Annotated Bibliography: Parent-Based Interventions

**RCT**=Randomized Control Trial, **QE**=Quasi Experimental Design, **CS**=Case Study, **Anecdotal**=Anecdotal Evidence

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| Doumas et al. (2013) | RCT    | 268 parents             | Parent-based intervention group (PBI): parents received handbooks and were encouraged to discuss content with their teens  
 |                  |        |                         | Parent-based intervention group plus booster (PBI-B): in addition to PBI, parents received three booster brochures in the fall semester  
 |                  |        |                         | Control group                                                                       | PBI plus booster group compared to PBI and control groups showed:  
 |                  |        |                         |                                                                                    | significantly less increase in frequency of drinking to intoxication  
 |                  |        |                         |                                                                                    | significantly less increase in the peak drinking quantity  | 30    |
| Donavan et al. (2012) | RCT    | 558 participants, comprising 279 parent-teen dyads from 11 colleges and universities in the US | MyStudentBody-Parent  
 |                  |        |                         | Control group receiving seven electronic newsletters                               | Students whose parents received the intervention were more likely than students who parents did receive the intervention to use a range of protective behavioral strategies, particularly those related to manner of drinking and stopping/limiting drinking  | 30    |
| Fernandez et al. (2011) | RCT    | 851 first-year students and parents | Brief motivational intervention (BMI) modeled after BASICS  
 |                  |        |                         | PBI (a handbook intervention modified from Turrisi et al. (2001))                   | BMI intervention significantly reduced the onset of heavy episodic drinking and alcohol-related consequences at 10 and 22 months.  
 |                  |        |                         |                                                                                | PBI intervention alone did not reduce onset of growth of heavy episodic drinking.  
 |                  |        |                         |                                                                                | BMI and PBI combined group showed significant reductions in alcohol-related consequences, but not heavy episodic drinking rates.  | 0     |
| Wood et al. (2010) | RCT    | 1,014 parent-student dyads | BMI (based on the BASICS program)  
 |                  |        |                         | PBI (a handbook intervention modified from Turrisi et al. (2001))                   | BMI participants were less likely than non-BMI participants to transition into heavy episodic drinking and to begin experiencing alcohol-related consequences.  
 |                  |        |                         |                                                                                | The combination of BMI & PBI further decreased the likelihood that participants began experiencing consequences  
 |                  |        |                         |                                                                                | PBI alone did not reduce growth or delay of the onset of heavy episodic drinking or consequences  
 |                  |        |                         |                                                                                | Descriptive norms mediated the impact of BMI on reducing the likelihood of transitioning into heavy episodic drinking and experiencing consequences  | 0     |
| Ichiyama et al. (2009) | RCT    | 724 incoming freshmen | Parent-based intervention group (PBI): parents received handbooks and discussed content with their teens  
 |                  |        |                         | Intervention-as-usual control group (IAU): parents received alcohol information fact sheet and conversed with teens about responsible alcohol use  | 82.5% of parents indicated that they read “most” or “all” of the handbook and 86.9% of parents were “mostly” or “very” satisfied with the handbook  
 |                  |        |                         |                                                                                | Women in PBI condition less likely to transition into drinking status during their freshman year  
 |                  |        |                         |                                                                                | Women in PBI condition showed less growth in the number of drinks consumed per week  | 24    |
| Turrisi et al. (2010) | RCT    | 1,275 | BASICS only; a 45-60 minute | Combined group reported significantly less | 0 |
Efficacy Research


**Overview:** This study evaluated the effectiveness of a parent-based intervention (PBI) in reducing drinking among first-year college students. Students were assigned to one of three conditions: PBI, PBI plus booster brochures, and an assessment only control group.

- **Parent-based intervention:**
  Parents received a handbook intervention modified from Turrisi et al. (2001) and a letter explaining the intervention and instructions to read the handbook and discuss information with their college student prior to the fall semester.

- **Parent-based intervention plus booster (PBI-B):**
  In addition to the letter and handbook, parents received three brochures sent early in the fall semester. Each brochure contained information reminding parents of the importance of encouraging protective behaviors, discouraging risky behaviors, and keeping the lines of communication open.

**Outcomes:**
- Typical weekly drinking quantity
- Frequency of drinking to intoxication
- Peak drinking quantity
- Frequency of binge drinking

**Results:**
- Compared to the PBI and control-only group, at four months the PBI-B group had significantly:
  - Less increase frequency of drinking to intoxication
  - Lower peak drinking quantity for students
- Students in the PBI-B group reported a 35% increase in frequency of drinking to intoxication compared to a greater than 100% increase in both the PBI group and the control group
- Students in the PBI-B group reported a 30% increase in peak drinking quantity compared to a greater than 90% increase in both the PBI group and the control group

This study extends the research literature by using a procedure that more likely replicates how campuses might use the parent handbook in a real-world setting. They did not ask parents to complete an assessment or provide incentives to parents to ensure that parent would read the handbook as a typical campus would be unlikely to require parents to take these steps.
The authors conclusions: Booster brochures increased the effectiveness of PBIs.


Overview: The purpose of this study was to test the efficacy of an online parent-based intervention designed to (1) increase communication between parents and students about alcohol and (2) reduce risks associated with alcohol use to students. A total of 558 participants, comprising 279 parent–teen dyads from 11 colleges and universities in the US, were enrolled in the randomized, controlled study.

Intervention: Parent/student dyads were categorized as one of eight combinations on the basis of parent/teen gender and presence/absence of past teen substance use. Parents in the experimental-group received MyStudentBody-Parent. The seven sections of MyStudentBody-Parent are: 1. College Trends, focusing on AOD education with emphasis on correctly misperceptions; 2. Share the Facts with Your Child; 3. Communicating About the Transition; 4. Prevention Strategies; 5. Warning Signs; 6. Support for Students; and 7. Rules and Regulations. Parents were instructed to review two sections of the website per week over a four-week period. The time commitment was 20 minutes per session for 160 minutes total.

The control group material consisted of seven electronic newsletters sent to parents two per week via email. The content focused on AOD use and risks, but was educational and did not emphasize communication skill-building.

Results: The intervention did not reduce binge drinking among students.

The findings suggested that parents who participated in the online intervention were more likely than parent in the e-newsletter control group to:

- discuss protective behavioral strategies related to manner of drinking
- discuss protective behavioral strategies related to stopping/limiting drinking

Students whose parents received the intervention were more likely than students who parents did receive the intervention to:

- use a range of protective behavioral strategies, particularly those related to manner of drinking and stopping/limiting drinking

The authors conclusions: A universal, online parent-based intervention may represent a valuable component of a college's comprehensive prevention effort.

**Overview:** The current study made use of a longitudinal measurement-burst design to examine whether parents should teach their children harm-reduction tips for using alcohol while in college or whether they should maintain a zero-tolerance policy.

The sample consisted of 585 second-year students from a large university in the northeastern United States. Participants completed a baseline survey and 14 daily web-based surveys. Students were assessed for perceptions of parental alcohol-related messages and their own alcohol use. Multilevel models were estimated using HLM 6.04.

**Outcomes:**
- Daily parent-student communication
- Perception of parental alcohol-related messages categorized as zero-tolerance, harm-reduction, mixed, or neither
- Daily quantity of alcohol use
- Negative consequences of alcohol use

**Results:**
The data indicate that zero-tolerance messages appeared most protective against alcohol use and negative consequences. Harm-reduction messages were most risky, even when compared with mixed messages or the absence of a message.

Students who perceived their parents as presenting a zero-tolerance message regarding alcohol:
- consumed 43% fewer drinks (significant) on weekend day compared to students who did not perceive a clear alcohol-related message
- significantly lower odds of heavy drinking compared to students who did not perceive a clear alcohol-related message

Students who perceived harm-reduction-based message from their parents
- consumed 154% more alcoholic drinks on weekend days compared with those who perceived neither type of alcohol-related message

**The authors conclude:**
Findings indicate that a zero-tolerance approach was associated with safer outcomes than other messages, even if students were already using alcohol.

**Overview:** Thus study simultaneously examined the impact of a two-session brief motivational intervention delivered to students and a handbook-based parent intervention. First-year students (n=851) and parents were recruited from two successive cohorts of incoming students at a mid-sized northeastern public university in the U.S. Parent-student dyads were randomized to treatment arms. Student follow-ups took place at 10 and 22 months. Parent follow-up took place at 12 months.

**Intervention:** The brief motivational intervention (BMI), modeled after BASICS, consisted of two counselor-facilitated interventions during the freshman year. The first one-hour meeting included the delivery of personalized feedback regarding alcohol-related behaviors and beliefs. A 30-minute booster session incorporated feedback on current and past drinking to reflect change in alcohol-related behaviors since the initial evaluation.

The parent-based intervention (PBI) consisted of a 32-page parent handbook which was mailed to parents in the summer before students matriculated to college. The original handbook developed by Rob Turrisi was modified to include information designed to raise parental awareness of college student alcohol use and provide strategies to help reduce student drinking and associated consequences. These strategies included parental permissiveness for drinking and increasing parental monitoring and parent-teen alcohol-related communications. Parents also received a letter explaining the intervention, and a handbook evaluation form.

The combined intervention consisted of BMI and PBI. The study also included an assessment-only control group.

**Outcomes:**
- Frequency of heavy episodic drinking
- Frequency of negative consequences related to alcohol

**Results:**
- BMI intervention significantly reduced the onset of heavy episodic drinking and alcohol-related consequences at 10 and 22 months.
- PBI intervention alone did not reduce onset of growth of heavy episodic drinking.
- BMI and PBI combined group showed significant reductions in alcohol-related consequences, but not heavy episodic drinking rates.


**Overview:** This study examined the impact of a brief motivational intervention (BMI) and a parent-based intervention (PBI) on alcohol-use among incoming college students.
The study employed a randomized factorial design, and over a two-year period, cohorts of parent-student dyads (n=1,014) were recruited and randomly assigned to one of four conditions:

- BMI (based on the BASICS program)
- PBI (a handbook intervention modified from Turrisi et al. (2001))
- BMI and PBI
- Assessment-only control

Baseline data were collected from students and parents during the summer prior to matriculation. Follow-ups occurred at 10 and 22 months post-baseline for students and at 12 months post-baseline for parents.

The two primary outcome measures examined were heavy episodic drinking and alcohol consequences. Additionally, researchers examined the following:

- BMI Mediators: descriptive norms, self-regulation of alcohol use, drinking strategies, readiness to change heavy episodic drinking
- PBI mediators: Parent-teen communication about drinking, parental disapproval and permissiveness, and parental monitoring

**Results:**

- BMI participants were less likely than non-BMI participants to transition into heavy episodic drinking and to begin experiencing alcohol-related consequences. Effect sizes were minimal at 10 months and small at 22 months
- The combination of BMI & PBI further decreased the likelihood that participants began experiencing consequences
- PBI alone did not reduce growth or delay of the onset of heavy episodic drinking or consequences
- Descriptive norms mediated the impact of BMI on reducing the likelihood of transitioning into heavy episodic drinking and experiencing consequences

**Limitations:**

- Limited sample
- Reliance on self-report data
- "Potential therapist effects were not analyzed, and empirically supported tests of MI fidelity were not conducted"
- Spacing and number of follow-up intervals were insufficient
- "Insufficient statistical power for the two-part latent growth curve analysis"
- Threat of assessment reactivity among non-PBI participants
- Various measures used to assess mediation were slightly modified and had not been tested for validity

**The authors conclude:** The current study may be the first "To provide support for BMI as a universal preventive intervention for incoming college students. Although hypothesized PBI main effects were not found, mediation analyses suggest future refinements could enhance PBI effectiveness."
Overview: This study reports the results of a randomized trial of a parent-based intervention (PBI) in a sample of college freshmen and is an expansion of a similar study of PBIs conducted in 2001 (Turrisi et al., 2001).

Incoming freshmen (n=724) were recruited from a university and randomly assigned to a parent-based intervention group (PBI) or an intervention-as-usual (IAU) control condition. These incoming students completed a baseline survey on drinking behaviors and their parents were recruited for study participation. Parents were also asked to complete a brief survey in the summer in which they were asked to rate how often they talked to their college-bound child about a range of topics (e.g., academics, sports, alcohol/drug use, etc).

PBI Condition: Parents were mailed a parent handbook during the summer months before their teen’s high school graduation and the beginning of college. Parents were asked to read all of the materials, discuss the content, and implement suggested activities with their teens before they went to college. The handbook (described in more detail in Turrisi et al., 2001) was called “A Parent Handbook for Talking with college Students about Alcohol.”

IAU Condition: Parents were mailed an alcohol information fact sheet in which parents are explicitly encouraged to be actively involved in conversation with their children about responsible alcohol use.

Students were administered follow-up assessments at 4 and 8 months on drinking behaviors, and parents were administered a 4-month follow-up survey in which they were asked to rate how much of the handbook they had read and their level of satisfaction with the material. Two-part latent growth curve modeling was used to test intervention effects.

Outcomes:
- 82.5% of parents indicated that they read “most” or “all” of the handbook and 86.9% of parents were “mostly” or “very” satisfied with the handbook
- Individuals in the PBI condition were less likely to transition into drinking status during their freshman year and showed less growth in the number of drinks consumed per week, yes these findings were limited to women
- There was no evidence for the efficacy for the PBI regarding either initiation or growth on heavy episodic drinking or for alcohol-related problems

Limitations:
- The fact that control parents received a pamphlet and were encouraged to talk to their students about responsible alcohol use during orientation may have dampened the overall effect of the PBI
- There were more commuter students in the Turrisi et al., 2001 study than this study, which may have diminished the PBI effect (as parents of commuter students may have more opportunities to talk with their teens)
- A single campus participated in the study
Authors Conclude: “Despite the overall modest findings of this study, broader consideration, particularly with respect to the ease of dissemination, suggests that the PBI approach continues to show promise as an effective preventative intervention to help address the ongoing problem of college student alcohol misuse.”


Overview: This multisite randomized alcohol prevention trial examined the efficacy of a parenting handbook intervention and the Brief Alcohol Screening and Intervention for College Students (BASICS) intervention in reducing alcohol use and related consequences among matriculating college student who participated in athletics while in high school. Both programs were examined alone and in combination.

Incoming freshmen were randomly selected at large public northeastern and northwestern universities and screened during the summer of 2006. Eligible participants (n=1,275) who had participated in high school or club team athletics then completed an online baseline assessment.

Parents of all teens (n=1,275) were invited to participate. Parents were asked to complete a survey assessing parent-teen communication.

Students were randomized to one of four conditions:

- BASICS only: A 45-60 minute session conducted one-on-one by a trained peer facilitator.
- Parent only: Parents were mailed a handbook during their teen’s transition period between high school graduation and the first year in college. The handbook was the same version as the one used in the Turrisi et al. (2001) study. Parents were asked to complete and return a brief questionnaire on and take notes in the handbook to ensure they read all materials. The questionnaire asked parents to rate how interesting, useful, readable, and effective the material was in each section and whether parents had discussed materials with their child.
- Combined BASICS and Parent
- Assessment-only control: All procedures were the same, except that the BASICS intervention was mailed and the parent intervention was offered after the follow-up

Follow-up assessments were conducted 10 months after baseline examining the following outcome variables:

- Peak BAC
- Number of drinks in a typical weekend
- Number of drinks in a typical week
- Number of consequences

Outcomes:

Parental Ratings:

- Overall, parents rated each section in the handbook positively
• For 21 out of 26 of the topics on drinking, more than 85% of parents indicated that they discussed the materials with their teens
• 84% of parents recorded positive comments in the note sections

Intervention Effect:
• Participants assigned to the combined condition reported significantly less drinking (peak BAC, number of drinkers/weekend, number of drinks/typical week) and fewer consequences compared with those in the control group and those in the parent intervention group
• Participants in the combined group also reported significantly fewer negative consequences than those randomized to BASICS
• Participants in the BASICS condition reported significantly lower peak BAC compared with the control group, significantly fewer drinks per weekend compared with both the control and parent-only conditions, and significantly fewer drinks per week compared with the parent-only condition
• The parent-alone intervention did not differ significantly from the control condition on drinking or consequence outcomes

Mediating variables:
• Descriptive and injunctive peer norms were significant mediators between the intervention and all drinking outcomes
• Alcohol beliefs mediated the relationship between intervention and peak BAC and consequences, yet not drinks per week or weekend
• Attitudes toward drinking and injunctive parent norms did not significantly mediate the relationship between intervention group and drinking outcomes

Limitations:
• Use of self-report data
• Low completion rate of in-person BASICS
• “The quality of intervention delivered by peers may have attenuated efficacy of BASICS”
• Effect sizes may have been larger if the study had been restricted to only heavy drinkers
• Lower completion rate among parents relative to the Turrisi et al. (2001) study

Authors Conclude: “...The parent intervention delivered before college may serve to enhance the efficacy of BASICS, potentially priming students to the subsequent BASICS message.”


Overview: This study examined the impact of a parent-based intervention to reduce the onset and rate of binge drinking during the first year of college. Participants were recruited in the areas surrounding Boise State University (BSU) and The University of Albany, State University of New York (SUNY Albany). To
recruit students to participate in the intervention group, student names were randomly selected from all high school yearbooks from both private and public schools in the sampling areas, and parents were called by phone and asked to participate. A total of 154 incoming freshmen comprised the intervention group. First-semester freshmen (n=48) were recruited from the participant pools at BSU and SUNY Albany to comprise a comparison group.

**Intervention:** Parents were given a 35-page parent handbook during the summer between high school graduation and the first semester of college. The handbook was divided into three chapters and included the following content:

- **Chapter 1:** This section gave an overview of incidences and consequences associated with college drinking with the intention of motivating parents to talk with their teens.
- **Chapter 2:** Outlined specific strategies that parents could use to improve communication channels, techniques for initiating conversations, common negative teen reactions, orientations that parents could adopt to facilitate good communication, common non-constructive parental responses, and techniques for giving and receiving criticism.
- **Chapter 3:** Discussed methods parents could use to teach their teens assertiveness skills, how to deal with peer pressure, and common pressure lines teen may hear.
- **Chapter 4:** This chapter went into depth on college student alcohol use and binge drinking, discussing the research literature on major variables, such as social norms, and how parents might discuss these topics with their teens. The issue of parental norms around alcohol use was also discussed. Focusing on cognitive-expectancy theories of alcohol consumption, the reasons why students drink were outlined and information was given on how to identify when a drinking problem exists and what to do in such an instance.

To ensure that parents read the books, they were asked to write short statements summarizing each chapter and to fill out a measure evaluating each chapter. Booster calls were also made during the summer to further check on parents. A total of 87 parents returned handbooks with their written comments and completed rating scales at the end of the summer.

To measure the impact of the intervention, teens in both the control and intervention conditions were surveyed during their first semester on binge drinking and drinking tendencies, their perceptions about drinking activities, perceived peer and parental approval of alcohol consumption, and binge drinking consequences.

**Outcomes:**

- Overall, parents rated the chapters of the handbook positively, and more than 90% of parents indicated that they had discussed topics with their children
- The intervention seemed to reduce drinking and tendencies toward drunkenness for intervention teens relative to control teens, however there were no group differences for the number of times having five or more drinks in the past two weeks
- Compared to teens in the control group, teens in the intervention group had more negative perceptions toward drinking and drunkenness activities and perceived that their peers would hold similar perceptions
- Individuals in the control group reported significantly higher perceptions of approval of alcohol consumption for both peers and parents than teens in the intervention group
- Controls reported significantly more consequences than teens in the treatment group
Limitations:

- Only short-term effects of the intervention were examined
- Variability in the treatment group conveys that the intervention did not affect all individuals equally
- It is difficult to know which components of the intervention brought about change
- One could argue that the impact observed was due to the mere attention given to teens by parents, rather than the intervention itself

The authors conclude: The authors feel as though this intervention shows great promise. “The data suggest that the intervention will affect the knowledge base and orientations of parents and that they will be more likely to communicate with their teens about issues concerning college drinking. In addition, there is evidence that the teens’ behavior will be positively affected.”