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Social Validity of a Behavioral Support Model

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Social Validity of a Positive Behavior Support Model

Nancy Y. Miramontes

A thesis submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of
Educational Specialist

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ABSTRACT

SOCIAL VALIDITY OF A POSITIVE BEHAVIOR SUPPORT MODEL

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As more schools turn to School-Wide Positive Behavior Supports (SWPBS) for help with academic and problem behaviors in their schools, the need to adequately evaluate these programs on a socially relevant level increases. The present study employs social validation measures to evaluate Utah’s Academic, Behavioral & Coaching Initiative (ABC-UBI), a Positive Behavior Support (PBS) initiative, on socially relevant issues. Participants from across the state of Utah who were active consumers of ABC-UBI’s program, were polled for their opinion on the acceptability of the treatment goals, procedures and outcomes of the program. The results outlined several areas of much needed improvement including, but not limited to the amount of paperwork required for successful implementation and the usability of program procedures. Social validity continues to be an important construct to consider when evaluating programs for social relevancy.

Keywords: social validity, positive behavior support, social validation, contextual fit
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# TABLE OF CONTENTS

**ABSTRACT** .................................................................................................................. ii

**ACKNOWLEDGEMENTS** ................................................................................................. iii

**TABLE OF CONTENTS** ................................................................................................ iv

**LIST OF TABLES** ............................................................................................................. vi

**INTRODUCTION** 1
  - Statement of Problem and Purpose 2
  - Research Questions 4

**REVIEW OF THE LITERATURE** 5
  - Social Validity Construct 5
    - The importance of social validity. 6
    - The research-to-practice gap 7
  - Social Validation 8
    - Assessment components 8
    - Survey research 10
      - Visual formatting for the survey 11
      - Consumer identification for the survey 12
  - Importance of social validation 13
  - Positive Behavior Support Intervention Model 13
    - Using social validation in PBS programs 15
    - Learning from past implementation methods 16
  - Utah’s Academic, Behavior and Coaching Initiative (ABC-UBI) 19
  - Current Limitations 22

**METHOD** 24
  - Participants 24
  - Measures 24
  - Procedures and Data Collection 27
  - Materials 29
  - Statistical Analyses 29

**RESULTS** 31
  - Consumer Judges 31
    - Related service providers 32
    - Teachers 32
    - Administrators 34
  - Multi-Tiered Levels of Intervention 36
  - SET Scores and Social Validation Correlations 36

**DISCUSSION** 40
  - Role of Findings in Addressing Research Issues 40
    - Consumer group responses 41
      - Related service providers 41
      - Teachers 42
      - Administrators 42
    - Supplemental and intensive levels of implementation 43
    - Social validation and faithful implementation 45
LIST OF TABLES

1. Participant Information by District 25
2. Percentage of Related Service Providers’ Positive and Negative Responses to Survey Questions 33
3. Percentage of Teachers’ Positive and Negative Responses to Survey Questions 35
4. Percentage of Administrators’ Positive and Negative Responses to Survey Questions 37
5. All Consumers’ Responses to Survey Questions Regarding Multi-Tiered Program Implementation 38
6. Correlation Between School-Wide Evaluation Tool (SET) Score and Scores from End Of Year Survey Questions 39
Introduction

The criteria for evaluating behavioral support programs are changing. It is no longer enough to simply create behavioral intervention strategies that are theoretically and technically sound, but it is now essential to match the plan to the people and to the environment where implementation will occur (Albin, Lucyshyn, Horner, & Flannery, 1996). In this ever-growing world, public educators are finding themselves overwhelmed by plans and strategies that promise results but do not deliver. The variety of educational programs however, does not guarantee that any program will always be effective (Reimers, Wacker, & Koepppl, 1987). In deciding which educational programs to implement, it is important for teachers and school psychologists to evaluate the program on its applicability. A successful educational program considers more than reliability and validity of its content and measures. It also considers how valuable the program will be to the specific group of consumers it will service.

The concept known as social validity was first described by Wolf in 1978 as the value society placed on a product. Wolf proposed that society would need to evaluate works based on goals, procedures, and outcomes if these works were going to be legitimately analyzed. This information could then be used to make positive changes that could benefit the consumer. By understanding what consumers do and do not find valuable, researchers today have at their disposal wide ranges of data that can be used to drive changes for previously unsuccessful social products or educational programs. The process of measuring the social validity concept is typically referred to as social validation, which is defined as a means of assessing and analyzing consumer behavior from data gathered through consumer opinion (Gresham & Lopez, 1996).

Consumer-based educational and behavioral programs like Positive Behavior Support (PBS) and Response to Intervention (RtI) are particularly susceptible to information gathered
from social validation. PBS in particular emphasizes the use of data collection and analysis to inform decision making (Sugai, Horner, Dunlap, Hieneman, Lewis, Nelson, et al., 2000). Currently most PBS programs collect data similar to that of social validity. Treatment fidelity data, for example, is collected by some PBS programs through school-wide evaluation assessments like the School-Wide Evaluation Tool (SET) to ensure that the PBS program is being implemented as intended. Treatment fidelity data is not social validation data however, and without social validation data researchers cannot fully evaluate what the consumer deems valuable.

**Statement of Problem and Purpose**

Despite the potential for social validation data to contribute valuable information to program development, the charge has dwindled not only for collecting social validation data but for collecting it properly. Social validation is not a new concept to the field; however, its methodology is still evolving. In response to this evolution, it has become necessary to make clarifications to the process of social validation. For example, first a clear definition of which consumers should be queried is important. Second, what these consumers consider to be socially relevant goals, procedures and outcomes is necessary. And third, how these responses are correlated to actual implementation integrity is a valuable piece of information rarely ever collected.

Carr, Austin, Britton, Kellum, and Bailey (1999) reviewed all full-length articles found in the Journal of Applied Behavior Analysis (JABA) between the years of 1968 and 1998 and reported that only about 12% of studies in the 1990s looked at social validity. In 2004, Kern and Mantz presented a similar review of the literature in the area of social validation and likewise highlighted the limitations of social validation procedures. Kern and Mantz specifically noted
that there was a significant limitation in the range of consumers who are queried during social validation procedures and that these assessments continuously addressed the primary tier of prevention and ignored the secondary and tertiary tiers of prevention when evaluating three tiered models like PBS and RtI.

The stagnation of social validity assessments highlighted by Kern and Mantz in 2004 and Carr et al. in 1999 is problematic for two reasons. First, without ongoing methods of soliciting consumer feedback on procedures and outcomes, researchers will have few if any methods for predicting program rejection. Second, if social validity measures are not reported frequently then a gap between what consumers want and what is actually implemented in the schools will develop, making positive progress towards addressing student needs more problematic. Unfortunately, it appears that this valuable measure is quickly fading from the repertoire of researchers.

Social validation as first described by Wolf in 1978, appears to have lost much of its focus. The present study proposes a redirection of social validation procedures to their primary purpose--the evaluation of program goals, procedures, and outcomes at all levels of program implementation. Furthermore correlations between social validation data and treatment integrity will be evaluated to further inform overall program performance. This study proposes to meet these objectives by collecting self-reported data from key consumers through social validity assessments. By shedding light on this vital and yet underused measure, the hope is that this study will serve as a platform for future research to explore the valuable avenues of social validation procedures.
Research Questions

This study proposes to expand the knowledge relating to the primary constructs of social validity by addressing the following questions:

1) What perceptions do related service providers (e.g. school psychologists, school counselors, social workers) have in respect to the social validity of goals, procedures, and outcomes of positive behavioral initiatives?

2) What perceptions do teachers have in respect to the social validity of the goals, procedures, and outcomes of positive behavioral initiatives?

3) What perceptions do administrators have in respect to the goals, procedures, and outcomes of positive behavioral initiatives?

4) What perceptions do the consumers involved in positive behavioral initiatives have in respect to the goals, procedures, and outcomes of the secondary and tertiary levels of PBS-RtI initiatives?

5) Is there a relationship between the respondent’s school’s SET scores (treatment fidelity) and their individual responses to the questionnaire?
Review of the Literature

To illustrate the importance of evaluating intervention programs based on social relevance, an in-depth discussion of the concept known as social validity will be presented. The term will be introduced as a construct and the importance and usability of the construct will be outlined. A discussion of the construct as a measure will follow with concurrent outlines of assessment components, survey research and the importance of the measure. In addition, the Positive Behavior Support Intervention Model will be presented as a model that facilitates the implementation of social relevant assessments. The model will be discussed in light of using social relevant measures in the model and the lessons learned from past intervention efforts. Utah’s Academic, Behavior and Coaching Initiative (ABC-UBI) is introduced as a positive behavioral program that strives to incorporate social relevant measures in new ways. Lastly, the field’s current limitations are outlined to illustrate the purposes of this study.

Social Validity Construct

In its simplest form, the term social validity refers to how well an intervention program is valued by those whom the program is designed to benefit. In 1978, Wolf first introduced the construct of social validity as an evaluation of three distinct areas: the social significance of treatment goals, the social appropriateness of the procedures, and the social importance of the effects or outcomes. If the goals of an intervention are valued by consumers, then the goals are considered socially valid (Kern & Mantz, 2004). Similarly, the procedures of an intervention must be feasible, cost effective, and appropriate for the consumer if the procedures are to have social validity. And lastly, if the outcomes of such procedures are to be socially valid, the outcomes must be meaningful to the consumer.
Social validity as a construct considers the opinions of the consumers and makes notable mention of how these opinions affect program implementation. With its roots in applied behavior analysis, social validity “attempts to go beyond ‘clinical judgment’ to derive information from the broader social environment of the individual(s) whose behavior is being changed” (Kennedy, 1992, p. 147). This focus not only makes social validity a unique concept to consider evaluating but it challenges the field to look beyond the typical “clinical judgments” and recognize the value in assessing consumer opinion.

**The importance of social validity.** Social validity is an important construct because, as professionals, we are responsible for the accuracy of our research to those directly affected by it. The consumer is an important component of any intervention program. After all, the consumer will ultimately decide if they wish to continue with an intervention or not. If a program is going to be successful it has to be accepted by those for whom the program was designed (Albin, Lucyshyn, Horner & Flannery, 1996).

In 1996, Albin and his colleagues noted that social validity or *contextual fit* (as they described it) was important because problem behaviors could not be understood without understanding the broader environmental contexts where they were occurring. It was argued that “support plans and intervention strategies must fit into, as well as build from, those [larger environmental] contexts” (Albin et al., 1996). This meant that an intervention program worked well when it was tailored for the people and environment where it was being implemented.

A program with high social validity is responsive to the needs of the consumers and such a characteristic cannot help but promote increased fidelity and sustainability of a program (Albin et al., 1996). When researchers use the concept of social validity to address the areas of most concern to the key consumers, consumers can then make informed choices and provide support
for a particular program. Schwartz (1991) noted that consumers who make informed choices are often the most satisfied, and the most satisfied consumers can help improve a program’s viability. Overall, social validity is important because consideration for consumer opinion can help reconcile current problems in education, particularly in the researcher-practitioner debate discussed in the next section.

The research-to-practice gap. There is currently a gap occurring between research and practice in the field of education that concepts like social validity can be used to bridge. Researchers and practitioners continue to engage in debates over the reasons for this gap. Some researchers argue that this gap exists because their research is basic without direct applications for practice (Carnine, 1997). And some practitioners argue that researchers create this “research-to-practice” gap by not involving them in the decision making process (Carnine, 1997). In any case there appears to be a disconnect between the research that is being published and the applicability of this research in the field.

Social validity has considerable appeal for bridging the gap between research and practice because social validity considers what the consumers have to say about program interventions. Teachers and others have legitimate reasons to be concerned about the quality of educational research that is being introduced into the field (Carnine, 1997). And because the gap between educational research and practice is steadily increasing (Kern & Manz, 2004), this is a critical aspect to consider, given that research-based interventions and programs are typically interjected in a top-down manner (Child Trends, 2008).

In order for social validity to bridge the gap between research and practice, the measurement of such a construct would need to be clear and concise. The concept of social validity has been evolving as a measure for the past two decades (Fawcett, 1991; Kern & Mantz,
2004; Kennedy, 1992; Schwartz & Baer, 1991). In 1992, Kennedy noted that “the definitions and uses of social validity are in the process of expanding from the original definitions provided by Kazdin (1977) and Wolf (1978)” (Kennedy, 1992, p. 148). Today, social validity is referred to both as a construct and as a form of measurement. For purposes of this study, social validity will be discussed as a measure.

**Social Validation**

The term *social validation* and *social validity* are often used interchangeably in the literature; however, for this study *social validation* is used to refer to the measurement and analysis of consumer behavior. The process of social validation involves gathering information about the treatment goals, procedures and effects of interventions from the representatives of constituencies who control program developers (i.e. the consumer judges) (Fawcett, 1991).

Social validation has continuously evolved since the conceptual introduction of social validity by Wolf (1978) and Kazdin (1977) and the methodological components to assessing this valuable construct are widespread.

**Assessment components.** The assessment components of social validation are continuously changing. In a review of the social validation literature, Schwartz and Baer (1991) note that the term social validation has, in recent years, been coined to describe a series of assessments, many of which do not accurately represent the original components of the concept. The original definition of social validity maintains that such a measurement assesses a program’s *viability*, which determines if a program has a reasonable chance of succeeding (Schwartz & Baer, 1991). Originally, social validation assessments were designed to evaluate how successful a social program would be, how viable, based on key public opinion (Kazdin, 1977; Wolf, 1978).
Schwartz and Baer (1991) note that original social validation assessments were composed of a two-step process. First, an accurate and representative sample of the consumers was assembled and their opinions were collected. Second, this information was then used to ensure that the program was valuable to the community. Carnine (1997) further noted that in order to effectively judge a program’s social validity, three important components must be a part of the social validation process: trustworthiness, usability, and accessibility. Trustworthiness is defined as the confidence that practitioners can have in the research findings. Usability is characterized by the practicality of the research-based practices for those who attempt to put them into practice. And accessibility provides a measure of the extent to which the findings are available to those who want to use them.

In a school setting, trustworthiness, usability, and accessibility are critical areas to examine when choosing an appropriate intervention for children. Teachers and others have legitimate concerns about the quality of educational research findings in terms of their applicability within real classroom settings (Carnine, 1997). Not only must research consider the technical methodology of these programs, but acquiring data on how likely a given intervention or social program can be used by practitioners, administrators and other knowledgeable consumers is also vital (Kaufman, 1996). The assessment components of social validation need to be clear, and must deal with topics that will be important to the practitioners, in this case to teachers.

Finally, in order to accomplish the task of evaluating the assessment components of trustworthiness, usability, and accessibility of intervention programs, two basic strategies are outlined in the literature: (a) subjective evaluation and (b) normative comparison (Kennedy, 1992). Subjective evaluation is based on individuals’ ratings and statements about an
intervention. Normative comparison involves comparing a person’s performance before or after an intervention with a control group of individuals who are considered to be typical or average. Despite their individual merits, “subjective evaluation has become the almost exclusive means of assessing social validity.” (Kennedy, 1992, p. 151). Because of this shift, social validation methodology is now predominantly rooted in survey research.

Survey research. Due to the fact that the inherent purpose of collecting social validation data is to solicit information directly from the consumers, survey research is one of the most efficient ways to gather this data. Various recommendations exist in the literature for designing each of the survey questions that make up a social validity questionnaire. The recommendations of Wolf (1978), Reimers et al. (1987), and Fawcett (1991) to ensure that social validity questionnaires are designed to remain true to the intentions of social validation will be discussed. Along these lines, the specific language that research has shown to be effective in attending to measures of social validation and consumer satisfaction assessments will also be reviewed.

Three succinctly proposed questions to ask participants in social validation assessments were outlined by Wolf (1978): (a) Are the specific behavioral goals important and relevant to what the targeted consumers want? (b) Do the consumers consider the treatment procedures acceptable? (c) Are the consumers satisfied with both the predicted and unpredicted outcomes? These questions have been referred to as judgments of social validity (Wolf, 1978). These judgments of social validity form the framework for this study.

In a seminal article, Fawcett (1991) outlined considerations to increase the chances for attaining meaningful results from social validation assessments. First, Fawcett suggests that in order to assess the social significance of the treatment goals and treatment outcomes, researchers must use precise and descriptive labels that include global language. A good social validity
questionnaire includes language outlined in the literature as conducive to targeting measures of acceptability. This language of survey research includes a variety of terms. For example, questions intended to measure the first judgment of social validity (i.e., program goal acceptability) can be written using the terms important and acceptable as outlined by Fawcett (1991). Questions intended to measure the second judgment of social validity, or acceptability of program procedures, can employ the language “willingness to use, given time constraints” and “willingness to recommend to others” as recommended (Kern & Manz, 2004, p. 54), for determining meaningful acceptance.

The third judgment of social validity, or program outcomes, can be measured using language taken from an outline provided by Lane and Beebe-Frankenberger, 2004. These researchers recommend using terms like, improved outcomes, and positive impact (Lane & Beebe-Frankenberger, 2004, p. 101). Lastly, items written to specifically address secondary and tertiary levels of multi-tired programs should be included so as to not limit the questions to primary levels (e.g. general levels) only.

Visual formatting for the survey. Tourangeau, Couper, & Conrad (2004) suggest that a number of visual heuristics affect how respondents answer survey questions. Spacing between descriptor options, the order of the descriptors, and grouping related questions were found to meaningfully impact the way participants responded to questions. In order to control for visual heuristics getting in the way of meaningful responses, social validity questionnaires should be designed to allow for equal spacing between descriptors and for the descriptors to be arranged positively from left to right. Furthermore, paper formatted, consumer surveys have been demonstrated to have lower response rates than web-based consumer surveys in the literature (Kamps et al., 1998; McCarthy & Shrum, 2000; Ransdell, 1996). Because of this limitation it
would be wise to increase response rates through the use of rewards or incentives when conducting paper formatted surveys (Kamps et al., 1998).

**Consumer identification for the survey.** Schwartz and Baer (1991) specifically identified four categories of consumers for social validation research: direct consumers, indirect consumers, members of the immediate community and members of the extended community. Direct consumers are those directly affected by the product or treatment. They are the primary consumers. For school-based interventions, the direct consumers are quite literally, the students (Gresham & Lopez, 1996; Schwartz & Baer, 1991). Indirect consumers are those individuals that have purchased or imposed the intervention onto the direct consumers. Examples of indirect consumers include the parents, teachers and school administrators in the school system (Gresham & Lopez, 1996; Schwartz & Baer, 1991). Members of the immediate community are the consumers that may or may not be directly involved in the program implementation process, but they do interact with both the direct and indirect consumers on a regular basis (Schwartz & Baer, 1991). People like bus drivers, other teachers or other school personnel all fall into this category. Finally, members of the extended community are the consumers that do not interact with the direct or indirect consumers on a regular basis but who live in the local community. Examples include but are not limited to tax payers, school boards and teachers at different schools, and law enforcement personnel (Gresham & Lopez, 1996).

**Importance of social validation.** The main goal and importance of social validation is not to gather false praise for a proposed program but to gather useful information about possible holes in the program, implementation problems, and future success of the program (Schwartz & Baer, 1991). Carnine (1997) explains that social validation is important because the act of endeavoring to seek out consumer opinion sets the foundation for trustworthiness in a program.
By specifically evaluating if a program is a priority for key consumers, social validation findings can also support the likelihood that a program will be used by those who actually employ the program. And finally, if support for a program is established or increased by the outcomes of social validation, then these results will help make the programs more accessible to the school communities.

Behavioral programs that tap into what matters most to the key consumers can be as successful in practice as they are in theory (Kazdin, 1977). For example, in education, social validation is an important measure because if the research findings do not align with what teachers believe is important, then the program will likely not be supported and will consequently be less useful (Carnine, 1997). Furthermore research-based interventions that are both aligned with student needs and that are teacher-friendly will be the most successful because they are directed at its key consumers.

**Positive Behavior Support Intervention Model**

The Positive Behavior Support Intervention Model is a three-tiered model rooted in prevention efforts that make it ideal for collecting social validation data. As our knowledge of behavior and academic interventions expands, social validation has provided us with a wealth of knowledge into what successful school environments look like. On the forefront of the newest research-based practices are two multi-tiered models operating on similar premises. The first, Positive Behavior Support (PBS) targets problem behaviors. The second, Response to Intervention (RtI) targets the academic side of student problems. Because this new methodology for dealing with both behavior and academic problems is based on the foundations provided by PBS, this study will henceforth focus on discussing the primary tenets of PBS which, conceptually, mirror those of RtI.
PBS strives to provide positive ways of managing problem behavior as opposed to the traditional punitive and reactionary methods. As a model, PBS recognizes that the etiology of behavior may in fact not reside within the student but within the interaction between the student and the environment (Safran & Oswald, 2003). PBS holds that a variety of variables play a part in resulting behaviors. In 2000 Sugai et al. sought to review and define the concepts of PBS and Functional Behavior Assessments (FBAs). In this paramount article, the authors define PBS as “a general term that refers to the application of positive behavioral interventions and systems to achieve socially important behavior change” (Sugai et al., 2000, p.133). Of particular note is their mention of the model’s central need to enact behavior changes that are socially significant. By seeking to deliver socially significant results, this particular model lends itself well to working with different types of consumers when determining the goals of an intervention.

Thus PBS interventions are designed to be proactive rather than reactive. These systems of positive interventions are based on data-driven measures. That is to say that, not only does PBS rely heavily on data to guide the decision making process, but it is also based on the sustained use of research-validated practices that focus on maximizing student achievement (Gresham, 2004; Sugai & Horner, 2002). With a team-problem solving model as its foundation, PBS functions on a three-tiered conceptual approach to problem identification. The overall model sets primary, secondary, and tertiary levels of intervention.

The primary level is also described as the universal level due to its applicability across all students, settings and staff (Kern & Mantz, 2004). These interventions are designed to target students that are equipped with general education skills (George, White, & Schlaffer, 2007). The secondary level is described as the targeted interventions level because it provides services for those students that have been classified as at risk for problem behaviors. At this level, services
are more specialized and tailored to go beyond the services provided at the primary level. The tertiary level in this three-tier model addresses the complex, ongoing behavior problems that affect approximately 1 to 5% of the school-wide population (George et al., 2007). Supports at this level are individualized to provide students with the intensive attention that they need.

**Using social validation in PBS programs.** The multi-tiered intervention model of PBS lends itself particularly well for social validation assessments. One of the fundamental philosophies of PBS is the idea that while humanistic values should not replace empiricism, these values should certainly inform empiricism (Carr et al., 2002). Stakeholder participation is fundamental to the success of PBS. By reverting from an expert-driven methodology to a consumer-driven methodology, PBS has managed to establish itself as a collaborative system (Sugai et al., 2000). This inclusive system has functioned as a support network which has undoubtedly contributed to its success with systems level change. (Carr et al., 2002; Sugai et al., 2000).

In School-Wide Positive Behavior Support (SWPBS), for example, decisions are developed, implemented, and evaluated by the school system as a whole, thus fostering ownership and social validity among its key consumers (Scott, 2007). And, as mentioned earlier in this manuscript, consumers who make informed choices are often the most satisfied, and the most satisfied consumers can help improve a program’s viability. The manner in which these key stakeholders (i.e., consumers) are integrated into the planning, implementation, and evaluation processes involved in SWPBS is what makes this system so unique (Carr et al., 2002; Scott; Sugai, Horner et al., 2000). It is therefore no surprise that key stakeholder opinion be evaluated when considering the future successful implementation and development of a PBS program. Social validity assessments serve as vital components of an overall evaluation of a
PBS program because they serve to inform the researchers on one of the most fundamental attributes of PBS implementation and development – stakeholder participation.

**Learning from past implementation methods.** There is much to learn from past social validation implementation methods in PBS programs. The assessment process for the important areas of social validation mentioned by Wolf (1978), Carnine (1997), and Kauffman (1996) can be implemented in PBS programs by using rating scales or surveys that collect self-reported information (Finn & Sladeczek, 2001). Some of the research in the area of positive behavior support has sought to incorporate social validation (Bohanon et al., 2006; Houchins et al., 2005; Lyst-Miltich, 2005; McCurdy et al., 2003). Since significant information is gathered using self-reported data, it is important to carefully consider the vitality of this measure and take appropriate steps towards implementing these assessments successfully.

McCurdy et al. (2003), for example, conducted teacher perception surveys regarding a SWPBS model that was being implemented in an ethnically and racially diverse inner-city elementary school to gather self-reported data on the acceptability of the new model. The staff satisfaction questionnaire was administered to school staff during each of the first two years of PBS implementation. The questions were tailored to query about overall satisfaction, generalizability and positive outcomes of the PBS model. The results showed high levels of satisfaction and support from the teachers (those who were directly involved with the program) for the program’s continuation. While the results provided the researchers with good information regarding the acceptability of the new model, these efforts were limited and did not survey any other key stakeholders or those who were not directly involved with the program, which could have provided additional information for future program changes.
Similarly in 2005, Lyst-Miltich, Gabriel, O’Shaughnessy, Meyers, and Meyers embarked on an effort specifically designed to measure the social validity of an early literacy program called Check and Connect with Early Literacy Support (CCEL), a program designed for at-risk children. The investigation used qualitative interviews in addition to quantitative rating scales to determine if the CCEL program was valuable to an additional member of the indirect consumer category -- the caregivers. The researchers asked both the teachers and caregivers several open-ended questions such as, “What makes you think CCEL interventions are worthwhile? Did you think CCEL was effective?” (Lyst-Militich, 2005, p. 201).

Results showed that caregivers commented on the effectiveness more frequently than teachers; however, teachers commented on the reasonableness and the worth of the program by listing specific areas of the program that they viewed positively and negatively. The researchers specifically state that, “high levels of understanding corresponded with relatively sophisticated and in-depth discussion of the intervention’s social validity” (Lyst-Militich, 2005, p. 215). These findings are interesting because they illustrate that the variety of stakeholders increases the variety of opinions when social validation data collected about PBS programs. By including related service providers like school psychologists, who are specifically valued for their expertise in academic and behavioral interventions, for example, one can deduce that this would generate a more “sophisticated and in-depth discussion,” about these programs (Lyst-Miltich et al., 2005, p. 215).

The next lesson from implementation attempts happened in 2006 when Bohanon and colleagues measured staff perceptions associated with a SWPBS implementation process occurring at a high school in the third largest public school system in the United States—The Chicago public school system. In this empirical endeavor the social validity of the primary or
universal level of PBS was in question. Once a year for two years, the researchers administered the Effective Behavior Support (EBS) Survey which was designed to provide a measure of the staff’s perception of SWPBS at that particular moment in time.

The survey was administered in small groups composed of “key personnel” who were defined by the researchers as those “who came into direct contact with the students during the school day” (p. 134). The results demonstrated a strong increase in support for the priority of the program from year 1 to year 2. This information was later used for selecting priorities for action planning in years 3 and 4. In discussing their limitations and future directions, the researchers commented on the scarcity of data concerning planning and implementation at individual levels of support. That is, there is a foreseeable need to examine the second and third tier level of supports as described by the PBS model. In response to this need, future improvements should be guided by feedback gathered from stakeholders involved in second and third tier support.

In an interesting effort to determine areas for growth, Kincaid, Childs, Blase, and Wallace (2007) used a systematic process to understand the barriers and facilitators of another SWPBS initiative implemented in Florida. By 2005 Florida’s behavioral support project had implemented SWPBS into more than 100 schools across the state and several questions began to emerge. In an effort for answers, the researchers invited eight high implementing PBS schools to participate in a modified nominal group process. Each group was instructed not to interact with other members while answering two open ended questions. They were instructed to write down their answers to the following questions: “What have been the barriers to implementing school-wide positive behavior support in your school or district?” And, “What has facilitated the implementation of school-wide positive behavior support at your school or in your district?”
Results outlined a total of 21 barrier themes. Of these themes, over half of the barriers reflected issues of staff buy-in. Lack of staff buy-in was characterized by poor communication resulting in miscommunications and confusion regarding simple procedures and desired goals. By identifying specific factors that have an impact on implementation of SWPBS, the team was able to successfully outline several ways to improve the success of the program. The information gathered by Kincaid et al. (2007) is an example of the valuable information that can be gathered by using social validity assessments to inform future practices.

Based on the recent literature presented on this topic, successful social validation implementation relies heavily on a number of unique system dynamics all working together to create the appropriate environment needed to evaluate the construct of social validity. First, we must not only survey key stakeholders (e.g. consumer judges) but we must survey a variety of key stakeholders. Second, we must evaluate the secondary and tertiary tiers of PBS, not just the universal tier. And third, we must use social validation data to produce a workable outline of things that need to change if this data is to be used productively. After reviewing the literature on this subject area, it is evident that much has been done and gained with using social validation assessments to evaluate PBS programs. However, it is clear that several untapped resources continue to exist in the process.

**Utah’s Academic, Behavior and Coaching Initiative (ABC-UBI)**

An organization that has made significant efforts in collecting social validation data is Utah’s Academic, Behavior and Coaching Initiative (ABC-UBI). This organization understands that programs which open themselves up to consumer opinion can strengthen their initiatives by
ABC-UBI has sought to sponsor and teach a number of schools across the state how to go about implementing PBS-RtI. ABC-UBI is a statewide training initiative that promotes district and school level implementation of Response to Intervention (RtI) and Positive Behavior Interventions and Supports (PBIS). ABC-UBI follows a school-wide model of prevention and problem behaviors to support positive behaviors. Together with the Utah State Office of Education, the Utah Personnel Development Center and the Utah State Personnel Development Improvement Grant, ABC-UBI currently sponsors 56 schools in 13 evaluation sites across the state.

As part of this initiative, ABC-UBI currently evaluates treatment fidelity by using the School-wide Evaluation Tool (SET) version 2.0 to assess and evaluate individual schools’ yearly progression. This tool is specifically designed to evaluate treatment fidelity, ensuring that schools are implementing PBS-RtI accurately. Data for the SET are collected annually, conducted before SWPBS interventions begin and conducted 6 to 12 weeks after SWPBS intervention are implemented. The specific information that is gathered for this assessment include observations, a minimum of 10 staff interviews and 15 student interviews or surveys, and reviews of permanent products. The SET is made up of seven indicator categories: Expectations defined, behavioral expectations taught, on-going system for rewarding behavioral expectations, system for responding to behavioral definitions, monitoring and decision making, management, and district and state level support.

Based on this information, the SET provides ABC-UBI with a score that places a school within a specific implementation level. High implementing schools are those that have received 80% on six of the seven indicator categories, meaning that these are schools which have been evaluated to be implementing PBIS programs efficiently and with integrity. In addition to the
SET, ABC-UBI also solicits consumer opinion through short satisfaction questionnaires as part of their annual conferences. Other outcome measures include monthly behavior summaries including office discipline referrals, suspensions and school wide positives. Participating schools also report on academic indicators three times a year.

Every spring ABC-UBI holds an annual conference for the schools that they sponsor, schools that have begun to implement PBS-RtI interventions. This conference is attended by members of the school wide team. Each SWPBS team is directly responsible for training their school in the procedures and program that ABC-UBI facilitates. These teams are comprised of “team members” from various consumer groups (i.e. related service providers, school teachers and administrators). ABC-UBI requires that each school based team include the administrator, one building coordinator (assigned by the administrator), one special education teacher, regular education teachers from both lower and higher grades, a related service provider and sometimes (at the school’s discretion) a numeracy or literacy coach and/or parent. All team member positions are voluntary. The building coordinator position, however, is an assigned position at the school administrator’s discretion. As another team member, each school also has a district coach, appointed by the district.

In efforts to inform future ABC-UBI and PBS/RtI program implementation, ABC-UBI has sought a redirection towards effective and ideal social validation procedures. As of April 2008, ABC-UBI used satisfaction questionnaires that were missing the key assessment components as outlined in the literature. For purposes of this study, ABC-UBI aligned with researchers to redesign their annual satisfaction questionnaire to address the limitations of past social validation efforts.
Current Limitations

The current literature pertaining to positive behavior supports is rapidly increasing but not without its limitations. Despite the repeated recommendations to assess social validity (Carnine, 1997; Carr, 2007; Gresham & Lopez, 1996; Kaufman, 1996; Kern & Mantz, 2004; Lyst et al., 2005; Schwartz & Baer, 1991; Scott, 2007), it appears that researchers have continued to omit reporting, or even evaluating this important piece of information. Even when strides are made to assess and report on social validity, these reports rarely reflect the original purposes for social validation as outlined by Wolf (1978) and Kazdin (1977), the founding fathers of social validity and social validation. The original intent of social validation was to target direct consumers for their evaluations of three distinct areas: the social significance of treatment goals, the social appropriateness of the procedures, and the social importance of the effects or outcomes.

In an attempt to regain some of what has been lost from social validity assessments, Kern and Mantz in 2004, proposed the following improvements be made in future research: (a) clearer definitions of the term stakeholders (b) adequate representation of stakeholders and (c) adequate assessments into the goals, procedures and outcomes regarding the secondary and/or tertiary levels of the PBS prevention model. These improvements redirect the purpose of social validity assessments back to evaluating whether or not the goals serve the client (Kern & Mantz, 2004).

As evidenced by the examination of McCurdy et al. (2003) and Lyst-Miltich (2005), an adequate representation of those responsible for the primary consumers (i.e., the students), in order to thoughtfully evaluate the goals of treatment programs, has yet to be done in an inclusive scale. Categorically speaking, key consumers should include: teachers, administrators, and related service providers like school psychologists, social workers, and school counselors.
Results should be compared across these consumers groups as well across those who are actively involved with program development and implementation and those who are not as actively involved with program development and implementation. Determining a difference between the levels of social validity for these groups would contribute to the range of information gathered from these reports.

In response to the overwhelming requests in the literature (Carnine, 1997; Carr, 2007; George et al., 2008; Gresham & Lopez, 1996; Kaufman, 1996; Kern & Mantz, 2004; Lyst et al., 2005; Schwartz & Baer, 1991; Scott, 2007) the present study proposes to address these limitations first and foremost by adequately defining, and including the following key consumer groups: teachers, administrators and related service providers. Second, an adequate representation of these groups will be assessed, along with an evaluation of consumer satisfaction regarding goals, procedures, and outcomes across all three tiers of PBS. And finally, since the study is interested in the levels of social validity for schools currently implementing PBS programs, the final sample will be taken from those participating in ABC-UBI’s program.
Method

Participants

The participants for this study were selected from a pool of PBS-RtI Elementary and Middle schools currently participating in Utah’s Academic, Behavior and Coaching Initiative (ABC-UBI). All of the schools sponsored by ABC-UBI received the questionnaire developed for this study. The final number of participants totaled 35 schools in 16 school districts across the state of Utah. All school districts were regionally distributed across urban, rural, and suburban regions. Proportions equal to the general population were included in this sample.

A significant proportion averaging about 80-90 % of the final sample was composed of teachers and 10-20% was composed of related service personnel and administrators. Demographically, participants were asked to provide information regarding, professional classification (teacher, related service provider, etc.), and number of years their school has participated in the ABC-UBI program. A comprehensive summary of the participating schools that supplied information regarding their school and district are presented in Table 1.

Measures

As the primary measure for this study, a questionnaire was designed specifically following suggestions in the literature for accurate social validity sampling. The questionnaire was designed to include a total of 18 items, each item measuring a specific judgment of social validity. For purposes of continuity, the term Positive Behavior Support (PBS) was replaced with the term Positive Behavior Interventions and Supports (PBIS) in the body of the questionnaire, in order to make the questionnaire’s terminology match with the participant’s training. Along this reasoning, the terms goals of PBIS were referred to as the four components of PBIS also to control for this difference in terminology. Following the suggestion of Reimers et al. (1987) that understanding should precede measures of acceptability; the questionnaire was
<table>
<thead>
<tr>
<th>District</th>
<th>Participating Schools</th>
<th>Years with ABC-UBI</th>
<th>SET Score</th>
<th>Related Service Providers</th>
<th>Total Participating Consumers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Total Participating Consumers</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Providers</td>
</tr>
<tr>
<td>Alpine</td>
<td>Grovecrest Elementary</td>
<td>1</td>
<td>-</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Cache</td>
<td>North Cache Center</td>
<td>7</td>
<td>95.8 %</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Wellsville Elementary</td>
<td>3</td>
<td>95.1 %</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Carbon</td>
<td>Creekview Elementary</td>
<td>3</td>
<td>-</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Charter</td>
<td>Summit Academy Elementary</td>
<td>1</td>
<td>51.9 %</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Summit Academy Secondary</td>
<td>1</td>
<td>49.1 %</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Canyons</td>
<td>Butler Elementary</td>
<td>2</td>
<td>-</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Davis</td>
<td>Centerville Elementary</td>
<td>3</td>
<td>-</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Lincoln Elementary</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Snowhorse Elementary</td>
<td>2</td>
<td>-</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Stewart Elementary</td>
<td>3</td>
<td>-</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Grand</td>
<td>Grand County Middle</td>
<td>2</td>
<td>59.1 %</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Granite</td>
<td>Cooper Hills Elementary</td>
<td>2</td>
<td>-</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>David Gourley Elementary</td>
<td>3</td>
<td>-</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Hillsdale Elementary</td>
<td>3</td>
<td>-</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Magna Elementary</td>
<td>3</td>
<td>100 %</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Robert Frost Elementary</td>
<td>3</td>
<td>-</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Valley Jr. High</td>
<td>2</td>
<td>-</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>
### Table 1 (continued)

**Participant Information by District**

<table>
<thead>
<tr>
<th>District</th>
<th>Participating Schools</th>
<th>Years with ABC-UBI</th>
<th>SET Score</th>
<th>Related Service Providers</th>
<th>Total Participating Consumers</th>
<th>Missing/Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jordan</td>
<td>Butterfield Canyon Elementary</td>
<td>2</td>
<td>-</td>
<td>1</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Columbia Elementary</td>
<td>1</td>
<td>92.6 %</td>
<td>0</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Logan</td>
<td>Hillcrest Elementary</td>
<td>1</td>
<td>97.4 %</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Ogden</td>
<td>Gramercy Elementary</td>
<td>3</td>
<td>83.3 %</td>
<td>1</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Salt Lake</td>
<td>Jackson Elementary</td>
<td>3</td>
<td>100 %</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Mountain View Elementary</td>
<td>1</td>
<td>85.4 %</td>
<td>0</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Unitah Elementary</td>
<td>2</td>
<td>94.7 %</td>
<td>1</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>San Juan</td>
<td>Blanding Elementary</td>
<td>3</td>
<td>97.6 %</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Monticello Elementary</td>
<td>3</td>
<td>98.3 %</td>
<td>0</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Tooele</td>
<td>Harris Elementary</td>
<td>2</td>
<td>94.6 %</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Wasatch</td>
<td>Heber Valley Elementary</td>
<td>3</td>
<td>100 %</td>
<td>1</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Old Mill Elementary</td>
<td>3</td>
<td>100 %</td>
<td>0</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Rocky Mountain Middle</td>
<td>2</td>
<td>97.6 %</td>
<td>0</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Weber</td>
<td>Farr West Elementary</td>
<td>1</td>
<td>95.8 %</td>
<td>0</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Freedom Elementary</td>
<td>4</td>
<td>96.4 %</td>
<td>0</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Hooper Elementary</td>
<td>2</td>
<td>88.3 %</td>
<td>1</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Lomond View Elementary</td>
<td>1</td>
<td>94.0 %</td>
<td>0</td>
<td>7</td>
<td>0</td>
</tr>
</tbody>
</table>

*Note.* A total of 28 participants did not include their surveys in school envelopes so their school information is not reported above.
designed to begin with an item written to measure participants’ perceived understanding of the model’s goals and procedures.

Two questions intended to measure the first judgment of social validity (i.e. program goal acceptability) were written using the terms important and acceptable as outlined by Fawcett (1991). Two questions intended to measure the second judgment of social validity, or acceptability of program procedures, employed the language “willingness to use, given time constraints” and “willingness to recommend to others” as recommended by Kern and Manz (2004) for determining meaningful acceptance. The third judgment of social validity, or program outcomes, was also addressed with two questions that were written to measure acceptability of treatment outcomes. The format for these questions pertaining to treatment outcome was taken from an outline provided by (Lane & Beebe-Frankenberger, 2004). Lastly, the final three items of this questionnaire were written to specifically address secondary and tertiary levels of PBIS prevention. The final questionnaire was submitted to expert review.

**Procedures and Data Collection**

The initial questionnaire was handed out at ABC-UBI’s yearly training conference. The ABC-UBI conference gathered all of the SWPBS school teams as part of the ongoing training that ABC-UBI offers its sponsored schools. At the close of the conference, participants were gathered in the main ballroom where the conference director, began by introducing the survey as part of a new research effort between ABC-UBI and a local university. The participants were told that this year’s satisfaction questionnaire was to be completed voluntarily to collect research data to inform future changes to the ABC-UBI program.

The participants were told to find their questionnaires in the conference folders (a folder they received at the commencement of the conference) and that their voluntary participation in
the research project would earn them a raffle entry for a chance to win one of 10 iPod shuffles. Participants were then instructed to first read and sign the front page (informed consent page) if they wished to participate and to submit their questionnaires along with their signed informed consent forms as a school in the white envelope provided to their building coordinator. This way data could be kept separate by school. They were told to seal the questionnaires in the envelope to ensure privacy of responses and drop them off at a designated station near an exit before leaving the conference. If they wished to complete their questionnaires in private and submit these individually (not as a school) they could take the survey home and mail them the program director at UPDC within the next two weeks to be included in the shuffle raffle.

The questionnaire began with an informed consent page for all participants to sign (See Appendix A). Following informed consent the participants were asked to read a brief one-page explanation of the terms they will encounter in the questionnaire to control for possible terminology confusion (See Appendix B). For purposes of continuity, the term Positive Behavior Support (PBS) was replaced with the term Positive Behavior Interventions and Supports (PBIS) in the body of the questionnaire, in order to make the questionnaire’s terminology match with the participant’s training. Along this reasoning, the term goals of PBIS were referred to as the four components of PBIS so as to control for this difference in terminology.

Next, participants were to fill out a demographics section at the top of the questionnaire inquiring about professional classification (teacher, related service provider, etc.), number of years their school had participated with ABC-UBI (see questionnaire in Appendix C). Following the demographics section, participants continued on to filling out the questionnaire.
SET scores for each individual school were gathered via ABC-UBI’s coaching/training website. Each school is listed under their corresponding district and every school has a school profile that is updated annually. SET scores posted on this training website are password protected to maintain confidentiality. Special rights to this website were granted to the researcher by ABC-UBI.

**Materials**

The questionnaire was administered in paper format. The complete list of materials for this study included: informed consent forms for team members, questionnaire cover pages with terminology clarifications and instructions for filling out the questionnaire, pens/pencils, conference folders, white envelopes for questionnaire privacy purposes, manila envelopes for blank questionnaires, and 10 iPod shuffles.

**Statistical Analyses**

The 18-item questionnaire was rated on a 5-point Likert scale. Each of the 5 points were anchored by a specified descriptor ranging from strongly agree to strongly disagree. By selecting to anchor each Likert point to a descriptor, the data was then feasibly organized to provide a visual representation of the results. Descriptive statistics were used to summarize and describe participant demographic information. Because this research is exploratory, and the purpose is not survey development, no analyses were run on the survey itself, however the survey was committed to expert review before being introduced to the participants.

Percentages for professional classification (e.g., teacher, related service provider), school location for those that turned in their questionnaires as a school, at the conference, were reported. Medians and measures of central tendency (i.e., means and standard deviations) were also calculated and reported. Possible differences were explored among percentages reported for
those who view ABC-UBI highly in terms of acceptability and those that view ABC-UBI as lower on acceptability.

A Spearman correlation was also conducted to explore linear relationships between school SET scores and responses on the questionnaire. In addition, a paired sample t-test was used to analyze SET data from the 2007-2008 and 2008-2009 school years in attempts to determine if SET scores varied over time. This was done with the intention to substitute missing 2008-2009 school data with 2007-2008 data.
Results

This primary objective of this study was carried out by addressing three key concepts missing in the social validity literature. First, each key consumer was identified and polled. Collectively the question asked was, “What perceptions do related service providers (e.g., school psychologists, school counselors, and social workers), teachers, and administrators have in regards to the goals, procedures and outcomes of positive behavioral initiatives? Second, the social validity of the secondary and tertiary levels of PBS-RtI programs, namely the ABC-UBI program, was evaluated. The question was asked, “What perceptions do the consumers involved in positive behavioral initiatives have in regards to the goals, procedures and outcomes of the secondary and tertiary levels of PBS-RtI initiatives?” And lastly, in an effort to find a correlation between treatment integrity and social validity, the question “Is there a relationship between the respondent’s schools’ SET scores and their individual responses to the questionnaire?” was addressed.

Consumer Judges

The data are organized and presented according to consumer judges. Each subgroup is identified and significant data for that subgroup is represented. Overall, the number of respondents for the entire survey totaled 282. Of these 282, 9.2% (n = 26) were administrators; 7.4% (n = 21) were related service providers (i.e., school psychologists, counselors, and social workers); 57.1% (n = 161) were teachers, both general and special education teachers; 11.7% (n = 33) did not respond; and 15.1% (n = 29) were included in the “other” category (i.e., district coaches, building coordinators, paraeducators, parent/community representatives, etc.). For those that turned in their questionnaires in their sealed school envelopes, a comprehensive summary of this data is presented in the participants table above. See Table 1.
**Related service providers.** The questionnaire responses for the consumer group labeled related service providers are summarized in Table 2. The data show this consumer group was highly satisfied with the ABC-UBI program. The mode response on the majority of the questions was a 4 (Agree). On Question 4 which asked about whether ABC-UBI made a positive impact on their school 100% \( (M = 4.65, SD = .49) \) of responders agreed or strongly agreed. On question 11, which asked about whether ABC-UBI was worth the time and effort invested, 95.2 % \( (M = 4.57, SD = .60) \) responded positively rating this question either a 4-Agree or 5-Strongly Agree. Out of 21 responders, 95.2% \( (M = 4.71, SD = .56) \) also said that they would recommend the ABC-UBI model to other educators, while 4.8 % remained neutral. On question 6, which pertained to the ease of implementation of the ABC-UBI procedures, 52.4% \( (M = 3.43, SD = .87) \) said the data collection procedures were easy to implement while 9.6% said they were not. The responders were also specifically asked about their perceptions of staff consensus or buy-in for the ABC-UBI program and out of 21 responders 66.7 % \( (M = 3.71, SD = .85) \) said they agreed or strongly agreed with that statement while 9.5 % did not.

**Teachers.** The results for the consumer group of teachers, both general education and special education teachers are presented in Table 3. The mode response on the majority of the questions was a 4 (Agree). Out of 161 teacher responders, 98.1% \( (M = 4.52, SD = .61) \) said the ABC-UBI program made a positive impact in their schools and 94.3 % \( (M = 4.38, SD = .64) \) of 156 responders said that the ABC-UBI program was worth their time and effort. Also 92.2 % \( (M = 4.41, SD = .70) \) of 155 responders said they would recommend the ABC-UBI program to other educators. Out of 12 social validity questions, 3 questions elicited negative responses from the teacher consumer group. On question 6, 72.4 % \( (M = 3.83, SD = .89) \) of 160 teachers said that
Table 2

Percentage of Related Service Providers’ Positive and Negative Responses to Survey Questions

<table>
<thead>
<tr>
<th>Question</th>
<th>n</th>
<th>Pos. %&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Neutral</th>
<th>Neg. %&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In the past year, I used ABC-UBI strategies and interventions.</td>
<td>21</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2. My knowledge (i.e. information learned from this program) in the application of systematic problem solving for academic and social behavior has increased.</td>
<td>21</td>
<td>95.2</td>
<td>0</td>
<td>4.8</td>
</tr>
<tr>
<td>3. My skills (i.e. personal tools gathered from program, abilities) in the application of systematic problem solving for academic and social behavior have increased.</td>
<td>21</td>
<td>85.7</td>
<td>9.5</td>
<td>4.8</td>
</tr>
<tr>
<td>4. The ABC-UBI Project made a positive impact within my school.</td>
<td>20</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5. ABC-UBI requirements improved school outcomes.</td>
<td>20</td>
<td>85</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>6. ABC-UBI’s data collection procedures were easy to implement.</td>
<td>21</td>
<td>52.4</td>
<td>38</td>
<td>9.6</td>
</tr>
<tr>
<td>7. ABC-UBI’s progress monitoring procedures were practical (i.e. easy, feasible, useable).</td>
<td>21</td>
<td>66.7</td>
<td>23.7</td>
<td>9.6</td>
</tr>
<tr>
<td>8. The amount of paperwork involved in implementing ABC-UBI was reasonable (i.e. not asking too much, manageable).</td>
<td>21</td>
<td>66.6</td>
<td>23.8</td>
<td>9.5</td>
</tr>
<tr>
<td>9. Our school’s administrative leadership for ABC-UBI was supportive (i.e. provided help, facilitated implementation).</td>
<td>21</td>
<td>95.2</td>
<td>0</td>
<td>4.8</td>
</tr>
<tr>
<td>10. Our school has staff consensus or “buy in” for ABC-UBI.</td>
<td>21</td>
<td>66.7</td>
<td>23.8</td>
<td>9.5</td>
</tr>
<tr>
<td>11. ABC-UBI Project was worth the time and effort invested.</td>
<td>21</td>
<td>95.2</td>
<td>4.8</td>
<td>0</td>
</tr>
<tr>
<td>12. I would recommend the ABC-UBI model to other educators.</td>
<td>21</td>
<td>95.2</td>
<td>4.8</td>
<td>0</td>
</tr>
</tbody>
</table>

<sup>a</sup> Participants’ responses were summarized as positive or negative. “Agree” and “strongly agree” were listed as positive.

<sup>b</sup> “Disagree” and “strongly disagree” were listed as negative.
the data collection procedures of the ABC-UBI program were easy to implement and 10 \% said they were not. On question 7, of 159 teachers, 6.9 \% (M = 3.85, SD = .83) of them said that the progress monitoring procedures were not practical. In regards to how reasonable the paperwork required to implement ABC-UBI strategies are, 68.4 \% (M = 3.96, SD = 2.6) of 161 responders agreed with that statement while 8.1 \% said the paperwork was not reasonable.

**Administrators.** The questionnaire responses for the consumer group labeled administrators are included in Table 4. The data show this consumer group was also highly satisfied with the ABC-UBI program. The mode response on the majority of the questions was a 5 (Strongly Agree). Out of 26 administrators, 100\% (M = 4.81, SD = .40) said the ABC-UBI program made a positive impact in their schools and 100\% (M = 4.64, SD = .49) said the program improved positive school outcomes. On questions 2 (M = 4.62, SD = .50) and 3 (M = 4.42, SD = .50), 100 \% of the administrators also said that both their knowledge and their skills in the application of systematic problem solving for academic and social behavior have increased.

In regards to how easy the data collection procedures for the ABC-UBI interventions are, 73.1 \% (M = 3.88, SD = .91) of 26 administrators said they were easy while 3.8 \% said they were not. In addition, 76\% (M = 4.0, SD = .96) of 25 administrators agreed that the paperwork was reasonable while 4 \% said they were not. The majority of the administrators, 96.1\%, (M = 4.76, SD = .44), also agreed that they would recommend the ABC-UBI to other educators and 100\% (M = 4.65, SD = .56) said the program was worth their time and effort. The response rates for the administrator category were the highest of all of the consumer groups and were the most positive.
Table 3

Percentage of Teachers’ Positive and Negative Responses to Survey Questions

<table>
<thead>
<tr>
<th>Question</th>
<th>n</th>
<th>Pos. %a</th>
<th>Neutral</th>
<th>Neg. %b</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In the past year, I used ABC-UBI strategies and interventions.</td>
<td>161</td>
<td>98.8</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>2. My knowledge (i.e. information learned from this program) in the application of systematic problem solving for academic and social behavior has increased.</td>
<td>160</td>
<td>95.6</td>
<td>3.8</td>
<td>0.6</td>
</tr>
<tr>
<td>3. My skills (i.e. personal tools gathered from program, abilities) in the application of systematic problem solving for academic and social behavior have increased.</td>
<td>161</td>
<td>94.4</td>
<td>5</td>
<td>0.6</td>
</tr>
<tr>
<td>4. The ABC-UBI Project made a positive impact within my school.</td>
<td>161</td>
<td>98.1</td>
<td>0.6</td>
<td>1.2</td>
</tr>
<tr>
<td>5. ABC-UBI requirements improved school outcomes.</td>
<td>158</td>
<td>94.3</td>
<td>4.4</td>
<td>1.2</td>
</tr>
<tr>
<td>6. ABC-UBI’s data collection procedures were easy to implement.</td>
<td>160</td>
<td>72.4</td>
<td>17.5</td>
<td>10</td>
</tr>
<tr>
<td>7. ABC-UBI’s progress monitoring procedures were practical (i.e. easy, feasible, useable).</td>
<td>159</td>
<td>73</td>
<td>20.1</td>
<td>6.9</td>
</tr>
<tr>
<td>8. The amount of paperwork involved in implementing ABC-UBI was reasonable (i.e. not asking too much, manageable).</td>
<td>161</td>
<td>68.4</td>
<td>23</td>
<td>8.1</td>
</tr>
<tr>
<td>9. Our school’s administrative leadership for ABC-UBI was supportive (i.e. provided help, facilitated implementation).</td>
<td>155</td>
<td>93.5</td>
<td>5.2</td>
<td>1.3</td>
</tr>
<tr>
<td>10. Our school has staff consensus or “buy in” for ABC-UBI.</td>
<td>155</td>
<td>74.2</td>
<td>20</td>
<td>5.8</td>
</tr>
<tr>
<td>11. ABC-UBI Project was worth the time and effort invested.</td>
<td>156</td>
<td>94.3</td>
<td>4.5</td>
<td>1.3</td>
</tr>
<tr>
<td>12. I would recommend the ABC-UBI model to other educators.</td>
<td>155</td>
<td>92.2</td>
<td>6.5</td>
<td>1.2</td>
</tr>
</tbody>
</table>

a Participants’ responses were summarized as positive or negative. “Agree” and “strongly agree” were listed as positive.
b “Disagree” and “strongly disagree” were listed as negative.
Multi-Tiered Levels of Intervention

Questions 13-18 of the questionnaire queried all consumers’ satisfaction with the treatment goals, procedures and outcomes across all tiers of PBS program implementation. Out of 276 responders, 94.6% ($M = 4.38, SD = .68$) said they were satisfied with their universal/core goals, 91% ($M = 4.30, SD = .74$) said they were satisfied with the universal procedures, and 86.2% ($M = 4.15, SD = .75$) said they were satisfied with the overall outcomes at the universal level. Out of 275 responders, 86.2% ($M = 4.18, SD = .76$) said they were satisfied with the supplemental and intensive (2\textsuperscript{nd} & 3\textsuperscript{rd} tier) goals while 2.5% said they were not. Lastly, out of 276 responders, 81.5% ($M = 4.11, SD = .77$) said they were satisfied with the supplemental and intensive procedures at their schools and 79.7% ($M = 4.03, SD = .77$) said they were satisfied with the supplemental and intensive outcomes at their schools. Results summarized in Table 5.

SET Scores and Social Validation Correlations

In efforts to explore the relationship between treatment fidelity (e.g. school SET scores) and responses to the individual questionnaire items, a Spearman correlation was conducted. A paired-sample $t$-test was also run to address a deficit in SET data. When SET data was first compiled, several schools were identified for not having reported 2008-2009 school year data, but data for these same schools were available for the 2007-2008 school year. Paired-samples $t$ tests were calculated to compare the mean 2008-2009 data with the mean 2007-2008 data to determine if a substitution for the missing 2008-2009 data could be made using the 2007-2008 data.

The mean on the 2007-2008 data was 91.02 ($SD = 6.04$), and the mean on the 2008-2009 data was 96.62 ($SD = 4.63$). A significant increase from 2007-2008 and 2008-2009 data was found ($t (64) = -6.168, p < .001$) which determined that the 2007 data could not be used in lieu of
Table 4

*Percentage of Administrators’ Positive and Negative Responses to Survey Questions*

<table>
<thead>
<tr>
<th>Question</th>
<th>n</th>
<th>Pos. %(^a)</th>
<th>Neutral</th>
<th>Neg. %(^b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In the past year, I used ABC-UBI strategies and interventions.</td>
<td>25</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2. My <em>knowledge</em> (i.e. information learned from this program) in the application of systematic problem solving for academic and social behavior has increased.</td>
<td>26</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3. My <em>skills</em> (i.e. personal tools gathered from program, abilities) in the application of systematic problem solving for academic and social behavior have increased.</td>
<td>26</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4. The ABC-UBI Project made a positive impact within my school.</td>
<td>26</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5. ABC-UBI requirements improved school outcomes.</td>
<td>25</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6. ABC-UBI’s <em>data collection</em> procedures were easy to implement.</td>
<td>26</td>
<td>73.1</td>
<td>23.1</td>
<td>3.8</td>
</tr>
<tr>
<td>7. ABC-UBI’s <em>progress monitoring</em> procedures were practical (i.e. easy, feasible, useable).</td>
<td>25</td>
<td>80</td>
<td>16</td>
<td>4</td>
</tr>
<tr>
<td>8. The amount of paperwork involved in implementing ABC-UBI was-reasonable (i.e. not asking too much, manageable).</td>
<td>25</td>
<td>76</td>
<td>20</td>
<td>4</td>
</tr>
<tr>
<td>9. Our school’s administrative leadership for ABC-UBI was supportive (i.e. provided help, facilitated implementation).</td>
<td>24</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10. Our school has staff consensus or “buy in” for ABC-UBI.</td>
<td>26</td>
<td>84.6</td>
<td>15.4</td>
<td>0</td>
</tr>
<tr>
<td>11. ABC-UBI Project was worth the time and effort invested.</td>
<td>26</td>
<td>96.1</td>
<td>3.8</td>
<td>0</td>
</tr>
<tr>
<td>12. I would recommend the ABC-UBI model to other educators.</td>
<td>25</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

\(^a\) Participants’ responses were summarized as positive or negative. “Agree” and “strongly agree” were listed as positive.

\(^b\) “Disagree” and “strongly disagree” were listed as negative.
the missing 2008 data.

A Spearman rho correlation coefficient was calculated for the relationship between school SET scores (of the 2008-2009 school year only) and participants’ responses to the individual questionnaire items. Significant positive correlations were found between SET scores and question 1 (\( \rho(279) = .118, p < .01 \)); question 4 (\( \rho(278) = .145, p < .01 \)); question 10 (\( \rho(272) = .195, p < .01 \)); question 14 (\( \rho(274) = .181, p < .01 \)); question 16 (\( \rho(273) = .146, p < .01 \)); and question 17 (\( \rho(274) = .143, p < .01 \)). The data illustrate that respondents from schools with higher treatment fidelity: used ABC-UBI strategies and interventions more, agreed that ABC-UBI initiatives made a positive impact, perceived their schools to have more buy-in for ABC-UBI, and were more satisfied with their school’s universal goals, supplemental and intensive goals and procedures. No positive correlations were found between SET data and 12 of the other individual questions. Also, no negative correlations were found. See Table 6.

Table 5

*Percentage of All Consumers’ Positive and Negative Responses to Survey Questions Regarding Multi-Tiered Program Implementation*

<table>
<thead>
<tr>
<th>Question</th>
<th>n</th>
<th>Pos. %a</th>
<th>Neutral</th>
<th>Neg. %b</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. I am satisfied with our school’s <em>universal</em>/core <em>goals</em>.</td>
<td>276</td>
<td>94.6</td>
<td>3.6</td>
<td>1.8</td>
</tr>
<tr>
<td>14. I am satisfied with our school’s <em>universal</em>/core <em>procedures</em>.</td>
<td>276</td>
<td>91</td>
<td>6.2</td>
<td>2.9</td>
</tr>
<tr>
<td>15. I am satisfied with our school’s <em>universal</em>/core <em>outcomes</em>.</td>
<td>276</td>
<td>86.2</td>
<td>10.9</td>
<td>2.9</td>
</tr>
<tr>
<td>16. I am satisfied with our school’s <em>supplemental</em> and <em>intensive</em> <em>goals</em>.</td>
<td>275</td>
<td>86.2</td>
<td>11.3</td>
<td>2.5</td>
</tr>
<tr>
<td>17. I am satisfied with our school’s <em>supplemental</em> and <em>intensive</em> <em>procedures</em>.</td>
<td>276</td>
<td>81.5</td>
<td>15.9</td>
<td>2.6</td>
</tr>
<tr>
<td>18. I am satisfied with our school’s <em>supplemental</em> and <em>intensive</em> <em>outcomes</em>.</td>
<td>276</td>
<td>79.7</td>
<td>17.4</td>
<td>2.9</td>
</tr>
</tbody>
</table>

a Participants’ responses were summarized as positive or negative. “Agree” and “strongly agree” were listed as positive.

b “Disagree” and “strongly disagree” were listed as negative.
Table 6

Correlation Between School-Wide Evaluation Tool (SET) Score and Scores from End Of Year Survey Questions

<table>
<thead>
<tr>
<th>Questions from ABC-UBI end of year survey</th>
<th>Spearman Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In the past year, I used ABC-UBI strategies and interventions.</td>
<td>.118*</td>
</tr>
<tr>
<td>2. My <strong>knowledge</strong> (i.e. information learned from this program) in the application of systematic problem solving for academic and social behavior has increased.</td>
<td>.073</td>
</tr>
<tr>
<td>3. My <strong>skills</strong> (i.e. personal tools gathered from program, abilities) in the application of systematic problem solving for academic and social behavior have increased.</td>
<td>.052</td>
</tr>
<tr>
<td>4. The ABC-UBI Project made a positive impact within my school.</td>
<td>.145*</td>
</tr>
<tr>
<td>5. ABC-UBI requirements improved school outcomes.</td>
<td>.101</td>
</tr>
<tr>
<td>6. ABC-UBI’s <strong>data collection</strong> procedures were easy to implement.</td>
<td>.037</td>
</tr>
<tr>
<td>7. ABC-UBI’s <strong>progress monitoring</strong> procedures were practical (i.e. easy, feasible, useable).</td>
<td>.024</td>
</tr>
<tr>
<td>8. The amount of paperwork involved in implementing ABC-UBI was reasonable (i.e. not asking too much, manageable).</td>
<td>.088</td>
</tr>
<tr>
<td>9. Our school’s administrative leadership for ABC-UBI was supportive (i.e. provided help, facilitated implementation).</td>
<td>.017</td>
</tr>
<tr>
<td>10. Our school has staff consensus or “buy in” for ABC-UBI.</td>
<td>.195**</td>
</tr>
<tr>
<td>11. ABC-UBI Project was worth the time and effort invested.</td>
<td>.059</td>
</tr>
<tr>
<td>12. I would recommend the ABC-UBI model to other educators.</td>
<td>.090</td>
</tr>
<tr>
<td>13. I am satisfied with our school’s <strong>universal/core goals</strong>.</td>
<td>.100</td>
</tr>
<tr>
<td>14. I am satisfied with our school’s <strong>universal/core procedures</strong>.</td>
<td>.181**</td>
</tr>
<tr>
<td>15. I am satisfied with our school’s <strong>universal/core outcomes</strong>.</td>
<td>.104</td>
</tr>
<tr>
<td>16. I am satisfied with our school’s <strong>supplemental and intensive goals</strong>.</td>
<td>.146*</td>
</tr>
<tr>
<td>17. I am satisfied with our school’s <strong>supplemental and intensive procedures</strong>.</td>
<td>.143*</td>
</tr>
<tr>
<td>18. I am satisfied with our school’s <strong>supplemental and intensive outcomes</strong>.</td>
<td>.114</td>
</tr>
</tbody>
</table>

*. Correlation is significant at the .05 level (2-tailed).
**. Correlation is significant at the .01 level (2-tailed).
Discussion

A central purpose of the present study was to redirect social validity assessments to their primary purpose – an evaluation of program goals, procedures and outcomes at all levels of intervention implementation. This was accomplished in conjunction with the objective to poll key consumers often excluded from assessments who could greatly contribute to informing future intervention efforts. The results of all research questions are discussed in this section along with an outline of the limitations, future directions, and implications for practice that this study facilitates.

Role of Findings in Addressing Research Issues

The research issues explored in this study contributed much to the literature for social validation. Each research issue is discussed in the order presented to the reader in the introduction for this study. First, the consumer group responses are reviewed to collectively address the first three research issues of this study (i.e. what perceptions do the consumers have in respect to the social validity of goals, procedures, and outcomes of positive behavioral initiatives?), and outline what each consumer group has to say about ABC-UBI’s goals, procedures and outcomes. Second, a review regarding the social validation of the supplemental and intensive levels of PBS is presented to illustrate how the fourth research question contributes to the literature (i.e. what perceptions do the consumers involved in positive behavioral initiatives have in respect to the goals, procedures, and outcomes of the secondary and tertiary levels of PBS-RtI initiatives?). And lastly, a discussion regarding the relationship between faithful implementation and social validation (i.e. is there a relationship between the respondent’s school’s SET scores and their individual responses to the questionnaire?), illustrates how exploring this relationship garners support for collecting social validation data.
Consumer group responses. Questionnaire response data, as presented in the results, was broken down by consumer categories namely to allow for specific discussion. Schwartz and Baer (1991) recommended that social validity assessments include four types of consumers: direct, indirect, and members of the immediate community. This study included two of the three recommended consumer types: direct and indirect consumers. Teachers are part of the direct consumer group; those that are direct recipients of the intervention. Related Service personnel and Administrators are part of the indirect consumer group; those who are not direct recipients of the intervention but they make decisions about its adoption or can affect the results of an intervention. Each consumer category, while agreeing on several concepts, had opinions to contribute that were unique to their consumer group.

Related service providers. The first consumer group, Related Service Providers like school psychologists, social workers, paraprofessionals, etc. regarded several facets of ABC-UBI quite positively. Namely, the statements pertaining to the overall school climate and improved environment after implementing ABC-UBI’s universal initiatives to which 95.2% responded that the initiatives were worth their time and effort, and 100% said the initiatives made a positive impact on their school. The majority of Related Service Providers perceived the ABC-UBI initiatives to not only be worth the time and effort invested but worthy enough to recommend to others as 95% said they would recommend the principles of ABC-UBI to other educators. This high percentage indicates high social validity for this initiative. As Kern and Mantz (2004) noted, the consumers’ willingness to recommend to others is a facet for determining meaningful acceptance.

Several areas were outlined as needing improvement based on a small majority of related service provider responses. According to this sample of Related Service Providers, 9.6% said
the methods of data collection procedures were not easy to implement, 9.6% said the progress monitoring procedures were not practical and 9.5% perceived the amount of paperwork involved in implementing ABC-UBI initiatives to be unreasonable. Furthermore, 9.5% perceived that their school did not have consensus or buy in for the program. They may have found the initiatives to be valuable; however, they didn’t perceive their schools to have complete consensus. Different consumer groups thought differently though.

**Teachers.** The second consumer group, both general education and special education teachers were slightly less positive than the related service providers and the administrators regarding ABC-UBI’s initiatives. The teachers still rated several areas favorably. Specifically, 94% said that the ABC-UBI initiatives had improved school outcomes and 95% said they had increased their personal knowledge and skills in the application of systematic problem solving for academic and social behavior. Also, 94% perceived the initiatives to have been worth the time and effort invested.

Much like the related service providers, the teachers rated the areas having to do with the amount of work required to implement ABC-UBI initiatives unfavoratively. Approximately, 10% of the teachers disagreed with the methods of data collection procedures, 6.9% disagreed with the progress monitoring procedures and 8.1% disagreed with the amount of paperwork involved in implementing ABC-UBI initiatives. These areas were all rated negatively. It is inferred based on these results that the initiatives, while positive, require more work than the teachers are able to give.

**Administrators.** The last consumer group was the Administrators. Chosen for their ability to present a global view of ABC-UBI initiatives, the administrators were surprisingly positive about the PBS-RtI initiatives. All of the Administrators said they would recommend the
ABC-UBI model to other educators, all agreed that the project had made a positive impact in their school, and all agreed that they increased their knowledge and skill for solving academic and social behavior. Administrators also noted that school outcomes had improved. Despite this positive response, a small amount of Administrators outlined the same areas of improvement as both the teachers and related service providers did.

Based on the collective results it is clear that Administrators as well as the other key consumers had problems with the data collection and implementation procedures of the ABC-UBI initiatives meaning that these are the largest areas that require improvement in the future. Carnine (1997) explains that research can be evaluated in terms of trustworthiness, usability and accessibility. He also notes that improvements in these areas bear strong implications for practice. Programs that are not accessible or useful are less likely to be implemented by staff that is already stretched thin time wise. The fact that this study found data collection practices and implementation procedures to be less supported by the Administrators and other key consumers implies that this particular intervention must improve in the usability of its methods if it is going to be socially viable. Improving usability and accessibility would greatly increase how much PBS/RtI is used and how likely it will continue to be used by the ABC-UBI stakeholders and PBS/RtI implementers nationwide.

**Supplemental and intensive levels of implementation.** In addition to identifying areas of improvement for future intervention efforts, based on key consumer opinion, the findings of this study also contribute much to a frequently neglected domain, the supplemental and intensive levels of implementation (e.g. secondary and tertiary levels). Kern and Mantz (2004) note that it is important to ascertain consumers’ opinions of how supports at various levels work synergistically. Additionally, Sugai et al., (2000) highlight Positive Behavior Support as having
a proactive perspective (positive and preventative) that is maintained across the three levels (primary, secondary and tertiary) of intervention. Evaluating the secondary and tertiary levels for social validity would likely yield data as meaningful as evaluating social validity at the primary level. Social validity has long been assessed for the primary levels; however the secondary and tertiary levels are hardly ever assessed.

With this in mind, the secondary and tertiary levels of intervention were targeted by asking the question, “What perceptions do the consumers involved in positive behavioral initiatives have in respect to the goals, procedures and outcomes of the secondary and tertiary levels of PBS-RtI initiatives?” The findings suggest that key consumers find the secondary and tertiary goals and procedures just slightly more favorable than the secondary and tertiary outcomes; as 86% said they agreed with the goals, 81% said they agreed with the procedures and a slightly lower percentage, 79% said they agreed with the outcomes. This data trend was noticed in the responses to the same questions pertaining to the universal outcomes as well when 94% agreed with the goals, 91% agreed with the procedures but a slightly lower majority of 86% agreed with the outcomes.

This trend, while small in percentage was evident to warrant further investigation into the rarely explored supplemental and intensive levels of positive behavior supports. Perhaps consumers are not finding the outcomes as favorable as the goals and procedures at the second and third tiers because outcomes at these levels require more dedication while yielding fewer indicators of progress. After all, when one thinks about the supplemental and intensive levels the realization that these are designed for children whom the universal interventions have already failed is a grim reminder of how challenging the behaviors may really be.
Also, rapid progress is not likely to happen if behaviors spike in response to universal intervention efforts making outcomes at the secondary and tertiary levels more difficult to see. In 2000, Sugai et al. noted that regardless of the problem of limited resources, schools can make significant contributions by working smarter and creating proactive environments that sustain system wide interventions like PBS when the procedures are more structured and targeted. In the case of ABC-UBI’s initiatives, a foundation for successful outcomes is already established by school personnel perceiving the goals and procedures as socially valid. What is left now is to use this buy in to ‘work smarter’ and adjust as necessary if the outcomes are to become socially valuable in the future. For instance, flexing more supports at the supplementary and intensive levels may yield more positive results faster or fine tuning the procedures to make them even easier for teachers to implement may also make the time invested seem less bearing and the outcomes easier to wait for. Rewarding teachers for their faithfulness and tireless commitment to working with children at the supplementary and intensive levels could also help maintain their focus and that altruistic spirit that made most of them become teachers in the first place.

**Social validation and faithful implementation.** The relationship between social validation and treatment fidelity (e.g. faithful implementation) yielded results that warrant further evaluation in the field. Faithful implementation or treatment fidelity measures how close consumers are adhering to the original purposes of the intervention. The SET is designed to assess and evaluate this treatment fidelity. This study proposed an explorative look at the relationship between the respondent’s school’s SET scores (treatment fidelity) and their individual responses to the questionnaire in order to get a general view of whether or not treatment fidelity was correlated with positive responses or not.
The correlational data collected to identify the presence or absence of these linear relationships illustrated an interesting pattern. The significant positive linear relationship between each school’s SET scores and responses pertaining to Questions 1, 4, 10, 14, 16 & 17 indicated that the more accurate PBS-RtI implementation was being implemented at the school, the more the consumers agreed upon the following: that the initiatives had made a positive impact in their school, that their school had consensus or buy in, and the more satisfied the consumers were with the supplemental and intensive goals and procedures.

Despite the significant correlations found, the majority of the questions (12 to be exact) were not found to have significant correlations with SET scores. This majority is illustrated to place the six questions that were significant in an unbiased light. This majority of non-significant correlations can be attributed to a number of study limitations, however, one thing is certain, no negative correlations were found between treatment fidelity and the individual questions indicating that there is no reason to believe that social validity or treatment fidelity would act against each other.

Interestingly, the questions that were significantly correlated, propose that the more faithful a school was to implementing PBS-RtI initiatives accurately, the more the key consumers perceived these to have made a positive impact in their school. PBS-RtI initiatives are often cumbersome when it comes to data collection and paperwork, and results are rarely ever seen immediately. But, as these data show, the more accurate the implementation the more valuable it slowly becomes.

In 1996, Albin and colleagues described the concept of contextual fit as a congruence between the behavioral support plan, and a set of variables that affect the implementation of these plans. Among these set of variables the researchers discussed the environments and
systems within which the plan will be implemented. They noted that the biggest impact accruing from good contextual fit for behavior support plans lies in the implementation of the plan. “Such characteristics cannot help but promote increased fidelity or implementation…as well as increased maintenance or sustainability of support plan implementation” (Albin et al., 1996).

The argument can be made that accurate and faithful PBS-RtI initiatives foster social validity, or good contextual fit, and social validity fosters faithful PBS-RtI implementation. This powerful finding further supports the vitality of gathering social validity data from key consumers. Powerful measures as these are comparable to frequented measures like validity and reliability. The current findings, while meaningful, should be interpreted in light of this study’s limitations as discussed further.

**Limitations**

The results of this study should be interpreted with caution based on a few limitations. First, since this research was exploratory in nature, the survey instrument used, while founded on researched principles, was not tested for validity and reliability which limits the generalizability of the results. This would indicate that flaws in the format, structure or wording of the questions as well as the questionnaire as a whole could have yielded responses that were maybe products of confusion or misunderstandings as opposed to true opinion.

Secondly, the SET data used for the correlations between implementation progress and answers to individual questions on the questionnaire were incomplete. More than half of the data were missing due to school failure to collect and/or report scores. It is noted that alternatively, with a complete data set, the results may or may not have swayed to stronger positive correlations. The data may have warranted stronger support for PBS-RtI initiatives becoming easier to implement with high fidelity or the data could have demonstrated a negative correlation.
indicating that consumers who were implementing PBS-RtI initiatives faithfully did not find the initiatives to be more valuable. The implication is that without a complete data set, accurate determinations about the ease with which PBS-RtI initiatives improve over time cannot be made. This only supports the future need for accurate data keeping when implementing PBS-RtI initiatives.

Another limitation existed in the setting for this research. The study was conducted at the annual ABC-UBI conference where only a small population of the overall group of consumers of the ABC-UBI initiatives existed. A web-based study that could be distributed throughout the many consumers of ABC-UBI initiatives might possibly yield stronger correlational results and overall data in the future. Also, in the spirit of full disclosure, a funding disclaimer is noted that may be interpreted by some as a potential source of bias. ABC-UBI provided partial funding for this research to be conducted by the local university. The researcher maintains that all data was collected ethically and correctly, with all results being reported honestly, however these funding disclaimers are fully disclosed to the reader.

Lastly, this survey was conducted in paper format due to lack of resources at the ABC-UBI conference to have the participants complete the surveys online. Paper formatted consumer surveys tend to yield lower response rates as discussed in the literature (Kamps et al., 1998; McCarthy & Shrum, 2000; Ransdell, 1996). For this reason, a raffle was offered to promote the survey and those who chose to participate were offered a chance to win one of 10 iPod shuffles. Offering rewards may be a good motivator but they may also encourage people to fill out the survey quickly and without conscious effort just to get the reward.
Future Directions

Several improvements to this study should be made if future researchers would like to expound on this study through replication or adaptation. Despite the limitations of this study, future intervention research would be wise to make social validation assessments a priority. Not measuring this typically under-explored area would mean missing out on meaningful data that could improve overall intervention implementation. Effective social validation assessments should begin by incorporating the advice in the literature (Carnine, 1997; Carr, 2007; George et al., 2008; Gresham & Lopez, 1996; Kaufman, 1996; Kern & Mantz, 2004; Lyst et al., 2005; Scott, 2007; Shwartz & Baer, 1991). Expanding consumer categories to include the students, parents and other community members would yield more global data which would also contribute to improvement efforts. Any expansion into the social validity literature would be limited without the inclusion of these key consumers.

In addition to incorporating the advice in the literature, the present study recommends the following. First, future studies would be wise to evaluate the reliability and validity of the survey questionnaire used for this research. Reliable, generalizable results would only be strengthened with a valid instrument that future programs can incorporate into their repertoire. Not only would it make future studies stronger, but it would promote the collection of this underused measure if a tool was already in place for measuring it.

Second, any future expansions of this research would be wise to increase the sample size by acquiring consumer opinion across all consumers of the ABC-UBI program. Polling all staff and students of ABC-UBI schools would likely also yield more significant and generalizable results as well as informing future research efforts of the valuable contributions this consumer group has to offer. Referring back to Schwartz and Baer (1991), the term consumer needs more
development before they can contribute to the increased accuracy of social validity assessments. This study set out to narrow this gap, now future studies must close it.

Lastly, future research would do well to evaluate the correlations between treatment fidelity and social validity. These constructs have yet to be thoroughly and formally examined for their relationships to each other in the social validity research. A more comprehensive and targeted look at these constructs could garner support for the postulations set forth in this study about the positive correlations between social validity and treatment integrity. The implications for practice of social validation are also large and wide spread.

**Implications for Practice**

The implications of the results from this study empower consumers and program developers alike. The notion of social validity arose from the realization that programs are destined for failure – particularly by way of rejection – if one or another facet of the program is not acceptable to consumers (Kern & Mantz, 2004). The fundamental purpose of this study was to contribute to the literature by redirecting social validation assessments to their primary purpose – the evaluation of program goals, procedures and outcomes at all levels of program implementation thereby hopefully narrowing the research to practice gap and facilitating meaningful discussion. As Schwartz and Baer echoed in 1991, “the first goal of social validity assessments should be to gather accurate and useful information about possible trouble, not to encourage false praise from consumers” (p. 191).

These findings are meaningful for the schools and the people that are involved with ABC-UBI initiatives because not only have the consumers, quite literally, united under one voice to make their concerns known but now they have a workable outline for the areas that need
improvement -- a set of items that they can specifically hold ABC-UBI and future PBS-RtI initiatives accountable to.

The majority of consumers of the PBS-RtI initiatives, as taught by ABC-UBI, said that they did not find the data collection procedures for these interventions to be socially valid. While the initiatives were found to foster positive improvement in school climate, the key consumers did not find these methods practical. That being said, small, yet statistically significant correlations were found between faithful program implementation and increased social validity, indicating that the more faithfully a program was implemented the more valuable the consumers perceived the procedures to be.

This information empowers the consumers in two ways. First, it gives them a global view of the progress of such interventions across the state and second, it informs them of the areas to which they themselves (as a school system) need to pay close attention. If the larger organization does not change the individual schools can make adjustments and alter the interventions to better suit their environments and needs. The initiatives that ABC-UBI teaches are designed to be personalized according to individual school setting. This is not to say that improvement in the overall way ABC-UBI teaches their initiatives cannot be made. It simply implies that the room for change is already built into the flexibility of the PBS model. With social validation data, each school can make adjustments that suit the needs of their particular group of consumers.

The larger context for this research addresses the need for meticulous research strategies that inform future program developments to be a considerable part of progress monitoring. Carnine (1997) notes that “research is not just science, but craft and art as well. In short, researchers and other groups must begin [to] work concurrently to deal with shortcomings that
undermine the value of research” (p. 520). Consumers should protect themselves from interventions that promise results but do not deliver, by being informed of weak spots and compelling the distributors of interventions to make adjustments as it suits the environments that they are intended to be implemented in. Consumers can also consider taking matters into their own hands and make adjustments if they are legitimately warranted given the information that is disseminated through social validity assessments.

The problem that remains unresolved and affects the field, at this point in the literature includes taking these social validity measurements out to a larger population of people who may have more meaningful things to contribute. By taking this information to a more global network, concern for the ethical use of this information arises. Any data in the hands of those willing to twist and corrupt, it is a danger with any research effort. Consumers would be wise to familiarize themselves with such attempts by participating in these assessments under full disclosure. Social validity assessments cannot be conducted without the people, so if the people require the policymakers to share this information in the spirit of collaboration, then their valuable opinions can be used for and not against them.

**Conclusion**

In review, one of the fundamental philosophies of PBS is the idea that while humanistic values should not replace empiricism, these values should certainly inform empiricism (Carr et al., 2002). Social validation continues to be a vitally underused measure in the literature. Overall, the field of social validity and other measures of contextual fit stress the vitality of collecting consumer opinion for the greater good, however few answer this call. While social validity assessments are vital to the survival of applied behavior analysis they are more of a defensive tool rather than the discipline (Schwartz & Baer 1991). Multi-tiered models like PBS
that are designed to be proactive rather than reactive lend themselves well to social validity research. Most importantly, programs like PBS, which have established themselves as a collaborative system (Sugai et al., 2000), can use this research to strengthen their foothold in education through meaningful attentiveness to the opinions of the consumers they serve.

This important distinction is what makes PBS particularly special for enacting great change by answering the call that Wolf made in (1978) for consumer satisfaction questionnaires to become an essential part of research. The results of this study indicated that, as predicted, the key consumers of Utah’s Academic, Behavior and Coaching Initiative (ABC-UBI) had meaningful insights regarding ABC-UBI’s goals, procedures and outcomes. This information has contributed greatly both to ABC-UBI’s organization by outlining ways to improve social validity and to the literature on this topic by addressing the holes in the literature and then making strides to fill these holes to improve social validation procedures.

So long as consumers continue to be a part of interventions, so too shall their opinions and needs continue to be significant. Consumer opinion cannot and should not be ignored for it contributes a variable of information that cannot be gathered by any other means. Regardless of how difficult reporting social validation measures can be, the hope is that researchers will not only recognize the vitality of this measure but will begin to sow its fruits.
References


Appendix A: Informed Consent

Social Validity of a Positive Behavior Support Model
Consent to be a Research Subject

This research is being conducted by Nancy Somarriba, a graduate student in School Psychology at BYU, under the direction of Michelle Marchant, PhD. The purpose of this study is to investigate the social validity of the ABC-UBI model. You have been invited to participate because your school implements ABC-UBI.

If you decide to participate, you will be asked to read the second page of this handout which includes a clarification of terms in order to ensure you understand the questionnaire. The questionnaire consists of 18 brief questions, and 3 demographic questions. The survey takes approximately 20 minutes to complete.

There are minimal risks for participation in this study. There are no direct benefits to subjects. However, it is hoped that through your participation research will help ABC-UBI design stronger, more socially viable programs that may ultimately serve the community at large.

All information provided will remain confidential and will only be reported as group data with no identifying information. All data, including questionnaires and tapes/transcriptions from the focus group, will be kept in a secure location at Brigham Young University and only those directly involved with the research will have access to them. The results of the study may be published or presented at professional meetings, but your identity will not be revealed.

Participants who release their information will receive one raffle ticket per person to be included in a raffle to win one of ten 2nd generation 2gb iPod shuffles. The odds of winning an iPod shuffle if all 400 members at ABC-UBI’s end of year conference participate is, 1 in 40.

Participation in this research study is voluntary. You have the right to withdraw at anytime or refuse to participate entirely without jeopardy to your school’s status with ABC-UBI or your professional standing within your school. You may also quit being in the study at any time or decide not to answer any question you are not comfortable answering.

If you have any questions you may contact me at (626) 393-2344, Yanettela@yahoo.com or my faculty advisor, Dr. Michelle Marchant at (801) 422-1238.

If you have questions regarding your rights as a research participant, you may contact Christopher Dromey, PhD, IRB Chair, (801) 422-6461, 133 TLRB, Brigham Young University, Provo, UT 84602, Christopher_Dromey@byu.edu.

I have read, understood, and received a copy of the above consent and desire of my own free will to participate in this study.
Signature: ___________________________________________ Date: ______________
Before continuing on to the questionnaire please read the following Definitions and Clarification of Terms:

Utah's Academic, Behavior & Coaching Initiative (ABC-UBI)
- Is a collaborative training platform for implementing Response to Intervention (RtI) and Positive Behavior Interventions and Supports (PBIS) in Utah schools.
- ABC-UBI follows a school-wide model of prevention of problem behaviors and support of positive behaviors.

Guiding Principles for Response to Intervention
- All students are part of one proactive educational system
- Use scientific, research-based instructions and interventions
- Data are used to guide instructional decisions
- Use instructionally relevant assessments that are reliable and valid
- Use the problem solving method to make decisions based on a continuum of student needs
- Quality professional development supports effective instruction for all students
- Leadership is vital

Behavior Core includes the following (PBIS):
- Define Expectations
- Teach Expectations
- Reinforce Expectations
- Systematically Correct Problem Behavior

** For the purposes of answering the following questions, please consider your understanding of the terms listed above and provide us with your thoughtful feedback.

Thank you for your participation in this very important data gathering process!
Appendix C: Questionnaire

**ABC-UBI End of Year Survey**

1. How long has your school been a part of the ABC-UBI project? _____________________________

2. Please circle your current school position: Administrator, Gen Ed Teacher, SpEd Teacher, Counselor, Related Server, District Coach, Building Coordinator, Paraeducator, Parent/Community Representative? Other: _________________

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<th>Strongly Disagree</th>
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<tbody>
<tr>
<td>1.</td>
<td>In the past year, I used ABC-UBI strategies and interventions.</td>
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<td>2.</td>
<td>My <em>knowledge</em> (i.e. information learned from this program) in the application of systematic problem solving for academic and social behavior has increased.</td>
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<td>3.</td>
<td>My <em>skills</em> (i.e. personal tools gathered from program, abilities) in the application of systematic problem solving for academic and social behavior have increased.</td>
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<td>4.</td>
<td>The ABC-UBI Project made a positive impact within my school.</td>
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<td>5.</td>
<td>ABC-UBI requirements improved school outcomes.</td>
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<td>6.</td>
<td>ABC-UBI’s <em>data collection</em> procedures were easy to implement.</td>
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<td>7.</td>
<td>ABC-UBI’s <em>progress monitoring</em> procedures were practical (i.e. easy, feasible, useable).</td>
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<td>8.</td>
<td>The amount of paperwork involved in implementing ABC-UBI was reasonable (i.e. not asking too much, manageable).</td>
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<td>Strongly Disagree</td>
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<td>9. Our school’s administrative leadership for ABC-UBI was supportive (i.e. provided help, facilitated implementation).</td>
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<td>10. Our school has staff consensus or “buy in” for ABC-UBI.</td>
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<td>11. ABC-UBI Project was worth the time and effort invested.</td>
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<td>12. I would recommend the ABC-UBI model to other educators.</td>
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The following statements address your school’s tiered approach to intervention & prevention:

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<td>13. I am satisfied with our school’s universal /core goals.</td>
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<td>14. I am satisfied with our school’s universal/core procedures.</td>
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<td>15. I am satisfied with our school’s universal / core outcomes.</td>
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<td>16. I am satisfied with our school’s supplemental and intensive goals.</td>
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<td>17. I am satisfied with our school’s supplemental and intensive procedures.</td>
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<td>18. I am satisfied with our school’s supplemental and intensive outcomes.</td>
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