anonymity, students were instructed to not write their names anywhere on the questionnaires. Furthermore, the surveys were not identified with particular schools. Many of the teachers reported that they already distribute similar surveys for the purposes of evaluation and thus this project did not seem unusual to the students (Drohobych teachers, personal communication, March 27, 2013).

In regards to sharing of data, there were several teachers who requested that they see the aggregate results of the research study. Thus, a summary report will be provided and translated into Ukrainian after study completion; however given that schools were not uniquely identified anywhere on the survey forms, these results will compare only pretest versus posttest data, and intervention versus control students as groups, not individuals.

Data Analyses

Introductory analyses. As noted previously, factor analyses were conducted on scales from the ADAS survey in order to verify the validity of the composite variables. Descriptive statistics were generated in order to ensure suitability of the research design. Dependent variables in particular were analyzed for normal distribution, absence of too many outliers, and significant correlations.

Inferential analyses. The descriptive statistics revealed that the study data violated many assumptions of multivariate analyses which would have been the preferred research design. First, all three of the dependent variables were not normally distributed, violating a key assumption of statistical analyses dependent upon mean scores. Next, there was a lack of strong correlation among dependent variables, suggesting that a multivariate analysis was inappropriate. Finally, the lack of linear correlation among predictor and outcome variables suggested that multiple regression analyses were also inappropriate, but linear regressions should be investigated instead.

Given these realities, the following statistical tests were chosen to test the hypotheses. Non-parametric tests (e.g., Mann-Whitney U, Wilcoxon signed-rank tests) were used instead of *t*-tests to evaluate Hypotheses One through Four. An alternative ANOVA procedure was sought to replace the multivariate analysis for Hypotheses Five through Six. Despite its popularity in the educational research domain (Jennings, 1988), the repeated measures ANOVA was not selected because the field has suggested that it is inappropriate for pretest-posttest with control group designs, because it obscures potentially significant effects, promotes repetitive analyses of the same data, and creates problems with respect to post hoc investigations (Huck & McLean, 1975; Jennings, 1988). If the research question primarily focused on differences in posttest scores – which is what Hypothesis Five specifically addressed - then the practical option was analyzing differences in posttest scores only with respect to independent variables (e.g., treatment group, gender), via independent multi-factorial ANOVA (Jennings, 1988) and therefore this method seemed a viable alternative for this study. Finally, regression analyses were used to address Hypotheses Seven and Eight which considered other factors such as age and peer influence.

Qualitative methods. The data analysis process consisted of several components: data reduction, data display, and data verification and drawing of conclusions (Chwalisz, Shah, &

Hand, 2008). The data reduction process condensed the transcribed comments of students and organized them according to themes or topics, which were then coded and summarized, and graphically depicted into a data display. Conclusion drawing and verification processes noted any differences in responses between the control and treatment groups and compared such patterns with the quantitative data (Chwalisz et al., 2008).

CHAPTER FOUR: RESULTS

Exploratory Factor Analyses

Exploratory factor analyses were conducted on the pretest student survey in order to examine construct validity of the instrument, and also to reduce the 63 items derived from 12 Likert scales into fewer variables which would serve as appropriate composite variables used in the analysis. The posttest instrument was also examined because it introduced a few additional questions concerning the FBT intervention.

The initial factorability of the survey items was examined using the following criteria: correlation of items, individual measures of sampling adequacy, Kaiser-Meyer-Olkin measure of sampling adequacy, Bartlett's test of sphericity, and communalities.

First, 62 of the 63 items on the pretest survey, and 70 of the 71 items on the posttest survey correlated at least .30 with at least one other item and all were statistically significant at $p < .001$, indicating reasonable linearity between variables. Only the item pertaining to question 4 did not have a Pearson R correlation higher than .30 with any other items, and it was dropped from the analysis. Second, Bartlett's tests of sphericity were statistically significant indicating good correlation (Mayer, 2013).

Sample size (N = 176) was questionable for the rigors of factor analysis, although Comrey and Lee (1992) regard a sample size of 200 as fair. The measure of sampling adequacy (MSA) values for nearly all individual items were .500 or above for items on both pretest and posttest student surveys. A few items were discarded from the analysis because they fell below acceptable MSA values and then the factor analyses were repeated. The resulting Kaiser-Meyer-Olkin (KMO) measures of sampling adequacy for the pretest and posttest surveys were .729 and

.761, respectively which was larger than the commonly accepted value of .500 (Mayer, 2013). Such KMO values provided reasonable assurance against multi-collinearity.

Fourth, communalities were reviewed, both to ensure that none exceeded a value of 1.0 and also to ensure that most fell above the recommended value of .30. None of the values exceeded 1.0, all met or exceeded communalities of .60, and most fell within .70-.90, more than adequately meeting the criterion value of > .30.

The principal components analysis procedures with Varimax orthogonal rotation with an eigenvalue cut-off of 1.0 were used to extract the factors from the data. Orthogonal rotation was selected given the use of an adapted instrument with underlying uncertainty that factors might be related and Varimax rotation selected because of relative ease of interpretation (Mayers, 2013). These procedures yielded 15 factors on the pretest survey and 13 factors on the posttest surveys which explained 79.1% and 80.0% of the total variances, respectively. The remaining factors on both analyses produced eigenvalues less than one and therefore solutions for more than thirteen factors were not examined.

Appendix J provides the factor loading pattern matrices for the final rotated solutions. All items contributed to the factor structure and had a primary factor loading between .439 and .911, with most loadings above .60 and well above the recommended .30. There were however, several items which factored negatively.

Factors loaded very similarly on both the pretest and posttest instruments. One exception was items from question 12, *number of friends who are substance users,* on the posttest survey which loaded negatively on the same factor as items from question 14 pertaining to *perceived harm of regular substance use.* All factors were examined for theoretical appropriateness, compatibility of survey items, and relevance to the research study. All factors relevant to this

study contained items using the same Likert-scale responses which ranged from 1 = low to 4 = high, and therefore the items were deemed suitable for creating interval, composite scales. Internal consistency for each of the composite scales was examined using Cronbach's alpha. All composite scales with the exception of *ability to refuse* demonstrated a Cronbach's alpha of .80 or greater. The *ability to refuse* scale yielded an alpha value of 0.66 which was not inherently concerning because previous research suggested that Cronbach's alpha values below .70 are realistic for psychological constructs (Kline, 1999). Appendix K contains descriptive statistics and reliability analyses for all of the factors relevant to this study. Composite variables were created by computing the sum of the items which loaded most strongly on each of the relevant factors.

Descriptive Statistics of the Sample

Of the students who participated in this research study, the final sample of Ukrainian youth (N = 173) were selected because of their participation in both the pretest and posttest survey collection. Two cases were dropped from the original sample size of N = 175 because of internal consistency issues and extreme scores. The FBT treatment group contained 71.7% (n = 128) of respondents and the control group contained 28.3% (n = 49) of respondents. Mean age was 14.20 years for the control group and 13.06 years for the FBT group, with a composite mean of 13.39 years old. Data were positively skewed, possibly due to the large frequency of 15 year old participants (n = 43). There was also an unequal gender distribution, with males comprising only 30.6% of the control group sample and 47.2% of the FBT treatment sample. It is important to consider these disparities because gender has been shown to influence substance use outcomes (Flay, Graumlich, Segawa, Burns, & Holliday, 2004) and could impact the scores on dependent variables.

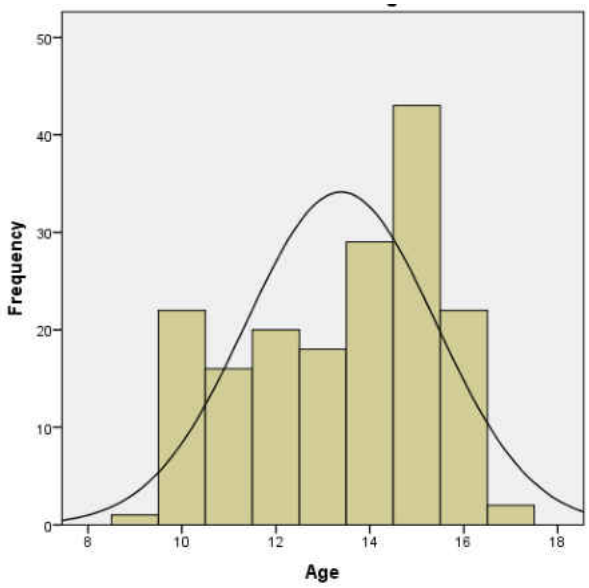

Figure 1. Distribution of ages

Missing Data Analyses

Pretest and posttest data were analyzed for missing values. Appendix M provides summaries of survey items with 5% or more missing values. All items from questions 6 and 14 contained between 10.5% and 37.8% of missing data at pretest and between 5.3% and 18.0% at posttest. At pretest, the large percentages of missing data were largely attributed to the fact that both questions 6 and 14 contained "I don't know" responses which were coded as missing. At posttest, Question 15 contained a large amount of missing data due to the duplication of this question on the survey and consequential need to code conflicting answers as missing.

Seventy-six percent of the pretest cases and 62.43% of the posttest cases contained missing values. Given this large percentage, data substitution was deemed necessary in order to complete the intended statistical analyses with adequate sample size. In accordance with previous literature, the expectation-maximization (EM) algorithm was used to replace missing data (Rubin, Stern, & Vehovar, 1995). It is important to note that a Little's MCAR test showed

that the data was likely not missing at random ($p < .001$), thus violating a critical assumption of the EM algorithm. However, statistical software limitations prevented the use of the more rigorous multiple imputation methods.

The percentage of missing data decreased at posttest. In fact, composite scores counting the frequencies of "I don't know" responses were compared at pretest and posttest, using a related samples *t*-test. The test confirmed that there were significantly fewer "I don't know" responses at posttest when compared with pretest, $t(170) = -5.604$, $p < .001$ (one-tailed) with a moderate effect, $d = 0.43$.

Comparing Groups at Baseline

Because the treatment and control groups were not randomly assigned, it was deemed necessary to examine the groups for any preexisting differences at baseline. Mann-Whitney U tests were used because the dependent variables were not normally distributed. These tests confirmed that there were no significant differences in scores with respect to *perceived harm of occasional substance use*, U = 2675.50; $p = .220$; *perceived harm of frequent substance use,* U = 2682.50, $p = .104$; and *perceived ability to refuse drug offers*, U = 2945.50, $p = .747$. Mean and median scores are displayed in Table 6.

Table 6

Scores on dependent variables at pretest

Variable	Condition	N	Mean	Median	SD	Std. Error Mean	95% CI of difference
Perceived Harm of Occasional Use	FBT class	124	21.83	22.00	3.67	.33	-1.93 to .41
	Control Group	49	22.59	22.00	3.04	.43	
Perceived Harm of Regular Use	FBT class	124	31.17	32.00	2.68	.24	-1.09 to .61
	Control Group	49	31.41	32.00	2.23	.32	
Perceived Ability to Refuse	FBT class	124	17.65	19.00	3.23	.29	-.91 to 1.30
	Control Group	49	17.45	19.00	3.52	.50	

Inferential Results

Research Question One: Changes in Outcomes within the FBT Treatment Group

Review of the research question and hypotheses. The first research question asked: Does exposure to the *Future Begins Today* intervention significantly impact Ukrainian adolescents' attitudes concerning substance abuse, particularly their perceived harm of substance use and their perceived ability to refuse drug offers? The first four hypotheses answered this question.

H 1: Exposure to the FBT intervention will significantly increase perceived harm of alcohol use among Ukrainian adolescents.

H 2: Exposure to the FBT intervention will significantly increase perceived harm of occasional drug use among Ukrainian adolescents.

H 3: Exposure to the FBT intervention will significantly increase perceived harm of frequent drug use among Ukrainian adolescents.

H 4: Exposure to the FBT intervention will significantly increase perceived ability to refuse drug offers among Ukrainian adolescents.

Hypotheses One was not considered independently because survey items concerning *perceived harm of alcohol use* loaded onto the same factors as *perceived harm of occasional drug use* and *perceived harm of regular drug use*. Apparently there was more of a distinction regarding the frequency of substance use than the actual substance itself.

Descriptive statistics on outcome variables. Prior to running inferential analyses, descriptive statistics were necessary to test assumptions. Results from descriptive statistics in Table 7 strongly suggested that the three outcome variables were not parametric. Significant Shapiro-Wilk and Kolmogorov-Smirnov tests warned that data were not normally distributed for any of the three variables, during either pretest or posttest ($p < .05$ for *perceived harm of occasional use,* and $p < .001$ for *perceived harm of regular use* and *perceived ability to refuse).* Skewness and kurtosis scores were less extreme for *perceived harm of occasional use* however. Therefore, Wilcoxon signed-rank tests were used instead of *t* tests to hypothesize that scores on dependent variables would be higher at posttest than pretest and Pearson's *r* was calculated by dividing the *z*-score by the square root of the sample size.

Table 7

Descriptive statistics analyzing normal distribution of outcome variables (N = 173)

Measure	Perceived Harm of Occasional Use		Perceived Harm of Regular Use		Perceived Ability to Refuse	
	Pre	Post	Pre	Post	Pre	Post
Mean	22.05	22.94	31.24	31.51	17.59	18.82
Median	22.00	23.50	32.00	32.00	19.00	20.00
Mode	22.00	27.00	32.00	32.00	20.00	20.00
Std. Deviation	3.51	4.08	2.55	1.27	3.31	2.02
Variance	12.32	16.62	6.52	1.62	10.94	4.08
Skewness	-0.60	-0.46	-6.02	-3.41	-1.83	-1.75
Std. Error of Skewness	0.18	0.19	0.18	0.19	0.18	0.19
z-score of Skewness	-3.26	-2.49	-32.62	-18.42	-9.90	-9.45
Kurtosis	0.99	-0.82	44.99	15.63	2.83	4.56
Std. Error of Kurtosis	0.37	0.37	0.37	0.37	0.37	0.37
z-score of Kurtosis	2.71	-2.23	122.49	42.43	7.72	12.39
Range	21.00	16.00	24.00	11.00	14.00	16.00

Outcomes. Descriptive data in Table 8 suggested some differences in median scores between pretest and posttest among FBT students, implying that scores for *perceived harm of occasional use* and *perceived ability to refuse* increased over time. There was no observable difference for the variable *perceived harm of regular use.* Indeed the Wilcoxon signed-rank tests confirmed that students significantly perceived greater *harm of occasional use* at posttest: W = 3853.00, z = -3.004, p = .001 (one-tailed), with a weak effect size (r = .272). There was also a significantly higher *perceived ability to refuse* drug offers at posttest: W = 2369.50, z = -4.152, p < .001 (one-tailed), with a weak effect size (r = .376). But the tests revealed no significant differences between pretest and posttest scores on *perceived harm of frequent use*.

Table 8

Scores on dependent variables among FBT students only (n = 122)

Dependent Variable	Time	Median	95% CI
Perceived Harm of Occasional Use	Pretest	22.00	21.14 to 22.46
	Posttest	24.00	22.33 to 23.81
Perceived Harm of Regular Use	Pretest	32.00	30.67 to 31.64
	Posttest	32.00	31.27 to 31.74
Perceived Ability to Refuse	Pretest	19.00	17.09 to 18.25
	Posttest	20.00	18.70 to 19.40

Research Question Two: Differences of Outcomes with Respect to Treatment Group

Review of the research question and hypotheses. The second research question asked: Are there significant differences (i.e. in student attitudes concerning substance use) between students who participate in the FBT intervention and those who do not participate in any intervention? Hypothesis Five considers the differences between posttest scores on dependent variables with respect to treatment conditions. Hypothesis Six, which considers the influence of gender on outcome scores, is also considered because *gender* is a categorical variable.

H5: At post-intervention, scores on all dependent variables will be higher among the FBT treatment group when compared with the non-treatment group.

H6: There will be a differential effect of program outcomes according to gender. The direction is not specified.

Both hypotheses were examined together. Descriptive statistics in Table 9 suggested that there were posttest differences with respect to treatment condition for two of the variables, *perceived harm of occasional use* and *perceived ability to refuse* but not for *perceived harm of regular use.* To ensure adequate comparison with other prevention studies which analyzed differences

between treatment and control groups, effect sizes for mean differences were also calculated using a variant of Cohen's *d* that relied upon the pooled standard deviation, where $d = M_1 - M_2 / SD_{pooled}$ (Rosenthal & Rosnow, 1991).

Table 9

Posttest scores on outcome variables

Variable	Condition	n	Mean	Median	SD	95% CI of difference	Cohen's *d* using σ_{pooled}
Perceived Harm of Occasional Use	FBT class	124	23.11	24.00	4.13	22.37 to 23.84	0.15
	Control Group	49	22.51	22.00	3.95	21.37 to 23.65	
Perceived Harm of Regular Use	FBT class	124	31.50	32.00	1.31	31.27 to 31.73	-0.02
	Control Group	49	31.53	32.00	1.19	31.18 to 31.87	
Perceived Ability to Refuse	FBT class	124	19.05	19.00	1.96	18.70 to 19.40	0.41
	Control Group	49	18.22	20.00	2.05	17.63 to 18.81	

Separate ANOVA tests analyzed each dependent variable at posttest with respect to two independent variables: gender and treatment condition (i.e., FBT versus control group). Because descriptive statistics suggested no noticeable differences on *perceived harm of regular use* scores with respect to time only, this variable was dropped from analysis.

Perceived harm of occasional use. The dependent variable *perceived harm of occasional use* was leptokurtic and negatively skewed, but the *z*-score analysis revealed that it was not considered beyond the bounds of normal distribution (Mayer, 2013) and therefore it was still feasible to include in an ANOVA test.

Visual inspection of Figure 2 suggests that there was not an effect for treatment conditions but there might have been a difference among gender groups. The independent two-way ANOVA depicted in Table 10 confirmed that there was a significant main effect for gender in respect of *perceived harm of occasional use* scores (F (1, 166) = 4.141, p = .043, *d* = 0.16); but no main effects for FBT group or interaction effects between FBT group and gender. This implies that while females had higher posttest scores on *perceived harm of occasional use,* these differences were not significantly caused by the FBT program.

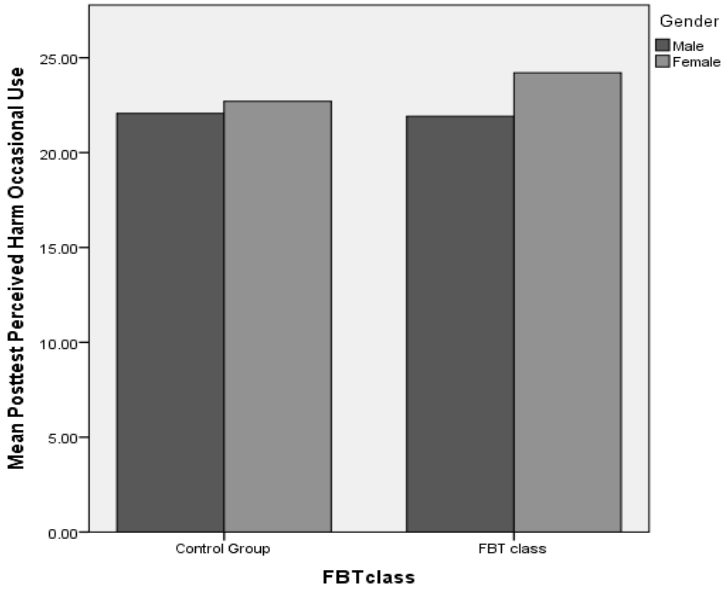

Figure 2. Posttest perceived harm of occasional substance use

Table 10

Analysis of variance between perceived harm of occasional use scores at posttest

Source	df	F	η_2	Sig. (two-tailed)
Gender	1	4.141	.024	.043
FBTclass	1	.870	.005	.352
Gender * FBTclass	1	1.316	.008	.253
Error	166			

Perceived ability to refuse. Data for the perceived *ability to refuse posttest scores* were not normally distributed, being extremely negatively skewed and leptokurtic, and were potentially inappropriate to consider in an ANOVA test. Separate Wilcoxon signed-rank tests could have been used to examine differences with respect to time period; however this would have limited the ability to examine potential interaction between the variables (Mayer, 2013). Thus the *perceived ability to refuse* variable was examined with an independent multi-factorial ANOVA; however caution should be used when interpreting outcomes concerning this variable due to its non-parametric properties.

Outcomes. Data in Figure 3 suggested a slight overall effect for treatment conditions but no significant difference for gender. The independent two-way ANOVA presented in Table 11 confirmed that there was a significant main effect for treatment in respect of posttest *perceived ability to refuse* scores ($F(1, 166) = 4.980$, $p = .014$ (one-tailed), $d = 0.17$); but no main effects for gender or interaction effects between FBT group and gender. This implies that students taking the FBT intervention had higher efficacy in refusing drug offers when compared with their counterparts in the control group, but there were no differences between gender groups.

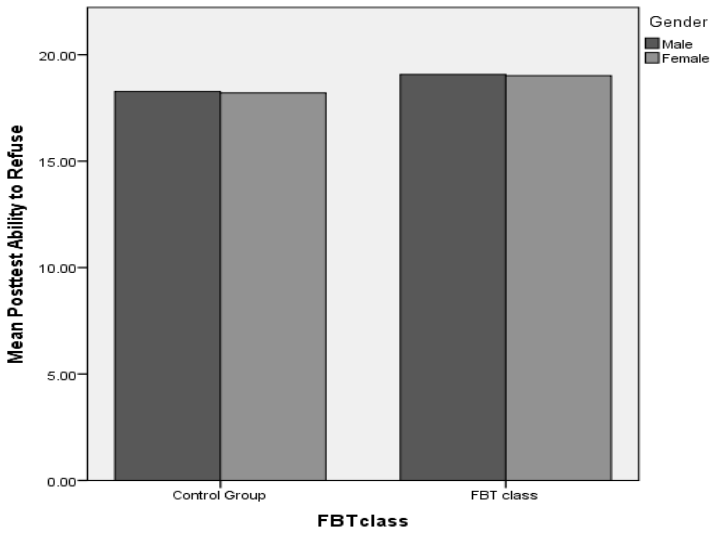

Figure 3. Posttest perceived ability to refuse with respect to gender and treatment conditions

Table 11

Analysis of variance between posttest scores on perceived ability to refuse scores

Source	df	F	η_2	Sig. (two-tailed)	Sig. (one-tailed)
Gender	1	.025	.000	.873	.437
FBTclass	1	4.980	.029	.027	.014
Gender * FBTclass	1	.000	.000	.993	.497
Error	166				

Research Question Three: Other Factors Which May Have Influenced Outcomes

Review of the research question and hypotheses. The third research question asked: Do program outcomes differ according to other factors such as student gender, influence of parents, and influence of peers? Thus, the purposes of Hypotheses Seven and Eight were to examine factors besides the FBT intervention which might affect outcome scores:

H7: Positive family influence (i.e. pressure to avoid drugs) will be positively correlated with favorable outcomes among dependent variables (e.g., higher perceived harm of substance use).

H8: Conversely, negative peer influence (i.e. pressure to use drugs) will be negatively correlated with favorable outcomes among dependent variables (e.g., higher perceived harm of substance use).

Descriptive statistics. Correlation matrices for both pretest and posttest data are displayed in Appendix L. Spearman's rank correlations were used because outcome variables were not parametric. A significantly negative correlation between *age* and *perceived harm of occasional use* suggested that older students were less likely to perceive occasional use as harmful. The negative correlation between outcome variables with *number of friends who are users* and the *number of friends who ask you to use* weakly implied that these factors negatively impacted student perception of harm. *Exposure to FBT* did not significantly correlate with any of the outcome variables, but the *use of FBT supplementary materials* correlated significantly, suggesting that students engaging in more program components were more likely to perceive occasional use as harmful and possess a higher efficacy in refusing drug offers. However, even the significant correlations were fairly weak ($r_s < .30$) and only three predictor variables – *age, use of FBT supplementary materials,* and *number of friends who are users* – correlated substantially with the outcome variables ($r_s > .30$). Graphical depictions of the linear relationships between these three variables with their respective outcome variables are depicted in Figures 4-6.

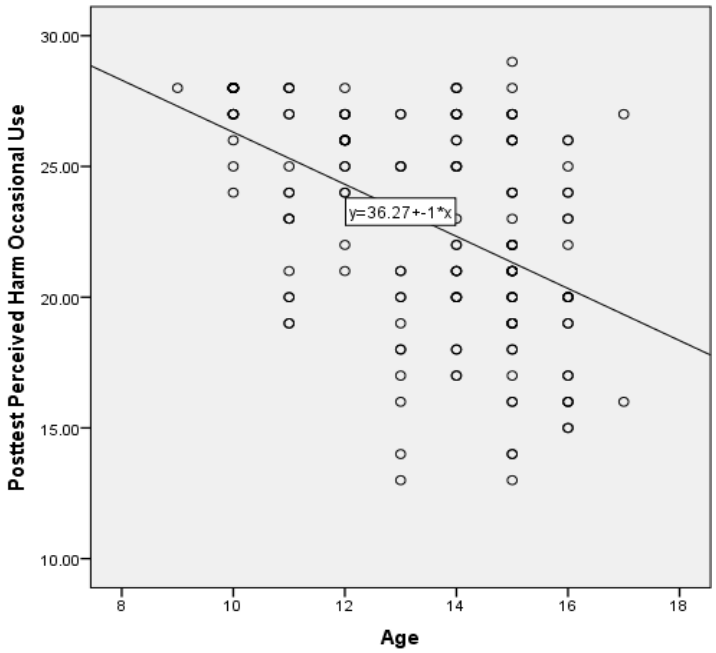

Figure 4. Age vs. posttest perceived harm of occasional use

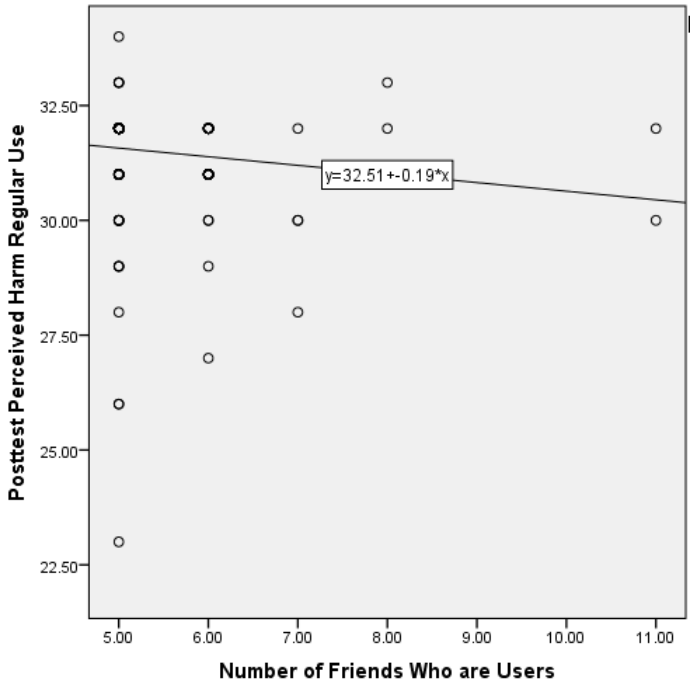

Figure 5. Friends who are users vs. posttest perceived harm of regular use

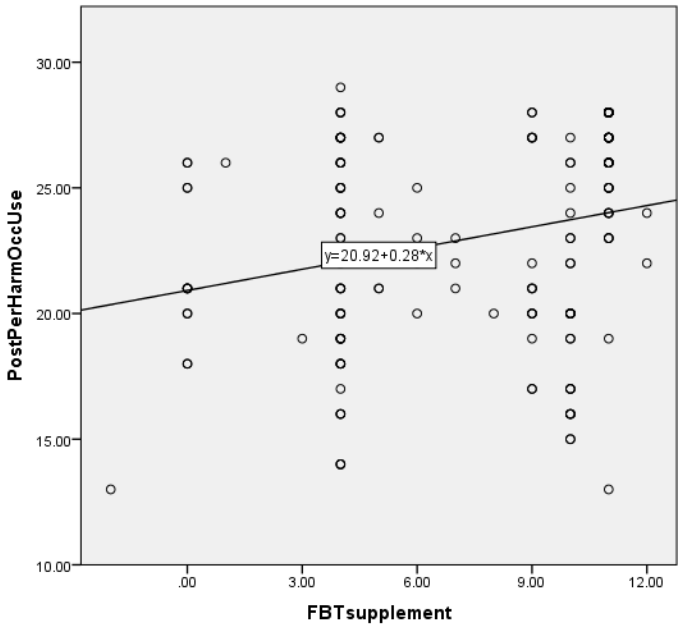

Figure 6. Use of FBT supplementary materials vs. posttest perceived harm of occasional use

Outcomes. There were only three relationships which justified regression models. Because the three predictor variables correlated with different outcome variables, three separate linear regressions were run. As indicated in Table 12, the linear regression model of *age* explained 24.5% of the overall variance in *perceived harm of occasional substance use* scores, and was found to significantly predict outcomes, F (1, 169) = 54.79, $p < .001$, $d = .32$, confirming the expectation that older students were less concerned about the harm of experimental substance use. Similarly, the linear regression model of FBT supplementary materials only explained 6.6% of the overall variance in *perceived harm of occasional substance use* scores, but was also found to significantly predict outcomes, F (1, 170) = 11.97, $p = .001$, $d =$. 07, weakly suggesting that more in-depth use of supplementary materials contributed to higher perceived harm of occasional substance use. The model relating to number of friends who are users was not identified as a significant predictor of perceived harm of frequent substance use outcomes.

Table 12

Linear regression analyses of outcome variables

Predictor Variable	Outcome Variable	R^2	Adj. R^2	F	P	Constant	β	t	p (t)
Age	Perceived harm of occasional substance use	.245	.240	54.79	.000	36.27	-.99	-7.40	.000
FBT supplementary materials	Perceived harm of occasional substance use	.066	.060	11.97	.001	20.92	.28	3.46	.001
Number of friends who are users	Perceived harm of frequent substance use	.015	.009	2.591	.109	32.51	-.19	-1.61	.109

Qualitative Data Analyses

The qualitative data was collected in order to support quantitative results and perhaps explain any unusual or unexpected findings. Following the example set forth by prior research, (Chwalisz, Shah, & Hand, 2008), these analyses consisted of data reduction, organization into data display and drawing of conclusions.

Data Reduction

The 33 responses were coded in a way to make the data more manageable. Even though questions 5-6 contained valuable information concerning the FBT intervention, the feedback concerned future adaptations and was not truly relevant to this study; therefore, only questions 1-4 were considered. Questions 1-3 each began with yes/no items asking for students' perceived harm of occasional alcohol use, frequent alcohol use, and experimental drug use, respectively; and the questions then asked for examples. These components were assigned a code from 0 to 2 with 0 = "no perceived harm," 1 = "undecided, ambivalent, or containing qualifying statements," and 2 = "perceived harm." Table 13 summarizes the frequencies of students' responses.

Data Display

Table 13

Frequency of responses to questions 1-3 on the open-ended questions

Question	Group	Yes = 2	Undecided = 1	No = 0	Total
"Are there any dangers with **occasional** alcohol use? If so, what?"	Control (n = 17)	15	1	1	17
	FBT (n = 16)	10	1	5	16
"Are there any dangers with **frequent** alcohol use? If so, what?"	Control (n = 17)	17	0	0	17
	FBT (n = 16)	16	0	0	16
"Are there any dangers with **experimental** drug use? If so, what?"	Control (n = 17)	11	4	2	17
	FBT (n = 16)	15	1	0	16

Table 14

Examples of responses from questions 1-4

Question	Sample answers
"Are there any dangers with **occasional** alcohol use? If so, what?"	"Yes, because there is a possibility to become an alcoholic."
	"It is always harmful for us."
	"From my point of view, occasional using of alcohol is not harmful and doesn't have any bad impact."
	"No."
"Are there any dangers with **frequent** alcohol use? If so, what?"	"YES! Of course, if any person will use it often then the probability to die is high."
	"Yes! When people abuse alcohol it leads to alcoholism."
	"Frequent alcohol consumption leads to a disease called alcoholism. This disease leads to worsening of reasoning and to degradation of a person."
"Are there any dangers with **experimental** drug use? If so, what?"	"Yes, every piece of drug is very harmful and it brings us one step closer to death."
	"We shouldn't "joke" with drugs even if we want to taste them just once. Person becomes addicted and his life becomes ruined."
	"In the majority of cases this kind of people lose families, children, job and relatives."
	"I think that it is not very dangerous to make experiments because sooner or later we have to try."
"What are the most effective approaches to avoiding abuse of substances such as alcohol, tobacco, and other drugs?"	"Yes."
	"We should stop all the contacts and not to deal with friends that use alcohol, tobacco and drugs. And from time to time our parents should talk to us about those issues. They have to explain us that it is harmful."
	"We need special lessons at school with good explanation about real harms of alcohol, drugs and tobacco for a young body."
	"Religion – mainly Christianity."
	"It is better not to use them. But if it happens there are such organizations as "Anonymous alcoholics" and others that will help you."
	"Conversations with parents, teachers, go in for sports and have good friends."

Students from both treatment and control groups agreed that *regular alcohol use* was harmful. Interestingly, several students from the treatment group did not perceive *occasional alcohol use* as harmful, while most of the control group students perceived it as detrimental. But treatment students perceived *experimental drug use* as more harmful when compared with their control group counterparts. Examples are provided in Table 14.

Many students, particularly in the control group, did not respond to the second parts of questions 1-3 where they were asked to give examples of the harmful impact of occasional alcohol use, regular alcohol use, and experimental drug use, respectively. However, some of the most frequently suggested impacts of substance use across all variables included negative health effects and danger of addiction. Figures 7-9 provide a graphical display of these and the other examples.

Figure 7. Perceived impact of occasional alcohol use

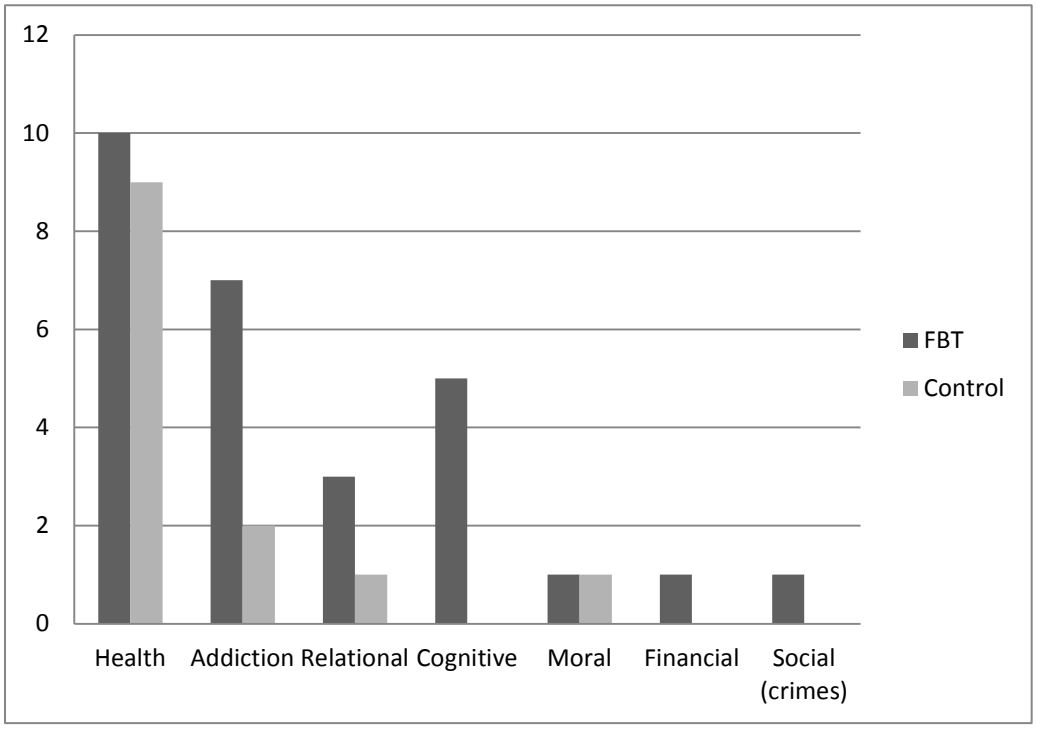

Figure 8. Perceived impact of frequent alcohol use

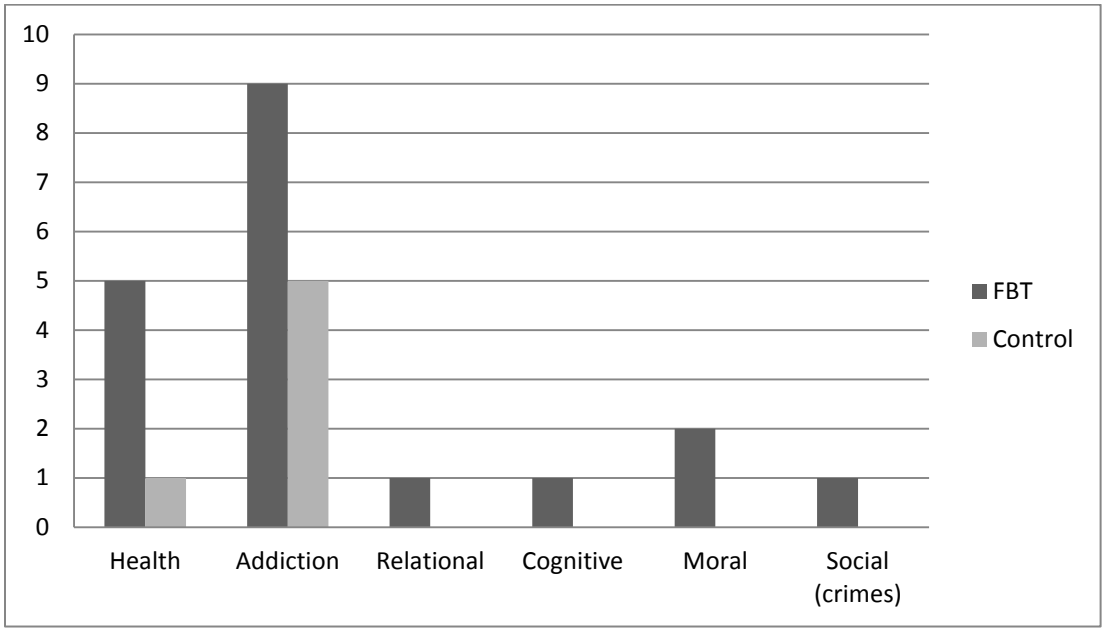

Figure 9. Perceived impact of experimental drug use

Question Four asked "What are the most effective approaches to avoiding abuse of substances such as alcohol, tobacco, or other drugs? Students in the control groups provided 29 suggestions, and students in the treatment group provided 26 suggestions. Figure 10 depicts the most-often suggested solutions for preventing substance abuse.

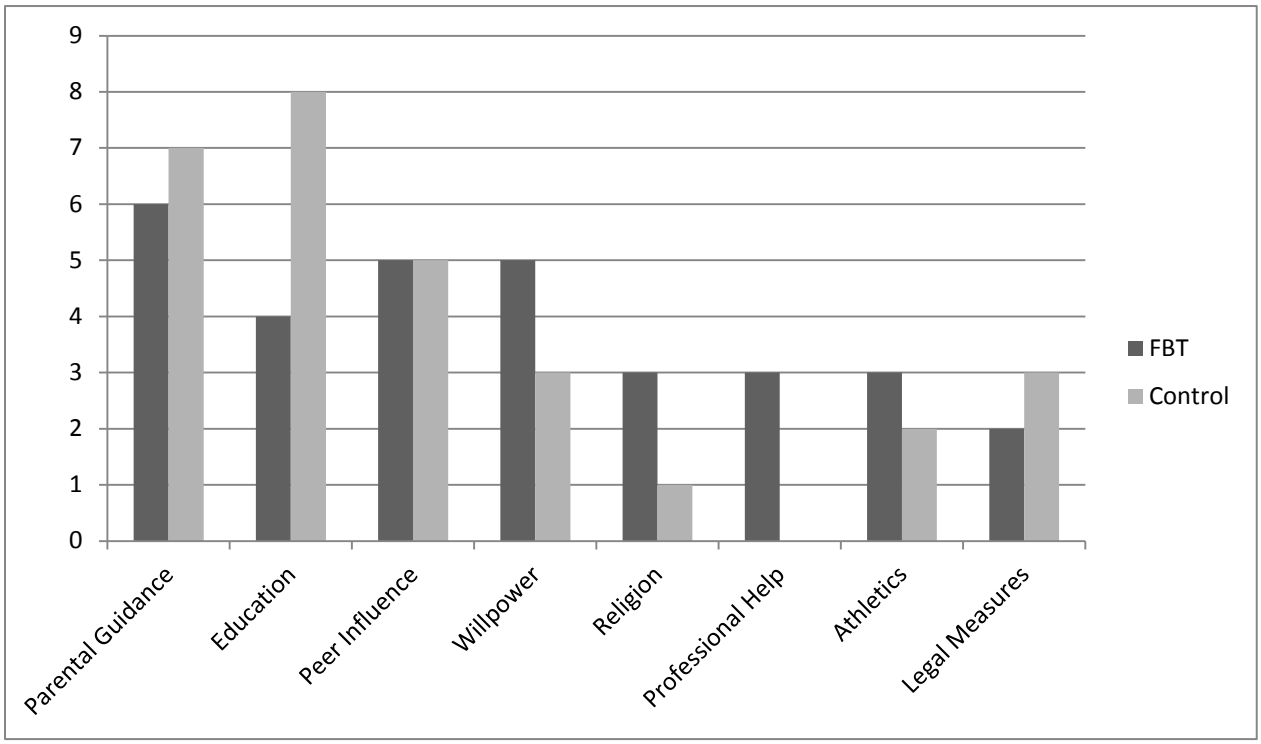

Figure 10. Proposed solutions for substance abuse prevention

Conclusions

The qualitative analysis added an interesting dimension to the study, in that it specifically asked students *how* substance use was harmful. Students from both groups agreed that *regular alcohol use* negatively impacted health and had addictive tendencies. But treatment and control groups differed in their opinions of *occasional alcohol use* and *experimental drug use.* The FBT group offered many more examples of how substance use impacted their lives, citing relational harm, cognitive impairment, financial devastation, and social ills. In general, the frequency of

specific examples was much higher across the three questions for the FBT treatment group when compared with the control group, suggesting that perhaps the FBT intervention aided students in articulating the harmful consequences of substance use. Both groups offered similar suggestions for avoiding substance abuse, as shown in Figure 10.

Comparison with Quantitative Data

Both analyses indicated that frequent substance use was perceived as harmful, although there were disparities concerning the perceived harm of occasional or experimental use. FBT students were more explicit in their open-ended responses concerning the particular impact of substance use when compared with control students. These observations supported the inferential results from the pre- and posttest comparisons which had indicated that the FBT attitude influenced student attitudes concerning substance use.

Several cautions should be observed when comparing these qualitative findings with the statistical results. Of course the sample size for this qualitative portion was rather small, limiting the ability to extrapolate findings. Also, the variables from this qualitative data were somewhat different than the student surveys. Nevertheless, the open-ended questionnaires supported findings from the quantitative data.

Summary of Major Findings

Factor analyses of the student survey revealed reliable and valid scores using the ADAS instrument which factored consistently during both the pretest analysis and posttest analyses. These analyses produced several composite scales which were consistent with prior studies, and these variables – *perceived harm in occasional use, perceived harm in regular use,* and *perceived ability to refuse* – were used as outcome variables in this study.

Students who participated in the FBT program scored significantly higher at posttest in *perceived harm of occasional substance use* and *perceived ability to refuse drug offers* when compared with pretest scores. There were no significant differences between pretest and posttest scores on *perceived harm of frequent use.* These results suggested that the FBT intervention might have affected student attitudes and efficacy in refusal, although effect sizes were small. Besides the fact that females had significantly higher posttest scores on *perceived harm of occasional use*, there were no significant interaction affects between treatment condition and gender for any outcome variable. ANOVA tests revealed significant main effects on mean scores for *perceived ability to refuse* with respect to treatment condition, indicating that students participating in the FBT program were more confident in their refusal ability than students in the control group. There were however, significant relationships between program outcomes and age and use of FBT supplementary materials. The qualitative data supported these findings, suggesting that students in the treatment group were more aware of the damaging effects of experimental substance use.

CHAPTER FIVE: CONCLUSION

In order to meet the need for school-based drug prevention education in Ukraine, the International School Project (ISP) developed a culturally-relevant intervention entitled *The Future Begins Today* (FBT) which targeted middle school youth. The purpose of this study was to evaluate the effectiveness of this intervention on student attitudes towards and knowledge of substance use, and efficacy on refusing drug offers. The study hypothesized the following: Exposure to the FBT intervention would significantly increase Ukrainian adolescents' perceived harm of alcohol use, perceived harm of occasional drug use, perceived harm of frequent drug use, and perceived ability to refuse drug offers. Moreover, at post-intervention, scores on all dependent variables would be higher among the FBT treatment group when compared with the non-treatment group, and these differences would be affected by gender. Finally, other factors including positive family influence and negative peer influence would affect program outcomes.

Impact of the FBT Intervention

Both quantitative and qualitative analyses suggested that program did not appear to influence their perceived harm of regular drug use. This finding was unsurprising given the fact that scores on this variable were already quite high at pretest. However, outcomes did suggest that the FBT program significantly increased Ukrainian students' perceived ability to refuse drug offers and also increased their perceived harm of occasional substance use. While effect sizes were small, they were comparable with those of other preventive interventions which demonstrated significant impacts (Bender, Tripodi, Sarteschi, & Vaughn, 2011; Rooke, Thorsteinsson, Karpin, Copeland, & Allsop, 2010). While study designs might have influenced such disparities, these appreciable effect sizes were quite noteworthy.

Indeed, any significant findings were remarkable given the limited duration of the study. Several factors may have contributed to the successful outcomes in this study. First, the FBT intervention incorporated principles of effective programs (e.g., interactive versus didactic, multi-modal), (Newton et al., 2012). Second, this study utilized a true control group, that is, a group which was not being exposed to alternative interventions. The lack of such true control groups have been a previously-noted shortcoming of prior studies and an explanation for smaller effect sizes (Ennett et al., 1994; Komro et al., 2008). Also, this study considered the degree of program exposure in terms of number of lessons used and supplementary materials used, rather than simply evaluating whether or not students participated in the intervention. One of the notable findings indicated that the degree to which FBT supplementary materials were used had a significantly positive impact on student attitudes.

Influence of Other Factors

Besides the FBT intervention, many other variables contributed to program outcomes. Age was influential in that older students were less wary of experimental drug use than younger students. Reasons for this inverse relationship were unclear. One possible suggestion is that older students were more likely to have used drugs (Kandel & Logan, 1984; Tibbits et al., 2011) and either had not experienced adverse side effects or merely did not wish to admit the potential harm. If either of these scenarios were to blame, it would seem more prudent in the future to target younger students with preventive interventions, before the onset of drug use.

Gender only affected one program outcome. Such findings only stood in mild contradiction of the existing literature because prior studies offered conflicting conclusions concerning the role of gender on treatment outcomes. In some studies, males responded to the program more positively (Cupp et al., 2008; Flay, et al., 2004), while in other cases females

demonstrated higher outcomes (Chhabra et al., 2010). The ambiguity of the findings in this study suggested that further research is needed to investigate the relationship between gender and program outcomes.

There also were no strong connections between *parental concern* and outcome variables. This finding contradicts previous research (Kumpfer, Xie, & O'Driscoll, 2012). Indeed, entire interventions, such as the *Strengthening Families* program, were founded on the premise that parents are the vital link between their child and substance abuse (Cervantes et al., 2011; Coombes, Allen, Marsh, & Foxcroft, 2009; Errasti Pérez et al., 2009). There are at least two potential explanations for this lack of connection. First, methodological issues could have been at fault, given the fact that only one survey scale actually addressed parental concern and the reliability of this scale was questionable. Alternatively, perhaps Ukrainian youth are more motivated by peer influence than family influence. While existing research agrees that family or parental influence can be a significant factor in prevention education, the strength of this connection depends upon whether or not a culture is more collectivistic and thus interested in the common good (e.g., good of the family, reputation) or whether the culture is more individualistic and motivated by narcissism (Marsiglia, Yabiku, Kulis, Nieri, & Lewin, 2010b; Resnicow et al., 2000; Springer et al., 2004; Unger et al., 2004). Therefore it becomes imperative to consider the collectivistic influences on the culture before integrating such family-oriented components into interventions.

Limitations of the Study

The design of this study contained many substantial limitations. First of all, the sample was not random, thus limiting the generalizability of the research findings. It is quite likely that self-selection bias affected the results because the teachers who were most likely to participate in

the study were also the teachers most likely to teach the intervention with fidelity and dedication. Second, there was a strong threat to validity due to possible researcher bias, because the primary researcher had personal relationships with many of the teachers recruited for the study. Third, the study only measured short-term effects. Consideration of long-term impact was beyond the scope and budget of this research endeavor. Furthermore, the impact of school influence was not considered in this study because the surveys do not indicate school name for confidentiality purposes.

There were also limitations related to the study sample. The non-parametric data limited the power of ANOVA analyses which compared multiple factors simultaneously. The lack of an adequate control group created large differences in control and treatment samples. There was a large diversity of ages. Since age and outcome variables were significantly connected, future studies should consider a much smaller age range. Also, the error in transcribing the posttest survey as well as the "don't know" responses both contributed to a large percentage of missing data. Finally, the study sample only included teachers and students from Western Ukraine and thus the results may not be indicative of curriculum usage across Ukraine.

Recommendations

Given the outcomes of this study which analyzed the FBT program, the following recommendations are offered to educators, program developers, and prevention researchers.

Recommendations for Educators

The importance of addressing the dangers of occasional substance use. Whereas students readily perceived regular substance use as harmful, they were less informed or opinionated regarding the dangers of occasional use. The FBT intervention demonstrated moderate success at changing student attitudes concerning this danger which is not surprising,

given that the curriculum directly addresses this topic. For example, Lesson 10 entitled "Benefits of Drug Abstinence" says, "The first decision about drugs – whether or not to begin –is the crucial point at which someone has the greatest control of his or her destiny. Once someone has begun to use drugs, he or she begins to lose options and opportunities" (Forbes et al., 2005, p. 1 of lesson 10). Thus, it is strongly recommended that other educators pay specific attention to addressing the harms of experimental or occasional substance use

The importance of providing practical skills-development. The FBT intervention contains several lessons on skills-development, such as Lesson 25 entitled "The Power of No" (Forbes et al., 2005). Numerous other studies attest to the importance of providing drug resistance training and skills to resist peer pressure (e.g., Faggiano et al., 2008; Gottfredson & Wislon, 2003; Newton et al., 2012). And one of the exemplars of the prevention field, the *kiR* program contains role-play activities as core components (Castro et al., 2010; Hecht & Krieger, 2006). Therefore, educators should prioritize giving their students confidence and abilities in refusing drug offers.

Inclusion of critical program components. Indeed, the extent to which such program components are utilized can have a significant impact on whether or not the program is effective. In the case of the FBT intervention, more extensive use of "teaching students to dream," "active involvement of students in education," "connection with parents," and the "personal students journal" activity (Forbes et al., 2005, pp. 6-7) resulted in higher impact on student attitudes concerning the harm of experimental substance use. Many of these program components have been previously referenced in the literature as key qualities of successful interventions, particularly the active learning methods (Botvin et al., 2001). On the other hand, it is not necessary for educators to rely upon extensive information-delivery approaches in order to

experience success. The FBT intervention actually deemphasizes the delivery of drug facts (Forbes et al., 2009) and previous research confirms that this is wise instruction given the limited success of information-dissemination approaches and scare tactics (Faggiano et al., 2008).

Recommendations for Program Developers

Considering younger students. Program developers should consider the development of preventive education that targets a younger age demographic. Older students perceived substance use as less harmful. This could be attributed to numerous factors, but the fact that the FBT treatment group – a younger sample than the control group – experienced positive program outcomes, justifies additional consideration into the targeting of younger students. Indeed, current prevention research has argued that in some cultures, younger students should be considered (Harthun, Dustman, Reeves, Marsiglia, & Hecht, 2009; Hecht et al., 2008). Perhaps future adaptations of the FBT program and other interventions should target elementary age students or at least young junior high students. Of course, interventions would need to be adapted so that they are age-appropriate.

Considering key influencers on student attitudes and behaviors. The FBT intervention contains several features which have been previously addressed in the literature as critical predictors of program success: interactive program design (e.g., Botvin et al., 2001), connection with parents (e.g., Kumpfer et al., 2008), and giving students skills they need to refuse drugs with confidence (e.g., Faggiano et al., 2008). But there were other elements incorporated in the FBT intervention which should also be considered: teaching students the importance of having dreams and life goals, and the personal student's journal activity which encouraged students to personalize what they learned each day.

Recommendations for Researchers

Continuing the adaptation and testing of CSIs. In light of the encouraging program outcomes, future projects which incorporate culturally sensitive interventions (CSI) such as the FBT program are recommended. These interventions should be more widely disseminated so that program outcomes could be compared across multiple cultural audiences (e.g., the study sample should be expanded outside of Western Ukraine in order to compare program effects across differing populations). Ideally, studies should be longer in duration or perhaps include follow-up analyses such as focus groups.

Measuring the extent to which the curriculum was used. Researchers must go beyond simply comparing the dichotomous condition of treatment versus control and instead incorporate variables into their study designs which measure which program components were used and for how long. This recommendation echoes the emerging opinion which argues that program variables –particularly culturally related variables – should be isolated when analyzing program outcomes (Lloyd et al., 2013).

Refinement of study instruments. Researchers might consider the incorporation of the ADAS survey provided that minor modifications are made to the instrument. First, the large percentage of missing values was largely attributed to the coding of "don't know" responses as missing on questions 6 and 14 of the survey (i.e., the questions that addressed perceived harm of substance use). Interestingly, the frequency of don't know responses decreased significantly between pretest and posttest. This fact alone warrants further investigation because it raises additional questions: Were students more confident in their knowledge at posttest? If so, a sub-scale should be added that addresses students' confidence in their knowledge. Second, the parental concern variable needs adjustment on this instrument. Only one sub-scale (i.e. question

8) addressed parental concern and data obtained from this subscale revealed very little because it was highly positively skewed. In other words, almost all of the student respondents indicated that their parents would "care" if they used tobacco, drank some alcohol, got drunk, or used gateway drugs. This question was quite ambiguous however, and in the future more sub-scales should be added to address the issue of parental monitoring, parental connection with the student, involvement in daily life, or whether other family figures (e.g., grandmother) were highly influential. Future studies should also explore the various cultural dimensions to determine whether or not communal or familial influences are strong enough to justify incorporating family activities into program components.

Exploration of other variables which may influence program outcomes. For example, it is important to continue to investigate the ideal age of preventive education. Also, the construct of gender is still a debatable factor and warrants further study. One of the statistical analyses in this study did show that females had higher perceived harm of occasional substance use, although the practical significance of this was low (d = .16). Peer influence was not an influential factor in this study. Granted, this observation stands in direct contradiction to a wealth of research on preventive education (e.g., Tragresser et al., 2010). Nevertheless, the fact that this variable was insignificant in this study implies that further clarity is needed. Finally, it is important to distinguish between experimental substance use and regular substance use when measuring program outcomes. In this study there was a consensus among participants that regular substance use was harmful, whereas there was more disagreement over the perceived harm of occasional use. From a methodological perspective, these differing outcomes lend support to research studies (e.g., Tragesser et al. 2010) which isolate these variables into distinct categories.

Conclusion

Despite the aforementioned limitations, this research study yielded credibility to the FBT intervention and supported the research proposition that CSIs are effective tools for influencing student attitudes concerning substance use. In addition, study yielded several substantial benefits to the field of prevention research. First, the factor analyses demonstrated that the ADAS survey, once adequately adapted, is an appropriate instrument for evaluating changes in student attitudes and beliefs concerning substance use. Also, this study considered many factors which are not always incorporated in prevention research. For example, the teacher survey investigated the degree to which teachers implemented the FBT curriculum and supplementary materials. Finally, the statistically significant program outcomes suggested that the FBT intervention had a positive impact, which was notable given the limited study duration of three months. These findings give credibility to the growing number of preventionists who argue that culturally sensitive interventions improve student attitudes and beliefs on substance use.

Declaration of Interest

This research project was funded completely by the principal investigator. No funding was received from any educational institution. It is important to note that the principal investigator is a salaried employee of the International School Project (ISP), the organization which developed the *Future Begins Today* intervention. Research was conducted with permission and cooperation of ISP, although no additional monetary compensation was given to the principal investigator for conducting this evaluation. Moreover, the FBT intervention was developed for non-profit purposes and is not publically marketed to a retail audience. A conflict of interest disclosure was provided to the IRB at the University of Central Florida.

APPENDIX A – EFFECTIVENESS OF SUBSTANCE ABUSE CSIs

Effectiveness of CSIs Targeting Adolescent Substance Abuse

Reference	CSI	Design	Audience	Outcomes
Abatemarco et al. 2004	PN	QES	Croatian youth	No significant effect on alcohol use
Cervantes, Goldbach, & Santos, 2011	Famila adelante	QES	Latino youth	Large effect sizes in decreasing risk factors for substance use and decrease in illegal drug use)
Chhabra et al., 2007	STEP	GRT	Indian youth	No significant effects on intention to use alcohol or other drugs
Chipungu et al., 2000	Multiple	PE	African American youth	Culturally sensitive programs enhanced student engagement
Coombes et al., 2009	SF	QES	UK youth	Few statistically significant program impacts but encouraging qualitative findings
Coombes et al., 2012	SF	QES	UK youth and their parents	No significant results were sought or found due to methodological issues
Cupp et al., 2008	PN	GRT	South Africa	Significant effect on alcohol refusal self-efficacy; no effects on alcohol use
Dixon et al., 2007	kiR	GRT	Native American youth	Significantly less effective (on substance use behaviors) among Native American youth.
Elek, Wagstaff, & Hecht, 2010	kiR	GRT	5th grade students	Intervention was not more effective if delivered to 5th graders (when compared with delivery to 7th graders only)
Errasti Pérez et al., 2009	SF	QES	Spanish students	The intervention had significant impact on student-reported drug use
Espada et al., 2012	Saluda	QES	Spanish students	Significant differences in alcohol use between experimental conditions and control conditions.
Flay et al., 2004	Other	RCD	African American youth	Significant reduction in violent behavior and drug use for boys; no significant effects for girls
Fraguela, Martín, & Triñanes, 2003	Life Skills	QES	Spanish youth	Statistically significant decrease in substance use at the 1 year follow-up posttest

Reference	CSI	Design	Audience	Outcomes
Gosin et al., 2003	kiR	GRT	Southwestern US youth	Students demonstrated ability to resist drugs, decrease in alcohol use
Gosin, Marsiglia, & Hecht, 2003	kiR	GRT	Latino, European, African American	Significant impact on norms, expectations of future substance use, and self-reported recent substance use
Harthun et al., 2002	kiR	GRT	Latino, European, African American	Students demonstrated ability to resist drugs, decrease in alcohol use
Hecht & Krieger, 2006	kiR	GRT	Multiple	Significant impact on norms, expectations of future substance use, and self-reported recent substance use
Hecht et al., 2008	kiR	GRT	5th grade students	No significant effects on intentions, expectancies, beliefs, or use
Hecht, Graham, & Elek, 2006	kiR	GRT	Latino	See Hecht & Krieger, 2006
Holleran-Steiker et al., 2011	kiR	QES	Alternative school students	Positive; significant change in alcohol use
Hopson & Holleran-Steiker, 2010	kiR	QES	Alternative school students	Significant change in alcohol use/intentions
Jackson, Hodge, & Vaughn, 2010	Multiple	Meta-analysis	African American youth	Culturally sensitive programs demonstrated small to medium effect sizes (preventing at-risk behaviors)
Karnell et al., 2006	PN	GRT	South Africa	No significant changes in alcohol-related variables
Komro et al., 2006	PN	QES	Urban youth	Influence on student attitudes and knowledge; no other significant results
Komro et al., 2008	PN	QES	Urban youth	No significant changes in alcohol use
Kulis et al., 2007	kiR	GRT	Mexican American youth	Influenced substance use and substance use norms. Effects differed by gender.

Reference	CSI	Design	Audience	Outcomes
Kumpfer, Magalhães, & Xie, 2012	SF	QES	Multiple	Medium to large effect sizes in decreasing risk factors; 22 countries included in studies
Kumpfer, Xie, & O'Driscoll, 2012	SF	QES	Irish 12-16 youth	Significant results (large effect sizes); decrease in risk factors for substance use
Marsiglia et al., 2010a	kiR	QES	Latino youth	No significant effects on cultural pride, self-esteem, and mutual aid, or substance use.
Marsiglia et al., 2010b	kiR	GRT	Alternative school students	Less-acculturated students were more responsive to the KiR curriculum
Marsiglia et al., 2011	kiR	GRT	Mexican-American youth	Intervention efficacy was not enhanced when it was delivered to students in two doses (5th grade and 7th grade)
Marsiglia et al., 2012	kiR	QES	Mexican-American youth	Students in treatment group had lower alcohol use than students in control group
Schinke, Tepavac, & Cole, 2000	Life Skills	GRT	Native American youth	Significant: Lower rates of alcohol, tobacco, marijuana use for intervention (skills) group
Springer et al., 2004	Multiple	QES	Multiple	Receptivity was higher among CSIs; CSIs significantly impacted substance use rates
Tibbets et al., 2011	Health Wise	GRT	South Africa	No significant intervention effects on lifetime polydrug use, except among females. Significant treatment effect for frequent polydrug use
Warren et al., 2006	kiR	QES	Latino, European, African American students	Exposure to kiR videos significantly effected student substance use.
West et al., 2008	PN	QES	Croatian youth	More effective with younger students and females for alcohol use
Williams et al., 2001	PN	QES	Russian youth	Influence on knowledge, but no significant impact on alcohol use

APPENDIX B – EXPLANATION OF RESEARCH PROJECT

ISP Research Project

The project

The International School Project (ISP) is conducting a research project in order to determine the effectiveness of the *Future Begins Today* (FBT) curriculum and its influence on student attitudes. Anne Marie Gewin is organizing this project. Your assistance with this project will help the ISP development of future programs.

Participants

We are trying to recruit at least 20 teachers in Drohobych and their students. We need 10 teachers who are planning to teach the FBT curriculum in Fall 2013. We also need 10 teachers who are NOT planning to teach the FBT curriculum. It is necessary to compare students who *have* received the lessons with students who *have not* received the lessons.

The role of the teachers in the project

The teachers will help Anne Marie distribute the survey to their students. These surveys will be given on two occasions: 1) in the early Fall 2013 *before* the FBT Units 1-3 are taught and 2) later in the Fall 2013 *after* FBT Units 1-3 are taught. Teachers will also be asked to give their opinions of the curriculum. Each survey can be completed in only one class period.

Questionnaire

Questions include student perceptions of drug and alcohol use, student opinion about the FBT curriculum, and student's expected use of drugs and alcohol in the future.

Privacy

The surveys will be completely anonymous. Teachers and students will NOT be required to provide their names on any of the survey forms.

Also, the surveys will first receive approval from educational officials, school psychologists, and parents.

Дослідницький проект МШП

Мета проекту

Міжнародний шкільний проект (МШП) проводить дослідження, щоб визначити ефективність програми «Майбутнє починається сьогодні» та її вплив на учнів. Організатором проекту є Анна-Марія Гевін. Ваша участь допоможе МШП у розробці нових програм.

Учасники проекту

Ми хочемо залучити принаймні 20 вчителів з Дрогобича та їхніх учнів. Нам потрібні 10 учителів, які планують викладати «МПС» з осені 2013. Нам потрібні також 10 учителів, які НЕ планують викладати «МПС» у новому н.р. Важливим є порівняння учнів, які *навчалися* за «МПС», з тими, які *не навчалися* за цією програмою.

Роль вчителів у цьому проекті

Учителі допоможуть роздати учням анкети-дослідження. Їх роздаватимуть двічі: 1) на початку осені, перед вивченням 1-3 розділів «МПС»; 2) пізніше, після опрацювання 1-3 розділів. Учителі також висловлять свої враження про програму(«МПС»). Дослідження може бути проведене тільки з **однією віковою групою**.

Запитання анкети

Запитання анкети стосуються ставлення учнів до вживання наркотиків та алкоголю, їхньої думки про програму «МПС» та вживання наркотиків/алкоголю у майбутньому.

Приватність

Усі анкети будуть цілком анонімними. Учителі та учні **не** повинні вказувати в анкеті своє ім’я.

Звичайно, анкети-дослідження спершу отримають схвалення керівництва, шкільних психологів та батьків.

APPENDIX C – STUDENT PRETEST SURVEY

#

Date:

The AMERICAN DRUG AND ALCOHOL SURVEY

1. **Age: _____**

2. **Grade/Form:**

6th	7th	8th	9th	10th	11-12th
○	○	○	○	○	○

3. **Gender**

Male	Female
○	○

4. **How much would your friends try to stop you from getting drunk?**

○	A lot
○	Some
○	Not much
○	Not at all

5. **How often have your friends asked you to get drunk?**

○	A lot
○	Some
○	Not much
○	Not at all

6. ***How much do you think people harm themselves (physically or otherwise) if they. . .**

	No harm	Very little harm	Some harm	A lot of harm	I don't know
Used alcohol 1 or 2 times	○	○	○	○	○
Use alcohol regularly	○	○	○	○	○
Get drunk 1 or 2 times	○	○	○	○	○
Get drunk regularly	○	○	○	○	○

7. **How many of your friends. . .**

	None	1 or 2	Some of them	Most of them
Get drunk once in a while	○	○	○	○
Get drunk almost every weekend	○	○	○	○

8. **How much would your parents care if you. . .**

	A lot	Some	Not much	Not at all
Used tobacco	○	○	○	○
Drank some alcohol	○	○	○	○
Got drunk	○	○	○	○
Used gateway drugs (like marijuana)	○	○	○	○

9. How easy do you think it would be for you to get each of the following types of drugs if you wanted some?

	Very easy	Fairly easy	Hard	Very Hard	Probably Impossible
Alcohol	○	○	○	○	○
Marijuana	○	○	○	○	○
Stimulants, speed	○	○	○	○	○
Cocaine	○	○	○	○	○
"Sniff" something like glue, gasoline, etc.	○	○	○	○	○
LSD (acid)	○	○	○	○	○
Other hallucinogen	○	○	○	○	○
Meth	○	○	○	○	○
Heroin	○	○	○	○	○
Narcotic painkillers	○	○	○	○	○
Cigarettes	○	○	○	○	○

10. How much would your friends try to stop you from . . .

	A lot	Some	Not much	Not at all
Using marijuana	○	○	○	○
Using cocaine	○	○	○	○
"Sniffing" glue or gas, etc.	○	○	○	○
Using meth, speed, crank	○	○	○	○
Using narcotic painkillers	○	○	○	○
Smoking cigarettes	○	○	○	○

11. How much would you try to stop your friends from . . .

	A lot	Some	Not much	Not at all
Using marijuana	○	○	○	○
Using cocaine	○	○	○	○
"Sniffing" glue or gas, etc.	○	○	○	○
Using meth, speed, crank	○	○	○	○
Using narcotic painkillers	○	○	○	○
Smoking cigarettes	○	○	○	○

12. How many of your friends do each of the following. . .

	None	A few	Most of them	All of them
Use marijuana	○	○	○	○
Use cocaine	○	○	○	○
"Sniff" glue or gas, etc.	○	○	○	○
Use meth, speed, crank	○	○	○	○
Use narcotic painkillers	○	○	○	○
Smoke cigarettes	○	○	○	○

13. How often have your friends asked you to use. . .

	Very often	Some	Not very often	Not at all
Marijuana	○	○	○	○
Cocaine	○	○	○	○
"Sniff" glue or gas, etc.	○	○	○	○
Meth, speed, crank	○	○	○	○
Narcotic painkillers	○	○	○	○
Cigarettes	○	○	○	○

14. How much do you think people harm themselves if they. . .

	No harm	Very little harm	Some harm	A lot of harm	I don't know
Use marijuana 1-2 times	○	○	○	○	○
Use marijuana regularly	○	○	○	○	○
Use cocaine 1-2 times	○	○	○	○	○
Use cocaine regularly	○	○	○	○	○
"Sniff" inhalants 1-2 times	○	○	○	○	○
"Sniff" inhalants regularly	○	○	○	○	○
Use meth 1-2 times	○	○	○	○	○
Use meth regularly	○	○	○	○	○
Use tobacco occasionally	○	○	○	○	○
Use tobacco regularly	○	○	○	○	○
Drink alcohol occasionally*	○	○	○	○	○
Drink alcohol regularly*	○	○	○	○	○

15. Which of the statements below best describes your <u>alcohol</u> use?*

○	I never drank alcohol (more than a few sips) and never will.
○	I never drank alcohol (more than a few sips) but may in the future
○	I drank alcohol (more than a few sips), but don't plan to drink again.
○	I drank alcohol (more than a few sips), and probably will again.

16. When I answered the questions about <u>alcohol</u>. . .

○	I was very honest
○	I said I used it more than I really do
○	I said I used it less than I really do

17. Which of the statements below best describes your <u>drug</u> use? (Do NOT count alcohol use for this question).

○	I have never used drugs and never will.
○	I never used drugs but may in the future
○	I used drugs, but don't plan to use them again.
○	I used drugs, and probably will use them again.

18. If one of your close friends asked you to use any of the following, how easy would it be for you to say no?*

	Very easy	Easy	Somewhat Hard	Very hard	I wouldn't say no.
Alcohol	○	○	○	○	○
Cigarettes	○	○	○	○	○
Gateway drugs	○	○	○	○	○
Heavy drugs	○	○	○	○	○

19. Have you ever had a class that taught you about the risks of alcohol and other drugs? (Please circle).

Yes No Not sure

20. Has your teacher ever used lessons from the *Future Begins Today* program? (Please circle).*

Yes No Not sure

21. In your opinion, which of the following are the best solutions to refusing drugs/alcohol? (Choose 1-2)

○	Talk with my teachers	○	Talk with my parents
○	Religion/church	○	Have other activities (such as sports)
○	Choose good friends	○	Learn more about drugs and alcohol addictions
○	Do nothing	○	Other: _____

#

Американське дослідження щодо зловживання алкоголем та наркотиками

Дата

1. **Вік: _____**

2. **Клас:**

6-й	7-й	8-й	9-й	10-й	11-12-й
○	○	○	○	○	○

3. **Стать**

Чоловіча	Жіноча
○	○

4. **Як часто Ваші друзі просять Вас не вживати алкоголь?**

○	Часто
○	іноді
○	рідко
○	ніколи

5. **Як часто Ваші друзі просили Вас вживати алкоголь (напитися)?**

○	часто
○	іноді
○	рідко
○	ніколи

6. ***Якої шкоди (фізичної чи іншої), на Вашу думку, завдає людині алкоголь, якщо вона . . .**

	Жодної шкоди	Дуже малої шкоди	Невеликої школи	Значної шкоди	Я не знаю
Вживала алкоголь 1-2 рази	○	○	○	○	○
Увесь час вживає алкоголь	○	○	○	○	○
Напилася 1-2 рази	○	○	○	○	○
Увесь час напивається	○	○	○	○	○

7. **Скільки Ваших друзів. . .**

	Ніхто	1 або 2	Декілька	Більшість
Іноді напиваються	○	○	○	○
Напиваються майже щовихідних	○	○	○	○

8. **Чи турбувалися б Ваші батьки, якщо б Ви. . .**

	Так	Трішки	Майже ні	Ні
Вживали тютюн	○	○	○	○
Вживали алкоголь	○	○	○	○
Напивалися	○	○	○	○
Вживали легкі наркотики (марихуану)	○	○	○	○

9. Як Ви гадаєте, чи легко було б Вам дістати якийсь із перелічених нижче наркотиків?

	Дуже легко	Легко	Складно	Дуже складно	Неможливо
Алкоголь	○	○	○	○	○
Марихуана	○	○	○	○	○
Стимулятори	○	○	○	○	○
Кокаїн	○	○	○	○	○
«Щось для нюхання» (клей, бензин)	○	○	○	○	○
ЛСД	○	○	○	○	○
Інші галюциногени	○	○	○	○	○
метамфетаміни	○	○	○	○	○
Героїн	○	○	○	○	○
Наркотичні знеболюючі засоби	○	○	○	○	○
Цигарки	○	○	○	○	○

10. Чи намагалися б Ваші друзі застерегти Вас від . . .

	Так	Трішки	Майже ні	Ні
Вживання марихуани	○	○	○	○
Вживання кокаїну	○	○	○	○
«Нюхання» клею, бензину	○	○	○	○
Вживання метамфетамінів, стимуляторів, гвинту	○	○	○	○
Вживання наркотичних знеболюючих засобів	○	○	○	○
Паління цигарок	○	○	○	○

11. Чи намагалися б Ви застерегти своїх друзів від . . .

	Так	Трішки	Майже ні	Ні
Вживання марихуани	○	○	○	○
Вживання кокаїну	○	○	○	○
«Нюхання» клею, бензину	○	○	○	○
Вживання метамфетамінів, стимуляторів, гвинту	○	○	○	○
Вживання наркотичних знеболюючих	○	○	○	○
Паління цигарок	○	○	○	○

12. Скільки Ваших друзів . . .

	Жоден	Декілька	Більшість	Усі
Вживають марихуану	○	○	○	○
Вживають кокаїн	○	○	○	○
«Нюхають» клей, бензин	○	○	○	○
Вживають метамфетаміни, стимулятори, гвинт	○	○	○	○
Вживають наркотичні знеболюючі	○	○	○	○
Палять	○	○	○	○

13. Ваші друзі пропонували Вам спробувати . . .

	Дуже часто	Інколи	Рідко	Ніколи
Марихуану	○	○	○	○
Кокаїн	○	○	○	○
«нюхати» клей, бензин	○	○	○	○
метамфетаміни, стимулятори, гвинт	○	○	○	○
Наркотичні знеболюючі	○	○	○	○
цигарки	○	○	○	○

14. Якої шкоди, на Вашу думку, люди завдають собі, якщо . . .

	Жодної	Дуже малої	Невеликої	Значної	Я не знаю
Вживають марихуану 1-2 рази	○	○	○	○	○
Вживають марихуану увесь час	○	○	○	○	○
Вживають кокаїн 1-2 рази	○	○	○	○	○
Вживають кокаїн	○	○	○	○	○
«нюхають» інгалятори 1-2 рази	○	○	○	○	○
«нюхають» інгалятори увесь час	○	○	○	○	○
вживають метамфетамін 1-2 рази	○	○	○	○	○
вживають метамфетамін увесь час	○	○	○	○	○
Іноді вживають тютюн	○	○	○	○	○
Вживають тютюн увесь час	○	○	○	○	○
Іноді вживають алкоголь *	○	○	○	○	○
Вживають алкоголь увесь час*	○	○	○	○	○

15. Яке з наведених нижче тверджень найкраще описує Ваше ставлення до вживання алкоголю?*

- o Я ніколи не пив і не питиму алкогольних напоїв (більше, ніж кілька ковтків).
- o Я ніколи не пив алкогольних напоїв (більше, ніж кілька ковтків), але, можливо, спробую у майбутньому
- o Я пив алкогольні напої (більше, ніж кілька ковтків), але не планую робити це надалі.
- o Я пив алкогольні напої (більше, ніж кілька ковтків) і, можливо, питиму знову.

16. Коли я відповідав на запитання про алкоголь . . .

- ○ Я був чесним
- ○ Я дещо перебільшив
- ○ Я дещо применшив

17. . Яке з наведених нижче тверджень найкраще описує Ваше ставлення до вживання наркотиків?

- ○ Я ніколи не вживав і не вживатиму наркотики.
- ○ Я ніколи не вживав наркотики, але, можливо, спробую у майбутньому.
- ○ Я вживав наркотики, але не планую робити це надалі.
- ○ Я вживав наркотики і , можливо, вживатиму знову.

18. Якщо б хтось з Ваших близьких друзів запропонував Вам спробувати щось з наведеного нижче, чи легко було б Вам відмовитися?*

	Дуже легко	Легко	Дещо складно	Дуже складно	Я б погодився спробувати.
Алкоголь	○	○	○	○	○
Цигарки	○	○	○	○	○
Легкі наркотики	○	○	○	○	○
Важкі наркотики	○	○	○	○	○

19. Чи був у Вас коли-небудь урок, пов'язаний з небезпекою вживання алкоголю та наркотиків? (обведіть правильний варіант відповіді).

Так Ні Не впевнений

20. Чи використовував Ваш вчитель уроки з програми «Майбутнє починається сьогодні?» (обведіть правильний варіант відповіді)*

Так Ні Не впевнений

21. Які з наступних рішень, на Вашу думку, є найкращими, щоб сказати «НІ» наркотикам/алкоголю. (Виберіть 1-2 варіанти відповідей)

○	Розмова з вчителями	○	Розмова з батьками
○	Релігія/церква	○	Заняття спортом
○	Хороші друзі	○	Детальніше ознайомлення з проблемою алкогольної/наркотичної залежності
○	Не робити нічого	○	Ваш варіант: _____

APPENDIX D – STUDENT POST-TEST SURVEY

#

The AMERICAN DRUG AND ALCOHOL SURVEY II

Date: _____

1. Age: _____

2. Grade/Form:

6th	7th	8th	9th	10th	11-12th
○	○	○	○	○	○

3. Gender

Male	Female
○	○

4. How much would your friends try to stop you from getting drunk?

○	A lot
○	Some
○	Not much
○	Not at all

5. How often have your friends asked you to get drunk?

○	A lot
○	Some
○	Not much
○	Not at all

6. *How much do you think people harm themselves (physically or otherwise) if they. . .

	No harm	Very little harm	Some harm	A lot of harm	I don't know
Used alcohol 1 or 2 times	○	○	○	○	○
Use alcohol regularly	○	○	○	○	○
Get drunk 1 or 2 times	○	○	○	○	○
Get drunk regularly	○	○	○	○	○

7. How many of your friends. . .

	None	1 or 2	Some of them	Most of them
Get drunk once in a while	○	○	○	○
Get drunk almost every weekend	○	○	○	○

8. How much would your parents care if you. . .

	A lot	Some	Not much	Not at all
Used tobacco	○	○	○	○
Drank some alcohol	○	○	○	○
Got drunk	○	○	○	○
Used gateway drugs (like marijuana)	○	○	○	○

9. How easy do you think it would be for you to get each of the following types of drugs if you wanted some?

	Very easy	Fairly easy	Hard	Very Hard	Probably Impossible
Alcohol	○	○	○	○	○
Marijuana	○	○	○	○	○
Stimulants, speed	○	○	○	○	○
Cocaine	○	○	○	○	○
"Sniff" something like glue, gasoline, etc.	○	○	○	○	○
LSD (acid)	○	○	○	○	○
Other hallucinogen	○	○	○	○	○
Meth	○	○	○	○	○
Heroin	○	○	○	○	○
Narcotic painkillers	○	○	○	○	○
Cigarettes	○	○	○	○	○

10. How much would your friends try to stop you from . . .

	A lot	Some	Not much	Not at all
Using marijuana	○	○	○	○
Using cocaine	○	○	○	○
"Sniffing" glue or gas, etc.	○	○	○	○
Using meth, speed, crank	○	○	○	○
Using narcotic painkillers	○	○	○	○
Smoking cigarettes	○	○	○	○

11. How much would you try to stop your friends from . . .

	A lot	Some	Not much	Not at all
Using marijuana	○	○	○	○
Using cocaine	○	○	○	○
"Sniffing" glue or gas, etc.	○	○	○	○
Using meth, speed, crank	○	○	○	○
Using narcotic painkillers	○	○	○	○
Smoking cigarettes	○	○	○	○

12. How many of your friends do each of the following. . .

	None	A few	Most of them	All of them
Use marijuana	○	○	○	○
Use cocaine	○	○	○	○
"Sniff" glue or gas, etc.	○	○	○	○
Use meth, speed, crank	○	○	○	○
Use narcotic painkillers	○	○	○	○
Smoke cigarettes	○	○	○	○

13. How often have your friends asked you to use. . .

	Very often	Some	Not very often	Not at all
Marijuana	○	○	○	○
Cocaine	○	○	○	○
"Sniff" glue or gas, etc.	○	○	○	○
Meth, speed, crank	○	○	○	○
Narcotic painkillers	○	○	○	○
Cigarettes	○	○	○	○

14. How much do you think people harm themselves if they. . .

	No harm	Very little harm	Some harm	A lot of harm	I don't know
Use marijuana 1-2 times	○	○	○	○	○
Use marijuana regularly	○	○	○	○	○
Use cocaine 1-2 times	○	○	○	○	○
Use cocaine regularly	○	○	○	○	○
"Sniff" inhalants 1-2 times	○	○	○	○	○
"Sniff" inhalants regularly	○	○	○	○	○
Use meth 1-2 times	○	○	○	○	○
Use meth regularly	○	○	○	○	○
Use tobacco occasionally	○	○	○	○	○
Use tobacco regularly	○	○	○	○	○
Drink alcohol occasionally*	○	○	○	○	○
Drink alcohol regularly*	○	○	○	○	○

15. If one of your close friends asked you to use any of the following, how easy would it be for you to say no?*

	Very easy	Easy	Somewhat Hard	Very hard	I wouldn't say no.
Alcohol	○	○	○	○	○
Cigarettes	○	○	○	○	○
Gateway drugs	○	○	○	○	○
Heavy drugs	○	○	○	○	○

16. Have you ever had a class that taught you about the risks of alcohol and other drugs? (Please circle).

Yes No Not sure

17. Has your teacher ever used lessons from the *Future Begins Today* program? (Please circle).*

Yes No Not sure

18. How much do you agree with the following statements about *Future Begins Today?*

	I agree very much	I agree somewhat	I disagree	I strongly disagree	I did not take this class
I enjoy the lessons.	○	○	○	○	○
The lessons in this class are very interactive (involve the students).	○	○	○	○	○
The lessons have taught me how to make goals.	○	○	○	○	○
The lessons have helped me learn how to refuse drugs and alcohol.	○	○	○	○	○

19. What did you like best about the lessons from *Future Begins Today*?*

_____

20. How much do you agree with the following statements about your teacher who uses *Future Begins Today* lessons?*

	I agree very much	I agree somewhat	I disagree	I strongly disagree	I did not take this class
I like my teacher.	○	○	○	○	○
My teacher understands the problems faced by teenagers.	○	○	○	○	○
My teacher has taught me how to refuse drugs and alcohol.	○	○	○	○	○
My teacher thinks that these lessons are important.	○	○	○	○	○

21. In your opinion, which of the following are the best solutions to refusing drugs/alcohol? (Choose 1-2)

○	Talk with my teachers	○	Talk with my parents
○	Religion/church	○	Have other activities (such as sports)
○	Choose good friends	○	Learn more about drugs and alcohol addictions
○	Do nothing	○	Other: _____

#

Американське дослідження щодо зловживання алкоголем та наркотиками II

Дата :

1. **Вік: _____**

2. **Клас:**

6-й	7-й	8-й	9-й	10-й	11-12-й
○	○	○	○	○	○

3. **Стать**

Чоловіча	Жіноча
○	○

4. **Як часто Ваші друзі просять Вас не вживати алкоголь?**

○	Часто
○	іноді
○	рідко
○	ніколи

5. **Як часто Ваші друзі просили Вас вживати алкоголь (напитися)?**

○	часто
○	іноді
○	рідко
○	ніколи

6. ***Якої шкоди (фізичної чи іншої), на Вашу думку, завдає людині алкоголь, якщо вона . . .**

	Жодної шкоди	Дуже малої шкоди	Невеликої школи	Значної шкоди	Я не знаю
Вживала алкоголь 1-2 рази	○	○	○	○	○
Увесь час вживає алкоголь	○	○	○	○	○
Напилася 1-2 рази	○	○	○	○	○
Увесь час напивається	○	○	○	○	○

7. **Скільки Ваших друзів. . .**

	Ніхто	1 або 2	Декілька	Більшість
Іноді напиваються	○	○	○	○
Напиваються майже щовихідних	○	○	○	○

8. **Чи турбувалися б Ваші батьки, якщо б Ви. . .**

	Так	Трішки	Майже ні	Ні
Вживали тютюн	○	○	○	○
Вживали алкоголь	○	○	○	○
Напивалися	○	○	○	○
Вживали легкі наркотики (марихуану)	○	○	○	○

9. Як Ви гадаєте, чи легко було б Вам дістати якийсь із перелічених нижче наркотиків?

	Дуже легко	Легко	Складно	Дуже складно	Неможливо
Алкоголь	○	○	○	○	○
Марихуана	○	○	○	○	○
Стимулятори	○	○	○	○	○
Кокаїн	○	○	○	○	○
«Щось для нюхання» (клей, бензин)	○	○	○	○	○
ЛСД	○	○	○	○	○
Інші галюциногени	○	○	○	○	○
метамфетаміни	○	○	○	○	○
Героїн	○	○	○	○	○
Наркотичні знеболюючі засоби	○	○	○	○	○
Цигарки	○	○	○	○	○

10. Чи намагалися б Ваші друзі застерегти Вас від . . .

	Так	Трішки	Майже ні	Ні
Вживання марихуани	○	○	○	○
Вживання кокаїну	○	○	○	○
«Нюхання» клею, бензину	○	○	○	○
Вживання метамфетамінів, стимуляторів, гвинту	○	○	○	○
Вживання наркотичних знеболюючих засобів	○	○	○	○
Паління цигарок	○	○	○	○

11. Чи намагалися б Ви застерегти своїх друзів від . . .

	Так	Трішки	Майже ні	Ні
Вживання марихуани	○	○	○	○
Вживання кокаїну	○	○	○	○
«Нюхання» клею, бензину	○	○	○	○
Вживання метамфетамінів, стимуляторів, гвинту	○	○	○	○
Вживання наркотичних знеболюючих	○	○	○	○
Паління цигарок	○	○	○	○

12. Скільки Ваших друзів . . .

	Жоден	Декілька	Більшість	Усі
Вживають марихуану	○	○	○	○
Вживають кокаїн	○	○	○	○
«Нюхають» клей, бензин	○	○	○	○
Вживають метамфетаміни, стимулятори, гвинт	○	○	○	○
Вживають наркотичні знеболюючі	○	○	○	○
Палять	○	○	○	○

13. Ваші друзі пропонували Вам спробувати . . .

	Дуже часто	Інколи	Рідко	Ніколи
Марихуану	○	○	○	○
Кокаїн	○	○	○	○
«нюхати» клей, бензин	○	○	○	○
метамфетаміни, стимулятори, гвинт	○	○	○	○
Наркотичні знеболюючі	○	○	○	○
цигарки	○	○	○	○

14. Якої шкоди, на Вашу думку, люди завдають собі, якщо . . .

	Жодної	Дуже малої	Невеликої	Значної	Я не знаю
Вживають марихуану 1-2 рази	○	○	○	○	○
Вживають марихуану увесь час	○	○	○	○	○
Вживають кокаїн 1-2 рази	○	○	○	○	○
Вживають кокаїн	○	○	○	○	○
«нюхають» інгалятори 1-2 рази	○	○	○	○	○
«нюхають» інгалятори увесь час	○	○	○	○	○
вживають метамфетамін 1-2 рази	○	○	○	○	○
вживають метамфетамін увесь час	○	○	○	○	○
Іноді вживають тютюн	○	○	○	○	○
Вживають тютюн увесь час	○	○	○	○	○
Іноді вживають алкоголь *	○	○	○	○	○
Вживають алкоголь увесь час*	○	○	○	○	○

15. Якщо б хтось з Ваших близьких друзів запропонував Вам спробувати щось з наведеного нижче, чи легко було б Вам відмовитися?*

	Дуже легко	Легко	Дещо складно	Дуже складно	Я б погодився спробувати.
Алкоголь	○	○	○	○	○
Цигарки	○	○	○	○	○
Легкі наркотики	○	○	○	○	○
Важкі наркотики	○	○	○	○	○

16. Чи був у Вас коли-небудь урок, пов'язаний з небезпекою вживання алкоголю та наркотиків? (обведіть правильний варіант відповіді).

Так Ні Не впевнений

17. Чи використовував Ваш вчитель уроки з програми «Майбутнє починається сьогодні?» (обведіть правильний варіант відповіді)*

Так Ні Не впевнений

18. Якщо б хтось з Ваших близьких друзів запропонував Вам спробувати щось з наведеного нижче, чи легко було б Вам відмовитися?*

	Дуже легко	Легко	Дещо складно	Дуже складно	Я б погодився спробувати.
Алкоголь	○	○	○	○	○
Цигарки	○	○	○	○	○
Легкі наркотики	○	○	○	○	○
Важкі наркотики	○	○	○	○	○

19. Чи був у Вас коли-небудь урок, пов'язаний з небезпекою вживання алкоголю та наркотиків? (обведіть правильний варіант відповіді).

Так Ні Не впевнений

20. Чи використовував Ваш вчитель уроки з програми «Майбутнє починається сьогодні?» (обведіть правильний варіант відповіді)*

Так Ні Не впевнений

21. Чи погоджуєтесь Ви з наступними твердженнями про програму «Майбутнє починається сьогодні»*?*

	Цілком погоджуюсь	Частково погоджуюсь	Не погоджуюсь	Зовсім не погоджуюсь	У мене не було таких уроків
Мені подобаються ці уроки.	○	○	○	○	○
Ці уроки дуже інтерактивні.	○	○	○	○	○
Ці уроки навчили мене ставити перед собою мету.	○	○	○	○	○
Ці уроки навчили мене казати «НІ» алкоголю та наркотикам.	○	○	○	○	○

22. Що Вам найбільше сподобалося в уроках програми «Майбутнє починається сьогодні»?*

_____

23. Чи погоджуєтесь Ви з наступними твердженнями про свого вчителя, який використовує програму «Майбутнє починається сьогодні»?*

	Цілком погоджуюсь	Частково погоджуюсь	Не погоджуюсь	Зовсім не погоджуюсь	У мене не було таких уроків
Я люблю свого вчителя.	○	○	○	○	○
Мій вчитель розуміє проблеми, з якими стикаються підлітки.	○	○	○	○	○
Мій вчитель навчив мене відмовлятися від алкоголю та наркотиків.	○	○	○	○	○
Мій вчитель вважає, що ці уроки є дуже важливими.	○	○	○	○	○

24. Які з наступних рішень, на Вашу думку, є найкращими, щоб сказати «НІ» наркотикам/алкоголю. (Виберіть 1-2 варіанти відповідей)

○	Розмова з вчителями	○	Розмова з батьками
○	Релігія/церква	○	Заняття спортом
○	Хороші друзі	○	Детальніше ознайомлення з проблемою алкогольної/наркотичної залежності
○	Не робити нічого	○	Ваш варіант: _____

APPENDIX E – TEACHER SURVEY

TEACHER SURVEY

Date: _____

1. **How do you classify your position at THIS school, that is, the activity at which you spend most of your time during the school year?**

   - Teacher of elementary school
   - Teacher of high school
   - School principal
   - Deputy principal
   - Teacher of out-of-school education
   - Director of out-of-school education establishment
   - Teacher/administrator of TRI institute
   - Other professional staff (e.g., psychologist, social educator)
   - Other (please specify):_____

2. **What are the ages of your pupils?**

   - 9 years or less
   - 10
   - 11
   - 12
   - 13
   - 14
   - 15 and above
   - I do not teach pupils.

3. **You took part, as a participant in the Conferences of International School Project:**

	Yes	**No**
Three- or four- day conference, the "Future begins today"	○	○
FLT (Future Leader Training) conference	○	○
A conference for students and English teachers	○	○
A conference for training in "Family Stronghold" curriculum	○	○

4. **In your opinion, how serious are these problems among pupils at YOUR school?**

	Serious problem	**Moderate problem**	**Minor problem**	**Not a problem**
Tardiness	○	○	○	○
Absenteeism	○	○	○	○
Dropping out of school	○	○	○	○
Lack of motivation for class work	○	○	○	○
Cheating	○	○	○	○
Use of cell phones during class work	○	○	○	○
Poor health	○	○	○	○
Cruel behavior towards other pupils	○	○	○	○
Use of alcohol	○	○	○	○
Use of drugs	○	○	○	○
Other problems:	○	○	○	○

5. **In previous ISP conferences, which roles have you performed?**

	Yes	No
Participant	○	○
Small Group Facilitator	○	○
Presenter	○	○
Director	○	○
Interpreter	○	○

6. **To what extent have you used the following ISP materials in THIS class?**

	All units/lessons	Some units/lessons	Not used at all
Future Begins Today curriculum	○	○	○
Family Stronghold curriculum	○	○	○
Additional videos	○	○	○

7. **In a typical school year (September-May), how many students do you expose to the FBT curriculum?**
   - □ None. I do not use the FBT curriculum.
   - □ 1-10
   - □ 11-20
   - □ 21-30
   - □ 31-40
   - □ 41-50
   - □ Other: _____

8. **If you do NOT use the FBT curriculum, please specify the reason.**
   - □ I dislike the structure and content of the curriculum.
   - □ I do not have the proper hours at school.
   - □ Administration of school does not give me permission for teaching it.
   - □ Parents disapprove teaching of this course for their children.
   - □ I am not a classroom teacher.

   Other:

   _____

9. **Have you taught lessons from the following units of the "Future Begins Today" curriculum?**

	Yes	No
1-Introduction	○	○
2-Drugs	○	○
3-Alcohol	○	○
4-Male/Female Relationships	○	○
5- Skills for Living	○	○
6-Conclusion	○	○

10. **How frequently do you teach lessons from the "Future Begins Today"?**

- Never
- 1 lesson each month
- 2-4 lessons each month
- More than 4 lessons each month

11. How much do you use the following ISP program elements (in your classroom)?

	Often	Sometimes	Never
Teaching students to dream	○	○	○
The active involvement of the students in the education process	○	○	○
Connection with parents	○	○	○
Personal student's journal	○	○	○

12. Would you recommend attending ISP conferences or teaching ISP curricula to other educators?

- Definitely
- Probably
- Possibly
- Probably not
- Definitely not

13. With how many colleagues have you shared the ISP materials since you were first exposed to the materials?

- None. I have NOT shared the ISP materials with my colleagues.
- 1-5
- 6-10
- 11-15
- 16-20
- Other: _____

14. What is your favorite component of the FBT curriculum?
Why?

15. What component of the FBT curriculum needs the most improvement?
Why?

16. Have you used the Family Stronghold Curriculum?

- Yes
- No

17. If yes, how has the Parenting Curriculum influenced the parents and students in your class?

18. Other comments?

UKRAINIAN VERSION

Дата _____

1. **Ваша посада:**

- Учитель початкової школи
- Учитель середньої школи
- Директор школи
- Заступник директора школи або інший адміністратор
- Педагог позашкільного закладу
- Директор позашкільного закладу
- Викладач/адміністратор інституту післядипломної освіти
- Інший фахівець освіти (шкільний психолог, соціальний педагог)
- Інше (що саме)_____

2. **Я якою віковою групою учнів Ви працюєте?**

- 9 років і молодші
- 10
- 11
- 12
- 13
- 14
- 15 і старші
- Я не викладаю учням в школі

3. **Який предмет Ви викладаєте?** _____

4. **Ви брали участь в конференціях/семінарах «Міжнародного шкільного проекту»:**

- Три- або чотириденній конференції «Майбутнє починається сьогодні»
- Конференції з підготовки лідерів «МШП»
- Англомовній конференції для вчителів і студентів
- Конференції «Родинна твердиня» (батьківська програма)

5. **Що, на Вашу думку, є найбільшими проблемами серед учнів Вашою школи?**

	Серйозна проблема	**Помірна проблема**	**Незначна проблема**	**Це не є проблема**
Запізнення	○	○	○	○
Прогули	○	○	○	○
Кидання навчання	○	○	○	○
Відсутність мотивації на навчання	○	○	○	○
Списування	○	○	○	○
Використання мобільних телефонів на уроках	○	○	○	○
Поганий стан здоров'я	○	○	○	○
Жорстокість по відношенню до інших учнів	○	○	○	○

Вживання алкоголю	○	○	○	○
Вживання наркотиків	○	○	○	○
Інші проблеми:	○	○	○	○

6. **Ви брали участь у попередніх конференціях «МШП» як (позначте все, що стосується)**
   - □ Учасник
   - □ Координатор малої групи
   - □ Лектор
   - □ Директор
   - □ Перекладач

7. **В якому обсязі Ви використовували матеріали «МШП» в цьому класі?**

	Усі розділи/уроки	Декілька розділів/уроків	Зовсім не використовувалось
«Майбутнє починається сьогодні»	○	○	○
«Родинна твердиня» (для батьків)	○	○	○
Додаткові відеоматеріали	○	○	○

8. **Протягом типового навчального року (вересень-травень) скільки учнів було залучено Вами до курсу «Майбутнє починається сьогодні»:**
   - □ Жодного, оскільки я не використовую посібник «МПС».
   - □ 1-10
   - □ 11-20
   - □ 21-30
   - □ 31-40
   - □ 41-50
   - □ Other: _____

9. **Якщо Ви не використовували посібник «МПС», вкажіть причину:**
   - □ Не подобається зміст і структура посібника.
   - □ Не має відповідних годин на викладання.
   - □ Адміністрація школи не дає дозволу на викладання.
   - □ Батьки не схвалюють навчання цьому курсу своїх дітей.
   - □ Я не класний керівник.
   - □ Інше_____

10. **Чи проводили Ви уроки з наступних розділів посібника «Майбутнє починається сьогодні»?**

	Так	Ні
1-Вступ	○	○
2-Наркотики	○	○
3-Алкоголь	○	○
4-Стосунки	○	○

5-Життєві навички	○	○
6-Факультативний курс	○	○

11. Як часто Ви проводите (проводили) уроки з курсу «Майбутнє починається сьогодні»?

- Ніколи
- 1 урок на місяць
- 2-4 уроки на місяць
- Більш ніж 4 уроки на місяць

12. Наскільки Ви використовували наступні елементи посібника?

	Часто	**Іноді**	**Ніколи**
Навчання учнів мріяти	○	○	○
Активне залучення учнів до навчального процесу	○	○	○
Зв'язок з батьками	○	○	○
Особистий щоденник учня	○	○	○

13. Чи порадите Ви своїм колегам відвідати конференції «МШП» або використовувати посібники?

- Неодмінно
- Скоріш за все
- Можливо
- Можливо ні
- Неодмінно ні

14. З якою кількістю колег ділились Ви матеріалами, як тільки-но з ними (матеріалами) познайомились ?

- Ніякою. Я не ознайомлювала(-вав) колег з матеріалами посібника
- 1-5
- 6-10
- 11-15
- 16-20

Інше: _____

15. Який компонент посібника «Майбутнє починається сьогодні» Вам найбільше подобається? Чому?

16. Який компонент «МПС» потребує подальшого опрацювання? Чому?

17. Чи використовували ви посібник «Родинна твердиня»?

- Так
- Ні

18. Якщо так, то як він вплинув на батьків і учнів Вашого класу?

19. Маєте щось додати?

APPENDIX F – TEACHER INSTRUCTIONS

TEACHER INSTRUCTIONS
ENGLISH VERSION

Dear Fellow Educator,
Thank you so much for agreeing to participate in research project analyzing the effectiveness of the *Future Begins Today* curriculum. Your assistance will greatly help the leaders of the International School Project as they revise and expand their programs. In order to provide the most accurate research results, please help us in the following ways:

1. Please do NOT teach Units 2 or 3 of the *Future Begins Today* curriculum until after October 1, 2013.
2. Anne Marie Gewin will be visiting Ukraine during the week of September 20th. At this time, she will be available to answer your questions and provide assistance in delivering the first student survey.
3. Before pupils receive and answer the survey, they must receive written permission from their parents. These consent forms will be provided to you.
4. The student survey should not take more than 30 minutes to complete during class. Please read the following instructions to the pupils:

Good morning/afternoon Pupils:
Today we are going to give you a brief survey that asks your opinions about drug and alcohol use. There are no right or wrong answers to the survey. If you do not feel comfortable responding to a particular question, you are not required to answer the question. If you do not understand a question you do are not required to provide an answer. You do not receive a grade for this survey and your participation is voluntary. However, we would appreciate your honest efforts and answers because this information will help the International School Project as they work to create the best programs for you. Please do NOT write your name anywhere on the survey form. This survey will be confidential. Also, please do NOT discuss the survey with other pupils. Thank you so much for your participation.

5. If you are planning to teach the *Future Begins Today* curriculum during the Fall 2013 term, please try to finish Units 2-3 by December 15, 2013.
6. **(For teachers who are using the *Future Begins Today* curriculum)***:* After you have completed Units 2-3 with your pupils, please administer the second survey between December 10-20th.
7. **(For teachers who are NOT using the *Future Begins Today* curriculum)*:*** Please administer the second survey between December 10-20th.
8. **Please return all surveys (sealed in the envelope) to Olesia Sushko.**
9. **Important: Please do NOT read the pupils' responses.** You will be given a summary at the conclusion of the study, but it is very important to protect the confidentiality of responses.

Інструкція для учителя

Шановні колеги-педагоги!
Дякуємо за те, що погодились брати участь у дослідницькому проекті, що аналізує ефективність курсу «Майбутнє починається сьогодні». Ваша участь допоможе керівництву «Міжнародного шкільного проекту» у розробці своїх програм. Для того, щоб забезпечити достовірність результатів дослідження, будь ласка, допоможіть нам наступним чином:

1. Не викладайте розділів 2 і 3 посібника «Майбутнє починається сьогодні» до 1 жовтня 2013
2. Анна Марія Гевін відвідає Україну протягом тижня з 20-го вересня. Вона відповість на всі запитання, що пов'язані з першим опитуванням учнів.
3. Перед тим, як учні почнуть працювати над опитуванням, вони мають отримати письмову згоду батьків.
4. Відповіді на запитання опитування повинні зайняти не більше 30 хвилин. Прочитайте наступну інструкцію учням:

Доброго ранку/дня, учні!
Сьогодні ми проведемо невеличке дослідження. Нам важливо знати вашу думку про вживання наркотиків і алкоголю. Немає правильних і неправильних відповідей на цю анкету. Якщо вам не дуже зручно відповідати на певні запитання, то відповідати не обов'язково. Якщо ви не зовсім розумієте запитання, можна не відповідати. Ніяких оцінок за цю роботу ви не отримуєте. Ваша участь цілком добровільна. Проте, ми будемо дуже вдячні за ваші відверті відповіді. Це тому, що вони допоможуть «Міжнародному шкільному проекту» розробити якнайкращі програми для вас. Будь ласка, не вказуйте своє прізвище ніде в цій анкеті. Дослідження конфіденційне. Також, не обговорюйте анкету з іншими учнями. Дякуємо за участь.

5. Якщо Ви плануєте викладати курс «Майбутнє починається сьогодні» у першій чверті, завершіть розділи 2 і 3 до 15 грудня 2013 р.
6. **(Для вчителів, які використовують посібник «Майбутнє починається сьогодні»)**: Після завершення розділу 2-3, поведіть друге опитування таким же чином. Якщо можливо, зробіть це 10-20 грудня 2013 р.
7. **(Для вчителів, які не використовують посібник «Майбутнє починається сьогодні»)**: Організуйте проведення другого опитування таким же чином. Якщо можливо, зробіть це 10-20 грудня 2013 р.
8. **Поверніть усі анкети Олесі Сушко (у заклеєному конверті).**
9. **Важливо: будь ласка, не читайте відповідей учнів.** Дуже важливо зберегти конфіденційність відповідей. Після обробки анкет, по завершенню дослідження, Вам будуть надані реузультати.

APPENDIX G – PASSIVE CONSENT FORMS

Youth Attitudes on Drugs and Alcohol

Parental Consent Form – for Students)

Explanation of Research Study

Principal Investigator(s): Anne Marie Gewin
Faculty Supervisor: Bobby Hoffman, Ph.D.
Investigational Site(s): Drohobych Schools, Drohobych rayon, Ukraine

Introduction: Researchers at the University of Central Florida (UCF) study many topics. To do this we need the help of people who agree to take part in a research study. You are being asked to allow your child to take part in a survey which will include about 200 pupils in Ukraine. Your child is being invited to take part in this research study because he or she is a pupil at a school that teaches the *Future Begins Today* program.

The person doing this research is Anne Marie Gewin of the International School Project. Because the researcher is a masters student at the University of Central Florida, she is being guided by Dr. Bobby Hoffman a UCF faculty supervisor in the Department of Education.

What you should know about a research study:

- Someone will explain this research study to you.
- A research study is something you volunteer for.
- Whether or not you take part is up to you.
- You should allow your child to take part in this study only because you want to.
- You can choose not to take part in the research study.
- You can agree to take part now and later change your mind.
- Whatever you decide it will not be held against you or your child.
- Feel free to ask all the questions you want before you decide.

Purpose of the research study: The purpose of this survey is to help The International School Project evaluate the needs of students and analyze the effectiveness of their programs.
What your child will be asked to do in the study: Your child will be asked to complete two short surveys in class. These surveys will ask about the health behaviors of students ages 10-14. The surveys will ask students about their opinions about school programs, tobacco, alcohol, and other drug use. Each survey should not require more than 30 minutes to complete. Also, your child may be randomly selected to participate in a focus group discussion which is entirely optional. These focus group discussions may be audio recorded, but your child's name will not be identified in any way.
Financial disclosure statement: The researcher is not receiving any monetary compensation for completing this project.

Risks/Benefits: Completing survey will cause little or no risk to your child. The only potential risk is that some students might find certain questions to be sensitive. There are no expected benefits or payment to your child for taking part in this study.
Anonymous research: This study is anonymous. That means that no one, not even members of the research team, will know that the information your child gave came from him or her. The survey has been designed to protect your child's privacy**. Pupils will not put their names on the survey**. Also, no school or student will ever be mentioned by name in a report of the results.

Study contact for questions about the study or to report a problem: If you have questions, concerns, or complaints, or think the research has hurt your child talk to *Olesia Sushko, olesiasushko@yandex.ua.*
IRB contact about you and your child's rights in the study or to report a complaint: Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). This research has been reviewed and approved by the IRB. For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901. You may also talk to them for any of the following:

- Your questions, concerns, or complaints are not being answered by the research team.
- You cannot reach the research team.
- You want to talk to someone besides the research team.
- You want to get information or provide input about this research.

Please sign below if you DO NOT wish for your child to participate in this survey:

DO NOT SIGN THIS FORM AFTER THE IRB EXPIRATION DATE BELOW

Name of participant (child)

Signature of participant (child)*

Date

- ❑ Parent
- ❑ Guardian (See note below)

Signature of parent or guardian

Printed name of parent or guardian

PASSIVE PARENTAL CONSENT FORM (UKRAINIAN)

Як молодь ставиться до алкоголю і наркотиків

Інформація для отримання дозволу
Головний дослідник: Анна Марія Гевін
Науковий керівник : Роберт Хофман, доктор філософії
Територія досліду: дрогобицькі школи, Дрогобицький район, Україна

Інформація: Дослідники з університету Центральної Флориди, США (УЦФ) проводять дослідження з багатьох тем. Для цього нам потрібна допомога людей, які згодні брати участь у дослідженнях. Ми звертаємось до Вас з проханням дозволити Вашій дитині взяти участь в опитуванні до якого будуть залучені понад 200 учнів України. Ваша дитина запрошена до участі в цьому дослідницькому опитуванні тому що вона у своїй школі проходила навчання за курсом «Майбутнє починається сьогодні», який був розроблений американськими науковцями а партнерстві з українськими і російськими педагогами і є міжнародним проектом, який використовується у декількох країнах світу. Це дослідження проводить Анна Марія Гевін з організації «Міжнародний шкільний проект». Оскільки вона є студентом-магістром їй призначено наукового керівника, декана факультету освіти УЦФ доктора Боба Хофмана.

Що Ви маєте знати про дослідження:

- Вам пояснять сутність цього дослідження.
- Участь в дослідженні добровільна.
- Вам вирішувати чи брати участь чи ні.
- Ви дозволите своїй дитині брати участь в дослідженні лише тому, що Ви хочете цього.
- Ви можете відмовитись від участі в дослідженні.
- Ви можете погодитись але згодом змінити своє рішення.
- Щоб Ви не вирішили, це не буде використано проти Вас або Вашої дитини.
- Ставте будь-які питання до того, як приймете рішення.

Ціль дослідження: Ціллю досліду є допомогти «Міжнародному шкільному проекту» оцінити потреби учнів і проаналізувати ефективність програм цієї організації.

Про що спитають Вашу дитину в дослідженні: Вашій дитині буде запропоновано заповнити в класі дві анкети опитування. Вони стосуються питань здорового стилю життя учнів у віці 10-14 років. Учнів запитають про їхню думку стосовно шкільних програм, тютюнопаління, алкоголю і інших наркотиків. Для того, щоб відповісти на питання кожного з опитувань потрібно не більше 30 хвилин. Також, Вашу дитину, за її згодою, можуть вибрати для участі в таматичному обговоренні в групі. Це обговорення, можливо, буде записане на диктофон, але ім'я Вашої дитини не буде згадуватись ніяким чином.

Роз'яснення щодо фінансових питань: Дослідник не отримує жодної фінансової компенсації за участь в цьому проекті.

Риск/Винагорода: Участь в опитуванні не несе ніякого риску для Вашої дитини. Єдине, що можливе, це те, що деякі питання можуть здатися учням дещо чутливими. За участь у дослідженні ніякої винагороди або виплат учням не передбачено.
Анонімність дослідження: Це опитування анонімне. Це означає, що ніхто, навіть члени команди дослідників ніколи не дізнаються, що інформація Вашої дитини надійшла саме від неї. Опитування захищає приватну інформацію Вашої дитини. Учні не вказують своє ім'я і при опитуванні. При обробці матеріалів не будуть згадані ані школа, ані прізвище учня.
Контакти стосовно дослідження: Якщо Ви маєте запитання, сумніви або скарги стосовно дослідження зверніться до Олесі Петрівни Сушко olesiasushko@yandex.ua
Контакти в УФЦ стосовно участі в дослідженні: Дослідження в Університеті Центральної Флориди (УЦФ) з залученням людей проводяться під наглядом Рецензійної комісії (РК УЦФ). Це дослідження схвалено цією установою. За інформацією стосовно прав учасників дослідження звертайтесь: Institutional Review Board, University of Central Florida, Office of Research and Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 або за телефоном 1(407) 823 2901. Можете звертатись, якщо:

- Маєте запитання, клопотання або скарги, які не може вирішити дослідницька команда.
- Не можете зв'язатися з дослідницької командою.
- Хочете поговорити з кимось крім дослідницької команди.
- Хочете отримати інформацію або щось додати до цього проекту.

Поставте свій підпис тут, якщо **Ви НЕ ХОЧЕТЕ**, щоб Ваша дитина брала участь в цьому дослідженні:_____

Ваш підпис нижче свідчить про те, Ви даєте дозвіл на участь Вашої дитини в дослідженні

Дата _____
Батько/мати
Опікун (див. коментар внизу)

Ім'я і прізвище учасника (дитини) ----------
Підпис учасника (дитини)*_____
Підпис одного з батьків або опікунів
_____
П.І.Б. одного з батьків або опікунів
_____

Згода

- Одержана
- Не одержана, тому що РК не вважає згоду дитини обов'язковою

Примітка для одержання дозволу опікуна: Особа може надати дозвіл лише у разі якщо вона надасть документ, що підтверджує її опікунські права. Додайте копію цього документу до підписаного документу.

Youth Attitudes on Drugs and Alcohol

Teacher Informed Consent

Principal Investigator(s): Anne Marie Gewin
Faculty Supervisor: Bobby Hoffman, Ph.D.
Investigational Site(s): Drohobych Schools, Drohobych rayon, Ukraine

Introduction: Researchers at the University of Central Florida (UCF) study many topics. To do this we need the help of people who agree to take part in a research study. You are being to take part in a survey which will include about 200 pupils in Ukraine. You are being invited to take part in this research study because your school teaches the *Future Begins Today* program. You must be 18 years of age or older to be included in the research study.

The person doing this research is Anne Marie Gewin of the International School Project. Because the researcher is a masters student at the University of Central Florida, she is being guided by Dr. Bobby Hoffman a UCF faculty supervisor in the Department of Education.

What you should know about a research study:

- Someone will explain this research study to you.
- A research study is something you volunteer for.
- Whether or not you take part is up to you.
- You should take part in this study only because you want to.
- You can choose not to take part in the research study.
- You can agree to take part now and later change your mind.
- Whatever you decide it will not be held against you.
- Feel free to ask all the questions you want before you decide.

Purpose of the research study: The purpose of this survey is to help The International School Project evaluate the needs of students and analyze the effectiveness of their programs.

What you will be asked to do in the study: You will be asked to administer two short surveys in class. Each survey should not require more than 30 minutes to complete. You also will be asked to complete two short surveys providing information about your use of the FBT curriculum. Also, your class may be randomly selected to participate in a focus group discussion which is entirely optional. You do not have to answer every question or complete every task. You will not lose any benefits if you skip questions or tasks.

Audio taping: In focus groups, you may be audio taped during this study. If you do not want to be audio taped, you will still be able to be in the study. Discuss this with the researcher or a

research team member. If you are audio taped, the tape will be kept in a locked, safe place. The tape will be erased or destroyed when the study is completed and no names will be used.
Financial disclosure statement: The researcher is not receiving any monetary compensation for completing this project.

Risks/Benefits: Completing survey will cause little or no risk. The only potential risk is that some students might find certain questions to be sensitive. There are no expected benefits or payment for taking part in this study.

Anonymous research: This study is anonymous. That means that no one, not even members of the research team, will know that the information came from you. The survey has been designed to protect privacy**. Pupils will not put their names on the survey**. Also, no school or student will ever be mentioned by name in a report of the results.

Study contact for questions about the study or to report a problem: If you have questions, concerns, or complaints, or think the research has hurt you talk to *Olesia Sushko, olesiasushko@yandex.ua.*

IRB contact about your rights in the study or to report a complaint: Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). This research has been reviewed and approved by the IRB. For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901. You may also talk to them for any of the following:

- Your questions, concerns, or complaints are not being answered by the research team.
- You cannot reach the research team.
- You want to talk to someone besides the research team.
- You want to get information or provide input about this research.

Withdrawing from the study:
If you decide to leave the research, there are no negative consequences. The sponsor can also end the research study early. We will tell you about any new information that may affect your health, welfare or choice to stay in the research.

Як молодь ставиться до алкоголю і наркотиків

Інформація для отримання дозволу

Головний дослідник: Анна Марія Гевін
Науковий керівник : Роберт Хофман, доктор філософії
Територія досліду: дрогобицькі школи, Дрогобицький район, Україна

Вступ: Дослідники з Університету Центральної Флориди (УЦФ) досіджують багато тем. Для цього нам потрібна допомога людей, які погоджуються брати участь в дослідницьких проектах. Запрошуємо Вас до участі в опитуванні, до якого будуть залучені 200 українських школярів. Ми запрошуемо Вас до цього дослідження тому що у Вашій школі вивчається курс «Майбутнє починається сьогодні». Вам має бути не менш ніж 18 років для того, щоб бути залученим до дослідження.

Це дослідження проводить Анна Марія Гевін з організації «Міжнародний шкільний проект». Оскільки вона є студентом-магістром їй призначено наукового керівника, декана факультету освіти УЦФ доктора Боба Хофмана.

Що необхідно знати про дослідження:

- Вам пояснять сутність цього дослідження.
- Участь в дослідженні добровільна.
- Вам вирішувати чи брати участь чи ні.
- Ви берете участь в цьому проекті тому що хочете цього.
- Ви можете відмовитись від участі в дослідженні.
- Ви можете погодитись але згодом змінити своє рішення.
- Що б Ви не вирішили, це не буде використано проти Вас.
- Ставте будь-які питання до того, як приймете рішення.

Ціль дослідження: Ціллю досліду є допомогти «Міжнародному шкільному проекту» оцінити потреби учнів і проаналізувати ефективність програм цієї організації.

Що Вас попросять зробити в цьому проекті: Вас попросять зробити в класі два коротеньких опитування. Кожне опитування потребує не більш, ніж 30 хвилин для відповідей. Також Вас попросять надати інформацію про те, як Ви використовуєте посібник «Майбутнє починається сьогодні», для чого Вам буде запропоновано дві анкети. Ще Вашому класу виборково буде запропоновано взяти участь у тематичному обговоренні. Ця вправа не є обовязковою. Не потрібно відповідати на всі запитання чи виконувати кожне завдання. Ви нічого не втрачаєте, якщо проігноруєте деякі запитання або завдання.

Аудіо запис:

Під час роботи в групах можливе проведення аудіо запису. Якщо Ви не бажаєте аудіо запису, Ви все одно можете брати участь у дослідженні. Обговоріть це з дослідником або з членом дослідницької команди. Якщо Вас буде записано на аудіо носії, вони будуть зберігатися у зачиненому надійному місці. Запис буде знищений, коли проект буде завершений. Прізвищ називатись не буде .

Роз'яснення щодо фінансових питань: Дослідник не отримує жодної фінансової компенсації за участь в цьому проекті.

Риск/Винагорода: Участь в опитуванні не несе ніякого риску. Єдине, що можливе, це те, що деякі питання можуть здатися учням дещо чутливими. За участь у дослідженні ніякої винагороди або виплат учням не передбачено.

Анонімність дослідженя: Дослідження анонімне. Це означає, що ніхто, навіть члени дослідницької команди, не дізнаються, що інформація походить саме від Вас. Проект зберігає приватність. Учні не вказують свої прізвища і імена в анкетах. Також, ані школа, ані учень не будуть згадані поіменно в підсумковому звіті.

Контакти стосовно дослідження: Якщо Ви маєте запитання, сумніви або скарги стосовно дослідження зверніться до Олесі Петрівни Сушко olesiasushko@yandex.ua

Контакти в УФЦ стосовно участі в дослідженні: Дослідження в Університеті Центральної Флориди (УЦФ) з залученням людей проводяться під наглядом Рецензійної комісії (РК УЦФ). Це дослідження схвалено цією установою. За інформацією стосовно прав учасників дослідження звертайтесь: Institutional Review Board, University of Central Florida, Office of Research and Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 або за телефоном 1(407) 823 2901. Можете звертатись, якщо:

- Маєте запитання, клопотання або скарги, які не може вирішити дослідницька команда.
- Не можете зв'язатися з дослідницької командою.
- Хочете поговорити з кимось крім дослідницької команди.
- Хочете отримати інформацію або щось додати до цього проекту.

Що буде, якщо Ви залишите проект:
Якщо Ви вирішите залишити дослідницький проект, це не буде мати ніяких негативних наслідків. Спонсор проекту також може завершити проект на ранній стадії. Ми повідомимо Вам будь-яку нову інформацію, що може стосуватись Вашого здоров'я, благополуччя чи вибору залишитися в проекті.
Проект спершу отримає згоду і дозвіл П.Я. Сушка, начальника відділу освіти Дрогобицької міськради. Батьки також отримають повідомлення про дослідження .

APPENDIX H – VERIFICATION OF TRANSLATION ACCURACY

VERIFICATION OF TRANSLATION ACCURACY

I, Gennadiy Skvortsov have reviewed the English and Ukrainian translations and verify that they are equivalent, except where noted. I am an independent translator who is not affiliated with the International School Project or paid by this organization.

Name (printed): Gennadiy Skvortsov

Signature: G

Date: 12.08.2013

APPENDIX I – LETTER OF PERMISSION

ВІДДІЛ ОСВІТИ
ВИКОНАВЧИХ ОРГАНІВ ДРОГОБИЦЬКОЇ МІСЬКОЇ РАДИ
вул. Шевченка,21, м. Дрогобич, Львівська обл., Україна, 82100, тел. 2-35-15, факс (03244) 2-35-15

08.08.2013 № 1181
На № від

ДОЗВІЛ

8 серпня, 2013

Цей документ підтверджує, що Анна-Марія Гевін, представник Міжнародного Шкільного Проекту, у співпраці з Університетом Центральної Флориди, отримала дозвіл проводити анкетування у школах мм. Дрогобича та Стебника Львівської області України.

З повагою,

Петро Сушко

Начальник відділу освіти виконавчих органів Дрогобицької міської ради

LETTER OF PERMISSION

August 8, 2013

To Whom it May Concern:

Anne Marie Gewin, of the International School Project and in cooperation with the University of Central Florida, has been granted permission to conduct research among schools in Drohobych and Stebnyk of L'viv Oblast, Ukraine.

Sincerely,

Peter Sushko

Department Head of Drohobych and Stebnyk

APPENDIX J – FACTOR ANALYSES MATRICES

Rotated Component Matrix of Pretest Survey

	Component														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
pre14j	.608														
pre14b	.774														
pre14d	.824														
pre14f	.660														
pre14h	.823														
pre14l	.796														
pre6b	.898														
pre6d	.900														
pre9k		.455									.651				
pre9c		.555													
pre9j		.640		.411											
pre9d		.713													
pre9b		.716													
pre9g		.751													
pre9f		.775													
pre9i		.787													
pre9h		.839													
pre10f			.668												
pre10c			.773												
pre10e			.883												
pre10d			.884												
pre10a			.893												
pre10b			.911												
pre12a				.756											
pre12d				.811											
pre12e				.865											
pre12b				.934											
pre11c					.694										
pre11a					.807										
pre11d					.826										
pre11b					.840										
pre11e					.870										
pre7b						.544									
pre12f						.707									
pre13f						.720									
pre5						.799									
pre7a						.834									

Rotated Component Matrix of Pretest Survey (continued)

	Component														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
pre6a							.439					.586			
pre14a							.600							-.608	
pre14k							.639								
pre14i							.650								
pre14e							.731								
pre14g							.734								
pre14c							.805								
pre8d								.806							
pre8b								.813							
pre8a								.852							
pre8c								.899							
pre13a									.545					.469	
pre13e									.746						
pre13c									.762						
pre13d									.800						
pre13b									.855						
pre15a										.786					
pre15c										.789					
pre15d										.820					
pre15b										.830					
pre9a											.677				
pre9e											.717				
pre6c												.877			
pre11f													.702		
pre12c															.855

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 8 iterations.

Rotated Component Matrix of Posttest Survey Questions

	Component												
	1	2	3	4	5	6	7	8	9	10	11	12	13
post9h	.884												
post9k	.580											-.634	
post9a	.592											-.638	
post9b	.710												
post9e	.710											-.424	
post9j	.819												
post9d	.832												
post9c	.833												
post9i	.838												
post9g	.841												
post9f	.850												
post12a		-.477				-.487							
post12b		-.713		.408									
post12c		-.498		.401									
post12d		-.698											
post12e		-.758											
post14b		.564									.539		
post14d		.690											
post14f		.758											
post14h		.709											
post14j		.705											
post14l		.720											
post6d		.653											.464
post10f			.528			.445							
post10c			.826										
post10a			.838										
post10b			.885										
post10e			.912										
post10d			.933										
post13a				.642							-.456		
post13c				.819									
post13d				.826									
post13e				.862									
post13b				.873									
post11f					.660								
post11a					.720								
post11c					.771								
post11d					.801								

Rotated Component Matrix of Posttest Survey Questions (continued)

	Component												
	1	2	3	4	5	6	7	8	9	10	11	12	13
post11e					.806								
post11b					.809								
post12f						-.734							
post7a						-.679							
post13f						-.547							
post6a						.612		.497					
post6c						.704							
post23c							.621						
post21c							.711						
post23a							.727						
post23b							.758						
post23d							.794						
post21b							.803						
post14i								.444					
post14a								.612			.563		
post14c								.801					
post14e								.616					
post14g								.844					
post14k								.502					
post15b									.776				
post15a									.834				
post8a										.840			
post8b										.869			
post6b													.742

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 10 iterations.

APPENDIX K – DESCRIPTIVE STATISTICS FOR FACTOR ANALYSES

Table of Composite Variables

Composite Variable Description	Items from Survey	N of Items	Mean		Variance		Standard Deviation		Cronbach's Alpha	
			Pre	Post	Pre	Post	Pre	Post	Pre	Post
Perceived Harm Regular Drug Use	14 (even), 6b, 6d	8	31.23	31.26	6.46	7.16	2.54	2.68	.917	.890
Perceived Access to Drugs	9a-k	11	25.77	28.21	81.15	124.49	9.01	11.16	.902	.944
Number Friends Who Stop You from Use	10a-f	6	20.81	21.51	30.65	24.66	5.54	4.97	.943	.941
Number Friends Who Use Drugs	12a-e	5	5.33	5.50	1.37	3.14	1.17	1.77	.796	.900
You Stop Friends from Use	11a-e	5	18.79	19.22	11.46	7.76	3.39	2.79	.937	.940
Perceived Harm Occasional Drug Use	14 (odds), 6a	7	22.02	22.75	12.23	19.33	3.50	4.40	.824	.870
Parental Care	8a-d	4	15.55	1.59	3.81	0.96	1.95	0.92	.958	.928
Friends Ask You to Use	13a-e	5	5.54	5.51	2.59	3.11	1.61	1.76	.810	.883
Ability to Refuse	15a-d	4	17.59	18.83	10.94	4.07	3.31	2.02	.861	.660
FBT Exposure	6 on teacher survey	3	n/a	4.86	n/a	6.95	n/a	2.64	n/a	.967
FBT Supplementary Materials	11 on teacher survey	4	n/a	7.21	n/a	13.80	n/a	3.72	n/a	0.95

APPENDIX L – CORRELATION TABLES OF DEPENDENT VARIABLES

Spearman's rho Correlations of Outcome Variables at Pretest

		Outcome Variables		
		Perceived Harm Occasional Use	Perceived Harm Regular Use	Perceived Ability to Refuse
Perceived Harm Occasional Use	Correlation Coefficient	1.000	.260**	.097
	Sig. (2-tailed)		.001	.206
Perceived Harm Regular Use	Correlation Coefficient	.260**	1.000	.079
	Sig. (2-tailed)	.001		.299
Perceived Ability to Refuse	Correlation Coefficient	.097	.079	1.000
	Sig. (2-tailed)	.206	.299	
Number of Friends Who are Users	Correlation Coefficient	-.026	-.161*	-.195*
	Sig. (2-tailed)	.738	.034	.010
Number of Friends Who Ask You to Use	Correlation Coefficient	-.111	-.200**	-.193*
	Sig. (2-tailed)	.145	.008	.011
Parental Concern	Correlation Coefficient	.202**	.117	.206**
	Sig. (2-tailed)	.008	.124	.007
Age	Correlation Coefficient	-.169*	.051	.089
	Sig. (2-tailed)	.027	.505	.245

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Spearman's rho Correlations of Outcome Variables at Posttest

		Outcome Variables		
		Perceived Harm Occasional Use	Perceived Harm Regular Use	Perceived Ability to Refuse
Perceived Harm Occasional Use	Correlation Coefficient	1.000	.266**	.306**
	Sig. (2-tailed)		.000	.000
Perceived Harm Regular Use	Correlation Coefficient	.266**	1.000	.074
	Sig. (2-tailed)	.000		.332
Perceived Ability to Refuse	Correlation Coefficient	.306**	.074	1.000
	Sig. (2-tailed)	.000	.332	
Number of Friends Who are Users	Correlation Coefficient	-.205**	-.306**	-.109
	Sig. (2-tailed)	.007	.000	.155
Number of Friends Who Ask You to Use	Correlation Coefficient	-.210**	-.190*	-.239**
	Sig. (2-tailed)	.006	.012	.002
Parental Concern	Correlation Coefficient	.146	.022	.198**
	Sig. (2-tailed)	.055	.774	.009
Exposure to FBT	Correlation Coefficient	.141	-.040	.096
	Sig. (2-tailed)	.065	.599	.209
Use of FBT Supplementary Materials	Correlation Coefficient	.353**	-.019	.211**
	Sig. (2-tailed)	.000	.803	.005
Age	Correlation Coefficient	-.506**	-.132	-.258**
	Sig. (2-tailed)	.000	.085	.001

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

APPENDIX M – MISSING VALUES ANALYSIS

Survey Items Missing at 5% or Greater

Survey Item	Pretest		Posttest	
	Missing		Missing	
	N	%	N	%
4	14	5.9%		
6a	35	14.7%	10	5.3%
6b	25	10.5%	10	5.3%
6c	34	14.3%	10	5.3%
6d	26	10.9%	13	6.9%
7b	15	6.3%	19	10.1%
9a	14	5.9%		
9b	16	6.7%		
9c	26	10.9%		
9d	20	8.4%	10	5.3%
9e	14	5.9%		
9f	33	13.9%		
9g	18	7.6%	10	5.3%
9h	29	12.2%		
9i	22	9.2%		
9j	21	8.8%	10	5.3%
9k	12	5.0%		
10b	13	5.5%		
10c	12	5.0%		
10d	14	5.9%		
10e	16	6.7%		
14a	51	21.4%	18	9.5%
14b	37	15.5%	12	6.3%
14c	62	26.1%	25	13.2%
14d	50	21.0%	18	9.5%
14e	90	37.8%	34	18.0%
14f	80	33.6%	28	14.8%
14g	88	37.0%	34	18.0%
14h	75	31.5%	30	15.9%
14i	36	15.1%	14	7.4%
14j	31	13.0%	11	5.8%
14k	33	13.9%		
14l	25	10.5%	10	5.3%
15a	n/a	n/a	31	16.4%
15b	n/a	n/a	30	15.9%
15c			22	11.6%
15d			18	9.5%

APPENDIX N – LETTER OF PERMISSION TO USE TABLE

Nicola Newton <n.newton@unsw.edu.au> Tue, Jun 18, 2013 at 12:01 AM
To: Anne Marie Gewin <annemarie.gewin@isponline.org>

Dear Anne,

Thanks for getting in touch and asking for permission to reprint this table. I'm very happy that you do so with referencing underneath it.

Best wishes,
Nickie.

Nicola Newton, PhD
Senior Research Fellow, National Drug and Alcohol Research Centre
Director, Prevention Stream, NHMRC Centre for Research Excellence in Mental Health and Substance Use
UNSW Medicine | University of New South Wales | Sydney | NSW 2052 | Australia

Tel: +61 (2) 9385 0159 | Mobile: +61 (0) 413 705554 | Fax: +61 (2) 9385 0222 |
Email: n.newton@unsw.edu.au |
Web: http://www.ndarc.med.unsw.edu.au |Web: http://www.comorbidity.edu.au |
UNSW ABN 57 195 873 179 CRICOS Provider Code 00098G

APPENDIX O – IRB PERMISSION LETTER

University of Central Florida Institutional Review Board Office of Research & Commercialization
12201 Research Parkway, Suite 501
Orlando, Florida 32826-3246
Telephone: 407-823-2901 or 407-882-2276
www.research.ucf.edu/compliance/irb.html

Approval of Human Research

From: **UCF Institutional Review Board #1 FWA00000351, IRB00001138**

To: **Anne M. Gewin**

Date: **August 23, 2013**

Dear Researcher:

On 8/23/2013, the IRB approved the following human participant research until

8/22/2014 inclusive: Type of Review: UCF Initial Review Submission Form
Project Title: Evaluating the Effectiveness of Culturally Relevant Substance Abuse Prevention in Ukraine Investigator: Anne M Gewin
IRB Number: SBE-13-09565
Funding Agency:
Grant Title:
Research ID: N/A

The scientific merit of the research was considered during the IRB review. The Continuing Review Application must be submitted 30days prior to the expiration date for studies that were previously expedited, and 60 days prior to the expiration date for research that was previously reviewed at a convened meeting. Do not make changes to the study (i.e., protocol, methodology, consent form, personnel, site, etc.) before obtaining IRB approval. A Modification Form **cannot** be used to extend the approval period of a study. All forms may be completed and submitted online at https://iris.research.ucf.edu .

If continuing review approval is not granted before the expiration date of 8/22/2014,

approval of this research expires on that date. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

Use of the approved, stamped consent document(s) is required. The new form supersedes all previous versions, which are now invalid for further use. Only approved investigators (or other approved key study personnel) may solicit consent for research participation. Participants or their representatives must receive a copy of the consent form(s).

In the conduct of this research, you are responsible to follow the requirements of the

Investigator Manual. On behalf of Sophia Dziegielewski, Ph.D., L.C.S.W., UCF IRB

Chair, this letter is signed by:

Signature applied by Joanne Muratori on 08/23/2013 10:37:42 AM EDT

IRB Coordinator

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